



REGULAR CITY COUNCIL MEETING AGENDA

City Hall - Council Chambers
4381 Broadway St., Suite 201, American Canyon
April 2, 2024
6:30 PM

Mayor: Leon Garcia
Vice Mayor: David Oro
Councilmembers: Mariam Aboudamous, Mark Joseph, Pierre Washington

At this meeting, Vice Mayor David Oro will participate via teleconference from Hilton Garden Inn Santa Barbara/Goleta Business Center at 6878 Hollister Avenue, Goleta, CA 93177.

Tonight's meeting is a limited public forum. American Canyon promotes respectful and responsible behavior among its meeting participants, whether they are present in person or remotely. Using offensive language or remarks that promote, foster, or perpetuate discrimination based on race, creed, color, age, religion, gender marital status, status regarding public assistance, national origin, physical or mental disability or sexual orientation/gender identification, as well as any other category protected by federal, state or local laws will not be tolerated. In the case of an occurrence, the speaker will be immediately disconnected from the microphone.

PUBLIC PARTICIPATION

City Council and other public meetings will be conducted in person. This meeting is also available via Zoom, is broadcast live to residents on Napa Valley TV, on our [website](#) and on [YouTube](#).

Zoom Link: [Click here](#). **Webinar ID:** 862 3299 1024; **Passcode:** 12345. **Phone in to Zoom:** 408-638-0968

Oral comments, during the meeting: Oral comments can be made in person during Open and Closed Session or through Zoom in Open Session only. On Zoom use the "raise your hand" tool during any public comment period. To avoid confusion, hands raised outside of Public Comment periods will be lowered.

Written comments: Submit written comments by the [eComments link](#), located on the Meetings & Agendas page of our website. eComments are available to council members in real time. To allow for Council review of comments, eComments will close at 3:00 pm on the day of the meeting.

The above identified measures exceed all legal requirements for participation in public comment, including those imposed by the Ralph M. Brown Act. For more information, please call the Office of the City Clerk at (707) 647-4369 or email cityclerk@cityofamericancanyon.org.

AGENDA MATERIALS: City Council agenda materials are published 72 hours prior to the meeting and are available to the public via the City's website at www.cityofamericancanyon.org.

AMERICANS WITH DISABILITIES ACT: The City Council will provide materials in appropriate alternative formats to comply with the Americans with Disabilities Act. Please send a written request to City Clerk at 4381 Broadway, Suite 201, American Canyon, CA 94503 or by email to cityclerk@cityofamericancanyon.org. Include your name, address, phone number and brief description of the requested materials, as well as your preferred alternative format or auxiliary aid, at least three calendar days before the meeting.

5:30 P.M. – CLOSED SESSION

The mayor will call the meeting to order and conduct roll call. Council will immediately convene into Closed Session after hearing any public comment on Closed Session items. At 6:30 p.m. the Council will reconvene into Open Session and then resume Closed Session at the end of the meeting to address outstanding items, if necessary.

CALL TO ORDER - CLOSED SESSION

ROLL CALL - CLOSED SESSION

PUBLIC COMMENTS - CLOSED SESSION ITEMS

This time is reserved for members of the public to address the City Council on Closed Session Items only. Comments must be made in person and are limited to 3 minutes. Comments for items on the Open Session agenda will be taken when the item is called in Open Session. Comments for Items not on the Closed Session or Open Session agenda will be heard during the Open Session Public Comment period.

MEETING RECESS - COUNCIL TO CONVENE IN CLOSED SESSION

5:30 P.M. CLOSED SESSION ITEMS

1. **Conference with Legal Counsel - Existing Litigation. Authorized pursuant to Government Code Section 54956.9(d)(1):**
 - a. ***City of American Canyon v. City of Vallejo, et al.*** (Sacramento Superior Court Case No. 34-2022-00327471).
 - b. ***City of American Canyon v. Leon Dale Schmidt*** (Napa County Superior Court Cases No. 22CV001041 and 23PR00161).
 - c. ***Center for Biological Diversity v. City of American Canyon et al.*** (Napa County Superior Court Case No. 23CV000511).
 - d. ***Golden State Environmental Justice Alliance v. City of American Canyon et al.*** (Napa Superior Court Case No. 23CV000510).
 - e. ***City of Vallejo v. City of American Canyon et al.*** (Napa County Superior Court Case No. 23CV000517).
 - f. ***City of Vallejo v. City of American Canyon et al.*** (Napa County Superior Court Case No. 23CV001600).

2. **Conference with Legal Counsel – Anticipated Litigation. Authorized pursuant to Government Code Section 54956.9 (d)(2). Three (3) Matters.**

6:30 P.M. OPEN SESSION - REGULAR MEETING

CALL TO ORDER - COUNCIL TO RECONVENE IN OPEN SESSION

PLEDGE OF ALLEGIANCE

ROLL CALL - OPEN SESSION

REPORT ON CLOSED SESSION/CONFIRMATION OF REPORTABLE ACTION

PROCLAMATIONS AND PRESENTATIONS

3. **Proclamation - Sexual Assault Awareness Month**
4. **Proclamation - April 2024 as Arts Month**

PUBLIC COMMENTS - ITEMS NOT ON CLOSED SESSION OR OPEN SESSION AGENDA

This time is reserved for members of the public to address the City Council on items that are not on the Closed Session or Open Session agenda and are within the subject matter jurisdiction of the City Council. Comments are limited to 3 minutes. Comments for items on the Open Session agenda will be taken when the item is called in Open Session. The City Council is prohibited by law from taking any action on matters discussed that are not on the agenda, and no adverse conclusions should be drawn if the City Council does not respond to public comment at this time.

AGENDA CHANGES

The Mayor and Council may change the order of the Agenda or request discussion of a Consent Item. A member of the Public may request discussion of a Consent Item by making that request during Public Comment.

CONSENT CALENDAR

5. **Minutes of March 19, 2024**
Recommendation: Approve the minutes of the Regular City Council meeting of March 19, 2024.
6. **Report Upon Return from Closed Session**
Recommendation: Approve the Report Upon Return from Closed Session for the Regular City Council meeting of March 19, 2024.
7. **Amendment No. 1 of the Melvin Road Sidewalk and Drainage Project (TR24-0200)**
Recommendation: Adopt a Resolution authorizing the City Manager to execute Amendment No. 1 to Agreement No. 2023-10 with Coastland Civil Engineering, Inc., in the amount of \$19,390, for a total contract amount not to exceed \$156,832, for the Melvin Road Sidewalk and Drainage Project (TR24-0200).
8. **Housing Element Municipal Code Updates**
Recommendation: Waive final reading, read by title only, and adopt an Ordinance by the City Council of the City of American Canyon amending American Canyon Municipal Code (ACMC) Chapter 19.39 Accessory Dwelling Units, and additional ACMC amendments consistent with current State Law and Housing Element Implementation Program C.
9. **CalOES Designation**
Recommendation: Adopt a Resolution designating the Authorized Agents with California Governor's Office of Emergency Services (CalOES) for the purpose of obtaining federal and state financial assistance for emergencies.

PUBLIC HEARINGS

10. **Utility Rate Increases - Proposition 218 "Protest Hearing"**
Recommendation: Take the following actions related to utility rates:
 1. Open the Public Hearing, receive public comment, and then close the Public Hearing;

2. Determine whether a majority of property owners have submitted written protests;
3. Waive first reading and adopt by title only an Ordinance amending City of American Canyon Municipal Code (ACMC) Chapter 13.06: "Water Rates and Connection Fees", Chapter 13.14 "Water Conservation Plan", and Chapter 14.04: "Wastewater Rates and Charges" to establish new potable water, recycled water and wastewater property related fees and charges.

BUSINESS

11. [New 'Environmental Sustainability' Goal](#)

Recommendation: Adopt a Resolution approving a new 'Environmental Sustainability' Goal and various strategies.

MANAGEMENT AND STAFF ORAL REPORTS

MAYOR/COUNCIL COMMENTS AND COMMITTEE REPORTS

The Mayor and Council may comment on matters of public concern and announce matters of public interest; no collective council action will be taken.

12. [City Council Committee Report - Councilmember Mark Joseph](#)

FUTURE AGENDA ITEMS

13. [Future Agenda Items of Note](#)

ADJOURNMENT

CERTIFICATION

I, Taresa Geilfuss, City Clerk for the City of American Canyon, do hereby declare that the foregoing agenda of the City Council was posted in compliance with the Brown Act prior to the meeting date.

Taresa Geilfuss, CMC, City Clerk

CITY OF AMERICAN CANYON PROCLAMATION



Sexual Assault Awareness Month - April 2024

WHEREAS, NEWS, Domestic Violence and Sexual Abuse Services is commemorating 42 years of service to survivors of domestic violence and sexual abuse in Napa County, and having opened as the county's Rape Crisis Center in 2010 to provide safety to those experiencing sexual abuse; and

WHEREAS, Sexual Assault Awareness Month is about promoting safety, respect and equality, and standing up and speaking out against harmful cultural norms and attitudes that allow sexual violence to persist. This year's national campaign of "**Building Connected Communities**" helps us reduce the likelihood of sexual abuse, assault, and harassment in our communities.

WHEREAS, rape, sexual assault, and sexual harassment harm our community. Statistics from the U.S. Center of Disease Control shows that over half of women and almost 1 in 3 men have experienced sexual violence involving physical contact during their lifetimes; and, that 1 in 4 women and about 1 in 26 men have experienced completed or attempted rape. Sexual violence disproportionately affects women, minors, and racial and ethnic minority groups who experience a higher incidence of sexual violence; and

WHEREAS, by observing April as Sexual Assault Awareness Month we show that our community is committed to supporting survivors and working toward the prevention of sexual violence across generations; and

WHEREAS, in Fiscal Year 2022/2023 NEWS provided services to nearly 1,800 of our Napa County community members—of which 271 were survivors of sexual abuse, and nearly half of those were minors—including 24-hour response and crisis intervention, financial aid, and advocacy, accompaniment and assistance of civil and criminal justice proceedings, referrals, and support completing victim compensation applications; and

WHEREAS, in Fiscal Year 2022/2023, NEWS served 142 clients from the city of American Canyon, including children, 34 of which experienced sexual assault. The NEWS Help Line received 162 calls for assistance from American Canyon residents. Clients from American Canyon received emergency assistance and crisis intervention services; court advocacy and accompaniment, including help preparing and filing restraining orders; and support from our Sexual Assault Victim Services (SAVS) program.

NOW, THEREFORE I, Leon Garcia, Mayor of the City of American Canyon, on behalf of the American Canyon City Council, join NEWS, advocates, and communities across the country in taking action to proclaim **April 2024 as Sexual Assault Awareness Month, in American Canyon**, and I ask the entire community to join in their effort, not only in April, but all year long, to be part of the effort to end sexual violence.

Dated: April 2, 2024

Leon Garcia, Mayor

CITY OF AMERICAN CANYON PROCLAMATION



APRIL 2024 AS ARTS MONTH

WHEREAS, the arts – including visual and performing arts, literature, music, and crafts are essential facets of a vibrant, dynamic community, enriching the lives of those who partake in and appreciate them; and

WHEREAS, the celebration of arts during the month of April recognizes the contributions of artists and art organizations, and encourages public participation in the arts; and

WHEREAS, the arts play a critical role in the cultural, educational, and economic vitality of our community, fostering creativity, innovation, and unity across diverse populations; and

WHEREAS, through workshops, exhibitions, performances, and readings, Arts Month will showcase the rich tapestry of artistic talent within our community, offering a platform for artists to inspire and be inspired; and

WHEREAS, engaging with the arts during April will not only enhance our appreciation for the myriad ways in which art enriches our lives but also highlight the importance of supporting arts throughout the year; and

WHEREAS, The American Canyon Arts Foundation, one of the oldest community organizations in American Canyon, continues to maintain, enhance, and support the role of arts in our community by bringing artists and community members together through recreational, cultural, and economic art events, programs, and shows.

NOW, THEREFORE, BE IT RESOLVED, that I, Leon Garcia, Mayor of the City of American Canyon on behalf of the City Council, do proclaim April as Arts Month in American Canyon and call upon our community to celebrate and participate in the arts. Let us recognize and support the artists and arts organizations that contribute to the cultural wealth of our community, and let us encourage each other to explore, experience, and express our creativity through the arts.

Dated: April 2, 2024

Mayor Leon Garcia

**CITY OF AMERICAN CANYON
REGULAR CITY COUNCIL MEETING**

ACTION MINUTES

March 19, 2024

5:30 P.M. – CLOSED SESSION

CALL TO ORDER - CLOSED SESSION

The meeting was called to order at 6:40 p.m.

ROLL CALL - CLOSED SESSION

Present: Councilmember Mariam Aboudamous, Councilmember Mark Joseph,
Councilmember Pierre Washington, Mayor Leon Garcia

Absent: None

Excused: Vice Mayor David Oro

Councilmember Mariam Aboudamous is participating by teleconference under the provisions of AB2449.

PUBLIC COMMENTS - CLOSED SESSION ITEMS

Mayor Garcia called for public comments. Written comments: none. Oral comments: none. The public comments period was closed.

MEETING RECESS - COUNCIL TO CONVENE IN CLOSED SESSION

5:30 P.M. CLOSED SESSION ITEMS

1. Conference with Legal Counsel - Existing Litigation. Authorized pursuant to Government Code Section 54956.9(d)(1):

- a) City of American Canyon v. City of Vallejo, et al. (Sacramento Superior Court Case No. 34-2022-00327471).
- b) City of American Canyon v. Leon Dale Schmidt (Napa County Superior Court Cases No. 22CV001041 and 23PR00161).
- c) Center for Biological Diversity v. City of American Canyon et al. (Napa County Superior Court Case No. 23CV000511).
- d) Golden State Environmental Justice Alliance v. City of American Canyon et al. (Napa Superior Court Case No. 23CV000510).
- e) City of Vallejo v. City of American Canyon et al. (Napa County Superior Court Case No. 23CV000517).

- f) City of Vallejo v. City of American Canyon et al. (Napa County Superior Court Case No. 23CV001600).

2. Conference with Legal Counsel – Anticipated Litigation. Authorized pursuant to Government Code Section 54956.9 (d)(2). Three (3) Matters.

6:30 P.M. OPEN SESSION - REGULAR MEETING

CALL TO ORDER - COUNCIL TO RECONVENE IN OPEN SESSION

The City Council meeting was called to order at 6:30 p.m.

PLEDGE OF ALLEGIANCE

The Pledge of Allegiance was recited.

ROLL CALL - OPEN SESSION

Present: Councilmember Mariam Aboudamous, Councilmember Mark Joseph, Councilmember Pierre Washington, Mayor Leon Garcia

Absent: None

Excused: Vice Mayor David Oro

Councilmember Mariam Aboudamous is participating by teleconference under the provisions of AB2449.

REPORT ON CLOSED SESSION/CONFIRMATION OF REPORTABLE ACTION

A report on Closed Session and confirmation of reportable action was given by City Attorney William Ross.

PROCLAMATIONS AND PRESENTATIONS

3. Presentation - American Canyon High School Link Crew

Council received a presentation from Linda Colin Juradu and Sarah Satake of the American Canyon High School Link Crew.

4. Presentation - Napa Valley Transportation Authority

Council received a Measure U presentation from Kate Miller, Executive Director of Napa Valley Transportation Authority with Addrell Coleman, Assistant Program Planner/Analyst and Danielle Schmitz, Director – Capital Development & Planning.

Councilmember Mariam Aboudamous left the meeting at 7:00 p.m.

5. Proclamation - March 25, 2024, Holi in American Canyon

Mayor Garcia announced the proclamation. It was received by Arvind Nischal, who shared pictures of past Holi events and provided a cake to share.

The meeting recessed for 15 minutes to share cake provided by Arvind Nischal.

PUBLIC COMMENTS - ITEMS NOT ON CLOSED SESSION OR OPEN SESSION AGENDA

Mayor Garcia called for public comments. Written comments: none. Oral comments: Jeanette Goyetche was called to speak; Hugh Marquez was called to speak; Beth Marcus was called to speak; Ken Leary was called to speak. The public comments period was closed.

AGENDA CHANGES

There were no changes to the agenda.

CONSENT CALENDAR

Action: Motion to adopt CONSENT CALENDAR made by Councilmember Mark Joseph, seconded by Councilmember Pierre Washington, and CARRIED by roll call vote.

Ayes: Councilmember Mark Joseph, Councilmember Pierre Washington, Mayor Leon Garcia

Nays: None

Abstain: None

Excused: Councilmember Mariam Aboudamous, Vice Mayor David Oro

6. Minutes of March 5, 2024

Action: Approved the minutes of the Regular City Council meeting of March 5, 2024.

7. Report Upon Return from Closed Session

Action: Approved the Report Upon Return from Closed Session for the meeting of March 5, 2024.

8. Electric Vehicle Charging Stations

Action: Adopted Resolution 2024-19 adding Capital Improvement Project Electric Vehicle Charging Stations (CF24-0100); Authorizing a project budget of \$230,526 for CF24-0100; Authorizing a purchase order (Agreement 2024-33) with Beam Global for a not to exceed amount of \$190,000; and Authorizing the City Manager to execute the purchase order.

9. Green Island Road Project Amendments and CFD Financing

Action: Adopted Resolution 2024-20 authorizing the City Manager to execute Amendment #7 (Agreement 2024-34) to Agreement 2016-15 with CONSOR North America, Inc., in the amount of \$383,500 for design services, for a total contract amount not to exceed \$1,414,030, in conjunction with the Green Island Road Reconstruction and Widening Project (TR16-0700);

Adopted Resolution 2024-21 authorizing the City Manager to execute Amendment #2 (Agreement 2024-35) to Agreement 2022-A166 with CONSOR North America, Inc., in the amount of \$100,000 for construction management services, for a total contract amount not to exceed \$350,000, in conjunction with the Green Island Road Rule 20 A/B Utility Undergrounding Project (TR16-0703); and

Adopted Resolution 2024-22 authorizing the City Manager to engage the financing team related to the second issuance of special tax bonds for and on behalf of the City of American Canyon Community Facilities District No. 2018-1, in conjunction with the Green Island Road Reconstruction and Widening Project (TR16-0700).

10. Increase Project Budget for the Adult Activity Center Flooring Replacement

Action: Adopted Resolution 2024-23 increasing the project budget for the Adult Activity Center Flooring Replacement (PR23-0900) from \$50,000 to \$80,000 and authorizing a budget transfer from Civic Facilities Renovation and Replacement Fund in the amount of \$30,000 to PR23-0900.

PUBLIC HEARINGS

11. General Plan and Housing Element Annual Reports and Housing Element Municipal Code Updates

Council received a staff report and presentation from Community Development Director Brent Cooper and Senior Planner William He. Mayor Garcia opened the public hearing and called for public comments. Written comments: none. Oral comments: none. Public comments and the public hearing were closed.

Action: Motion to adopt Waived first reading, read by title only, and adopt an Ordinance by the City Council of the City of American Canyon amending American Canyon Municipal Code (ACMC) Chapter 19.39 Accessory Dwelling Units, and additional ACMC amendments consistent with current State Law and Housing Element Implementation Program C made by Councilmember Pierre Washington, seconded by Councilmember Mark Joseph, and CARRIED by roll call vote.

Ayes: Councilmember Mark Joseph, Councilmember Pierre Washington, Mayor Leon Garcia

Nays: None

Abstain: None

Excused: Councilmember Mariam Aboudamous, Vice Mayor David Oro

Action: Motion to adopt Receive and File 2023 Calendar Year General Plan and Housing Element Progress Reports made by Councilmember Mark Joseph, seconded by Councilmember Pierre Washington, and CARRIED by roll call vote.

Ayes: Councilmember Mark Joseph, Councilmember Pierre Washington, Mayor Leon Garcia

Nays: None

Abstain: None

Excused: Councilmember Mariam Aboudamous, Vice Mayor David Oro

BUSINESS

12. Parks and Recreation Department User Fee Schedule

Council received a staff report and presentation from Parks & Recreation Director Alexandra Ikeda. Mayor Garcia called for public comments. Written comments: none. Oral comments: Ken Leary was called to speak; Fran Lemos was called to speak; Clarence Mamaril was called to speak; Hugh Marquez was called to speak. The public comments period was closed.

Action: Motion to adopt Resolution 2024-23 of the City Council of the City of American Canyon to repeal and replace Resolution 2023-30 with the updated Parks and Recreation Department User Fee Schedule made by Councilmember Mark Joseph, seconded by Councilmember Pierre Washington, and CARRIED by roll call vote.

Ayes: Councilmember Mark Joseph, Councilmember Pierre Washington, Mayor Leon Garcia

Nays: None

Abstain: None

Excused: Councilmember Mariam Aboudamous, Vice Mayor David Oro

13. 2023 Annual Communications Report

Council received a staff report and presentation from Communications Manager Jen Kansanback. Mayor Garcia called for public comments. Written comments: none. Oral comments: Clarence Mamaril was called to speak; Melissa Lamattina was called to speak. The public comments period was closed.

14. American Canyon Police Department Annual Report

Action: Receive and file the American Canyon Police Department's 2023 Annual Report.

Council received a staff report and presentation from Police Chief Rich Greenberg. Mayor Garcia called for public comments. Written comments: none. Oral comments: Beth Marcus was called to speak; Clarence Mamaril was called to speak. The public comments period was closed.

MANAGEMENT AND STAFF ORAL REPORTS

Council received an oral update from Environmental Services Manager Pam Phillips. Mayor Garcia called for public comments. Written comments: none. Oral comments: none. The public comments period was closed.

Parks & Recreation Director Alexandra Ikeda announced upcoming community events.

MAYOR/COUNCIL COMMENTS AND COMMITTEE REPORTS

Council members announced items of interest.

FUTURE AGENDA ITEMS

16. Future Agenda Items of Note:

April 2, 2024; 6:30 p.m.

Proclamation National Fair Housing Month

Proclamation April Arts Month

Proclamation Sexual Assault Awareness

Utility Rate Protest Hearing

Traffic Calming Program Update

New Sustainability Goal, Strategies, and 2024 Key Initiatives

April 16, 2024; 6:30 p.m.

Proclamation - April Volunteer Week

Proclamation - Earth Day

Proclamation - National Building Safety Month

Presentation - Spirit Horse

Presentation - ACPD Cadets

Police Services Agreement

Proposed Staffing Plan - FY 24/25 and Beyond

May 7, 2024; 6:30 p.m.

Presentation - Municipal Clerk Week

Proclamation - Older Americans Month

Presentation - Historic Preservation Month

Presentation - CalGreen Building Code

2024 Water Supply Update

May 21, 2024; 6:30 p.m.

Proclamation - Memorial Day

Proclamation - Public Works Week

Proclamation - Bike Month

Presentation - Juneteenth 2023 Event

Proposed FY 24/25 Budget

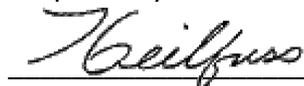
Kids Commerce Fee Waiver

ADJOURNMENT

The meeting was adjourned at 9:41 p.m. in honor of Cecil Shaver.

CERTIFICATION

Respectfully Submitted,



Taresa Geilfuss, City Clerk



City Council Community Update

MARCH 19, 2024 CITY COUNCIL MEETING

Proclamations & Accolades

Holi: Proclamation received by Arvind Nischal, founder of Helping Hand Indo-American.



Presentations

- Received presentation on **2023 Annual Communications Report**
- Received presentation on **2023 ACPD Annual Report**
- Received quarterly update **presentation from the Maintenance & Utilities Department**

City Action

- Received and filed the 2023 Calendar Year General Plan and Housing Element Progress Reports.
- Adopted an Ordinance amending American Canyon Municipal Code (ACMC) Chapter 19.39 Accessory Dwelling Units, and additional ACMC amendments consistent with current State Law and Housing Element Implementation Program C.
- Adopted a Resolution to repeal and replace Resolution 2023-30 with the updated Parks and Recreation Department User Fee Schedule.

Next time...

Join our **April 2** meeting to learn more about:

- Utility Rate Public Hearing
- Traffic Calming Program Update
- New Sustainability Goal, Strategies and 2024 Key Initiatives

View presentations, agenda packets and meeting details:



William D. Ross
David P. Schwarz
Kypros G. Hostetter
Christina M. Bellardo

Law Offices of
William D. Ross
400 Lambert Avenue
Palo Alto, California 94306
Telephone: (650) 843-8080
www.lawross.com

Los Angeles Office:
11420 Santa Monica Blvd
#25532
Los Angeles, CA 90025

File No: 199/6

March 25, 2024

VIA E-MAIL

The Honorable Leon Garcia, Mayor
and Members of the City Council
City of American Canyon
4381 Broadway, Suite 201
American Canyon, CA 94503

Re: Report Upon Return from Closed Session; Regular City Council Closed Session Meeting of the American Canyon City Council of March 19, 2024

Dear Mayor Garcia and Members of the City Council:

This communication sets forth reportable action, if any, of the City Council (“Council”) of the City of American Canyon (“City”), consistent with provisions of the Ralph M. Brown Opening Meeting Act (Government Code Section 54950, *et seq.*) resulting from the Closed Session of the Regular City Council Closed Session Meeting of March 19, 2024, consistent with Government Code Section 54957.1.

Mayor Leon Garcia called the meeting to order in Open Session at 5:30 p.m. and ascertained that there were no public comments on the matters agendized for Closed Session consideration. Additionally, Council Member Aboudamous indicated that she requested to participate remotely consistent with AB 2449, using one of two just cause exceptions because of illness. With a quorum being present, the Council then adjourned at 5:31 p.m. to address the matters agendized for Closed Session consideration.

There were two matters agendized for City Closed Session consideration:

1. Conference with Legal Counsel – Existing Litigation
Authorized Pursuant to Government Code Section 54956.9(d)(1):
 - a. *City of American Canyon v. City of Vallejo, et al.* (Sacramento Superior Court Case No. 34-2022-00327471);
 - b. *City of American Canyon v. Leon Dale Schmidt*, (Napa County Superior Court Case No. 22CV001041 and 23PR00161);

- c. *Center for Biological Diversity v. City of American Canyon et al.* (Napa County Superior Court Case No. 23CV000511);
 - d. *Golden State Environmental Justice Alliance v. City of American Canyon et al.* (Napa County Superior Court Case No. 23CV000510);
 - e. *City of Vallejo v. City of American Canyon et al.* (Napa County Superior Court Case No. 23CV000517); and,
 - f. *City of Vallejo v. City of American Canyon et al.* (Napa County Superior Court Case No. 23CV001600).
2. Conference with Legal Counsel – Anticipated Litigation
Authorized Pursuant to Government Code Section No. 54956.9(d)(2)
Three (3) Matters.

With respect to Closed Session Agenda Item No. 1.a., there was no reportable action under the common law attorney-client privilege and that provided by Government Code Section 54956.9(d)(1).

With respect to Closed Session Agenda Item No. 1.b., there was reportable action in that the Public Guardian, Joseph Cherry, indicated that additional debris would be removed from the property and that additional assets of Mr. Schmidt had been located and that they anticipated an agreement for repayment of the City’s lien on the property upon further specification of financial capability and amounts involved. Except as indicated, there was no other reportable action under the common law attorney-client privilege and that provided by Government Code Section 54956.9(d)(1).

With respect to Closed Session Agenda Item No. 1.c. through 1.e, there was no reportable action under the common law attorney-client privilege and that provided by Government Code Section 54956.9(d)(1).

With respect to Closed Session Agenda Item No. 1.f., there was no reportable action under the common law attorney-client privilege and that provided by Government Code Section 54956.9(d)(1).

With respect to Closed Session Agenda Item No. 2., there was no reportable action under the common law attorney-client privilege and that provided by Government Code Section 54956.9(d)(2) with respect to each of the three matters considered.

Upon conclusion of consideration of the three matters agendized under Closed Session

The Honorable Leon Garcia, Mayor
and Members of the City Council
March 25, 2024
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Agenda Item No. 2., it was unanimously (4-0) approved that an additional matter for Closed Session consideration be added to the Closed Session Agenda. With respect to that additional matter for Closed Session consideration, there was no reportable action under the common law attorney-client privilege and that provided by Government Code Section 54956.9(d)(2).

During consideration of the additional Closed Session Item from 6:09 p.m. to 6:18 p.m., neither the City Manager Jason Holley, nor the City Attorney William Ross, were present in the Council Closed Session consideration.

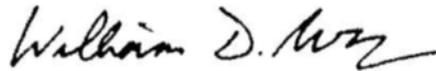
Your Council concluded the Closed Session at 6:20 p.m.

In Open Session, it was indicated that a written report upon return from Closed Session consistent with Government Code Section 54957.1, would be prepared concerning the matters agendized for Closed Session.

This communication should be reviewed under the Consent portion of the Agenda of your next Regular or Special City Council Meeting.

Should you have questions concerning this Report, it may be taken off the Consent calendar when agendized in the future, or our office may be contacted in the interim.

Very truly yours,



William D. Ross
City Attorney

WDR:jf

cc: Jason B. Holley, City Manager
Maria Ojeda, Assistant City Manager
Taresa Geilfuss, City Clerk
Cherri Walton, Deputy City Clerk



TITLE

Amendment No. 1 of the Melvin Road Sidewalk and Drainage Project (TR24-0200)

RECOMMENDATION

Adopt a Resolution authorizing the City Manager to execute Amendment No. 1 to Agreement No. 2023-10 with Coastland Civil Engineering, Inc., in the amount of \$19,390, for a total contract amount not to exceed \$156,832, for the Melvin Road Sidewalk and Drainage Project (TR24-0200).

CONTACT

Erica Ahmann Smithies, P.E., Public Works Director

BACKGROUND & ANALYSIS

On March 15, 2022, City Council approved Resolution No. 2022-27 appropriating approximately \$500,000 of American Rescue Plan Act (ARPA) funding to the Melvin Road Sidewalk and Drainage Project (TR24-0200). Melvin Road is one of six capital projects identified in Resolution No. 2022-27 to receive a portion of the City's ARPA funding.

There are two main improvement components to the Melvin Road project. The first component is to provide additional sidewalk and pedestrian connectivity within the City's right-of-way on both sides of Melvin Road between Cassayre Drive and James Road. The project will also close a couple of sidewalk gaps along the east side of James Road between Wilson Way to Donaldson Way. Completing the sidewalk gap along Melvin Road will provide more access for residents in the area to the adjacent schools, commerce, and facilities in the surrounding areas. The second component of this project is to install additional storm drain infrastructure that will improve the area's hydrology and resiliency during storm events. Following the survey and preliminary design, the consultant will engage with the City to discuss whether additional right of way is needed to complete the project.

On February 7, 2023, City Council approved Agreement No. 2023-10 with Coastland Civil Engineering, Inc. (Coastland) to provide design services specific to the Melvin Road Project for an amount not to exceed \$137,442. Considerable design progress has been made this past year but additional field surveying and design work is necessary to realign the proposed storm drain alignment to avoid shallow utility conflicts (i.e. water and gas services) that will significantly increase construction costs. The additional design work identified will assist with mitigating conflicts encountered during construction for an additional time and materials amount not to exceed

\$19,390. The final plans and specifications are anticipated to be completed by early April so that the project can then be advertised by May 2024.

COUNCIL PRIORITY PROGRAMS AND PROJECTS

Infrastructure: "Develop and maintain infrastructure resources to support sustainable growth."

FISCAL IMPACT

The funding request is to increase the approved agreement from \$137,442 to a new not to exceed amount of \$156,832. The Melvin Road Sidewalk and Drainage Project (TR24-0200) has sufficient funding to approve the increase. The project has an adopted FY23/24 budget of \$1,050,000 which is comprised of \$500,000 in ARPA funds and \$550,000 of Measure A funds.

ENVIRONMENTAL REVIEW

15301 - The Project is exempt from review under the California Environmental Quality Act ("CEQA") under the Class 1 exemption of existing facilities of Section 15301 of Title 14 of the California Code of Regulations and said exemption is not negated by any exception under Section 15300.2 of said Regulations.

ATTACHMENTS:

[1. Resolution Coastland](#)

RESOLUTION NO. 2024-_____

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF AMERICAN CANYON AUTHORIZING THE CITY MANAGER TO EXECUTE AMENDMENT NO. 1 TO AGREEMENT NO. 2023-10 WITH COASTLAND CIVIL ENGINEERING, INC., IN THE AMOUNT OF \$19,390, FOR A TOTAL CONTRACT AMOUNT NOT TO EXCEED \$156,832, FOR THE MELVIN ROAD SIDEWALK AND DRAINAGE PROJECT (TR24-0200)

WHEREAS, the Melvin Road Sidewalk and Drainage Project will close a significant sidewalk gap to both sides of Melvin Road between Cassayre Drive and James Road, eliminate two sidewalk gaps along the east side of James Road to Donaldson Way and provide storm drain infrastructure that will improve the area’s hydrology and resiliency during storm events; and

WHEREAS, on February 7, 2023, City Council authorized the City Manager to execute Agreement No. 2023-10 with Coastland Civil Engineering to design the Melvin Road Sidewalk and Drainage Project (TR24-0200) for an amount not to exceed \$137,442; and

WHEREAS, considerable design progress has been made this past year but additional field surveying and design work is necessary to realign the proposed storm drain alignment to avoid shallow utility conflicts (i.e. water and gas services) that will significantly increase construction costs; and

WHEREAS, Coastland has provided a proposal to complete the additional work in the amount of \$19,390 for a new contract not to exceed amount of \$156,832; and

WHEREAS, there is sufficient funding available in the FY23/24 project budget.

NOW, THEREFORE, BE IT FURTHER RESOLVED that the City Council of the City of American Canyon hereby authorizes the City Manager to execute Amendment No. 1 to Agreement No. 2023-10 with Coastland Civil Engineering, Inc., in the amount of \$19,390, for a total contract amount not to exceed \$156,832, for the Melvin Road Sidewalk and Drainage Project (TR24-0200).

PASSED, APPROVED and ADOPTED at a regularly scheduled meeting of the City Council of the City of American Canyon held on the 2nd day of April, 2024 by the following vote:

- AYES:
- NOES:
- ABSTAIN:
- ABSENT:

Leon Garcia, Mayor

ATTEST:

APPROVE AS TO FORM:

Taresa Geilfuss, CMC, City Clerk

William D. Ross, City Attorney



TITLE

Housing Element Municipal Code Updates

RECOMMENDATION

Waive final reading, read by title only, and adopt an Ordinance by the City Council of the City of American Canyon amending American Canyon Municipal Code (ACMC) Chapter 19.39 Accessory Dwelling Units, and additional ACMC amendments consistent with current State Law and Housing Element Implementation Program C.

CONTACT

Brent Cooper, AICP, Community Development Director

BACKGROUND & ANALYSIS

On March 19, 2024, the City Council approved the first reading of an Ordinance approving Municipal Code updates to reduce constraints to housing production including an update to the Accessory Dwelling Unit Ordinance.

Municipal Code updates include the following:

1. Allow low barrier navigation centers as a permitted use in the Community Commercial (CC) zoning district in compliance with Government Code Section 65660 and 65668.

A Low Barrier Navigation Center is a temporary living facility with case managers that help people experiencing homelessness connect with resources to move into permanent housing. The code amendment would permit this form of housing in the Community Commercial zoning district.

2. Allow small residential care facilities as a permitted use in the Rural Residential Estate Hillside (RRH) zoning district in compliance with Government Code Section 65583.

A Small Residential Care facility is a home for six or fewer persons in need of personal services, supervision, protection or assistance essential for sustaining the activities of daily living, or twenty-four-hour care for six or fewer foster children. Per State Law, this facility is already permitted in all single family zoning districts. The Rural Residential Estate Hillside zoning district (Canyon Estates)

was overlooked and will be corrected with this zoning code amendment.

3. Allow manufactured housing subject only to the restrictions of single-family uses .

Manufactured housing is pre-assembled in a factory and delivered to a property on a permanent foundation. This zoning code amendment would remove approval criteria and subjective design standards that does not exist for "stick-built" single family homes.

Examples of subjective approval criteria standards to remove from the zoning code include:

- “harmonious with context of surrounding neighborhood.”
- “compatibility in design and appearance with residences in the vicinity.”
- “protect neighborhood integrity.”
- “harmonious relationships between manufactured homes and surrounding uses, etc.”

Examples of design standards to remove from the zoning code include:

- “exterior siding material compatible with adjacent residential structures.”
- “shiny or metallic finishes are prohibited.”
- “a specific roof material.”
- “eaves or roof overhangs of not less than one foot.”
- “finished floor elevation no higher than twenty inches above the exterior finished grade.”
- “exterior materials and roofing proposed for any garage shall be the same as those materials used on the main structure.”

4. Update Floor Area Ratio (FAR) standards in the Neighborhood Commercial (CN) and Community Commercial (CC) zoning districts to allow a minimum Floor Area Ratio (FAR) of 1.0 for projects with three to seven units or 1.25 for projects with eight to 10 units.

This new standard is required by Government Code Sections 54237, 54237.7, and 54239.4.

5 . Remove the conditional use permit requirement for large farm employee housing in the Community Commercial CC zoning district.

The Employee Housing Act (Division 13, Part 1 of the Health and Safety Code) requires employee (farmworker) housing consisting of 12 units, or 36 beds must be permitted by right. The City allows larger farmworker housing in the Community Commercial CC zoning district with a conditional use permit. The zoning code amendment would remove the conditional use permit requirement.

6 . Update the Accessory Dwelling Unit Ordinance (American Canyon Municipal Code (ACMC) Chapter 19.39) consistent with an October 4, 2023 State of California Department of Housing and Community Development (HCD) letter.

The HCD letter identifies a variety of amendments needed to ensure the Accessory Dwelling Unit

Ordinance remains in compliance with State Law. A copy of the HCD is included as Attachment 6. A summary of changes identified in the HCD letter include the following:

- Technical language cleanups, such as:
 - Amend definitions to Specific “One” ADU instead of “additional” ADUs.
 - Add allowance of a multifamily ADU concurrent or after the multifamily is built.
- An ADU size is unlimited when an accessory structure is converted to an ADU.
- Allow 3 ADUs on a parcel: One attached, one detached, and one Junior ADU.
- No fire sprinkler is required if the primary residence does not have fire sprinklers regardless of how large the ADU addition is.
- ADUs cannot be denied if there are unrelated code violations on the property.
- Junior ADU standards are revised to become more lenient, such as:
 - No limits on electric service.
 - No prohibition of propane or natural gas appliances.
 - Subjective language removed “food preparation area and cabinets are reasonable size in relationship to the JADU”.
 - No limit on kitchen sink waste line.
- Parking Standards Reduced, such as:
 - No parking required when car share vehicle is located within one block.
 - No parking required when the ADU application is submitted at the same time for a SFD or MFD.
- Subjective Design Standards removed, such as:
 - “Compatibility of accessory dwelling units with the neighborhood.”
 - “Comply with any City adopted objective design standards applicable to ADUs.”
- Approval Standards:
 - City must approve or deny an ADU application within 60 days.
 - If the ADU is denied, we must identify reasons.

If the final reading is approved, the Ordinance will become effective 30 days later on May 2, 2024. A copy of the Ordinance is included as Attachment 1.

COUNCIL PRIORITY PROGRAMS AND PROJECTS

Organizational Effectiveness: "Deliver exemplary government services."

FISCAL IMPACT

The City is required to Municipal Code updates to reduce constraints to housing production. Completion of these municipal code amendments will enable the City to remain consistent with State Housing Laws which are increasingly tied to infrastructure and housing-related grant programs.

ENVIRONMENTAL REVIEW

The Housing Element Municipal Code Updates are exempt from environmental review under CEQA because the amendments are consistent with State law that preempt any inconsistent local ordinance. Thus, the City’s action is not creating a new land use regulation and it can be seen with certainty that no environmental impacts will result from the City’s action. Consequently, the action is exempt in accordance with CEQA Section 21084(a) and both Section 15002(i)(1) – lack of Local Jurisdictional Discretion – and Section 15061(b)(3) – General Rule of Exemption – of the CEQA Guidelines.

ATTACHMENTS:

1. [Ordinance Housing Element Implementation and ADU 2024](#)

ORDINANCE NO. 2024-XX

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF AMERICAN CANYON AMENDING THE AMERICAN CANYON MUNICIPAL CODE TO UPDATE CHAPTER 19.39 “ACCESSORY DWELLING UNITS” AND ADDITIONAL AMENDMENTS CONSISTENT WITH CURRENT STATE LAW AND HOUSING ELEMENT IMPLEMENTATION PROGRAM C

WHEREAS, on January 31, 2023, the City Council approved the 6th Cycle Housing Element (Housing Element); and; and

WHEREAS, on June 30, 2023, the State of California Department of Housing and Community Development (HCD) certified the Housing Element; and

WHEREAS, the Housing Element includes certain programs to identify and reduce constraints to housing production; and

WHEREAS, Housing Element Implementation Program C requires certain Municipal Code updates to reduce constraints to housing production, including:

1. Allow low barrier navigation centers in compliance with Government Code Section 65660 and 65668;
2. Allow small residential care facilities as a permitted use in the (RRH) zoning district in compliance with Government Code Section 65583;
3. Allow manufactured housing subject only to the restrictions of single-family uses;
4. Update Floor Area Ratio (FAR) standards in the CN and CC zoning districts to allow a minimum of 1.0 for projects with three to seven units or 1.25 for projects with eight to 10 units;
5. Remove the conditional use permit requirement for large farm employee housing in the CC zoning district; and
6. An amendment to the Accessory Dwelling Unit Ordinance (ACMC Chapter 19.39) to comply with current State law consistent with an October 4, 2023, HCD letter identifying needed amendments; and

WHEREAS, on February 22, 2024, the City of American Canyon Planning Commission conducted a duly noticed public hearing on the Paoli/Watson Lane Annexation Pre-Zoning and Rezoning and recommends City Council approval; and

WHEREAS, on March 19, 2024, the City Council of the City of American Canyon conducted a duly-noticed public hearing on the subject application, at which time all those in attendance were given the opportunity to speak on this proposal and to submit comments.

NOW, THEREFORE, BE IT ORDAINED that the City Council of the City of American Canyon, having considered all the evidence, including any submitted by member of the public, hereby adopts Municipal Code amendments as follows:

SECTION 1: Allow low barrier navigation centers in compliance with Government Code Section 65660 and 65668 as follows:

- a. Update American Canyon Municipal Code Section 19.05.040 Residential Classifications to add “Low Barrier Navigation Center” definition as follows:

19.05.040 Residential Classifications

Low Barrier Navigation Center: “a Housing First, low-barrier, service-enriched shelter focused on moving people into permanent housing that provides temporary living facilities while case managers connect individuals experiencing homelessness to income, public benefits, health services, shelter, and housing (See Government Code § 65660).

- b. Amend American Canyon Municipal Code Section 19.11.040 to add Low Barrier Navigation Center as a permitted use in the CC zoning district as follows:

19.11.040 Permitted uses.

Table 1 of this section sets forth the permitted and conditionally permitted uses for each commercial district. A "P" designates a permitted use. A "C" indicates a conditionally permitted use subject to approval of a use permit by the planning commission. An "M" indicates a minor use permit is required pursuant to Chapter 19.42. If no letter is found opposite a particular use, it is not permitted in that district.

**Table 1
Permitted and Conditionally Permitted Uses ¹
Community Commercial and Neighborhood Commercial Districts**

Use Classification	Zoning District	Related Provision
	CC	
Residential		
Low Barrier Navigation Center	P	

- c. Amend the Broadway District Specific Plan Table 2-3 to add Low Barrier Navigation Center as a permitted use in the Business Park, Downtown Core, and Local Serving Mixed Use zoning districts as follows:

TABLE 2-3: BROADWAY ZONING DISTRICT PERMITTED USES

Use Classification (Per ACMC Chapter 19.05)	Broadway District Specific Plan Zoning				
	Broadway Residential	Business Park ¹	Downtown Core	Local Serving Mixed Use	Home Improvement
Residential					
Low Barrier Navigation Center	P	P	P	P	P

JUSTIFICATION: Assembly Bill (AB) 101 requires cities to allow low barrier navigation centers as a permitted use in mixed use zones and other nonresidential zones that permit multi-family residential development.

SECTION 2: Allow small residential care homes as a permitted use in the (RRH) zoning district in compliance with Government Code Section 65583 as follows:

- a. Update American Canyon Municipal Code Section 19.05.040 Residential Classifications to add the word “Small” to the Residential Care Home definition as follows:

19.05.040 Residential Classifications

Residential Care Home, Small: provision of twenty-four-hour nonmedical care of six or fewer persons in need of personal services, supervision, protection or assistance licensed by the state essential for sustaining the activities of daily living, or twenty-four-hour care for six or fewer foster children. Furthermore, Small residential care homes without State license personal services shall also have the same standards and processing as residential care homes. For the purposes of any law or zoning ordinance that relates to the residential use of property pursuant to this chapter, the residents and operators of the facility shall be considered a family. (see Health and Safety Code § 1568.0831).

- b. Amend American Canyon Municipal Code Section 19.10.040 to add small residential care homes as a permitted use in the RRH zoning district as follows:

19.10.040 Permitted uses.

Table 19.10.040
Permitted and Conditionally Permitted Uses
Residential Districts ¹

Use Classification	RRH	RE	RR	RS	RM	RH	Related Provision
Residential							
Residential Care Home, Small	P	P	P	P	P	P	

SECTION 3: Amend ACMC Section 19.10.130 to allow manufactured housing subject only to the restrictions of single-family uses.

19.10.130 Manufactured homes.

(A) Intent. It is the intent of the city to provide opportunities for the placement of manufactured homes in single-family residential districts, consistent with state law.

(B) Approval. Approval by the community development director is required prior to the issuance of building permits for individual manufactured homes on a site in any residential district, subject to the provisions of this section.

(C) Location. Manufactured homes may be located in any residential district where a single-family detached dwelling is permitted, subject to the same restrictions on density and to the same property development regulations.

(D) Design and Development. Each manufactured home:

(1) Shall be built on a permanent foundation approved by the building official;

(2) Shall be certified under the National Manufactured Home Construction and Safety Act of 1974, and shall be installed in accordance with the provisions of the most recent edition of the ~~Uniform~~ California Building Code adopted by the city;

(3) Shall provide skirting of exterior finish materials extending to the finished grade;

(4) Shall have roofing material complying with the most recent editions of the Uniform Building Code adopted by the city;

(E) Cancellation of State Registration. Whenever a manufactured home is installed on a permanent foundation, any registration of the manufactured home with the state of California shall be canceled, pursuant to state laws and regulations. Before any occupancy certificate may be issued for use of such a manufactured home, the owner shall provide to the building official satisfactory evidence showing that the state registration of the manufactured home has been or will, with certainty, be canceled; if the manufactured home is new and has never been registered with the state, the owner shall provide the building official with a statement to that effect from the dealer selling the home.

(Ord. 2001-02 § 1, 2001.)

SECTION 4: Amend American Canyon Municipal Code Section 19.11.050 to allow a minimum of 1.0 Floor Area Ratio (FAR) standards in the Neighborhood Commercial (CN) and 1.25 FAR in the Community Commercial (CC) zoning districts for residential projects with three to seven dwelling units or for residential projects with eight or more dwelling units as follows:

19.11.050 Development standards.

Table 2 of this chapter sets forth the minimum lot area for each commercial district.

Table 2

Zoning District	CN	CC
Minimum area per lot	10,000 sq. ft.	1 acre**
Minimum width per lot	100 feet	200 feet
Minimum depth per lot	100 feet	100 feet
Minimum front yard	10 feet	20 feet
Minimum side yard	10 feet	10 feet
Street side of corner lot	10 feet	15 feet
Minimum rear yard	20 feet	10 feet
Minimum setback from Hwy. 29	40 feet 50 feet avg.	40 feet 50 feet avg.
Density		
Nonresidential	0.35 FAR	0.50 FAR
Mixed-use structure	1.5	1.5
Residential portion	1.0	1.0
Commercial portion	0.50	0.50
Residential (3-7 dwelling units)	1.0 FAR Minimum	1.0 FAR Minimum
Residential (8 or more dwelling units)	1.5 FAR Minimum	1.5 FAR Minimum
Maximum number of stories:		
All buildings	2 stories	2 stories
Exceptions:		
Residential or mixed-use structures	3 stories	3 stories west of Broadway

Zoning District	CN	CC
Residential, overnight accommodations and lodging services, or mixed-use structures	N/A	4 stories east of Broadway
Maximum building height:	30 feet	35 feet
Exceptions:		
Residential or mixed-use structures	42 feet	42 feet west of Broadway
Residential, overnight accommodations and lodging services, or mixed-use structures	N/A	54 feet east of Broadway
Maximum building coverage for stand-alone residential uses	50 percent west of Broadway	50 percent west of Broadway
	60 percent east of Broadway	60 percent east of Broadway

SECTION 5: Amend American Canyon Municipal Code Section 19.11.040 to remove the conditional use permit requirement for large farm employee housing in the CC zoning district as follows:

19.11.040 Permitted uses.

Table 1 of this section sets forth the permitted and conditionally permitted uses for each commercial district. A "P" designates a permitted use. A "C" indicates a conditionally permitted use subject to approval of a use permit by the planning commission. An "M" indicates a minor use permit is required pursuant to Chapter 19.42. If no letter is found opposite a particular use, it is not permitted in that district.

**Table 1
Permitted and Conditionally Permitted Uses ¹**

Community Commercial and Neighborhood Commercial Districts

Use Classification	Zoning District		Related Provision
	CN	CC	
Residential			
Farm employees housing	-	P	

SECTION 6: Adopt the updated American Canyon Municipal Code Chapter 19.39 “Accessory Dwelling Units” as follows:

Chapter 19.39 ACCESSORY DWELLING UNITS

19.39.010 Purpose of the chapter.

19.39.020 Applicability.

19.39.030 General plan consistency.

19.39.040 Definitions.

19.39.050 Development standards—Generally.

19.39.060 Junior accessory dwelling unit standards.

19.39.070 Parking standards.

19.39.080 Operational standards.

19.39.090 Design standards.

19.39.100 Review and approval process.

19.39.110 Code enforcement.

19.39.010 Purpose of the chapter.

The purpose of this chapter is to increase the supply of smaller units and rental housing units by allowing accessory dwelling units on lots containing a single-family dwelling in various residential districts as shown on Table 19.10.040, and to establish design and development standards for accessory dwelling units to ensure that they are compatible with existing neighborhoods and consistent with the general plan and its elements. Accessory dwelling units contribute needed housing to the community’s housing stock. (Ord. 2020-04 § 1, 2020; Ord. 2017-05 § 2, 2017)

19.39.020 Applicability.

The provisions of this chapter apply to all lots that are occupied with a single-family dwelling unit and multifamily dwelling and zoned residential. Accessory dwelling units do not exceed the allowable density for the lot upon which the accessory dwelling unit is located and are a residential use that is consistent with the existing general plan and zoning designation for the lot. (Ord. 2020-04 § 1, 2020; Ord. 2017-05 § 2, 2017)

19.39.030 General plan consistency.

An accessory dwelling unit that conforms to this chapter shall be deemed to be an accessory use or an accessory building and shall not be considered to exceed the allowable density for the lot upon which it is located and shall be deemed to be a residential use that is consistent with the existing general plan and zoning designations for the lot. The accessory dwelling units shall not be considered in the application of any local ordinance, policy, or program to limit residential growth in accordance with Government Code Section 65852.2(a)(8). (Ord. 2020-04 § 1, 2020; Ord. 2017-05 § 2, 2017)

19.39.040 Definitions.

“Accessory dwelling unit” means any of the following:

1. One dwelling unit attached to, within, or detached from the proposed or existing primary dwelling unit that is on the same parcel in areas zoned to allow single-family and/or multifamily dwelling

residential use, and provides permanent and independent provisions for living, sleeping, eating, cooking, and sanitation for one or more persons.

2. An efficiency unit, as defined in Section 17958.1 of the Health and Safety Code.

3. A manufactured home, as defined in Section 18007 of the Health and Safety Code.

4. Multiple accessory dwelling units up to 25 percent of the existing multifamily dwelling units within portions of existing multifamily dwelling structures that are not used as livable space, including, but not limited to, storage rooms, boiler rooms, passageways, attics, basements, or garages, if each unit complies with state building standards for dwellings, as defined in Government Code section 65852.2, subdivision (e)(1)(C).

“Junior accessory dwelling unit” means one accessory dwelling unit that is 500 square feet or less that is contained entirely in the primary residence or within an attached garage.

“Primary residence” means the residential dwelling that existed on the parcel before or constructed concurrent with the accessory dwelling unit. (Ord. 2020-04 § 1, 2020; Ord. 2017-05 § 2, 2017)

19.39.050 Development standards—Generally.

A. Each accessory dwelling unit requires approval of a building permit.

B. The applicant of each accessory dwelling unit building permit application shall identify the anticipated rent and household size of the new accessory dwelling unit.

C. One detached accessory dwelling unit, one attached accessory dwelling unit, and one junior accessory dwelling unit are permitted per single-family parcel.

D. A multi-family or single-family primary residence dwelling must exist on the parcel before the accessory dwelling unit is built or it shall be built concurrently with the accessory dwelling unit.

E. Accessory dwelling units shall comply with the lot area, yard setback, height, and building coverage standards of the applicable residential zoning district as described in Section 19.10.050 except for the following:

1. The accessory dwelling unit is built in the garage and the garage setback is closer than the setback for the primary residence.

2. If the accessory dwelling unit is built in a previously-permitted ~~existing~~ accessory structure, the ~~existing~~ accessory structure setbacks apply and not the setbacks for a single-family house.

3. Development standards shall be waived to permit a detached accessory dwelling unit that is no greater than eight hundred square feet, and has four-foot setbacks.

4. The maximum ADU height depends on these conditions:

i. A height of 16 feet for a detached accessory dwelling unit on a lot with an existing or proposed single family or multifamily dwelling unit.

ii. A height of 18 feet for a detached accessory dwelling unit on a lot with an existing

or proposed single family or multifamily dwelling unit that is within one-half of one mile walking distance of a major transit stop or a high-quality transit corridor, as those terms are defined in Section 21155 of the Public Resources Code.

- iii. A local agency shall also allow an additional two feet in height to accommodate a roof pitch on the accessory dwelling unit that is aligned with the roof pitch of the primary dwelling unit.
 - iv. A height of 18 feet for a detached accessory dwelling unit on a lot with an existing or proposed multifamily, multistory dwelling.
 - v. A height of 25 feet or the height limitation in the local zoning ordinance that applies to the primary dwelling, whichever is lower, for an accessory dwelling unit that is attached to a primary dwelling. This clause shall not require a local agency to allow an accessory dwelling unit to exceed two stories.
5. The applicant shall not be required to correct pre-existing nonconforming zoning conditions that are not related to the ADU as a condition of ADU approval.

F. Accessory Dwelling Living Area Standard.

1. A Detached accessory dwelling unit shall not exceed one 1,200 square feet, unless:
 - i. On a single-family lot, the detached ADU converts a previously-permitted accessory structure which is greater than 1,200 square feet. In this circumstance, the ADU may equal the square footage of the existing accessory structure.
 - ii. On a lot with a multifamily primary dwelling, the detached ADU is not subject to a square foot limit (Gov. Code, § 65852.2, subs. (e)(1)(A), (C), and (D)).
2. An Attached accessory dwelling unit may occupy up to fifty percent of the primary residence living area but shall not exceed 1,200 square feet.
3. A Junior accessory dwelling unit shall not exceed 500 square feet.

G. Fire Sprinkler Requirements.

1. Accessory dwelling units shall comply with all applicable fire safety provisions of state law as well as locally adopted building and fire codes under Title 16. Examples include, but are not limited to, standards such as water supply and fire department access.
2. Accessory dwelling units shall not be required to be equipped with fire sprinklers unless fire sprinklers are required for the primary residence. For purposes of this requirement, the following standards shall apply:
 - i. When the primary residence has fire sprinklers, the accessory dwelling unit shall be constructed with fire sprinklers.
 - ii. When the primary residence does not have fire sprinklers, the junior accessory dwelling unit and attached accessory dwelling unit do not require fire.
 - iii. Detached accessory dwelling units require fire sprinklers unless the primary residence

does not have fire sprinklers.

- H. Deed Restrictions. Prior to issuing a building permit for an accessory dwelling unit, the property owner shall file with the county recorder, in a format with language approved by the city, a declaration of restrictions containing a reference to the deed under which the property was acquired by the present owner and stating that:
 - 1. The accessory dwelling unit shall not be sold separately.
 - 2. The restrictions are binding upon any successor in ownership of the property.
 - 3. The property owner must occupy as a primary residence one of the two dwelling units on the property, either the primary or accessory dwelling unit except accessory dwelling unit and junior accessory dwelling unit applications submitted between January 1, 2020 to January 1, 2025.
 - 4. When the applicant is a qualified nonprofit housing organization, a deed restriction is not required.
- I. Impact Fees.
 - 1. Accessory dwelling units less than 750 square feet are exempt from all city impact fees.
 - 2. Impact fees for accessory dwelling units equal or greater than 750 square feet are exempt from water and sewer capacity fees. All remaining impact fees shall be charged proportionately in relation to the square footage of the primary dwelling unit.
- J. Accessory Dwelling Units on Multifamily Dwellings. The building division shall review and approve ministerially accessory dwelling units under the following conditions.
 - 1. Non-habitable area within an existing multifamily dwelling structure, including, but not limited to: storage rooms, boiler rooms, passageways, attics, basements or garages, may be converted to one or more accessory dwelling units if each accessory dwelling unit complies with state dwelling unit building standards.
 - 2. An existing multifamily dwelling shall be permitted to accommodate additional accessory dwelling units in an amount up to twenty-five percent of the existing multifamily dwelling units.
 - 3. An existing multifamily dwelling is permitted a minimum of one accessory dwelling unit up to two detached accessory dwelling units on the same lot. Each detached accessory dwelling unit shall subject to a height limit in accordance with Section 19.35.050(E)(4) and four-foot rear yard and side yard setbacks.
- K. CC&Rs. As defined in California Civil Code Section 4751 or any successor statute, any covenant, condition, and restriction (CC&R) or contained in any deed, contract, security instrument, or other instrument affecting the transfer or sale of any interest in a planned development, and any provision of a governing document, that effectively prohibits or unreasonably restricts the construction or use of an accessory dwelling unit or junior accessory dwelling unit on a lot zoned

for single-family residential use that meets the above-described minimum standards (subsections F and G) established for those units shall be void and unenforceable. (Ord. 2020-04 § 1, 2020; Ord. 2017-05 § 2, 2017)

19.39.060 Junior accessory dwelling unit standards.

- A. Each junior accessory dwelling unit shall comply with the following building standards.
 - 1. The dwelling must have its own exterior entrance.
 - 2. The kitchen must include a cooking facility with appliances and includes a food preparation counter and storage cabinets.
 - 3. The bathroom may be included in the unit or shared with the primary residence.
 - 4. Junior accessory dwelling units are exempt from the building code wall separation requirements with the primary residence. (Ord. 2020-04 § 1, 2020; Ord. 2017-05 § 2, 2017)

19.39.070 Parking standards.

- A. When accessory dwelling unit parking is required by this chapter or provided at the discretion of the homeowner, parking spaces may be covered or uncovered, provided as tandem parking on an existing driveway or on a paved surface in a setback or yard area.
- B. Primary Residence. Parking for the primary residence must comply with Chapter 19.21 except when the garage is converted to a ADU.
- C. Detached Accessory Dwelling Unit.
 - 1. A minimum of one on-site parking space is required.
 - 2. Notwithstanding subsection (C)(1), on-site ADU parking is not required when:
 - i. The detached accessory dwelling unit is located within one-half mile walking distance of public transit or within one block of a car-sharing pickup/drop-off location; and/or
 - ii. The ADU is located within an architecturally and historically significant historic district; and/or
 - iii. The ADU is part of the proposed or existing primary residence or an accessory structure; and/or
 - iv. On-street parking permits are required but not offered to the occupant of the ADU; and/or
 - v. A car share vehicle is located within one block of the accessory dwelling unit; and/or
 - vi. An accessory dwelling unit building permit application is submitted in conjunction with a building permit application for a new single-family dwelling or a new multifamily dwelling on the same lot.
- D. Attached Accessory Dwelling Unit. No on-site parking is required.

- E. Junior Accessory Dwelling Unit. No on-site parking is required.
- F. When a garage, carport, or covered parking structure is demolished in conjunction with the construction of an accessory dwelling unit or converted to an accessory dwelling unit, the city shall not require replacement of the off-street parking spaces. (Ord. 2020-04 § 1, 2020; Ord. 2017-05 § 2, 2017)

19.39.080 Operational standards.

- A. The accessory dwelling unit may not be sold separately from the primary residence.
- B. Owner-Occupancy. The property owner shall reside in either the primary residence or the accessory dwelling unit except accessory dwelling unit and junior accessory dwelling unit applications submitted between January 1, 2020 to January 1, 2025.
- C. An accessory dwelling unit may not be rented for transient occupancy (less than thirty consecutive days). (Ord. 2020-04 § 1, 2020; Ord. 2017-05 § 2, 2017)

19.39.090 Design standards.

Accessory dwelling units shall comply with the following standards.

- A. An accessory dwelling unit connected to an onsite water treatment system requires a percolation test completed within the last five years, or, if the percolation test has been recertified, within the last ten years. (Ord. 2020-04 § 1, 2020; Ord. 2017-05 § 2, 2017)

19.39.100 Review and approval process.

Permits for accessory dwelling units and junior accessory dwelling units shall be reviewed ministerially through the building division in accordance to Government Code Section 65852.2 (a) through (e).

- A. The building division shall “shall approve or deny” ~~act on~~ the application to create an accessory dwelling unit or junior accessory dwelling unit within sixty days from the date the building division receives a completed application if there is an existing single-family or multifamily dwelling on the lot.
- B. If the City denies an accessory dwelling unit building permit application, the applicant shall receive a list of application deficiencies that would remedy a subsequent building permit application.

JUSTIFICATION: See HCD Comment #11 related to the City’s obligation to approve or deny an ADU application within 60-days.

- A. If the permit application to create an accessory dwelling unit or junior accessory dwelling unit is submitted concurrently with a permit application to create a new single-family dwelling on the lot, the building division may delay acting on the accessory dwelling unit or junior accessory dwelling unit permit application until the building division acts on the new single-family dwelling permit application, but the application to create the accessory dwelling unit or junior accessory dwelling unit shall be considered ministerial without discretionary review or a hearing. If the applicant requests a delay, the sixty-day time period shall be tolled for the period of the delay. (Ord. 2020-04 § 1, 2020)

19.39.110 Code enforcement.

For accessory dwelling units built before January 1, 2020, the property owner may request delayed enforcement of building standards for five years.

- A. There shall be no delays granted after January 1, 2030.
- B. There shall be no delays granted if the delay of the correction will cause a violation needed to protect health and safety. (Ord. 2020-04 § 1, 2020)

SECTION 7. CEQA FINDINGS. The City Council finds the municipal code amendments are exempt from environmental review under CEQA because the amendments are consistent with State law that preempt any inconsistent local ordinance. Thus, the City’s action is not creating a new land use regulation and it can be seen with certainty that no environmental impacts will result from the City’s action. Consequently, and in accordance with CEQA Section 21084(a) and both Section 15002(i)(1) – lack of Local Jurisdictional Discretion – and Section 15061(b)(3) – General Rule of Exemption – of the CEQA Guidelines, the ordinance adoption is exempt from CEQA review and a Notice of Exemption has been prepared for this proposed amendment.

SECTION 8. EFFECTIVE DATE. This ordinance shall become effective effect 30 days after its final passage pursuant to Government Code Section 36937.

SECTION 9. SEVERABILITY. If any section, sentence, clause or phrase of this Ordinance is for any reason held to be invalid or unconstitutional by a decision of any court of competent jurisdiction, such decision shall not affect the validity of the remaining portions of this Ordinance. The City Council hereby declares that it would have passed this Ordinance and adopted this Ordinance and each section, sentence, clause or phrase thereof, irrespective of the fact that one or more sections, subsections, sentences, clauses or phrases be declared invalid or unconstitutional.

SECTION 10. CUSTODIAN OF RECORDS. The documents and materials that constitute the record of proceedings on which this Ordinance is based are located at the City Clerk’s office located at 4831 Broadway, Suite 201, American Canyon, CA 94503. The custodian of these records is the City Clerk.

The foregoing Ordinance was introduced at a regular meeting of the City Council of the City of American Canyon, State of California, held on the 19TH day of March, 2024 by the following vote:

AYES:

NOES:

ABSTAIN:

ABSENT:

The foregoing Ordinance was adopted at a regular meeting of the City Council of the City of American Canyon, State of California, held on the _____ day of _____, _____, by the following vote:

AYES:

NOES:

ABSTAIN:

ABSENT:

ATTEST:

Taresa Geilfuss, CMC, City Clerk

Leon Garcia, Mayor
APPROVED AS TO FORM:

William D. Ross, City Attorney



TITLE

CalOES Designation

RECOMMENDATION

Adopt a Resolution designating the Authorized Agents with California Governor's Office of Emergency Services (CalOES) for the purpose of obtaining federal and state financial assistance for emergencies.

CONTACT

Erica Ahmann Smithies, P.E., Public Works Director

BACKGROUND & ANALYSIS

This is an administrative item required by the Governor's Office of Emergency Services (CalOES), which will enable the City of American Canyon to obtain federal financial assistance for any existing or future disaster/grant programs.

Ordinance 97-13 designates the City Manager as the Emergency Services Director and established in Chapter 2.48 of the City Municipal Code, Civil Defense and Disaster Relief. Chapter 2.48 includes the duties of each designation. In order to be reimbursed, CalOES requires a resolution with specific wording and the identification of alternates. The attached resolution is based on their format (CalOES form 130). The Resolution is effective for all currently open grants and for 3 years from date of approval and must be renewed every 3 years.

COUNCIL PRIORITY PROGRAMS AND PROJECTS

Organizational Effectiveness: "Deliver exemplary government services."

FISCAL IMPACT

There is no fiscal impact for this action.

ENVIRONMENTAL REVIEW

None

ATTACHMENTS:

1. Resolution - CalOES



DESIGNATION OF APPLICANT'S AGENT RESOLUTION FOR NON-STATE AGENCIES

BE IT RESOLVED BY THE City Council OF THE City of American Canyon
 (Governing Body) (Name of Applicant)

THAT City Manager, OR
 (Title of Authorized Agent)

Fire Chief, OR
 (Title of Authorized Agent)

Public Works Director
 (Title of Authorized Agent)

is hereby authorized to execute for and on behalf of the City of American Canyon,
 (Name of Applicant)

a public entity established under the laws of the State of California, this application and to file it with the California Governor's Office of Emergency Services for the purpose of obtaining federal financial assistance for any existing or future grant program, including, but not limited to any of the following:

- **Federally declared Disaster (DR), Fire Mitigation Assistance Grant (FMAG), California State Only Disaster (CDAA), Immediate Services Program (ISP), Hazard Mitigation Grant Program (HMGP), Building Resilient Infrastructure and Communities (BRIC), Legislative Pre-Disaster Mitigation Program (LPDM)**, under
- Public Law 93-288 as amended by the Robert T. Stafford Disaster Relief and Emergency Assistance Act of 1988, and/or state financial assistance under the California Disaster Assistance Act.
- **Flood Mitigation Assistance Program (FMA)**, under Section 1366 of the National Flood Insurance Act of 1968.
- **National Earthquake Hazards Reduction Program (NEHRP)** 42 U.S. Code 7704 (b) ((2) (A) (ix) and 42 U.S. Code 7704 (b) (2) (B) National Earthquake Hazards Reduction Program, and also The Consolidated Appropriations Act, 2018, Div. F, Department of Homeland Security Appropriations Act, 2018, Pub. L. No. 115-141
- **California Early Earthquake Warning (CEEW)** under CA Gov Code – Gov, Title 2, Div. 1, Chapter 7, Article 5, Sections 8587.8, 8587.11, 8587.12

That the City of American Canyon, a public entity established under the
 (Name of Applicant)

laws of the State of California, hereby authorizes its agent(s) to provide to the Governor's Office of Emergency Services for all matters pertaining to such state disaster assistance the assurances and agreements required.



Please check the appropriate box below

- This is a universal resolution and is effective for all open and future disasters/grants declared up to three (3) years following the date of approval.
- This is a disaster/grant specific resolution and is effective for only disaster/grant number(s): _____

Passed and approved this 2 day of April, 2024

Leon Garcia, Mayor

(Name and Title of Governing Body Representative)

David Oro, Vice Mayor

(Name and Title of Governing Body Representative)

Mark Joseph, Council Member

(Name and Title of Governing Body Representative)

CERTIFICATION

I, **Taresa Geilfuss**, duly appointed and **City Clerk** of
 (Name) (Title)

City of American Canyon, do hereby certify that the above is a true and
 (Name of Applicant)

correct copy of a resolution passed and approved by the **City Council**
 (Governing Body)

of the **City of American Canyon** on the 2nd day of April, 2024.
 (Name of Applicant)

City Clerk

(Signature)

(Title)



TITLE

Utility Rate Increases - Proposition 218 "Protest Hearing"

RECOMMENDATION

Take the following actions related to utility rates:

1. Open the Public Hearing, receive public comment, and then close the Public Hearing;
2. Determine whether a majority of property owners have submitted written protests;
3. Waive first reading and adopt by title only an Ordinance amending City of American Canyon Municipal Code (ACMC) Chapter 13.06: "Water Rates and Connection Fees", Chapter 13.14 "Water Conservation Plan", and Chapter 14.04: "Wastewater Rates and Charges" to establish new potable water, recycled water and wastewater property related fees and charges.

CONTACT

Jason Holley, City Manager

Erica Ahmann Smithies, P.E., Public Works Director

Juan Gomez, Finance Director

BACKGROUND & ANALYSIS

American Canyon provides potable water, recycled water, and sewer services to properties in its "service area". The term "property related fee(s)" is more commonly known as "utility rate(s)" and describes the "fees and charges" assessed for those utility services.

Tonight's hearing represents the final step of a formal, multi-step process for increasing utility rates (i.e. property related fees). Article XIII D of the California Constitution - as enumerated by the passage of Proposition 218 in 1996 - dictates this process, which includes "majority protest" proceedings involving property owners.

Specifically, the California Constitution requires:

- Revenues generated by utility rates to not exceed the cost of the utility service.
- A property owner's utility rate to not exceed their proportionate share of the costs.
- Utility rates are charged only for services available to the property owner.
- Holding a public hearing at least 45-days after notifying property owners and prior to taking action to increase utility rates.

In addition, the Council is prohibited from taking action to increase utility rates if a majority of property owners submit "written protests".

On January 16, 2024, the Council reviewed proposed utility rate increases, authorized property-owner notifications and set a hearing date for tonight. Staff recommends increasing utility rates to cover operational expenses and needed capital investments. The amounts of the increases were reviewed and confirmed by a volunteer group of local residents known as the Utility Rate Advisory Committee and are discussed in more detail below.

Summary of Community Outreach since January 2024

The California Constitution requires at a minimum a written notification of proposed increases to property owners. Notices of proposed utility rates increase - including specifically the amounts of the increases - were mailed to all property owners more than 45 days ago (Attachment 3).

Staff has undertaken a robust public outreach centered around the City's Virtual City Hall (www.cityofamcan.org/water). Property owner notices in English, Spanish, and Tagalog versions are available here along with a "rate study" containing the analysis which serves as the basis for rate structure. Customer resources – including Frequently Asked Questions (FAQs), low-income customer options, an online bill impact calculator, a printable protest letter, visual infographics and cost comparisons are also found here.

A poster with the key messaging is posted in the lobby at City Hall, and other key public areas in the community. In addition, a large informational postcard mailer was mailed to all residences and businesses. Lastly, staff included messaging in the City Manager's Update, social media platforms, and utility bill inserts.

Background

American Canyon's utility infrastructure includes a vast network of pipes, tanks, pump stations, fire hydrants, meters, treatment plants, and other facilities. This infrastructure delivers safe and reliable drinking water, collects and treats wastewater, and recycles water for non-potable uses. Skilled labor, quality materials, and reliable equipment are necessary to operate and maintain the utility systems.

American Canyon provides three (3) distinct and separate utility services to properties within its service area: potable water, recycled water, and sewer (wastewater). Each of these services are operated separately from each other - and separately from other general services (such as public safety, parks and facilities, etc.).

The California Constitution requires these "enterprises" to operate independently - meaning

revenue from one cannot be used for the other. And while private investor-owned utilities such as PG&E make a profit on gas and electric services, American Canyon does not. Meaning any surplusage revenue at the end of a fiscal year is retained and re-invested in its respective utility operation.

Staff proposes three (3) separate utility rates (water, recycled water and wastewater) - one for each enterprise. These rates are further proposed to be delineated between a fixed monthly amount (which does not change based on the volume - i.e. \$/month) and a variable amount (based on volume, i.e. \$/unit).

It is important to note one classes of ratepayers (e.g. "commercial") cannot be charged a a higher rate to reduce the rate of another (e.g. "residential"). Additionally, wealthy ratepayers cannot be charged a higher rate in order to subsidize a lower rate for those who might be unable to afford higher rates.

History and Current Challenges

American Canyon last updated water rates in 2019. Wastewater rates have not been updated since 2007. Uniform rates for recycled water were never formally adopted (but are proposed now).

While staff has increased utility rates administratively - based on the Consumer Price Index (CPI) - American Canyon continues to experience external cost pressures exceeding inflation - and Council approval is now required to increase utility rates.

Example cost pressures include maintenance and construction costs, treatment costs, personnel costs, new regulatory costs, water supply challenges, aging infrastructure, water purchases from the Cities of Napa and Vallejo, as well as the State Water Project and specifically, participation in the Sites Reservoir Project.

Also, there are no established recycled water rates, which is needed to cover operational costs and service loans made to this fund for startup costs.

In summary, the current utility rates do not bring in sufficient revenue to cover the cost of providing reliable services. Since rates are the primary funding source the City must consider potential rate and charges increases for water service and wastewater service as well as establishing new rates and charges for recycled water service.

Analysis

The Council established a voluntary citizen Utility Rate Advisory Committee on November 15, 2022. Since then, the Committee has met several times to understand the City's the costs of providing utility service while collaborating with staff to prepare a recommendation for the Council.

Proposed utility rates were developed based on the City's costs to provide the service and considering future annual operating costs and budgeted repair and replacement expenses by evaluating the prior year's audited financial data.

A "Cost of Service Analysis" was prepared by independent consulting firm (NBS) and contains a detailed description of the analysis which serves as the basis for the staff's recommendation (Attachment 2, Exhibit A). The proposed utility rate increases will support a cost-of-service structure consistent with current law.

Latest Update since January 2024

In response to Council and public feedback, staff is revising its prior recommendation as shown below (in bold):

Potable Water - Fixed Charges

Same increases recommended in the property owner notice shown in Attachment 2.

Potable Water - Variable Rate

New Recommendation: the Council takes no action. The quantity rate (\$/unit) established in 2018 remains unchanged but the delineation between Tiers 1 and 2 is reduced from 10 units to 6 units.

Of note, staff will continue to administratively increase quantity rate up to 3% each (based on the Consumer Price Index) as currently allowed. As a result, the variable rate in Year 5 will grow up to a maximum of \$8.74/unit (instead of \$8.99/unit). Said differently, the quantity rate will increase by only 15.9% (over 5 years) instead of 19.2%.

Staff believes the additional customers at Watson Ranch (and elsewhere) will broaden the base of customers. And when you broaden the base of customers with a relatively smaller quantity rate will generate the required revenue to support the operations.

Recycled Water - Fixed Charges

Same increases as recommended in the property owner notice shown in Attachment 2.

Recycled Water - Variable Rate

New Recommendation: the Council takes action for a lower volumetric rate. The property owner notice listed a proposed volumetric rate of \$6.69/unit for delivery and \$4.00/unit for self-haul. The revised recommendation is a lower volumetric rate of \$3.14/unit for delivery and \$1.88/unit for self-haul respectively.

Staff forecasts increased revenue based on the City's Urban Water Management Plan – which identifies an expanded customer base to generate the required revenue to support the operations.

The additional customers are the result of soon to be completed pipeline and service extensions leading to more customers than previously considered.

Sewer – Residential and Commercial Customer Class

Same increases as recommended in the property owner notice shown in Attachment 2.

Sewer – Non-Residential High-Strength Customer Class

New Recommendation: the Council takes no action. The City has three (3) non-residential, high-strength customers (known as “significant industrial users” or SIU). To protect the Water Reclamation Facility (WRF) from high-strength waste, each SIU has a specific sewer service agreement and NPDES discharge permit. Currently each SIU "pre-treats" its wastewater before discharging to the collection system. The SIU metered, monitored, and tests the wastewater for a variety of constituents.

At Council’s direction as part of an economic development strategy for expanding business opportunities in the Green Island Industrial Area, staff is currently exploring options for a new capital project at the WRF that will embrace (rather than reject) an SIU’s discharge of high-strength waste. The revenue to pay for this improvement will be generated by the current SIUs (and hopefully other SIUs) in conjunction with a future rate study, but for now, the current wastewater rate for SIU’s will generate adequate revenue over the next 18 to 24 months.

Regional Comparison

Below is comparison of staff recommendation to other agencies. The table assumes residential use of 7 units per month.

Utility Rates - Regional Comparison					
City/Agency	Potable Water Fixed	Potable Water Quantity	Wastewater Fixed	Wastewater Quantity	Total Monthly Bill
Petaluma	\$26.02	\$34.99	\$39.85	N/a	\$94.87
Napa*	\$26.02	\$28.59	\$61.55	N/a	\$116.16
Yountville	\$93.76	\$22.49	\$65.42	N/a	\$116.25
Benicia	\$26.59	\$38.78	\$58.07	\$23.80	\$123.44
American Canyon (Current)	\$26.56	\$52.78	\$60.48	N/a	\$139.82
Vallejo*	\$51.72	\$33.32	\$73.74	N/a	\$158.78
American Canyon (Proposed)	\$31.32	\$54.99	\$74.94	N/a	\$161.25
Calistoga	\$62.82	\$94.22	\$106.24	N/a	\$263.28
St. Helena	\$67.75	\$41.93	\$89.63	\$69.23	\$268.54

*Note: wastewater service provided by separate special district

Implementation Process

After a brief presentation, staff recommends opening the Public Hearing, receiving public comment, and then closing the Public Hearing. Note, public testimony does not substitute for written protest if the property owner opposes to the increases.

Once all public testimony is received and the Public Hearing is closed, all written protests received to that point by the City Clerk will be evaluated to determine if a majority of property owners have submitted written protests. If the number is close, then staff will need to adjourn to review the protests to determine the number of valid votes. Two protests from the same property, one from the property owner and one from the ratepayer/tenant, is counted as one protest.

If a majority of written protests is not received, then staff recommends adopting the Ordinance (Attachment 1) approving increased utility rates. If adopted, the new rates would become effective January 1, 2025. Scheduled inflation increases will also occur in January each year.

COUNCIL PRIORITY PROGRAMS AND PROJECTS

Infrastructure: "Develop and maintain infrastructure resources to support sustainable growth."

FISCAL IMPACT

The fiscal impact related this item will result in increased operational revenues for all three Enterprise Funds to offset projected increases associated with operating these enterprises. The attached Rate Study Report (Attachment 1, Exhibit A) provides greater detail on projected revenues and expenses.

The goal of the rate study is to provide adequate funding for operational expenses and necessary long-term capital program needs. As Enterprise Funds, the Water, Sewer and Recycled Water Funds should be self-sustaining, this item achieves the goal of long-term fiscal and operational sustainability for the Water and Sewer Enterprises. The Recycled Water Enterprise is a relatively new system with significant capital investments made in the last couple of years and these projected increases to the rates would move us closer to achieving a healthy, self-sustaining enterprise.

ENVIRONMENTAL REVIEW

The recommunicated utility rate increases are, among other things, for the purpose of continuing to provide funds to meet the costs of operating, maintaining and replacing the utility facilities within the service area and to provide funding for capital projects necessary and/or required to maintain service within the existing service area and as such are Categorically Exempt from environmental review (Division 13, Section 21080 (b) (8)) under CEQA.

ATTACHMENTS:

1. Ordinance
2. Exhibit A (Rate Study, March 2024)
3. Notice

ORDINANCE NO. 2024-

ORDINANCE OF THE CITY COUNCIL OF THE CITY OF AMERICAN CANYON AMENDING CITY OF AMERICAN CANYON MUNICIPAL CODE CHAPTER 13.06: "WATER RATES AND CONNECTION FEES", CHAPTER 13.14 "WATER CONSERVATION PLAN", AND CHAPTER 14.04: "WASTEWATER RATES AND CHARGES" TO ESTABLISH NEW POTABLE WATER, RECYCLED WATER AND WASTEWATER PROPERTY RELATED FEES AND CHARGES

WHEREAS, the City of American Canyon's utility infrastructure includes a network of treatment plants, pipes, tanks, pump stations, fire hydrants, meters, and other facilities; and

WHEREAS, through this valuable infrastructure, the City provides safe and reliable drinking water, collects and treats wastewater, and produces recycled water for reuse, advancing sustainability efforts; and

WHEREAS, skilled labor, quality materials, and reliable equipment are necessary to operate and maintain the utility systems and facilitate water purchases from the Cities of Napa and Vallejo, as well as the State Water Project; and

WHEREAS, the City's current utility rates and charges, comprised of Water, Wastewater, and Recycled Water Enterprise Funds, do not bring in sufficient revenue to cover operating and capital costs; and

WHEREAS, utility rates and charges have not increased for water since 2018, wastewater since 2009, and there are no established recycled water rates and charges; and

WHEREAS, a Utility Rate Study was prepared by an independent consulting firm, NBS, and contains a detailed description and analysis of the proposed utility rates and charges per the respective enterprise fund; and

WHEREAS, the City and the Utility Rate Advisory Committee (URAC) have conducted a detailed fiscal analysis of the utility rates and developed recommendations regarding adjustments to the utility rates and charges in order to comply with state law; and

WHEREAS, these rate and charge adjustments will help ensure the health and safety of the community while protecting the City's financial health; and

WHEREAS, Article XIID, Section 6 of the California Constitution requires that prior to the public hearing to increase utility rates charged by the City, the City mail to each property owner or utility billing customer, at least 45 days prior to such public hearing, a notice describing (a) the amount of the fee or charge to be imposed upon each parcel, (b) the basis upon which the amount of the proposed fee or charge was calculated, (c) the reason for the fee or charge, and (d) the date, time, and location of a public hearing on the proposed fee or charge; and

WHEREAS, on February 16, 2024 the City mailed the notice of public hearing to be held on April 2, 2024, relating to the City’s proposed utility rates and charges in accordance with California Constitution Article XIII D Section 6; and

WHEREAS, the City held such public hearing on April 2, 2024, and received and considered all oral and written protests related to the proposed adjustments in the utility rates and charges; and

WHEREAS, the City Council of the City of American Canyon determined that written protests have not been received from property owners or utility billing customers representing a majority of the parcels subject to the proposed fee increase; and

WHEREAS, the City Council intends to adopt new utility rates and charges as shown in Exhibit A, attached hereto and made a part thereof, following the procedures required by Proposition 218, article XII D, section 6 of the California Constitution; and

WHEREAS, the City Council intends to adopt a utility rate structure proposed by the analysis following the procedures required by Proposition 218, article XIII D, section 6 of the California Constitution; and

NOW THEREFORE BE IT ORDAINED that the City Council of the City of American Canyon, having considered all the evidence, including any submitted by member of the public, hereby adopts Municipal Code amendments as follows:

SECTION 1: Repeal and replace ACMC 13.06.030.B with the following:

(B) As of the effective date of the ordinance, or January 1, 2025, whichever comes later, the water meter charges for all customers shall be levied according to the following schedule:

	<i>01/01/25</i>	<i>01/01/26</i>	<i>01/01/27</i>	<i>01/01/28</i>	<i>01/01/29</i>
<i>< 1" meter</i>	<i>\$31.32</i>	<i>\$34.14</i>	<i>\$37.21</i>	<i>\$38.70</i>	<i>\$39.86</i>
<i>1" meter</i>	<i>\$31.32</i>	<i>\$34.14</i>	<i>\$37.21</i>	<i>\$38.70</i>	<i>\$39.86</i>
<i>1 1/2" meter</i>	<i>\$58.53</i>	<i>\$63.80</i>	<i>\$69.55</i>	<i>\$72.33</i>	<i>\$74.50</i>
<i>2" meter</i>	<i>\$91.19</i>	<i>\$99.40</i>	<i>\$108.35</i>	<i>\$112.68</i>	<i>\$116.06</i>
<i>3" meter</i>	<i>\$178.29</i>	<i>\$194.33</i>	<i>\$211.82</i>	<i>\$220.30</i>	<i>\$226.91</i>
<i>4" meter</i>	<i>\$276.27</i>	<i>\$301.13</i>	<i>\$328.23</i>	<i>\$341.36</i>	<i>\$351.60</i>
<i>6" meter</i>	<i>\$548.43</i>	<i>\$597.79</i>	<i>\$651.59</i>	<i>\$677.66</i>	<i>\$697.99</i>
<i>8" meter</i>	<i>\$875.03</i>	<i>\$953.78</i>	<i>\$1,039.63</i>	<i>\$1,081.21</i>	<i>\$1,113.65</i>

SECTION 2: Repeal ACMC 13.06.030.C.

SECTION 3: Repeal and replace ACMC 13.06.040.B with the following:

(B) As of the effective date of the ordinance, or January 1, 2019, whichever comes later, customers will pay quantity rates according to the following schedule below:

<i>Residential Use</i>	<i>01/01/19</i>	<i>01/01/20</i>	<i>01/01/21</i>	<i>01/01/22</i>	<i>01/01/23</i>
<i>Tier 1 (0 - 6 units)</i>	<i>\$6.07</i>	<i>\$6.42</i>	<i>\$6.78</i>	<i>\$7.15</i>	<i>\$7.54</i>
<i>Tier 2 (> 6 units)</i>	<i>\$6.50</i>	<i>\$7.01</i>	<i>\$7.38</i>	<i>\$7.76</i>	<i>\$8.15</i>
<i>Non-Residential Use</i>	<i>01/01/19</i>	<i>01/01/20</i>	<i>01/01/21</i>	<i>01/01/22</i>	<i>01/01/23</i>
	<i>\$6.24</i>	<i>\$6.59</i>	<i>\$6.96</i>	<i>\$7.33</i>	<i>\$7.72</i>
<i>Raw Water</i>	<i>01/01/19</i>	<i>01/01/20</i>	<i>01/01/21</i>	<i>01/01/22</i>	<i>01/01/23</i>
	<i>\$3.06</i>	<i>\$3.15</i>	<i>\$3.24</i>	<i>\$3.34</i>	<i>\$3.44</i>

Effective January 1, 2024, and on every January 1st thereafter, quantity charges will be adjusted by the percent change in the Bay Area Consumer Price Index over the previous calendar year, or by three percent, whichever is less.

SECTION 4: Repeal and replace ACMC 13.14.100 with the following:

13.14.100 – Drought Surcharge

(A) Customers will receive prior notification of the standard allotment basis, applicable rates, and the opportunity to request exceptions to the standard allotment basis.

(B) Water use beyond the maximum allowed for each water conservation stage shall be subject to a drought surcharge pursuant to the schedule set forth below. The customer of record may request an increase in this basic allotment as set forth in Section 13.14.110 hereof. Application forms and instructions will be available at the American Canyon City Hall.

(C) In addition to the quantity rates set forth in ACMC 13.06.040.B, each customer shall pay, during each billing period, a drought surcharge for water delivered in excess of the basic allotment as follows:

	<i>01/01/25</i>	<i>01/01/26</i>	<i>01/01/27</i>	<i>01/01/28</i>	<i>01/01/29</i>
<i>Stage 1</i>	<i>\$0.35</i>	<i>\$0.44</i>	<i>\$0.53</i>	<i>\$0.58</i>	<i>\$0.62</i>
<i>Stage 2</i>	<i>\$0.79</i>	<i>\$0.98</i>	<i>\$1.19</i>	<i>\$1.30</i>	<i>\$1.39</i>
<i>Stage 3</i>	<i>\$1.36</i>	<i>\$1.68</i>	<i>\$2.03</i>	<i>\$2.23</i>	<i>\$2.39</i>
<i>Stage 4</i>	<i>\$2.12</i>	<i>\$2.61</i>	<i>\$3.16</i>	<i>\$3.46</i>	<i>\$3.71</i>
<i>Stage 5</i>	<i>\$3.17</i>	<i>\$3.92</i>	<i>\$4.75</i>	<i>\$5.20</i>	<i>\$5.57</i>
<i>Stage 6</i>	<i>\$4.76</i>	<i>\$5.88</i>	<i>\$7.12</i>	<i>\$7.79</i>	<i>\$8.36</i>

Customers whose water usage falls in Tier 1 as set forth in in ACMC 13.06.040.B are assumed to have maximized their conservation effort and will not be subject to a drought surcharge if their water consumption is not further reduced.

In addition to the drought surcharge, if drought usage exceeds the allowed allotment, a warning will be issued and enforcement actions may be taken as described in Section 13.14.120.

SECTION 5: Modify ACMC 13.14.065 as follows:

Following a public hearing, the city's ~~nonresidential~~ recycled water customers whose properties may be served by recycled water shall connect their property to recycled water for those uses for which the use of potable domestic water would be deemed a waste or unreasonable use of water as specified in Division 7, Chapter 7, of the California Water Code (Section 13550 et seq.). Recycled water customers shall pay for recycled water at the rate established by the city council.

As of the effective date of the ordinance, or January 1, 2025, whichever comes later, recycled water customers shall pay the meter charges and quantity rates for recycled water service as set forth below:

Water Meter Charges					
	01/01/25	01/01/26	01/010/27	01/01/28	01/01/29
< 1" meter	\$38.89	\$42.78	\$47.05	\$49.41	\$51.88
1" meter	\$64.81	\$71.29	\$78.42	\$82.34	\$86.46
1 1/2" meter	\$129.62	\$142.58	\$156.84	\$164.69	\$172.92
2" meter	\$207.40	\$228.14	\$250.95	\$263.50	\$276.67
3" meter	\$414.79	\$456.27	\$501.90	\$526.99	\$553.34
4" meter	\$648.11	\$712.92	\$784.22	\$823.43	\$864.60
6" meter	\$1,296.23	\$1,425.85	\$1,568.43	\$1,646.85	\$1,729.20
8" meter	\$2,073.96	\$2,281.36	\$2,509.49	\$2,634.97	\$2,766.71

Quantity Rates (\$/hcf)					
	01/01/25	01/01/26	01/010/27	01/01/28	01/01/29
Delivered	\$3.14	\$3.46	\$3.80	\$3.99	\$4.19
Self-Haul	\$1.88	\$2.07	\$2.28	\$2.39	\$2.51

Effective January 1, 2030, and on every January 1st thereafter, wastewater service charges will be adjusted by the percent change in the Bay Area Consumer Price Index over the previous calendar year, or by three percent, whichever is less.

SECTION 6: Repeal and replace ACMC 14.04.020 as follows:

14.04.020 Wastewater service charges – Residential service

(A) As of the effective date of the ordinance, or January 1, 2025, whichever comes later, each residential customer shall pay for wastewater services per dwelling unit per month according to the schedule outlined below:

	01/01/25	01/01/26	01/010/27	01/01/28	01/01/29
Single Family Residential	\$74.94	\$89.93	\$100.72	\$112.81	\$112.81
Multi-Family Residential	\$48.70	\$58.44	\$65.45	\$73.31	\$73.31

(B) Effective January 1, 2030, and on every January 1st thereafter, wastewater service charges will be adjusted by the percent change in the Bay Area Consumer Price Index over the previous calendar year, or by three percent, whichever is less.

SECTION 6: Repeal and replace ACMC 14.04.030 as follows:

14.04.030 Wastewater service charge—Mobile home residential service.

(A) Each mobile home customer with an individual metered account shall be considered a Multi-Family Residential Customer and pay for wastewater services according to the schedule set forth in ACMC 14.040.020.

SECTION 7: Repeal and replace ACMC 14.04.040 as follows:

14.04.040 Wastewater service charge—Multifamily.

(A) Each multi-family residential customer shall pay for wastewater services according to the schedule set forth in ACMC 14.040.020.

SECTION 8: Repeal and replace ACMC 14.04.050 as follows

14.04.050 Wastewater service charges—Nonresidential, normal strength.

(A) As of the effective date of the ordinance, or January 1, 2025, whichever comes later, each normal strength, nonresidential customer shall pay both a monthly service charge and a volumetric charge for wastewater services according to the schedule outlined below:

	01/01/25	01/01/26	01/010/27	01/01/28	01/01/29
Monthly Service Charge	\$115.21	\$138.25	\$154.84	\$173.42	\$173.42
Volumetric Rate (\$/HCF)	\$1.92	\$2.31	\$2.58	\$2.89	\$2.89

The volumetric charge shall be equal to the volumetric rate established by schedule above (\$/HCF) multiplied by the quantity of water delivered to the customer pursuant to ACMC 13.04.

(B) Effective January 1, 2030, and on every January 1st thereafter, wastewater service charges will be adjusted by the percent change in the Bay Area Consumer Price Index over the previous calendar year, or by three percent, whichever is less.

NOW THEREFORE BE IT FURTHER ORDAINED that the American Canyon City Council does hereby resolve as that based on these facts and circumstances presented and the information received during the public hearing, the City Council finds that adjustments to the utility rates and charges, as shown in Exhibit A, are necessary and hereby adopted.

PASSED, APPROVED and ADOPTED at a regularly scheduled meeting of the City Council of the City of American Canyon held on the 2nd day of April, 2024, by the following vote:

AYES:
NOES:
ABSTAIN:
ABSENT:

Leon Garcia, Mayor

ATTEST:

APPROVED AS TO FORM:

Taresa Geilfuss, CMC, City Clerk

William D. Ross, City Attorney

CITY OF AMERICAN CANYON

Report for:

Sewer, Water, and Recycled Water Enterprise Rate Studies

March 2024



nbsgov.com

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1. Purpose and Overview of the Study

1.1 Purpose

The City of American Canyon (City) retained NBS to conduct a comprehensive rate study for its water, recycled water, and sewer enterprise funds. The City had a number of objectives and goals in mind for this study including meeting revenue requirements, reviewing current rate structures based on recent consumption data, funding capital improvements and changes in costs, and complying with certain legal requirements (e.g., California Constitution Article XIII D, Section 6, which is commonly referred to as Proposition 218 [Prop 218]). The City's broader objectives in this study include ensuring adequate funding for operating and capital costs, maintaining reasonable reserves, ensuring revenue stability in utility rates, and developing new recycled water and drought rates to reflect the revenue requirements at various stages of water conservation. The rates resulting from this study were developed in a manner that is consistent with industry standard cost-of-service principles. In addition to documenting the rate study methodology, this report is provided with the intent to assist the City in its continuing effort to maintain transparent communications with the residents and community it serves.

In developing new rates for the City's enterprise funds, NBS worked cooperatively with City staff and the City Council (Council) in selecting the appropriate rate alternatives that address the City's goals and objectives. Based on input provided by City staff, NBS proposes the rates summarized in this report. The Council has the final decision regarding the adoption of the proposed rates and whether to proceed with the Proposition 218 approval process.

1.2 The City of American Canyon Background

The City of American Canyon was incorporated in 1992 and is located in southern Napa County about thirty-five miles northeast of San Francisco.

WATER UTILITY

The City provides potable water service to approximately 6,825 metered customers. Of these potable water customers, residential customers represent approximately 90%, including single-family and multi-family users. Recent consumption records indicate that residential households use 59% of total water sold compared to all other non-residential customers who use the remaining 41%. The City's existing potable water system includes treatment, storage, pumping, and distribution infrastructure serving residential, industrial, commercial, and agricultural customers.¹

The City relies on several sources of water to meet its needs including water from the State Water Project, water from the cities of Vallejo and Napa, and recycled water produced at the City's Water Reclamation Facility (WRF). The primary source of water is from the State Water Project (61%) via the North Bay Aqueduct, while the remaining supply consists of treated water from the cities of Vallejo and Napa as well as raw water from the City of Vallejo. The City has also partnered with the Sites Reservoir Project in 2017 to construct an off-river reservoir that will capture excess water from major storms that can be utilized during drier periods. This project is in the final stages of environmental review.

¹ Source: <https://www.cityofamericancanyon.org/home/showpublisheddocument/17957>.

RECYCLED WATER UTILITY

The City owns and operates a complementary water and wastewater utility infrastructure that includes water reclamation and water reuse within the City limits. The current area served with recycled water is approximately 5 square miles with an overall potential service area of over 14 square miles, including potential customers within Napa County just outside City limits along the northern boundary.² The City currently serves public schools, public parks, industrial, commercial, and agricultural users, and produces approximately 80 million gallons of recycled water each year primarily for outdoor use. The City provides recycled water service to 76 customers.

Using recycled water for irrigation saves electricity, using one quarter of the energy needed to pump groundwater, and dramatically reduces the consumption of potable water. The additional treatment of wastewater at the reclamation plant also reduces nitrates which could otherwise impact the groundwater basin. As with reclaimed water providers throughout California, the City's recycled water rates tries to be competitive with other sources of irrigation water while ideally recovering basic operating costs.

SEWER UTILITY

The City currently provides sewer service to customers located within the City limits, as well as the Airport Industrial Area and a few areas within the unincorporated County area. The City completed construction of the Water Reclamation Facility (WRF) in 2002 to treats domestic and industrial wastewater flows.

Currently, the sewer utility services approximately 6,100 connections; the vast majority (77%) of which are single-family residential users. The remainder of the customers are primarily multi-family residential users (21%) and a handful of commercial and industrial users (3%). The current area served is approximately 6.3 square miles with an overall potential service area of over 8.5 square miles and includes approximately 53 miles of sewer mains, five pump stations, and 5 miles of sewer force main.³

1.3 Overview of the Study

Comprehensive rate studies, such as this one, typically include three components: (1) preparation of a financial plan that identifies the net revenue requirements for the utility; (2) analysis of the cost to serve each customer class; and (3) the rate structure design. These steps are shown in **Figure 1** and are intended to follow industry standards. They reflect the fundamental principles of cost-of-service rate making embodied in the American Water Works Association's (AWWA) *Principles of Water Rates, Fees, and Charges*,⁴ also referred to as Manual M1 for water rates and the Water Environment Federation's (WEF) *Financing and Charges for Wastewater Systems*, Manual of Practice No. 27⁵ for sewer rates. They also address requirements under Proposition 218 that rates do not exceed the cost of providing the service and be proportionate to the cost of providing service for all customers. In terms of the chronology of the study, these three steps represent the order in which they were performed in this Study.

² Source: <https://www.cityofamericancanyon.org/home/showpublisheddocument/9735>.

³ Source: <https://www.cityofamericancanyon.org/home/showpublisheddocument/9733>.

⁴ *Principles of Water Rates, Fees, and Charges*, Manual of Water Supply Practices, Manual M1, American Water Works Association, 7th Edition, 2017.

⁵ *Financing and Charges for Wastewater Systems*, Manual of Practice No. 27, Water Environment Federation, 4th Edition, 2018.

Figure 1. Primary Components of a Rate Study



NBS projected revenues and expenditures, developed net revenue requirements, performed cost-of-service rate analyses, and developed new water, recycled water, and sewer rates for the City using this approach. The following sections in this report present an overview of the methodologies, assumptions, and data used along with the financial plans and rates developed. Detailed tables and figures documenting the development of the proposed rates are provided in the Appendices.

The City provided NBS with the data necessary to conduct the study, including historical, current, and projected revenues and expenditures, number of customer accounts, and water consumption data along with other operational and capital cost information.

FINANCIAL PLAN

As a part of the rate study, NBS projected revenues and expenditures on a cash-flow basis for the next five (5) years. The amount of rate revenue required that will allow reserves to be maintained at the recommended levels is known as the net revenue requirement. As current rate revenue falls short of the net revenue requirement, rate adjustments - or more accurately, adjustments in the total revenue collected from rates - are recommended. This report presents an overview of the methodologies, assumptions, and data used along with the financial plan and proposed rates developed in this study.⁶

COST-OF-SERVICE ANALYSIS

The basic purpose of the cost-of-service analysis (COSA) is to fairly and equitably allocate costs to customer classes. The cost-of-service analysis consists of two major components: (1) the classification of expenses, and (2) the allocation of costs to customer classes. For example, a key task is the “classification” of the water revenue requirements into the following categories:

- Commodity related costs
- Recycled water related costs
- Capacity related costs
- Customer service related costs
- Fire Protection related costs

⁶ The complete financial plans are available in the *Appendices*.

In addition, here are the categories used in the “classification” of the sewer revenue requirements :

- Flow related costs
- Strength related costs
- Customer service related costs

These cost allocation factors represent the types of cost allocations in the cost of service. Further details are discussed below and documented in the *Appendices*.

RATE DESIGN ANALYSIS

During the rate design phase of the study, NBS and City staff worked together to develop rate alternatives to meet the City’s objectives. It is important for the City to send proper price signals to its customers about the actual cost of providing service. This objective is typically addressed through both the magnitude of the rate adjustments and the rate structure design. In other words, both the amount of revenue collected and the way in which the revenue is collected from customers are important.

Several criteria are typically considered in setting rates and developing sound rate structures. The fundamentals of this process have been well documented in a number of rate-setting manuals, such as AWWA’s Manual M1. The foundation for evaluating rate structures is generally credited to James C. Bonbright in *Principles of Public Utility Rates*,⁷ which outlines pricing policies, theories, and economic concepts along with various rate designs. The following is a simplified list of the attributes of a sound rate structure:

- Rates should be easy to understand from the customer’s perspective.
- Rates should be easy to administer from the utility’s perspective.
- Rates should promote the efficient allocation of the resource.
- Rates should be equitable and non-discriminating (i.e., cost based).
- There should be continuity in the rate making philosophy over time.
- Addressing other utility policies (e.g., conservation and economic development).
- Rates should provide month-to-month and year-to-year revenue stability.

RATE STRUCTURE TERMINOLOGY

This section covers basic rate design criteria that NBS and City staff considered as a part of their review of the rate structure alternatives. One of the most fundamental points in considering rate structures is the relationship between fixed and variable costs. Fixed costs, such as debt service and personnel costs, typically do not vary with the amount of water consumed. In contrast, variable costs, such as the cost of purchased water, chemicals, and electricity, tend to change with the quantity of water sold. The vast majority of rate structures contain a fixed, or minimum, charge in combination with a volumetric charge.

- **Fixed Charges** – Fixed charges can be called base charges, minimum monthly charges, customer charges, fixed meter charges, etc. Fixed charges for water utilities typically increase by meter

⁷ James C. Bonbright, Albert L. Danielsen, and David R. Kamerschen, *Principles of Public Utility Rates*, Arlington, VA: Public Utilities Report, Inc., Second Edition, 1988, pp. 383-384.

size. For example, a customer with a 2-inch meter has a fixed meter charge that is more than five times greater than the typical residential customer based on the safe operating capacity of the meter.⁸ Since a large portion of utility costs are typically related to meeting capacity requirements, individual capacity demands are important in establishing equitable rates for customers.

- **Variable (Consumption-Based) Charges** – In contrast to fixed charges, variable costs, such as purchased water, groundwater replenishment costs, and the cost of electricity used in pumping water and chemicals for treatment, tend to change with the quantity of water produced. For a water utility, variable charges are calculated based on a metered consumption per unit price (e.g., per 100 cubic feet, or HCF).
- **Uniform (Single-Tier) Water Rates** – There are significant variations in the basic philosophy of variable charge rate structure alternatives. Under a uniform (single tier) rate structure, the cost per unit does not change with consumption and, therefore, provides a simple and straightforward approach from the customer’s perspective and in terms of the City’s rate administration.
- **Tiered Water Charges** – In contrast to a uniform tier, a tiered (or inclining block) rate structure attempts to send a price signal to customers that the cost of water increases as more water is consumed and is considered to be a more conservation-oriented rate structure. Tiered water rates are encouraged by state law and regulatory mandates but are also intended to represent the higher costs for customers who contribute more to peak usage and place greater demands on the system. The types of higher costs reflected in the higher tiers may include:
 - *Conservation Program Costs* - These are costs intended to encourage customers to eliminate inefficient and wasteful water use, and otherwise reduce consumption during peak periods.
 - *Purchased Water Costs* - When consumption exceeds the amount of water rights the City is allocated, the City may incur additional costs for replacement water in order to meet that increased demand. That replacement water comes at a higher cost.
 - *Energy Costs* - During summer months, the City may pay more in electric charges to pump, treat, and deliver water, and have a higher percentage of its energy bill in higher electricity “tiers.”
 - *Higher Maintenance Costs* - Peak periods tend to have a higher number of service calls, capacity costs, and system maintenance issues when the water system is running at peak demand.

REGULATORY ISSUES

Drought and Water Conservation – On January 17, 2014, Governor Jerry Brown declared a State of Emergency throughout California due to severe drought conditions. On April 1, 2015, the Governor issued Executive Order B-29-15 mandating statewide water conservation of 25 percent. The specific conservation mandate for each community in California varied from 4 to 36 percent. Beginning in June 2016,

⁸ *Principles of Water Rates, Fees, and Charges*, Manual of Water Supply Practices, Manual M1, AWWA, 7th Edition, 2017, pp. 151-152.

communities like the City were allowed to “self-certify” that they had sufficient supply to meet customer demand for three years but were no longer mandated to achieve a specific conservation target.

While conservation is good from a supply and environmental standpoint, it places added financial pressure on the water utility. Consumption impacts both revenue and expenses and, with positive conservation efforts continuing to be a priority for the City, revenue declines could put the water utility at risk in the future without changes in the consumption charges. To help offset these risks, the drought rates proposed in this study account for various stages of water conservation to allow the City to continue meeting its financial obligations going forward. The drought rates would be intended to go into effect whenever the City declares it is in a specific stage of its adopted drought mitigation plan.

KEY FINANCIAL ASSUMPTIONS

The following is a summary of the key financial assumptions used in the analyses. The following capital and operational fund targets reflect input from City staff in order to meet specific utility objectives:

- **Funding of Capital Projects** – The capital improvement costs will be funded with a combination of cash in reserves and the additional revenue generated from the proposed rate increases. The capital projects listed in the financial plan are from the City’s capital improvement plan. The analysis assumes:
 - Capital costs attributable to existing customers are funded by rate revenue.
 - Capital costs attributable to growth are funded through revenue from the capacity fee reserves.
- **Reserve Targets** – For each utility (i.e., water, recycled water, and sewer), the City maintains reserves for operations, capital, and other specific needs. The details of each utility’s reserve targets are covered in their respective section of this report.
- **Inflation and Growth Projections** – Assumptions were made in the analysis with regard to cost inflation in order to project future revenues and expenses for the study period. The following inflation factors were used in the analysis:
 - Customer growth is estimated at 1.80% per year.
 - General cost inflation is set at 3.0% annually.
 - Labor cost inflation is set at 3.5% annually.
 - Energy cost inflation is set at 7.44% annually.
 - Electricity cost inflation is set at 5.64% annually.
 - Fuel & Utilities cost inflation is set at 5.24% annually.
 - Construction cost inflation is set at 3.5% annually.

These inflation factors are based on long-term trends; therefore, the City should re-examine these factors in another year to assess whether short-term trends are a better reflection of the costs going forward.

2. Water Rate Study

2.1 Key Water Rate Study Issues

The City's water rate analysis was undertaken with a few specific objectives, including:

- Generating sufficient revenue to meet anticipated operating and maintenance costs and fund necessary capital improvement projects for the next five years.
- Continuing with a rate design that promotes revenue stability.
- Developing drought rates.
- Verifying that the City's tiered volumetric rates are cost of service based.
- Encouraging water conservation with a tiered rate structure.
- Maintaining adequate reserve levels to ensure continuity in operations.
- Complying with the legal requirements of Proposition 218 to ensure the cost of providing service is properly allocated amongst user classifications.

NBS developed various water rate alternatives as requested by City staff over the course of this study. All rate structure alternatives relied on industry standards and cost-of-service principles. The fixed charges and volume-based rates were calculated based on the net revenue requirements, number of customer accounts, water consumption and estimated water discharge, and other relevant data provided by the City.

The following are the basic components included in this analysis:

- **Developing Cost Allocations** – The water revenue requirements were “functionalized” into five categories: (1) commodity (or volume-based) costs; (2) recycled water costs; (3) fixed capacity costs; (4) customer service costs; and (5) fire protection costs. These functionalized costs were then used to develop unit costs based on various factors, such as water consumption, peaking factors, and number of accounts by meter size.
- **Determining Revenue Requirements by Customer Class** – The total revenue that needs to be collected from each customer class was determined using the functional costs and allocation factors. For example, customer costs are allocated based on the number of meters, while volume-related costs are allocated based on the water consumption of each customer class. Once the costs are allocated and the net revenue requirement for each customer class is determined, collecting the revenue requirements from each customer class is addressed within the rate design.
- **Evaluating Rate Design (Fixed vs. Variable Charges)** – The revenue requirements for each customer class are collected through a combination of fixed monthly service charges and volumetric rates.

2.2 Financial Plan

It is important for municipal utilities to not only collect sufficient revenues every year, but to also maintain reasonable reserves to handle emergencies, fund working capital, maintain a good credit rating, and generally follow sound financial management practices. Rate adjustments are governed by the need to meet operating and capital costs as well as maintain reasonable reserve funds. The current state of the City's water utility, with regard to these objectives, is as follows:

- **Meeting Net Revenue Requirements:** For FY 2023/24 through FY 2027/28, the projected net revenue requirement (that is, total annual expenses plus debt service and rate-funded capital costs, less non-rate revenues) for the water system is approximately \$13.4 million per year. The net revenue requirement includes interfund transfers for debt service and capital projects totaling \$4.0 million annually and are expected to continue over the next five years. As a result, the water utility is financially sound and requires only minimal rate adjustments over the 5-year rate adoption period. However, it is important to note that the utility would be facing a deficit that would grow to \$3.8 million by the end of this period if these contributions were to cease.
- **Building and Maintaining Reserve Funds:** Reserve funds provide a basis for a utility to cope with fiscal emergencies, such as revenue shortfalls, asset failure, and natural disasters, among other events. Reserve policies provide guidelines for sound financial management, with an overall long-range perspective to maintain financial solvency and mitigate financial risks associated with revenue instability, volatile capital costs, and unexpected emergencies.
- NBS along with City staff have chosen to set the following reserve targets:
 - **Operating Reserve** set equal to 90 days of operating and maintenance expenses, or approximately \$1.9 million in FY 2023/24. An operating reserve is intended to promote financial viability in the event of any short-term fluctuation in revenues and/or expenditures, such as those caused by weather patterns, the natural inflow and outflow of cash during billing cycles, natural variability in demand-based revenue streams (e.g., volumetric charges), and - particularly in periods of economic distress - changes or trends in the age of receivables.
 - **Capital Rehabilitation & Replacement Reserve**, at a minimum, should equal 3% of net capital assets, or approximately \$1.9 million in FY 2023/24. This reserve is intended to be a cash resource set aside to address long-term capital system replacement and rehabilitation needs.
- **Funding Capital Improvement Projects:** The City must also be able to fund necessary capital improvements in order to maintain current service levels. City staff has identified roughly \$20.2 million in expected capital expenditures for the next five years (FY 2023/24 through FY 2027/28) which is an average of \$4 million in capital expenditures annually. Beyond FY 2027/28, an average of \$4 million in capital expenditures is expected annually (future year value). With the recommended rate increases, these capital expenditures can be funded without draining existing reserves.
- **Inflation and Growth Projections:** Assumptions regarding cost inflation were made in order to project future revenues and expenses for the study period. Customer growth is expected to be nearly 1.80% annually. This factor was used in the analysis for some revenues and expenses, and all other inflation factors are based on the Consumer Price Index for all urban consumers in the San Francisco area.⁹
- **Impact of Annual Rate Adjustment Date:** The financial plan assumes that rate adjustments occur in January of each year. This means that only about half of the planned revenue to be collected from the rate adjustment listed for one fiscal year will be collected in that year. However, the rated adjustment in Year 1 is scheduled to occur in April 2024 which means that

⁹ Website: <https://www.bls.gov/cpi/>.

the 9.0% increase in rate revenue planned will result in rates that recover \$10.3 million. In other words, due to the timing of when the rates will go into effect, the financial plan results in only \$9.4 million in rate revenue that will be collected for FY 2023/24 due to the end of year implementation.

- **Figure 2** summarizes the sources and uses of funds, net revenue requirements, and the annual percentage adjustments in total rate revenue recommended for the next 5 years.

Figure 2. Summary of Water Revenue Requirements

Summary of Sources and Uses of Funds and Net Revenue Requirements	Actuals	Actuals	5-Year Projected Rate Period				
	FY 2021/22	FY 2022/23	FY 2023/24	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28
Sources of Water Funds							
Rate Revenue Under Prevailing Rates	\$ 8,410,172	\$ 8,544,184	\$ 9,441,640	\$ 9,611,590	\$ 9,774,987	\$ 9,941,161	\$10,110,161
Non-Rate Revenues	664,001	448,314	473,600	482,125	490,321	498,656	507,134
Interest Earnings	(212,625)	215,995	275,008	87,285	61,319	56,589	58,325
Total Sources of Funds	\$ 8,861,548	\$ 9,208,492	\$10,190,248	\$10,180,999	\$10,326,626	\$10,496,407	\$10,675,619
Uses of Water Funds							
560 - Water Treatment Plant	\$ 1,483,133	\$ 1,788,187	\$ 2,088,189	\$ 3,357,121	\$ 2,228,382	\$ 2,302,054	\$ 2,378,221
565 - Water Distribution	991,284	1,013,187	1,536,149	1,586,987	1,639,520	1,693,803	1,749,895
50 - Public Works	1,356,080	1,616,039	366,768	378,613	390,854	403,506	416,582
Water Purchases	3,380,850	4,035,407	3,602,218	3,674,262	3,747,748	3,822,703	3,899,157
Non-Operating Expenses	1,263,894	1,798,674	2,206,123	2,207,963	2,171,674	2,237,313	2,304,938
Debt Service	523,735	744,109	820,140	823,637	1,468,278	2,523,408	3,014,261
Rate-Funded Capital Expenses	251,795	2,790,541	4,566,877	1,523,075	1,565,040	754,328	665,707
Total Use of Funds	\$ 9,250,771	\$13,786,145	\$15,186,464	\$13,551,658	\$13,211,497	\$13,737,114	\$14,428,761
Surplus (Deficiency) before Rate Increase	\$ (389,223)	\$ (4,577,653)	\$ (4,996,216)	\$ (3,370,659)	\$ (2,884,870)	\$ (3,240,707)	\$ (3,753,142)
Additional Revenue from Rate Increases ¹	-	-	212,437	1,336,492	2,361,290	3,190,413	3,710,759
Surplus (Deficiency) after Rate Increase	\$ (389,223)	\$ (4,577,653)	\$ (4,783,779)	\$ (2,034,168)	\$ (523,580)	\$ (50,295)	\$ (42,383)
Projected Annual Rate Increase	0.00%	0.00%	9.00%	9.00%	9.00%	4.00%	3.00%
<i>Cumulative Rate Increases</i>	<i>0.00%</i>	<i>0.00%</i>	<i>9.00%</i>	<i>18.81%</i>	<i>29.50%</i>	<i>34.68%</i>	<i>38.72%</i>
Net Revenue Requirement²	\$ 8,799,395	\$13,121,837	\$14,393,795	\$12,938,188	\$12,610,375	\$13,132,387	\$13,813,821

1. Assumes new rates are implemented April 1, 2024.

2. Total use of funds less non-rate revenues and interest earnings.

Figure 3 summarizes the projected reserve fund balances and reserve targets for the City's unrestricted funds. A detailed version of the proposed 5-year financial plan is included in *Appendix A*. The tables in the appendix include the revenue requirement, reserve funds, revenue sources, proposed rate adjustments, capital improvement program, and the proposed rate adjustments needed to meet City's funding requirements.

Figure 3. Summary of Primary Water Reserve Funds

Beginning Reserve Fund Balances and Recommended Reserve Targets	Actuals	Actuals	5-Year Projected Rate Period				
	FY 2021/22	FY 2022/23	FY 2023/24	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28
Operating Reserve							
Ending Balance	\$ 3,245,347	\$ 5,727,496	\$ 4,142,536	\$ 2,278,487	\$ 1,930,446	\$ 2,055,691	\$ 2,188,848
<i>Recommended Minimum Target</i>	<i>1,803,000</i>	<i>2,113,000</i>	<i>1,898,000</i>	<i>2,249,000</i>	<i>2,002,000</i>	<i>2,056,000</i>	<i>2,111,000</i>
Capital Rehabilitation & Replacement Reserve							
Ending Balance	\$ 35,571	\$ 3,488,438	\$ 2,118,478	\$ 2,079,900	\$ 2,079,900	\$ 2,079,900	\$ 2,079,900
<i>Recommended Minimum Target</i>	<i>1,420,700</i>	<i>1,548,600</i>	<i>1,870,900</i>	<i>2,079,900</i>	<i>2,260,500</i>	<i>2,370,700</i>	<i>2,458,100</i>
Total Ending Balance	\$ 3,280,918	\$ 9,215,935	\$ 6,261,013	\$ 4,358,387	\$ 4,010,346	\$ 4,135,591	\$ 4,268,748
<i>Total Recommended Minimum Target</i>	<i>\$ 3,223,700</i>	<i>\$ 3,661,600</i>	<i>\$ 3,768,900</i>	<i>\$ 4,328,900</i>	<i>\$ 4,262,500</i>	<i>\$ 4,426,700</i>	<i>\$ 4,569,100</i>

2.3 Cost-of-Service Analysis

Once the net revenue requirements are determined, the cost-of-service analysis (COSA) proportionately distributes the revenue requirements to each of the customer classes. The COSA consists of two major

components: (1) the classification of expenses, and (2) the allocation of costs to each customer class. Costs are classified corresponding to the function they serve. All costs in the City’s budget are allocated to each component of the rate structure in proportion to the level of service required by customers. The level of service is related to the volume and strength of the water treated, infrastructure capacity, and customer service. These costs are based on allocation factors, such as water consumption, number of meters, and customer class. Ultimately, a COSA is intended to result in rates that are proportional to the cost of providing service to each customer class.

FUNCTIONALIZATION AND CLASSIFICATION OF COSTS

Most costs are not typically allocated just to fixed or variable categories but allocated to multiple functions of water service. The functionalization and classification process provides the basis for allocating costs to various customer classes based on the cost causation (classification) components described below:

- **Commodity related costs** are costs associated with the change in the volume of water produced and delivered. These commonly include the costs of water quality testing, energy related to pumping for transmission and distribution, and source of supply.
- **Capacity related costs** are costs associated with sizing facilities to meet the maximum, or peak, demand. This includes both operating costs and capital infrastructure costs incurred to accommodate peak system capacity events.
- **Customer related costs** are costs associated with having a customer connected to the water system, such as meter reading, postage, billing, and other administrative duties.
- **Recycled Water related costs** are costs associated with the collection, treatment, and delivery of recycled water. Recycled water customers have separate fixed and volumetric rates which are discussed further in Section 3.
- **Fire Protection related costs** are costs associated with providing sufficient capacity in the system for fire meters and other operating and maintenance costs of providing water to properties for private fire service protection.

The City’s budgeted costs were reviewed and allocated to these cost causation components which are used as the basis for establishing new water rates and translated to fixed and variable charges. Tables in the *Appendices* show how the City’s expenses were classified and allocated to these cost causation components. In the analysis, these cost causation components are also considered to be either fixed or variable.

FIXED AND VARIABLE COSTS

Ideally, utilities should recover all of their fixed costs from fixed charges and all of their variable costs from volumetric rates. When this is the case, fluctuations in water sales revenues would be directly offset by reductions or increases in variable expenses. When rates are set in this manner, they provide greater revenue stability for the utility. However, other factors are often considered when designing water rates, such as community values, water conservation goals, ease of understanding, and ease of administration.¹⁰

¹⁰ *Principles of Water Rates, Fees, and Charges*, Manual of Water Supply Practices, Manual M1, AWWA, 7th Edition, 2017, pp. 6 and 96.

NBS functionalized the City’s costs into categories that can be more generally grouped into fixed and variable costs. This analysis resulted in a cost distribution that is approximately 56% fixed and 44% variable (i.e., volumetric or source specific). However, the City has decided on a rate structure that collects 40% of the net revenue requirement from fixed charges and 60% from volumetric rates. This rate structure will provide financial stability for the City, while maintaining a tiered rate structure that encourages water conservation. The proposed new rates are based on these allocations.

Figure 4 summarizes how costs are allocated to each cost component and used to establish new water rates. **Figure 5** shows the resulting cost allocation to each cost classification component. The remaining revenue requirements are allocated to capacity, customer, and fire protection cost categories.

Figure 4. Allocation Percentages of Revenue Requirements

Classification Components	PROPOSED ALTERNATIVE Cost-of-Service Net Revenue Requirements (FY 2023/24)	
Commodity-Related Costs	\$ 6,174,833	60.0%
Capacity-Related Costs	3,709,181	36.0%
Customer-Related Costs	300,640	2.9%
Fire Protection-Related Costs	106,734	1.0%
Net Revenue Requirement	\$ 10,291,388	100.0%

Figure 5. Allocated Net Revenue Requirements

Customer Classes	Classification Components				Cost of Service Net Rev. Req'ts	% of COS Net Revenue Req'ts
	VARIABLE	FIXED				
	Commodity- Related Costs	Capacity- Related Costs	Customer- Related Costs	Fire Protection- Related Costs		
Residential	\$ 3,092,204	\$ 1,565,159	\$ 214,963	\$ -	\$ 4,872,326	47.3%
Multi-Family	546,290	1,777,034	56,075	-	2,379,400	23.1%
Commercial	1,943,118	221,463	15,109	-	2,179,689	21.2%
Landscape	323,989	38,794	3,216	-	365,999	3.6%
Private Fire Protection	139,154	77,779	10,792	106,734	334,458	3.2%
Temporary Hydrant Meters	50,606	16,254	352	-	67,213	0.7%
Raw Water	79,472	12,699	132	-	92,303	0.9%
Total Net Revenue Requirement	\$ 6,174,833	\$ 3,709,181	\$ 300,640	\$ 106,734	\$ 10,291,388	100%

2.4 Characteristics of Water Customers by Customer Class

Customer classes are typically determined by grouping customers with similar demand characteristics into categories that reflect the cost differentials to serve each type of customer. Customer classes are most often identified as single family, multi-family, commercial, landscape, etc., and the City follows this common methodology. The rates proposed in this report follow a similar structure where the fixed charges within each customer class vary by meter size. Variable rates are tiered (two tiers) for single family residential (SFR); all other customers are charged a uniform volumetric rate.

The amount of consumption, the peaking factors, and the number of meters by size are used to allocate costs as a part of COSA to allocate costs to customer classes and determine the appropriate rate structures for each. These components of the COSA are presented in the following figures.

Commodity related costs are costs associated with the total annual consumption of water by customer class. **Figure 6** below summarizes the most recent consumption data by customer class and represents the expected percent of consumption over the 5-year rate period.

Figure 6. Water Consumption by Customer Class

Customer Class	FY 2021/22 Consumption (hcf)	% Adjustment for Conservation ²	Est. FY 2021/22 Volume Adjusted for Conservation	FY 2021/22 % of Total Volume
Residential	507,339	20.0%	405,871	50.1%
Multi-Family	89,630	20.0%	71,704	8.8%
Commercial	318,808	20.0%	255,046	31.5%
Landscape	53,157	20.0%	42,526	5.2%
Private Fire Protection	22,831	20.0%	18,265	2.3%
Temporary Hydrant Meters	8,303	20.0%	6,642	0.8%
Raw Water	13,039	20.0%	10,431	1.3%
Total	1,013,107		810,486	100%

1. Consumption data is based on the City of American Canyon's billing data.
2. A conservation factor of 20% included in table above based on the "20 by 2020" law passed in 2009.
Source: <https://www.ca-ilg.org>.

Figure 7 shows the capacity allocation factors for each customer class.

Figure 7. Capacity Factors by Customer Class

Customer Class	Meter Size ¹	No. of Meters	Hydraulic Capacity Factors ²	Total Equivalent Meters	% of EDUs
Residential	< 1" meter	4,880		4,930	42.2%
	1" meter	1,986	1.00	1,986	
	1 1/2" meter	2,875	1.00	2,875	
	2" meter	7	2.00	14	
	3" meter	9	3.20	29	
	4" meter	1	6.40	6	
Multi-Family	4" meter	2	10.00	20	47.9%
	556		5,598		
	1 1/2" meter	20	2.00	40	
	2" meter	201	3.20	643	
	3" meter	96	6.40	614	
Commercial	4" meter	48	10.00	480	6.0%
	6" meter	191	20.00	3,820	
	343		698		
	< 1" meter	102	1.00	102	
	1" meter	88	1.00	88	
	1 1/2" meter	54	2.00	108	
Landscape	2" meter	81	3.20	259	1.0%
	3" meter	11	6.40	70	
	4" meter	7	10.00	70	
	73		122		
Private Fire Protection	< 1" meter	13	1.00	13	2.1%
	1" meter	30	1.00	30	
	1 1/2" meter	14	2.00	28	
	2" meter	16	3.20	51	
Temporary Hydrant Meters	245		245	0.4%	
	< 1" meter	245	1.00		245
Raw Water	8		51	0.3%	
	3" meter	8	6.40		51
	3		40		
	4" meter	2	10.00	20	
	6" meter	1	20.00	20	
	Total	6,108		11,684	

1. Meter by class and size are based on June 2022 customer billing data.
2. Source: *Principles of Water Rates, Fees, and Charges*, Manual M1, AWWA, Table B-1.

Figure 8 shows the number of meters for each customer class. The percentage of total customers by customer class is then used to develop the customer allocation factors in order to allocate customer costs. Customer costs are those costs associated with having customers connected to the water system and include costs related to meter reading, postage, and billing.

Figure 8. Number of Meters by Customer Class

Customer Class	No. of Meters/Accounts FY 2021/22 ¹	% of Total Meters
Residential	4,880	71.5%
Multi-Family ²	1,273	18.7%
Commercial	343	5.0%
Landscape	73	1.1%
Private Fire Protection	245	3.6%
Temporary Hydrant Meters	8	0.1%
Raw Water	3	0.0%
Total	6,825	100.0%

1. Meter count data is based on the City's billing data for June 2022.

2. Multi-family residential customers are by dwelling units.

2.5 Rate Design Analysis

The process of evaluating the water rate structure provides the opportunity to review and incorporate rate-design objectives and policies, including revenue stability, equity among customers, and water conservation. NBS discussed several water rate alternatives and methodologies with City Staff over the course of this study, such as the percentage of revenue collected from fixed charges vs. variable rates and differentiating rates by customer class. Ultimately, City staff selected a rate alternative that is similar to the results of the COSA that includes a fixed service charge based on customer class and meter size. The following sections describe this process. The selected rate structure also maintains the existing two tiers for single family residential customers and proposes a uniform tier for all other customer classes.

The following sections describe how the proposed water rates were developed.

DEVELOPMENT OF PROPOSED RATES

Fixed Service Charges

The fixed meter charge recognizes that the water utility incurs fixed costs regardless of whether customers actually use water. There are two components that comprise the fixed meter charge: (1) the customer component, and (2) the capacity component. The customer components are those costs related to reading and maintaining meters, customer billing and collection, and other customer service-related costs. The capacity component recovers costs associated with sizing the water system to ensure there is sufficient capacity in the system to meet peak demand. A user class with higher peaking (capacity) needs is allocated a proportionately higher share of the capacity related costs compared to customer classes with lower peaking needs.

Meter sizes have different fixed charges based on their capacity requirements, where larger meters have the potential to use more of the system’s capacity¹¹ or, said differently, they can have higher peaking factors compared to smaller meters. The potential capacity demanded (peaking) is proportional to the maximum hydraulic flow through each meter size based on the hydraulic capacity ratios established by AWWA.¹² The AWWA capacity ratios used for this report are shown in **Figure 9**.

Figure 9. Hydraulic Capacity Factors

Meter Size	Standard Meters	
	Meter Capacity (gpm) ¹	Equivalency to 1 inch
	<i>Displacement Meters</i>	
5/8 inch	20	1.00
3/4 inch	30	1.00
1 inch	50	1.00
1 1/2 inch	100	2.00
2 inch	160	3.20
	<i>Compound Class I Meters</i>	
3 inch	320	6.40
4 inch	500	10.00
6 inch	1,000	20.00
8 inch	1,600	32.00
	<i>Turbine Class II Meters</i>	
10 inch	4,200	84.00
12 inch	5,300	106.00

1. Per AWWA, M1 Manual, Table B-1.

The actual number of meters by size is multiplied by the corresponding capacity ratios to calculate equivalent meters. The number of equivalent meters is used as a proxy for the potential demand that each customer can place on the water system. **Figure 10** summarizes the number of meters, the hydraulic capacity factors, and the number of equivalent meters (i.e., the number of meters multiplied by the hydraulic capacity factor) by customer class and meter size.

Figure 10. Equivalent Meters

Number of Meters by Class and Size ¹	FY 2023/24								Total
	< 1" meter	1" meter	1 1/2" meter	2" meter	3" meter	4" meter	6" meter	8" meter	
Residential	1,986	2,875	7	9	1	2	0	0	4,880
Multi-Family	0	0	20	201	96	48	191	0	556
Commercial	13	30	14	16	0	0	0	0	73
Commercial	102	88	54	81	11	7	0	0	343
Private Fire Protection	245	0	0	0	0	0	0	0	245
Temporary Hydrant Meters	0	0	0	0	8	0	0	0	8
Raw Water	0	0	0	0	0	2	1	0	3
Total Meters/Accounts	2,346	2,993	95	307	116	59	192	0	6,108
<i>Hydraulic Capacity Factor²</i>	<i>1.00</i>	<i>1.00</i>	<i>2.00</i>	<i>3.20</i>	<i>6.40</i>	<i>10.00</i>	<i>20.00</i>	<i>32.00</i>	
Total Equivalent Meters	2,346	2,993	190	982	742	590	3,840	0	11,684

1. Meter by Class and Size are based on June 2022 customer billing data.

2. Source: *Principles of Water Rates, Fees, and Charges*, Manual M1, AWWA, Table B-1.

Using the costs allocated to each customer class from Figure 5, **Figure 11** shows the calculation of the fixed monthly service charges for all customer classes based on meter size. As previously mentioned, the customer service charge is calculated by dividing the customer service-related costs by the total number of

¹¹ System capacity is the system’s ability to supply water to all delivery points at the time when demanded.

¹² *Principles of Water Rates, Fees and Charges*, Manual of Water Supply Practices, Manual M1, AWWA, 7th Edition, 2017, p. 386. *Water Meters – Selection, Installation, Testing and Maintenance*, Manual M6, AWWA, 5th Edition, 2012, pp. 63-65.

meters, whereas the fixed capacity charge is calculated by dividing the capacity-related costs by the total number of equivalent meters for each meter size.

Figure 11. Calculation of Fixed Service Charges (Residential)

Number of Meters by Class and Size	FY 2023/24								Total	
	< 1" meter	1" meter	1 1/2"	2" meter	3" meter	4" meter	6" meter	8" meter		
Monthly Fixed Service Charges										
Customer Costs (\$/Acct/month)	\$4.10	\$4.10	\$4.10	\$4.10	\$4.10	\$4.10	\$4.10	\$4.10	\$4.10	
Capacity Costs (\$/Acct/month)	\$27.22	\$27.22	\$54.43	\$87.09	\$174.19	\$272.17	\$544.33	\$870.93		
Total Monthly Meter Charge	\$31.32	\$31.32	\$58.53	\$91.19	\$178.29	\$276.27	\$548.43	\$875.03		
Annual Fixed Costs Allocated to Monthly Meter Charges										
Customer Costs	\$ 300,640									
Capacity Costs	3,815,915									
Total Fixed Meter Costs	\$4,116,555									
Annual Revenue from Monthly Meter Charges										
Customer Charges	\$ 115,491	\$ 147,298	\$ 4,676	\$ 15,111	\$ 5,710	\$ 2,904	\$ 9,450	\$ -	\$ -	\$ 300,640
Capacity Charges	\$ 766,330	\$ 977,381	\$ 62,054	\$ 320,851	\$ 242,467	\$ 192,693	\$1,254,139	\$ -	\$ -	\$3,815,915
Total Revenue from Monthly Meter Charges	\$ 881,821	\$1,124,680	\$ 66,730	\$ 335,961	\$ 248,177	\$ 195,597	\$1,263,590	\$ -	\$ -	\$4,116,555

Volumetric Rates

Currently, the City uses a 2-tier rate structure for residential customers (i.e., single family customers), while all other customers are charged a uniform, or single tier, volumetric rate. The following sections of this report describe how the tiered rates were developed.

Source of Supply

The City has three primary sources of supply: (1) State Water Project (SWP); (2) Cities of Napa and Vallejo treated water; and (3) City of Vallejo raw water. **Figure 12** shows how these supply sources are allocated to each tier. A description of how this allocation was developed is included in *Appendix A*.

Figure 12. Summary of Supply Sources Allocated to Tiers

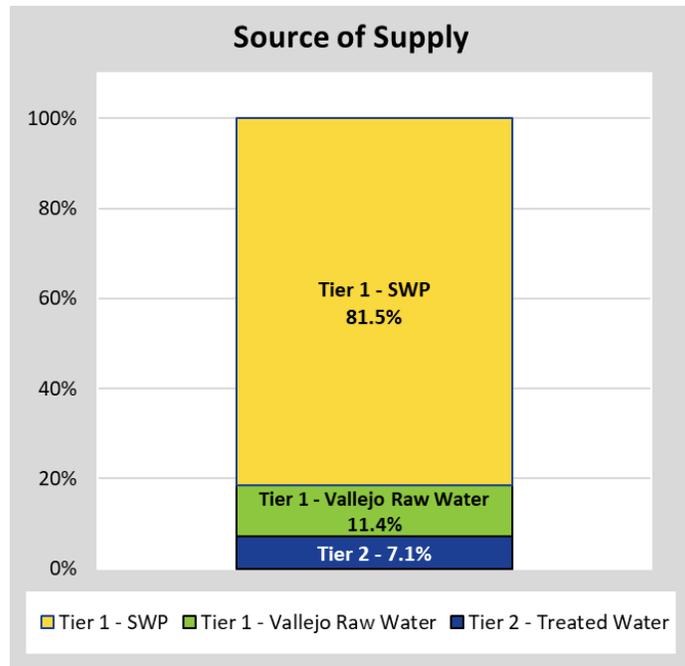


Figure 13 shows the amount of each source of supply that is included in the tiers for residential customers.

Figure 13. Allocated Consumption from Each Source of Supply

Source of Supply	Total Contracted Purchases		Acre Feet as a % of Total
	In AF	In HCF	
SWP (Contracted Purchase)	3,590	1,563,804	81.5%
Vallejo Raw Water (Contracted Purchase)	500	217,800	11.4%
Treated Water (Contracted Purchase) ¹	313	136,181	7.1%
Totals	4,403	1,917,785	100.0%

Residential Tiered Rates

Before the tiered rates could be developed, expected consumption in each tier was determined, and tier breakpoints were established. The breakpoint for Tier 1 was set so that expected consumption within each tier would most closely match the allocated consumption by that source. That is, the amount of expected consumption in Tier 1 would correspond to the amount of water that the SWP and the City of Vallejo (raw water) could supply. Similarly, expected consumption in Tier 2 corresponds to the amount of treated water supply from the cities of Napa and Vallejo.

For residential customers, the tier breakpoints were identified by first determining the quantity available in each tier (see Figure 13). Once the quantity of water by tier is determined, individual customer billing records are analyzed to determine what tier breakpoint would maximize the use of water in each tier. The resulting breakpoint was determined to be the 6 HCF as shown in **Figure 14**. The amount of estimated consumption in Tier 1 differs slightly from the allocated consumption due to the fact that monthly reads for all customers are not precise.

Figure 14. Tier Breakpoints for Residential Customers

Residential Tiers	Consumption	% of Consumption	Avg. Monthly Consumption FY 2020/21 (hcf)	Tier Breakpoint (hcf)
Tier 1 - SWP & Vallejo Raw Water	322,836	79.5%		6.00
Tier 2 - Treated Water (Napa & Vallejo)	83,035	20.5%		
Total	405,871	100.0%	7.0	

Once the expected consumption by tier was determined, the expenses assigned to commodity-related costs, previously shown in Figure 4, were spread over the expected consumption resulting in the rates shown in **Figure 15**.

Figure 15. Tiered Rates for FY 2023/24

Source of Supply	Supply Costs Allocated to Residential Tiered Rates	Source of Supply Costs	Other Costs Allocated to Vol. Rates	Total Costs Allocated	FY 2020/21 Consumption	Residential Rates (\$/HCF)
Residential Tiered Rate Costs	(1)	(2)	(3)	(4)	(5)	(6)
Tier 1 - SWP & Vallejo Raw Water	79.5%	\$ 565,431	\$ 1,716,250	\$ 2,281,681	322,836	\$7.07
Tier 2 - Treated Water (Napa & Vallejo)	20.5%	369,096	441,426	810,523	83,035	\$9.76
Total Residential Tiered Rate Costs	100.0%	\$ 934,527	\$ 2,157,676	\$ 3,092,204	405,871	

Uniform Rates

Expected consumption in the uniform tier accounts for the remaining amount of supply from all three water sources. **Figure 16** identifies the uniform tier rate per unit of water for all non-residential customers.

Figure 16. Uniform Tier Rates for FY 2023/24

Customer Classes	Number of Meters ¹	Water Consumption (hcf/yr) ²	Total Target Rev. Req't from Vol. Charges	% of Total Rate Revenue	Uniform Commodity Rates (\$/hcf)	Proposed Rate Structure
Residential	4,880	405,871	\$ 3,092,204	30.0%	n/a	2 Tiers
Multi-Family	1,273	71,704	546,290	5.3%	\$7.619	Uniform
Commercial	343	255,046	1,943,118	18.9%	\$7.619	Uniform
Landscape	73	42,526	323,989	3.1%	\$7.619	Uniform
Private Fire Protection	245	18,265	139,154	1.4%	\$7.619	Uniform
Temporary Hydrant Meters	8	6,642	50,606	0.5%	\$7.619	Uniform
Raw Water	3	10,431	79,472	0.8%	\$7.619	Uniform
Total Potable Water	6,825	810,486	\$ 6,174,833	60%		

1. Consumption data is based on the City of American Canyon's billing data.

2. Water consumption is actual consumption for FY 2021/22 and includes an adjustment of 20% for conservation. See Table 28.

The rate for each unit of water is determined by dividing costs to recover, or total target revenue requirements, per tier by the estimated consumption. The tiered rates per HCF are identified as follows:

- **Residential Tier 1** is equal to the costs for water from the SWP and the raw water from the City of Vallejo.
- **Residential Tier 2** is equal to the treated water costs for the cities of Napa and Vallejo.
- **Uniform Tier** is equal to all remaining water supply costs not allocated to residential customers from SWP and the cities of Napa and Vallejo.

In addition to developing the uniform volumetric rates shown in Figure 16, the City Council requested an alternative analysis that was based on the City's current volumetric water rate increased by three percent a year, with the fixed charges remaining as proposed. This analysis compared the revenue generated from the cost of service volumetric rates with the rates generated using three percent escalation. **Figure 17** compares the revenue generation from the two approaches.

Figure 17. Variable Revenue Comparison

ALTERNATIVE 1 (COSA)					
Customer Class	COSA Revenue				
	FY 2023/24	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28
Residential					
Tier 1 - SWP & Vallejo Raw Water	\$ 2,459,588	\$ 2,487,033	\$ 2,710,866	\$ 2,819,300	\$ 2,903,879
Tier 2 - Treated Water (Napa & Vallejo)	632,616	883,470	962,982	1,001,501	1,031,546
Multi-Family	546,290	595,456	649,047	675,009	695,259
Commercial	1,943,118	2,117,998	2,308,618	2,400,963	2,472,992
Landscape	323,989	353,148	384,931	400,329	412,339
Private Fire Protection	139,154	151,678	165,329	171,942	177,100
Temporary Hydrant Meters	50,606	55,161	60,125	62,530	64,406
Raw Water	79,472	86,624	94,421	98,198	101,143
Total	\$ 6,174,833	\$ 6,730,567	\$ 7,336,319	\$ 7,629,771	\$ 7,858,664
ALTERNATIVE 2 - INCREASE CURRENT VARIABLE RATES BY 3% ANNUALLY					
Customer Class	COSA Revenue				
	FY 2023/24	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28
Residential					
Tier 1 - SWP & Vallejo Raw Water	\$ 2,507,212	\$ 2,582,428	\$ 2,659,901	\$ 2,739,698	\$ 2,821,889
Tier 2 - Treated Water (Napa & Vallejo)	697,036	717,947	739,485	761,670	784,520
Multi-Family	570,162	587,266	604,884	623,031	641,722
Commercial	2,028,027	2,088,868	2,151,534	2,216,080	2,282,562
Landscape	338,147	348,291	358,740	369,502	380,587
Private Fire Protection	72,617	74,796	77,040	79,351	81,731
Temporary Hydrant Meters	52,818	54,402	56,034	57,715	59,447
Raw Water	36,960	38,069	39,211	40,387	41,599
Total	\$ 6,302,977	\$ 6,492,067	\$ 6,686,829	\$ 6,887,434	\$ 7,094,057
Difference	\$ (128,145)	\$ 238,501	\$ 649,490	\$ 742,338	\$ 764,608

2.6 Proposed Water Rates

Currently, all customers are subject to a fixed service charge that varies by meter size and volumetric rates based on consumption for the various customer classes. The cost-of-service analysis (COSA) by nature “re-balances” how costs are allocated between customer classes and, as a result, there are uneven adjustments in the first year of the 5-year rate adoption period. In contrast, in the subsequent four years of the rate planning period, proposed charges are simply adjusted by the proposed adjustment in total rate revenue needed to meet projected revenue requirements.

The following figures provide a comparison of the current and proposed water rates for FY 2023/24 through 2027/28 for each customer class and meter size. Projected rates for FY 2023/24¹³ reflect adjustments based on the COSA. More detailed tables on the development of the proposed water rates are documented in *Appendix A*.

¹³ All rate adjustments are scheduled to be effective on January 1st except Year 1 which will be implemented on April 1, 2024.

Figure 18. Current and Proposed Water Rates - Fixed Charges

Water Rate Schedule	Current Rates	Proposed Rates				
		FY 2023/24	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28
Monthly Fixed Service Charges (in \$/mo)						
Residential Use						
< 1" meter	\$26.56	\$31.32	\$34.14	\$37.21	\$38.70	\$39.86
1" meter	\$26.56	\$31.32	\$34.14	\$37.21	\$38.70	\$39.86
1 1/2" meter	\$26.56	\$58.53	\$63.80	\$69.55	\$72.33	\$74.50
2" meter	\$26.56	\$91.19	\$99.40	\$108.35	\$112.68	\$116.06
3" meter	\$26.56	\$178.29	\$194.33	\$211.82	\$220.30	\$226.91
4" meter	\$26.56	\$276.27	\$301.13	\$328.23	\$341.36	\$351.60
6" meter	\$26.56	\$548.43	\$597.79	\$651.59	\$677.66	\$697.99
8" meter	\$26.56	\$875.03	\$953.78	\$1,039.63	\$1,081.21	\$1,113.65
Multi-Family, Commercial and Landscape						
< 1" meter	\$26.56	\$31.32	\$34.14	\$37.21	\$38.70	\$39.86
1" meter (Residential)	\$26.56	\$31.32	\$34.14	\$37.21	\$38.70	\$39.86
1" meter (Commercial)	\$44.42	\$31.32	\$34.14	\$37.21	\$38.70	\$39.86
1 1/2" meter	\$88.75	\$58.53	\$63.80	\$69.55	\$72.33	\$74.50
2" meter	\$141.99	\$91.19	\$99.40	\$108.35	\$112.68	\$116.06
3" meter	\$283.98	\$178.29	\$194.33	\$211.82	\$220.30	\$226.91
4" meter	\$443.74	\$276.27	\$301.13	\$328.23	\$341.36	\$351.60
6" meter	\$887.48	\$548.43	\$597.79	\$651.59	\$677.66	\$697.99
8" meter	\$1,420.06	\$875.03	\$953.78	\$1,039.63	\$1,081.21	\$1,113.65
Private Fire Protection						
< 1" meter	\$13.28	\$31.32	\$34.14	\$37.21	\$38.70	\$39.86
1" meter	\$13.28	\$31.32	\$34.14	\$37.21	\$38.70	\$39.86
1 1/2" meter	\$13.28	\$58.53	\$63.80	\$69.55	\$72.33	\$74.50
2" meter	\$13.28	\$91.19	\$99.40	\$108.35	\$112.68	\$116.06
3" meter	\$13.28	\$178.29	\$194.33	\$211.82	\$220.30	\$226.91
4" meter	\$13.28	\$276.27	\$301.13	\$328.23	\$341.36	\$351.60
6" meter	\$13.28	\$548.43	\$597.79	\$651.59	\$677.66	\$697.99
8" meter	\$13.28	\$875.03	\$953.78	\$1,039.63	\$1,081.21	\$1,113.65
Temporary Hydrant Meters						
< 1" meter	\$283.98	\$31.32	\$34.14	\$37.21	\$38.70	\$39.86
1" meter	\$283.98	\$31.32	\$34.14	\$37.21	\$38.70	\$39.86
1 1/2" meter	\$283.98	\$58.53	\$63.80	\$69.55	\$72.33	\$74.50
2" meter	\$283.98	\$91.19	\$99.40	\$108.35	\$112.68	\$116.06
3" meter	\$283.98	\$178.29	\$194.33	\$211.82	\$220.30	\$226.91
4" meter	\$283.98	\$276.27	\$301.13	\$328.23	\$341.36	\$351.60
6" meter	\$283.98	\$548.43	\$597.79	\$651.59	\$677.66	\$697.99
8" meter	\$283.98	\$875.03	\$953.78	\$1,039.63	\$1,081.21	\$1,113.65
Raw Water						
< 1" meter	<i>n/a</i>	\$31.32	\$34.14	\$37.21	\$38.70	\$39.86
1" meter	\$44.42	\$31.32	\$34.14	\$37.21	\$38.70	\$39.86
1 1/2" meter	<i>n/a</i>	\$58.53	\$63.80	\$69.55	\$72.33	\$74.50
2" meter	\$141.99	\$91.19	\$99.40	\$108.35	\$112.68	\$116.06
3" meter	<i>n/a</i>	\$178.29	\$194.33	\$211.82	\$220.30	\$226.91
4" meter	\$443.74	\$276.27	\$301.13	\$328.23	\$341.36	\$351.60
6" meter	\$887.48	\$548.43	\$597.79	\$651.59	\$677.66	\$697.99
8" meter	<i>n/a</i>	\$875.03	\$953.78	\$1,039.63	\$1,081.21	\$1,113.65

Figure 19. Current and Proposed Water Rates - Variable Rates (COSA)

Water Rate Schedule	Current Rates	Proposed Rates				
		FY 2023/24	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28
Variable Rates for All Water Consumed (in \$/hcf)						
Residential Use						
Tier 1 (0 - 6 units)	\$7.54	\$7.07	\$7.70	\$8.40	\$8.73	\$8.99
Tier 2 (> 6 units)	\$8.15	\$9.76	\$10.64	\$11.60	\$12.06	\$12.42
Multi-Family, Commercial and Landscape	\$7.72	\$7.62	\$8.30	\$9.05	\$9.41	\$9.70
Private Fire Protection	\$3.86	\$7.62	\$8.30	\$9.05	\$9.41	\$9.70
Temporary Hydrant Meters	\$7.72	\$7.62	\$8.30	\$9.05	\$9.41	\$9.70
Raw Water	\$3.44	\$7.62	\$8.30	\$9.05	\$9.41	\$9.70

Figure 20. Current and Proposed Water Rates - Variable Rates (Alternative 2)

Water Rate Schedule	Current Rates	Proposed Rates				
		FY 2023/24	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28
Variable Rates for All Water Consumed (in \$/hcf)						
Residential Use						
Tier 1 (0 - 6 units)	\$7.54	\$7.77	\$8.00	\$8.24	\$8.49	\$8.74
Tier 2 (> 6 units)	\$8.15	\$8.39	\$8.65	\$8.91	\$9.17	\$9.45
Multi-Family, Commercial and Landscape	\$7.72	\$7.95	\$8.19	\$8.44	\$8.69	\$8.95
Private Fire Protection	\$3.86	\$3.98	\$4.10	\$4.22	\$4.34	\$4.47
Temporary Hydrant Meters	\$7.72	\$7.95	\$8.19	\$8.44	\$8.69	\$8.95
Raw Water	\$3.44	\$3.54	\$3.65	\$3.76	\$3.87	\$3.99

2.7 Comparison of Current and Proposed Water Bills

Figure 21 and Figure 22 compare a range of monthly water bills under the current and proposed water rates for residential and commercial customers. These monthly bills are based on typical meter sizes and highlight the average consumption levels for each customer.

Figure 21. Monthly Water Bill Comparison for Residential Customers

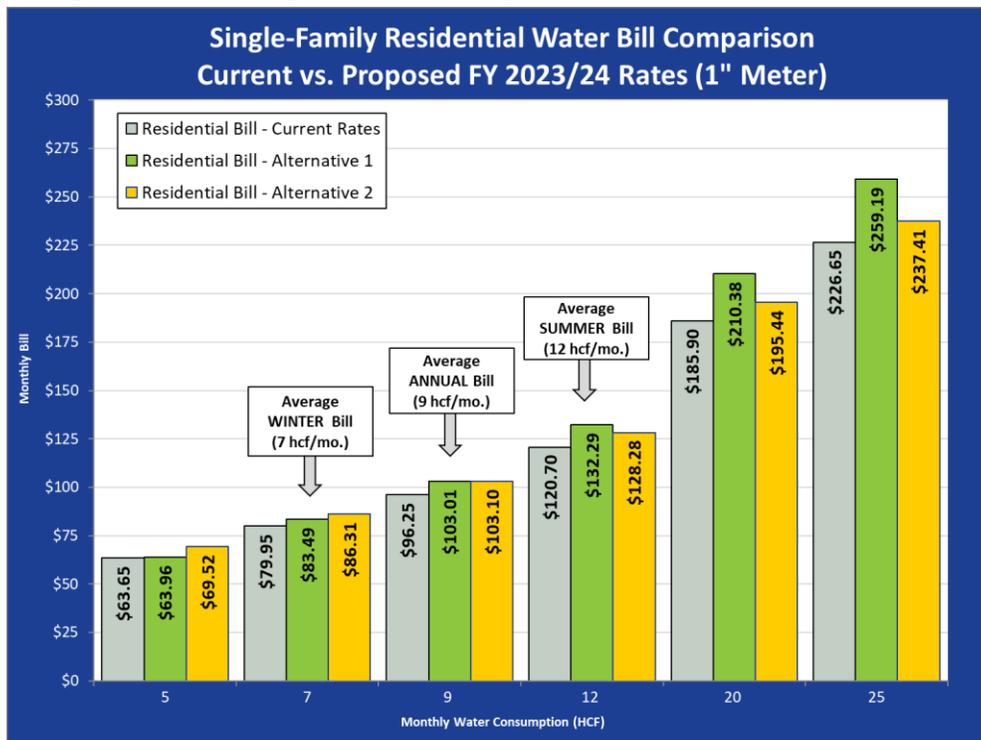
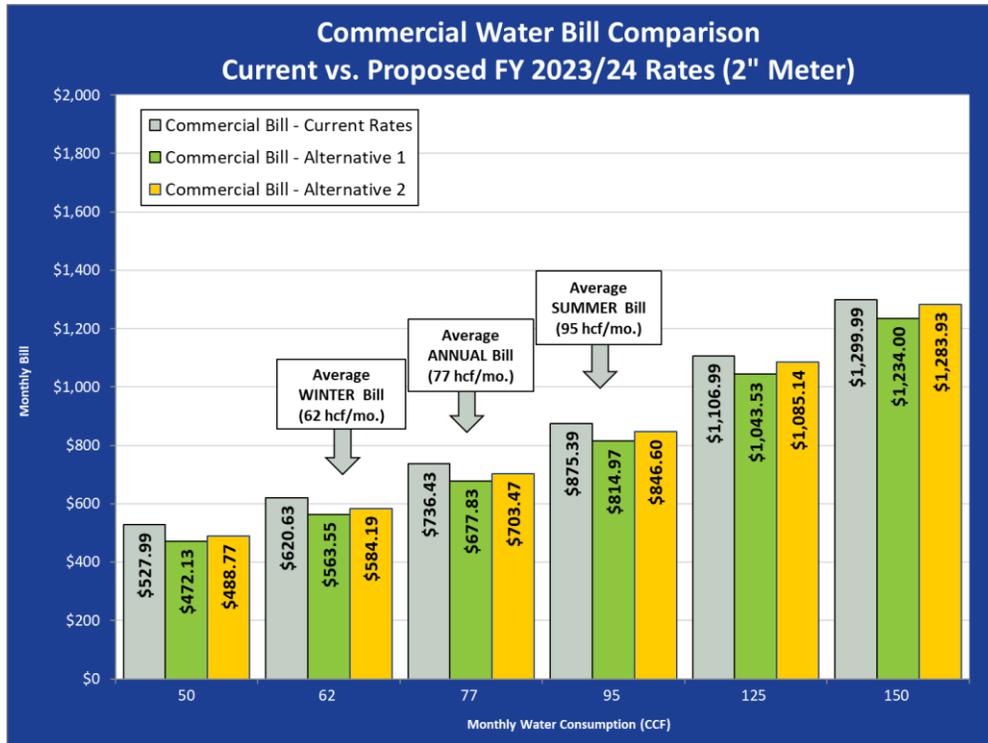


Figure 22. Monthly Water Bill Comparison for Commercial Customers



2.8 Drought Rates

The City is obligated to meet its annual net revenue requirements to keep the utility operating and functional regardless of whether consumption levels decline due to conservation or other unexpected events (e.g., unseasonal weather, natural disasters, etc.). At the request of the City, drought rates have been developed so that if total consumption should decrease further due to an increase in conservation required by the state, another regulatory agency, or if the City Council declares that it is in more severe drought stages, the City’s water utility would still be kept whole, financially. In the event that consumption decreases beyond projected baseline consumption levels, some costs will also decrease, and the proposed drought rates have taken this reduced revenue need into consideration.¹⁴

Figure 23 shows the expenses directly impacted by conservation over the next five years. Because these expenses are a significant portion of the City’s budget, drought rates will offset the loss of variable revenue, if needed and implemented by the City in different stages of drought severity.

Figure 23. Expenses Directly Impacted by Conservation

Description	Commodity-Related Costs				
	FY 2023/24	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28
City of Napa	\$ 278,000	\$ 283,560	\$ 289,231	\$ 295,016	\$ 300,916
North Bay Aqueduct	3,203,000	3,267,060	3,332,401	3,399,049	3,467,030
City of Vallejo	121,218	123,642	126,115	128,638	131,210
Total:	\$ 3,602,218	\$ 3,674,262	\$ 3,747,748	\$ 3,822,703	\$ 3,899,157

¹⁴ Details regarding the calculation of the drought rates can be found in *Appendix A*.

Figure 24 shows the calculation of the updated commodity costs for each percentage of conservation the City is looking to achieve with the drought rates for FY 2023/24. **Figure 25** presents the proposed drought surcharge that would replace the uniform volumetric rate (shown in Figures 19 and 20) at each stage of conservation through FY 2027/28.

The projected monthly revenues should be based on the FY 2020/21 monthly consumption levels adjusted for conservation and the volumetric rate. Key aspects of the drought rates include:

- The drought surcharge was developed using water usage for FY 2020/21, the same assumption used in the proposed volumetric rates.
- The City Council must activate the drought rate surcharge. If the surcharge is activated, it will remain in effect as necessary and will be reviewed by the City Council at a minimum of every six (6) months for determination of necessity until the surcharge is deactivated.
- The drought rate surcharge is added to the uniform volumetric rate on a per unit basis to cover the cost of water service during times of mandated conservation and/or extreme water supply shortage.

Figure 24. Projected Consumption at Baseline and Each Successive Drought Stage

2021/22 Consumption Assumptions ¹					
Shortage Level	Percent Shortage Range	Shortage Response Action	Potable Water Consumption (AF/yr.)	Potable Water Consumption (hcf/yr.)	Difference to Baseline (hcf)
Baseline Consumption²			1,861	810,486	0
1	Up to 10%	Voluntary Conservation	1,675	729,437	(81,049)
2	Up to 20%	Water Alert	1,488	648,388	(162,097)
3	Up to 30%	Water Emergency	1,302	567,340	(243,146)
4	Up to 40%	Critical Water Emergency	1,116	486,291	(324,194)
5	Up to 50%	Severe Water Emergency	930	405,243	(405,243)
6	>50%	Catastrophic Interruption of Water Supplies	744	324,194	(486,291)

1. Drought stages based on the City's Water Conservation Plan. Source files: 2_ Redlines_Ordinance_Water_Conservation_Plan_Chapter_13.14 (4).pdf & 3_Table_8-1_Water_Shortage_Contingency_Plan_Levels.pdf.

2. This represents the baseline consumption for FY 2021/22 consumption (excludes recycled water). Conservation percentage for each drought stage is relative to the baseline consumption.

Figure 25. Proposed Drought Surcharges

Drought Rate Schedule (in \$/hcf)	Current Rates	FY 2023/24	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28
10% Conservation	n/a	\$0.35	\$0.44	\$0.53	\$0.58	\$0.62
20% Conservation	n/a	\$0.79	\$0.98	\$1.19	\$1.30	\$1.39
30% Conservation	n/a	\$1.36	\$1.68	\$2.03	\$2.23	\$2.39
40% Conservation	n/a	\$2.12	\$2.61	\$3.16	\$3.46	\$3.71
50% Conservation	n/a	\$3.17	\$3.92	\$4.75	\$5.20	\$5.57
60% Conservation	n/a	\$4.76	\$5.88	\$7.12	\$7.79	\$8.36

3. Recycled Water Rate Study

3.1 Key Recycled Water Rate Study Issues

Recycled water rates face a unique set of challenges in determining what rates should be charged. Regardless of actual system costs, rates cannot exceed what the “market” can bear, or else recycled water customers will likely use alternative sources. This has often resulted in setting these rates arbitrarily low so that they do not exceed the costs of alternative sources (or exceed potable prices). Actual costs are also unclear because typically wastewater customers often benefit from reclaimed water as it tends to reduce wastewater disposal costs.

The primary issues addressed in this study for the recycled water system were: (1) ensuring rates generate a reasonable level of revenue to pay for operating costs of the system, and (2) establishing reasonable rates that are competitive with other sources of irrigation water while ideally recovering basic operating costs. Currently, the City does not have separate fixed charges and volumetric rates for recycled water customers, so NBS worked with City staff to determine the appropriate cost allocations of sewer treatment and distribution costs that recycled water customers should pay. The following sections describe the results of this analysis.

3.2 Recycled Water Utility Revenue Requirements

A cost-of-service analysis was performed, and rates were designed to collect 80% of the rate revenue from variable rates and 20% from fixed rates. Recycled water connections represent about 1.1% of all the City’s meters. **Figure 26** summarizes the sources and uses of funds, net revenue requirements, and the annual percentage adjustments in total rate revenue recommended for the next 5 years, and **Figure 27** summarizes the recycled water revenue requirements for FY 2023/24.

Figure 26. Summary of Recycled Water Revenue Requirements

Summary of Sources and Uses of Funds and Net Revenue Requirements	Actuals		5-Year Projected Rate Period				
	FY 2021/22	FY 2022/23	FY 2023/24	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28
Sources of Water Funds							
Rate Revenue Under Prevailing Rates	\$ 151,038	\$ 226,361	\$ 207,000	\$ 210,726	\$ 214,308	\$ 217,952	\$ 221,657
Interest Earnings	4,101	12,392	22,343	2,195	7,873	4,912	2,640
Total Sources of Funds	\$ 155,140	\$ 238,753	\$ 229,343	\$ 212,921	\$ 222,182	\$ 222,864	\$ 224,297
Uses of Water Funds							
Fund 580 - Recycled Water Operations	\$ 272,644	\$ 1,632,152	\$ 893,163	\$ 797,921	\$ 823,477	\$ 849,857	\$ 877,086
Interfund Loan Repayment	-	-	198,566	198,566	267,497	267,497	267,497
Rate-Funded Capital Expenses	-	-	-	-	-	-	-
Total Use of Funds	\$ 272,644	\$ 1,632,152	\$ 1,091,728	\$ 996,487	\$ 1,090,974	\$ 1,117,354	\$ 1,144,583
Surplus (Deficiency) before Rate Increase	\$ (117,504)	\$ (1,393,399)	\$ (862,386)	\$ (783,566)	\$ (868,793)	\$ (894,490)	\$ (920,286)
Additional Revenue from Rate Increases ¹	-	-	129,375	563,692	652,033	728,149	788,637
Surplus (Deficiency) after Rate Increase	\$ (117,504)	\$ (1,393,399)	\$ (733,011)	\$ (219,874)	\$ (216,759)	\$ (166,341)	\$ (131,650)
Projected Annual Rate Increase	0.00%	0.00%	250.00%	10.00%	10.00%	5.00%	5.00%
Cumulative Rate Increases	0.00%	0.00%	250.00%	285.00%	323.50%	344.68%	366.91%
Net Revenue Requirement²	\$ 268,543	\$ 1,619,760	\$ 1,069,386	\$ 994,292	\$ 1,083,101	\$ 1,112,441	\$ 1,141,943

1. Assumes new rates are implemented April 1, 2024.

2. Total use of funds less interest earnings.

Figure 27. Summary of Recycled Water Revenue Requirements for FY 2023/24

Recycled Water Classification Components	Cost-of-Service Net Revenue Requirements (2023/24)	
Variable (Collected from Vol. Rates)	\$ 855,509	80%
Fixed (Collected from Fixed Charges)	213,877	20%
Net Revenue Requirement	\$ 1,069,386	100%

3.3 Proposed Recycled Water Rates

Fixed Charges

Fixed charges have been calculated in the same manner as potable water fixed charges. **Figure 28** shows the calculation of the monthly fixed meter charges. In total, the fixed and variable charges collect the target revenue from recycled water customers as shown previously in Figure 27.

Figure 28. Recycled Water Fixed Rate Calculation

Number of RW Meters by Class and Size ¹	FY 2023/24								Total
	< 1" meter	1" meter	1 1/2"	2" meter	3" meter	4" meter	6" meter	8" meter	
Recycled Water									
Recycled Water	2	13	14	28	13	6	0	0	76
Total Meters/Accounts	2	13	14	28	13	6	0	0	76
<i>Hydraulic Capacity Factor²</i>	1.00	1.67	3.33	5.33	10.67	16.67	33.33	53.33	
Total Equivalent Meters	2	22	47	149	139	100	0	0	458
Monthly Fixed Service Charges									
Fixed Charge (\$/EM/month) ³	\$38.89	\$38.89	\$38.89	\$38.89	\$38.89	\$38.89	\$38.89	\$38.89	
Fixed Monthly Charge	\$38.89	\$64.81	\$129.62	\$207.40	\$414.79	\$648.11	\$1,296.23	\$2,073.96	
Annual Fixed Costs Allocated to Monthly Meter Charges									
Total Revenue from RW Meter Charges	\$ 933	\$ 10,111	\$ 21,777	\$ 69,685	\$ 64,708	\$ 46,664	\$ -	\$ -	\$ 213,877

1. Meter by Class and Size are based on June 2022 customer billing data.

2. Source: *Principles of Water Rates, Fees, and Charges*, Manual M1, AWWA, Table B-1.

3. Cost per month per equivalent meter. Monthly fixed charges are set for each meter size using the hydraulic capacity factors and total equivalent meters.

Given the amount of consumption relative to the number of meters in the recycled water system, it is expected that 80% of the rate revenue will be collected from the variable charge. **Figure 29** calculates the volumetric rate per HCF and the fixed monthly charge per equivalent meter (monthly fixed charges will be based on meter size).

Figure 29. Recycled Water Variable Rate Calculation

Recycled Water Customers	Cost Allocation Factors			Cost Classifications			RW Volumetric Rate (\$/hcf) ⁵	RW Fixed Charges (\$/Eq. Meter/Month) ⁶
	Annual RW Consumption ¹	Equivalent Meters ²		Variable Costs ³	Fixed Costs ⁴	Net Revenue Req'ts		
		No. of Equiv. Meters	% of Equiv. Meters					
Recycled Water								
Recycled Water	272,268	458	100.0%	\$ 855,509	\$ 213,877	\$ 1,069,386	\$3.14	\$38.89
Total Net Revenue Requirement	272,268	458	100.0%	\$ 855,509	\$ 213,877	\$ 1,069,386	--	--

1. Source file: 2020 Urban Water Management Plan, Figure 6.4.

2. Number of meters by size times the hydraulic capacity factor for each meter size. Source: AWWA, Manual M1, Table B-1 & AWWA, Manual M6, Table 5-3.

3. Total Variable Costs times the proportional share of annual RW consumption.

4. Fixed costs times the percent of equivalent meters.

5. Total Variable Costs divided by Total Annual RW Consumption.

6. Total Fixed Costs divided by total Equivalent Meters. This provides the basis for monthly fixed charges for each meter size.

3.4 Current vs. Proposed Recycled Water Rates

Using the same hydraulic capacity factors listed in Figure 9, monthly fixed charges were developed for each meter size. **Figure 30** shows the current and proposed recycled water rates for FY 2023/24 through FY

2027/28. The self-haul rate was based on the current self-rate, then escalated at the same rate as the delivered recycled water.

Figure 30. Current and Proposed Recycled Water Rates

Recycled Water Rate Schedule	Current Rates	Proposed Rates				
		FY 2023/24	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28
Monthly Fixed Service Charges (in \$/mo)						
< 1" meter	\$26.56	\$38.89	\$42.78	\$47.05	\$49.41	\$51.88
1" meter	\$44.42	\$64.81	\$71.29	\$78.42	\$82.34	\$86.46
1 1/2" meter	\$88.75	\$129.62	\$142.58	\$156.84	\$164.69	\$172.92
2" meter	\$141.99	\$207.40	\$228.14	\$250.95	\$263.50	\$276.67
3" meter	\$283.98	\$414.79	\$456.27	\$501.90	\$526.99	\$553.34
4" meter	\$443.74	\$648.11	\$712.92	\$784.22	\$823.43	\$864.60
6" meter	\$887.48	\$1,296.23	\$1,425.85	\$1,568.43	\$1,646.85	\$1,729.20
8" meter	\$1,420.06	\$2,073.96	\$2,281.36	\$2,509.49	\$2,634.97	\$2,766.71
Commodity Charges for All Water Consumed (in \$/hcf)						
Variable Charge	\$0.90	\$3.14	\$3.46	\$3.80	\$3.99	\$4.19
Variable Charge - Self-Haul	n/a	\$1.88	\$2.07	\$2.28	\$2.39	\$2.51

4. Sewer Rate Study

4.1 Key Sewer Rate Study Issues

The City manages a wastewater system for approximately 6,150 customers within its service area. The City owns and operates the American Canyon Water Reclamation Facility (WRF) that collects and treats wastewater for both domestic and industrial customers. The City's wastewater rate analysis was undertaken with a few specific objectives, including:

- Ensure equity among customer classes by collecting rate revenue through the cost-of-service process based on both fixed monthly charges and volumetric rates.
- Maintain adequate reserve levels to ensure continuity in operations.
- Provide greater revenue stability for the utility, due to the level of capital investment planned over the next five years.
- Comply with Prop 218 requirements to ensure cost-of-service are properly allocated amongst user classifications.

4.2 Financial Plan

Similar to the water utility, it is important for the wastewater utility to ensure rates provide sufficient funding to cover operating and maintenance costs, planned capital expenditures, and maintain reasonable reserves. The wastewater utility's rate increases are governed by these needs, and the current state of City's wastewater utility is as follows:

- **Meeting Net Revenue Requirements:** For FY 2023/24 through FY 2027/28, the projected net revenue requirements (that is, total operating expenses plus rate-funded capital costs less non-rate revenues) for the City averages approximately \$8.5 million, annually. If no rate adjustments are implemented, the City is projected to average a \$3.3 million deficit each year.
- **Maintaining Reserve Funds:** Reserve funds provide a basis for a utility to cope with fiscal emergencies such as revenue shortfalls, asset failure, and natural disasters, among other events. Reserve policies provide guidelines for sound financial management, with an overall long-range perspective to maintain financial solvency and mitigate financial risks associated with revenue instability, volatile capital costs, and emergencies. NBS recommends that the City target a minimum of approximately \$2.9 million in unrestricted reserve funds over the 5-year period. The reserve funds for the sewer utility are considered unrestricted reserves and consist of the following:
 - **Operating Reserve** should equal approximately 90 days of operating expenses, or approximately \$1.8 million annually. An operating reserve is intended to promote financial viability in the event of any short-term fluctuation in revenues and/or expenditures. Fluctuations in revenue can be caused by weather patterns, the natural inflow and outflow of cash during billing cycles, natural variability in demand-based revenue streams (such as volumetric charges), and – particularly in periods of economic distress – changes or trends in age of receivables.

- **Capital Rehabilitation & Replacement Reserve** should equal approximately 3% of net capital assets which is approximately \$936,000 in FY 2023/24. This reserve is set aside to address long-term capital system replacement and rehabilitation needs.

Rate revenue increases will be needed throughout the 5-year rate adoption period in order to fully fund all operating expenses and planned capital projects as well as maintain reserves at the recommended targets.

Figure 31 summarizes the sources and uses of funds, net revenue requirements, and the recommended annual increases in wastewater rate revenue proposed for the next 5 years.

Figure 31. Summary of Wastewater Revenue Requirements

Summary of Sources and Uses of Funds and Net Revenue Requirements	Actuals		5-Year Projected Rate Period				
	FY 2021/22	FY 2022/23	FY 2023/24	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28
Sources of Sewer Funds							
Rate Revenue Under Prevailing Rates ¹	\$ 4,824,937	\$ 4,940,178	\$ 5,042,690	\$ 5,128,416	\$ 5,215,599	\$ 5,304,264	\$ 5,394,436
Additional Revenue from Rate Increases ²	-	-	630,336	1,923,156	3,077,203	4,141,569	4,755,735
Total: Rate Revenue	4,824,937	4,940,178	5,673,026	7,051,572	8,292,802	9,445,833	10,150,172
Interest Earnings	28,277	166,693	120,000	22,911	22,211	24,657	21,576
Total: Sources of Funds	\$ 4,853,213	\$ 5,106,871	\$ 5,793,026	\$ 7,074,483	\$ 8,315,013	\$ 9,470,491	\$10,171,748
Uses of Sewer Funds							
Operating Expenses	\$ 5,819,790	\$ 2,105,714	\$ 6,260,396	\$ 6,503,425	\$ 6,723,889	\$ 9,410,800	\$ 7,188,544
Rate-Funded Capital Expenses	345,549	3,201,161	2,573,447	197,942	1,111,368	14,992	2,230,867
Total: Use of Funds	\$ 6,165,340	\$ 5,306,875	\$ 8,833,843	\$ 6,701,367	\$ 7,835,256	\$ 9,425,791	\$ 9,419,410
Projected Increases in Rate Revenue	0.00%	0.00%	25.00%	20.00%	12.00%	12.00%	0.00%
Cumulative Rate Increases	0.00%	0.00%	25.00%	50.00%	68.00%	88.16%	88.16%
Net Revenue Requirement³	\$ 7,169,511	\$ 5,175,276	\$ 8,830,324	\$ 6,802,043	\$ 7,935,240	\$ 9,536,723	\$ 9,541,748

1. Revenue and expenses for FY 2021/22 and FY 2022/23 provided by the City. Source files: 1 - Budget - Wastewater.xlsx, 2022.03.08 Revenue Budget FY 2021-22 Midyear.xlsx & REV_EXP_ACTUALS - FY22 and FY23_NBS.
2. Revenue from rate increases assumes an implementation date of January 1, 2024. For each year thereafter, the assumption is that new rates will be implemented on January 1st of each year.
3. Total Use of Funds less non-rate revenues and interest earnings. This is the annual amount needed from sewer rates.

Figure 32 summarizes the projected reserve fund balances and reserve targets for the sewer utility's unrestricted funds. A more detailed version of the utility's proposed 5-year financial plan is included in *Appendix C*. The appendix tables include revenue requirements, reserve funds, revenue sources, proposed rate increases, and the City's capital improvement program. As **Figure 32** shows, given the proposed rate increases, reserves are well over the minimum target balances.

Figure 32. Summary of Sewer Reserve Funds

Beginning Reserve Fund Balances and Recommended Reserve Targets	Actuals		5-Year Projected Rate Period				
	FY 2021/22	FY 2022/23	FY 2023/24	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28
Unrestricted Reserves							
Operating Reserve							
Ending Balance	\$ 1,455,000	\$ 2,627,989	\$ 1,677,226	\$ 1,626,000	\$ 1,805,087	\$ 1,579,529	\$ 1,797,000
<i>Recommended Minimum Target</i>	<i>1,455,000</i>	<i>526,000</i>	<i>1,565,000</i>	<i>1,626,000</i>	<i>1,681,000</i>	<i>2,353,000</i>	<i>1,797,000</i>
Capital Rehabilitation & Replacement Reserve							
Ending Balance	\$ 5,016,223	\$ 5,049,669	\$ 882,962	\$ 1,047,302	\$ 1,088,664	\$ 1,088,664	\$ 1,341,869
<i>Recommended Minimum Target</i>	<i>759,000</i>	<i>852,000</i>	<i>936,000</i>	<i>968,000</i>	<i>1,060,000</i>	<i>1,156,000</i>	<i>1,255,000</i>
Total Ending Balance	\$ 6,471,223	\$ 7,677,658	\$ 2,560,188	\$ 2,673,302	\$ 2,893,751	\$ 2,668,194	\$ 3,138,869
<i>Total Recommended Minimum Target</i>	<i>\$ 2,214,000</i>	<i>\$ 1,378,000</i>	<i>\$ 2,501,000</i>	<i>\$ 2,594,000</i>	<i>\$ 2,741,000</i>	<i>\$ 3,509,000</i>	<i>\$ 3,052,000</i>

4.3 Cost-of-Service Analysis

Once the net revenue requirements are determined, the cost-of-service analysis (COSA) proportionately distributes the revenue requirements to each of the customer classes. COSA consists of the classification of

expenses and then the allocation of those expenses to customer classes based on allocation factors, such as water consumption and number of equivalent dwelling units (EDUs), or accounts. Ultimately, a COSA is intended to result in rates that are proportional to the cost of providing service to each customer class.

CLASSIFICATION OF COSTS

As previously noted, costs are classified into the following categories: (1) flow-related costs; (2) strength-related costs (BOD and TSS); and (3) customer-related costs. Most costs are typically allocated to more than one of these categories. The City’s budgeted costs were reviewed and allocated to these basic categories which serve as the basis for calculating the fixed and variable charges. Tables in *Appendix C* show how the City’s expenses were classified and allocated to these cost-causation components.

Based on the City’s projected costs, the COSA resulted in a distribution that is approximately 45% fixed and 55% variable. Currently, the City’s rate structure collects 100% of the rate revenue from fixed charges for residential customers and either fixed or variable rates for commercial customers, depending on which is greater.

Figure 33 summarizes the allocation of the net revenue requirements to each cost causation component for the proposed rate structure. More detail on the development of the allocation factors that resulted in this summary will be covered in the following section.

Figure 33. Allocation of Revenue Requirements by Customer Class

Customer Class	Cost Classification Components				Cost-of-Service Net Revenue	% of COS Net Revenue Reqts.
	Volume	BOD	TSS	Customer		
Net Revenue Requirements¹	\$ 3,487,175	\$ 1,315,190	\$ 1,315,190	\$ 185,808	\$ 6,303,363	--
	55.3%	20.9%	20.9%	2.9%	100.0%	
Residential Customers						
Single Family Residential	\$ 2,337,493	\$ 878,986	\$ 876,669	\$ 142,186	\$ 4,235,335	67.2%
Multi-Family Residential	400,385	150,560	150,163	38,188	739,296	11.7%
All Other Customers						
Commercial	\$ 324,130	\$ 208,946	\$ 208,395	\$ 5,343	\$ 746,815	11.8%
Industrial						
Hess Collection Winery	\$ 24,149	\$ 1,207	\$ 620	\$ 30	\$ 26,006	0.4%
AmCan Beverage (Coca-Cola)	302,695	55,832	52,026	30	410,583	6.5%
Mezzetta Processing Facility	98,322	19,659	27,316	30	145,327	2.3%
Total:	\$ 3,487,175	\$ 1,315,190	\$ 1,315,190	\$ 185,808	\$ 6,303,363	100%

1. Revenue requirement for each customer class is determined by multiplying the revenue requirement from each cost classification by the allocation factors for each customer class.

CHARACTERISTICS OF CUSTOMERS BY CLASS

Customer classes are determined by combining customers with similar demand characteristics and types of use into categories that reflect the cost differentials to serve each type of customer. The most recent water consumption data was used to estimate the amount of flow that each customer class sends to the City’s Water Reclamation Facility (WRF). Volumetric rates for all customer classes were based on the average winter water consumption for the three lowest months of use.¹⁵ For non-residential customers that do not

¹⁵ Lowest consecutive winter months are January through March 2021.

have typical (i.e., residential) effluent strengths, volumetric rates reflect both their estimated flow and the appropriate non-residential effluent strengths.

Figure 34 shows the development of the flow (or volume) allocation factors by customer class calculated by taking the lowest consecutive 3-month water usage for FY 2020/21 and annualizing the usage per customer class.

Figure 34. Development of the Flow Allocation Factor

Customer Class ¹	Design Capacity					Total Annual Volume						
	Flow MGD	BOD mg/l	TSS mg/l	BOD lbs/day	TSS lbs/day	Flow MG	BOD mg/l ²	BOD lbs	% of Total BOD	TSS mg/l ²	TSS lbs	% of Total TSS
Residential Customers												
Single Family Residential	0.97	175	175	1,409	1,409	352	n/a	514,224	69.4%	n/a	514,224	69.8%
Multi-Family Residential	0.17	175	175	241	241	60	n/a	88,080	11.9%	n/a	88,080	12.0%
All Other Customers												
Commercial	0.13	300	300	335	335	49	n/a	122,237	16.5%	n/a	122,237	16.6%
Industrial ³												
Hess Collection Winery	0.01	50	30	4	2	3.64	8.6	260	0.0%	2.3	70	0.0%
AmCan Beverage (Coca-Cola)	0.13	200	220	209	229	45.63	23.1	8,782	1.2%	5.3	1,998	0.3%
Mezzetta Processing Facility	0.04	150	220	51	74	14.82	61.7	7,631	1.0%	81.2	10,035	1.4%
Total:	1.44			2,248	2,291	526		741,214	100.0%		736,644	100.0%

1. Customer data provided by the City for FY 2021/22. Source file: FY 2021-22 Summary by Rate Code - Detailed v2.xlsx.
 2. Annual volume and strength factors provided by the City. Source file: SIU 2 year data.xlsx.
 3. Flow for industrial customer is based on wastewater flow. Strength factors are based on input from City staff and lower than expected due to customers' pretreatment process. Source file: INF-001 & SIU Flow.xlsx.

Determining Customer Class Effluent Strengths

Effluent strength factors for each customer class were estimated by using the *Revenue Program Guidelines*¹⁶ issued by the State Water Resources Control Board (SWRCB) as described below:

- Residential customers were assigned BOD and TSS strength factors of 175 mg/l which is within the normal range for residential users.
- Commercial customers were assigned BOD and TSS strength factors of 300 mg/l.

Figure 35 summarizes the development of the customer allocation factor.

Figure 35. Development of the Customer Allocation Factor

Customer Class	Number of Dwelling Units / Accounts ¹	Percent of Total
Residential Customers		
Single Family Residential	4,710	76.5%
Multi-Family Residential	1,265	20.6%
All Other Customers		
Commercial	177	2.9%
Industrial		
Hess Collection Winery	1	0.0%
AmCan Beverage (Coca-Cola)	1	0.0%
Mezzetta Processing Facility	1	0.0%
Total:	6,155	100.0%

1. SFR, MFR, and Industrial customers are based on the number of dwelling units and all other customers are based on the number of accounts.

¹⁶ *Revenue Program Guidelines: Commercial User Strength Characteristics*, State Water Resources Control Board, Appendix G, page G-21. Site: https://www.waterboards.ca.gov/publications_forms/publications/general/docs/srf_wastewater_facilities_b.pdf.

4.4 Rate Design Analysis

The process of evaluating the sewer rate structure provides the opportunity to incorporate a number of rate-design objectives and policies, including revenue stability, equity among customer classes, and water conservation. The overall objective is to improve the fairness and equity of the rate design and ensure costs were being appropriately collected from each customer class. During the course of the study, NBS discussed several sewer rate alternatives and methodologies with City staff, such as the percentage of revenue collected from fixed vs. variable charges and differentiating rates by customer class. The proposed rates were developed based on input provided by City staff and the City Council.

FIXED CHARGES

The fixed charge recognizes that the sewer utility incurs fixed costs regardless of whether customers send any wastewater into the City's collection system. There are three factors used to develop the fixed charge: 1) the number of dwelling units for residential customers; 2) the number of accounts for non-residential customers; and 3) the annual revenue requirement. The monthly fixed charge is calculated by taking the 45% fixed charge multiplied by the annual revenue requirement which is then divided by the number of dwelling units for residential customers and accounts for commercial customers and billing periods per year.

VARIABLE RATES

The variable rates, on the other hand, are calculated by taking the remaining 55% portion of the net revenue requirement in each customer class and dividing it by the estimated effluent volume produced based on annualized average winter water use for both residential and non-residential customer classes.

The proposed sewer rates in this study were developed with the goal of developing a new rate structure that consists of both a fixed and variable rate component based on the number of dwelling units or accounts (for customer-related costs) and the water consumption for all customer classes. **Figure 36** compares the current and proposed rates for FY 2023/24 through FY 2027/28 by customer class. Projected rates for future years, with implementation date of April 1 in Year and then January 1 each year thereafter. These rates reflect adjustments based on the following factors: 1) the cost-of-service analysis, 2) the 45% fixed and 55% variable rate design structure; and 3) the recommended annual percentage increases in rate revenue. More detailed tables on the development of the proposed rates are documented in *Appendix C*.

Figure 36. Current vs. Proposed Sewer Rates

Sewer Rate Schedule ^{1,2}	Description	Current Rates	Proposed Sewer Rates				
			FY 2023/24	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28
			25.00%	20.00%	12.00%	12.00%	0.00%
Residential - Monthly Fixed Service Charges							
Single Family Residential	Per Dwelling Unit	\$60.48	\$74.94	\$89.93	\$100.72	\$112.81	\$112.81
Multi-Family Residential	Per Dwelling Unit	\$45.36	\$48.70	\$58.44	\$65.45	\$73.31	\$73.31
Commercial Customers³							
Monthly Fixed Service Charge	Per Account	\$60.48	\$115.21	\$138.25	\$154.84	\$173.42	\$173.42
Volumetric Rate	Per HCF	\$5.40	\$1.92	\$2.31	\$2.58	\$2.89	\$2.89
Industrial Customers							
Monthly Fixed Administrative Charge	Per Account	n/a	\$2.52	\$3.02	\$3.38	\$3.79	\$3.79
Fixed Charges							
Flow - per HCF per day	Per HCF per day Sewage Flow	n/a	\$517	\$620	\$695	\$778	\$778
BOD - per pound per day	Per pound per day	n/a	\$221	\$266	\$297	\$333	\$333
TSS - per pound per day	Per pound per day	n/a	\$217	\$261	\$292	\$327	\$327
Sewer Use Charges							
Flow - per HCF	Per HCF Sewage Flow	n/a	\$3.54	\$4.24	\$4.75	\$5.32	\$5.32
BOD - per pound	Per pound	n/a	\$1.10	\$1.32	\$1.48	\$1.66	\$1.66
TSS - pound	Per pound	n/a	\$1.11	\$1.33	\$1.49	\$1.67	\$1.67

1. Sewer rates are set according to the average monthly water use for January to March of the previous calendar year. New customers are charged at the average winter water use rate (standard) and adjusted the following year if applicable.
2. The fixed charge includes a monthly customer charge per account.
3. Current rates for commercial customers are charged the higher of the fixed or variable rate. Proposed rates have both a fixed and volumetric charge per commercial customer.

4.5 Comparison of Current and Proposed Sewer Bills

The following figures compare monthly sewer bills under current and proposed rates for various customers over the 5-year rate period.

Figure 37. Single Family Sewer Bill Comparison

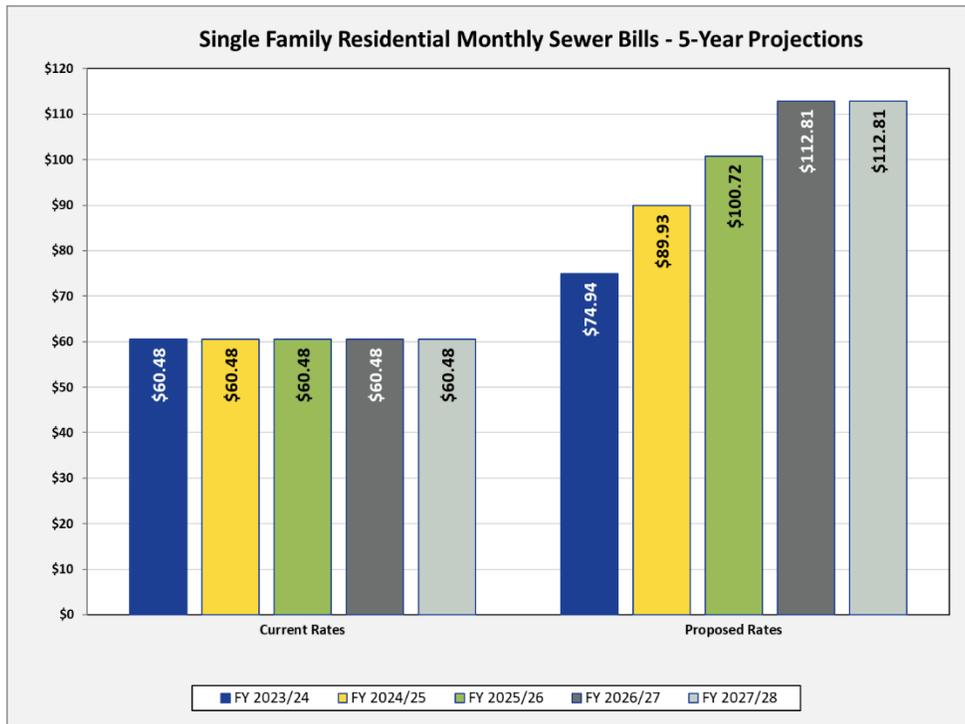


Figure 38. Multi-Family Residential Sewer Bill Comparison

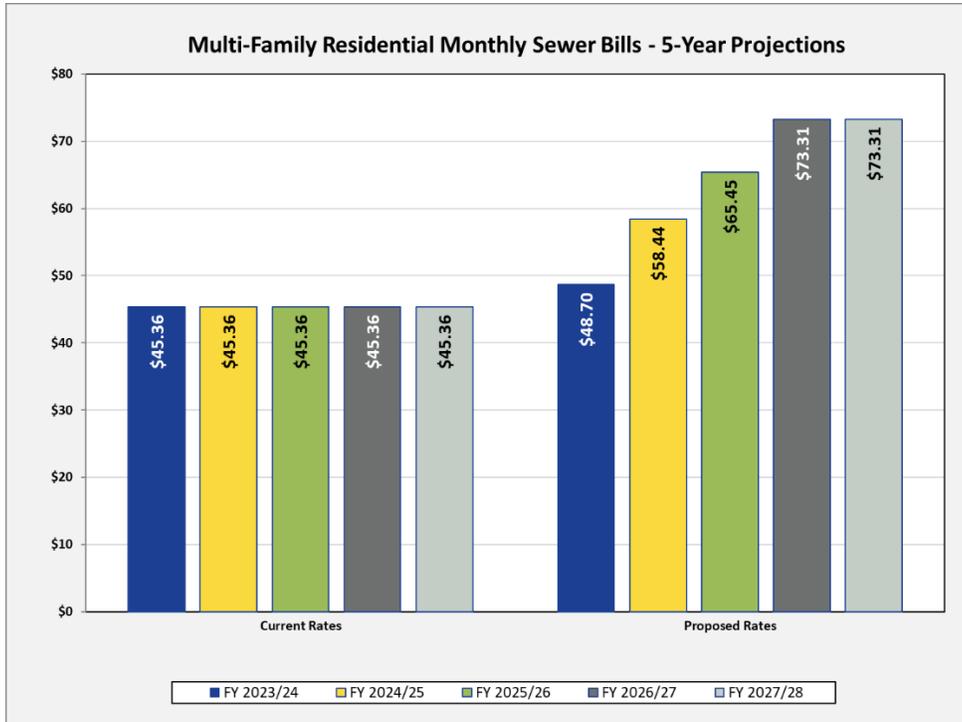
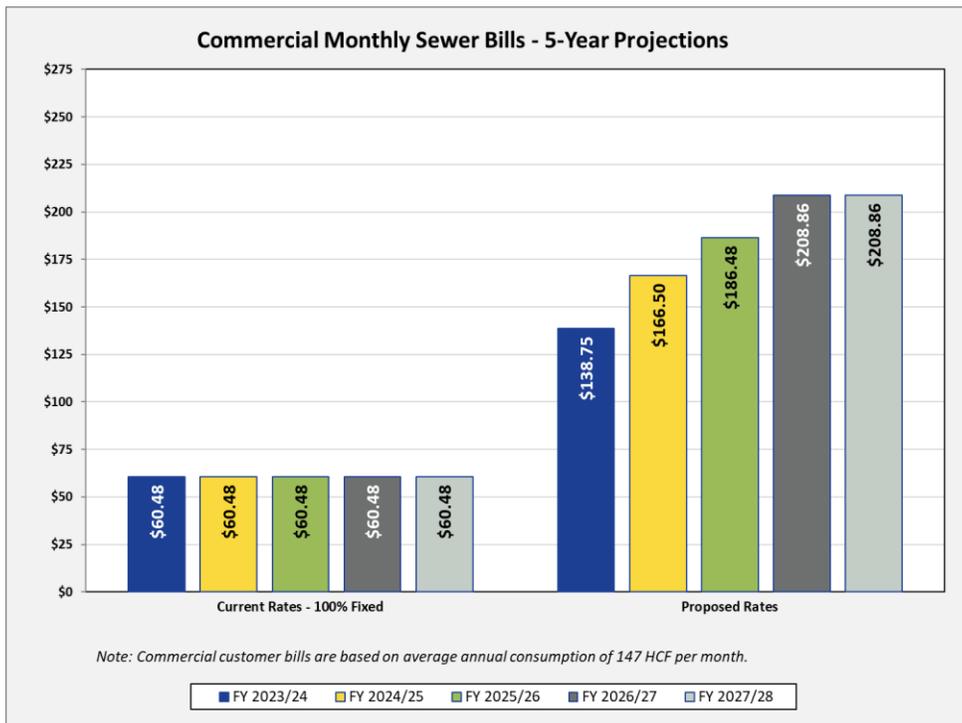


Figure 39. Commercial Sewer Bill Comparison



5. Recommendations and Next Steps

5.1 Consultant Recommendations

NBS recommends the City take the following actions:

- **Approve and Accept this Study:** NBS recommends the City Council formally approve and adopt this Study and its recommendations and proceed with the next steps outlined below to implement the proposed rates. This will provide documentation of the rate study analyses and the basis for analyzing potential changes to future rates.
- **Implement Recommended Levels of Rate Increases and Proposed Rates:** Based on successfully meeting the Proposition 218 procedural requirements, the City should proceed with implementing the 5-year schedule of proposed rates (including drought rates) and rate increases previously shown in Figure 18, Figure 19, Figure 20, Figure 25, Figure 30, and Figure 36. This will help ensure the continued financial health of City's utilities.

5.2 Next Steps

Annually Review Rates and Revenue – Any time an agency adopts new utility rates or rate structures, those new rates should be closely monitored over the next several years to ensure the revenue generated is sufficient to meet the annual revenue requirements. Changing economic and water consumption patterns underscore the need for this review, as well as potential and unseen changing revenue requirements—particularly those related to environmental regulations that can significantly affect capital improvements and repair and replacement costs.

Note: The attached Technical Appendices provide more detailed information on the analysis of the financial plan, revenue requirements, cost-of-service, and the rate design analyses that have been summarized in this report.

5.3 NBS' Principal Assumptions and Considerations

In preparing this report and the opinions and recommendations included herein, NBS has relied on a number of principal assumptions and considerations with regard to financial matters, conditions, and events that may occur in the future. This information and these assumptions, including the City's budgets, capital improvement costs, customer accounts and consumption, and information from City staff were provided by sources we believe to be reliable, although NBS has not independently verified this data.

While we believe NBS' use of such information and assumptions is reasonable for the purpose of this report and its recommendations, some assumptions will invariably not materialize as stated herein and may vary significantly due to unanticipated events and circumstances. Therefore, the actual results can be expected to vary from those projected to the extent that actual future conditions differ from those assumed by us or provided to us by others.

Technical Appendices



Appendix A. Water Rate Study Tables and Figures

TABLE 1: FINANCIAL PLAN AND SUMMARY OF REVENUE REQUIREMENTS

RATE REVENUE REQUIREMENTS SUMMARY	Actuals	Actuals	5-Year Projected Rate Period					Projected				
	FY 2021/22	FY 2022/23	FY 2023/24	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30	FY 2030/31	FY 2031/32	FY 2032/33
Sources of Water Funds												
<i>Rate Revenue:</i> ¹												
Water Sales - Meter Use Fees	\$ 8,362,554	\$ 8,485,676	\$ 9,360,200	\$ 9,528,684	\$ 9,690,671	\$ 9,855,413	\$ 10,022,955	\$ 10,193,345	\$ 10,366,632	\$ 10,532,498	\$ 10,701,018	\$ 10,872,234
Water Sales - Metered Water	47,619	58,508	81,440	82,906	84,315	85,749	87,206	88,689	90,197	91,640	93,106	94,596
<i>Non-Rate Revenue:</i>												
Grant - State/Local	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Interest Earnings ²	(212,625)	215,995	275,008	87,285	61,319	56,589	58,325	60,169	56,736	48,854	37,654	23,863
Miscellaneous Revenues	570,024	319,827	359,300	365,767	371,985	378,309	384,740	391,281	397,933	404,300	410,769	417,341
Late Penalties / Interest	93,977	128,487	114,300	116,357	118,335	120,347	122,393	124,474	126,590	128,615	130,673	132,764
Interfund Transfer In (Loan Repayment)	-	-	44,061	44,061	49,482	49,482	49,482	49,482	49,482	49,482	49,482	49,482
Total Sources of Funds	\$ 8,861,548	\$ 9,208,492	\$ 10,234,309	\$ 10,225,060	\$ 10,376,108	\$ 10,545,889	\$ 10,725,101	\$ 10,907,439	\$ 11,087,569	\$ 11,255,388	\$ 11,422,701	\$ 11,590,279
Uses of Water Funds												
<i>Operating Expenses:</i> ¹												
<i>Water Operations:</i>												
560 - Water Treatment Plant	\$ 1,483,133	\$ 1,788,187	\$ 2,088,189	\$ 3,357,121	\$ 2,228,382	\$ 2,302,054	\$ 2,378,221	\$ 2,456,970	\$ 2,538,391	\$ 2,622,580	\$ 2,709,633	\$ 2,799,651
565 - Water Distribution	991,284	1,013,187	1,536,149	1,586,987	1,639,520	1,693,803	1,749,895	1,807,858	1,867,753	1,929,647	1,993,606	2,059,700
50 - Public Works	1,356,080	1,616,039	366,768	378,613	390,854	403,506	416,582	430,096	444,064	458,500	473,420	488,842
Water Purchases	3,380,850	4,035,407	3,602,218	3,674,262	3,747,748	3,822,703	3,899,157	3,977,140	4,056,683	4,137,816	4,220,573	4,304,984
Subtotal: Water Supply & Distribution: Expenses:	\$ 7,211,347	\$ 8,452,821	\$ 7,593,324	\$ 8,996,983	\$ 8,006,504	\$ 8,222,065	\$ 8,443,854	\$ 8,672,063	\$ 8,906,891	\$ 9,148,543	\$ 9,397,232	\$ 9,653,176
<i>Non-Operating Expenses:</i> ³												
Transfer To General Fund	1,263,894	1,798,674	2,206,123	2,207,963	2,171,674	2,237,313	2,304,938	2,374,610	2,446,390	2,520,343	2,596,533	2,675,030
Subtotal: Non-Operating Expenses:	\$ 1,263,894	\$ 1,798,674	\$ 2,206,123	\$ 2,207,963	\$ 2,171,674	\$ 2,237,313	\$ 2,304,938	\$ 2,374,610	\$ 2,446,390	\$ 2,520,343	\$ 2,596,533	\$ 2,675,030
<i>Other Expenditures:</i>												
Existing Debt Service	\$ 523,735	\$ 744,109	\$ 820,140	\$ 823,637	\$ 1,468,278	\$ 2,523,408	\$ 3,014,261	\$ 3,269,396	\$ 3,287,122	\$ 3,227,021	\$ 3,128,082	\$ 103,586
New Debt Service	-	-	-	-	-	-	-	-	-	-	-	-
Rate-Funded Capital Expenses	251,795	2,790,541	4,566,877	1,523,075	1,565,040	754,328	665,707	952,128	1,201,396	1,421,386	1,618,317	1,797,260
Subtotal: Other Expenditures	\$ 775,530	\$ 3,534,650	\$ 5,387,017	\$ 2,346,712	\$ 3,033,319	\$ 3,277,736	\$ 3,679,968	\$ 4,221,524	\$ 4,488,517	\$ 4,648,407	\$ 4,746,399	\$ 1,900,846
Total Uses of Water Funds	\$ 9,250,771	\$ 13,786,145	\$ 15,186,464	\$ 13,551,658	\$ 13,211,497	\$ 13,737,114	\$ 14,428,761	\$ 15,268,197	\$ 15,841,798	\$ 16,317,293	\$ 16,740,164	\$ 14,229,052
<i>plus: Revenue from Rate Increases</i> ⁴	-	-	212,437	1,336,492	2,361,290	3,190,413	3,710,759	3,981,564	4,049,251	4,114,039	4,179,863	4,246,741
Annual Surplus/(Deficit)	\$ (389,223)	\$ (4,577,653)	\$ (4,739,718)	\$ (1,990,107)	\$ (474,099)	\$ (813)	\$ 7,099	\$ (379,194)	\$ (704,979)	\$ (947,866)	\$ (1,137,600)	\$ 1,607,968
Net Revenue Req't. (Total Uses less Non-Rate Revenue)	\$ 8,799,395	\$ 13,121,837	\$ 14,393,795	\$ 12,938,188	\$ 12,610,375	\$ 13,132,387	\$ 13,813,821	\$ 14,642,792	\$ 15,211,058	\$ 15,686,042	\$ 16,111,587	\$ 13,605,603
Total Rate Revenue After Rate Increases	\$ 8,410,172	\$ 8,544,184	\$ 10,291,388	\$ 11,419,530	\$ 12,658,891	\$ 13,389,056	\$ 14,025,170	\$ 14,263,598	\$ 14,506,079	\$ 14,738,176	\$ 14,973,987	\$ 15,213,571
Projected Annual Rate Revenue Increase	0.00%	0.00%	9.00%	9.00%	9.00%	4.00%	3.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Cumulative Increase from Annual Revenue Increases	0.00%	0.00%	9.00%	18.81%	29.50%	34.68%	38.72%	38.72%	38.72%	38.72%	38.72%	38.72%
Debt Coverage After Rate Increase	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

1. Revenue and expenses for FY 2021/22 through FY 2023/24 provided by the City. Revenues and expenses for all other years are escalated based on the forecasting assumptions located in Table 10. Source files: *Fund 510 Water Operations.xlsx*, *FY2023-24 Exp Budget Water.xlsx*, and *Fund 510 - 580 FY 23-24 Budget Status as of 09-19-2023.xlsx*.

2. Interest earnings for FY 2021/22 and FY 2022/23 are from the City's Budget. For all other years, it is calculated based on historical LAIF returns.

3. These expenses are from source file: *1 - Budget - Water.xlsx*.

4. Revenue from rate increases assumes an implementation date of April 1, 2024 for new rates. For each year thereafter, the assumption is that new rates will be implemented on January 1st of each year.

CITY OF AMERICAN CANYON
WATER RATE STUDY
Financial Plan and Reserve Projections

1	<-- Select Financial Plan Scenario Here												
Financial Plan Alternatives		FY 2021/22	FY 2022/23	FY 2023/24	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30	FY 2030/31	FY 2031/32	FY 2032/33
1	Alternative 1 - Full Cost Recovery Rate Increases ¹	0.00%	0.00%	9.00%	9.00%	9.00%	4.00%	3.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2	Alternative 2 - Phased-in Rate Increases ²	0.00%	0.00%	7.00%	7.00%	7.00%	7.00%	6.00%	0.00%	0.00%	0.00%	0.00%	0.00%
3	Alternative 3 - Minimal Rate Increases ³	0.00%	0.00%	5.00%	5.00%	5.00%	5.00%	5.00%	0.00%	0.00%	0.00%	0.00%	0.00%
4	Alternative 4 - No Rate Increases	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

- Alternative 1: Scenario 1 - Rates needed to meet all revenue requirements and meet the target reserve levels (Large increase followed by smaller increases).
- Alternative 2: Scenario 2 - Large increases phased in over two years, followed by smaller increases (Reserves drop below target level).
- Alternative 3: Scenario 3 - Smaller increases (Reserves drop below target level).

TABLE 2 : RESERVE FUND SUMMARY

SUMMARY OF CASH ACTIVITY	Actuals	Actuals	5-Year Projected Rate Period					Projected				
	FY 2021/22	FY 2022/23	FY 2023/24	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30	FY 2030/31	FY 2031/32	FY 2032/33
Unrestricted Reserve:												
Total Beginning Cash¹	\$ 3,670,141	\$ 13,667,530	\$ 10,874,673									
Operating Reserve												
Beginning Reserve Balance	\$ 3,634,570	\$ 13,667,530	\$ 10,874,673	\$ 4,142,536	\$ 2,278,487	\$ 1,930,446	\$ 2,055,691	\$ 2,188,848	\$ 1,935,712	\$ 1,356,792	\$ 534,984	\$ (476,558)
Plus: Net Cash Flow (After Rate Increases)	(389,223)	(4,577,653)	(4,739,718)	(1,990,107)	(474,099)	(813)	7,099	(379,194)	(704,979)	(947,866)	(1,137,600)	1,607,968
Plus: Transfer in of Debt Reserve Surplus	-	-	-	-	-	-	-	-	-	-	-	-
Plus: Transfer in from Capital and Infrastructure Reserve	-	-	-	-	-	-	-	-	-	-	-	-
Plus: Transfer in from Capacity Fee Reserve (Interfund Loan)	-	126,058	126,058	126,058	126,058	126,058	126,058	126,058	126,058	126,058	126,058	-
Less: Transfer out to Capital and Infrastructure Reserve	-	(3,488,438)	(2,118,478)	-	-	-	-	-	-	-	-	-
Ending Operating Reserve Balance	\$ 3,245,347	\$ 5,727,496	\$ 4,142,536	\$ 2,278,487	\$ 1,930,446	\$ 2,055,691	\$ 2,188,848	\$ 1,935,712	\$ 1,356,792	\$ 534,984	\$ (476,558)	\$ 1,131,410
Target Ending Balance (90-days of O&M)²	\$ 1,803,000	\$ 2,113,000	\$ 1,898,000	\$ 2,249,000	\$ 2,002,000	\$ 2,056,000	\$ 2,111,000	\$ 2,168,000	\$ 2,227,000	\$ 2,287,000	\$ 2,349,000	\$ 2,413,000
Capital Rehabilitation & Replacement Reserve												
Beginning Reserve Balance	\$ 35,571	\$ -	\$ -	\$ 2,118,478	\$ 2,079,900	\$ 2,079,900	\$ 2,079,900	\$ 2,079,900	\$ 2,079,900	\$ 2,079,900	\$ 2,079,900	\$ 2,079,900
Plus: Grant Proceeds	-	-	-	-	-	-	-	-	-	-	-	-
Plus: Transfer of Operating Reserve Surplus	-	3,488,438	2,118,478	-	-	-	-	-	-	-	-	-
Less: Transfer out to Operating Reserve	-	-	-	-	-	-	-	-	-	-	-	-
Less: Use of Reserves for Capital Projects	-	-	-	(38,578)	-	-	-	-	-	-	-	-
Ending Capital and Infrastructure Reserve Balance	\$ 35,571	\$ 3,488,438	\$ 2,118,478	\$ 2,079,900	\$ 2,079,900	\$ 2,079,900	\$ 2,079,900	\$ 2,079,900	\$ 2,079,900	\$ 2,079,900	\$ 2,079,900	\$ 2,079,900
Target Ending Balance (3% of net assets)³	\$ 1,420,700	\$ 1,548,600	\$ 1,870,900	\$ 2,079,900	\$ 2,260,500	\$ 2,370,700	\$ 2,458,100	\$ 2,548,200	\$ 2,641,000	\$ 2,736,700	\$ 2,835,300	\$ 2,937,000
Ending Balance - Excl. Restricted Reserves	\$ 3,280,918	\$ 9,215,935	\$ 6,261,013	\$ 4,358,387	\$ 4,010,346	\$ 4,135,591	\$ 4,268,748	\$ 4,015,612	\$ 3,436,692	\$ 2,614,884	\$ 1,603,342	\$ 3,211,310
Min. Target Ending Balance - Excl. Restricted Reserves	\$ 3,223,700	\$ 3,661,600	\$ 3,768,900	\$ 4,328,900	\$ 4,262,500	\$ 4,426,700	\$ 4,569,100	\$ 4,716,200	\$ 4,868,000	\$ 5,023,700	\$ 5,184,300	\$ 5,350,000
Ending Surplus/(Deficit) Compared to Reserve Targets	\$ 57,218	\$ 5,554,335	\$ 2,492,113	\$ 29,487	\$ (252,154)	\$ (291,109)	\$ (300,352)	\$ (700,588)	\$ (1,431,308)	\$ (2,408,816)	\$ (3,580,958)	\$ (2,138,690)

- Beginning cash balances provided by City staff for Fund 510 - Water Operations. Source files: 4 - Current Cash and Fund Balance - Water 12062021.xlsx & Beg Fund Balance FY23- Water.xls .
- The target ending balance is set equal to 90-days of O&M expenses. Source file: 4 - Current Cash and Fund Balance - Water 12062021.xlsx .
- The target ending balance is set equal to 3% of net capital assets. See Exhibit 2 (CIP) for details.

TABLE 3 : RESERVE FUND SUMMARY, cont.

SUMMARY OF CASH ACTIVITY	Actuals	Actuals	5-Year Projected Rate Period					Projected				
	FY 2021/22	FY 2022/23	FY 2023/24	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30	FY 2030/31	FY 2031/32	FY 2032/33
Restricted Reserve: ¹												
Capacity Fee Reserve												
Beginning Reserve Balance	\$5,688,050	\$6,284,390	\$6,333,173	\$ 6,397,366	\$ 11,290,006	\$ 9,761,564	\$ 8,534,556	\$ 7,552,200	\$ 6,768,455	\$ 6,145,989	\$ 5,653,746	\$ 5,267,306
Plus: Interest Earnings	77,699	157,110	158,329	87,388	154,221	133,343	116,582	103,163	92,457	83,954	77,230	71,951
Plus: Capacity Fee Revenue	1,252,878	332,954	1,662,778	7,785,325	915,300	930,860	946,685	962,778	979,146	994,812	1,010,729	1,026,901
Less: Transfer out to Operating Reserve (Interfund Loan)	-	(126,058)	(126,058)	(126,058)	(126,058)	(126,058)	(126,058)	(126,058)	(126,058)	(126,058)	(126,058)	-
Less: Use of Reserves for Capital Projects	-	-	(1,630,856)	(2,854,016)	(2,471,905)	(2,165,153)	(1,919,564)	(1,723,628)	(1,568,012)	(1,444,951)	(1,348,341)	(1,273,232)
Ending Connection Fee Fund Balance	\$ 7,018,626	\$ 6,648,395	\$ 6,397,366	\$ 11,290,006	\$ 9,761,564	\$ 8,534,556	\$ 7,552,200	\$ 6,768,455	\$ 6,145,989	\$ 5,653,746	\$ 5,267,306	\$ 5,092,926
Target Ending Balance (3% of net assets) ³	\$ 1,420,700	\$ 1,548,600	\$ 1,870,900	\$ 2,079,900	\$ 2,260,500	\$ 2,370,700	\$ 2,458,100	\$ 2,548,200	\$ 2,641,000	\$ 2,736,700	\$ 2,835,300	\$ 2,937,000
Debt Reserve												
Beginning Reserve Balance	\$ 1,151,405	\$ 122,586	\$ 125,651	\$ 128,792	\$ 130,551	\$ 132,335	\$ 134,142	\$ 135,975	\$ 137,832	\$ 139,715	\$ 141,623	\$ 143,558
Plus: Reserve Funding from New Debt Obligations	-	-	-	-	-	-	-	-	-	-	-	-
Plus: Interest Earnings	15,728	3,065	3,141	1,759	1,783	1,808	1,832	1,857	1,883	1,909	1,935	1,961
Less: Transfer of Surplus to Operating Reserve	-	-	-	-	-	-	-	-	-	-	-	-
Ending Debt Reserve Balance	\$ 1,167,133	\$ 125,651	\$ 128,792	\$ 130,551	\$ 132,335	\$ 134,142	\$ 135,975	\$ 137,832	\$ 139,715	\$ 141,623	\$ 143,558	\$ 145,519
Target Ending Balance	\$ 71,827	\$ 72,068	\$ 72,053	\$ 71,580	\$ 70,175	\$ 66,417	\$ 53,204	\$ -				
Annual Interest Earnings Rate ²	1.37%	2.50%	2.50%	1.37%	1.37%	1.37%	1.37%	1.37%	1.37%	1.37%	1.37%	1.37%

1. The beginning cash balances provided by the City. Source file: 4 - Current Cash and Fund Balance - Water 12062021.xlsx , Beg Fund Balance FY23- Water.xls, & Beg Fund Balance FY23- Recycled Water.xls .
2. The target ending balance is set equal to 3% of net capital assets. See Exhibit 2 (CIP) for details.
3. Historical interest earning rates are per the average annual yields for funds invested in LAIF (2017-2021). The source is the California State Treasurer's website: <https://www.treasurer.ca.gov/pmia-laif/historical/annual.asp> .

CHART 1

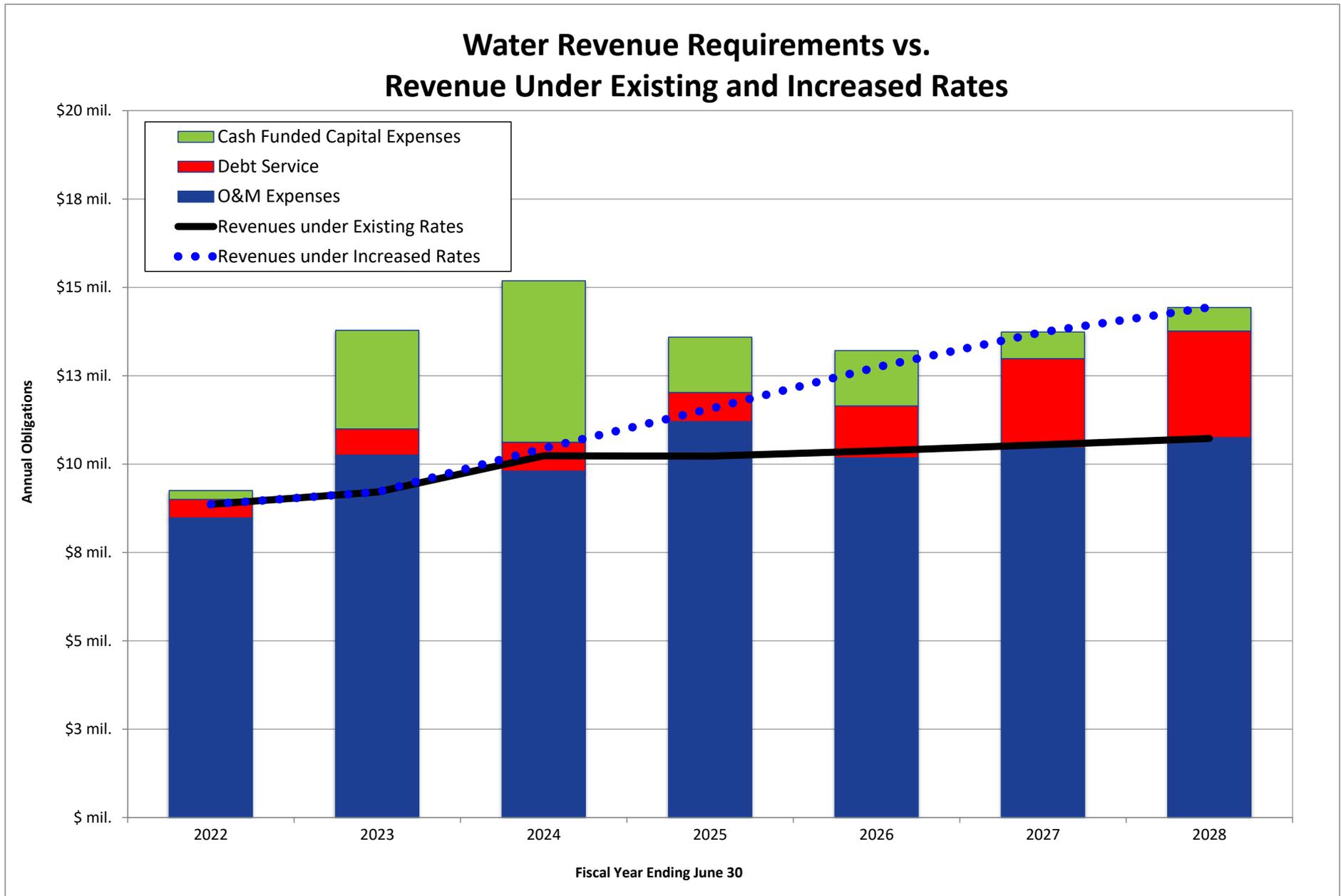


CHART 2

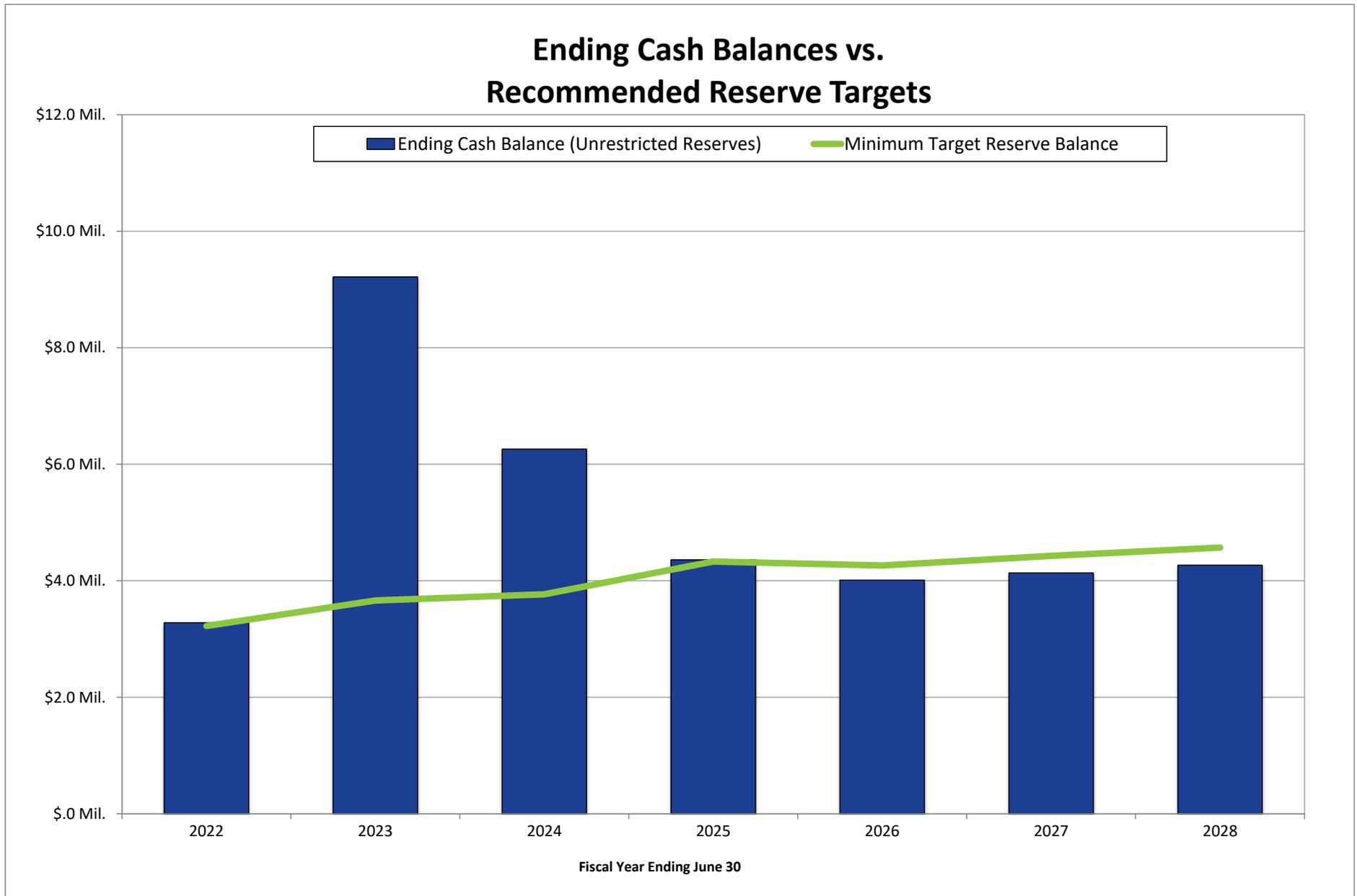


CHART 3

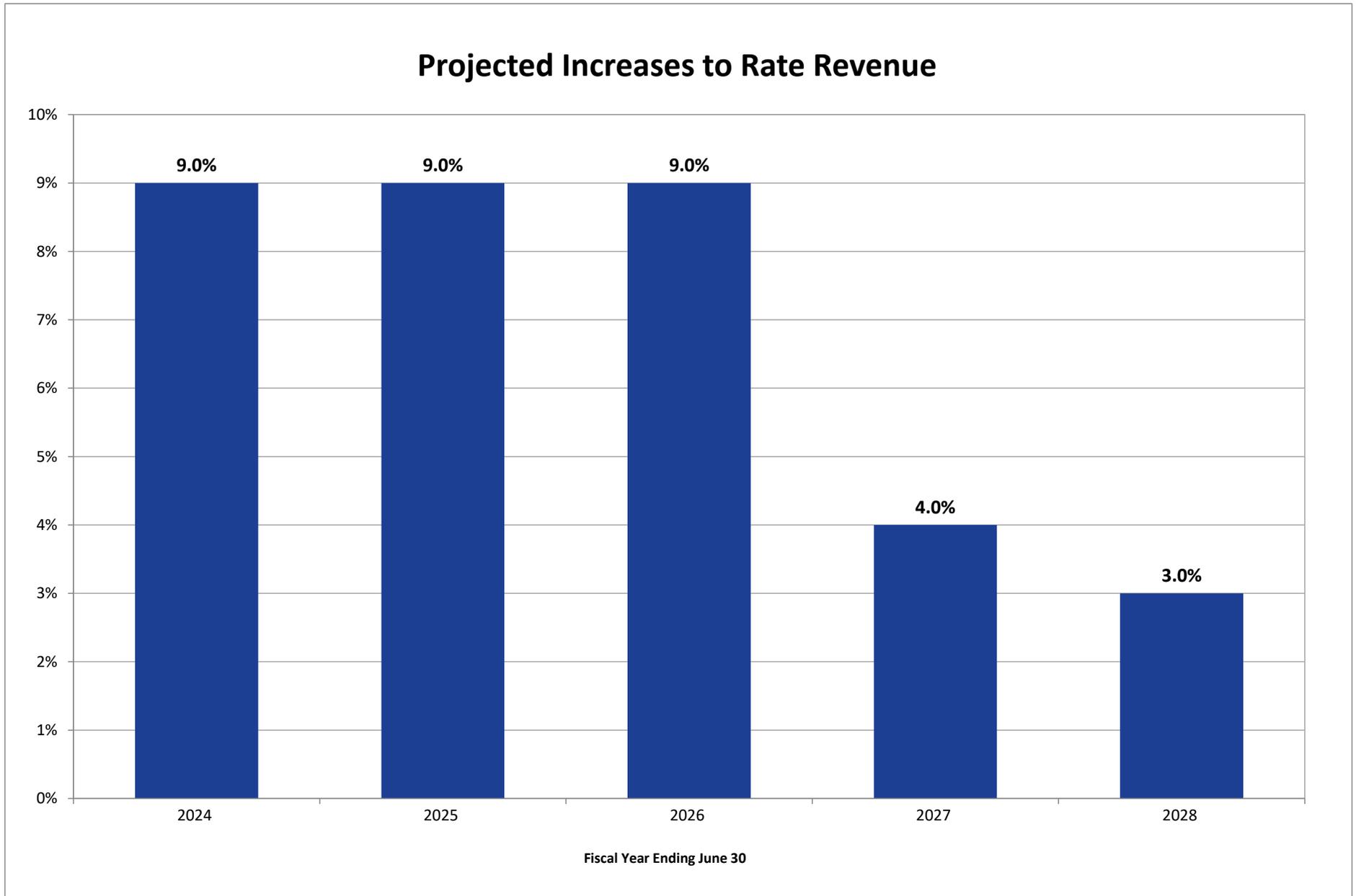


CHART 4

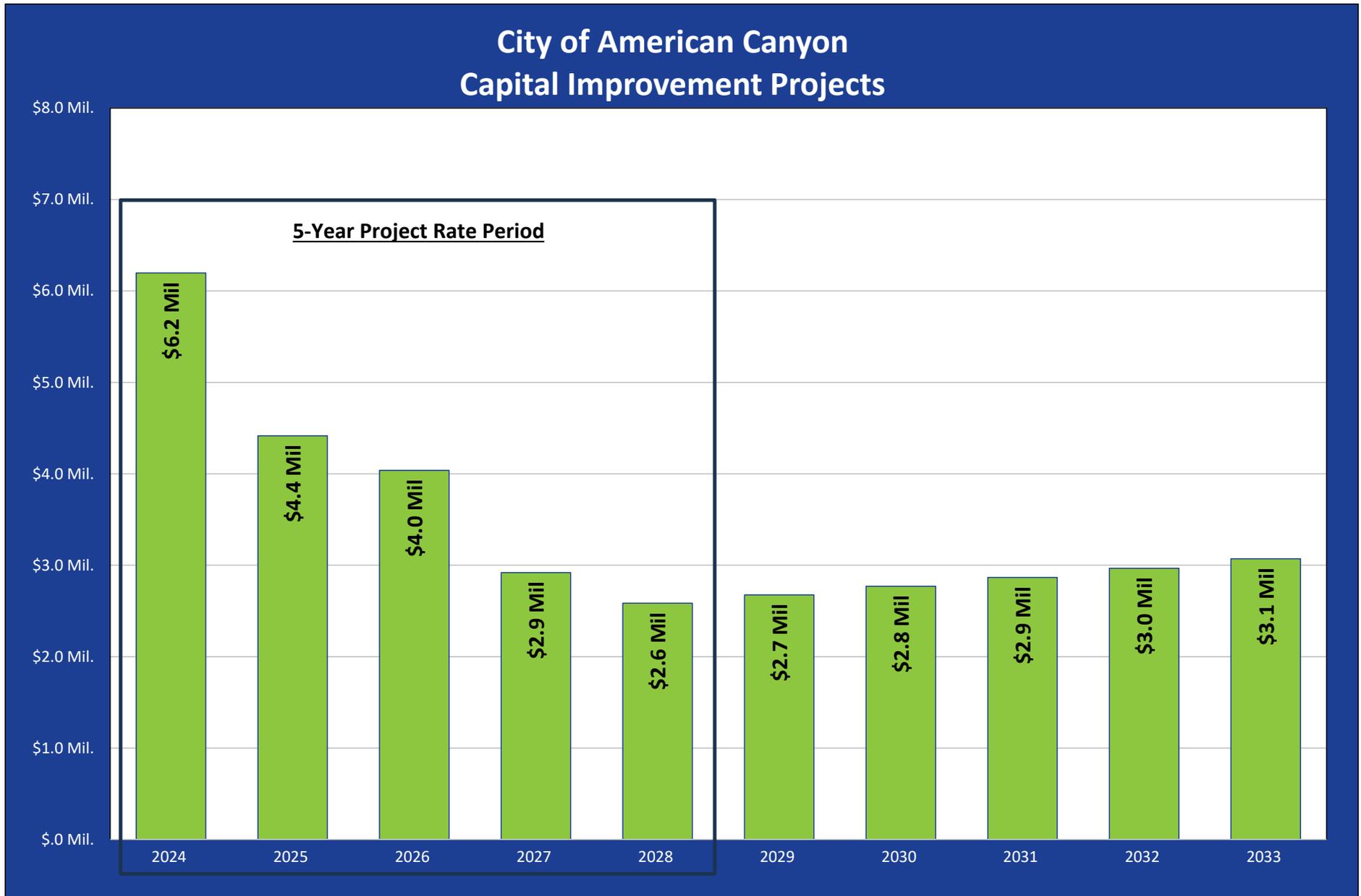


TABLE 4 : REVENUE FORECAST¹

DESCRIPTION	Basis	Actuals		5-Year Projected Rate Period					Projected				
		FY 2021/22	FY 2022/23	FY 2023/24	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30	FY 2030/31	FY 2031/32	FY 2032/33
Rate Revenue													
Water Service Charge - Potable	1	\$ 8,362,554	\$ 8,485,676	\$ 9,360,200	\$ 9,528,684	\$ 9,690,671	\$ 9,855,413	\$ 10,022,955	\$ 10,193,345	\$ 10,366,632	\$ 10,532,498	\$ 10,701,018	\$ 10,872,234
Water Service Charge - Raw	1	47,619	58,508	81,440	82,906	84,315	85,749	87,206	88,689	90,197	91,640	93,106	94,596
Other Revenue													
Grant - State/Local	1	-	-	-	-	-	-	-	-	-	-	-	-
Interest Earnings	See FP	(212,625)	215,995	-	-	-	-	-	-	-	-	-	-
Charges for Services	9	329,720	-	-	-	-	-	-	-	-	-	-	-
Miscellaneous Revenues	1	240,304	319,827	359,300	365,767	371,985	378,309	384,740	391,281	397,933	404,300	410,769	417,341
Late Penalties / Interest	1	93,977	128,487	114,300	116,357	118,335	120,347	122,393	124,474	126,590	128,615	130,673	132,764
Insurance Reimbursements	9	-	-	-	-	-	-	-	-	-	-	-	-
Fund Transfer In													
Interfund Transfer In (Loan Repayment)	9	-	-	44,061	44,061	49,482	49,482	49,482	49,482	49,482	49,482	49,482	49,482
Capacity Fee Revenue													
Water Capacity Fees	1	1,252,878	332,954	1,662,778	7,785,325	915,300	930,860	946,685	962,778	979,146	994,812	1,010,729	1,026,901
Interest Earnings	1	114,219	282,378	50,000	50,900	51,765	52,645	53,540	54,450	55,376	56,262	57,162	58,077
TOTAL: REVENUE		\$ 10,228,645	\$ 9,823,824	\$ 11,672,079	\$ 17,974,001	\$ 11,281,855	\$ 11,472,805	\$ 11,667,002	\$ 11,864,499	\$ 12,065,355	\$ 12,257,609	\$ 12,452,939	\$ 12,651,394

TABLE 5 : REVENUE SUMMARY

DESCRIPTION	Basis	Actuals		5-Year Projected Rate Period					Projected				
		FY 2021/22	FY 2022/23	FY 2023/24	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30	FY 2030/31	FY 2031/32	FY 2032/33
Rate Revenue													
Water Service Charge - Potable		\$ 8,362,554	\$ 8,485,676	\$ 9,360,200	\$ 9,528,684	\$ 9,690,671	\$ 9,855,413	\$ 10,022,955	\$ 10,193,345	\$ 10,366,632	\$ 10,532,498	\$ 10,701,018	\$ 10,872,234
Water Service Charge - Raw		47,619	58,508	81,440	82,906	84,315	85,749	87,206	88,689	90,197	91,640	93,106	94,596
Other Revenue													
Grant - State/Local		-	-	-	-	-	-	-	-	-	-	-	-
Interest Earnings		(212,625)	215,995	-	-	-	-	-	-	-	-	-	-
Miscellaneous Revenues		570,024	319,827	359,300	365,767	371,985	378,309	384,740	391,281	397,933	404,300	410,769	417,341
Late Penalties / Interest		93,977	128,487	114,300	116,357	118,335	120,347	122,393	124,474	126,590	128,615	130,673	132,764
Interfund Transfer In (Loan Repayment)		-	-	44,061	44,061	49,482	49,482	49,482	49,482	49,482	49,482	49,482	49,482
Capacity Fee Revenue													
Water Capacity Fees		1,252,878	332,954	1,662,778	7,785,325	915,300	930,860	946,685	962,778	979,146	994,812	1,010,729	1,026,901
Interest Earnings		114,219	282,378	50,000	50,900	51,765	52,645	53,540	54,450	55,376	56,262	57,162	58,077
TOTAL: REVENUE		\$ 10,228,645	\$ 9,823,824	\$ 11,672,079	\$ 17,974,001	\$ 11,281,855	\$ 11,472,805	\$ 11,667,002	\$ 11,864,499	\$ 12,065,355	\$ 12,257,609	\$ 12,452,939	\$ 12,651,394

TABLE 6 : OPERATING EXPENSE FORECAST¹

DESCRIPTION	Basis	Actuals		5-Year Projected Rate Period					Projected				
		FY 2021/22	FY 2022/23	FY 2023/24	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30	FY 2030/31	FY 2031/32	FY 2032/33
Fund 510 - Water Operations													
560 - Water Treatment Plant													
Wages - Full time	3	\$ 419,960	\$ 552,331	\$ 612,238	\$ 633,667	\$ 655,845	\$ 678,800	\$ 702,558	\$ 727,147	\$ 752,597	\$ 778,938	\$ 806,201	\$ 834,418
Wages - Overtime	3	10,703	14,204	9,000	9,315	9,641	9,978	10,328	10,689	11,063	11,451	11,851	12,266
Health Insurance	3	73,246	91,247	95,546	98,890	102,351	105,933	109,641	113,478	117,450	121,561	125,815	130,219
Health-In-Lieu	3	-	-	9,690	10,029	10,380	10,743	11,119	11,509	11,911	12,328	12,760	13,206
Cafeteria Plan Section 125	3	15,149	19,673	24,587	25,448	26,338	27,260	28,214	29,202	30,224	31,282	32,377	33,510
Social Security & Medicare	3	6,835	8,573	9,374	9,703	10,042	10,394	10,757	11,134	11,524	11,927	12,344	12,776
Worker Comp Insurance	3	32,904	36,686	49,859	51,604	53,410	55,280	57,215	59,217	61,290	63,435	65,655	67,953
Benefits - Other	3	1,125	1,705	1,106	1,145	1,185	1,226	1,269	1,314	1,360	1,407	1,457	1,508
Info Tech Support Services	2	40,818	2,424	116,200	119,686	123,277	126,975	130,784	134,708	138,749	142,911	147,199	151,615
Professional Services	2	132,912	128,160	366,400	377,392	388,714	400,375	412,386	424,758	437,501	450,626	464,145	478,069
Temp Agency Services	2	-	1,066	-	-	-	-	-	-	-	-	-	-
Misc Contractual Services	2	4,962	66,347	59,200	60,976	62,805	64,689	66,630	68,629	70,688	72,809	74,993	77,243
General Repairs & Maint	2	220,338	114,331	53,800	55,414	57,076	58,789	60,552	62,369	64,240	66,167	68,152	70,197
Advertising	2	4,908	1,279	6,000	6,180	6,365	6,556	6,753	6,956	7,164	7,379	7,601	7,829
Postage/Mail/Copy/Printing Svc	2	8,482	3,887	2,000	2,060	2,122	2,185	2,251	2,319	2,388	2,460	2,534	2,610
Membership Dues & Subscription	2	2,430	1,369	3,200	3,296	3,395	3,497	3,602	3,710	3,821	3,936	4,054	4,175
Conferences - Training	2	8,946	15,126	13,500	13,905	14,322	14,752	15,194	15,650	16,120	16,603	17,101	17,614
Rentals - Equipment/Space	2	4,305	9,134	3,700	3,811	3,925	4,043	4,164	4,289	4,418	4,551	4,687	4,828
Regulatory Compliance Permits	2	29,461	205	-	-	-	-	-	-	-	-	-	-
Office Supplies	2	2,929	2,645	25,000	25,750	26,523	27,318	28,138	28,982	29,851	30,747	31,669	32,619
Operating Supplies	2	347,712	406,005	488,400	503,052	518,144	533,688	549,699	566,189	583,175	600,670	618,691	637,251
Water Plant Membrane Filters	2	-	-	-	1,200,000	-	-	-	-	-	-	-	-
Utilities - Gas & Elec	5	61,656	61,456	73,000	77,116	81,465	86,059	90,912	96,038	101,454	107,175	113,218	119,603
Util-PhonesPgrsInternetCable	2	5,422	6,589	5,800	5,974	6,153	6,338	6,528	6,724	6,926	7,133	7,347	7,568
Major Equipment	2	15,000	152,253	-	-	-	-	-	-	-	-	-	-
Capital Outlay-Contra Account	9	(40,761)	-	-	-	-	-	-	-	-	-	-	-
PERS Retirement	3	73,689	91,491	60,588	62,708	64,903	67,175	69,526	71,959	74,478	77,085	79,783	82,575
Subtotal - Water Treatment Plant		\$ 1,483,133	\$ 1,788,187	\$ 2,088,189	\$ 3,357,121	\$ 2,228,382	\$ 2,302,054	\$ 2,378,221	\$ 2,456,970	\$ 2,538,391	\$ 2,622,580	\$ 2,709,633	\$ 2,799,651

TABLE 7 : OPERATING EXPENSE FORECAST, cont.¹

DESCRIPTION	Basis	Actuals		5-Year Projected Rate Period					Projected				
		FY 2021/22	FY 2022/23	FY 2023/24	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30	FY 2030/31	FY 2031/32	FY 2032/33
565 - Water Distribution													
Wages - Full time	3	\$ 426,369	\$ 436,850	\$ 544,808	\$ 563,876	\$ 583,612	\$ 604,038	\$ 625,180	\$ 647,061	\$ 669,708	\$ 693,148	\$ 717,408	\$ 742,517
Wages - Overtime	3	24,335	14,875	3,000	3,105	3,214	3,326	3,443	3,563	3,688	3,817	3,950	4,089
Health Insurance	3	43,356	53,367	110,792	114,670	118,683	122,837	127,137	131,586	136,192	140,959	145,892	150,998
Health-In-Lieu	3	14,200	11,400	-	-	-	-	-	-	-	-	-	-
Cafeteria Plan Section 125	3	21,165	21,467	27,459	28,420	29,415	30,444	31,510	32,613	33,754	34,936	36,158	37,424
Social Security & Medicare	3	7,057	7,005	8,298	8,588	8,889	9,200	9,522	9,855	10,200	10,557	10,927	11,309
Worker Comp Insurance	3	44,905	37,930	58,411	60,455	62,571	64,761	67,028	69,374	71,802	74,315	76,916	79,608
Benefits - Other	3	1,354	7,974	1,901	1,968	2,036	2,108	2,182	2,258	2,337	2,419	2,503	2,591
Info Tech Support Services	2	5,422	31,462	84,600	87,138	89,752	92,445	95,218	98,075	101,017	104,047	107,169	110,384
Professional Services	2	932	10,305	52,000	53,560	55,167	56,822	58,526	60,282	62,091	63,953	65,872	67,848
Misc Contractual Services	2	6,051	3,952	9,300	9,579	9,866	10,162	10,467	10,781	11,105	11,438	11,781	12,134
General Repairs & Maint	2	177,364	86,880	375,100	386,353	397,944	409,882	422,178	434,844	447,889	461,326	475,165	489,420
Reimbursable Repairs	2	-	-	20,000	20,600	21,218	21,855	22,510	23,185	23,881	24,597	25,335	26,095
Postage/Mail/Copy/Printing Svc	2	-	224	3,499	3,604	3,712	3,823	3,938	4,056	4,178	4,303	4,432	4,565
Membership Dues & Subscription	2	1,312	390	3,200	3,296	3,395	3,497	3,602	3,710	3,821	3,936	4,054	4,175
Conferences - Training	2	8,755	3,806	7,000	7,210	7,426	7,649	7,879	8,115	8,358	8,609	8,867	9,133
Rentals - Equipment/Space	2	5,206	4,996	13,000	13,390	13,792	14,205	14,632	15,071	15,523	15,988	16,468	16,962
Office Supplies	2	1,660	4,778	2,000	2,060	2,122	2,185	2,251	2,319	2,388	2,460	2,534	2,610
Operating Supplies	2	15,671	37,392	33,200	34,196	35,222	36,279	37,367	38,488	39,643	40,832	42,057	43,318
Water Meters	7	98,208	104,845	100,000	103,500	107,123	110,872	114,752	118,769	122,926	127,228	131,681	136,290
Util-PhonesPgrsInternetCable	5	3,960	4,825	4,100	4,331	4,575	4,833	5,106	5,394	5,698	6,019	6,359	6,717
Major Equipment	2	15,000	54,531	-	-	-	-	-	-	-	-	-	-
PERS Retirement	3	69,004	73,933	74,481	77,088	79,786	82,578	85,468	88,460	91,556	94,760	98,077	101,510
Subtotal -Water Distribution		\$ 991,284	\$ 1,013,187	\$ 1,536,149	\$ 1,586,987	\$ 1,639,520	\$ 1,693,803	\$ 1,749,895	\$ 1,807,858	\$ 1,867,753	\$ 1,929,647	\$ 1,993,606	\$ 2,059,700

TABLE 8 : OPERATING EXPENSE FORECAST, cont.¹

DESCRIPTION	Basis	Actuals		5-Year Projected Rate Period					Projected				
		FY 2021/22	FY 2022/23	FY 2023/24	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30	FY 2030/31	FY 2031/32	FY 2032/33
50 - Public Works													
810 - Non Departmental													
Wages - Full time	3	\$ 113,357	\$ 136,471	\$ 128,293	\$ 132,783	\$ 137,430	\$ 142,240	\$ 147,219	\$ 152,371	\$ 157,704	\$ 163,224	\$ 168,937	\$ 174,850
Wages - Overtime	3	954	178	-	-	-	-	-	-	-	-	-	-
Allowances	3	1,811	1,920	1,920	1,987	2,057	2,129	2,203	2,280	2,360	2,443	2,528	2,617
Health Insurance	3	18,856	20,841	21,244	21,987	22,757	23,553	24,378	25,231	26,114	27,028	27,974	28,953
Cafeteria Plan Section 125	3	4,227	4,452	4,312	4,463	4,619	4,781	4,948	5,122	5,301	5,486	5,678	5,877
Social Security & Medicare	3	1,747	2,069	2,038	2,109	2,183	2,259	2,338	2,420	2,505	2,592	2,683	2,777
Worker Comp Insurance	3	7,901	7,096	9,825	10,169	10,525	10,893	11,274	11,669	12,077	12,500	12,937	13,390
OPEB	3	80,835	(8,807)	47,537	49,201	50,923	52,705	54,550	56,459	58,435	60,480	62,597	64,788
Pension Expense	3	(223,456)	37,354	-	-	-	-	-	-	-	-	-	-
Benefits - Other	3	1,371	1,421	-	-	-	-	-	-	-	-	-	-
Info Tech Support Services	2	-	-	33,414	34,416	35,449	36,512	37,608	38,736	39,898	41,095	42,328	43,598
Professional Services	2	42,173	47,333	66,586	68,584	70,641	72,760	74,943	77,191	79,507	81,892	84,349	86,880
Postage/Mail/Copy/Printing Svc	2	-	9,000	6,000	6,180	6,365	6,556	6,753	6,956	7,164	7,379	7,601	7,829
Bad Debt Expense	2	(11,826)	14,649	-	-	-	-	-	-	-	-	-	-
Membership Dues & Subscription	2	425	767	2,600	2,678	2,758	2,841	2,926	3,014	3,105	3,198	3,294	3,392
Regulatory Compliance Permits	2	-	-	-	-	-	-	-	-	-	-	-	-
Services - Cash for Grass	2	17,463	8,815	30,000	30,900	31,827	32,782	33,765	34,778	35,822	36,896	38,003	39,143
Services - Toilet Rebates	9	5,300	5,800	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000
Services - Washer Rebates	2	-	-	-	-	-	-	-	-	-	-	-	-
Office Supplies	2	-	-	500	515	530	546	563	580	597	615	633	652
Operating Supplies	2	750	637	-	-	-	-	-	-	-	-	-	-
Utilities - Water	5	2,155	2,563	2,500	2,641	2,790	2,947	3,113	3,289	3,474	3,670	3,877	4,096
City of Napa	8	178,426	305,944	278,000	283,560	289,231	295,016	300,916	306,934	313,073	319,335	325,721	332,236
North Bay Aqueduct	8	2,142,501	2,330,665	3,203,000	3,267,060	3,332,401	3,399,049	3,467,030	3,536,371	3,607,098	3,679,240	3,752,825	3,827,881
City of Vallejo	8	1,059,922	1,398,799	121,218	123,642	126,115	128,638	131,210	133,834	136,511	139,241	142,026	144,867
AC Recycled Water	2	10,000	49,405	-	-	-	-	-	-	-	-	-	-
Depreciation	2	1,282,037	1,274,074	-	-	-	-	-	-	-	-	-	-
Transfer to Gen Fund Support Sv	2	766,412	942,449	1,124,203	1,157,929	1,192,667	1,228,447	1,265,300	1,303,259	1,342,357	1,382,628	1,424,107	1,466,830
Transfer To General Fund - Oth	9	57,195	319,586	160,000	100,000	-	-	-	-	-	-	-	-
Retiree Health Benefits	3	60,100	53,849	74,980	77,605	80,321	83,132	86,042	89,053	92,170	95,396	98,735	102,191
PERS Retirement	3	17,037	18,820	16,257	16,826	17,415	18,024	18,655	19,308	19,984	20,683	21,407	22,156
ISF - Bldg Maint	2	77,400	218,948	325,219	334,976	345,025	355,376	366,037	377,018	388,328	399,978	411,978	424,337
ISF - Fleet	2	238,950	178,624	354,173	364,798	375,742	387,014	398,625	410,584	422,901	435,588	448,656	462,115
ISF - Info Tech	2	18,000	44,795	54,709	56,350	58,041	59,782	61,575	63,423	65,325	67,285	69,304	71,383
ISF - Legal Services	2	28,800	21,603	96,582	99,479	102,464	105,538	108,704	111,965	115,324	118,784	122,347	126,018
Subtotal - Non Departmental		\$ 6,000,824	\$ 7,450,121	\$ 6,175,109	\$ 6,260,838	\$ 6,310,276	\$ 6,463,522	\$ 6,620,677	\$ 6,781,846	\$ 6,947,136	\$ 7,116,658	\$ 7,290,526	\$ 7,468,856
TOTAL: WATER OPERATIONS EXPENSES		\$ 8,475,241	\$ 10,251,496	\$ 9,799,447	\$ 11,204,947	\$ 10,178,178	\$ 10,459,378	\$ 10,748,792	\$ 11,046,673	\$ 11,353,281	\$ 11,668,886	\$ 11,993,765	\$ 12,328,206

TABLE 9 : OPERATING EXPENSE FORECAST, cont.¹ (for information only)

DESCRIPTION	Basis	Actuals		5-Year Projected Rate Period					Projected				
		FY 2021/22	FY 2022/23	FY 2023/24	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30	FY 2030/31	FY 2031/32	FY 2032/33
CAPITAL PROJECTS													
Intra-fund Transfer Out Water	7	\$ 89,642	\$ 85,675	\$ 2,038,185	\$ 2,109,521	\$ 2,183,355	\$ 2,259,772	\$ 2,338,864	\$ 2,420,724	\$ 2,505,450	\$ 2,593,141	\$ 2,683,900	\$ 2,777,837
Intra-fund Transfer Out Recycled	7	-	-	120,000	124,200	128,547	133,046	137,703	142,522	147,511	152,674	158,017	163,548
Misc. Contractual Services (Dept 450)	2	400,000	50,000	-	-	-	-	-	-	-	-	-	-
Transfer Cap Projs Fund - Gen	7	-	-	596,000	616,860	638,450	660,796	683,924	707,861	732,636	758,278	784,818	812,287
Transfer Cap Proj - Water	7	-	-	-	-	-	-	-	-	-	-	-	-
Transfer Cap Proj - Wastewater	7	(155,893)	412,280	250,000	258,750	267,806	277,179	286,881	296,922	307,314	318,070	329,202	340,724
Transfer Cap Proj - Recycled	7	-	-	917,509	949,622	982,859	1,017,259	1,052,863	1,089,713	1,127,853	1,167,328	1,208,185	1,250,471
Subtotal - Capital Projects		\$ 333,749	\$ 547,955	\$ 3,921,694	\$ 4,058,954	\$ 4,201,017	\$ 4,348,053	\$ 4,500,235	\$ 4,657,743	\$ 4,820,764	\$ 4,989,490	\$ 5,164,123	\$ 5,344,867

TABLE 10 : FORECASTING ASSUMPTIONS

INFLATION FACTORS ²	Basis	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Customer Growth ³	1	--	1.80%	1.80%	1.80%	1.70%	1.70%	1.70%	1.70%	1.70%	1.60%	1.60%	1.60%
General Cost Inflation ⁴	2	--	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Labor Cost Inflation ⁵	3	--	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%
Energy ⁶	4	--	7.44%	7.44%	7.44%	7.44%	7.44%	7.44%	7.44%	7.44%	7.44%	7.44%	7.44%
Electricity ⁷	5	--	5.64%	5.64%	5.64%	5.64%	5.64%	5.64%	5.64%	5.64%	5.64%	5.64%	5.64%
Fuel & Utilities ⁸	6	--	5.24%	5.24%	5.24%	5.24%	5.24%	5.24%	5.24%	5.24%	5.24%	5.24%	5.24%
Construction Cost Inflation ⁹	7	--	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%
Water Purchases ¹⁰	8	--	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%
No Escalation	9	--	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

- Revenue and expenses for FY 2021/22 through FY 2023/24 provided by the City. Revenues and expenses for all other years are escalated based on the forecasting assumptions located in Table 10. Source files: *Fund 510 Water Operations.xlsx*, *FY 22 Fund 520 Water Cap Revenue Detailed Trial Balance*, *FY 23 Fund 520 Water Cap Revenue Detailed Trial Balance*, & *REV EXP ACTUALS - FY22 and FY23_NBS*.
- Expenses are inflated each year by the following annual inflation factor categories.
- Customer growth is based on service area population growth through FY 2039/40. Source file: *American Canyon 2015 UWMP.pdf*, page 26.
- General cost inflation is based on the 5-year average annual change in the Consumer Price Index for all Urban Consumers in the San Francisco-Oakland-Hayward, CA area.
- Labor cost inflation is based on the 5-year average annual change in the Quarterly Census of Employment and Wages for San Francisco County, CA.
- Energy cost inflation is based on the 5-year average annual change in the Consumer Price Index for all Urban Consumers in the San Francisco-Oakland-Hayward, CA area.
- Electricity cost inflation is based on the 5-year average change in the Consumer Price Index for San Francisco County.
- Fuel & Utilities cost inflation is based on the 5-year average annual change in the Consumer Price Index - Average Price Data for Fuels and related products and power. This factor is used for utility costs other than electricity.
- Construction cost Inflation is the 10-year average change in the Construction Cost Index for 2012-2022. Source: Engineering News Record website (<http://enr.construction.com>).
- Water purchases growth is estimated at 2% annually. Source file: *Water cost projections.xlsx*.

TABLE 11: CAPITAL FUNDING SUMMARY

CAPITAL FUNDING FORECAST	Actuals		5-Year Projected Rate Period					Projected				
	FY 2021/22	FY 2022/23	FY 2023/24	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30	FY 2030/31	FY 2031/32	FY 2032/33
Funding Sources:												
Grants	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Use of Capacity Fee Reserves	-	-	1,630,856	2,854,016	2,471,905	2,165,153	1,919,564	1,723,628	1,568,012	1,444,951	1,348,341	1,273,232
SRF Loan Funding	-	-	-	-	-	-	-	-	-	-	-	-
Use of New Revenue Bond Proceeds	-	-	-	-	-	-	-	-	-	-	-	-
Use of Capital Rehabilitation and Replacement Reserve	-	-	-	38,578	-	-	-	-	-	-	-	-
Rate Revenue	251,795	2,790,541	4,566,877	1,523,075	1,565,040	754,328	665,707	952,128	1,201,396	1,421,386	1,618,317	1,797,260
Total Sources of Capital Funds	\$ 251,795	\$ 2,790,541	\$ 6,197,733	\$ 4,415,669	\$ 4,036,946	\$ 2,919,481	\$ 2,585,271	\$ 2,675,756	\$ 2,769,407	\$ 2,866,337	\$ 2,966,658	\$ 3,070,492
Uses of Capital Funds:												
Total Project Costs	\$ 251,795	\$ 2,790,541	\$ 6,197,733	\$ 4,415,669	\$ 4,036,946	\$ 2,919,481	\$ 2,585,271	\$ 2,675,756	\$ 2,769,407	\$ 2,866,337	\$ 2,966,658	\$ 3,070,492
Capital Funding Surplus (Deficiency)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

CAPITAL IMPROVEMENT PROGRAM FUNDING OPTIONS

Capital Improvement Program Funding Choice	FY 2021/22	FY 2022/23	FY 2023/24	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30	FY 2030/31	FY 2031/32	FY 2032/33
Effective Annual Funding Amount	\$ 251,795	\$ 2,790,541	\$ 6,197,733	\$ 4,415,669	\$ 4,036,946	\$ 2,919,481	\$ 2,585,271	\$ 2,675,756	\$ 2,769,407	\$ 2,866,337	\$ 2,966,658	\$ 3,070,492

CAPITAL IMPROVEMENT PROGRAM

TABLE 12 : CAPITAL IMPROVEMENT PROGRAM COSTS (in Current-Year Dollars)¹

Project No.	Description	FY 2021/22	FY 2022/23	FY 2023/24	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30	FY 2030/31	FY 2031/32	FY 2032/33
Capital Projects²													
TR23-0100	Knightsbridge Rehab and Water Main Replacement	\$ -	\$ -	\$ 505,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
TR24-0300	ARPA Rancho Del Mar Paving and Utility Improvements	-	-	1,162,000	-	-	-	-	-	-	-	-	-
WW16-0300	SCADA	-	-	250,000	-	-	-	-	-	-	-	-	-
UM20-0100	Engi Energy Services Contract Budget Expense Remaining	162,280	-	-	-	-	-	-	-	-	-	-	-
WA24-0100	Rio Del Mar Water Main Upgrade	-	-	45,000	360,000	-	-	-	-	-	-	-	-
WA24-0200	North Kelly Road Water Main	-	-	-	145,000	-	-	-	-	-	-	-	-
WA25-0100	Hanna Drive Water Main Repl.	-	-	-	-	550,000	-	-	-	-	-	-	-
WA26-0100	Northampton Water Main Repl.	-	-	-	-	-	650,000	-	-	-	-	-	-
NEW	Water Treatment Plant Shop	-	-	75,000	-	-	-	-	-	-	-	-	-
NEW	WTP Filter Media Replacement and Underdrain Repair	-	-	350,000	-	-	-	-	-	-	-	-	-
NEW	Parks - Irrigation Controller Upgrade (RW)	-	-	200,000	-	-	-	-	-	-	-	-	-
NEW	Solids Handling at WTP	-	-	100,000	900,000	-	-	-	-	-	-	-	-
Master Plan Projects - Potable Water³													
W1	Zone 1 Storage	\$ -	\$ -	\$ 343,000	\$ 343,000	\$ 343,000	\$ 343,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
W2	Annual Water Main Replacements	-	1,500,000	1,455,000	995,000	950,000	850,000	1,500,000	1,500,000	1,500,000	1,500,000	1,500,000	1,500,000
W3	Annual Water Service Replacements	81,000	81,000	81,000	81,000	-	-	-	-	-	-	-	-
W4	High Pressure Zone System	-	1,024,000	1,024,000	1,024,000	1,024,000	-	-	-	-	-	-	-
W8	Replace Transmission Mains Near SR29	-	-	-	-	196,000	196,000	196,000	196,000	196,000	196,000	196,000	196,000
W9	Replace Oat Hill Transmission Main	-	-	-	-	128,000	128,000	128,000	128,000	128,000	128,000	128,000	128,000
W11	Fire Flows in Hess Drive	-	-	-	-	79,000	79,000	79,000	79,000	79,000	79,000	79,000	79,000
W13	Main Zone Reliability Improvements	-	-	-	-	129,000	129,000	129,000	129,000	129,000	129,000	129,000	129,000
Estimated Future Projects													
Future Projects⁴													
Total: CIP Program Costs (Future-Year Dollars)		\$ 243,280	\$ 2,605,000	\$ 5,590,000	\$ 3,848,000	\$ 3,399,000	\$ 2,375,000	\$ 2,032,000					

TABLE 13 : CAPITAL IMPROVEMENT PROGRAM COSTS (in Future-Year Dollars)⁵

Project No.	Description	FY 2021/22	FY 2022/23	FY 2023/24	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30	FY 2030/31	FY 2031/32	FY 2032/33
Capital Projects²													
TR23-0100	Knightsbridge Rehab and Water Main Replacement	\$ -	\$ -	\$ 559,903	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
TR24-0300	ARPA Rancho Del Mar Paving and Utility Improvements	-	-	1,288,330	-	-	-	-	-	-	-	-	-
WW16-0300	SCADA	-	-	277,179	-	-	-	-	-	-	-	-	-
UM20-0100	Engi Energy Services Contract Budget Expense Remaining	167,960	-	-	-	-	-	-	-	-	-	-	-
WA24-0100	Rio Del Mar Water Main Upgrade	-	-	49,892	413,108	-	-	-	-	-	-	-	-
WA24-0200	North Kelly Road Water Main	-	-	-	166,391	-	-	-	-	-	-	-	-
WA25-0100	Hanna Drive Water Main Repl.	-	-	-	-	653,227	-	-	-	-	-	-	-
WA26-0100	Northampton Water Main Repl.	-	-	-	-	-	799,016	-	-	-	-	-	-
NEW	Water Treatment Plant Shop	-	-	83,154	-	-	-	-	-	-	-	-	-
NEW	WTP Filter Media Replacement and Underdrain Repair	-	-	388,051	-	-	-	-	-	-	-	-	-
NEW	Parks - Irrigation Controller Upgrade (RW)	-	-	221,744	-	-	-	-	-	-	-	-	-
NEW	Solids Handling at WTP	-	-	110,872	1,032,771	-	-	-	-	-	-	-	-
Master Plan Projects - Potable Water³													
W1	Zone 1 Storage	\$ -	\$ -	\$ 380,290	\$ 393,600	\$ 407,376	\$ 421,635	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
W2	Annual Water Main Replacements	-	1,606,838	1,613,185	1,141,785	1,128,302	1,044,867	1,908,419	1,975,214	2,044,346	2,115,898	2,189,955	2,266,603
W3	Annual Water Service Replacements	83,835	86,769	89,806	92,949	-	-	-	-	-	-	-	-
W4	High Pressure Zone System	-	1,096,934	1,135,327	1,175,064	1,216,191	-	-	-	-	-	-	-
W8	Replace Transmission Mains Near SR29	-	-	-	-	232,787	240,934	249,367	258,095	267,128	276,477	286,154	296,169
W9	Replace Oat Hill Transmission Main	-	-	-	-	152,024	157,345	162,852	168,552	174,451	180,557	186,876	193,417
W11	Fire Flows in Hess Drive	-	-	-	-	93,827	97,111	100,510	104,028	107,669	111,437	115,338	119,374
W13	Main Zone Reliability Improvements	-	-	-	-	153,212	158,574	164,124	169,868	175,814	181,967	188,336	194,928
Estimated Future Projects													
Future Projects⁴													
Total: CIP Program Costs (Future-Year Dollars)		\$ 251,795	\$ 2,790,541	\$ 6,197,733	\$ 4,415,669	\$ 4,036,946	\$ 2,919,481	\$ 2,585,271	\$ 2,675,756	\$ 2,769,407	\$ 2,866,337	\$ 2,966,658	\$ 3,070,492

TABLE 14 : FORECASTING ASSUMPTIONS

Economic Variables	FY 2021/22	FY 2022/23	FY 2023/24	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30	FY 2030/31	FY 2031/32	FY 2032/33
Annual Construction Cost Inflation, Per Engineering News Record ⁶	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%
Cumulative Construction Cost Multiplier from FY 2021/22	1.04	1.07	1.11	1.15	1.19	1.23	1.27	1.32	1.36	1.41	1.46	1.51

- Capital project costs were provided by City Staff in source file: *Water Projects.pdf*.
- Capital projects costs for FY 2021/22 and FY 2022/23 are from source files: 11. *CIP Budget vs Expense Report FY 2021-2022 through Oct 2021.pdf* & *Water FY 2023-2027.xlsx*.
- The City's Water Master Plan projects were scheduled to begin in 2016; however, the study only includes costs from FY 2021/22 through FY 2034/35. Source file: *2016 Potable Water Master Plan.pdf*, page 53.
- Future project costs beyond FY 2034/35 are calculated based on the City's 10-year average.
- Capital improvement projects are inflated to future year estimated costs with ENR CCI for the region. Source: Engineering News Record website (<http://enr.construction.com>).
- For reference purposes, the annual Construction Cost Inflation percentage is the 10-year average change in the Construction Cost Index for September 2012-2022 (3.5%). Source: Engineering News Record website (<http://enr.construction.com>).

TABLE 15 : EXISTING DEBT OBLIGATIONS

EXISTING DEBT OBLIGATIONS	Actuals		5-Year Projected Rate Period					Projected				
	FY 2021/22	FY 2022/23	FY 2023/24	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30	FY 2030/31	FY 2031/32	FY 2032/33
Annual Repayment Schedules:												
SWRCB (California Department of Water Resources): Contract No. D-GLC 46 ¹												
Principal Payment	\$ 70,382	\$ 72,142	\$ 73,946	\$ 75,794	\$ 77,689	\$ 79,631	\$ 53,204	\$ -	\$ -	\$ -	\$ -	\$ -
Interest Payment	24,084	22,324	20,521	18,672	16,777	14,835	12,844	-	-	-	-	-
Subtotal: Annual Debt Service	\$ 94,466	\$ 94,466	\$ 94,466	\$ 94,466	\$ 94,466	\$ 94,466	\$ 66,048	\$ -	\$ -	\$ -	\$ -	\$ -
Coverage Requirement (\$-Amnt above annual payment)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Reserve Requirement ²	\$ 71,827	\$ 72,068	\$ 72,053	\$ 71,580	\$ 70,175	\$ 66,417	\$ 53,204	\$ -	\$ -	\$ -	\$ -	\$ -
Banc of America Public Capital Corp Agreement (ENGIE) - Loan Amount \$5,209,209 ³												
Principal Payment	\$ 5,520	\$ 66,788	\$ 63,992	\$ 68,673	\$ 73,583	\$ 75,042	\$ 82,720	\$ 88,430	\$ 78,658	\$ 84,010	\$ 89,620	\$ 94,771
Interest Payment	23,749	22,854	21,682	20,498	19,229	17,900	16,494	14,966	13,463	12,011	10,462	8,815
Subtotal: Annual Debt Service	\$ 29,269	\$ 89,642	\$ 85,674	\$ 89,171	\$ 92,812	\$ 92,941	\$ 99,214	\$ 103,396	\$ 92,122	\$ 96,021	\$ 100,082	\$ 103,586
Coverage Requirement (\$-Amnt above annual payment)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Reserve Requirement (total fund balance)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Sites Reservoir Project - Debt Amount \$20,586,000 ⁴												
Principal Payment	\$ 400,000	\$ 560,000	\$ 640,000	\$ 640,000	\$ 1,281,000	\$ 2,336,000	\$ 2,849,000	\$ 3,166,000	\$ 3,195,000	\$ 3,131,000	\$ 3,028,000	\$ -
Interest Payment	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: Annual Debt Service	\$ 400,000	\$ 560,000	\$ 640,000	\$ 640,000	\$ 1,281,000	\$ 2,336,000	\$ 2,849,000	\$ 3,166,000	\$ 3,195,000	\$ 3,131,000	\$ 3,028,000	\$ -
Coverage Requirement (\$-Amnt above annual payment)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Reserve Requirement (total fund balance)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Grand Total: Existing Annual Debt Service	\$ 523,735	\$ 744,109	\$ 820,140	\$ 823,637	\$ 1,468,278	\$ 2,523,408	\$ 3,014,261	\$ 3,269,396	\$ 3,287,122	\$ 3,227,021	\$ 3,128,082	\$ 103,586
Grand Total: Existing Annual Coverage Requirement	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Grand Total: Existing Debt Reserve Target	\$ 71,827	\$ 72,068	\$ 72,053	\$ 71,580	\$ 70,175	\$ 66,417	\$ 53,204	\$ -	\$ -	\$ -	\$ -	\$ -

TABLE 16 : WATER UTILITY EXISTING DEBT OBLIGATIONS, cont.

EXISTING DEBT OBLIGATIONS	Actuals		5-Year Projected Rate Period					Projected				
	FY 2021/22	FY 2022/23	FY 2023/24	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30	FY 2030/31	FY 2031/32	FY 2032/33
Interfund Loans (For Information Only)												
Water Operations to Water Capacity Fund												
Advance from Water Operations 510 to Water Capacity 520												
Original Loan Amount (June 1, 2008)	\$ 1,000,000											
Accrued Interest (LAIF Rate + 2%)	132,325											
Annual Debt Service⁵		\$126,058	\$ 126,058	\$ 126,058	\$ 126,058	\$ 126,058	\$ 126,058	\$ 126,058	\$ 126,058	\$ 126,058	\$ 126,058	\$ -
Water Operations to Recycled Water Fund												
Advance from Water Operations 510 to Recycled Water Operations 580												
Original Loan Amount (September 21, 2021)	\$ 128,189											
Accrued Interest (LAIF Rate + 2%)	11,706											
Annual Debt Service⁶					\$ 5,421	\$ 5,421	\$ 5,421	\$ 5,421	\$ 5,421	\$ 5,421	\$ 5,421	\$ 5,421
Water Operations to Recycled Water Fund												
Advance from Water Operations 510 to Recycled Water Operations 580												
Original Loan Amount (June 20, 2023)	\$ 1,136,140											
Accrued Interest (LAIF Rate + 2%)	981											
Annual Debt Service⁷			\$44,061	\$44,061	\$44,061	\$44,061	\$44,061	\$44,061	\$44,061	\$44,061	\$44,061	\$44,061

1. Construction loan issued by the State under the Davis-Grunsky Act. Source files: 5 - Debt Service Schedules.xlsx & 6 - Davis Grunsky Agreement \$2,050,000 Loan Dec 9 1974.pdf .
2. The City is required to maintain a debt reserve fund equal to the average annual payment of the total outstanding loan balance. Source file: 6 - Davis Grunsky Agreement \$2,050,000 Loan Dec 9 1974.pdf , pp. 11-12 .
3. Equipment lease/purchase loan issued by the Banc of America Public Capital Corp to cover energy efficiency projects to City facilities. Water utility portion is 24.64%, or \$1,283,549.10 (Principal). Source file: 6 - ENGIE Closing Documents.pdf .
4. Debt service for the City's portion of costs related to the Sites Reservoir Project. Source files: Email from City staff dated 9-19-2022 & Sites-2021-Draft-Plan-of-Finance.pdf , Table 6A, page 27.
5. Funds advanced to purchase water rights. Repayment scheduled to begin FY 2022/23.
6. Funds advanced for Green Island Recycled Waterline Project. Repayment scheduled to begin FY 2025/26.
7. Funds advanced for the Recycled Water Expansion Project, Project no. RW17-0100. Repayment scheduled to begin FY 2023/24.

TABLE 17 : EXISTING ANNUAL DEBT OBLIGATIONS TO BE SATISFIED BY WATER RATES

Annual Obligations	FY 2021/22	FY 2022/23	FY 2023/24	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30	FY 2030/31	FY 2031/32	FY 2032/33
Existing Annual Debt Service	\$ 523,735	\$ 744,109	\$ 820,140	\$ 823,637	\$ 1,468,278	\$ 2,523,408	\$ 3,014,261	\$ 3,269,396	\$ 3,287,122	\$ 3,227,021	\$ 3,128,082	\$ 103,586
Existing Annual Coverage Requirement	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Existing Debt Reserve Target	\$ 71,827	\$ 72,068	\$ 72,053	\$ 71,580	\$ 70,175	\$ 66,417	\$ 53,204	\$ -	\$ -	\$ -	\$ -	\$ -

TABLE 18: CURRENT WATER RATE SCHEDULE

Water Rate Schedule ¹	Current Rates Jan. 1, 2023
Monthly Fixed Service Charges	
Residential Use	\$26.56
Multi-Family, Commercial and Landscape	
< 1" meter	\$26.56
1" meter (Residential)	\$26.56
1" meter (Commercial)	\$44.42
1 1/2" meter	\$88.75
2" meter	\$141.99
3" meter	\$283.98
4" meter	\$443.74
6" meter	\$887.48
8" meter	\$1,420.06
Private Fire Protection	\$13.28
Temporary Hydrant Meters	\$283.98
Raw Water	
1" meter	\$44.42
2" meter	\$141.99
4" meter	\$443.74
6" meter	\$887.48
Variable Rates for All Water Consumed (in \$/hcf)²	
Residential Use	
Tier 1 (0 - 10 units)	\$7.54
Tier 2 (> 10 units)	\$8.15
Multi-Family, Commercial and Landscape	\$7.72
Private Fire Protection	\$3.86
Temporary Hydrant Meters	
Potable	\$7.72
Recycled	\$0.90
Raw Water	\$3.44

1. Rates available on the City website. Source: <https://www.cityofamericancanyon.org>.

2. HCF = hundred cubic feet (748 gallons).

TABLE 19 : CLASSIFICATION OF EXPENSES FOR COST OF SERVICE ANALYSIS

Classification of Expenses									
Budget Categories	Total Revenue	Commodity	Capacity	Customer	Fire Protection	Basis of Classification			
	Requirements					(COM)	(CAP)	(CA)	(FP)
	FY 2023/24								
Fund 510 - Water Operations									
560 - Water Treatment Plant									
Wages - Full Time	\$ 612,238	\$ 306,119	\$ 223,160	\$ 61,224	\$ 21,736	50.0%	36.4%	10.0%	3.6%
Wages - Overtime	9,000	4,500	3,280	900	320	50.0%	36.4%	10.0%	3.6%
Health Insurance	95,546	47,773	34,826	9,555	3,392	50.0%	36.4%	10.0%	3.6%
Health-In-Lieu	9,690	4,845	3,532	969	344	50.0%	36.4%	10.0%	3.6%
Cafeteria Plan Section 125	24,587	12,294	8,962	2,459	873	50.0%	36.4%	10.0%	3.6%
Social Security & Medicare	9,374	4,687	3,417	937	333	50.0%	36.4%	10.0%	3.6%
Worker Comp Insurance	49,859	24,930	18,174	4,986	1,770	50.0%	36.4%	10.0%	3.6%
Benefits - Other	1,106	553	403	111	39	50.0%	36.4%	10.0%	3.6%
Info Tech Support Services	116,200	58,100	42,355	11,620	4,125	50.0%	36.4%	10.0%	3.6%
Professional Services	366,400	183,200	133,552	36,640	13,008	50.0%	36.4%	10.0%	3.6%
Misc Contractual Services	59,200	29,600	21,578	5,920	2,102	50.0%	36.4%	10.0%	3.6%
General Repairs & Maint	53,800	26,900	19,610	5,380	1,910	50.0%	36.4%	10.0%	3.6%
Advertising	6,000	3,000	2,187	600	213	50.0%	36.4%	10.0%	3.6%
Postage/Mail/Copy/Printing Svc	2,000	1,000	729	200	71	50.0%	36.4%	10.0%	3.6%
Membership Dues & Subscription	3,200	1,600	1,166	320	114	50.0%	36.4%	10.0%	3.6%
Conferences - Training	13,500	6,750	4,921	1,350	479	50.0%	36.4%	10.0%	3.6%
Rentals - Equipment/Space	3,700	1,850	1,349	370	131	50.0%	36.4%	10.0%	3.6%
Office Supplies	25,000	12,500	9,112	2,500	888	50.0%	36.4%	10.0%	3.6%
Operating Supplies	488,400	244,200	178,021	48,840	17,339	50.0%	36.4%	10.0%	3.6%
Water Plant Membrane Filters	-	-	-	-	-	50.0%	36.4%	10.0%	3.6%
Utilities - Gas & Elec	73,000	36,500	26,608	7,300	2,592	50.0%	36.4%	10.0%	3.6%
Util-Phonespgrsinternetcable	5,800	2,900	2,114	580	206	50.0%	36.4%	10.0%	3.6%
Pers Retirement	60,588	30,294	22,084	6,059	2,151	50.0%	36.4%	10.0%	3.6%
Subtotal - Water Treatment Plant	\$ 2,088,189	\$ 1,044,094	\$ 761,140	\$ 208,819	\$ 74,135	50.0%	36.4%	10.0%	3.6%

TABLE 20 : CLASSIFICATION OF EXPENSES FOR COST OF SERVICE ANALYSIS, cont.

Classification of Expenses									
Budget Categories	Total Revenue	Commodity	Capacity	Customer	Fire	Basis of Classification			
	Requirements				Protection	(COM)	(CAP)	(CA)	(FP)
	FY 2023/24	(COM)	(CAP)	(CA)	(FP)				
Fund 510 - Water Operations									
565 - Water Distribution									
Wages - Full Time	\$ 544,808	\$ 272,404	\$ 198,581	\$ 54,481	\$ 19,342	50.0%	36.4%	10.0%	3.6%
Wages - Overtime	3,000	1,500	1,093	300	107	50.0%	36.4%	10.0%	3.6%
Health Insurance	110,792	55,396	40,384	11,079	3,933	50.0%	36.4%	10.0%	3.6%
Cafeteria Plan Section 125	27,459	13,730	10,009	2,746	975	50.0%	36.4%	10.0%	3.6%
Social Security & Medicare	8,298	4,149	3,025	830	295	50.0%	36.4%	10.0%	3.6%
Worker Comp Insurance	58,411	29,205	21,291	5,841	2,074	50.0%	36.4%	10.0%	3.6%
Benefits - Other	1,901	951	693	190	67	50.0%	36.4%	10.0%	3.6%
Info Tech Support Services	84,600	42,300	30,837	8,460	3,003	50.0%	36.4%	10.0%	3.6%
Professional Services	52,000	26,000	18,954	5,200	1,846	50.0%	36.4%	10.0%	3.6%
Misc Contractual Services	9,300	4,650	3,390	930	330	50.0%	36.4%	10.0%	3.6%
General Repairs & Maint	375,100	187,550	136,723	37,510	13,317	50.0%	36.4%	10.0%	3.6%
Reimbursable Repairs	20,000	10,000	7,290	2,000	710	50.0%	36.4%	10.0%	3.6%
Postage/Mail/Copy/Printing Svc	3,499	1,750	1,275	350	124	50.0%	36.4%	10.0%	3.6%
Membership Dues & Subscription	3,200	1,600	1,166	320	114	50.0%	36.4%	10.0%	3.6%
Conferences - Training	7,000	3,500	2,551	700	249	50.0%	36.4%	10.0%	3.6%
Rentals - Equipment/Space	13,000	6,500	4,738	1,300	462	50.0%	36.4%	10.0%	3.6%
Office Supplies	2,000	1,000	729	200	71	50.0%	36.4%	10.0%	3.6%
Operating Supplies	33,200	16,600	12,101	3,320	1,179	50.0%	36.4%	10.0%	3.6%
Water Meters	100,000	50,000	36,450	10,000	3,550	50.0%	36.4%	10.0%	3.6%
Util-Phonespgrsinternetcable	4,100	2,050	1,494	410	146	50.0%	36.4%	10.0%	3.6%
Pers Retirement	74,481	37,240	27,148	7,448	2,644	50.0%	36.4%	10.0%	3.6%
Subtotal -Water Distribution	\$ 1,536,149	\$ 768,074	\$ 559,923	\$ 153,615	\$ 54,537	50.0%	36.4%	10.0%	3.6%

TABLE 21 : CLASSIFICATION OF EXPENSES FOR COST OF SERVICE ANALYSIS, cont.

Classification of Expenses									
Budget Categories	Total Revenue Requirements	Commodity	Capacity	Customer	Fire Protection	Basis of Classification			
	FY 2023/24	(COM)	(CAP)	(CA)	(FP)	(COM)	(CAP)	(CA)	(FP)
50 - Public Works									
810 - Non Departmental									
Wages - Full Time	\$ 128,293	\$ 64,146	\$ 46,762	\$ 12,829	\$ 4,555	50.0%	36.4%	10.0%	3.6%
Allowances	1,920	960	700	192	68	50.0%	36.4%	10.0%	3.6%
Health Insurance	21,244	10,622	7,743	2,124	754	50.0%	36.4%	10.0%	3.6%
Cafeteria Plan Section 125	4,312	2,156	1,572	431	153	50.0%	36.4%	10.0%	3.6%
Social Security & Medicare	2,038	1,019	743	204	72	50.0%	36.4%	10.0%	3.6%
Worker Comp Insurance	9,825	4,912	3,581	982	349	50.0%	36.4%	10.0%	3.6%
Opeb	47,537	23,769	17,327	4,754	1,688	50.0%	36.4%	10.0%	3.6%
Info Tech Support Services	33,414	16,707	12,179	3,341	1,186	50.0%	36.4%	10.0%	3.6%
Professional Services	66,586	33,293	24,270	6,659	2,364	50.0%	36.4%	10.0%	3.6%
Postage/Mail/Copy/Printing Svc	6,000	3,000	2,187	600	213	50.0%	36.4%	10.0%	3.6%
Membership Dues & Subscription	2,600	1,300	948	260	92	50.0%	36.4%	10.0%	3.6%
Services - Cash For Grass	30,000	15,000	10,935	3,000	1,065	50.0%	36.4%	10.0%	3.6%
Services - Toilet Rebates	10,000	5,000	3,645	1,000	355	50.0%	36.4%	10.0%	3.6%
Office Supplies	500	250	182	50	18	50.0%	36.4%	10.0%	3.6%
Utilities - Water	2,500	1,250	911	250	89	50.0%	36.4%	10.0%	3.6%
City Of Napa	278,000	278,000	-	-	-	100.0%	0.0%	0.0%	0.0%
North Bay Aqueduct	3,203,000	3,203,000	-	-	-	100.0%	0.0%	0.0%	0.0%
City Of Vallejo	121,218	121,218	-	-	-	100.0%	0.0%	0.0%	0.0%
Transfer To Gen Fund Support Sv	1,124,203	562,102	409,770	112,420	39,912	50.0%	36.4%	10.0%	3.6%
Transfer To General Fund - Oth	160,000	80,000	58,320	16,000	5,680	50.0%	36.4%	10.0%	3.6%
Retiree Health Benefits	74,980	37,490	27,330	7,498	2,662	50.0%	36.4%	10.0%	3.6%
Pers Retirement	16,257	8,128	5,926	1,626	577	50.0%	36.4%	10.0%	3.6%
Isf - Bldg Maint	325,219	162,610	118,542	32,522	11,546	50.0%	36.4%	10.0%	3.6%
Isf - Fleet	354,173	177,087	129,095	35,417	12,574	50.0%	36.4%	10.0%	3.6%
Isf - Info Tech	54,709	27,355	19,941	5,471	1,942	50.0%	36.4%	10.0%	3.6%
Isf - Legal Services	96,582	48,291	35,204	9,658	3,429	50.0%	36.4%	10.0%	3.6%
Subtotal - Non Departmental	\$ 6,175,109	\$ 4,888,664	\$ 937,813	\$ 257,289	\$ 91,343	79.2%	15.2%	4.2%	1.5%
Total: Water Operations Expenses	\$ 9,799,447	\$ 6,700,833	\$ 2,258,877	\$ 619,723	\$ 220,015	68.4%	23.1%	6.3%	2.2%
TOTAL: WATER OPERATIONS EXPENSES	\$ 9,799,447	\$ 6,700,833	\$ 2,258,877	\$ 619,723	\$ 220,015	68.4%	23.1%	6.3%	2.2%

TABLE 22 : CLASSIFICATION OF EXPENSES FOR COST OF SERVICE ANALYSIS, cont.

Classification of Expenses, continued									
Budget Categories	Total Revenue Requirements	Commodity	Capacity	Customer	Fire Protection	Basis of Classification			
	FY 2023/24	(COM)	(CAP)	(CA)	(FP)	(COM)	(CAP)	(CA)	(FP)
Debt Service Payments									
Outstanding Debt	\$ 820,140	\$ -	\$ 820,140	\$ -	\$ -	0.0%	100.0%	0.0%	0.0%
New Debt Issue - SRF Loan	-	-	-	-	-	0.0%	100.0%	0.0%	0.0%
New Debt Issue - Revenue Bond	-	-	-	-	-	0.0%	100.0%	0.0%	0.0%
Total Debt Service Payments	\$ 820,140	\$ -	\$ 820,140	\$ -	\$ -	0.0%	100.0%	0.0%	0.0%
Capital Expenditures									
Rate Funded Capital Expenses	\$ 4,566,877	\$ -	\$ 4,566,877	\$ -	\$ -	0.0%	100.0%	0.0%	0.0%
TOTAL REVENUE REQUIREMENTS	\$ 15,186,464	\$ 6,700,833	\$ 7,645,894	\$ 619,723	\$ 220,015	44.1%	50.3%	4.1%	1.4%
<i>Less: Non-Rate Revenues</i>									
Other Revenue									
Grant - State/Local	\$ -	\$ -	\$ -	\$ -	\$ -	44.1%	50.3%	4.1%	1.4%
Interest Earnings	(275,008)	(121,344)	(138,458)	(11,222)	(3,984)	44.1%	50.3%	4.1%	1.4%
Miscellaneous Revenues	(359,300)	(158,537)	(180,896)	(14,662)	(5,205)	44.1%	50.3%	4.1%	1.4%
Late Penalties / Interest	(114,300)	(50,433)	(57,546)	(4,664)	(1,656)	44.1%	50.3%	4.1%	1.4%
Interfund Transfer In (Loan Repayment)	(44,061)	(19,441)	(22,183)	(1,798)	(638)	44.1%	50.3%	4.1%	1.4%
NET REVENUE REQUIREMENTS	\$ 14,393,795	\$ 6,351,077	\$ 7,246,811	\$ 587,376	\$ 208,531				
<i>Allocation of Revenue Requirements</i>	<i>100.0%</i>	<i>44.1%</i>	<i>50.3%</i>	<i>4.1%</i>	<i>1.4%</i>				

TABLE 23 : ADJUSTMENT TO CLASSIFICATION OF EXPENSES FOR COST OF SERVICE ANALYSIS

Classification of Expenses, continued					
Adjustments to Classification of Expenses					
Adjustment for Current Rate Level:	Total	(COM)	(CAP)	(CA)	(FP)
Test Year (FY 2023/24) Target Rate Rev. After Rate Increases	\$ 10,291,388				
Projected Rate Revenue at Current Rates	\$ 9,441,640				
Test Year (FY 2023/24) Projected Rate Adjustment	9.00%				
Adjusted Net Revenue Req'ts	\$ 10,291,388	\$ 4,540,943	\$ 5,181,381	\$ 419,967	\$ 149,097
<i>Percent of Revenue</i>	<i>100.0%</i>	<i>44.1%</i>	<i>50.3%</i>	<i>4.1%</i>	<i>1.4%</i>

TABLE 24 : NET REVENUE REQUIREMENTS PER COSA RESULTS

Net Revenue Requirements - Per COSA Results 56% Fixed / 44% Variable	Total Rate Revenue Requirements FY 2023/24 (Excluding Recycled Water)	Commodity Related Costs			Fixed Costs		
		SWP	Raw Water	Treated Water	Capacity Related Costs	Customer Related Costs	Fire Protection Related Costs
Rate-Design Adjustments to Fixed/Variable %	100.0%	44.1%			50.3%	4.1%	1.4%
Rate-Design Adjustments to Fixed/Variable (\$)	\$10,291,388	\$3,702,785	\$515,708	\$322,450	\$5,181,381	\$419,967	\$149,097

TABLE 25 : NET REVENUE REQUIREMENTS PER COSA RESULTS - ALTERNATIVE 1 (COSA)

Rate-Design Adjustments to Fixed/Variable %	100.0%	60.0%			36.0%	2.9%	1.0%
Rate-Design Adjustments to Fixed/Variable (\$)	\$10,291,388	\$5,035,095	\$701,267	\$438,471	\$3,709,181	\$300,640	\$106,734

TABLE 26 : DEVELOPMENT OF THE COMMODITY ALLOCATION FACTOR

Development of the Volumetric/Variable Allocation Factor ¹				
Customer Class	FY 2021/22 Consumption (hcf)	% Adjustment for Conservation ²	Est. FY 2021/22 Volume Adjusted for Conservation	FY 2021/22 % of Total Volume
Residential	507,339	20.0%	405,871	50.1%
Multi-Family	89,630	20.0%	71,704	8.8%
Commercial	318,808	20.0%	255,046	31.5%
Landscape	53,157	20.0%	42,526	5.2%
Private Fire Protection	22,831	20.0%	18,265	2.3%
Temporary Hydrant Meters	8,303	20.0%	6,642	0.8%
Raw Water	13,039	20.0%	10,431	1.3%
Total	1,013,107		810,486	100%

1. Consumption data is based on the City of American Canyon's billing data.
2. A conservation factor of 20% included in table above based on the "20 by 2020" law passed in 2009.
Source: <https://www.ca-ilg.org>.

Commodity Related Costs: Costs associated with the total consumption (flow) of water over a specified period of time (e.g. annual).

TABLE 27 : DEVELOPMENT OF THE CAPACITY ALLOCATION FACTORS

Development of the CAPACITY Allocation Factors					
Customer Class	Meter Size ¹	No. of Meters	Hydraulic Capacity Factors ²	Total Equivalent Meters	% of EDUs
Residential		4,880		4,930	42.2%
	< 1" meter	1,986	1.00	1,986	
	1" meter	2,875	1.00	2,875	
	1 1/2" meter	7	2.00	14	
	2" meter	9	3.20	29	
	3" meter	1	6.40	6	
	4" meter	2	10.00	20	
Multi-Family		556		5,598	47.9%
	1 1/2" meter	20	2.00	40	
	2" meter	201	3.20	643	
	3" meter	96	6.40	614	
	4" meter	48	10.00	480	
	6" meter	191	20.00	3,820	
Commercial		343		698	6.0%
	< 1" meter	102	1.00	102	
	1" meter	88	1.00	88	
	1 1/2" meter	54	2.00	108	
	2" meter	81	3.20	259	
	3" meter	11	6.40	70	
	4" meter	7	10.00	70	
Landscape		73		122	1.0%
	< 1" meter	13	1.00	13	
	1" meter	30	1.00	30	
	1 1/2" meter	14	2.00	28	
Private Fire Protection	2" meter	16	3.20	51	2.1%
		245		245	
Temporary Hydrant Meters	< 1" meter	245	1.00	245	0.4%
		8		51	
Raw Water	3" meter	8	6.40	51	0.3%
		3		40	
	4" meter	2	10.00	20	
	6" meter	1	20.00	20	
Total		6,108		11,684	100%

Capacity Related Costs: Costs associated with the maximum demand required at one point in time or the maximum size of facilities required to meet this demand.

1. Meter by class and size are based on June 2022 customer billing data.
2. Source: *Principles of Water Rates, Fees, and Charges*, Manual M1, AWWA, Table B-1.

TABLE 28 : DEVELOPMENT OF THE CUSTOMER ALLOCATION FACTORS

Development of the Customer Allocation Factor		
Customer Class	No. of Meters/Accounts FY 2021/22 ¹	% of Total Meters
Residential	4,880	71.5%
Multi-Family ²	1,273	18.7%
Commercial	343	5.0%
Landscape	73	1.1%
Private Fire Protection	245	3.6%
Temporary Hydrant Meters	8	0.1%
Raw Water	3	0.0%
Total	6,825	100.0%

1. Meter count data is based on the City's billing data for June 2022.
2. Multi-family residential customers are by dwelling units.

Customer Related Costs: Costs associated with having a customer on the water system. These costs vary with the addition or deletion of customers on the system.
 Examples: Meter-reading, Postage and billing.

TABLE 29 : FY 2023/24 WATER SUPPLY BY SOURCE

Source of Supply	Total Contracted Purchases		Acre Feet as a % of Total	Total Cost (FY 2023/24)	Cost as a % of Total Cost
	In AF	In HCF			
SWP (Contracted Purchase)	3,590	1,563,804	81.5%	\$ 2,727,590	75.7%
Vallejo Raw Water (Contracted Purchase)	500	217,800	11.4%	138,033	3.8%
Treated Water (Contracted Purchase) ¹	313	136,181	7.1%	737,049	20.5%
Totals	4,403	1,917,785	100.0%	\$ 3,602,672	100%

1. This includes Vallejo Treated Water and City of Napa Treat and Wheel. Source files: *Water cost projections.xlsx*.

TABLE 30 : UNIT COSTS BY SOURCE OF SUPPLY

Source of Supply	Quantity (AF)	Total Cost	Rate (\$/AF)
SWP (Tier 1)	3,590	\$ 2,727,590	\$ 760
Vallejo Raw Water (Tier 1)	500	138,033	\$ 276
Treated Water (Tier 2)	313	737,049	\$ 2,358
Total Water Supply (AF)	4,403	\$ 3,602,672	
Unit Costs (\$/HCF)	Quantity (HCF)	Total Cost	Rate (\$/HCF)
Tier 1 - SWP & Vallejo Raw Water	1,781,604	\$ 1,129,112	\$ 0.63
Tier 2 - Treated Water (Napa & Vallejo)	136,181	737,049	\$ 5.41
<i>Blended Cost (all water) per hcf</i>			\$ 1.88
Total Estimated Quantity (hcf)	1,917,785	\$ 1,866,161	810,486
Estimated Residential Consumption			405,871
<i>Total FY 2023/24 % of Total Volume</i>			50.1%

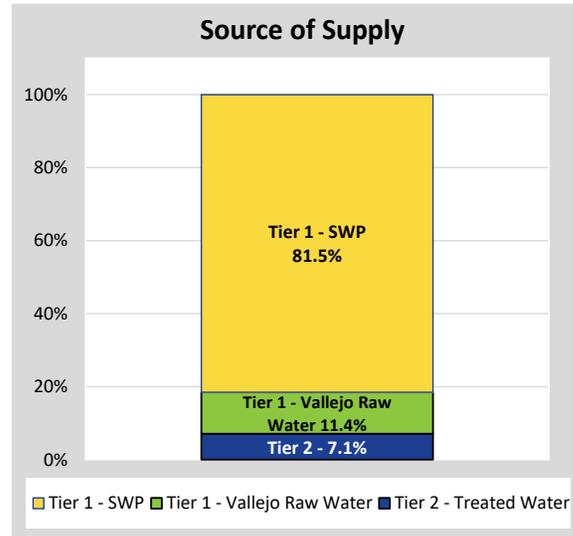
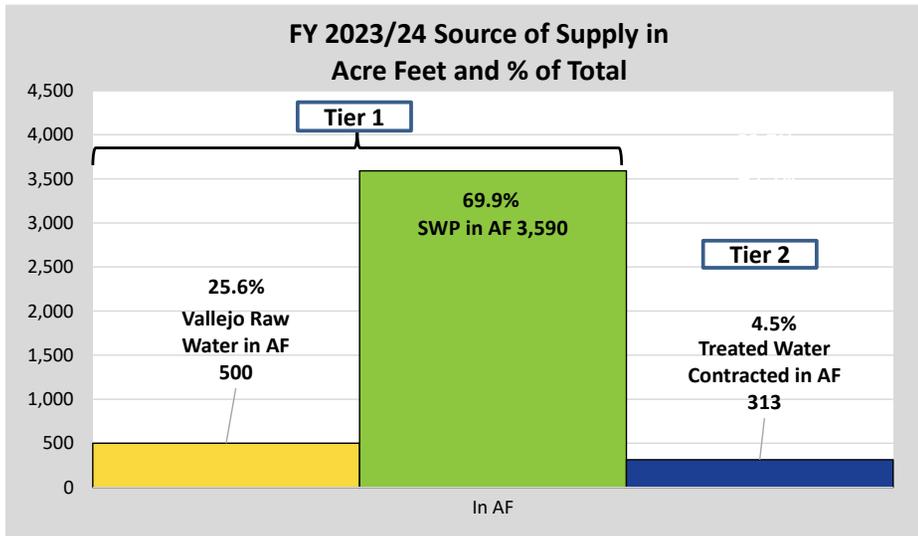


TABLE 31 : ALLOCATION OF WATER REVENUE REQUIREMENTS

Classification Components	PROPOSED ALTERNATIVE (40% Fixed / 60% Variable) Cost-of-Service Net Revenue Requirements (FY 2023/24)	
	Commodity-Related Costs	\$ 6,174,833
Capacity-Related Costs	3,709,181	36.0%
Customer-Related Costs	300,640	2.9%
Fire Protection-Related Costs	106,734	1.0%
Net Revenue Requirement	\$ 10,291,388	100.0%

Unadjusted Net Rev. Req'ts.
60.0% total variable
40.0% total fixed
100.0%

TABLE 32 : ALLOCATION OF UNADJUSTED NET REVENUE REQUIREMENTS - FY 2023/24

Net Revenue Requirements (COSA)						
Customer Classes	Classification Components				Cost of Service Net Rev. Req'ts	% of COS Net Revenue Req'ts
	VARIABLE	FIXED				
	Commodity- Related Costs	Capacity- Related Costs	Customer- Related Costs	Fire Protection- Related Costs		
Residential	\$ 3,092,204	\$ 1,565,159	\$ 214,963	\$ -	\$ 4,872,326	47.3%
Multi-Family	546,290	1,777,034	56,075	-	2,379,400	23.1%
Commercial	1,943,118	221,463	15,109	-	2,179,689	21.2%
Landscape	323,989	38,794	3,216	-	365,999	3.6%
Private Fire Protection	139,154	77,779	10,792	106,734	334,458	3.2%
Temporary Hydrant Meters	50,606	16,254	352	-	67,213	0.7%
Raw Water	79,472	12,699	132	-	92,303	0.9%
Total Net Revenue Requirement	\$ 6,174,833	\$ 3,709,181	\$ 300,640	\$ 106,734	\$ 10,291,388	100%
<i>Total Net Revenue Requirement by Classification Component</i>	<u>VARIABLE</u> \$6,174,833	<u>FIXED</u> \$4,116,555			\$10,291,388	

TABLE 33 : COST-OF-SERVICE SUMMARY OF REVENUE REQUIREMENTS

Customer Class	Proposed Alternative Allocated Costs	
	FY 2023/24 COS Rev. Req't	% of COS Rev. Req't.
Residential	\$ 4,872,326	47.3%
Multi-Family	2,379,400	23.1%
Commercial	2,179,689	21.2%
Landscape	365,999	3.6%
Private Fire Protection	334,458	3.2%
Temporary Hydrant Meters	67,213	0.7%
Raw Water	92,303	0.9%
Total	\$ 10,291,388	100%

TABLE 34 : METER EQUIVALENCY FACTORS USED IN FIXED CHARGES CALCULATION

Meter Size	Standard Meters	
	Meter Capacity (gpm) ¹	Equivalency to 1 inch
	<u>Displacement Meters</u>	
5/8 inch	20	1.00
3/4 inch	30	1.00
1 inch	50	1.00
1 1/2 inch	100	2.00
2 inch	160	3.20
	<u>Compound Class I Meters</u>	
3 inch	320	6.40
4 inch	500	10.00
6 inch	1,000	20.00
8 inch	1,600	32.00
	<u>Turbine Class II Meters</u>	
10 inch	4,200	84.00
12 inch	5,300	106.00

1. Per AWWA, M1 Manual, Table B-1.

TABLE 35 : CALCULATION OF MONTHLY FIXED METER SERVICE CHARGES FOR FY 2023/24

ALTERNATIVE 1 (COSA)									
Number of Meters by Class and Size ¹	FY 2023/24								
	< 1" meter	1" meter	1 1/2" meter	2" meter	3" meter	4" meter	6" meter	8" meter	Total
Residential	1,986	2,875	7	9	1	2	0	0	4,880
Multi-Family	0	0	20	201	96	48	191	0	556
Commercial	13	30	14	16	0	0	0	0	73
Commercial	102	88	54	81	11	7	0	0	343
Private Fire Protection	245	0	0	0	0	0	0	0	245
Temporary Hydrant Meters	0	0	0	0	8	0	0	0	8
Raw Water	0	0	0	0	0	2	1	0	3
Total Meters/Accounts	2,346	2,993	95	307	116	59	192	0	6,108
<i>Hydraulic Capacity Factor</i> ²	1.00	1.00	2.00	3.20	6.40	10.00	20.00	32.00	
Total Equivalent Meters	2,346	2,993	190	982	742	590	3,840	0	11,684
Monthly Fixed Service Charges									
Customer Costs (\$/Acct/month) ³	\$4.10	\$4.10	\$4.10	\$4.10	\$4.10	\$4.10	\$4.10	\$4.10	\$4.10
Capacity Costs (\$/Acct/month) ⁴	\$27.22	\$27.22	\$54.43	\$87.09	\$174.19	\$272.17	\$544.33	\$870.93	
Total Monthly Meter Charge	\$31.32	\$31.32	\$58.53	\$91.19	\$178.29	\$276.27	\$548.43	\$875.03	
Annual Fixed Costs Allocated to Monthly Meter Charges									
Customer Costs	\$ 300,640								
Capacity Costs	3,815,915								
Total Fixed Meter Costs	\$ 4,116,555								
Annual Revenue from Monthly Meter Charges									
Customer Charges	\$ 115,491	\$ 147,298	\$ 4,676	\$ 15,111	\$ 5,710	\$ 2,904	\$ 9,450	\$ -	\$ 300,640
Capacity Charges	\$ 766,330	\$ 977,381	\$ 62,054	\$ 320,851	\$ 242,467	\$ 192,693	\$ 1,254,139	\$ -	\$ 3,815,915
Total Revenue from Monthly Meter Charges	\$ 881,821	\$ 1,124,680	\$ 66,730	\$ 335,961	\$ 248,177	\$ 195,597	\$ 1,263,590	\$ -	\$ 4,116,555

- Meter by Class and Size are based on June 2022 customer billing data.
- Source: *Principles of Water Rates, Fees, and Charges*, Manual M1, AWWA, Table B-1.
- Customer costs are allocated to each customer by dividing the total customer costs by the total number of customers.
- Capacity costs are allocated by meter size and the hydraulic capacity of the meter.

TABLE 36 : FIXED CHARGES REVENUE CHECK

Number of Meters by Class and Size	FY 2023/24								Total
	< 1"	1"	1 1/2"	2"	3"	4"	6"	8"	
Potable Water									
Residential	1,986	2,875	7	9	1	2	0	0	4,880
Multi-Family	0	0	20	201	96	48	191	0	556
Commercial	102	88	54	81	11	7	0	0	343
Landscape	13	30	14	16	0	0	0	0	73
Private Fire	245	0	0	0	0	0	0	0	245
Temp Meter	0	0	0	0	8	0	0	0	8
Raw Water	0	0	0	0	0	2	1	0	3
Recycled Water									
Recycled Water	2	13	14	28	13	6	0	0	76
Total Meters/Accounts	2,348	3,006	109	335	129	65	192	0	6,184

TABLE 37 : PROJECTED FIXED REVENUE CHECK

Projected Revenue From Fixed Charges by Customer Class	FY 2023/24								Total
	< 1"	1"	1 1/2"	2"	3"	4"	6"	8"	
All Customers by Meter Size	\$31.32	\$31.32	\$58.53	\$91.19	\$178.29	\$276.27	\$548.43	\$875.03	
Revenue from Fixed Charges									
Potable Water									
Residential	\$ 746,526	\$ 1,080,333	\$ 4,917	\$ 9,849	\$ 2,139	\$ 6,630	\$ -	\$ -	\$ 1,850,395
Multi-Family	-	-	14,048	219,962	205,387	159,130	1,257,008	-	1,855,536
Commercial	38,334	33,072	37,931	88,641	23,534	23,206	-	-	244,718
Landscape	4,886	11,275	9,834	17,509	-	-	-	-	43,503
Private Fire	92,076	-	-	-	-	-	-	-	92,076
Temp Meter	-	-	-	-	17,116	-	-	-	17,116
Raw Water	-	-	-	-	-	6,630	6,581	-	13,212
Total Revenue - Fixed Charges									\$ 4,116,555

TABLE 38 : PROJECTED FIXED REVENUE CHECK

Customer Class	Net Revenue Requirements (COSA)		
	COS Rev. Req't	Expected Revenue	Over/(Under) Collected
Potable Water			
Residential	\$ 1,780,122	\$ 1,850,395	\$ 70,272
Multi-Family	1,833,110	1,855,536	22,426
Commercial	236,572	244,718	8,146
Landscape	42,010	43,503	1,494
Private Fire	195,304	92,076	(103,229)
Temp Meter	16,607	17,116	509
Raw Water	12,831	13,212	381
Total	\$ 4,116,555	\$ 4,116,555	\$ -

TABLE 39 : PROPOSED VOLUMETRIC CHARGES FOR FY 2023/24

Net Revenue Requirements (COSA)						
Customer Classes	Number of Meters ¹	Water Consumption (hcf/yr) ²	Total Target Rev. Req't from Vol. Charges	% of Total Rate Revenue	Uniform Commodity Rates (\$/hcf)	Proposed Rate Structure
Residential	4,880	405,871	\$ 3,092,204	50.1%	n/a	2 Tiers
Multi-Family	1,273	71,704	546,290	8.8%	\$7.619	Uniform
Commercial	343	255,046	1,943,118	31.5%	\$7.619	Uniform
Landscape	73	42,526	323,989	5.2%	\$7.619	Uniform
Private Fire Protection	245	18,265	139,154	2.3%	\$7.619	Uniform
Temporary Hydrant Meters	8	6,642	50,606	0.8%	\$7.619	Uniform
Raw Water	3	10,431	79,472	1.3%	\$7.619	Uniform
Total Potable Water	6,825	810,486	\$ 6,174,833	100%		

1. Consumption data is based on the City of American Canyon's billing data.
2. Water consumption is actual consumption for FY 2021/22 and includes an adjustment of 20% for conservation. See Table 26.

TABLE 40 : RESIDENTIAL & MOBILE HOME TIER BREAK ADJUSTMENTS

Residential Tiers ¹	Consumption	% of Consumption ²	Avg. Monthly Consumption FY 2020/21 (hcf) ³	Tier Breakpoint (hcf) ⁴
Tier 1 - SWP & Vallejo Raw Water	322,836	79.5%		6.00
Tier 2 - Treated Water (Napa & Vallejo)	83,035	20.5%		
Total	405,871	100.0%	7.0	

1. SWP & Vallejo raw water are included in Tier 1 and all treated water (Napa & Vallejo) is in Tier 2. The FY 2021/22 consumption data are actuals and includes a 20% conservation factor. See *Allocation Factors* Tab, Table 26.
2. See *Source of Supply* Tab for details on how the percentage of consumption was calculated.
3. Annual residential consumption divided by total residential meters divided by 12 months.
4. Tier 2 breakpoint is the percentage of Tier 1 consumption times the *Avg. Monthly Consumption*, rounded to the nearest integer in hcf.

TABLE 41 : ALLOCATION OF SOURCE OF SUPPLY COSTS TO SINGLE FAMILY TIERED RATES

Source of Supply	Water Supply by Source (hcf) ¹	% Alloc. by Class ²	Cost (\$/hcf) ³	Total Supply Costs	Residential Share of Supply
Tier 1 - SWP & Vallejo Raw Water					
Residential	892,183	50.1%	\$0.63	\$ 565,431	\$ 565,431
All Other Classes	889,421	49.9%	\$0.63	563,680	N.A.
Total SWP & Vallejo Raw Water	1,781,604	100.0%	N.A.	\$ 1,129,112	N.A.
Tier 2 - Treated Water (Napa & Vallejo)					
Residential	68,196	50.1%	\$5.41	\$ 369,096	\$ 369,096
All Other Classes	67,985	49.9%	\$5.41	367,953	N.A.
Total Treated Water (Napa & Vallejo)	136,181	100.0%	N.A.	\$ 737,049	N.A.
Grand Total	1,917,785			\$ 1,866,161	\$ 934,527

1. Total Contracted Supply Purchase Costs are from the *Source of Supply* Tab, Table 29.
2. Residential consumption for FY 2021/22 is from the *Allocation Factors* Tab, Table 26.
3. Contracted Supply Costs are from the *Source of Supply* Tab, Table 30.

TABLE 42 : RESIDENTIAL TIERED RATES

Source of Supply	Supply Costs Allocated to Residential Tiered Rates ¹	Source of Supply Costs ²	Other Costs Allocated to Vol. Rates	Total Costs Allocated ³	FY 2020/21 Consumption ⁴	Residential Rates (\$/HCF) ⁵
Residential Tiered Rate Costs	(1)	(2)	(3)	(4)	(5)	(6)
Tier 1 - SWP & Vallejo Raw Water	79.5%	\$ 565,431	\$ 1,716,250	\$ 2,281,681	322,836	\$7.07
Tier 2 - Treated Water (Napa & Vallejo)	20.5%	369,096	441,426	810,523	83,035	\$9.76
Total Residential Tiered Rate Costs	100.0%	\$ 934,527	\$ 2,157,676	\$ 3,092,204	405,871	

1. Percentage of annual supply based on contracted purchases from *Source of Supply* Tab, Table 29.
2. See Table 41.
3. Total Variable Costs allocated to residential customers (*Proposed Fixed Charges* Tab, Table 33) less their Source of Supply Costs. NBS assumed these other costs are proportionally allocated to Tier 1 and Tier 2.
4. FY 2021/22 volume adjusted for conservation is from the *Allocation Factors* Tab, Table 26.

TABLE 43 : ESTIMATED VOLUMETRIC REVENUE BY CUSTOMER CLASS - PROPOSED ALTERNATIVE

ALTERNATIVE 1 (COSA)						
Customer Class	Estimated Consumption (hcf)	Estimated Variable Revenue	% of Variable Rate Revenue	Estimated Fixed Revenue	Total Estimated Revenue	Cost of Service Net Revenue Req'ts
Residential						
Tier 1 - SWP & Vallejo Raw Water	322,836	\$ 2,459,588	40%	\$ 1,471,833	\$ 3,931,421	\$ 3,875,526
Tier 2 - Treated Water (Napa & Vallejo)	83,035	632,616	10%	378,561	1,011,177	996,800
Multi-Family	71,704	546,290	9%	1,855,536	2,401,826	2,379,400
Commercial	255,046	1,943,118	31%	244,718	2,187,836	2,179,689
Landscape	42,526	323,989	5%	43,503	367,493	365,999
Private Fire Protection	18,265	139,154	2%	92,076	231,229	334,458
Temporary Hydrant Meters	6,642	50,606	1%	17,116	67,722	67,213
Raw Water	10,431	79,472	1%	13,212	92,684	92,303
Grand Total	810,486	\$ 6,174,833	100%	\$ 4,116,555	\$ 10,291,388	\$ 10,291,388

TABLE 44 : PROPOSED VOLUMETRIC CHARGES FOR FY 2023/24

ALTERNATIVE 2 - INCREASE CURRENT VARIABLE RATES BY 3% ANNUALLY						
Customer Classes	Number of Meters	Water Consumption (hcf/yr)	Total Target Rev. Req't from Vol. Charges	% of Total Rate Revenue	Proposed Commodity Rates (\$/hcf)	Revised Revenue from Vol. Charges
Residential	4,880					
Tier 1 - SWP & Vallejo Raw Water		322,836	\$ 2,459,588	39.8%	\$7.766	\$ 2,507,212
Tier 2 - Treated Water (Napa & Vallejo)		83,035	632,616	10.2%	\$8.395	697,036
Multi-Family	1,273	71,704	546,290	8.8%	\$7.952	570,162
Commercial	343	255,046	1,943,118	31.5%	\$7.952	2,028,027
Landscape	73	42,526	323,989	5.2%	\$7.952	338,147
Private Fire Protection	245	18,265	139,154	2.3%	\$3.976	72,617
Temporary Hydrant Meters	8	6,642	50,606	0.8%	\$7.952	52,818
Raw Water	3	10,431	79,472	1.3%	\$3.543	36,960
Grand Total	6,825	810,486	\$ 6,174,833	100%		\$ 6,302,977

TABLE 45 : ASSUMPTIONS USED IN DROUGHT RATE ANALYSIS

2021/22 Consumption Assumptions ¹					
Shortage Level	Percent Shortage Range	Shortage Response Action	Potable Water Consumption (AF/yr.)	Potable Water Consumption (hcf/yr.)	Difference to Baseline (hcf)
	Baseline Consumption²		1,861	810,486	0
1	Up to 10%	Voluntary Conservation	1,675	729,437	(81,049)
2	Up to 20%	Water Alert	1,488	648,388	(162,097)
3	Up to 30%	Water Emergency	1,302	567,340	(243,146)
4	Up to 40%	Critical Water Emergency	1,116	486,291	(324,194)
5	Up to 50%	Severe Water Emergency	930	405,243	(405,243)
6	>50%	Catastrophic Interruption of Water Supplies	744	324,194	(486,291)

1. Drought stages based on the City's Water Conservation Plan. Source files: 2_ Redlines_Ordinance_Water_Conservation_Plan_Chapter_13.14 (4).pdf & 3_ Table_8-1_Water_Shortage_Contingency_Plan_Levels.pdf.

2. This represents the baseline consumption for FY 2021/22 consumption (excludes recycled water). Conservation percentage for each drought stage is relative to the baseline consumption.

TABLE 46 : EXPENSES DIRECTLY IMPACTED BY FUTURE MANDATED WATER USE REDUCTION

Expenses Directly Effected By Consumption Changes					
Description	Commodity-Related Costs				
	FY 2023/24	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28
City of Napa	\$ 278,000	\$ 283,560	\$ 289,231	\$ 295,016	\$ 300,916
North Bay Aqueduct	3,203,000	3,267,060	3,332,401	3,399,049	3,467,030
City of Vallejo	121,218	123,642	126,115	128,638	131,210
Total:	\$ 3,602,218	\$ 3,674,262	\$ 3,747,748	\$ 3,822,703	\$ 3,899,157

TABLE 47 : CALCULATION OF DROUGHT RATES FOR FY 2023/24

ALTERNATIVE 1 (COSA)						
Conservation Goal	Water Consumption (hcf/yr.)	Baseline Rev. Req't from Vol. Charges	Cost Reduction Due to Conservation ¹	Target Rev. Req't from Vol. Charges	Drought Surcharge (\$/hcf)	Uniform Commodity Rates (\$/hcf)
0%	810,486	\$ 6,174,833	\$ -	\$ 6,174,833	\$0.00	\$7.62
Up to 10%	729,437	6,174,833	(360,222)	5,814,611	\$0.35	\$7.97
Up to 20%	648,388	6,174,833	(720,444)	5,454,389	\$0.79	\$8.41
Up to 30%	567,340	6,174,833	(1,080,665)	5,094,167	\$1.36	\$8.98
Up to 40%	486,291	6,174,833	(1,440,887)	4,733,945	\$2.12	\$9.73
Up to 50%	405,243	6,174,833	(1,801,109)	4,373,724	\$3.17	\$10.79
>50%	324,194	6,174,833	(2,161,331)	4,013,502	\$4.76	\$12.38

1. Cost reduction equals the conservation goal percentage multiplied by expenses directly effected by consumption charges.

TABLE 48 : CALCULATION OF DROUGHT RATES FOR FY 2024/25

ALTERNATIVE 1 (COSA)						
Conservation Goal	Water Consumption (hcf/yr.)	Baseline Rev. Req't from Vol. Charges	Cost Reduction Due to Conservation ¹	Target Rev. Req't from Vol. Charges	Drought Surcharge (\$/hcf)	Uniform Commodity Rates (\$/hcf)
0%	810,486	\$ 6,851,718	\$ -	\$ 6,851,718	\$0.00	\$8.45
Up to 10%	729,437	6,851,718	(367,426)	6,484,291	\$0.44	\$8.89
Up to 20%	648,388	6,851,718	(734,852)	6,116,865	\$0.98	\$9.43
Up to 30%	567,340	6,851,718	(1,102,279)	5,749,439	\$1.68	\$10.13
Up to 40%	486,291	6,851,718	(1,469,705)	5,382,013	\$2.61	\$11.07
Up to 50%	405,243	6,851,718	(1,837,131)	5,014,587	\$3.92	\$12.37
>50%	324,194	6,851,718	(2,204,557)	4,647,160	\$5.88	\$14.33

1. Cost reduction equals the conservation goal percentage multiplied by expenses directly effected by consumption charges.

TABLE 49 : CALCULATION OF DROUGHT RATES FOR FY 2025/26

ALTERNATIVE 1 (COSA)						
Conservation Goal	Water Consumption (hcf/yr.)	Baseline Rev. Req't from Vol. Charges	Cost Reduction Due to Conservation ¹	Target Rev. Req't from Vol. Charges	Drought Surcharge (\$/hcf)	Uniform Commodity Rates (\$/hcf)
0%	810,486	\$ 7,595,335	\$ -	\$ 7,595,335	\$0.00	\$9.37
Up to 10%	729,437	7,595,335	(374,775)	7,220,560	\$0.53	\$9.90
Up to 20%	648,388	7,595,335	(749,550)	6,845,785	\$1.19	\$10.56
Up to 30%	567,340	7,595,335	(1,124,324)	6,471,010	\$2.03	\$11.41
Up to 40%	486,291	7,595,335	(1,499,099)	6,096,236	\$3.16	\$12.54
Up to 50%	405,243	7,595,335	(1,873,874)	5,721,461	\$4.75	\$14.12
>50%	324,194	7,595,335	(2,248,649)	5,346,686	\$7.12	\$16.49

1. Cost reduction equals the conservation goal percentage multiplied by expenses directly effected by consumption charges.

TABLE 50 : CALCULATION OF DROUGHT RATES FOR FY 2026/27

ALTERNATIVE 1 (COSA)						
Conservation Goal	Water Consumption (hcf/yr.)	Baseline Rev. Req't from Vol. Charges	Cost Reduction Due to Conservation ¹	Target Rev. Req't from Vol. Charges	Drought Surcharge (\$/hcf)	Uniform Commodity Rates (\$/hcf)
0%	810,486	\$ 8,033,434	\$ -	\$ 8,033,434	\$0.00	\$9.91
Up to 10%	729,437	8,033,434	(382,270)	7,651,163	\$0.58	\$10.49
Up to 20%	648,388	8,033,434	(764,541)	7,268,893	\$1.30	\$11.21
Up to 30%	567,340	8,033,434	(1,146,811)	6,886,623	\$2.23	\$12.14
Up to 40%	486,291	8,033,434	(1,529,081)	6,504,353	\$3.46	\$13.38
Up to 50%	405,243	8,033,434	(1,911,351)	6,122,082	\$5.20	\$15.11
>50%	324,194	8,033,434	(2,293,622)	5,739,812	\$7.79	\$17.70

1. Cost reduction equals the conservation goal percentage multiplied by expenses directly effected by consumption charges.

TABLE 51 : CALCULATION OF DROUGHT RATES FOR FY 2027/28

ALTERNATIVE 1 (COSA)							
Conservation Goal	Water Consumption (hcf/yr.)	Baseline Rev. Req't from Vol. Charges	Cost Reduction Due to Conservation ¹	Target Rev. Req't from Vol. Charges	Drought Surcharge (\$/hcf)	Uniform Commodity Rates (\$/hcf)	
0%	810,486	\$ 8,415,102	\$ -	\$ 8,415,102	\$0.00	\$10.38	
Up to 10%	729,437	8,415,102	(389,916)	8,025,186	\$0.62	\$11.00	
Up to 20%	648,388	8,415,102	(779,831)	7,635,271	\$1.39	\$11.78	
Up to 30%	567,340	8,415,102	(1,169,747)	7,245,355	\$2.39	\$12.77	
Up to 40%	486,291	8,415,102	(1,559,663)	6,855,439	\$3.71	\$14.10	
Up to 50%	405,243	8,415,102	(1,949,578)	6,465,524	\$5.57	\$15.95	
>50%	324,194	8,415,102	(2,339,494)	6,075,608	\$8.36	\$18.74	

1. Cost reduction equals the conservation goal percentage multiplied by expenses directly effected by consumption charges.

TABLE 52 : CURRENT VS. PROPOSED WATER RATES - FIXED CHARGES

Water Rate Schedule	Current Rates	Proposed Rates				
		FY 2023/24	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28
ALTERNATIVE 1 (COSA)						
Monthly Fixed Service Charges (in \$/mo)						
Residential Use						
< 1" meter	\$26.56	\$31.32	\$34.14	\$37.21	\$38.70	\$39.86
1" meter	\$26.56	\$31.32	\$34.14	\$37.21	\$38.70	\$39.86
1 1/2" meter	\$26.56	\$58.53	\$63.80	\$69.55	\$72.33	\$74.50
2" meter	\$26.56	\$91.19	\$99.40	\$108.35	\$112.68	\$116.06
3" meter	\$26.56	\$178.29	\$194.33	\$211.82	\$220.30	\$226.91
4" meter	\$26.56	\$276.27	\$301.13	\$328.23	\$341.36	\$351.60
6" meter	\$26.56	\$548.43	\$597.79	\$651.59	\$677.66	\$697.99
8" meter	\$26.56	\$875.03	\$953.78	\$1,039.63	\$1,081.21	\$1,113.65
Multi-Family, Commercial and Landscape						
< 1" meter	\$26.56	\$31.32	\$34.14	\$37.21	\$38.70	\$39.86
1" meter (Residential)	\$26.56	\$31.32	\$34.14	\$37.21	\$38.70	\$39.86
1" meter (Commercial)	\$44.42	\$31.32	\$34.14	\$37.21	\$38.70	\$39.86
1 1/2" meter	\$88.75	\$58.53	\$63.80	\$69.55	\$72.33	\$74.50
2" meter	\$141.99	\$91.19	\$99.40	\$108.35	\$112.68	\$116.06
3" meter	\$283.98	\$178.29	\$194.33	\$211.82	\$220.30	\$226.91
4" meter	\$443.74	\$276.27	\$301.13	\$328.23	\$341.36	\$351.60
6" meter	\$887.48	\$548.43	\$597.79	\$651.59	\$677.66	\$697.99
8" meter	\$1,420.06	\$875.03	\$953.78	\$1,039.63	\$1,081.21	\$1,113.65
Private Fire Protection						
< 1" meter	\$13.28	\$31.32	\$34.14	\$37.21	\$38.70	\$39.86
1" meter	\$13.28	\$31.32	\$34.14	\$37.21	\$38.70	\$39.86
1 1/2" meter	\$13.28	\$58.53	\$63.80	\$69.55	\$72.33	\$74.50
2" meter	\$13.28	\$91.19	\$99.40	\$108.35	\$112.68	\$116.06
3" meter	\$13.28	\$178.29	\$194.33	\$211.82	\$220.30	\$226.91
4" meter	\$13.28	\$276.27	\$301.13	\$328.23	\$341.36	\$351.60
6" meter	\$13.28	\$548.43	\$597.79	\$651.59	\$677.66	\$697.99
8" meter	\$13.28	\$875.03	\$953.78	\$1,039.63	\$1,081.21	\$1,113.65
Temporary Hydrant Meters						
< 1" meter	\$283.98	\$31.32	\$34.14	\$37.21	\$38.70	\$39.86
1" meter	\$283.98	\$31.32	\$34.14	\$37.21	\$38.70	\$39.86
1 1/2" meter	\$283.98	\$58.53	\$63.80	\$69.55	\$72.33	\$74.50
2" meter	\$283.98	\$91.19	\$99.40	\$108.35	\$112.68	\$116.06
3" meter	\$283.98	\$178.29	\$194.33	\$211.82	\$220.30	\$226.91
4" meter	\$283.98	\$276.27	\$301.13	\$328.23	\$341.36	\$351.60
6" meter	\$283.98	\$548.43	\$597.79	\$651.59	\$677.66	\$697.99
8" meter	\$283.98	\$875.03	\$953.78	\$1,039.63	\$1,081.21	\$1,113.65
Raw Water						
< 1" meter	n/a	\$31.32	\$34.14	\$37.21	\$38.70	\$39.86
1" meter	\$44.42	\$31.32	\$34.14	\$37.21	\$38.70	\$39.86
1 1/2" meter	n/a	\$58.53	\$63.80	\$69.55	\$72.33	\$74.50
2" meter	\$141.99	\$91.19	\$99.40	\$108.35	\$112.68	\$116.06
3" meter	n/a	\$178.29	\$194.33	\$211.82	\$220.30	\$226.91
4" meter	\$443.74	\$276.27	\$301.13	\$328.23	\$341.36	\$351.60
6" meter	\$887.48	\$548.43	\$597.79	\$651.59	\$677.66	\$697.99
8" meter	n/a	\$875.03	\$953.78	\$1,039.63	\$1,081.21	\$1,113.65

TABLE 53 : CURRENT VS. PROPOSED WATER RATES - VARIABLE RATES

		ALTERNATIVE 1 (COSA)				
Water Rate Schedule	Current Rates	Proposed Rates				
		FY 2023/24	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28
<i>Projected Increase in Rate Revenue per Financial Plan:</i>		9.00%	9.00%	9.00%	4.00%	3.00%
Variable Rates for All Water Consumed (in \$/hcf)						
Residential Use						
Tier 1 (0 - 6 units)	\$7.54	\$7.07	\$7.70	\$8.40	\$8.73	\$8.99
Tier 2 (> 6 units)	\$8.15	\$9.76	\$10.64	\$11.60	\$12.06	\$12.42
Multi-Family, Commercial and Landscape	\$7.72	\$7.62	\$8.30	\$9.05	\$9.41	\$9.70
Private Fire Protection	\$3.86	\$7.62	\$8.30	\$9.05	\$9.41	\$9.70
Temporary Hydrant Meters	\$7.72	\$7.62	\$8.30	\$9.05	\$9.41	\$9.70
Raw Water	\$3.44	\$7.62	\$8.30	\$9.05	\$9.41	\$9.70

TABLE 54 : CURRENT VS. PROPOSED WATER RATES - VARIABLE RATES

		ALTERNATIVE 2 - INCREASE CURRENT VARIABLE RATES BY 3% ANNUALLY				
Water Rate Schedule	Current Rates	Proposed Rates				
		FY 2023/24	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28
<i>Projected Increase in Rate Revenue per Financial Plan:</i>		3.00%	3.00%	3.00%	3.00%	3.00%
Variable Rates for All Water Consumed (in \$/hcf)						
Residential Use						
Tier 1 (0 - 6 units)	\$7.54	\$7.77	\$8.00	\$8.24	\$8.49	\$8.74
Tier 2 (> 6 units)	\$8.15	\$8.39	\$8.65	\$8.91	\$9.17	\$9.45
Multi-Family, Commercial and Landscape	\$7.72	\$7.95	\$8.19	\$8.44	\$8.69	\$8.95
Private Fire Protection	\$3.86	\$3.98	\$4.10	\$4.22	\$4.34	\$4.47
Temporary Hydrant Meters	\$7.72	\$7.95	\$8.19	\$8.44	\$8.69	\$8.95
Raw Water	\$3.44	\$3.54	\$3.65	\$3.76	\$3.87	\$3.99

TABLE 55 : CURRENT VS. PROPOSED DROUGHT RATES

		ALTERNATIVE 1 (COSA)				
Drought Rate Schedule (in \$/hcf)	Current Rates	FY 2023/24	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28
10% Conservation	n/a	\$0.35	\$0.44	\$0.53	\$0.58	\$0.62
20% Conservation	n/a	\$0.79	\$0.98	\$1.19	\$1.30	\$1.39
30% Conservation	n/a	\$1.36	\$1.68	\$2.03	\$2.23	\$2.39
40% Conservation	n/a	\$2.12	\$2.61	\$3.16	\$3.46	\$3.71
50% Conservation	n/a	\$3.17	\$3.92	\$4.75	\$5.20	\$5.57
60% Conservation	n/a	\$4.76	\$5.88	\$7.12	\$7.79	\$8.36

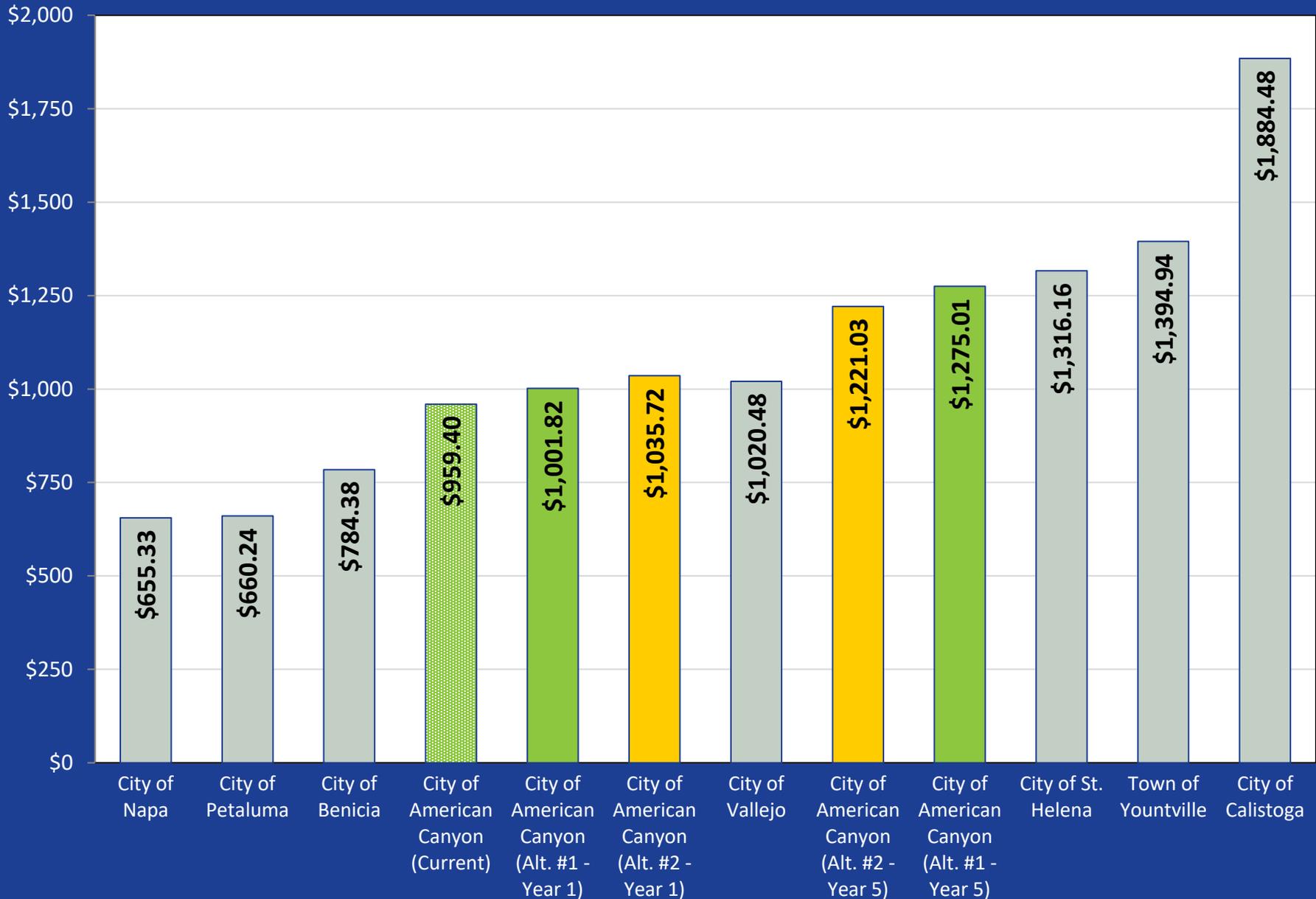
TABLE 56 : RATES AND DROUGHT SURCHARGE FOR EACH DROUGHT STAGE

<i>Proposed Drought Rates</i>										
Drought Rate Schedule ¹	FY 2023/24		FY 2024/25		FY 2025/26		FY 2026/27		FY 2027/28	
Water Consumption Baseline (hcf/yr) ²	810,486 hcf									
Conservation Target	Drought Surcharge ³	Drought Rate ⁴								
No Conservation	\$0.00	\$7.62	\$0.00	\$8.45	\$0.00	\$9.37	\$0.00	\$9.91	\$0.00	\$10.38
Up to 10%	\$0.35	\$7.97	\$0.44	\$8.89	\$0.53	\$9.90	\$0.58	\$10.49	\$0.62	\$11.00
Up to 20%	\$0.79	\$8.41	\$0.98	\$9.43	\$1.19	\$10.56	\$1.30	\$11.21	\$1.39	\$11.78
Up to 30%	\$1.36	\$8.98	\$1.68	\$10.13	\$2.03	\$11.41	\$2.23	\$12.14	\$2.39	\$12.77
Up to 40%	\$2.12	\$9.73	\$2.61	\$11.07	\$3.16	\$12.54	\$3.46	\$13.38	\$3.71	\$14.10
Up to 50%	\$3.17	\$10.79	\$3.92	\$12.37	\$4.75	\$14.12	\$5.20	\$15.11	\$5.57	\$15.95
>50%	\$4.76	\$12.38	\$5.88	\$14.33	\$7.12	\$16.49	\$7.79	\$17.70	\$8.36	\$18.74

1. ACTIVATION - The Drought Surcharge will NOT be added on water bills unless approved by the City Council. If the surcharge is activated, it will remain in effect as necessary and will be reviewed by the City Council at least monthly for a determination of necessity until the surcharge is deactivated.
2. Baseline water consumption is based on water usage for FY 2020/21, the same assumption used in the proposed volumetric rates.
3. Drought Surcharge is added to the Uniform Rate on a per unit basis to cover the cost of water service during times of State mandated conservation and/or extreme water supply shortage, resulting in water consumption below the established baseline.
4. The Drought Rate equals the Volumetric Rate plus Volumetric Surcharge. This does not include pumping charges which will apply where applicable.

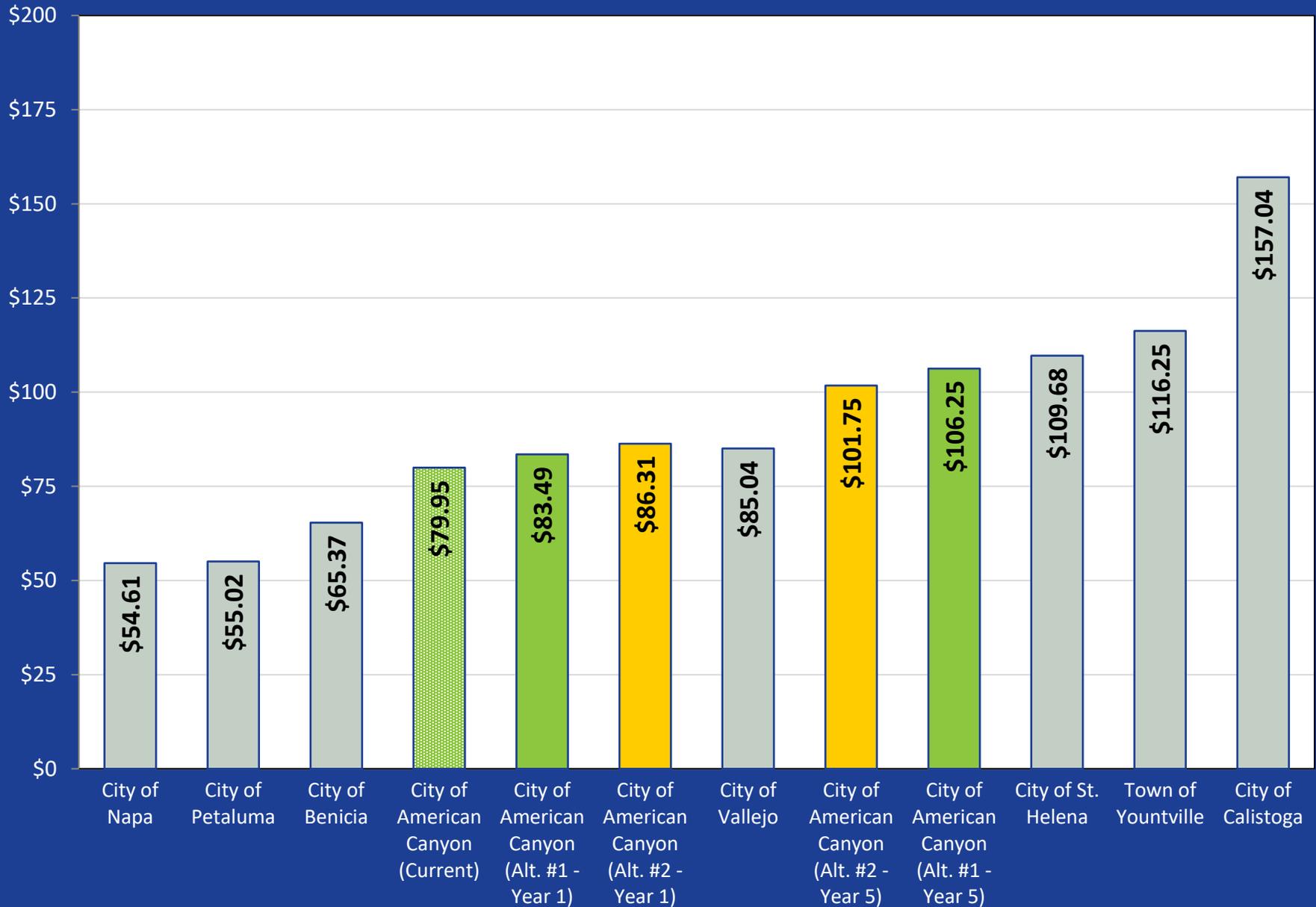
City of American Canyon (Year 1)

Annual Water Bill Comparison - Single Family Accounts

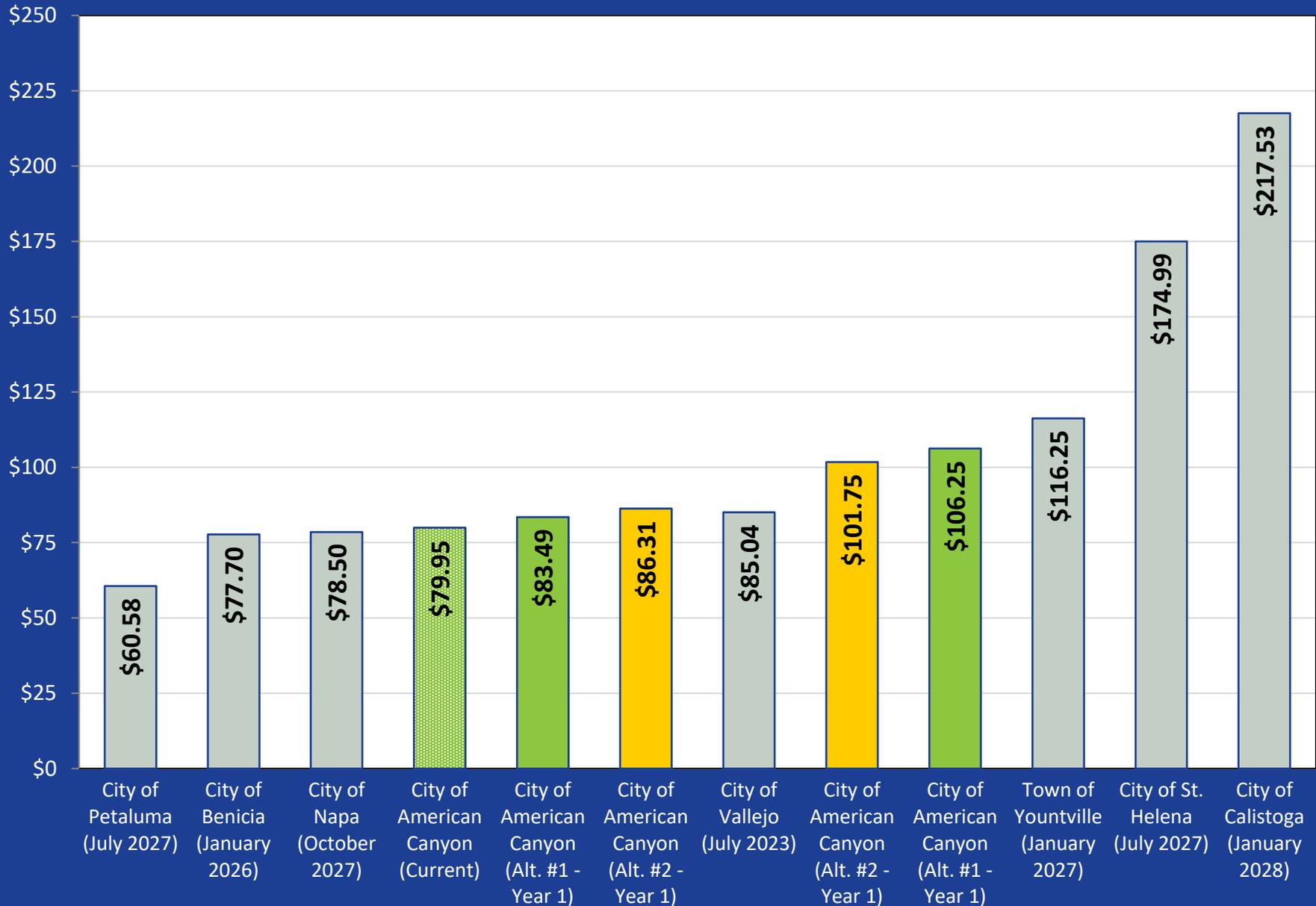


City of American Canyon (Year 1 & 5)

Monthly Water Bill Comparison - Single Family Accounts

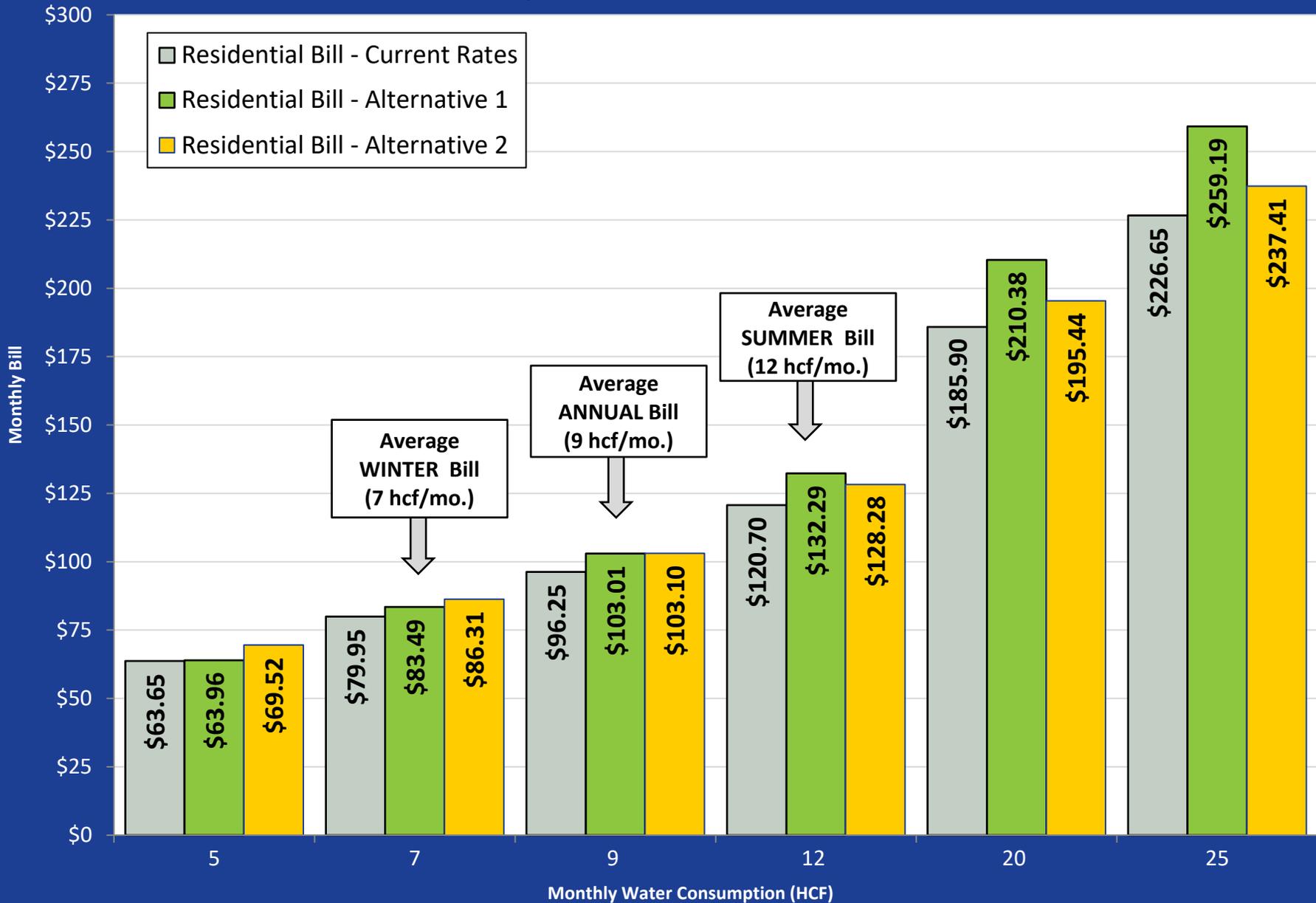


City of American Canyon (Year 1 & 5) Monthly Water Bill Comparison - Single Family Accounts



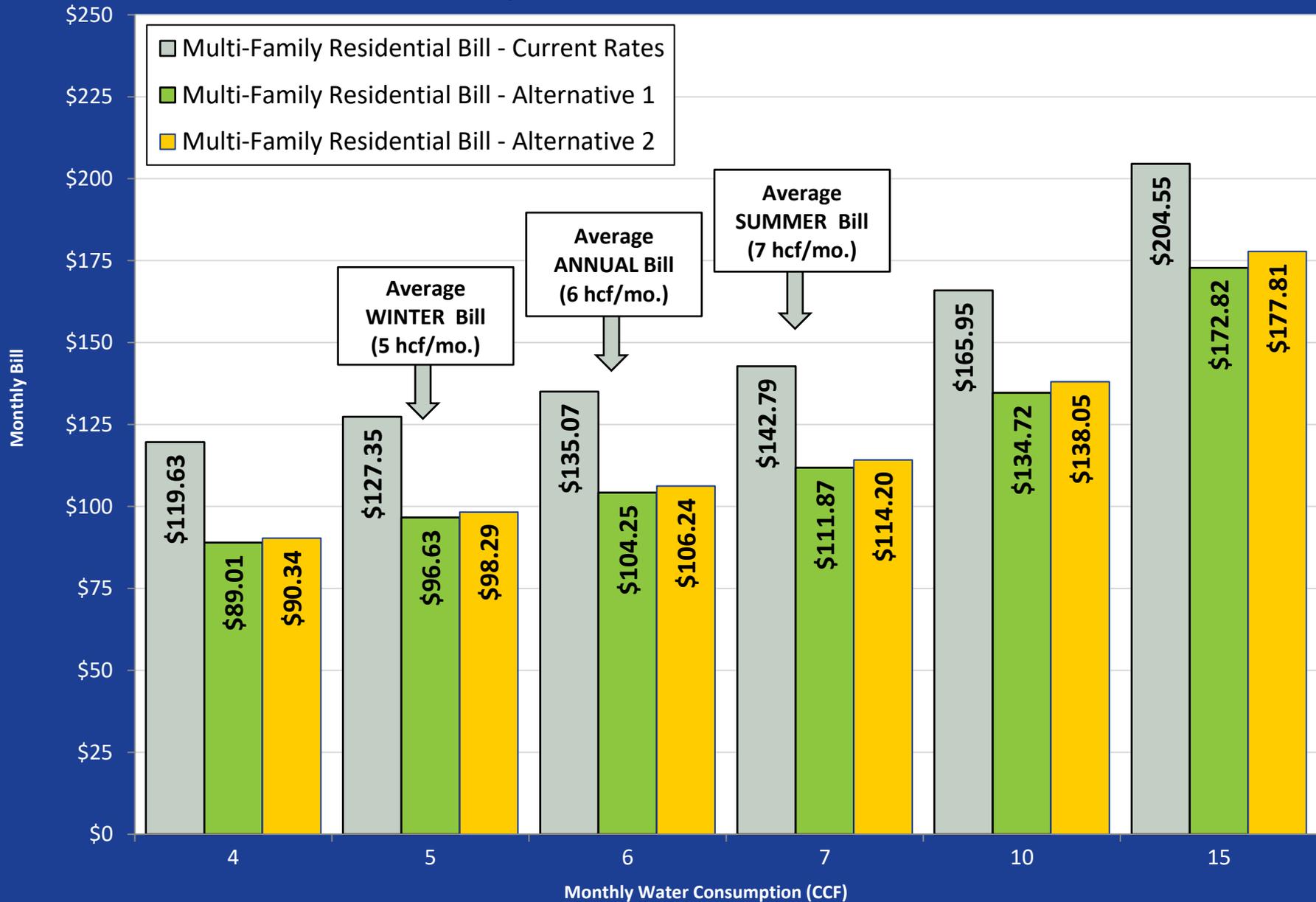
Single-Family Residential Water Bill Comparison

Current vs. Proposed FY 2023/24 Rates (1" Meter)



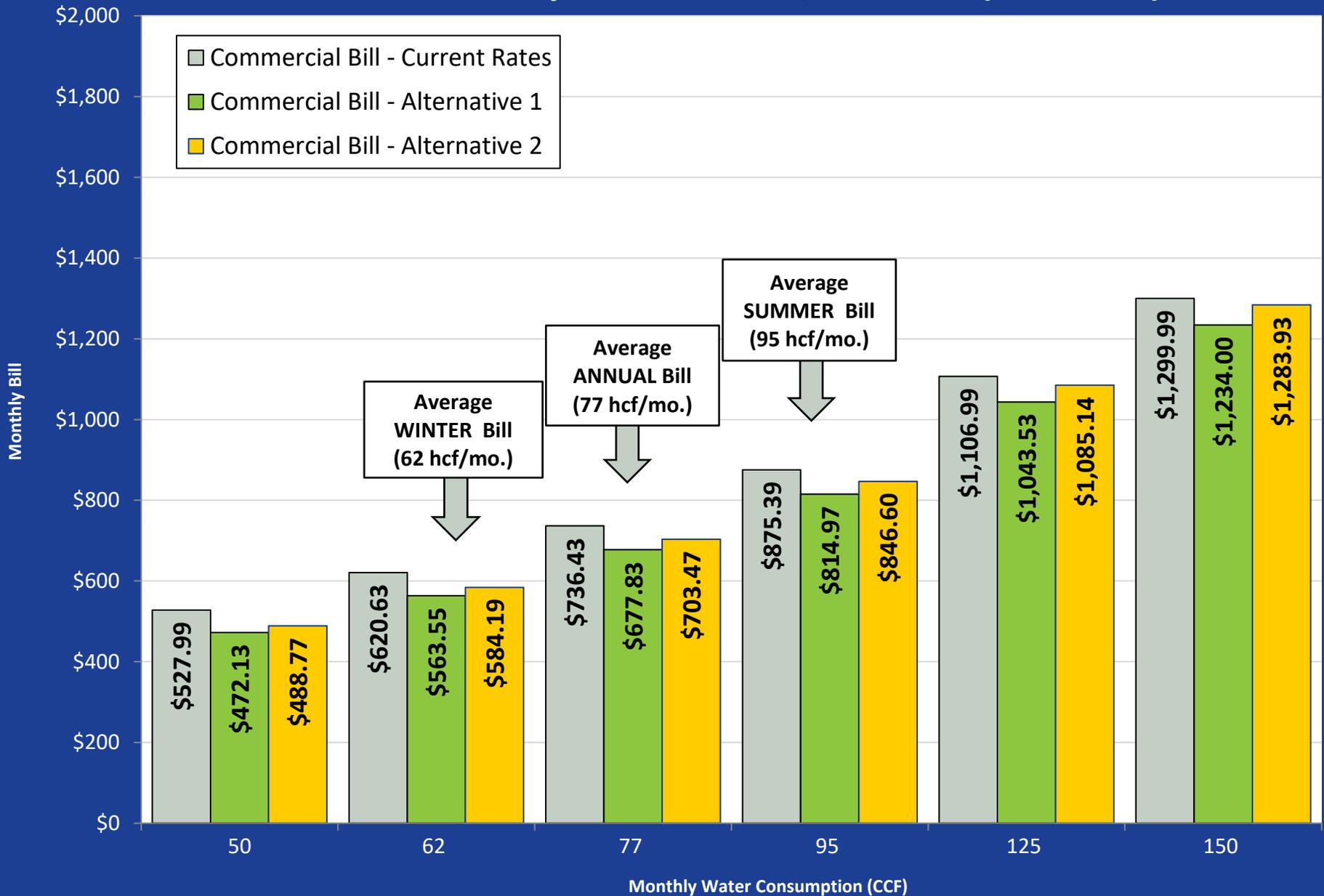
Multi-Family Residential Water Bill Comparison

Current vs. Proposed FY 2023/24 Rates (1.5" Meter)



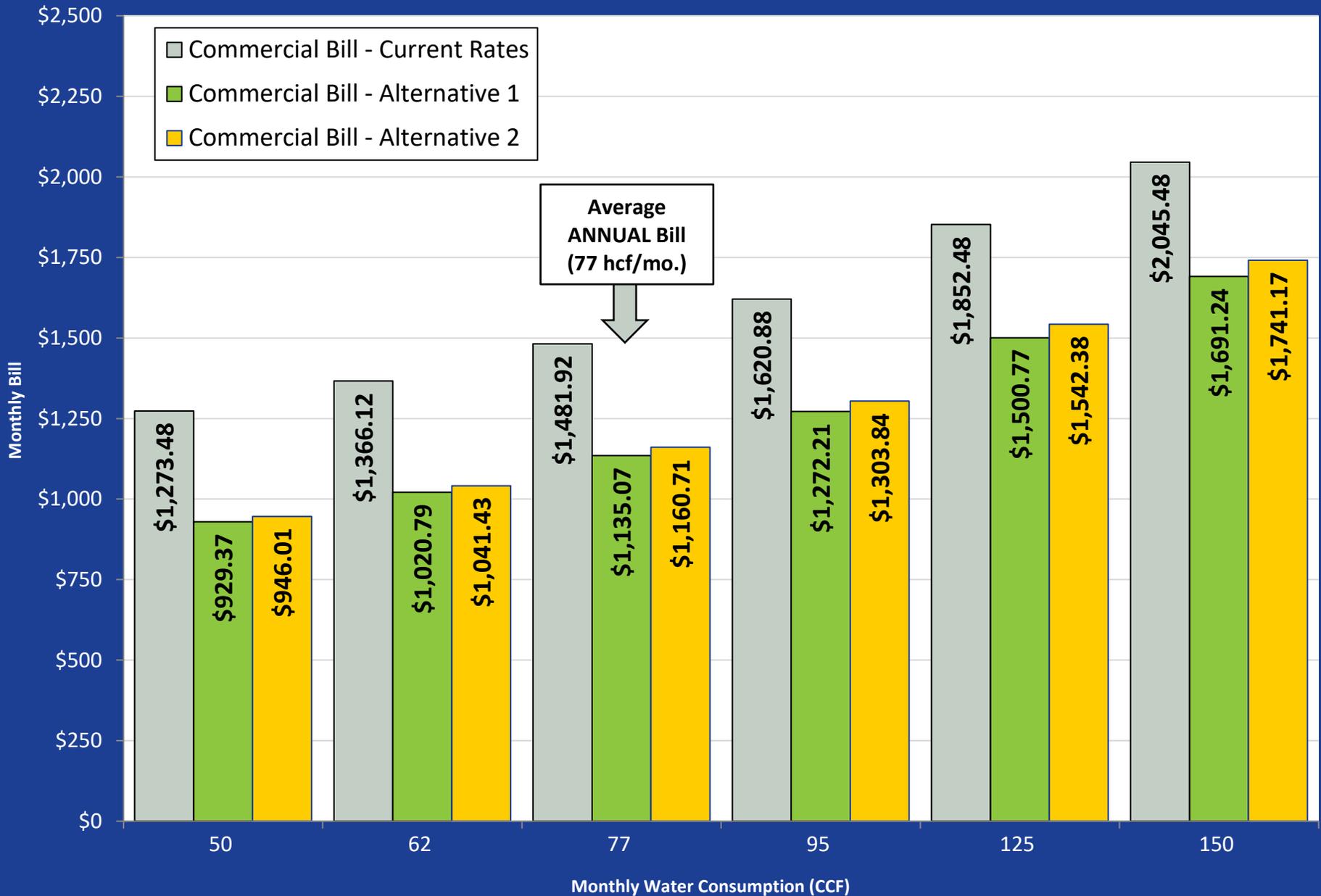
Commercial Water Bill Comparison

Current vs. Proposed FY 2023/24 Rates (2" Meter)



Commercial Water Bill Comparison

Current vs. Proposed FY 2023/24 Rates (6" Meter)



Appendix B. Recycled Water Rate Study Tables and Figures

TABLE 1 : FINANCIAL PLAN AND SUMMARY OF REVENUE REQUIREMENTS

RATE REVENUE REQUIREMENTS SUMMARY	Actuals	Actuals	5-Year Projected Rate Period					Projected				
	FY 2021/22	FY 2022/23	FY 2023/24	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30	FY 2030/31	FY 2031/32	FY 2032/33
Sources of Water Funds												
<i>Rate Revenue:</i> ¹												
Water Sales - Recycled Water Charges	\$ 151,038	\$ 226,361	\$ 207,000	\$ 210,726	\$ 214,308	\$ 217,952	\$ 221,657	\$ 225,425	\$ 229,257	\$ 232,925	\$ 236,652	\$ 240,439
<i>Non-Rate Revenue:</i>												
Interest Earnings ²	4,101	12,392	22,343	2,195	7,873	4,912	2,640	842	-	-	-	-
Total Sources of Funds	\$ 155,140	\$ 238,753	\$ 229,343	\$ 212,921	\$ 222,182	\$ 222,864	\$ 224,297	\$ 226,267	\$ 229,257	\$ 232,925	\$ 236,652	\$ 240,439
Uses of Water Funds												
<i>Operating Expenses:</i> ¹												
<i>Water Operations:</i>												
Fund 580 - Recycled Water Operations	\$ 272,644	\$ 1,632,152	\$ 893,163	\$ 797,921	\$ 823,477	\$ 849,857	\$ 877,086	\$ 905,193	\$ 934,206	\$ 964,155	\$ 995,069	\$ 1,026,980
<i>Other Expenditures:</i>												
Existing Debt Service	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Interfund Loan Repayment ³	-	-	198,566	198,566	267,497	267,497	267,497	267,497	267,497	267,497	267,497	267,497
Rate-Funded Capital Expenses	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: Other Expenditures	\$ -	\$ -	\$ 198,566	\$ 198,566	\$ 267,497	\$ 267,497	\$ 267,497	\$ 267,497	\$ 267,497	\$ 267,497	\$ 267,497	\$ 267,497
Total Uses of Water Funds	\$ 272,644	\$ 1,632,152	\$ 1,091,728	\$ 996,487	\$ 1,090,974	\$ 1,117,354	\$ 1,144,583	\$ 1,172,690	\$ 1,201,703	\$ 1,231,652	\$ 1,262,566	\$ 1,294,477
<i>plus: Revenue from Rate Increases</i> ⁴	-	-	129,375	563,692	652,033	728,149	788,637	827,104	841,165	854,623	868,297	882,190
Annual Surplus/(Deficit)	\$ (117,504)	\$ (1,393,399)	\$ (733,011)	\$ (219,874)	\$ (216,759)	\$ (166,341)	\$ (131,650)	\$ (119,320)	\$ (131,281)	\$ (144,103)	\$ (157,617)	\$ (171,849)
Net Revenue Req't. (Total Uses less Non-Rate Revenue)	\$ 268,543	\$ 1,619,760	\$ 1,069,386	\$ 994,292	\$ 1,083,101	\$ 1,112,441	\$ 1,141,943	\$ 1,171,848	\$ 1,201,703	\$ 1,231,652	\$ 1,262,566	\$ 1,294,477
Total Rate Revenue After Rate Increases	\$ 151,038	\$ 226,361	\$ 724,500	\$ 811,295	\$ 907,596	\$ 969,176	\$ 1,034,935	\$ 1,052,529	\$ 1,070,422	\$ 1,087,548	\$ 1,104,949	\$ 1,122,628
Projected Annual Rate Revenue Increase	0.00%	0.00%	250.00%	10.00%	10.00%	5.00%	5.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Cumulative Increase from Annual Revenue Increases	0.00%	0.00%	250.00%	285.00%	323.50%	344.68%	366.91%	366.91%	366.91%	366.91%	366.91%	366.91%

1. Revenue and expenses for FY 2021/22 through FY 2023/24 provided by the City. Revenues and expenses for all other years are escalated based on the forecasting assumptions located in Table 61. Source files: *Fund 580 Recycled Water Operations.xlsx* & *FY2023-24 Exp Budget Recycled Water.xlsx*.

2. Interest earnings for FY 2021/22 and FY 2022/23 are from the City's Budget. For all other years, it is calculated based on historical LAIF returns.

3. Repayment of interfund loans advanced by Wastewater Capacity 550 to Recycled Water Operations 540 for various project. See *Exhibit 3 (Debt)* for more details.

4. Revenue from rate increases assumes an implementation date of April 1, 2024 for new rates. For each year thereafter, the assumption is that new rates will be implemented on January 1st of each year.

1	<-- Select Financial Plan Scenario Here	FY 2021/22	FY 2022/23	FY 2023/24	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30	FY 2030/31	FY 2031/32	FY 2032/33
1	Alternative 1 - Full Cost Recovery Rate Increases ¹	0.00%	0.00%	250.00%	10.00%	10.00%	5.00%	5.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2	Alternative 2 - Phased-in Rate Increases ²	0.00%	0.00%	20.00%	20.00%	5.00%	2.00%	2.00%	0.00%	0.00%	0.00%	0.00%	0.00%
3	Alternative 3 - Minimal Rate Increases ³	0.00%	0.00%	15.00%	15.00%	10.00%	5.00%	5.00%	0.00%	0.00%	0.00%	0.00%	0.00%
4	Alternative 4 - No Rate Increases	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

1. Alternative 1: Scenario 1 - Rates needed to meet all revenue requirements and meet the target reserve levels (Large increase followed by smaller increases).

2. Alternative 2: Scenario 2 - Large increases phased in over two years, followed by smaller increases (Reserves drop below target level).

3. Alternative 3: Scenario 3 - Smaller increases (Reserves drop below target level).

TABLE 2 : RESERVE FUND SUMMARY

SUMMARY OF CASH ACTIVITY	Actuals		5-Year Projected Rate Period					Projected				
	FY 2021/22	FY 2022/23	FY 2023/24	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30	FY 2030/31	FY 2031/32	FY 2032/33
Unrestricted Reserve:												
Total Beginning Cash¹	\$ 105,383	\$ 549,510										
Operating Reserve												
Beginning Reserve Balance	\$ 105,383	\$ 549,510	\$ 650,000	\$ (83,011)	\$ (302,885)	\$ (519,644)	\$ (685,985)	\$ (817,634)	\$ (936,954)	\$ (1,068,236)	\$ (1,212,339)	\$ (1,369,955)
Plus: Net Cash Flow (After Rate Increases)	(117,504)	(1,393,399)	(733,011)	(219,874)	(216,759)	(166,341)	(131,650)	(119,320)	(131,281)	(144,103)	(157,617)	(171,849)
Plus: Transfer in from Capital and Infrastructure Reserve	-	-	-	-	-	-	-	-	-	-	-	-
Less: Transfer out to Capital and Infrastructure Reserve	-	-	-	-	-	-	-	-	-	-	-	-
Ending Operating Reserve Balance	\$ (12,121)	\$ (843,889)	\$ (83,011)	\$ (302,885)	\$ (519,644)	\$ (685,985)	\$ (817,634)	\$ (936,954)	\$ (1,068,236)	\$ (1,212,339)	\$ (1,369,955)	\$ (1,541,804)
Target Ending Balance (90-days of O&M)²	\$ 68,000	\$ 408,000	\$ 223,000	\$ 199,000	\$ 206,000	\$ 212,000	\$ 219,000	\$ 226,000	\$ 234,000	\$ 241,000	\$ 249,000	\$ 257,000
Capital Rehabilitation & Replacement Reserve												
Beginning Reserve Balance	\$ -	\$ -	\$ 243,704	\$ 243,704	\$ 879,258	\$ 879,258	\$ 879,258	\$ 879,258	\$ 879,258	\$ 879,258	\$ 879,258	\$ 879,258
Plus: Transfer of Operating Reserve Surplus	-	-	-	-	-	-	-	-	-	-	-	-
Less: Transfer out to Operating Reserve	-	-	-	-	-	-	-	-	-	-	-	-
Less: Use of Reserves for Capital Projects	-	-	-	-	-	-	-	-	-	-	-	-
Ending Capital and Infrastructure Reserve Balance	\$ -	\$ 243,704	\$ 243,704	\$ 879,258	\$ 879,258	\$ 879,258	\$ 879,258	\$ 879,258	\$ 879,258	\$ 879,258	\$ 879,258	\$ 879,258
Target Ending Balance (3% of net assets)³	\$ 1,420,700	\$ 1,548,600	\$ 1,870,900	\$ 2,079,900	\$ 2,260,500	\$ 2,370,700	\$ 2,458,100	\$ 2,548,200	\$ 2,641,000	\$ 2,736,700	\$ 2,835,300	\$ 2,937,000
Ending Balance - Excl. Restricted Reserves	\$ (12,121)	\$ (600,185)	\$ 160,693	\$ 576,373	\$ 359,614	\$ 193,273	\$ 61,624	\$ (57,696)	\$ (188,977)	\$ (333,081)	\$ (490,697)	\$ (662,546)
Min. Target Ending Balance -Excl. Restricted Reserves	\$ 1,488,700	\$ 1,956,600	\$ 2,093,900	\$ 2,278,900	\$ 2,466,500	\$ 2,582,700	\$ 2,677,100	\$ 2,774,200	\$ 2,875,000	\$ 2,977,700	\$ 3,084,300	\$ 3,194,000
Ending Surplus/(Deficit) Compared to Reserve Targets	\$ (1,500,821)	\$ (2,556,785)	\$ (1,933,207)	\$ (1,702,527)	\$ (2,106,886)	\$ (2,389,427)	\$ (2,615,476)	\$ (2,831,896)	\$ (3,063,977)	\$ (3,310,781)	\$ (3,574,997)	\$ (3,856,546)
Annual Interest Earnings Rate⁴	1.37%	2.50%	2.50%	1.37%	1.37%	1.37%	1.37%	1.37%	1.37%	1.37%	1.37%	1.37%

1. Beginning cash balances provided by City staff for Fund 580 - Recycled Water Operations. Source file: 4 - Current Cash and Fund Balance - Recycled Water 12062021.xlsx , Beg Fund Balance FY23- Water.xls , & Beg Fund Balance FY23- Recycled Water.xls .
 2. The target ending balance is set equal to 90-days of O&M expenses. Source file: 4 - Current Cash and Fund Balance - Water 12062021.xlsx .
 3. The target ending balance is set equal to 3% of net capital assets. See Exhibit 2 (CIP) for details.
 4. Historical interest earning rates are per the average annual yields for funds invested in LAIF (2017-2021). The source is the California State Treasurer's website: <https://www.treasurer.ca.gov/pmia-laif/historical/annual.asp> .

CHART 1

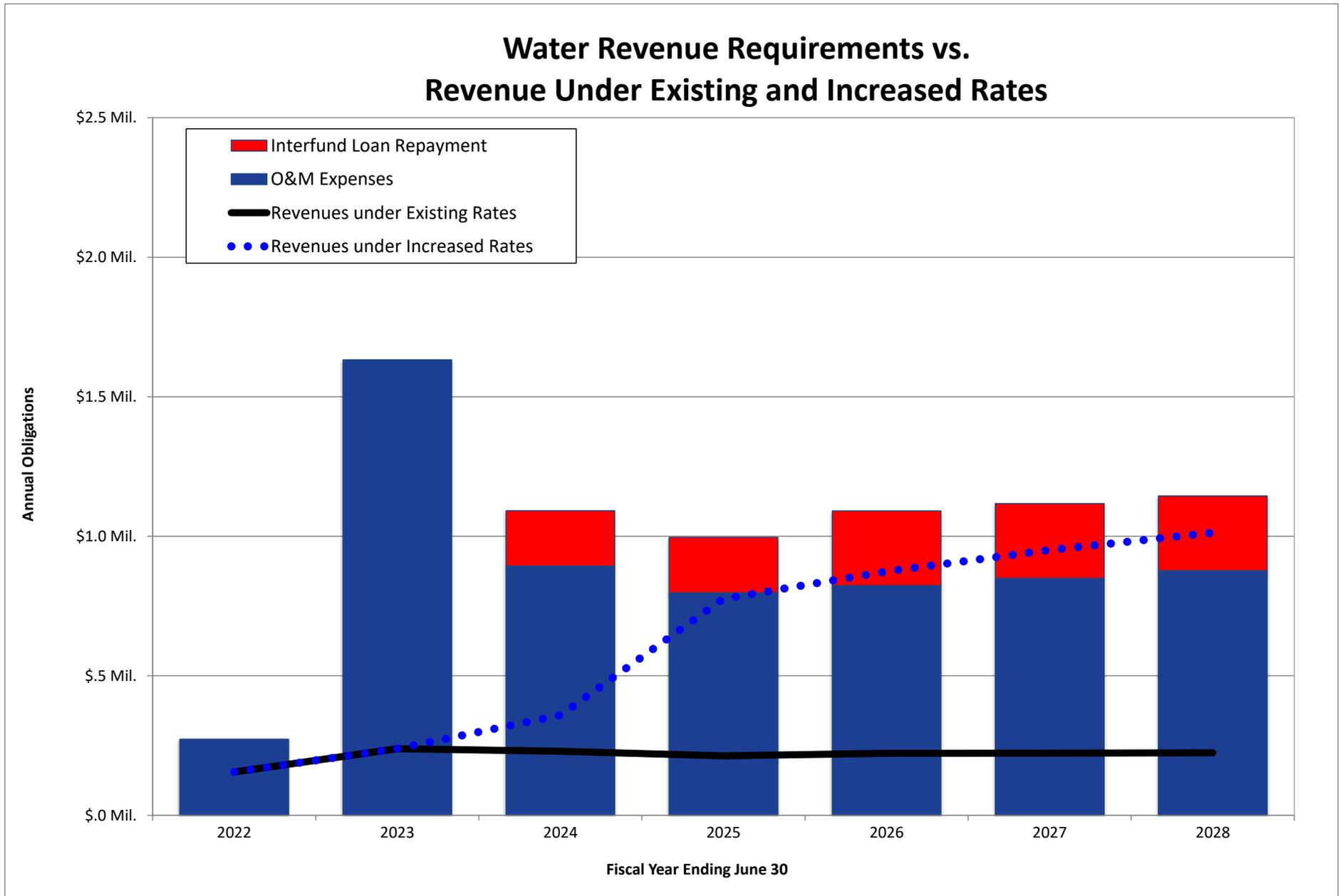


CHART 2

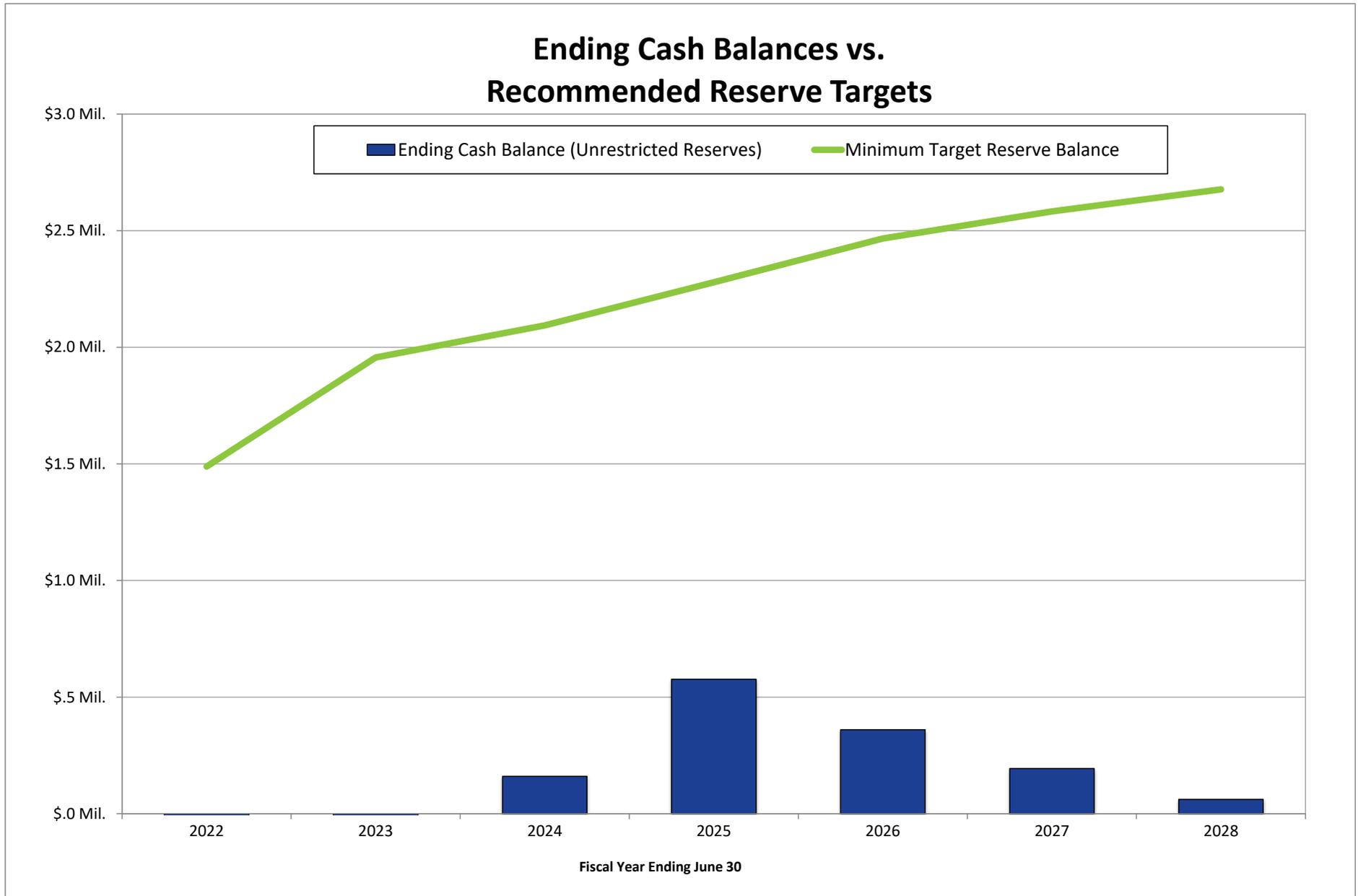


CHART 3

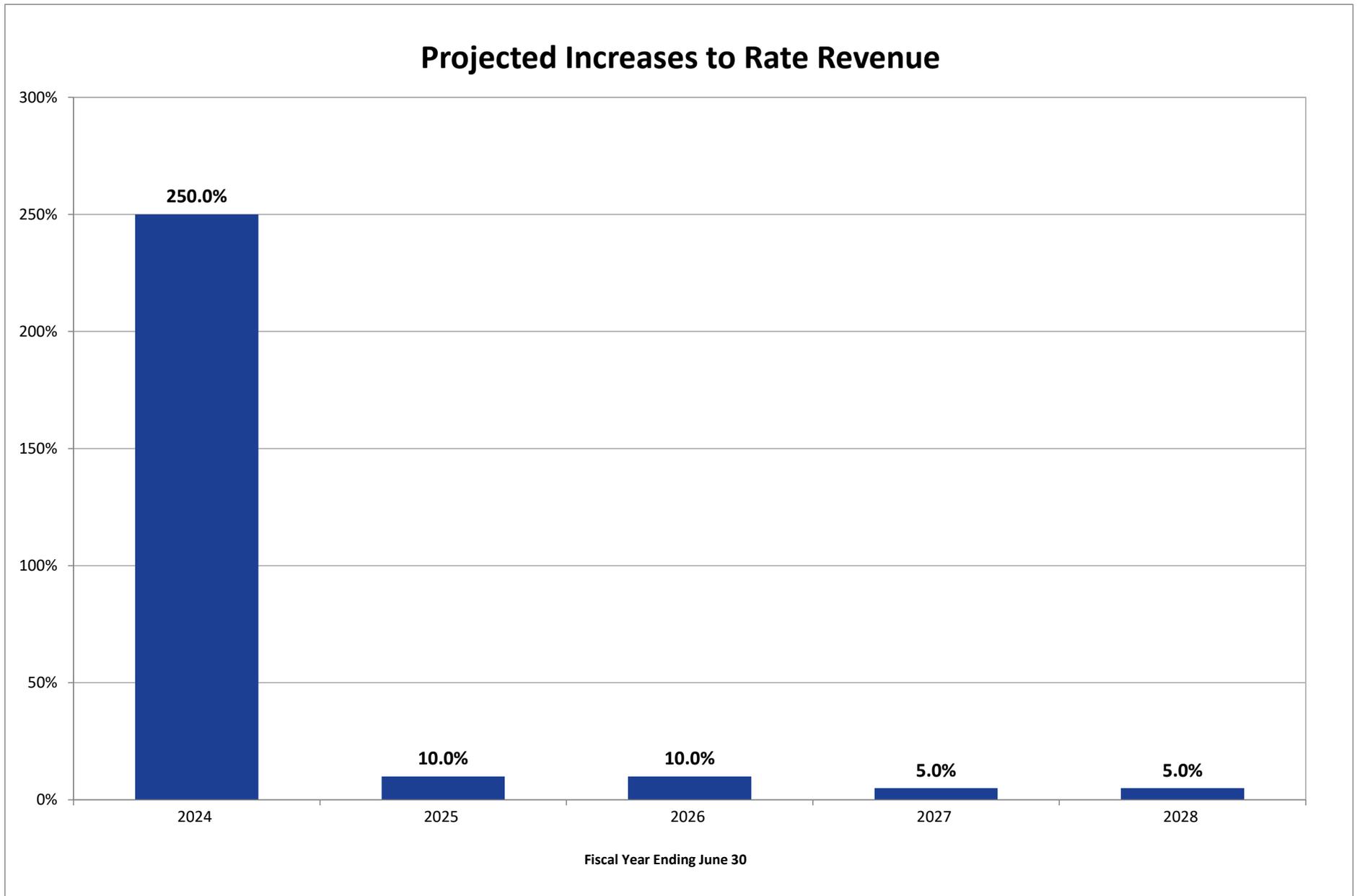


TABLE 3 : REVENUE FORECAST¹

DESCRIPTION	Basis	Actuals		5-Year Projected Rate Period					Projected				
		FY 2021/22	FY 2022/23	FY 2023/24	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30	FY 2030/31	FY 2031/32	FY 2032/33
Rate Revenue													
Water Service Charge - Recycled Water	1	\$ 151,038	\$ 226,361	\$ 207,000	\$ 210,726	\$ 214,308	\$ 217,952	\$ 221,657	\$ 225,425	\$ 229,257	\$ 232,925	\$ 236,652	\$ 240,439
Other Revenue													
Interest Earnings	See FP	4,101	12,392	-	-	-	-	-	-	-	-	-	-
TOTAL: REVENUE		\$ 155,140	\$ 238,753	\$ 207,000	\$ 210,726	\$ 214,308	\$ 217,952	\$ 221,657	\$ 225,425	\$ 229,257	\$ 232,925	\$ 236,652	\$ 240,439

TABLE 4 : OPERATING EXPENSE FORECAST¹

DESCRIPTION	Basis	Actuals		5-Year Projected Rate Period					Projected				
		FY 2021/22	FY 2022/23	FY 2023/24	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30	FY 2030/31	FY 2031/32	FY 2032/33
Fund 580 - Recycled Water Operations													
Wages - Full time	3	\$ -	\$ 217	\$ 209,085	\$ 216,403	\$ 223,977	\$ 231,816	\$ 239,930	\$ 248,327	\$ 257,019	\$ 266,015	\$ 275,325	\$ 284,961
Health Insurance	3	-	-	35,576	36,821	38,109	39,443	40,824	42,253	43,731	45,262	46,846	48,486
Health-In_Lieu	3	-	-	2,280	2,360	2,442	2,528	2,616	2,708	2,803	2,901	3,002	3,107
Cafeteria Plan Section 125	3	-	-	9,599	9,935	10,282	10,642	11,015	11,400	11,799	12,212	12,640	13,082
PERS Retirement	3	-	1,246	26,843	27,782	28,755	29,761	30,803	31,881	32,997	34,152	35,347	36,584
Benefits - Other	3	-	-	471	488	505	522	541	560	579	599	620	642
Social Security & Medicare	3	-	3	3,204	3,316	3,432	3,552	3,677	3,805	3,938	4,076	4,219	4,367
Worker Comp Insurance	3	-	526	22,467	23,254	24,067	24,910	25,782	26,684	27,618	28,585	29,585	30,621
Info Tech Support Services	2	-	-	54,000	55,620	57,289	59,007	60,777	62,601	64,479	66,413	68,406	70,458
Professional Services	2	13,511	16,694	51,000	52,530	54,106	55,729	57,401	59,123	60,897	62,724	64,605	66,543
Misc Contractual Services	2	-	117,361	2,000	2,060	2,122	2,185	2,251	2,319	2,388	2,460	2,534	2,610
Temp Agency Services	2	-	-	-	-	-	-	-	-	-	-	-	-
General Repairs & Maint	2	-	727	20,000	20,600	21,218	21,855	22,510	23,185	23,881	24,597	25,335	26,095
Postage/Mail/Copy/Printing Svc	2	-	36	5,000	5,150	5,305	5,464	5,628	5,796	5,970	6,149	6,334	6,524
Membership Dues & Subscription	2	-	-	1,000	1,030	1,061	1,093	1,126	1,159	1,194	1,230	1,267	1,305
Conferences - Training	2	-	-	2,000	2,060	2,122	2,185	2,251	2,319	2,388	2,460	2,534	2,610
Office Supplies	2	-	-	500	515	530	546	563	580	597	615	633	652
Operating Supplies	2	-	7,594	123,000	126,690	130,491	134,405	138,438	142,591	146,868	151,274	155,813	160,487
AC Recycled Water	2	36,360	18,437	-	-	-	-	-	-	-	-	-	-
Depreciation	2	222,773	222,255	-	-	-	-	-	-	-	-	-	-
Depreciation - Infrastructure	2	-	-	-	-	-	-	-	-	-	-	-	-
Vehicles	2	-	-	-	-	-	-	-	-	-	-	-	-
Major Equipment	8	-	-	70,000	-	-	-	-	-	-	-	-	-
Transfers Out To Other Funds	8	-	1,196,580	50,000	-	-	-	-	-	-	-	-	-
Retiree Health Benefits	3	-	134	1,973	2,042	2,114	2,188	2,264	2,344	2,426	2,510	2,598	2,689
OPEB	3	-	1,115	1,251	1,295	1,340	1,387	1,436	1,486	1,538	1,592	1,647	1,705
ISF - Bldg Maint	2	-	26,844	39,873	41,069	42,301	43,570	44,877	46,224	47,610	49,039	50,510	52,025
ISF - Legal Services	2	-	514	23,705	24,416	25,149	25,903	26,680	27,481	28,305	29,154	30,029	30,930
Capital Outlay-Contra Account	8	-	-	-	-	-	-	-	-	-	-	-	-
Transfer to Gen Fnd Support Sv	2	-	21,869	138,336	142,486	146,761	151,163	155,698	160,369	165,180	170,136	175,240	180,497
Interest Payments for Internal Loans	See Exh. 3	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL: RECYCLED WATER OPERATIONS EXPENSES		\$ 272,644	\$ 1,632,152	\$ 893,163	\$ 797,921	\$ 823,477	\$ 849,857	\$ 877,086	\$ 905,193	\$ 934,206	\$ 964,155	\$ 995,069	\$ 1,026,980

TABLE 5 : FORECASTING ASSUMPTIONS

INFLATION FACTORS ²	Basis	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Customer Growth ³	1	--	1.80%	1.80%	1.80%	1.70%	1.70%	1.70%	1.70%	1.70%	1.60%	1.60%	1.60%
General Cost Inflation ⁴	2	--	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Labor Cost Inflation ⁵	3	--	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%
Energy ⁶	4	--	7.44%	7.44%	7.44%	7.44%	7.44%	7.44%	7.44%	7.44%	7.44%	7.44%	7.44%
Electricity ⁷	5	--	5.64%	5.64%	5.64%	5.64%	5.64%	5.64%	5.64%	5.64%	5.64%	5.64%	5.64%
Fuel & Utilities ⁸	6	--	5.24%	5.24%	5.24%	5.24%	5.24%	5.24%	5.24%	5.24%	5.24%	5.24%	5.24%
Construction Cost Inflation ⁹	7	--	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%
No Escalation	8	--	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

1. Revenue and expenses for FY 2021/22 through FY 2023/24 provided by the City. Revenues and expenses for all other years are escalated based on the forecasting assumptions located in Table 61. Source files: *Fund 580 Recycled Water Operations.xlsx* & *FY2023-24 Exp Budget Recycled Water*.

2. Expenses are inflated each year by the following annual inflation factor categories.

3. Customer growth is based on service area population growth through FY 2039/40. Source file: *American Canyon 2015 UWMP.pdf*, page 26.

4. General cost inflation is based on the 5-year average annual change in the Consumer Price Index for all Urban Consumers in the San Francisco-Oakland-Hayward, CA area.

5. Labor cost inflation is based on the 5-year average annual change in the Quarterly Census of Employment and Wages for San Francisco County, CA.

6. Energy cost inflation is based on the 5-year average annual change in the Consumer Price Index for all Urban Consumers in the San Francisco-Oakland-Hayward, CA area.

7. Electricity cost inflation is based on the 5-year average change in the Consumer Price Index for San Francisco County.

8. Fuel & Utilities cost inflation is based on the 5-year average annual change in the Consumer Price Index - Average Price Data for Fuels and related products and power. This factor is used for utility costs other than electricity.

9. Construction cost inflation is the 10-year average change in the Construction Cost Index for 2012-2022. Source: Engineering News Record website (<http://enr.construction.com>).

TABLE 6 : CAPITAL FUNDING SUMMARY

CAPITAL FUNDING FORECAST	Actuals		5-Year Projected Rate Period					Projected				
	FY 2021/22	FY 2022/23	FY 2023/24	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30	FY 2030/31	FY 2031/32	FY 2032/33
Funding Sources:												
Grants ¹	\$ 235,463	\$ 243,704	\$ 385,279	\$ 635,554	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Use of Capacity Fee Reserves	-	-	-	16,812	1,989,375	2,059,003	2,131,068	1,756,623	1,818,105	1,881,739	1,947,600	2,015,766
SRF Loan Funding	-	-	-	-	-	-	-	-	-	-	-	-
Use of New Revenue Bond Proceeds	-	-	-	-	-	-	-	-	-	-	-	-
Use of Capital Rehabilitation and Replacement Reserve	-	-	-	-	-	-	-	-	-	-	-	-
Rate Revenue	-	-	-	-	-	-	-	-	-	-	-	-
Total Sources of Capital Funds	\$ 235,463	\$ 243,704	\$ 385,279	\$ 652,367	\$ 1,989,375	\$ 2,059,003	\$ 2,131,068	\$ 1,756,623	\$ 1,818,105	\$ 1,881,739	\$ 1,947,600	\$ 2,015,766
Uses of Capital Funds:												
Total Project Costs	\$ 235,463	\$ 243,704	\$ 385,279	\$ 652,367	\$ 1,989,375	\$ 2,059,003	\$ 2,131,068	\$ 1,756,623	\$ 1,818,105	\$ 1,881,739	\$ 1,947,600	\$ 2,015,766
Capital Funding Surplus (Deficiency)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

1. Grant from American Rescue Plan Act (ARPA) Funds through Napa County for the Recycled Water System Expansion Project (RW17-0100). Source file: RESOLUTION 2022-58.pdf.

CAPITAL IMPROVEMENT PROGRAM FUNDING OPTIONS

Capital Improvement Program Funding Choice	FY 2021/22	FY 2022/23	FY 2023/24	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30	FY 2030/31	FY 2031/32	FY 2032/33
Effective Annual Funding Amount	\$ 235,463	\$ 243,704	\$ 385,279	\$ 652,367	\$ 1,989,375	\$ 2,059,003	\$ 2,131,068	\$ 1,756,623	\$ 1,818,105	\$ 1,881,739	\$ 1,947,600	\$ 2,015,766

CAPITAL IMPROVEMENT PROGRAM

TABLE 7 : CAPITAL IMPROVEMENT PROGRAM COSTS (in Current-Year Dollars)¹

Project No.	Description	FY 2021/22	FY 2022/23	FY 2023/24	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30	FY 2030/31	FY 2031/32	FY 2032/33
Capital Projects²													
NEW	Recycled Water Fill Stations	\$ -	\$ -	\$ 120,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Master Plan Projects - Recycled Water³													
RW1	Tower / Devlin / South Kelly Road	\$ 137,500	\$ 137,500	\$ 137,500	\$ 137,500	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
RW2	Spikerush Circle	31,000	31,000	31,000	31,000	-	-	-	-	-	-	-	-
RW3	Benton Way	59,000	59,000	59,000	59,000	-	-	-	-	-	-	-	-
RW4	Pelleria Drive	-	-	-	32,000	32,000	32,000	32,000	-	-	-	-	-
RW5	Jim Oswald Way / Mezzetta Court / Green Island Road	-	-	-	121,000	121,000	121,000	121,000	-	-	-	-	-
RW6	Hanna Drive	-	-	-	76,000	76,000	76,000	76,000	-	-	-	-	-
RW7	Dodd / Klamath Court	-	-	-	24,000	24,000	24,000	24,000	-	-	-	-	-
RW8	Lombard / Hess Road	-	-	-	88,000	88,000	88,000	88,000	-	-	-	-	-
RW9	Watson Lane	-	-	-	-	135,000	135,000	135,000	135,000	135,000	135,000	135,000	135,000
RW10	Main / South Napa Junction Road	-	-	-	-	299,000	299,000	299,000	299,000	299,000	299,000	299,000	299,000
RW11	Newell Drive	-	-	-	-	205,000	205,000	205,000	205,000	205,000	205,000	205,000	205,000
RW12	PS Upgrade	-	-	-	-	80,000	80,000	80,000	80,000	80,000	80,000	80,000	80,000
RW13	Paoli Loop Road / Northern Vineyards	-	-	-	-	140,000	140,000	140,000	140,000	140,000	140,000	140,000	140,000
RW14	Eucalyptus Drive	-	-	-	-	128,000	128,000	128,000	128,000	128,000	128,000	128,000	128,000
RW15	Broadway / Donaldson Way	-	-	-	-	347,000	347,000	347,000	347,000	347,000	347,000	347,000	347,000
Estimated Future Projects													
Future Projects⁴													
Total: CIP Program Costs (Future-Year Dollars)		\$ 227,500	\$ 227,500	\$ 347,500	\$ 568,500	\$ 1,675,000	\$ 1,675,000	\$ 1,675,000	\$ 1,334,000				

TABLE 8 : CAPITAL IMPROVEMENT PROGRAM COSTS (in Future-Year Dollars)⁵

Project No.	Description	FY 2021/22	FY 2022/23	FY 2023/24	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30	FY 2030/31	FY 2031/32	FY 2032/33
Capital Projects²													
NEW	Recycled Water Fill Stations	\$ -	\$ -	\$ 133,046	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Master Plan Projects - Recycled Water³													
RW1	Tower / Devlin / South Kelly Road	\$ 142,313	\$ 147,293	\$ 152,449	\$ 157,784	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
RW2	Spikerush Circle	32,085	33,208	34,370	35,573	-	-	-	-	-	-	-	-
RW3	Benton Way	61,065	63,202	65,414	67,704	-	-	-	-	-	-	-	-
RW4	Pelleria Drive	-	-	-	36,721	38,006	39,336	40,713	-	-	-	-	-
RW5	Jim Oswald Way / Mezzetta Court / Green Island Road	-	-	-	138,850	143,710	148,740	153,946	-	-	-	-	-
RW6	Hanna Drive	-	-	-	87,212	90,264	93,423	96,693	-	-	-	-	-
RW7	Dodd / Klamath Court	-	-	-	27,541	28,504	29,502	30,535	-	-	-	-	-
RW8	Lombard / Hess Road	-	-	-	100,982	104,516	108,174	111,961	-	-	-	-	-
RW9	Watson Lane	-	-	-	-	160,338	165,949	171,758	177,769	183,991	190,431	197,096	203,994
RW10	Main / South Napa Junction Road	-	-	-	-	355,118	367,547	380,411	393,726	407,506	421,769	436,531	451,810
RW11	Newell Drive	-	-	-	-	243,476	251,997	260,817	269,946	279,394	289,173	299,294	309,769
RW12	PS Upgrade	-	-	-	-	95,015	98,340	101,782	105,345	109,032	112,848	116,798	120,885
RW13	Paoli Loop Road / Northern Vineyards	-	-	-	-	166,276	172,096	178,119	184,353	190,806	197,484	204,396	211,550
RW14	Eucalyptus Drive	-	-	-	-	152,024	157,345	162,852	168,552	174,451	180,557	186,876	193,417
RW15	Broadway / Donaldson Way	-	-	-	-	412,127	426,552	441,481	456,933	472,925	489,478	506,609	524,341
Estimated Future Projects													
Future Projects ⁴													
Total: CIP Program Costs (Future-Year Dollars)		\$ 235,463	\$ 243,704	\$ 385,279	\$ 652,367	\$ 1,989,375	\$ 2,059,003	\$ 2,131,068	\$ 1,756,623	\$ 1,818,105	\$ 1,881,739	\$ 1,947,600	\$ 2,015,766

TABLE 9 : FORECASTING ASSUMPTIONS

Economic Variables	FY 2021/22	FY 2022/23	FY 2023/24	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30	FY 2030/31	FY 2031/32	FY 2032/33
Annual Construction Cost Inflation, Per Engineering News Record ⁶	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%
Cumulative Construction Cost Multiplier from FY 2021/22	1.04	1.07	1.11	1.15	1.19	1.23	1.27	1.32	1.36	1.41	1.46	1.51

- Capital project costs were provided by City Staff in source file: *Water Projects.pdf*.
- Capital projects costs for FY 2021/22 and FY 2022/23 are from source files: 11. *CIP Budget vs Expense Report FY 2021-2022 through Oct 2021.pdf*.
- The City's Recycled Water Master Plan projects were scheduled to begin in 2016; however, the study only includes costs from FY 2021/22 through FY 2034/35. Source file: *2016 Recycled Water Master Plan.pdf*, page 63.
- Future project costs beyond FY 2034/35 are calculated based on the City's 10-year average.
- Capital improvement projects are inflated to future year estimated costs with ENR CCI for the region. Source: Engineering News Record website (<http://enr.construction.com>).
- For reference purposes, the annual Construction Cost Inflation percentage is the 10-year average change in the Construction Cost Index for September 2012-2022 (3.5%). Source: Engineering News Record website (<http://enr.construction.com>).

TABLE 10 : EXISTING DEBT OBLIGATIONS

EXISTING DEBT OBLIGATIONS	Actuals	Actuals	5-Year Projected Rate Period					Projected				
	FY 2021/22	FY 2022/23	FY 2023/24	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30	FY 2030/31	FY 2031/32	FY 2032/33
Interfund Loans												
Water Operations to Recycled Water Fund												
Advance from Water Operations 510 to Recycled Water Operations 580												
Original Loan Amount (June 20, 2023)	\$ 1,136,140											
Accrued Interest (LAIF Rate + 2%)	981											
Annual Debt Service¹			\$44,061	\$44,061	\$44,061	\$44,061	\$44,061	\$44,061	\$44,061	\$44,061	\$44,061	\$44,061
Water Operations to Recycled Water Fund												
Advance from Water Operations 510 to Recycled Water Operations 580												
Original Loan Amount (September 21, 2021)	\$ 128,189											
Accrued Interest (LAIF Rate + 2%)	11,706											
Annual Debt Service²					\$ 5,421	\$ 5,421	\$ 5,421	\$ 5,421	\$ 5,421	\$ 5,421	\$ 5,421	\$ 5,421
Wastewater Capacity to Recycled Water Fund												
Advance from WW Capacity 550 to Recycled Water Operations 580												
Original Loan Amount (March 17, 2011)	\$ 1,070,000											
Accrued Interest (LAIF Rate + 2%)	205,869											
Annual Debt Service³					\$ 49,438	\$ 49,438	\$ 49,438	\$ 49,438	\$ 49,438	\$ 49,438	\$ 49,438	\$ 49,438
Wastewater Capacity to Recycled Water Fund												
Advance from WW Capacity 550 to Recycled Water Operations 580												
Original Loan Amount (December 15, 2009)	\$ 304,614											
Accrued Interest (LAIF Rate + 2%)	58,577											
Annual Debt Service⁴					\$ 14,073	\$ 14,073	\$ 14,073	\$ 14,073	\$ 14,073	\$ 14,073	\$ 14,073	\$ 14,073
Wastewater Capacity to Recycled Water Fund												
Advance from WW Capacity 550 to Recycled Water Operations 580												
Original Loan Amount (December 15, 2009)	\$ 3,532,410											
Accrued Interest (LAIF Rate + 2%)	454,994											
Annual Debt Service⁵			\$ 154,504	\$ 154,504	\$ 154,504	\$ 154,504	\$ 154,504	\$ 154,504	\$ 154,504	\$ 154,504	\$ 154,504	\$ 154,504

1. Funds advanced for the Recycled Water Expansion Project. Repayment scheduled to begin FY 2023/24.
2. Funds advanced for Green Island Recycled Waterline Project. Repayment scheduled to begin FY 2025/26.
3. Funds advanced for the Green Island Road Recycled Waterline Project. Repayment scheduled to begin FY 2025/26.
4. Funds advanced for the Recycled Water Pump Station Upgrade. Repayment scheduled to begin FY 2025/26.
5. Funds advance for various CIP projects. Repayment scheduled to begin FY 2025/26.

TABLE 11 : EXISTING ANNUAL DEBT OBLIGATIONS TO BE SATISFIED BY WATER RATES

Annual Obligations	FY 2021/22	FY 2022/23	FY 2023/24	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30	FY 2030/31	FY 2031/32	FY 2032/33
Existing Interfund Loan Repayment	\$ -	\$ -	\$ 198,566	\$ 198,566	\$ 267,497	\$ 267,497	\$ 267,497	\$ 267,497	\$ 267,497	\$ 267,497	\$ 267,497	\$ 267,497

TABLE 12 : CURRENT RECYCLED WATER RATE SCHEDULE

Recycled Water Rate Schedule ¹	Current Rates Jan. 1, 2023
Monthly Fixed Service Charges	
Recycled Water²	
< 1" meter	\$26.56
1" meter	\$44.42
1 1/2" meter	\$88.75
2" meter	\$141.99
3" meter	\$283.98
4" meter	\$443.74
6" meter	\$887.48
8" meter	\$1,420.06
Variable Rates for All Water Consumed (in \$/hcf)³	
Recycled Water	\$0.90

1. Rates available on the City website. Source: <https://www.cityofamericancanyon.org>.
2. Green Island Vineyard is charged different rates based on contract terms.
3. HCF = hundred cubic feet (748 gallons).

TABLE 13 : CLASSIFICATION OF EXPENSES FOR COST OF SERVICE ANALYSIS

Classification of Expenses							
Budget Categories	Total Revenue	Commodity	Capacity	Customer	Basis of Classification		
	FY 2023/24	(COM)	(CAP)	(CA)	(COM)	(CAP)	(CA)
Fund 580 - Recycled Water Operations							
Wages - Full time	\$ 209,085	\$ 104,543	\$ 83,634	\$ 20,909	50.0%	40.0%	10.0%
Health Insurance	35,576	17,788	14,230	3,558	50.0%	40.0%	10.0%
Health-In_Lieu	2,280	1,140	912	228	50.0%	40.0%	10.0%
Cafeteria Plan Section 125	9,599	4,799	3,839	960	50.0%	40.0%	10.0%
PERS Retirement	26,843	13,421	10,737	2,684	50.0%	40.0%	10.0%
Benefits - Other	471	236	188	47	50.0%	40.0%	10.0%
Social Security & Medicare	3,204	1,602	1,282	320	50.0%	40.0%	10.0%
Worker Comp Insurance	22,467	11,234	8,987	2,247	50.0%	40.0%	10.0%
Info Tech Support Services	54,000	27,000	21,600	5,400	50.0%	40.0%	10.0%
Professional Services	51,000	25,500	20,400	5,100	50.0%	40.0%	10.0%
Misc Contractual Services	2,000	1,000	800	200	50.0%	40.0%	10.0%
General Repairs & Maint	20,000	10,000	8,000	2,000	50.0%	40.0%	10.0%
Postage/Mail/Copy/Printing Svc	5,000	2,500	2,000	500	50.0%	40.0%	10.0%
Membership Dues & Subscription	1,000	500	400	100	50.0%	40.0%	10.0%
Conferences - Training	2,000	1,000	800	200	50.0%	40.0%	10.0%
Office Supplies	500	250	200	50	50.0%	40.0%	10.0%
Operating Supplies	123,000	61,500	49,200	12,300	50.0%	40.0%	10.0%
Major Equipment	70,000	35,000	28,000	7,000	50.0%	40.0%	10.0%
Transfers Out To Other Funds	50,000	25,000	20,000	5,000	50.0%	40.0%	10.0%
Retiree Health Benefits	1,973	987	789	197	50.0%	40.0%	10.0%
OPEB	1,251	625	500	125	50.0%	40.0%	10.0%
ISF - Bldg Maint	39,873	19,937	15,949	3,987	50.0%	40.0%	10.0%
ISF - Legal Services	23,705	11,853	9,482	2,371	50.0%	40.0%	10.0%
Transfer to Gen Fnd Support Sv	138,336	69,168	55,334	13,834	50.0%	40.0%	10.0%
Total: Recycled Water Operations Expenses	\$ 893,163	\$ 446,581	\$ 357,265	\$ 89,316	50.0%	40.0%	10.0%
Total: Recycled Water Operations Expenses	\$ 893,163	\$ 446,581	\$ 357,265	\$ 89,316	50.0%	40.0%	10.0%
Total: Operations Expenses - Delivered¹	\$ 732,393	\$ 366,197	\$ 292,957	\$ 73,239	50.0%	40.0%	10.0%
Total: Operations Expenses - Self-Haul¹	\$ 160,769	\$ 80,385	\$ 64,308	\$ 16,077	50.0%	40.0%	10.0%

Current Allocation
 82%
 18%

1. Delivered and self-haul recycled water rates based on direction provided by City staff; that is, 82% of O&M costs attributed to delivered water and 18% to self-haul.

TABLE 14 : CLASSIFICATION OF EXPENSES FOR COST OF SERVICE ANALYSIS, cont.

Classification of Expenses, continued							
Budget Categories	Total Revenue Requirements	Commodity	Capacity	Customer	Basis of Classification		
	FY 2023/24	(COM)	(CAP)	(CA)	(COM)	(CAP)	(CA)
Debt Service Payments							
Outstanding Debt	\$ -	\$ -	\$ -	\$ -	0.0%	100.0%	0.0%
Interfund Loan Repayment	198,566	-	198,566	-	0.0%	100.0%	0.0%
Total Debt Service Payments	\$ 198,566	\$ -	\$ 198,566	\$ -	0.0%	100.0%	0.0%
Total Debt Service Payments - Delivered	\$ 99,283	\$ -	\$ 99,283	\$ -	0.0%	100.0%	0.0%
Total Debt Service Payments - Self-Haul	\$ 99,283	\$ -	\$ 99,283	\$ -	0.0%	100.0%	0.0%
Capital Expenditures							
Rate Funded Capital Expenses	\$ -	\$ -	\$ -	\$ -	0.0%	100.0%	0.0%
Total Capital Expenditures - Delivered	\$ -	\$ -	\$ -	\$ -	0.0%	100.0%	0.0%
Total Capital Expenditures - Self-Haul	\$ -	\$ -	\$ -	\$ -	0.0%	100.0%	0.0%
TOTAL REVENUE REQUIREMENTS	\$ 1,091,728	\$ 446,581	\$ 555,831	\$ 89,316	40.9%	50.9%	8.2%
TOTAL REVENUE REQUIREMENTS - Delivered	\$ 831,676	\$ 366,197	\$ 392,240	\$ 73,239	44.0%	47.2%	8.8%
TOTAL REVENUE REQUIREMENTS - Self-Haul	\$ 260,052	\$ 80,385	\$ 163,591	\$ 16,077	30.9%	62.9%	6.2%
<i>Less: Non-Rate Revenues</i>							
Other Revenue							
Interest Earnings	(22,343)	(9,139)	(11,375)	(1,828)	40.9%	50.9%	8.2%
NET REVENUE REQUIREMENTS	\$ 1,069,386	\$ 437,442	\$ 544,455	\$ 87,488			
<i>Allocation of Revenue Requirements</i>	100.0%	40.9%	50.9%	8.2%			
NET REVENUE REQUIREMENTS - Delivered	\$ 813,355	\$ 358,702	\$ 382,912	\$ 71,740	44.1%	47.1%	8.8%
NET REVENUE REQUIREMENTS - Self-Haul	\$ 256,030	\$ 78,740	\$ 161,543	\$ 15,748	9.7%	19.9%	1.9%

Current Allocation
 50%
 50%
 Current Allocation
 50%
 50%
 Current Allocation
 82%
 18%

TABLE 15 : ADJUSTMENT TO CLASSIFICATION OF EXPENSES FOR COST OF SERVICE ANALYSIS

Classification of Expenses, continued				
Adjustments to Classification of Expenses				
Adjustment for Current Rate Level:	Total	(COM)	(CAP)	(CA)
Test Year (FY 2023/24) Target Rate Rev. After Rate Increases	\$ 1,069,386			
Projected Rate Revenue at Current Rates	\$ 207,000			
Test Year (FY 2023/24) Projected Rate Adjustment	417%			
Adjusted Net Revenue Req'ts	\$ 1,069,386	\$ 437,442	\$ 544,455	\$ 87,488
<i>Percent of Revenue</i>	<i>100.0%</i>	<i>40.9%</i>	<i>50.9%</i>	<i>8.2%</i>

TABLE 16 : NET REVENUE REQUIREMENTS PER COSA RESULTS

<i>Net Revenue Requirements - Per COSA Results</i> <i>59% Fixed / 41% Variable</i>	Total Rate Revenue Requirements FY 2023/24	Commodity Related Costs	Capacity Related Costs	Customer Related Costs
Rate-Design Adjustments to Fixed/Variable %	100.0%	40.9%	50.9%	8.2%
Rate-Design Adjustments to Fixed/Variable (\$)	\$1,069,386	\$437,442	\$544,455	\$87,488

TABLE 17 : REVISED NET REVENUE REQUIREMENTS PER COSA RESULTS

Rate-Design Adjustments to Fixed/Variable %	100.0%	40.9%	50.9%	8.2%
Rate-Design Adjustments to Fixed/Variable (\$)	\$1,069,386	\$437,442	\$544,455	\$87,488

TABLE 18 : REVISED NET REVENUE REQUIREMENTS - (40% FIXED/60% VOLUMETRIC) - ALTERNATIVE 2

Rate-Design Adjustments to Fixed/Variable %	100.0%	60.0%	34.5%	5.5%
Rate-Design Adjustments to Fixed/Variable (\$)	\$1,069,386	\$641,631	\$368,535	\$59,220

TABLE 19 : REVISED NET REVENUE REQUIREMENTS - (20% FIXED/80% VOLUMETRIC) - ALTERNATIVE 3

Rate-Design Adjustments to Fixed/Variable %	100.0%	80.0%	17.2%	2.8%
Rate-Design Adjustments to Fixed/Variable (\$)	\$1,069,386	\$855,509	\$184,267	\$29,610

TABLE 20 : ALLOCATION OF RECYCLED WATER REVENUE REQUIREMENTS

PROPOSED ALTERNATIVE		
Recycled Water Classification Components	Cost-of-Service Net Revenue Requirements (2023/24) ¹	
Variable (Collected from Vol. Rates)	\$ 855,509	80%
Fixed (Collected from Fixed Charges)	213,877	20%
Net Revenue Requirement	\$ 1,069,386	100%

1. For calculation, see the RW - Funct. & Classification tab.

TABLE 21 : ALLOCATION OF NET REVENUE REQUIREMENTS - FY 2023/24

PROPOSED ALTERNATIVE								
Recycled Water Customers	Cost Allocation Factors			Cost Classifications			RW Volumetric Rate (\$/hcf) ⁵	RW Fixed Charges (\$/Eq. Meter/Month) ⁶
	Annual RW Consumption ¹	Equivalent Meters ²		Variable Costs ³	Fixed Costs ⁴	Net Revenue Req'ts		
		No. of Equiv. Meters	% of Equiv. Meters					
Recycled Water								
Recycled Water	272,268	458	100.0%	\$ 855,509	\$ 213,877	\$ 1,069,386	\$3.14	\$38.89
Total Net Revenue Requirement	272,268	458	100.0%	\$ 855,509	\$ 213,877	\$ 1,069,386	--	--

1. Source file: 2020 Urban Water Management Plan , Figure 6.4.

2. Number of meters by size times the hydraulic capacity factor for each meter size. Source: AWWA, Manual M1, Table B-1 & AWWA, Manual M6, Table 5-3.

3. Total Variable Costs times the proportional share of annual RW consumption.

4. Fixed costs times the percent of equivalent meters.

5. Total Variable Costs divided by Total Annual RW Consumption.

6. Total Fixed Costs divided by total Equivalent Meters. This provides the basis for monthly fixed charges for each meter size.

TABLE 22 : CALCULATION OF MONTHLY FIXED METER SERVICE CHARGES FOR FY 2023/24

PROPOSED ALTERNATIVE									
Number of RW Meters by Class and Size ¹	FY 2023/24								Total
	< 1" meter	1" meter	1 1/2" meter	2" meter	3" meter	4" meter	6" meter	8" meter	
Recycled Water									
Recycled Water	2	13	14	28	13	6	0	0	76
Total Meters/Accounts	2	13	14	28	13	6	0	0	76
<i>Hydraulic Capacity Factor²</i>	<i>1.00</i>	<i>1.67</i>	<i>3.33</i>	<i>5.33</i>	<i>10.67</i>	<i>16.67</i>	<i>33.33</i>	<i>53.33</i>	
Total Equivalent Meters	2	22	47	149	139	100	0	0	458
Monthly Fixed Service Charges									
Fixed Charge (\$/EM/month) ³	\$38.89	\$38.89	\$38.89	\$38.89	\$38.89	\$38.89	\$38.89	\$38.89	\$38.89
Fixed Monthly Charge	\$38.89	\$64.81	\$129.62	\$207.40	\$414.79	\$648.11	\$1,296.23	\$2,073.96	
Annual Fixed Costs Allocated to Monthly Meter Charges									
Total Revenue from RW Meter Charges	\$ 933	\$ 10,111	\$ 21,777	\$ 69,685	\$ 64,708	\$ 46,664	\$ -	\$ -	\$ 213,877

1. Meter by Class and Size are based on June 2022 customer billing data.

2. Source: Principles of Water Rates, Fees, and Charges , Manual M1, AWWA, Table B-1.

3. Cost per month per equivalent meter. Monthly fixed charges are set for each meter size using the hydraulic capacity factors and total equivalent meters.

TABLE 23 : METER EQUIVALENCY FACTORS USED IN FIXED CHARGES CALCULATION

Meter Size	Standard Meters	
	Meter Capacity	Equivalency to 3/4 inch
	<u>Displacement Meters</u>	
5/8 inch	20	1.00
3/4 inch	30	1.00
1 inch	50	1.67
1.5 inch	100	3.33
2 inch	160	5.33
	<u>Compound Class I Meters</u>	
3 inch	320	10.67
4 inch	500	16.67
6 inch	1,000	33.33
8 inch	1,600	53.33
	<u>Turbine Class II Meters</u>	
10 inch	4,200	140.00
12 inch	5,300	176.67

1. Per AWWA, M1 Manual, Table B-1.

TABLE 24 : ALLOCATION OF RECYCLED WATER REVENUE REQUIREMENTS

Recycled Water Classification Components	Total ¹	Net Revenue Requirements - Delivered (2023/24)		Net Revenue Requirements - Self-Haul(2023/24)	
Variable (Collected from Vol. Rates)	\$ 437,442	\$ 650,684	80%	\$ 256,030	100%
Fixed (Collected from Fixed Charges)	631,944	162,671	20%	-	0%
Net Revenue Requirement	\$ 1,069,386	\$ 813,355	100%	\$ 256,030	100%

1. For calculation, see the RW - Funct. & Classification tab.

TABLE 25 : ALLOCATION OF NET REVENUE REQUIREMENTS - FY 2023/24

Recycled Water Customers	Cost Allocation Factors			Cost Classifications			RW Volumetric Rate (\$/hcf) ⁵	RW Fixed Charges (\$/Eq. Meter/Month) ⁶
	Annual RW Consumption ¹	Equivalent Meters ²		Variable Costs ³	Fixed Costs ⁴	Net Revenue Req'ts		
		No. of Equiv. Meters	% of Equiv. Meters					
Recycled Water								
Delivered	136,134	458	100.0%	\$ 650,684	\$ 162,671	\$ 813,355	\$4.78	\$29.58
Self-Haul	136,134	0	0.0%	256,030	-	256,030	\$1.88	n/a
Total Net Revenue Requirement	272,268	458	0.0%	\$ 256,030	\$ -	\$ 256,030	--	--

- Source file: 2020 Urban Water Management Plan , Figure 6.4.
- Number of meters by size times the hydraulic capacity factor for each meter size. Source: AWWA, Manual M1, Table B-1 & AWWA, Manual M6, Table 5-3.
- Total Variable Costs times the proportional share of annual RW consumption.
- Fixed costs times the percent of equivalent meters.
- Total Variable Costs divided by Total Annual RW Consumption.
- Total Fixed Costs divided by total Equivalent Meters. This provides the basis for monthly fixed charges for each meter size.

TABLE 26 : CALCULATION OF MONTHLY FIXED METER SERVICE CHARGES FOR FY 2023/24

Number of RW Meters by Class and Size ¹	FY 2023/24								Total
	< 1" meter	1" meter	1 1/2" meter	2" meter	3" meter	4" meter	6" meter	8" meter	
Recycled Water									
Delivered	2	13	14	28	13	6	0	0	76
Total Meters/Accounts	2	13	14	28	13	6	0	0	76
Hydraulic Capacity Factor ²	1.00	1.67	3.33	5.33	10.67	16.67	33.33	53.33	
Total Equivalent Meters	2	22	47	149	139	100	0	0	458
Monthly Fixed Service Charges									
Fixed Charge (\$/EM/month) ³	\$29.58	\$29.58	\$29.58	\$29.58	\$29.58	\$29.58	\$29.58	\$29.58	
Fixed Monthly Charge	\$29.58	\$49.29	\$98.59	\$157.74	\$315.48	\$492.94	\$985.89	\$1,577.42	
Annual Fixed Costs Allocated to Monthly Meter Charges									
Total Revenue from RW Meter Charges	\$ 710	\$ 7,690	\$ 16,563	\$ 53,001	\$ 49,215	\$ 35,492	\$ -	\$ -	\$ 162,671

- Meter by Class and Size are based on June 2022 customer billing data.
- Source: Principles of Water Rates, Fees, and Charges , Manual M1, AWWA, Table B-1.
- Cost per month per equivalent meter. Monthly fixed charges are set for each meter size using the hydraulic capacity factors and total equivalent meters.

TABLE 27 : METER EQUIVALENCY FACTORS USED IN FIXED CHARGES CALCULATION

Meter Size	Standard Meters	
	Meter Capacity	Equivalency to 3/4 inch
	<u>Displacement Meters</u>	
5/8 inch	20	1.00
3/4 inch	30	1.00
1 inch	50	1.67
1.5 inch	100	3.33
2 inch	160	5.33
	<u>Compound Class I Meters</u>	
3 inch	320	10.67
4 inch	500	16.67
6 inch	1,000	33.33
8 inch	1,600	53.33
	<u>Turbine Class II Meters</u>	
10 inch	4,200	140.00
12 inch	5,300	176.67

1. Per AWWA, M1 Manual, Table B-1.

TABLE 28 : CURRENT VS. PROPOSED RATES

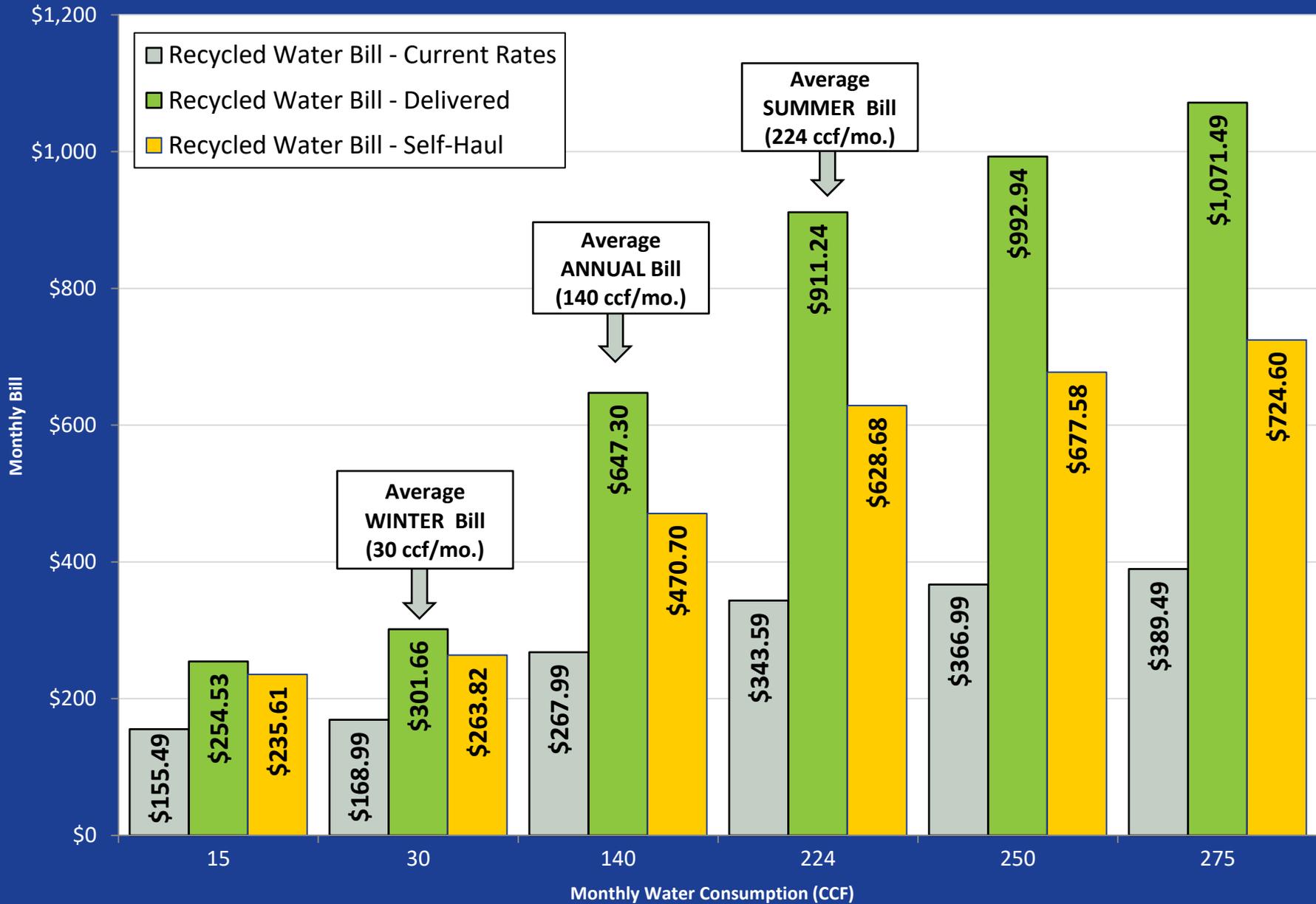
Recycled Water Rate Schedule	Current Rates	PROPOSED ALTERNATIVE				
		Proposed Rates				
		FY 2023/24	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28
<i>Projected Increase in Rate Revenue per Financial Plan:</i>		250.00%	10.00%	10.00%	5.00%	5.00%
Monthly Fixed Service Charges (in \$/mo) - Delivered Only						
< 1" meter	\$26.56	\$29.58	\$32.53	\$35.79	\$37.58	\$39.46
1" meter	\$44.42	\$49.29	\$54.22	\$59.65	\$62.63	\$65.76
1 1/2" meter	\$88.75	\$98.59	\$108.45	\$119.29	\$125.26	\$131.52
2" meter	\$141.99	\$157.74	\$173.52	\$190.87	\$200.41	\$210.43
3" meter	\$283.98	\$315.48	\$347.03	\$381.73	\$400.82	\$420.86
4" meter	\$443.74	\$492.94	\$542.24	\$596.46	\$626.28	\$657.60
6" meter	\$887.48	\$985.89	\$1,084.47	\$1,192.92	\$1,252.57	\$1,315.20
8" meter	\$1,420.06	\$1,577.42	\$1,735.16	\$1,908.67	\$2,004.11	\$2,104.31
Commodity Charges for All Water Consumed (in \$/hcf)						
Variable Charge - Delivered	\$0.90	\$4.78	\$5.26	\$5.78	\$6.07	\$6.38
Variable Charge - Self-Haul	n/a	\$1.88	\$2.07	\$2.28	\$2.39	\$2.51

TABLE 29 : CURRENT VS. PROPOSED RATES

Recycled Water Rate Schedule	Current Rates	PROPOSED ALTERNATIVE				
		Proposed Rates				
		FY 2023/24	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28
<i>Projected Increase in Rate Revenue per Financial Plan:</i>						
		250.00%	10.00%	10.00%	5.00%	5.00%
Monthly Fixed Service Charges (in \$/mo)						
< 1" meter	\$26.56	\$38.89	\$42.78	\$47.05	\$49.41	\$51.88
1" meter	\$44.42	\$64.81	\$71.29	\$78.42	\$82.34	\$86.46
1 1/2" meter	\$88.75	\$129.62	\$142.58	\$156.84	\$164.69	\$172.92
2" meter	\$141.99	\$207.40	\$228.14	\$250.95	\$263.50	\$276.67
3" meter	\$283.98	\$414.79	\$456.27	\$501.90	\$526.99	\$553.34
4" meter	\$443.74	\$648.11	\$712.92	\$784.22	\$823.43	\$864.60
6" meter	\$887.48	\$1,296.23	\$1,425.85	\$1,568.43	\$1,646.85	\$1,729.20
8" meter	\$1,420.06	\$2,073.96	\$2,281.36	\$2,509.49	\$2,634.97	\$2,766.71
Commodity Charges for All Water Consumed (in \$/hcf)						
Variable Charge	\$0.90	\$3.14	\$3.46	\$3.80	\$3.99	\$4.19
Variable Charge - Self-Haul	n/a	\$1.88	\$2.07	\$2.28	\$2.39	\$2.51

Recycled Water Bill Comparison

Current vs. Proposed FY 2023/24 Rates (2" Meter)



Appendix C. Sewer Rate Study Tables and Figures

TABLE 1 : FINANCIAL PLAN AND SUMMARY OF REVENUE REQUIREMENTS

RATE REVENUE REQUIREMENTS SUMMARY	Actuals	Actuals	5-Year Projected Rate Period					Projected				
	FY 2021/22	FY 2022/23	FY 2023/24	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30	FY 2030/31	FY 2031/32	FY 2032/33
Sources of Funds¹												
<i>Rate Revenue:</i>												
Sewer Rate Revenue	\$ 4,824,937	\$ 4,940,178	\$ 5,042,690	\$ 5,128,416	\$ 5,215,599	\$ 5,304,264	\$ 5,394,436	\$ 5,486,142	\$ 5,573,920	\$ 5,663,103	\$ 5,753,713	\$ 5,845,772
Other Revenue	82,867	171,545	98,593	100,269	101,974	103,707	105,470	107,263	108,979	110,723	112,495	114,295
Interest Earnings	28,277	166,693	120,000	22,911	22,211	24,657	21,576	24,547	25,380	26,255	27,142	28,071
Total: Sources of Funds	\$ 4,936,080	\$ 5,278,416	\$ 5,261,283	\$ 5,251,596	\$ 5,339,784	\$ 5,432,629	\$ 5,521,483	\$ 5,617,952	\$ 5,708,280	\$ 5,800,081	\$ 5,893,350	\$ 5,988,138
Uses of Water Funds												
<i>Operating Expenses:</i>												
570 - Wastewater Treatment Plant	\$ 3,075,847	\$ (1,723,127)	\$ 1,952,137	\$ 2,041,362	\$ 2,121,194	\$ 4,663,008	\$ 2,291,046	\$ 2,381,374	\$ 2,475,521	\$ 2,573,662	\$ 2,675,976	\$ 2,782,656
575 - Wastewater Collections	509,518	1,181,331	835,861	873,335	902,822	933,308	964,830	997,421	1,031,118	1,065,960	1,101,985	1,139,234
585 - Wastewater Environmental Compliance	414,090	489,734	856,655	887,901	915,994	944,981	974,890	1,005,750	1,037,594	1,070,451	1,104,354	1,139,337
810 - Non Departmental	1,820,335	2,157,776	2,615,743	2,700,825	2,783,879	2,869,503	2,957,779	3,048,788	3,142,618	3,239,356	3,339,093	3,441,923
Subtotal: Operating Expenses	\$ 5,819,790	\$ 2,105,714	\$ 6,260,396	\$ 6,503,425	\$ 6,723,889	\$ 9,410,800	\$ 7,188,544	\$ 7,433,334	\$ 7,686,851	\$ 7,949,428	\$ 8,221,408	\$ 8,503,149
<i>Other Expenditures:</i>												
Existing Debt Service	\$ 1,115,315	\$ 206,640	\$ 215,074	\$ 223,856	\$ 224,168	\$ 239,297	\$ 249,385	\$ 222,191	\$ 231,597	\$ 241,391	\$ 249,843	\$ 259,060
Future Debt Service	-	-	-	-	-	-	-	-	-	-	-	-
Rate-Funded Capital Expenses	345,549	3,201,161	2,573,447	197,942	1,111,368	14,992	2,230,867	1,406,839	332,901	-	-	-
Subtotal: Other Expenditures	\$ 1,460,864	\$ 3,407,800	\$ 2,788,521	\$ 421,799	\$ 1,335,536	\$ 254,288	\$ 2,480,251	\$ 1,629,030	\$ 564,498	\$ 241,391	\$ 249,843	\$ 259,060
Total: Uses of Funds	\$ 7,280,654	\$ 5,513,515	\$ 9,048,917	\$ 6,925,223	\$ 8,059,425	\$ 9,665,088	\$ 9,668,795	\$ 9,062,364	\$ 8,251,349	\$ 8,190,819	\$ 8,471,251	\$ 8,762,209
<i>Plus: Revenue from Rate Increases²</i>	-	-	630,336	1,923,156	3,077,203	4,141,569	4,755,735	4,836,583	4,913,968	4,992,591	5,072,473	5,153,633
Annual Surplus/(Deficit)	\$ (2,344,574)	\$ (235,099)	\$ (3,157,298)	\$ 249,528	\$ 357,562	\$ (90,890)	\$ 608,423	\$ 1,392,171	\$ 2,370,899	\$ 2,601,853	\$ 2,494,572	\$ 2,379,561
Net Revenue Req. (Total Uses less Non-Rate Revenue)	\$ 7,169,511	\$ 5,175,276	\$ 8,830,324	\$ 6,802,043	\$ 7,935,240	\$ 9,536,723	\$ 9,541,748	\$ 8,930,554	\$ 8,116,989	\$ 8,053,841	\$ 8,331,613	\$ 8,619,843
Total Rate Revenue After Rate Increases	\$ 4,824,937	\$ 4,940,178	\$ 6,303,363	\$ 7,692,624	\$ 8,762,206	\$ 9,980,503	\$ 10,150,172	\$ 10,322,725	\$ 10,487,888	\$ 10,655,694	\$ 10,826,185	\$ 10,999,404
Projected Annual Rate Revenue Increase	0.00%	0.00%	25.00%	20.00%	12.00%	12.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Cumulative Increase from Annual Revenue Increases	0.00%	0.00%	25.00%	50.00%	68.00%	88.16%	88.16%	88.16%	88.16%	88.16%	88.16%	88.16%
Debt Coverage After Rate Increase	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

1. Revenue and expenses for FY 2021/22 through FY 2023/24 provided by the City. Source files: Fund 540 Wastewater Operations & Fund 510 - 580 FY 23-24 Budget Status as of 09-19-2023 .
2. Revenue from rate increases assumes an implementation date of January 1, 2024. For each year thereafter, the assumption is that new rates will be implemented on January 1st of each year.

Selection of Financial Plan Alternative		1											
Financial Plan Alternatives		FY 2021/22	FY 2022/23	FY 2023/24	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30	FY 2030/31	FY 2031/32	FY 2032/33
1	Alternative 1 - Full Cost Recovery Rates ¹	0.00%	0.00%	25.00%	20.00%	12.00%	12.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2	Alternative 2 - Phased-in Rate Increases ²	0.00%	0.00%	15.00%	15.00%	15.00%	15.00%	10.00%	0.00%	0.00%	0.00%	0.00%	0.00%
3	Alternative 3 - Minimal Rate Increases ³	0.00%	0.00%	5.00%	5.00%	5.00%	5.00%	5.00%	0.00%	0.00%	0.00%	0.00%	0.00%
4	No Rate Increases	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

1. Alternative 1: Scenario 1 - Rates needed to meet all revenue requirements and meet the target reserve levels (Large increase followed by smaller increases).
2. Alternative 2: Scenario 2 - Large increases phased in over two years, followed by smaller increases (Reserves drop below target level).
3. Alternative 3: Scenario 3 - Smaller increases (Reserves drop below target level).

TABLE 2 : RESERVE FUND SUMMARY

SUMMARY OF CASH ACTIVITY SEWER FUND RESERVES	Actuals	Actuals	5-Year Projected Rate Period					Projected				
	FY 2021/22	FY 2022/23	FY 2023/24	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30	FY 2030/31	FY 2031/32	FY 2032/33
Total Beginning Cash¹	\$ 8,702,214											
Unrestricted Reserves:												
Operating Reserve												
Beginning Reserve Balance	\$ 8,314,998	\$ 7,733,712	\$ 5,200,513	\$ 1,677,226	\$ 1,626,000	\$ 1,805,087	\$ 1,579,529	\$ 1,797,000	\$ 1,858,000	\$ 1,922,000	\$ 1,987,000	\$ 2,055,000
Plus: Net Cash Flow (After Rate Increases)	(2,344,574)	(235,099)	(3,157,298)	249,528	357,562	(90,890)	608,423	1,392,171	2,370,899	2,601,853	2,494,572	2,379,561
Plus: Transfer of Debt Reserve Surplus	-	-	-	-	-	-	-	-	-	-	-	-
Plus: Interest Earnings	113,583	193,343	130,013	22,911	22,211	24,657	21,576	24,547	25,380	26,255	27,142	28,071
Less: Transfer out to Capacity Fee Reserve (Interfund Loan)	-	(159,325)	(159,325)	(159,325)	(159,325)	(159,325)	(159,325)	(159,325)	(159,325)	(159,325)	(159,325)	-
Less: Transfer Out to Capital Replacement Reserve	(4,629,007)	(4,904,642)	(336,678)	(164,341)	(41,362)	-	(253,205)	(1,196,393)	(2,172,955)	(2,403,783)	(2,294,390)	(2,336,632)
Ending Operating Reserve Balance	\$ 1,455,000	\$ 2,627,989	\$ 1,677,226	\$ 1,626,000	\$ 1,805,087	\$ 1,579,529	\$ 1,797,000	\$ 1,858,000	\$ 1,922,000	\$ 1,987,000	\$ 2,055,000	\$ 2,126,000
Target Ending Balance (90 days of O&M)²	\$ 1,455,000	\$ 526,000	\$ 1,565,000	\$ 1,626,000	\$ 1,681,000	\$ 2,353,000	\$ 1,797,000	\$ 1,858,000	\$ 1,922,000	\$ 1,987,000	\$ 2,055,000	\$ 2,126,000
Capital Rehabilitation & Replacement Reserve												
Beginning Reserve Balance	\$ 387,216	\$ 145,027	\$ 546,284	\$ 882,962	\$ 1,047,302	\$ 1,088,664	\$ 1,088,664	\$ 1,341,869	\$ 2,527,393	\$ 3,580,955	\$ 4,447,200	\$ 5,116,353
Plus: Grant Proceeds	-	-	-	-	-	-	-	-	-	-	-	-
Plus: Transfer of Operating Reserve Surplus	4,629,007	4,904,642	336,678	164,341	41,362	-	253,205	1,196,393	2,172,955	2,403,783	2,294,390	2,336,632
Less: Use of Reserves for Capital Projects	-	-	-	-	-	-	-	(10,869)	(1,119,393)	(1,537,538)	(1,625,237)	(1,715,751)
Ending Capital Rehab & Replacement Reserve Balance	\$ 5,016,223	\$ 5,049,669	\$ 882,962	\$ 1,047,302	\$ 1,088,664	\$ 1,088,664	\$ 1,341,869	\$ 2,527,393	\$ 3,580,955	\$ 4,447,200	\$ 5,116,353	\$ 5,737,234
Target Ending Balance (3% of Assets)³	\$ 759,000	\$ 852,000	\$ 936,000	\$ 968,000	\$ 1,060,000	\$ 1,156,000	\$ 1,255,000	\$ 1,331,000	\$ 1,408,000	\$ 1,487,000	\$ 1,569,000	\$ 1,655,000
Ending Cash Balance - Excl. Restricted Reserves	\$ 6,471,223	\$ 7,677,658	\$ 2,560,188	\$ 2,673,302	\$ 2,893,751	\$ 2,668,194	\$ 3,138,869	\$ 4,385,393	\$ 5,502,955	\$ 6,434,200	\$ 7,171,353	\$ 7,863,234
Min. Target Ending Cash Balance - Excl. Restricted Reserves	\$ 2,214,000	\$ 1,378,000	\$ 2,501,000	\$ 2,594,000	\$ 2,741,000	\$ 3,509,000	\$ 3,052,000	\$ 3,189,000	\$ 3,330,000	\$ 3,474,000	\$ 3,624,000	\$ 3,781,000
Ending Surplus/(Deficit) Compared to Reserve Targets	\$ 4,257,223	\$ 6,299,658	\$ 59,188	\$ 79,302	\$ 152,751	\$ (840,806)	\$ 86,869	\$ 1,196,393	\$ 2,172,955	\$ 2,960,200	\$ 3,547,353	\$ 4,082,234
Days Cash on Hand	384	529	106	146	135	104	122	182	251	296	319	338
Annual Interest Earnings Rate⁴	1.37%	2.50%	2.50%	1.37%								

1. Beginning cash balance for FY 2021/22 and FY 2022/23 provided by City staff. Source file: *Cash Balances - Enterprise Funds.xlsx*.

2. The Operating Reserve target is set equal to 3 months, or 90 days, of operating expenditures.

3. The Capital Rehabilitation & Replacement Reserve target is set to 3% of net assets. Source files: *8 - City of American Canyon Annual Report FYE 2021.pdf*, page 51.

4. Historical interest earning rates are per the average annual yields for funds invested in LAIF (2017-2021). The source is the California State Treasurer's website: <https://www.treasurer.ca.gov/pmia-laif/historical/annual.asp>.

CHART 1

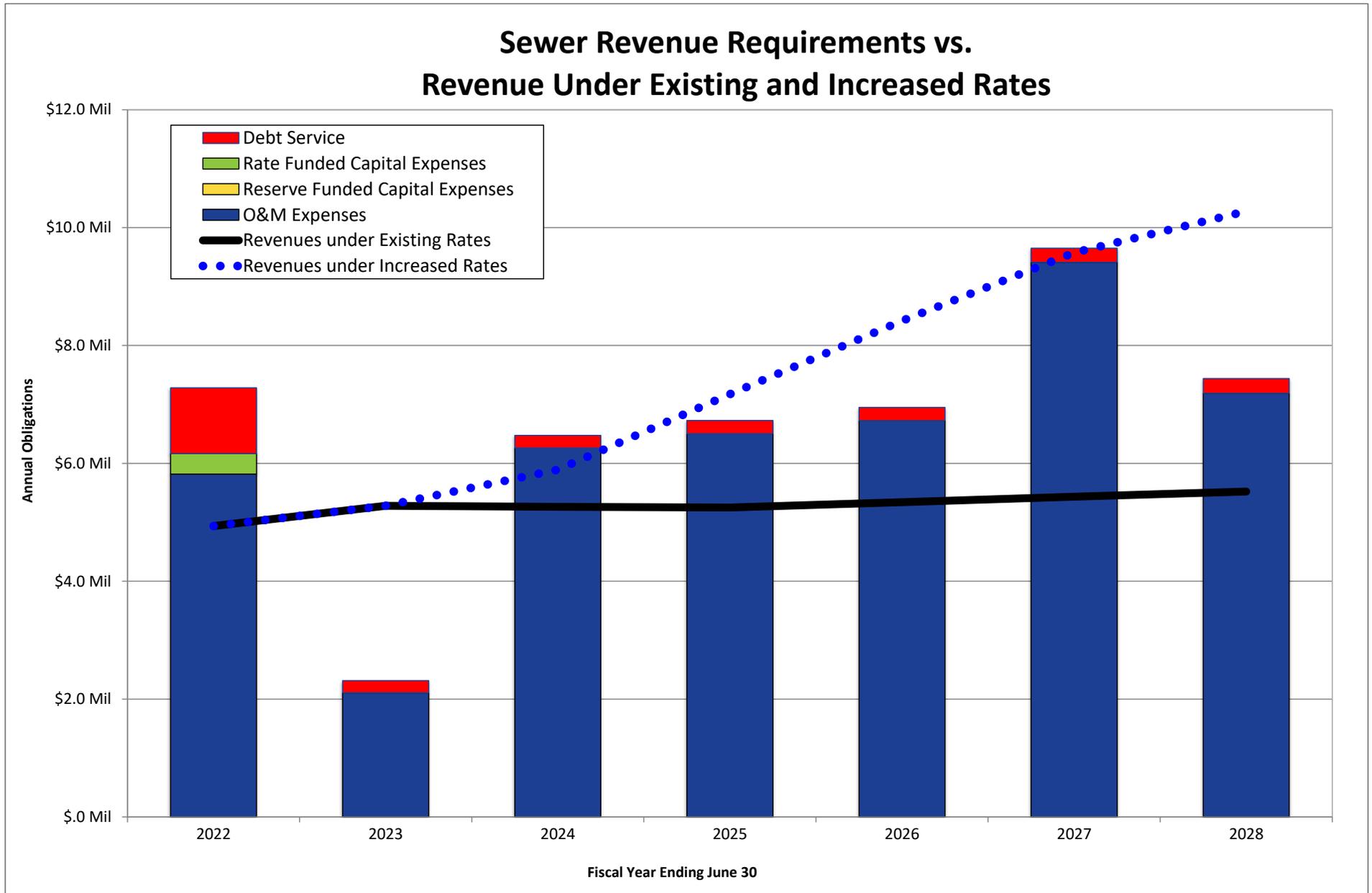


CHART 2

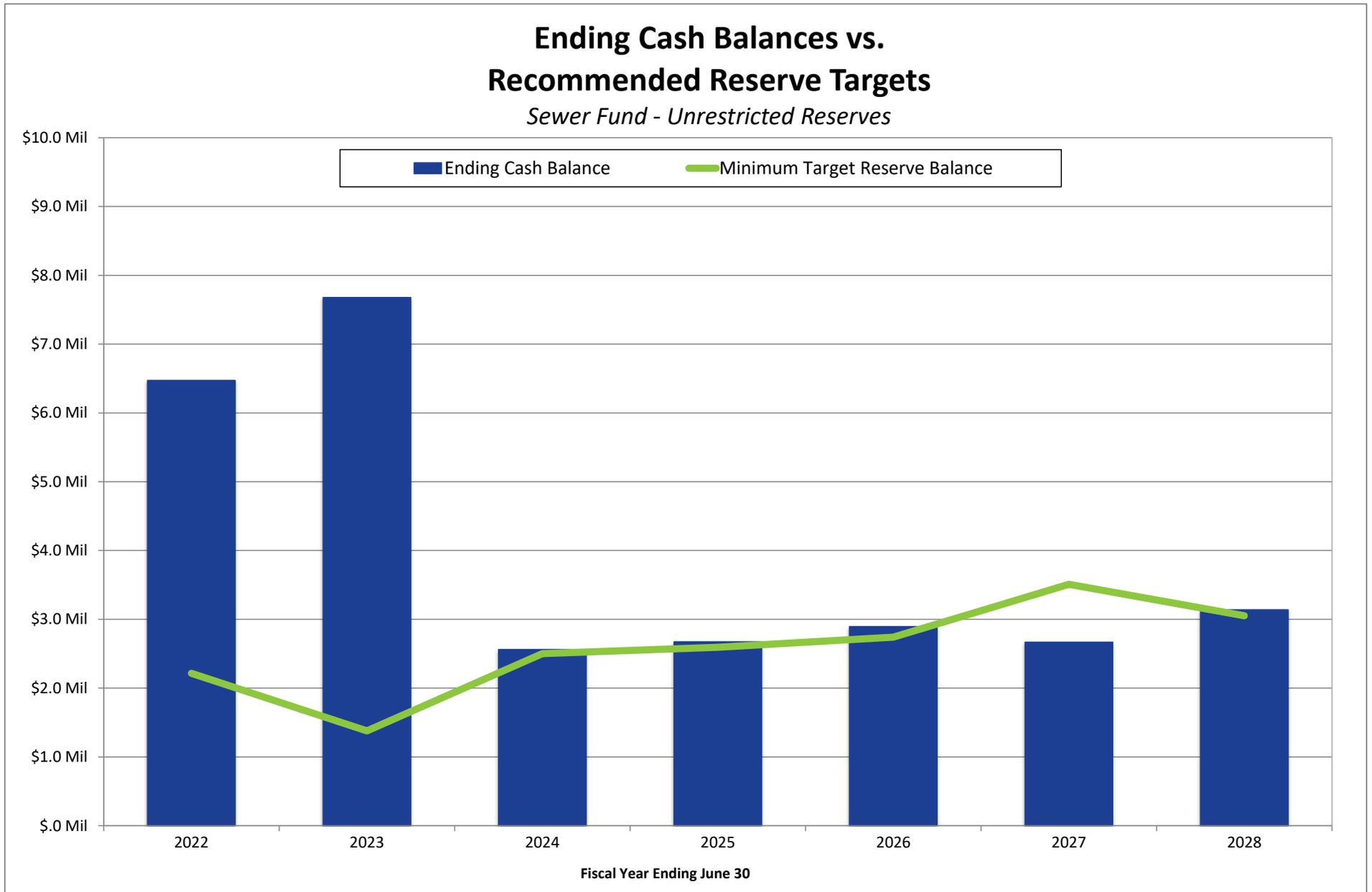


CHART 3

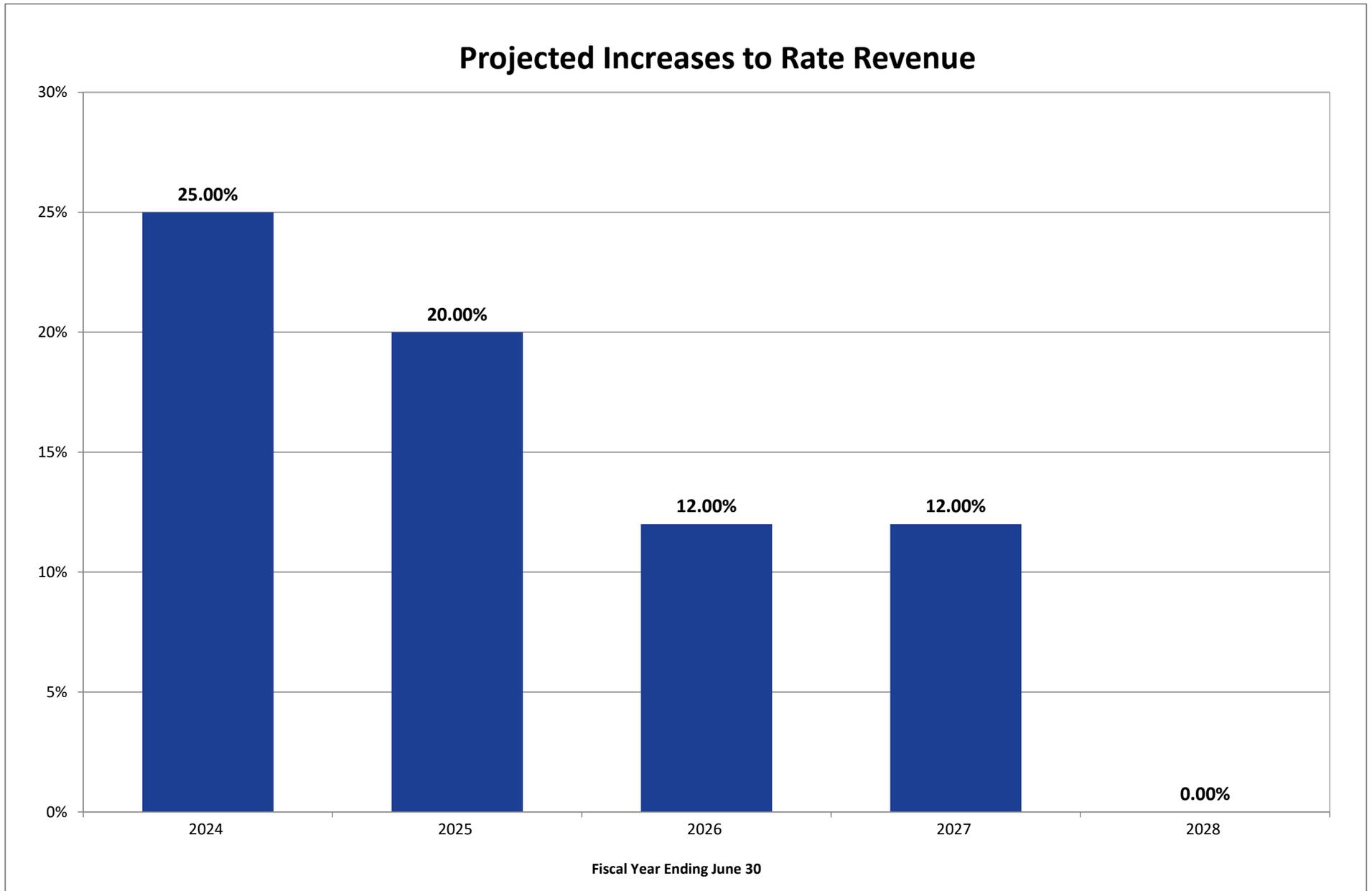


CHART 4

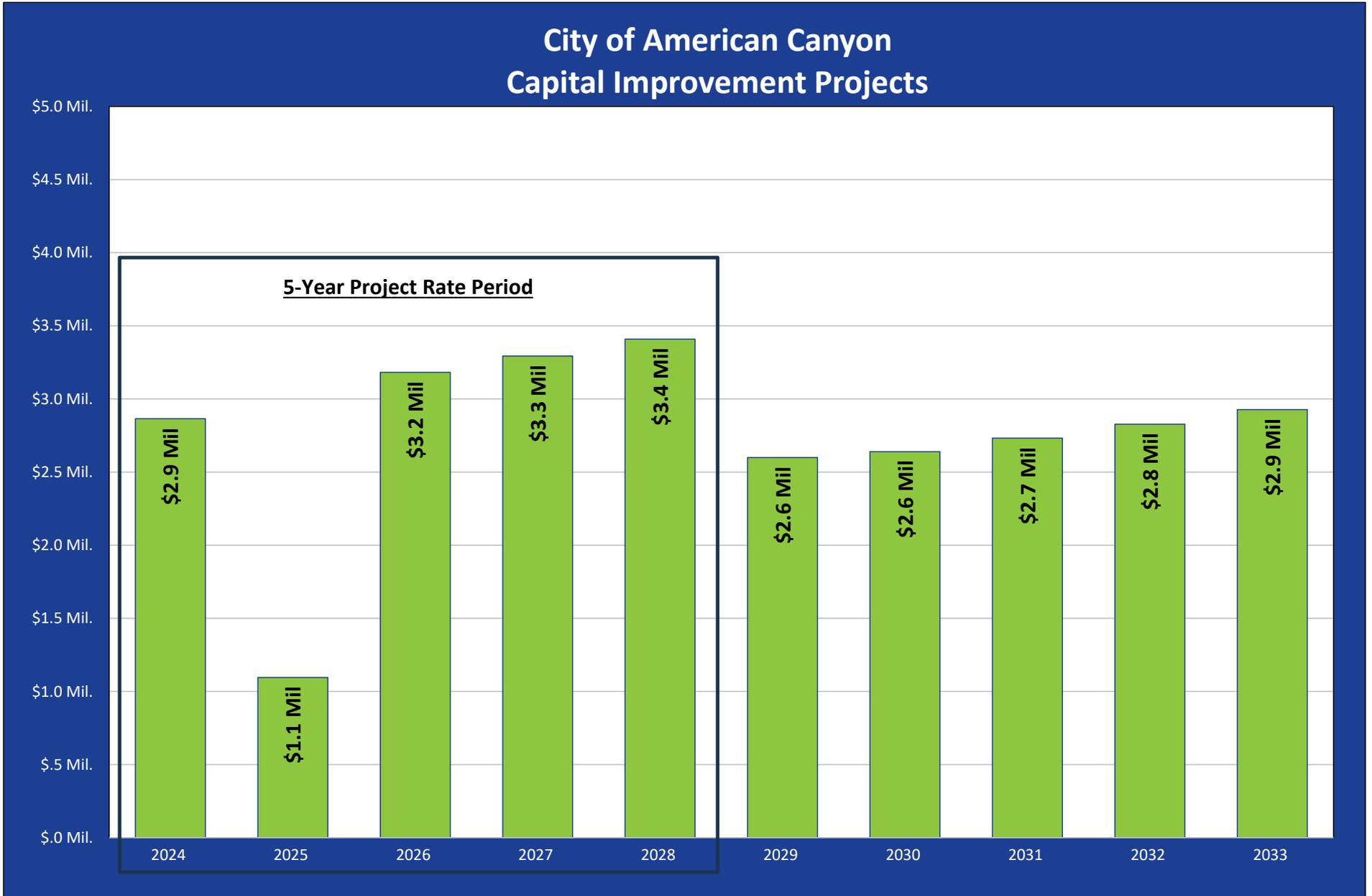


TABLE 3 : REVENUE FORECAST¹

DESCRIPTION	Basis	Actuals		5-Year Projected Rate Period					Projected				
		FY 2021/22	FY 2022/23	FY 2023/24	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30	FY 2030/31	FY 2031/32	FY 2032/33
Rate Revenue													
Sewer Service Charge	1	\$ 4,824,937	\$ 4,940,178	\$ 5,042,690	\$ 5,128,416	\$ 5,215,599	\$ 5,304,264	\$ 5,394,436	\$ 5,486,142	\$ 5,573,920	\$ 5,663,103	\$ 5,753,713	\$ 5,845,772
Other Revenue													
Misc. Revenues - Other	1	17,936	89,761	8,593	8,739	8,888	9,039	9,192	9,349	9,498	9,650	9,805	9,961
Late Penalties / Interest	1	64,931	81,785	90,000	91,530	93,086	94,668	96,278	97,915	99,481	101,073	102,690	104,333
Interest Income	See FP	28,277	166,693	120,000	-	-	-	-	-	-	-	-	-
Capacity Fee Revenue													
Capacity Fees	1	573,335	235,879	835,413	4,563,228	508,500	517,145	525,936	534,877	543,435	552,130	560,964	569,939
Interfund Transfer In (Loan Repayment)	8	-	-	-	-	453,816	453,816	453,816	453,816	453,816	453,816	453,816	453,816
Interest Income	See FP	26,256	157,984	136,186	198,000	-	-	-	-	-	-	-	-
TOTAL: REVENUE		\$ 5,535,672	\$ 5,672,278	\$ 6,232,882	\$ 9,989,913	\$ 6,279,888	\$ 6,378,931	\$ 6,479,658	\$ 6,582,098	\$ 6,680,150	\$ 6,779,771	\$ 6,880,987	\$ 6,983,822

TABLE 4 : REVENUE SUMMARY

DESCRIPTION	Basis	Actuals		5-Year Projected Rate Period					Projected				
		FY 2021/22	FY 2022/23	FY 2023/24	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30	FY 2030/31	FY 2031/32	FY 2032/33
Rate Revenue													
Sewer Service Charge		\$ 4,824,937	\$ 4,940,178	\$ 5,042,690	\$ 5,128,416	\$ 5,215,599	\$ 5,304,264	\$ 5,394,436	\$ 5,486,142	\$ 5,573,920	\$ 5,663,103	\$ 5,753,713	\$ 5,845,772
Other Revenue													
Interest Income		28,277	166,693	120,000	-	-	-	-	-	-	-	-	-
Other Revenue		82,867	171,545	98,593	100,269	101,974	103,707	105,470	107,263	108,979	110,723	112,495	114,295
Capacity Fee Revenue													
Capacity Fees		573,335	235,879	835,413	4,563,228	508,500	517,145	525,936	534,877	543,435	552,130	560,964	569,939
Interfund Transfer In (Loan Repayment)		-	-	-	-	453,816	453,816	453,816	453,816	453,816	453,816	453,816	453,816
Interest Income		26,256	157,984	136,186	198,000	-	-	-	-	-	-	-	-
TOTAL: REVENUE		\$ 5,535,672	\$ 5,672,278	\$ 6,232,882	\$ 9,989,913	\$ 6,279,888	\$ 6,378,931	\$ 6,479,658	\$ 6,582,098	\$ 6,680,150	\$ 6,779,771	\$ 6,880,987	\$ 6,983,822

TABLE 5 : OPERATING EXPENSE FORECAST¹

DESCRIPTION	Basis	Actuals	Actuals	5-Year Projected Rate Period					Projected				
		FY 2021/22	FY 2022/23	FY 2023/24	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30	FY 2030/31	FY 2031/32	FY 2032/33
Fund 540 - Wastewater Operations													
570 - Wastewater Treatment Plant													
Wages - Full time	3	\$ 495,550	\$ 554,877	\$ 602,884	\$ 633,028	\$ 655,184	\$ 678,115	\$ 701,849	\$ 726,414	\$ 751,839	\$ 778,153	\$ 805,388	\$ 833,577
Wages - Overtime	3	13,725	27,777	-	-	-	-	-	-	-	-	-	-
Health Insurance	3	58,890	74,134	77,250	81,112	83,951	86,889	89,931	93,078	96,336	99,708	103,197	106,809
Health-In-Lieu	3	3,200	-	6,840	7,182	7,433	7,694	7,963	8,242	8,530	8,829	9,138	9,457
Cafeteria Plan Section 125	3	18,409	19,246	21,712	22,798	23,596	24,422	25,277	26,161	27,077	28,025	29,006	30,021
Social Security & Medicare	3	8,120	9,039	9,156	9,614	9,950	10,298	10,659	11,032	11,418	11,818	12,231	12,659
Worker Comp Insurance	3	32,204	29,763	39,875	41,869	43,334	44,851	46,421	48,045	49,727	51,467	53,269	55,133
Benefits - Other	3	-	280	1,135	1,192	1,233	1,276	1,321	1,367	1,415	1,465	1,516	1,569
Info Tech Support Services	2	7,478	5,486	73,500	75,705	77,976	80,315	82,725	85,207	87,763	90,396	93,108	95,901
Professional Services	2	34,840	52,991	187,138	192,752	198,535	204,491	210,625	216,944	223,453	230,156	237,061	244,173
Temp Agency Services	2	-	1,066	-	-	-	-	-	-	-	-	-	-
Misc. Contractual Services	2	8,911	8,380	17,900	18,437	18,990	19,560	20,147	20,751	21,374	22,015	22,675	23,355
General Repairs & Maint	2	307,866	145,560	201,500	207,545	213,771	220,184	226,790	233,594	240,602	247,820	255,254	262,912
Postage/Mail/Copy/Printing Svc	2	759	254	1,000	1,030	1,061	1,093	1,126	1,159	1,194	1,230	1,267	1,305
Membership Dues & Subscription	2	21,708	1,315	12,700	13,081	13,473	13,878	14,294	14,723	15,164	15,619	16,088	16,571
Conferences - Training	2	3,357	1,440	14,500	14,935	15,383	15,845	16,320	16,809	17,314	17,833	18,368	18,919
Rentals - Equipment/Space	2	4,193	7,848	11,600	11,948	12,306	12,676	13,056	13,448	13,851	14,267	14,695	15,135
Office Supplies	2	4,298	4,668	4,000	4,120	4,244	4,371	4,502	4,637	4,776	4,919	5,067	5,219
Operating Supplies	2	52,947	65,278	56,000	57,680	59,410	61,193	63,028	64,919	66,867	68,873	70,939	73,067
WW Treatment Plant Membranes	2	-	-	-	-	-	\$2,458,636	-	-	-	-	-	-
Utilities - Gas & Elec	5	330,471	300,152	484,200	511,504	540,348	570,818	603,006	637,010	672,931	710,877	750,964	793,311
Util-PhonesPgrsInternetCable	5	16,694	18,326	19,000	20,071	21,203	22,399	23,662	24,996	26,406	27,895	29,468	31,129
Depreciation	2	1,561,144	1,746,613	-	-	-	-	-	-	-	-	-	-
Major Equipment	2	19,460	-	-	-	-	-	-	-	-	-	-	-
Capital Outlay-Contra Account	2	(31,535)	(4,906,869)	-	-	-	-	-	-	-	-	-	-
PERS Retirement	3	103,159	109,251	110,247	115,760	119,811	124,005	128,345	132,837	137,486	142,298	147,279	152,433
Subtotal - Wastewater Treatment Plant		\$ 3,075,847	\$ (1,723,127)	\$ 1,952,137	\$ 2,041,362	\$ 2,121,194	\$ 4,663,008	\$ 2,291,046	\$ 2,381,374	\$ 2,475,521	\$ 2,573,662	\$ 2,675,976	\$ 2,782,656

TABLE 6 : OPERATING EXPENSE FORECAST¹

DESCRIPTION	Basis	Actuals		5-Year Projected Rate Period					Projected				
		FY 2021/22	FY 2022/23	FY 2023/24	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30	FY 2030/31	FY 2031/32	FY 2032/33
575 - Wastewater Collections													
Wages - Full time	3	\$ 268,022	\$ 248,676	\$ 411,834	\$ 432,425	\$ 447,560	\$ 463,225	\$ 479,438	\$ 496,218	\$ 513,586	\$ 531,561	\$ 550,166	\$ 569,422
Wages - Overtime	3	7,125	1,721	5,000	5,250	5,434	5,624	5,821	6,024	6,235	6,454	6,679	6,913
Health Insurance	3	41,952	37,937	46,756	49,094	50,812	52,591	54,432	56,337	58,308	60,349	62,461	64,648
Health-In-Lieu	3	4,800	5,700	14,250	14,963	15,486	16,028	16,589	17,170	17,771	18,393	19,036	19,703
Cafeteria Plan Section 125	3	12,646	11,364	19,245	20,208	20,915	21,647	22,404	23,189	24,000	24,840	25,710	26,609
Social Security & Medicare	3	4,244	3,868	6,457	6,780	7,017	7,263	7,517	7,780	8,053	8,335	8,626	8,928
Worker Comp Insurance	3	30,604	32,837	36,753	38,591	39,941	41,339	42,786	44,283	45,833	47,438	49,098	50,816
Benefits - Other	3	1,319	1,471	1,918	2,014	2,084	2,157	2,233	2,311	2,392	2,475	2,562	2,652
Info Tech Support Services	2	302	702	94,600	97,438	100,361	103,372	106,473	109,667	112,957	116,346	119,836	123,432
Professional Services	2	-	4,425	20,000	20,600	21,218	21,855	22,510	23,185	23,881	24,597	25,335	26,095
Misc. Contractual Services	2	3,852	4,253	5,600	5,768	5,941	6,119	6,303	6,492	6,687	6,887	7,094	7,307
General Repairs & Maint	2	35,466	7,405	24,000	24,720	25,462	26,225	27,012	27,823	28,657	29,517	30,402	31,315
Membership Dues & Subscription	2	2,165	1,606	4,900	5,047	5,198	5,354	5,515	5,680	5,851	6,026	6,207	6,393
Conferences - Training	2	2,303	17,724	5,200	5,356	5,517	5,682	5,853	6,028	6,209	6,395	6,587	6,785
Rentals - Equipment/Space	2	-	-	5,000	5,150	5,305	5,464	5,628	5,796	5,970	6,149	6,334	6,524
Office Supplies	2	1,121	396	15,000	15,450	15,914	16,391	16,883	17,389	17,911	18,448	19,002	19,572
Operating Supplies	2	27,795	32,450	42,100	43,363	44,664	46,004	47,384	48,805	50,270	51,778	53,331	54,931
Util-PhonesPgrsInternetCable	5	1,498	1,833	1,500	1,585	1,674	1,768	1,868	1,973	2,085	2,202	2,326	2,458
Major Equipment	2	19,460	709,259	-	-	-	-	-	-	-	-	-	-
PERS Retirement	3	44,845	57,704	75,748	79,535	82,319	85,200	88,182	91,268	94,463	97,769	101,191	104,733
Subtotal - Wastewater Collections		\$ 509,518	\$ 1,181,331	\$ 835,861	\$ 873,335	\$ 902,822	\$ 933,308	\$ 964,830	\$ 997,421	\$ 1,031,118	\$ 1,065,960	\$ 1,101,985	\$ 1,139,234

TABLE 7 : OPERATING EXPENSE FORECAST, cont.¹

DESCRIPTION	Basis	Actuals		5-Year Projected Rate Period					Projected				
		FY 2021/22	FY 2022/23	FY 2023/24	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30	FY 2030/31	FY 2031/32	FY 2032/33
585 - Wastewater Environmental Compliance													
Wages - Full time	3	\$ 175,790	\$ 144,748	\$ 194,374	\$ 204,093	\$ 211,236	\$ 218,630	\$ 226,282	\$ 234,202	\$ 242,399	\$ 250,883	\$ 259,664	\$ 268,752
Wages - Overtime	3	-	182	500	525	543	562	582	602	624	645	668	691
Health Insurance	3	16,273	23,843	23,378	24,547	25,406	26,296	27,216	28,168	29,154	30,175	31,231	32,324
Health-In-Lieu	3	3,200	-	2,280	2,394	2,478	2,565	2,654	2,747	2,843	2,943	3,046	3,152
Cafeteria Plan Section 125	3	6,651	6,232	8,828	9,270	9,594	9,930	10,277	10,637	11,009	11,395	11,794	12,206
Social Security & Medicare	3	2,685	2,190	2,980	3,128	3,238	3,351	3,469	3,590	3,716	3,846	3,980	4,120
Worker Comp Insurance	3	5,101	11,826	18,594	19,524	20,208	20,915	21,647	22,404	23,189	24,000	24,840	25,710
Benefits - Other	3	-	559	641	673	696	721	746	772	799	827	856	886
Info Tech Support Services	2	368	-	59,650	61,440	63,283	65,181	67,137	69,151	71,225	73,362	75,563	77,830
Professional Services	2	115,883	108,682	253,000	260,590	268,408	276,460	284,754	293,296	302,095	311,158	320,493	330,108
General Repairs & Maint	2	8,426	9,674	10,000	10,300	10,609	10,927	11,255	11,593	11,941	12,299	12,668	13,048
Postage/Mail/Copy,Printing Svc	2	103	6,182	13,000	13,390	13,792	14,205	14,632	15,071	15,523	15,988	16,468	16,962
Membership Dues & Subscription	2	822	11,770	12,600	12,978	13,367	13,768	14,181	14,607	15,045	15,496	15,961	16,440
Conferences - Training	2	275	7,531	21,800	22,454	23,128	23,821	24,536	25,272	26,030	26,811	27,616	28,444
Regulatory Compliance Permits	2	32,062	84,279	157,300	162,019	166,880	171,886	177,043	182,354	187,824	193,459	199,263	205,241
Operating Supplies	2	14,672	20,594	27,000	27,810	28,644	29,504	30,389	31,300	32,239	33,207	34,203	35,229
Major Equipment	2	-	9,918	25,000	25,750	26,523	27,318	28,138	28,982	29,851	30,747	31,669	32,619
Intra-fund Transfer Out Wastewater	2	-	-	-	-	-	-	-	-	-	-	-	-
PERS Retirement	3	31,779	41,525	25,730	27,016	27,962	28,941	29,953	31,002	32,087	33,210	34,372	35,575
Subtotal - Wastewater Environmental Compliance		\$ 414,090	\$ 489,734	\$ 856,655	\$ 887,901	\$ 915,994	\$ 944,981	\$ 974,890	\$ 1,005,750	\$ 1,037,594	\$ 1,070,451	\$ 1,104,354	\$ 1,139,337

TABLE 8 : OPERATING EXPENSE FORECAST, cont.¹

DESCRIPTION	Basis	Actuals		5-Year Projected Rate Period						Projected			
		FY 2021/22	FY 2022/23	FY 2023/24	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30	FY 2030/31	FY 2031/32	FY 2032/33
Fund 80 - Non Departmental													
810 - Non Departmental													
Wages - Full time	3	\$ 113,357	\$ 136,471	\$ 128,293	\$ 134,707	\$ 139,422	\$ 144,302	\$ 149,352	\$ 154,580	\$ 159,990	\$ 165,590	\$ 171,385	\$ 177,384
Wages - Overtime	3	954	178	-	-	-	-	-	-	-	-	-	-
Allowances	3	1,811	1,920	1,920	2,016	2,087	2,160	2,235	2,313	2,394	2,478	2,565	2,655
Health Insurance	3	18,856	20,840	21,244	22,306	23,087	23,895	24,731	25,596	26,492	27,420	28,379	29,373
Cafeteria Plan Section 125	3	4,228	4,452	4,312	4,528	4,686	4,850	5,020	5,196	5,378	5,566	5,761	5,962
Social Security & Medicare	3	1,747	2,069	2,038	2,139	2,214	2,292	2,372	2,455	2,541	2,630	2,722	2,817
Worker Comp Insurance	3	7,901	7,096	9,825	10,316	10,677	11,051	11,438	11,838	12,252	12,681	13,125	13,584
OPEB	3	44,764	44,160	49,726	52,213	54,040	55,931	57,889	59,915	62,012	64,183	66,429	68,754
Pension Expense	3	(163,418)	47,287	-	-	-	-	-	-	-	-	-	-
Benefits - Other	3	1,371	1,421	-	-	-	-	-	-	-	-	-	-
Professional Services	2	-	-	100,000	103,000	106,090	109,273	112,551	115,927	119,405	122,987	126,677	130,477
Temp Agency Services	2	-	-	6,000	6,180	6,365	6,556	6,753	6,956	7,164	7,379	7,601	7,829
Bad Debt Expense	2	(13,591)	9,434	-	-	-	-	-	-	-	-	-	-
Membership Dues & Subscription	2	197	457	1,400	1,442	1,485	1,530	1,576	1,623	1,672	1,722	1,773	1,827
Conferences - Training	2	30	-	5,000	5,150	5,305	5,464	5,628	5,796	5,970	6,149	6,334	6,524
Office Supplies	2	-	625	1,000	1,030	1,061	1,093	1,126	1,159	1,194	1,230	1,267	1,305
Utilities - Water	5	11,868	14,702	14,000	14,789	15,623	16,504	17,435	18,418	19,457	20,554	21,713	22,938
Intra-fund Transfer Out Wastewater	2	605,656	281,641	290,090	298,793	307,757	316,989	326,499	336,294	346,383	356,774	367,478	378,502
Transfer to Gen Fnd Support Sv	2	763,512	985,309	1,123,854	1,157,570	1,192,297	1,228,066	1,264,908	1,302,855	1,341,940	1,382,199	1,423,665	1,466,375
Transfer To General Fund - Other	2	2,394	481	-	-	-	-	-	-	-	-	-	-
Trans to Other Funds	2	-	17,129	-	-	-	-	-	-	-	-	-	-
Services - Other	2	20,296	812	-	-	-	-	-	-	-	-	-	-
Retiree Health Benefits	3	60,317	60,646	78,433	82,355	85,238	88,221	91,309	94,504	97,812	101,235	104,779	108,446
PERS Retirement	3	17,037	18,820	16,257	17,070	17,667	18,286	18,926	19,588	20,274	20,983	21,717	22,478
ISF - Bldg Maint	2	59,800	176,525	262,206	270,072	278,174	286,520	295,115	303,969	313,088	322,480	332,155	342,119
ISF - Fleet	2	138,950	106,843	163,573	168,480	173,535	178,741	184,103	189,626	195,315	201,174	207,209	213,426
ISF - Info Tech	2	93,500	194,110	237,073	244,185	251,511	259,056	266,828	274,833	283,078	291,570	300,317	309,326
ISF - Legal Services	2	28,800	24,347	99,499	102,484	105,558	108,725	111,987	115,347	118,807	122,371	126,042	129,824
Subtotal - Non Departmental		\$ 1,820,335	\$ 2,157,776	\$ 2,615,743	\$ 2,700,825	\$ 2,783,879	\$ 2,869,503	\$ 2,957,779	\$ 3,048,788	\$ 3,142,618	\$ 3,239,356	\$ 3,339,093	\$ 3,441,923
GRAND TOTAL: SEWER EXPENSES		\$ 5,819,790	\$ 2,105,714	\$ 6,260,396	\$ 6,503,425	\$ 6,723,889	\$ 9,410,800	\$ 7,188,544	\$ 7,433,334	\$ 7,686,851	\$ 7,949,428	\$ 8,221,408	\$ 8,503,149

TABLE 9 : FORECASTING ASSUMPTIONS

INFLATION FACTORS ³	Basis	FY 2021/22	FY 2022/23	FY 2023/24	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30	FY 2030/31	FY 2031/32	FY 2032/33
Customer Growth ⁴	1	--	1.80%	1.80%	1.70%	1.70%	1.70%	1.70%	1.70%	1.60%	1.60%	1.60%	1.60%
General Cost Inflation ⁵	2	--	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Labor Cost Inflation ⁶	3	--	3.50%	5.00%	5.00%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%
Energy ⁷	4	--	7.44%	7.44%	7.44%	7.44%	7.44%	7.44%	7.44%	7.44%	7.44%	7.44%	7.44%
Electricity ⁸	5	--	5.64%	5.64%	5.64%	5.64%	5.64%	5.64%	5.64%	5.64%	5.64%	5.64%	5.64%
Fuel & Utilities ⁹	6	--	5.24%	5.24%	5.24%	5.24%	5.24%	5.24%	5.24%	5.24%	5.24%	5.24%	5.24%
Construction Cost Inflation ¹⁰	7	--	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%
No Escalation	8	--	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

1. Revenue and expenses for FY 2021/22 through FY 2023/24 provided by the City. Revenues and expenses for all other years are escalated based on the forecasting assumptions located in Table 9 above. Source files: Fund 540 Wastewater Operations Fund 510 - 580 FY 23-24 Budget Status as of 09-19-2023, FY 22 Fund 550 Wastewater Cap Revenue Detail Trial Balance, FY 23 Fund 550 Wastewater Cap Revenue Detail Trial Balance, & REV EXP ACTUALS - FY22 and FY23_NBS

2. Expenses are inflated each year by the following annual inflation factor categories.
3. Customer growth is based on service area population growth through FY 2039/40. Source file: American Canyon 2015 UWMP.pdf, page 26.
4. General cost inflation is based on the 5-year average annual change in the Consumer Price Index for all Urban Consumers in the San Francisco-Oakland-Hayward, CA area.
5. Labor cost inflation is based on the 5-year average annual change in the Quarterly Census of Employment and Wages for San Francisco County, CA.
6. Energy cost inflation is based on the 5-year average annual change in the Consumer Price Index for all Urban Consumers in the San Francisco-Oakland-Hayward, CA area.
7. Electricity cost inflation is based on the 5-year average change in the Consumer Price Index for San Francisco County.
8. Fuel & Utilities cost inflation is based on the 5-year average annual change in the Consumer Price Index - Average Price Data for Fuels and related products and power. This factor is used for utility costs other than electricity.
9. Construction cost Inflation is the 10-year average change in the Construction Cost Index for 2012-2022. Source: Engineering News Record website (<http://enr.construction.com>).

TABLE 10 : CAPITAL FUNDING SUMMARY

CAPITAL FUNDING FORECAST	Actuals		5-Year Projected Rate Period					Projected				
	FY 2021/22	FY 2022/23	FY 2023/24	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30	FY 2030/31	FY 2031/32	FY 2032/33
Funding Sources:												
Grants	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Use of Capacity Fee Reserves	-	-	291,480	897,942	2,070,444	3,278,183	1,177,570	1,181,673	1,187,638	1,194,792	1,202,725	1,211,189
SRF Loan Funding	-	-	-	-	-	-	-	-	-	-	-	-
Use of Future Revenue Bond Proceeds	-	-	-	-	-	-	-	-	-	-	-	-
Use of Capital Rehabilitation and Replacement Reserve	-	-	-	-	-	-	-	10,869	1,119,393	1,537,538	1,625,237	1,715,751
Rate Revenue	345,549	3,201,161	2,573,447	197,942	1,111,368	14,992	2,230,867	1,406,839	332,901	-	-	-
Total Sources of Capital Funds	\$ 345,549	\$ 3,201,161	\$ 2,864,927	\$ 1,095,884	\$ 3,181,812	\$ 3,293,175	\$ 3,408,436	\$ 2,599,381	\$ 2,639,932	\$ 2,732,330	\$ 2,827,961	\$ 2,926,940
Uses of Capital Funds:												
Total Project Costs	\$ 345,549	\$ 3,201,161	\$ 2,864,927	\$ 1,095,884	\$ 3,181,812	\$ 3,293,175	\$ 3,408,436	\$ 2,599,381	\$ 2,639,932	\$ 2,732,330	\$ 2,827,961	\$ 2,926,940
Capital Funding Surplus (Deficiency)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

CAPITAL IMPROVEMENT PROGRAM FUNDING OPTIONS

Capital Improvement Program Funding Choice	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Effective Annual Funding Amount	\$ 345,549	\$ 3,201,161	\$ 2,864,927	\$ 1,095,884	\$ 3,181,812	\$ 3,293,175	\$ 3,408,436	\$ 2,599,381	\$ 2,639,932	\$ 2,732,330	\$ 2,827,961	\$ 2,926,940

TABLE 11 : CAPITAL IMPROVEMENT PROGRAM COSTS (in Current-Year Dollars)¹

Project Description	FY 2021/22	FY 2022/23	FY 2023/24	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30	FY 2030/31	FY 2031/32	FY 2032/33
Capital Projects												
2020 Annual Pavement Management Project	\$ 42,008	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
TR24-0300 ARPA Rancho Del Mar Paving and Utility Improvements	-	-	1,334,000	-	-	-	-	-	-	-	-	-
WW16-0300 SCADA Improvements	-	250,000	250,000	-	-	-	-	-	-	-	-	-
WW20-0100 SS4 Broadway Sewer Rehabilitation (Crawford to Poco)	-	375,000	1,000,000	250,000	-	-	-	-	-	-	-	-
WW22-0100 UV Disinfection	-	500,000	-	-	-	-	-	-	-	-	-	-
WW22-0200 Blower Replacement	-	500,000	-	-	-	-	-	-	-	-	-	-
WW21-0400 Sanitary Sewer Manhole Rehab	-	100,000	-	-	-	-	-	-	-	-	-	-
UM20-0100 Engie Energy Services Contract	291,856	122,618	-	-	-	-	-	-	-	-	-	-
Master Plan Projects - Wastewater Collection System²												
SS1 Rio Del Mar Basin	\$ -	\$ -	\$ -	\$ 500,000	\$ 500,000	\$ 500,000	\$ 500,000	\$ -	\$ -	\$ -	\$ -	\$ -
SS2 Napa Logistics and Green Island Pump Station	-	1,140,700	-	-	-	-	-	-	-	-	-	-
SS3 Huntington Way (Rio Del Mar to W American Canyon Road)	-	-	-	-	458,000	458,000	458,000	458,000	458,000	458,000	458,000	458,000
SS5 Summerfield Project	-	-	-	-	37,000	37,000	37,000	37,000	-	-	-	-
SS6 Theresa Avenue and Los Altos Drive	-	-	-	205,000	205,000	205,000	205,000	-	-	-	-	-
SS7 Main Basin Pump Station	-	-	-	-	1,199,000	1,199,000	1,199,000	1,199,000	1,199,000	1,199,000	1,199,000	1,199,000
SS8 Broadway, Cartagena Way to Mobile Home Park Entrance	-	-	-	-	68,000	68,000	68,000	68,000	68,000	68,000	68,000	68,000
SS9 Elliott Drive south of Northampton	-	-	-	-	109,000	109,000	109,000	109,000	109,000	109,000	109,000	109,000
SS10 Broadway north of Rio Del Mar	-	-	-	-	103,000	103,000	103,000	103,000	103,000	103,000	103,000	103,000
Estimated Future Projects												
Future Projects ³	-	-	-	-	-	-	-	-	-	-	-	-
Total: Capital Improvement Program Costs (Current-Year Dollars)	\$ 333,864	\$ 2,988,318	\$ 2,584,000	\$ 955,000	\$ 2,679,000	\$ 2,679,000	\$ 2,679,000	\$ 1,974,000	\$ 1,937,000	\$ 1,937,000	\$ 1,937,000	\$ 1,937,000

TABLE 12 : CAPITAL IMPROVEMENT PROGRAM COSTS (in Future-Year Dollars)⁴

Project Description	FY 2021/22	FY 2022/23	FY 2023/24	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30	FY 2030/31	FY 2031/32	FY 2032/33
Capital Projects												
2020 Annual Pavement Management Project	\$ 43,478	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
TR24-0300 ARPA Rancho Del Mar Paving and Utility Improvements	-	-	1,479,030	-	-	-	-	-	-	-	-	-
WW16-0300 SCADA Improvements	-	267,806	277,179	-	-	-	-	-	-	-	-	-
WW20-0100 SS4 Broadway Sewer Rehabilitation	-	401,709	1,108,718	286,881	-	-	-	-	-	-	-	-
WW22-0100 UV Disinfection	-	535,613	-	-	-	-	-	-	-	-	-	-
WW22-0200 Blower Replacement	-	535,613	-	-	-	-	-	-	-	-	-	-
WW21-0400 Sanitary Sewer Manhole Rehab	-	107,123	-	-	-	-	-	-	-	-	-	-
UM20-0100 Engie Energy Services Contract	302,071	131,351	-	-	-	-	-	-	-	-	-	-
Master Plan Projects - Wastewater Collection System²												
SS1 Rio Del Mar Basin	\$ -	\$ -	\$ -	\$ 573,762	\$ 593,843	\$ 614,628	\$ 636,140	\$ -	\$ -	\$ -	\$ -	\$ -
SS2 Napa Logistics and Green Island Pump Station	-	1,221,946	-	-	-	-	-	-	-	-	-	-
SS3 Huntington Way	-	-	-	-	543,960	562,999	582,704	603,099	624,207	646,054	668,666	692,069
SS5 Summerfield Project	-	-	-	-	43,944	45,482	47,074	48,722	-	-	-	-
SS6 Theresa Avenue and Los Altos Drive	-	-	-	235,242	243,476	251,997	260,817	-	-	-	-	-
SS7 Main Basin Pump Station	-	-	-	-	1,424,036	1,473,877	1,525,463	1,578,854	1,634,114	1,691,308	1,750,504	1,811,771
SS8 Broadway, Cartagena Way to Mobile Home Park Entrance	-	-	-	-	80,763	83,589	86,515	89,543	92,677	95,921	99,278	102,753
SS9 Elliott Drive south of Northampton	-	-	-	-	129,458	133,989	138,678	143,532	148,556	153,755	159,137	164,706
SS10 Broadway north of Rio Del Mar	-	-	-	-	122,332	126,613	131,045	135,631	140,378	145,292	150,377	155,640
Estimated Future Projects												
Future Projects ³	-	-	-	-	-	-	-	-	-	-	-	-
Total: Capital Improvement Program Costs (Future-Year Dollars)	\$ 345,549	\$ 3,201,161	\$ 2,864,927	\$ 1,095,884	\$ 3,181,812	\$ 3,293,175	\$ 3,408,436	\$ 2,599,381	\$ 2,639,932	\$ 2,732,330	\$ 2,827,961	\$ 2,926,940

TABLE 13 : FORECASTING ASSUMPTIONS

Economic Variables	FY 2021/22	FY 2022/23	FY 2023/24	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30	FY 2030/31	FY 2031/32	FY 2032/33
Annual Construction Cost Inflation, Per Engineering News Record ⁵	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%
Cumulative Construction Cost Multiplier from FY 2021/22	1.04	1.07	1.11	1.15	1.19	1.23	1.27	1.32	1.36	1.41	1.46	1.51

- Capital project costs were provided by City staff. Source files: 11. CIP Budget vs Expense Report FY 2021-2022 through Oct 2021.pdf & Wastewater FY 2023-2027.xlsx.
- The City's Wastewater Collection System Master Plan projects were scheduled to begin in 2016; however, the study only includes costs from FY 2021/22 through FY 2034/35. Source file: 2016 Sewer Master Plan.pdf, page 52.
- Future project costs beyond FY 2034/35 are calculated based on the City's 10-year average.
- Capital improvement projects are inflated to future year estimated costs with ENR CCI for the region. Source: Engineering News Record website (<http://enr.construction.com>).
- For reference purposes, the annual Construction Cost Inflation percentage is the 10-year average change in the Construction Cost Index for September 2012-2022 (3.50%). Source: Engineering News Record website (<http://enr.construction.com>).

TABLE 14 : SEWER UTILITY EXISTING DEBT OBLIGATIONS

EXISTING DEBT OBLIGATIONS	Actuals		5-Year Projected Rate Period					Projected				
	FY 2021/22	FY 2022/23	FY 2023/24	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30	FY 2030/31	FY 2031/32	FY 2032/33
Annual Repayment Schedules:												
<u>City National Bank - Loan Amount \$2,004,200¹</u>												
Principal Payment	\$ 155,243	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Interest Payment	1,979	-	-	-	-	-	-	-	-	-	-	-
Subtotal: Annual Debt Service	\$ 157,222	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Coverage Requirement (\$-Amnt above annual payment) ²	\$ 180,805	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Reserve Requirement (total fund balance) ²	\$ 157,222	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<u>SWRCB: Project No. C-06-4666-110 & Agreement No. 99819-550-0³</u>												
Principal Payment	\$ 722,377	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Interest Payment	-	-	-	-	-	-	-	-	-	-	-	-
Other Charges	19,504	-	-	-	-	-	-	-	-	-	-	-
Subtotal: Annual Debt Service	\$ 741,881	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Coverage Requirement (\$-Amnt above annual payment)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Reserve Requirement (total fund balance)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<u>Bank of America Public Capital Corp Agreement (ENGIE) - Loan Amount \$5,209,209⁴</u>												
Principal Payment	\$ 161,088	\$ 154,345	\$ 165,634	\$ 177,478	\$ 180,996	\$ 199,515	\$ 213,287	\$ 189,719	\$ 202,626	\$ 216,158	\$ 228,580	\$ 241,999
Interest Payment	55,123	52,295	49,440	46,378	43,173	39,781	36,097	32,472	28,971	25,233	21,262	17,061
Subtotal: Annual Debt Service	\$ 216,211	\$ 206,640	\$ 215,074	\$ 223,856	\$ 224,168	\$ 239,297	\$ 249,385	\$ 222,191	\$ 231,597	\$ 241,391	\$ 249,843	\$ 259,060
Coverage Requirement (\$-Amnt above annual payment)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Reserve Requirement (total fund balance)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Grand Total: Existing Annual Debt Service	\$ 1,115,315	\$ 206,640	\$ 215,074	\$ 223,856	\$ 224,168	\$ 239,297	\$ 249,385	\$ 222,191	\$ 231,597	\$ 241,391	\$ 249,843	\$ 259,060
Grand Total: Existing Annual Coverage Requirement	\$ 180,805	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Grand Total: Existing Debt Reserve Target	\$ 157,222	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

TABLE 15 : SEWER UTILITY EXISTING DEBT OBLIGATIONS, cont.

EXISTING DEBT OBLIGATIONS	Actuals	Actuals	5-Year Projected Rate Period					Projected				
	FY 2021/22	FY 2022/23	FY 2023/24	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30	FY 2030/31	FY 2031/32	FY 2032/33
Annual Repayment Schedules:												
Interfund Loans (For information only)												
Wastewater Capacity to Wastewater Fund												
Advance from WW Capacity 550 to Wastewater Operations 540												
Original Loan Amount (December 1, 2008)	\$ 1,285,000											
Interest (for budget purposes only)	146,147											
Annual Debt Service ⁵		\$ 159,325	\$ 159,325	\$ 159,325	\$ 159,325	\$ 159,325	\$ 159,325	\$ 159,325	\$ 159,325	\$ 159,325	\$ 159,325	\$ -
Wastewater Capacity to Recycled Water Fund												
Advance from WW Capacity 550 to Recycled Water Operations 580												
Original Loan Amount (March 11, 2011)	\$ 1,070,000											
Interest (for budget purposes only)	205,869											
Annual Debt Service ⁶		\$ -	\$ -	\$ -	\$ 99,295	\$ 99,295	\$ 99,295	\$ 99,295	\$ 99,295	\$ 99,295	\$ 99,295	\$ 99,295
Wastewater Capacity to Recycled Water Fund												
Advance from WW Capacity 550 to Recycled Water Operations 580												
Original Loan Amount (December 15, 2009)	\$ 304,614											
Interest (for budget purposes only)	58,577											
Annual Debt Service ⁷		\$ -	\$ -	\$ -	\$ 28,266	\$ 28,266	\$ 28,266	\$ 28,266	\$ 28,266	\$ 28,266	\$ 28,266	\$ 28,266
Wastewater Capacity to Recycled Water Fund												
Advance from WW Capacity 550 to Recycled Water Operations 580												
Original Loan Amount (December 15, 2009)	\$ 3,532,410											
Interest (for budget purposes only)	659,727											
Annual Debt Service ⁸		\$ -	\$ -	\$ -	\$ 326,255	\$ 326,255	\$ 326,255	\$ 326,255	\$ 326,255	\$ 326,255	\$ 326,255	\$ 326,255

1. Loan originally issued between Municipal Finance Corporation, City National Bank, and the City of American Canyon. Source files: 5 - Debt Service Schedules.xlsx & 6 - Wastewater Membrane Agreement.pdf .
2. Coverage and reserve requirements were provided by the City. Source files: 6 - Wastewater Membrane Agreement.pdf , pages 9 & 12.
3. State Revolving Fund Loan issued in September 1999 in that amount of \$10,859,470. Source file: 6 - SWRCB Agreement 99-819-550-0 4666-110 Executed Amendment #2_11-12-14.pdf .
4. Equipment lease/purchase loan issued by Bank of America for equipment upgrades, replacements and installation to provide energy savings for the City. Sewer utility portion is 59.43%, or \$3,095,832.91 (Principal). Source file: 6 - ENGIE Closing Documents.pdf .
5. Funds advanced for capital projects. Repayment scheduled to begin FY 2022/23.
6. Funds advanced for Green Island Recycled Waterline Project. Repayment scheduled to begin FY 2025/26.
7. Funds advance for Recycled Water Pump Station Upgrade. Repayment scheduled to begin FY 2025/26.
8. Funds advanced for various CIP projects. Repayment scheduled to begin FY 2025/26.

TABLE 16 : EXISTING ANNUAL DEBT OBLIGATIONS TO BE SATISFIED BY SEWER RATES

Annual Obligations	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Existing Annual Debt Service	\$ 1,115,315	\$ 206,640	\$ 215,074	\$ 223,856	\$ 224,168	\$ 239,297	\$ 249,385	\$ 222,191	\$ 231,597	\$ 241,391	\$ 249,843	\$ 259,060
Existing Annual Coverage Requirement	\$ 180,805	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Existing Debt Reserve Target	\$ 157,222	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

TABLE 17 : CURRENT SEWER RATE SCHEDULE

Sewer Rate Schedule ¹	Description	Current Rates Jan. 1, 2023
<i>Single-Family Residential - Monthly Fixed Service Charges</i>		
Low Winter Water Use	4 units or less	\$56.79
Average Winter Water Use (Standard)	4.1 – 13 units	\$60.48
High Winter Water Use	13.01 units and above	\$62.65
<i>All Other Monthly Fixed Service Charges</i>		
Multi-Family Residential	Per Dwelling Unit	\$45.36
Commercial	Whichever is greater	\$60.48 or \$5.40 per unit

1. Sewer rates are set according to the average monthly water use for January to March of the previous calendar year. New customers are charged at the average winter use rate (standard) and adjusted the following year, if applicable.

TABLE 18 : CLASSIFICATION OF EXPENSES FOR COST OF SERVICE ANALYSIS

Classification of Expenses									
Budget Categories	Total Revenue Requirements	Flow	Strength		Customer	Basis of Classification			
	FY 2023/24	(VOL)	(BOD)	(TSS)	(CA)	(VOL)	(BOD)	(TSS)	(CA)
Fund 540 - Wastewater Operations									
570 - Wastewater Treatment Plant									
Wages - Full time	\$ 602,884	\$ 307,471	\$ 132,634	\$ 132,634	\$ 30,144	51%	22%	22%	5%
Health Insurance	77,250	39,397	16,995	16,995	3,862	51%	22%	22%	5%
Health-In-Lieu	6,840	3,488	1,505	1,505	342	51%	22%	22%	5%
Cafeteria Plan Section 125	21,712	11,073	4,777	4,777	1,086	51%	22%	22%	5%
Social Security & Medicare	9,156	4,669	2,014	2,014	458	51%	22%	22%	5%
Worker Comp Insurance	39,875	20,336	8,772	8,772	1,994	51%	22%	22%	5%
Benefits - Other	1,135	579	250	250	57	51%	22%	22%	5%
Info Tech Support Services	73,500	37,485	16,170	16,170	3,675	51%	22%	22%	5%
Professional Services	187,138	95,440	41,170	41,170	9,357	51%	22%	22%	5%
Misc. Contractual Services	17,900	9,129	3,938	3,938	895	51%	22%	22%	5%
General Repairs & Maint	201,500	102,765	44,330	44,330	10,075	51%	22%	22%	5%
Postage/Mail/Copy/Printing Svc	1,000	510	220	220	50	51%	22%	22%	5%
Membership Dues & Subscription	12,700	6,477	2,794	2,794	635	51%	22%	22%	5%
Conferences - Training	14,500	7,395	3,190	3,190	725	51%	22%	22%	5%
Rentals - Equipment/Space	11,600	5,916	2,552	2,552	580	51%	22%	22%	5%
Office Supplies	4,000	2,040	880	880	200	51%	22%	22%	5%
Operating Supplies	56,000	28,560	12,320	12,320	2,800	51%	22%	22%	5%
WW Treatment Plant Membranes	-	-	-	-	-	51%	22%	22%	5%
Utilities - Gas & Elec	484,200	246,942	106,524	106,524	24,210	51%	22%	22%	5%
Util-PhonesPgrsInternetCable	19,000	9,690	4,180	4,180	950	51%	22%	22%	5%
PERS Retirement	110,247	56,226	24,254	24,254	5,512	51%	22%	22%	5%
Subtotal - Wastewater Treatment Plant	\$ 1,952,137	\$ 995,590	\$ 429,470	\$ 429,470	\$ 97,607	51%	22%	22%	5%

TABLE 19 : CLASSIFICATION OF EXPENSES FOR COST OF SERVICE ANALYSIS

Classification of Expenses									
Budget Categories	Total Revenue Requirements	Flow	Strength		Customer	Basis of Classification			
	FY 2023/24	(VOL)	(BOD)	(TSS)	(CA)	(VOL)	(BOD)	(TSS)	(CA)
Fund 540 - Wastewater Operations									
575 - Wastewater Collections									
Wages - Full time	\$ 411,834	\$ 411,834	\$ -	\$ -	\$ -	100%	0%	0%	0%
Wages - Overtime	5,000	5,000	-	-	-	100%	0%	0%	0%
Health Insurance	46,756	46,756	-	-	-	100%	0%	0%	0%
Health-In-Lieu	14,250	14,250	-	-	-	100%	0%	0%	0%
Cafeteria Plan Section 125	19,245	19,245	-	-	-	100%	0%	0%	0%
Social Security & Medicare	6,457	6,457	-	-	-	100%	0%	0%	0%
Worker Comp Insurance	36,753	36,753	-	-	-	100%	0%	0%	0%
Benefits - Other	1,918	1,918	-	-	-	100%	0%	0%	0%
Info Tech Support Services	94,600	94,600	-	-	-	100%	0%	0%	0%
Professional Services	20,000	20,000	-	-	-	100%	0%	0%	0%
Misc. Contractual Services	5,600	5,600	-	-	-	100%	0%	0%	0%
General Repairs & Maint	24,000	24,000	-	-	-	100%	0%	0%	0%
Membership Dues & Subscription	4,900	4,900	-	-	-	100%	0%	0%	0%
Conferences - Training	5,200	5,200	-	-	-	100%	0%	0%	0%
Rentals - Equipment/Space	5,000	5,000	-	-	-	100%	0%	0%	0%
Office Supplies	15,000	15,000	-	-	-	100%	0%	0%	0%
Operating Supplies	42,100	42,100	-	-	-	100%	0%	0%	0%
Util-PhonesPgrsInternetCable	1,500	1,500	-	-	-	100%	0%	0%	0%
PERS Retirement	75,748	75,748	-	-	-	100%	0%	0%	0%
Subtotal - Wastewater Collections	\$ 835,861	\$ 835,861	\$ -	\$ -	\$ -	100%	0%	0%	0%

TABLE 20 : CLASSIFICATION OF EXPENSES FOR COST OF SERVICE ANALYSIS

Classification of Expenses									
Budget Categories	Total Revenue Requirements	Flow	Strength		Customer	Basis of Classification			
	FY 2023/24	(VOL)	(BOD)	(TSS)	(CA)	(VOL)	(BOD)	(TSS)	(CA)
Fund 540 - Wastewater Operations									
585 - Wastewater Environmental Compliance									
Wages - Full time	\$ 194,374	\$ 99,131	\$ 42,762	\$ 42,762	\$ 9,719	51%	22%	22%	5%
Wages - Overtime	500	255	110	110	25	51%	22%	22%	5%
Health Insurance	23,378	11,923	5,143	5,143	1,169	51%	22%	22%	5%
Health-In-Lieu	2,280	1,163	502	502	114	51%	22%	22%	5%
Cafeteria Plan Section 125	8,828	4,502	1,942	1,942	441	51%	22%	22%	5%
Social Security & Medicare	2,980	1,520	655	655	149	51%	22%	22%	5%
Worker Comp Insurance	18,594	9,483	4,091	4,091	930	51%	22%	22%	5%
Benefits - Other	641	327	141	141	32	51%	22%	22%	5%
Info Tech Support Services	59,650	30,422	13,123	13,123	2,983	51%	22%	22%	5%
Professional Services	253,000	129,030	55,660	55,660	12,650	51%	22%	22%	5%
General Repairs & Maint	10,000	5,100	2,200	2,200	500	51%	22%	22%	5%
Postage/Mail/Copy.Printing Svc	13,000	6,630	2,860	2,860	650	51%	22%	22%	5%
Membership Dues & Subscription	12,600	6,426	2,772	2,772	630	51%	22%	22%	5%
Conferences - Training	21,800	11,118	4,796	4,796	1,090	51%	22%	22%	5%
Regulatory Compliance Permits	157,300	80,223	34,606	34,606	7,865	51%	22%	22%	5%
Operating Supplies	27,000	13,770	5,940	5,940	1,350	51%	22%	22%	5%
Major Equipment	25,000	12,750	5,500	5,500	1,250	51%	22%	22%	5%
PERS Retirement	25,730	13,122	5,661	5,661	1,286	51%	22%	22%	5%
Subtotal - Wastewater Environmental Compliance	\$ 856,655	\$ 436,894	\$ 188,464	\$ 188,464	\$ 42,833	51%	22%	22%	5%

TABLE 21 : CLASSIFICATION OF EXPENSES FOR COST OF SERVICE ANALYSIS

Classification of Expenses									
Budget Categories	Total Revenue Requirements	Flow	Strength		Customer	Basis of Classification			
	FY 2023/24	(VOL)	(BOD)	(TSS)	(CA)	(VOL)	(BOD)	(TSS)	(CA)
Fund 80 - Non Departmental									
810 - Non Departmental									
Wages - Full time	\$ 128,293	\$ 65,429	\$ 28,224	\$ 28,224	\$ 6,415	51%	22%	22%	5%
Allowances	1,920	979	422	422	96	51%	22%	22%	5%
Health Insurance	21,244	10,834	4,674	4,674	1,062	51%	22%	22%	5%
Cafeteria Plan Section 125	4,312	2,199	949	949	216	51%	22%	22%	5%
Social Security & Medicare	2,038	1,039	448	448	102	51%	22%	22%	5%
Worker Comp Insurance	9,825	5,011	2,161	2,161	491	51%	22%	22%	5%
OPEB	49,726	25,360	10,940	10,940	2,486	51%	22%	22%	5%
Professional Services	100,000	51,000	22,000	22,000	5,000	51%	22%	22%	5%
Temp Agency Services	6,000	3,060	1,320	1,320	300	51%	22%	22%	5%
Membership Dues & Subscription	1,400	714	308	308	70	51%	22%	22%	5%
Conferences - Training	5,000	2,550	1,100	1,100	250	51%	22%	22%	5%
Office Supplies	1,000	510	220	220	50	51%	22%	22%	5%
Utilities - Water	14,000	7,140	3,080	3,080	700	51%	22%	22%	5%
Intra-fund Transfer Out Wastewater	290,090	147,946	63,820	63,820	14,505	51%	22%	22%	5%
Transfer to Gen Fnd Support Sv	1,123,854	573,166	247,248	247,248	56,193	51%	22%	22%	5%
Retiree Health Benefits	78,433	40,001	17,255	17,255	3,922	51%	22%	22%	5%
PERS Retirement	16,257	8,291	3,577	3,577	813	51%	22%	22%	5%
ISF - Bldg Maint	262,206	133,725	57,685	57,685	13,110	51%	22%	22%	5%
ISF - Fleet	163,573	83,422	35,986	35,986	8,179	51%	22%	22%	5%
ISF - Info Tech	237,073	120,907	52,156	52,156	11,854	51%	22%	22%	5%
ISF - Legal Services	99,499	50,744	21,890	21,890	4,975	51%	22%	22%	5%
Subtotal - Non Department	\$ 2,615,743	\$ 1,334,029	\$ 575,463	\$ 575,463	\$ 130,787	51%	22%	22%	5%
Total: Sewer Operations Expenses	\$ 6,260,396	\$ 3,602,374	\$ 1,193,398	\$ 1,193,398	\$ 271,227	58%	19%	19%	4%

TABLE 22 : CLASSIFICATION OF EXPENSES FOR COST OF SERVICE ANALYSIS

Classification of Expenses, cont.									
Budget Categories	Total Revenue Requirements	Flow	Strength		Customer	Basis of Classification			
	FY 2023/24	(VOL)	(BOD)	(TSS)	(CA)	(VOL)	(BOD)	(TSS)	(CA)
Debt Service Payments									
Outstanding Debt	215,074	107,537	53,768	53,768	-	50%	25%	25%	0%
New Debt Issue - SRF Loan	-	-	-	-	-	50%	25%	25%	0%
New Debt Issue - Revenue Bond	-	-	-	-	-	50%	25%	25%	0%
Total Debt Service Payments	\$ 215,074	\$ 107,537	\$ 53,768	\$ 53,768	\$ -	50%	25%	25%	0%
Capital Expenditures									
Rate Funded Capital Expenses	\$ 2,573,447	\$ 1,286,724	\$ 643,362	\$ 643,362	\$ -	50%	25%	25%	0%
TOTAL REVENUE REQUIREMENTS	\$ 9,048,917	\$ 4,996,634	\$ 1,890,528	\$ 1,890,528	\$ 271,227	55%	21%	21%	3%
<i>Less: Non-Rate Revenues</i>									
Rate Revenue									
Interest Income	\$ (120,000)	\$ (61,200)	\$ (26,400)	\$ (26,400)	\$ (6,000)	51%	22%	22%	5%
Other Revenue	(98,593)	(50,282)	(21,690)	(21,690)	(4,930)	51%	22%	22%	5%
NET REVENUE REQUIREMENTS	\$ 8,830,324	\$ 4,885,152	\$ 1,842,438	\$ 1,842,438	\$ 260,297				
<i>Allocation of Revenue Requirements</i>	<i>100.0%</i>	<i>55.3%</i>	<i>20.9%</i>	<i>20.9%</i>	<i>2.9%</i>				

TABLE 23 : ADJUSTMENT TO CLASSIFICATION OF EXPENSES FOR COST-OF-SERVICE ANALYSIS

Adjustment to Current Rate Level:	Total	(VOL)	(BOD)	(TSS)	(CA)
FY 2023/24 Target Rate Rev. After Rate Increases	\$ 6,303,363				
Projected Rate Revenue at Current Rates	\$ 5,042,690				
FY 2023/24 Projected Rate Increase 25%					
Adjusted Net Revenue Req'ts	\$ 6,303,363	\$ 3,487,175	\$ 1,315,190	\$ 1,315,190	\$ 185,808
<i>Percent of Revenue</i>		<i>55.3%</i>	<i>20.9%</i>	<i>20.9%</i>	<i>2.9%</i>

TABLE 24 : NET REVENUE REQUIREMENTS PER COSA RESULTS - PROPOSED ALTERNATIVE

<i>Net Revenue Requirements (PROPOSED ALTERNATIVE - 45% Fixed / 55% Variable)</i>					
Rate-Design Adjustments to Percentages	100.0%	55.3%	20.9%	20.9%	2.9%
Rate-Design Adjustments to Dollars	\$ 6,303,363	\$ 3,487,175	\$ 1,315,190	\$ 1,315,190	\$ 185,808

TABLE 25 : ADJUSTMENT TO COST OF SERVICE RATES

Ratio of Targeted Rate Revenue to Net Revenue Requirements	Total	(VOL)	(BOD)	(TSS)	(CA)
Actual Total Fixed Costs	\$ 2,788,521	\$ 1,394,261	\$ 697,130	\$ 697,130	\$ -
Adjusted Total Fixed Costs	\$ 1,990,534	\$ 995,267	\$ 497,633	\$ 497,633	\$ -
Total Operating Costs	\$ 6,260,396	\$ 3,602,374	\$ 1,193,398	\$ 1,193,398	\$ 271,227
Less: Non Rate Revenue	\$ (218,593)	\$ (111,482)	\$ (48,090)	\$ (48,090)	\$ (10,930)
Actual Net Operating Costs	\$ 6,041,803	\$ 3,490,891	\$ 1,145,307	\$ 1,145,307	\$ 260,297
Adjusted Net Operating Costs	\$ 4,312,829	\$ 2,491,908	\$ 817,556	\$ 817,556	\$ 185,808
Actual Net Revenue Requirements	\$ 8,830,324	\$ 4,885,152	\$ 1,842,438	\$ 1,842,438	\$ 260,297
Adjusted Net Revenue Requirements	\$ 6,303,363	\$ 3,487,175	\$ 1,315,190	\$ 1,315,190	\$ 185,808

TABLE 26 : DEVELOPMENT OF THE FLOW ALLOCATION FACTOR

Customer Class ¹	Number of Dwelling Units / Accounts ²	Consumption (hcf/year)	Winter Consumption (Jan-Mar. '22)	Annualized Winter Consumption (hcf)	Adjusted Winter Volume (gallons) ³	Design Capacity					Total Annual Volume						
						Flow MGD	BOD mg/l	TSS mg/l	BOD lbs/day	TSS lbs/day	Flow MG	BOD mg/l ⁴	BOD lbs	% of Total BOD	TSS mg/l ⁴	TSS lbs	% of Total TSS
Residential Customers																	
Single Family Residential	4,710	507,339	117,749	470,996	352,328,558	0.97	175	175	1,409	1,409	352	n/a	514,224	69.4%	n/a	514,224	69.8%
Multi-Family Residential	1,265	89,630	20,169	80,676	60,349,682	0.17	175	175	241	241	60	n/a	88,080	11.9%	n/a	88,080	12.0%
All Other Customers																	
Commercial	177	318,808	65,311	261,244	195,423,574	0.13	300	300	335	335	49	n/a	122,237	16.5%	n/a	122,237	16.6%
Industrial ⁵																	
Hess Collection Winery	n/a	n/a	n/a	n/a	n/a	0.01	50	30	4	2	3.64	8.6	260	0.0%	2.3	70	0.0%
AmCan Beverage (Coca-Cola)	n/a	n/a	n/a	n/a	n/a	0.13	200	220	209	229	45.63	23.1	8,782	1.2%	5.3	1,998	0.3%
Mezzetta Processing Facility	n/a	n/a	n/a	n/a	n/a	0.04	150	220	51	74	14.82	61.7	7,631	1.0%	81.2	10,035	1.4%
Total:	6,152	915,777	203,229	812,916	608,101,814	1.44			2,248	2,291	526		741,214	100.0%		736,644	100.0%

1. Customer data provided by the City for FY 2021/22. Source file: FY 2021-22 Summary by Rate Code - Detailed v2.xlsx .
2. SFR, MFR, and Industrial customers are based on the number of dwelling units and all other customers are based on the number of accounts.
3. Annual consumption for all customer classes based on average winter water consumption.
4. Annual volume and strength factors provided by the City. Source file: SIU 2 year data.xlsx .
5. Flow for industrial customer is based on wastewater flow. Strength factors are based on input from City staff and lower than expected due to customers' pretreatment process. Source file: INF-001 & SIU Flow.xlsx .

TABLE 27 : DEVELOPMENT OF THE CUSTOMER ALLOCATION FACTOR

Customer Class	Number of Dwelling Units / Accounts ¹	Percent of Total
Residential Customers		
Single Family Residential	4,710	76.5%
Multi-Family Residential	1,265	20.6%
All Other Customers		
Commercial	177	2.9%
Industrial ¹		
Hess Collection Winery	1	0.0%
AmCan Beverage (Coca-Cola)	1	0.0%
Mezzetta Processing Facility	1	0.0%
Total:	6,152	100.0%

1. SFR, MFR, and industrial customers are based on the number of dwelling units and all other customers are based on the number of accounts.

TABLE 28 : ESTIMATED FLOW PER DWELLING UNIT

Customer Class	Est. Annual Wastewater Flow (hcf)	Est. Flow/DU/Day (gallons)	Percent of Total
Residential Customers			
Single Family Residential	470,996	205	--
Multi-Family Residential	80,676	131	63.78%

TABLE 29 : ALLOCATION OF SEWER REVENUE REQUIREMENTS

	Total	(FLOW)	(BOD)	(TSS)	(CA)
Total Fixed Costs	\$ 1,990,534	\$ 995,267	\$ 497,633	\$ 497,633	\$ -
Net Operating Costs	\$ 4,312,829	\$ 2,491,908	\$ 817,556	\$ 817,556	\$ 185,808
Net Revenue Requirements	\$ 6,303,363	\$ 3,487,175	\$ 1,315,190	\$ 1,315,190	\$ 185,808
Capacity Charges to recover Fixed Costs					
		Flow (\$/MGD)	BOD (\$/lbs/day)	TSS (\$/lbs/day)	
Fixed Costs		\$ 995,267	\$ 497,633	\$ 497,633	
Design Capacity		1.44	2,248	2,291	
		\$ 691,132.43	\$ 221.32	\$ 217.18	
User Charges					
		Flow (\$/MG)	BOD (\$/lb)	TSS (\$/lb)	
Net operating Costs		\$ 2,491,908	\$ 817,556	\$ 817,556	
Annual Volumes		526	741,214	736,644	
		\$ 4,740.90	\$ 1.10	\$ 1.11	
					Acct. Charge (\$/yr)
Customer Costs					\$ 185,808
Number of Accounts					6,155
					\$ 30.19

TABLE 30 : ALLOCATION OF SEWER REVENUE REQUIREMENTS

Development of Allocation Factors	Net Revenue Requirements - Design Capacity				
Customer Class	Total	Volume	BOD	TSS	Customer
Residential Customers					
Single Family Residential	\$ 1,284,903	\$ 667,139	\$ 311,800	\$ 305,964	\$ -
Multi-Family Residential	220,089	114,273	53,408	52,408	-
All Other Customers					
Commercial	\$ 239,360	\$ 92,509	\$ 74,119	\$ 72,731	\$ -
Industrial					
Hess Collection Winery	\$ 8,355	\$ 6,892	\$ 920	\$ 542	\$ -
AmCan Beverage (Coca-Cola)	182,346	86,392	46,145	49,809	-
Mezzetta Processing Facility	55,483	28,062	11,242	16,179	-
Total:	\$ 1,990,534	\$ 995,267	\$ 497,633	\$ 497,633	\$ -

TABLE 31 : ALLOCATION OF SEWER REVENUE REQUIREMENTS

Development of Allocation Factors	Net Revenue Requirements - Operating Costs				
Customer Class	Total	Volume	BOD	TSS	Customer
Residential Customers					
Single Family Residential	\$ 2,808,246	\$ 1,670,355	\$ 567,186	\$ 570,705	\$ -
Multi-Family Residential	481,019	286,112	97,152	97,755	-
All Other Customers					
Commercial	\$ 502,112	\$ 231,621	\$ 134,827	\$ 135,664	\$ -
Industrial					
Hess Collection Winery	\$ 17,621	\$ 17,257	\$ 286	\$ 78	\$ -
AmCan Beverage (Coca-Cola)	228,207	216,304	9,687	2,217	-
Mezzetta Processing Facility	89,814	70,260	8,417	11,137	-
Total:	\$ 4,127,020	\$ 2,491,908	\$ 817,556	\$ 817,556	\$ -

TABLE 32 : ALLOCATION OF SEWER REVENUE REQUIREMENTS

Development of Allocation Factors Customer Class	Net Revenue Requirements - Customer Costs				
	Total	Volume	BOD	TSS	Customer
Residential Customers					
Single Family Residential	\$ 142,186	\$ -	\$ -	\$ -	\$ 142,186
Multi-Family Residential	38,188	-	-	-	38,188
All Other Customers					
Commercial	\$ 5,343	\$ -	\$ -	\$ -	\$ 5,343
Industrial					
Hess Collection Winery	\$ 30	\$ -	\$ -	\$ -	\$ 30
AmCan Beverage (Coca-Cola)	30	-	-	-	30
Mezzetta Processing Facility	30	-	-	-	30
Total:	\$ 185,808	\$ -	\$ -	\$ -	\$ 185,808
Grand Total:	\$ 6,303,363	\$ 3,487,175	\$ 1,315,190	\$ 1,315,190	\$ 185,808

TABLE 33 : ALLOCATION OF NET REVENUE REQUIREMENTS TO CUSTOMER CLASSES - PROPOSED ALTERNATIVE

Customer Class	Cost Classification Components				Cost-of-Service Net Revenue Reqts.	% of COS Net Revenue Reqts.
	Volume	BOD	TSS	Customer		
Net Revenue Requirements ¹	\$ 3,487,175	\$ 1,315,190	\$ 1,315,190	\$ 185,808	\$ 6,303,363	--
	55.3%	20.9%	20.9%	2.9%	100.0%	
Residential Customers						
Single Family Residential	\$ 2,337,493	\$ 878,986	\$ 876,669	\$ 142,186	\$ 4,235,335	67.2%
Multi-Family Residential	400,385	150,560	150,163	38,188	739,296	11.7%
All Other Customers						
Commercial	\$ 324,130	\$ 208,946	\$ 208,395	\$ 5,343	\$ 746,815	11.8%
Industrial						
Hess Collection Winery	\$ 24,149	\$ 1,207	\$ 620	\$ 30	\$ 26,006	0.4%
AmCan Beverage (Coca-Cola)	302,695	55,832	52,026	30	410,583	6.5%
Mezzetta Processing Facility	98,322	19,659	27,316	30	145,327	2.3%
Total:	\$ 3,487,175	\$ 1,315,190	\$ 1,315,190	\$ 185,808	\$ 6,303,363	100%

1. Revenue requirement for each customer class is determined by multiplying the revenue requirement from each cost classification by the allocation factors for each customer class.

TABLE 34 : CALCULATION OF PROPOSED SEWER RATES FOR RESIDENTIAL CUSTOMERS

Customer Class	No. of Dwelling Units	Annual Revenue Requirement	Monthly Fixed Charge Per Dwelling Unit
Residential Customers			
Single Family Residential	4,710	\$ 4,235,335	\$74.94
Multi-Family Residential	1,265	739,296	\$48.70
Subtotal: Residential	5,975	\$ 4,974,631	

TABLE 35 : CALCULATION OF PROPOSED SEWER RATES FOR COMMERCIAL CUSTOMERS - PROPOSED ALTERNATIVE

Customer Class	No. of Accounts	Annual Volume (hcf)	Total Annual Revenue Requirement	Monthly Capacity Per Account	Monthly Customer Charge Per Account	Monthly Fixed Charge Per Account ¹	Volumetric Charge Per hcf
Commercial							
Commercial	177	261,244	\$ 746,815	\$112.69	\$ 2.52	\$115.21	\$1.92

1. Monthly fixed charge is the based fixed charge plus the monthly customer charge per the number of accounts.

TABLE 36 : CALCULATION OF PROPOSED SEWER RATES FOR INDUSTRIAL CUSTOMERS

Customer Class	Total Annual Revenue Requirement	Annual Volumes	Proposed Rates
Industrial			
Monthly Fixed Administrative Charge	\$ 91		\$3
<u>Fixed Charges (Design Capacity)</u>			
Flow - per HCF per day	\$ 121,346	235 HCF per day	\$517
BOD - per pound per day	58,307	263 lbs./day	\$221
TSS - per pound per day	66,530	306 lbs./day	\$217
<u>Sewer Use Charges</u>			
Flow - per HCF	\$ 303,821	85,675 HCF	\$3.54
BOD - per pound	18,390	16,673 lbs.	\$1.10
TSS - pound	13,432	12,103 lbs.	\$1.11

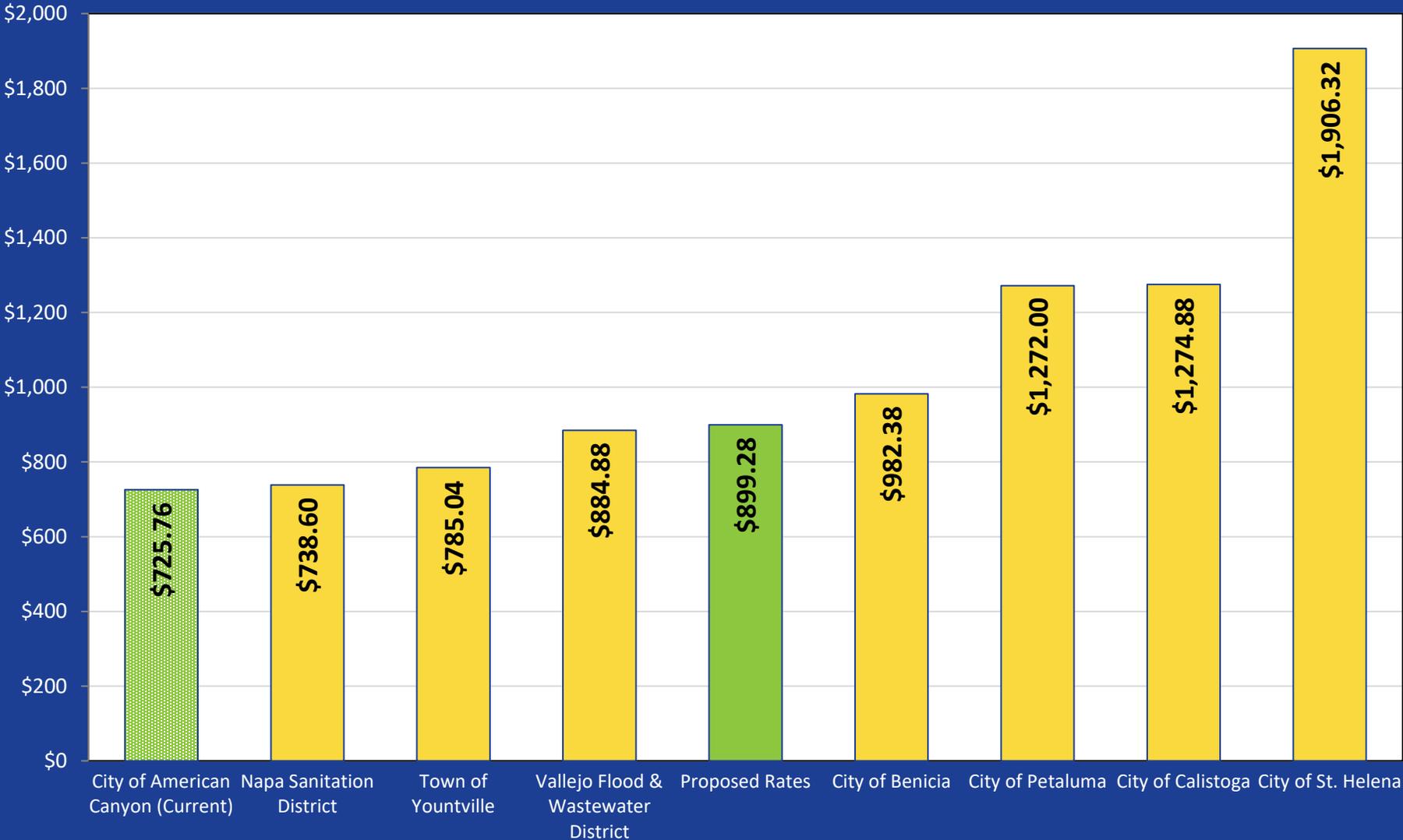
TABLE 37 : CURRENT VS. PROPOSED SEWER RATES

Sewer Rate Schedule ^{1,2}	Description	Current Rates	Proposed Sewer Rates				
			FY 2023/24	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28
			25.00%	20.00%	12.00%	12.00%	0.00%
Residential - Monthly Fixed Service Charges							
Single Family Residential	Per Dwelling Unit	\$60.48	\$74.94	\$89.93	\$100.72	\$112.81	\$112.81
Multi-Family Residential	Per Dwelling Unit	\$45.36	\$48.70	\$58.44	\$65.45	\$73.31	\$73.31
Commercial Customers³							
Monthly Fixed Service Charge	Per Account	\$60.48	\$115.21	\$138.25	\$154.84	\$173.42	\$173.42
Volumetric Rate	Per HCF	\$5.40	\$1.92	\$2.31	\$2.58	\$2.89	\$2.89
Industrial Customers							
Monthly Fixed Administrative Charge	Per Account	n/a	\$2.52	\$3.02	\$3.38	\$3.79	\$3.79
Fixed Charges							
Flow - per HCF per day	Per HCF per day Sewage Flow	n/a	\$517	\$620	\$695	\$778	\$778
BOD - per pound per day	Per pound per day	n/a	\$221	\$266	\$297	\$333	\$333
TSS - per pound per day	Per pound per day	n/a	\$217	\$261	\$292	\$327	\$327
Sewer Use Charges							
Flow - per HCF	Per HCF Sewage Flow	n/a	\$3.54	\$4.24	\$4.75	\$5.32	\$5.32
BOD - per pound	Per pound	n/a	\$1.10	\$1.32	\$1.48	\$1.66	\$1.66
TSS - pound	Per pound	n/a	\$1.11	\$1.33	\$1.49	\$1.67	\$1.67

1. Sewer rates are set according to the average monthly water use for January to March of the previous calendar year. New customers are charged at the average winter water use rate (standard) and adjusted the following year if applicable.
2. The fixed charge includes a monthly customer charge per account.
3. Current rates for commercial customers are charged the higher of the fixed or variable rate. Proposed rates have both a fixed and volumetric charge per commercial customer.

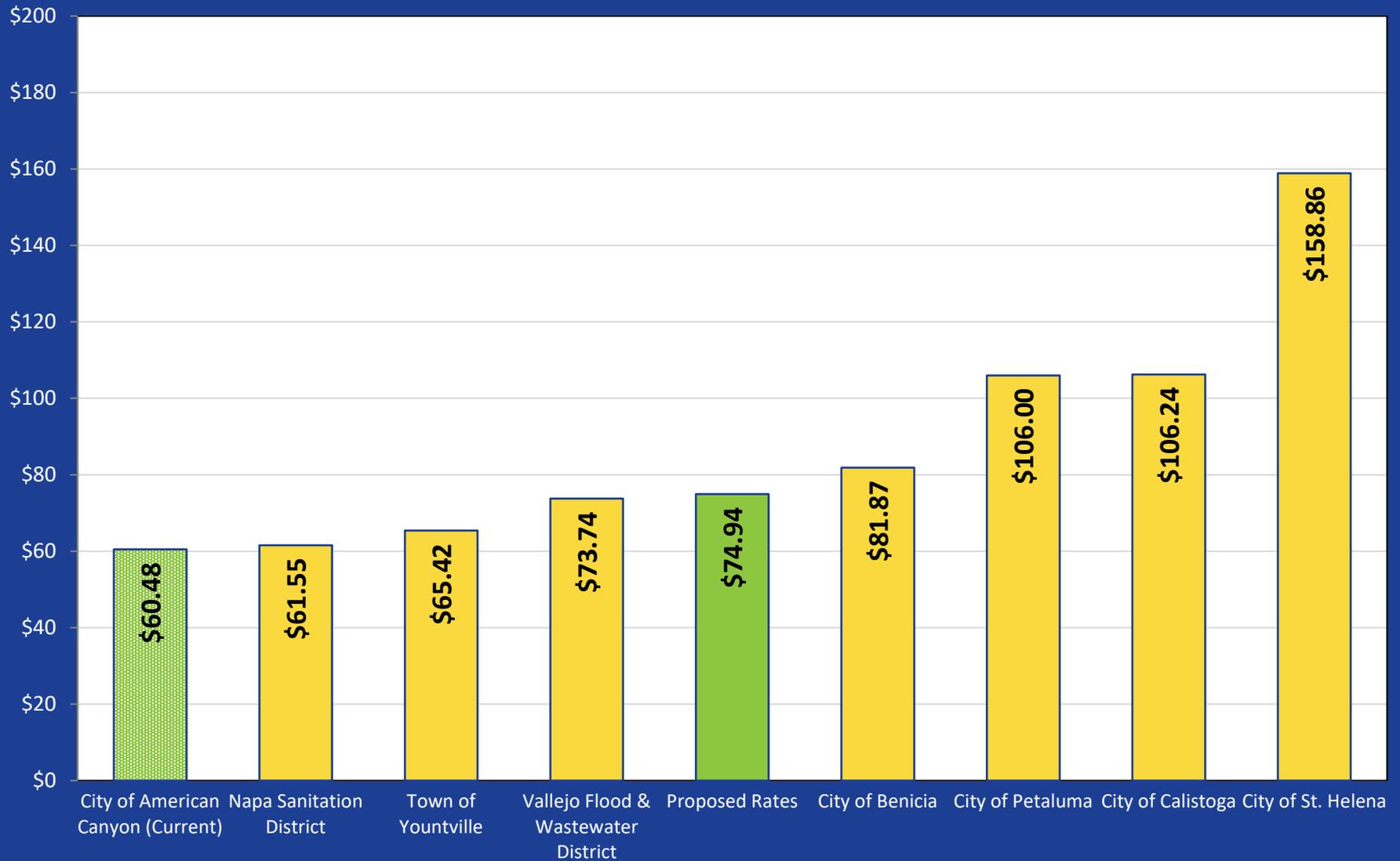
City of American Canyon (Year 1)

Annual Sewer Bill Comparison - Single Family Accounts



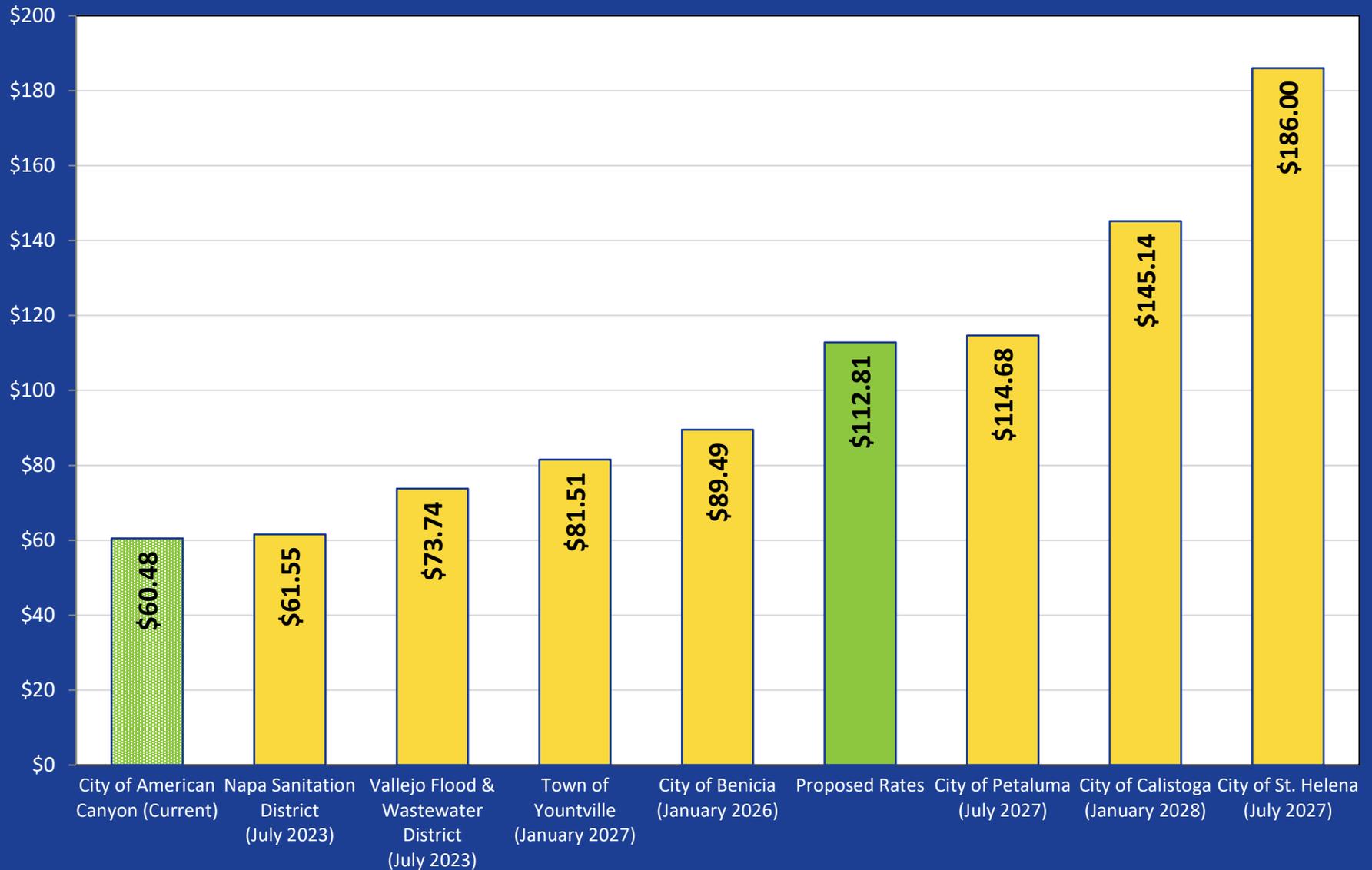
City of American Canyon (Year 1)

Monthly Sewer Bill Comparison - Single Family Accounts

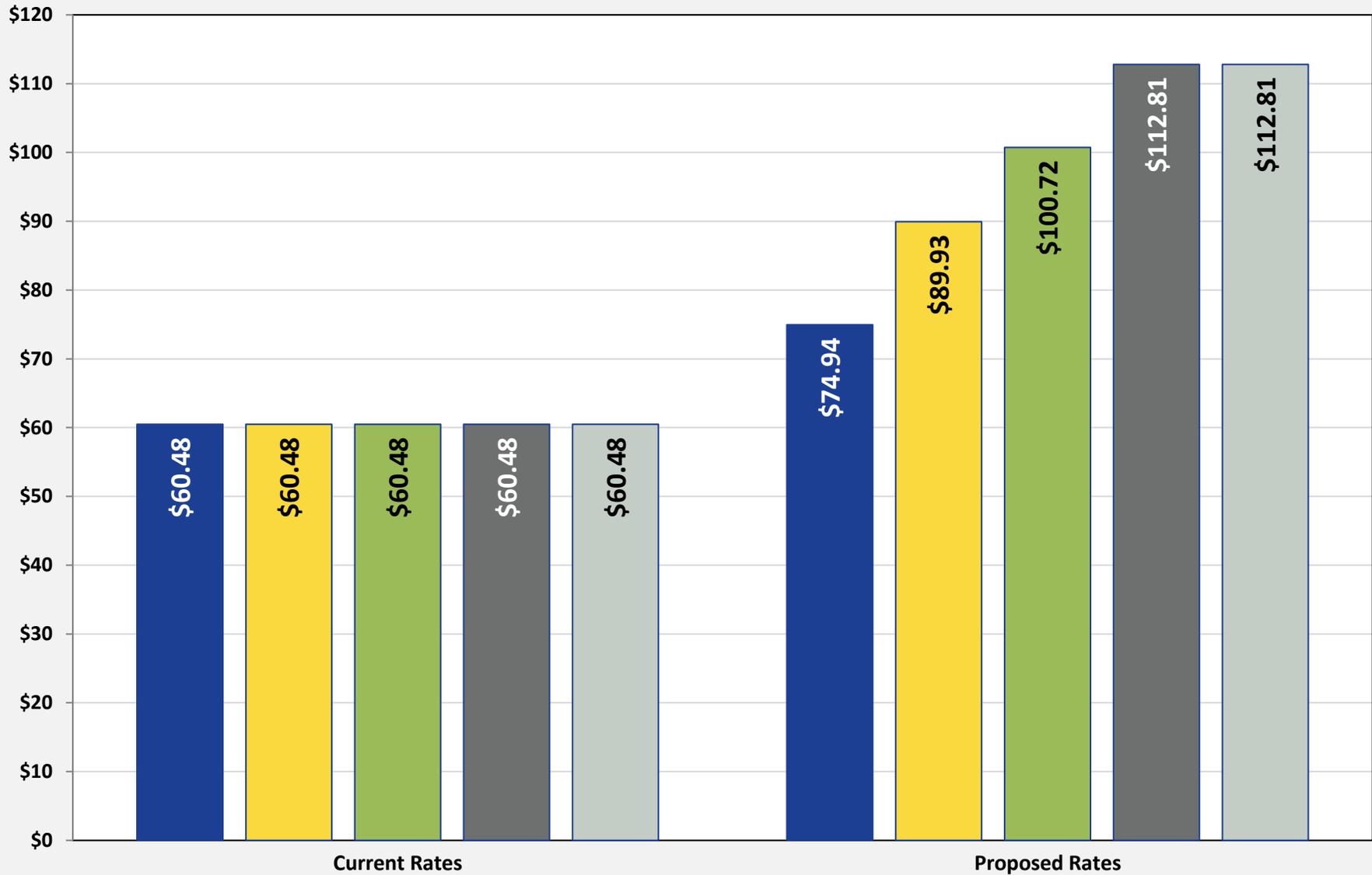


City of American Canyon (Year 5)

Monthly Sewer Bill Comparison - Single Family Accounts

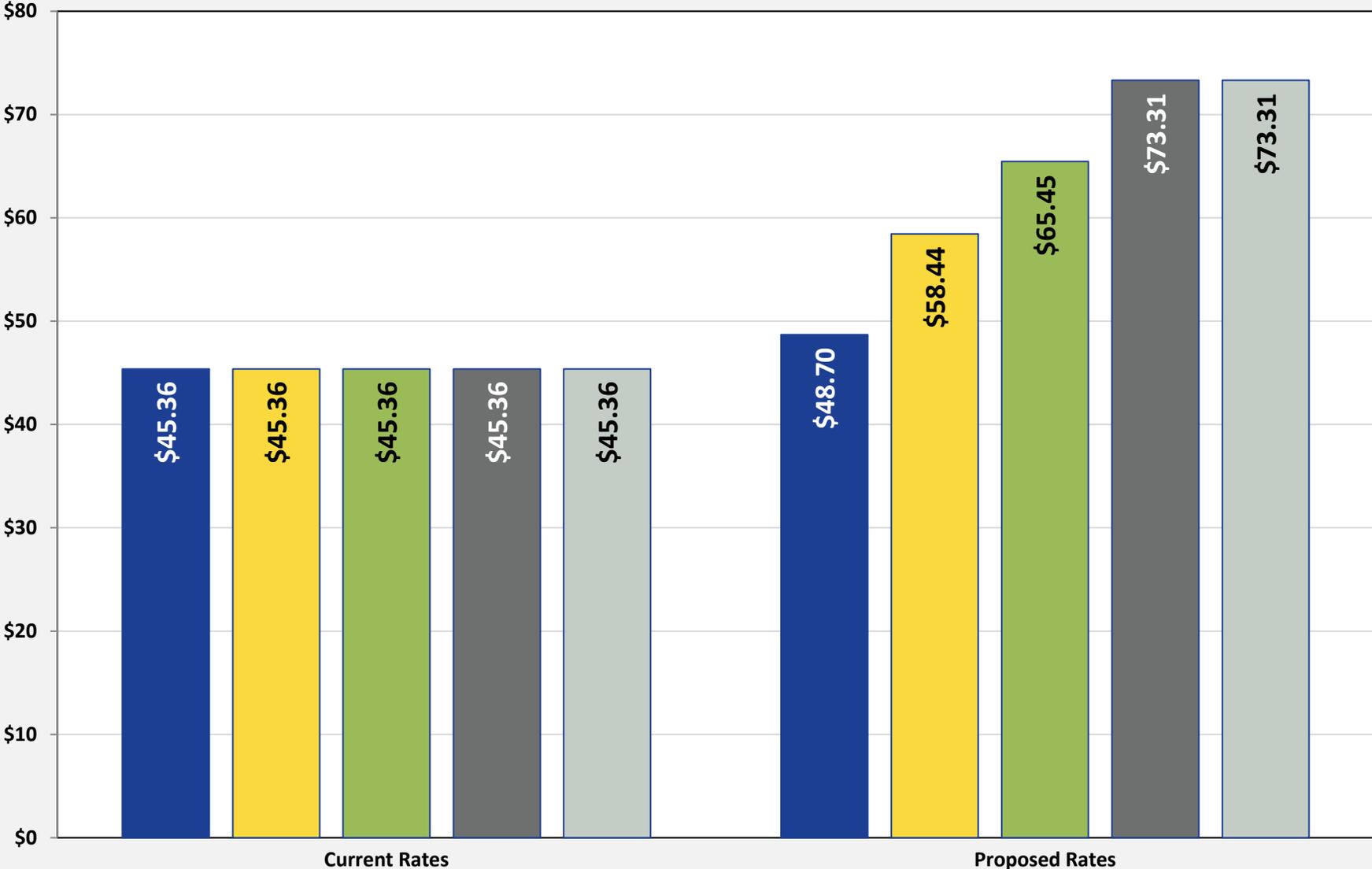


Single Family Residential Monthly Sewer Bills - 5-Year Projections



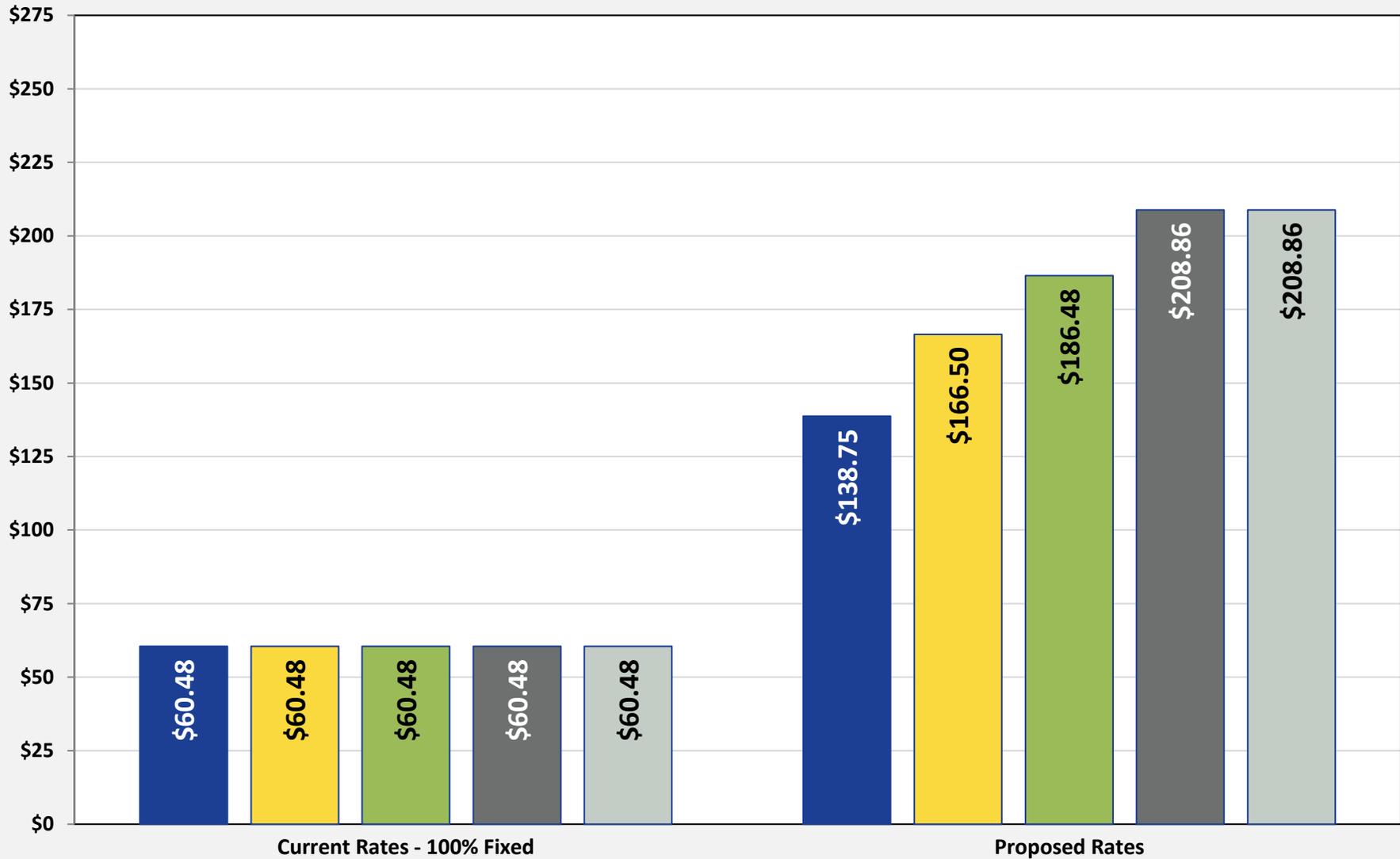
■ FY 2023/24
 ■ FY 2024/25
 ■ FY 2025/26
 ■ FY 2026/27
 ■ FY 2027/28

Multi-Family Residential Monthly Sewer Bills - 5-Year Projections



■ FY 2023/24
 ■ FY 2024/25
 ■ FY 2025/26
 ■ FY 2026/27
 ■ FY 2027/28

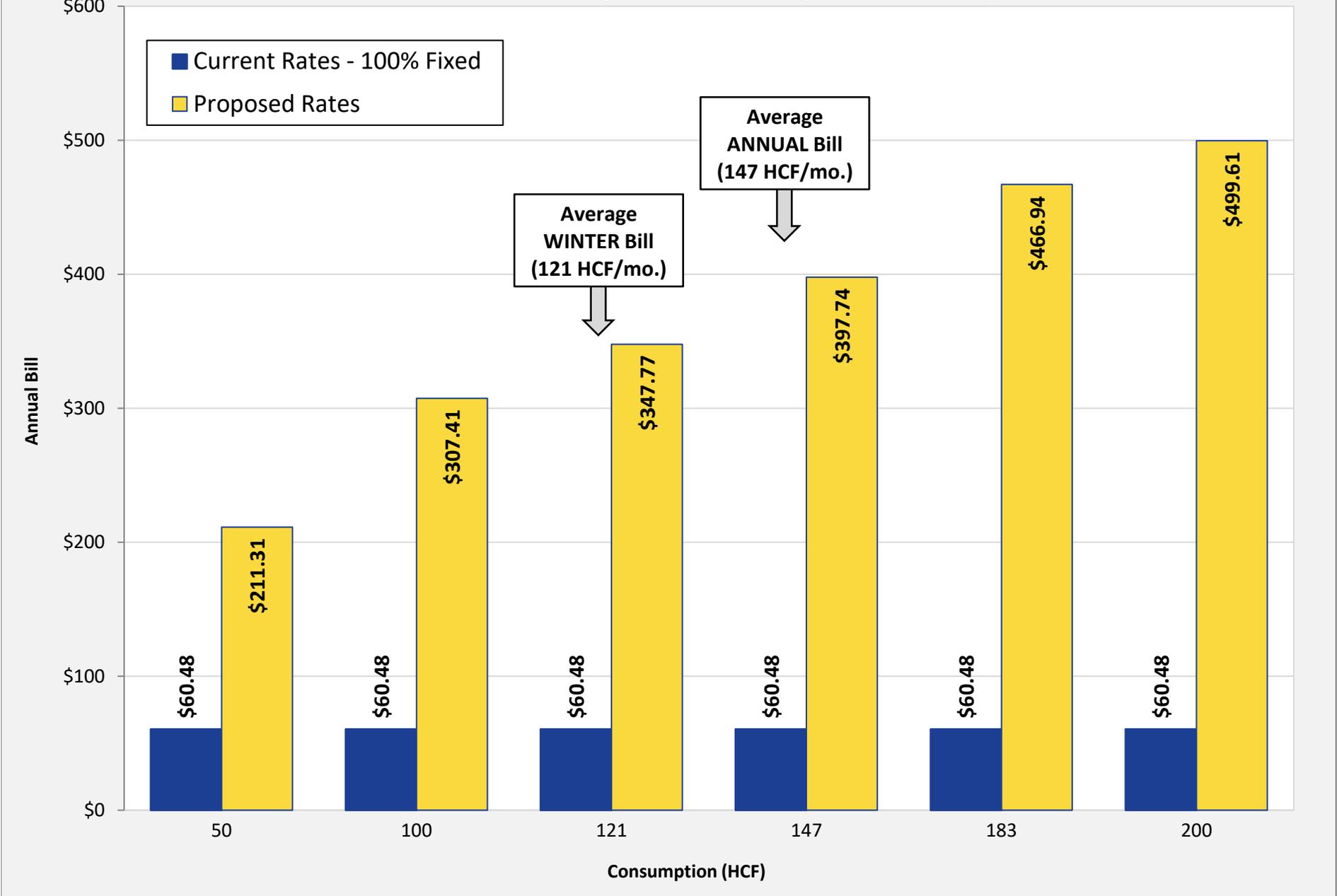
Commercial Monthly Sewer Bills - 5-Year Projections



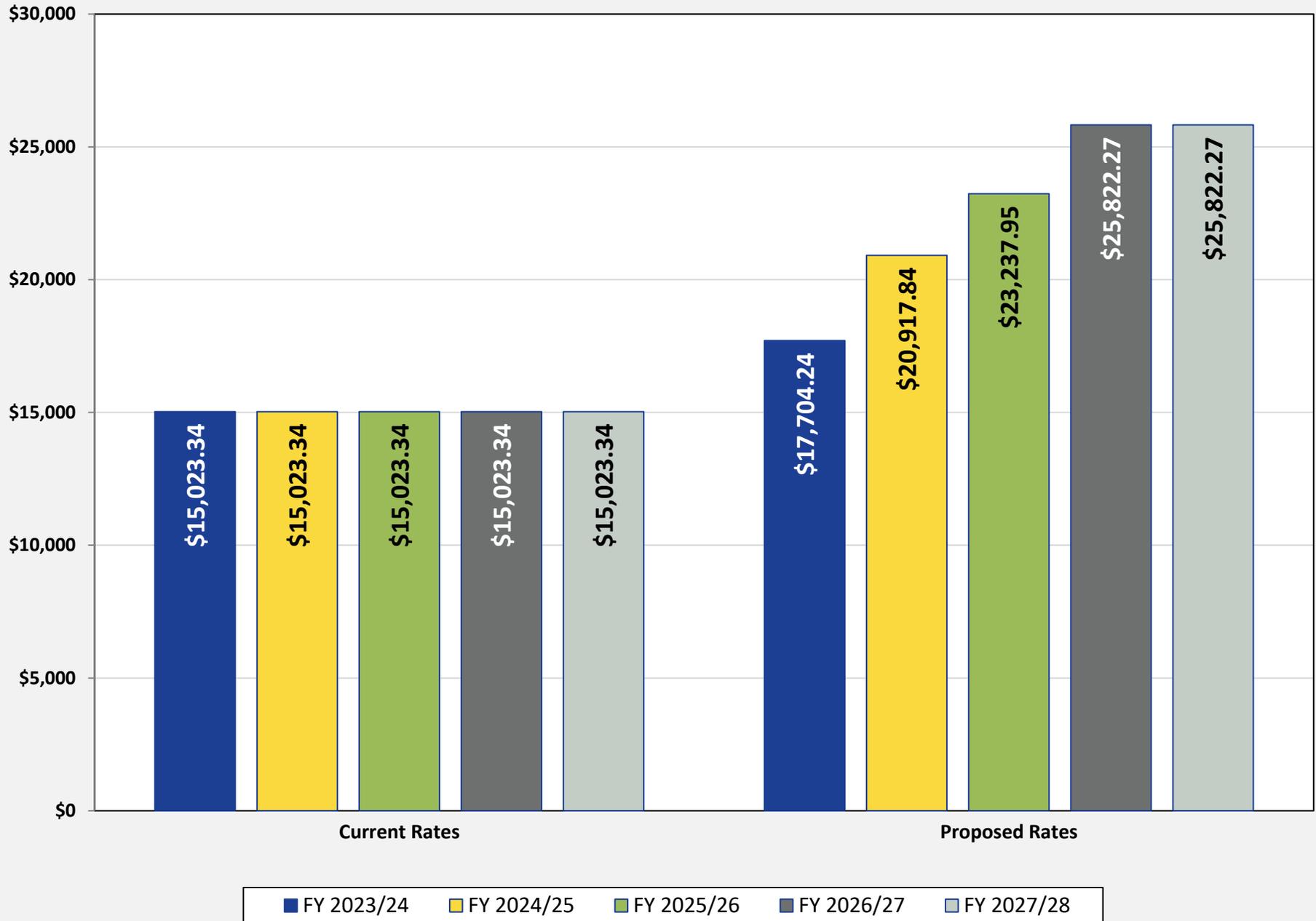
Note: Commercial customer bills are based on average annual consumption of 147 HCF per month.

■ FY 2023/24
 ■ FY 2024/25
 ■ FY 2025/26
 ■ FY 2026/27
 ■ FY 2027/28

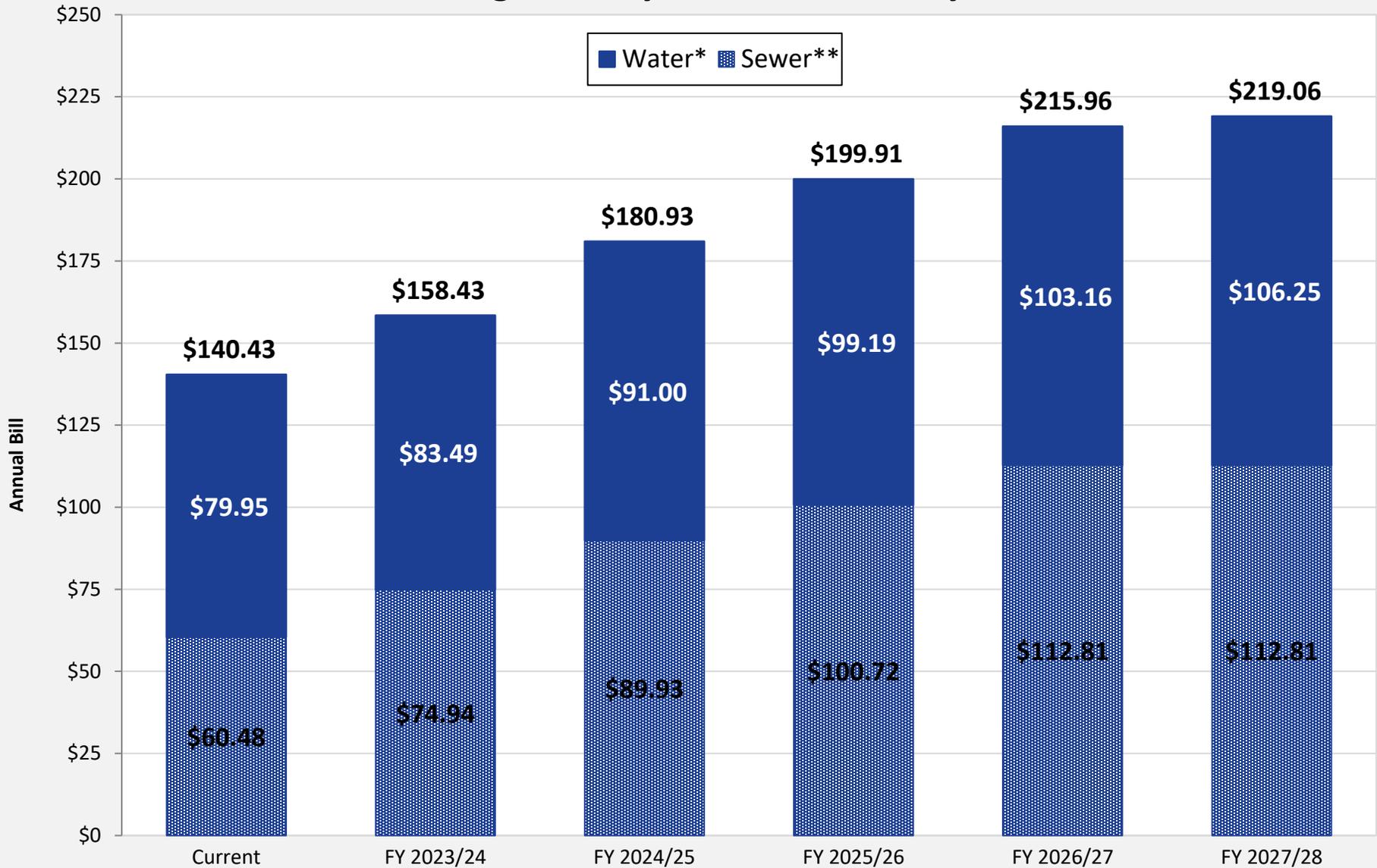
Commercial Sewer Bill Comparison Current vs. Proposed Rates (FY 2023/24)



AmCan Beverages Inc. Monthly Sewer Bills - 5-Year Projections



Single Family Residential Utility Bill



* Water bill is calculated using a 1" Meter and monthly winter water use of 7 HCF (Alternative 1).

** Sewer bill is based on COSA - 55% Fixed / 45% Variable.

Single Family Residential Utility Bill



* Water bill is calculated using a 1" Meter and monthly winter water use of 7 HCF (Alternative 2).

** Sewer bill is based on COSA - 55% Fixed / 45% Variable.

NOTICE OF PROPOSED WATER, SEWER & RECYCLED WATER RATE INCREASES

Water Rate Schedule

Water Rate Schedule	Current Rates	Proposed Rates				
		FY 2023/24	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28
Monthly Fixed Service Charges (in \$/mo)						
Residential Use						
< 1" meter	\$26.56	\$31.32	\$34.14	\$37.21	\$38.70	\$39.86
1" meter	\$26.56	\$31.32	\$34.14	\$37.21	\$38.70	\$39.86
1 1/2" meter	\$26.56	\$58.53	\$63.80	\$69.55	\$72.33	\$74.50
2" meter	\$26.56	\$91.19	\$99.40	\$108.35	\$112.68	\$116.06
3" meter	\$26.56	\$178.29	\$194.33	\$211.82	\$220.30	\$226.91
4" meter	\$26.56	\$276.27	\$301.13	\$328.23	\$341.36	\$351.60
6" meter	\$26.56	\$548.43	\$597.79	\$651.59	\$677.66	\$697.99
8" meter	\$26.56	\$875.03	\$953.78	\$1,039.63	\$1,081.21	\$1,113.65
Multi-Family, Commercial and Landscape						
< 1" meter	\$26.56	\$31.32	\$34.14	\$37.21	\$38.70	\$39.86
1" meter (Residential)	\$26.56	\$31.32	\$34.14	\$37.21	\$38.70	\$39.86
1" meter (Commercial)	\$44.42	\$31.32	\$34.14	\$37.21	\$38.70	\$39.86
1 1/2" meter	\$88.75	\$58.53	\$63.80	\$69.55	\$72.33	\$74.50
2" meter	\$141.99	\$91.19	\$99.40	\$108.35	\$112.68	\$116.06
3" meter	\$283.98	\$178.29	\$194.33	\$211.82	\$220.30	\$226.91
4" meter	\$443.74	\$276.27	\$301.13	\$328.23	\$341.36	\$351.60
6" meter	\$887.48	\$548.43	\$597.79	\$651.59	\$677.66	\$697.99
8" meter	\$1,420.06	\$875.03	\$953.78	\$1,039.63	\$1,081.21	\$1,113.65
Private Fire Protection						
< 1" meter	\$13.28	\$31.32	\$34.14	\$37.21	\$38.70	\$39.86
1" meter	\$13.28	\$31.32	\$34.14	\$37.21	\$38.70	\$39.86
1 1/2" meter	\$13.28	\$58.53	\$63.80	\$69.55	\$72.33	\$74.50
2" meter	\$13.28	\$91.19	\$99.40	\$108.35	\$112.68	\$116.06
3" meter	\$13.28	\$178.29	\$194.33	\$211.82	\$220.30	\$226.91
4" meter	\$13.28	\$276.27	\$301.13	\$328.23	\$341.36	\$351.60
6" meter	\$13.28	\$548.43	\$597.79	\$651.59	\$677.66	\$697.99
8" meter	\$13.28	\$875.03	\$953.78	\$1,039.63	\$1,081.21	\$1,113.65
Temporary Hydrant Meters						
< 1" meter	\$283.98	\$31.32	\$34.14	\$37.21	\$38.70	\$39.86
1" meter	\$283.98	\$31.32	\$34.14	\$37.21	\$38.70	\$39.86
1 1/2" meter	\$283.98	\$58.53	\$63.80	\$69.55	\$72.33	\$74.50
2" meter	\$283.98	\$91.19	\$99.40	\$108.35	\$112.68	\$116.06
3" meter	\$283.98	\$178.29	\$194.33	\$211.82	\$220.30	\$226.91
4" meter	\$283.98	\$276.27	\$301.13	\$328.23	\$341.36	\$351.60
6" meter	\$283.98	\$548.43	\$597.79	\$651.59	\$677.66	\$697.99
8" meter	\$283.98	\$875.03	\$953.78	\$1,039.63	\$1,081.21	\$1,113.65

NOTICE OF PROPOSED WATER, SEWER & RECYCLED WATER RATE INCREASES

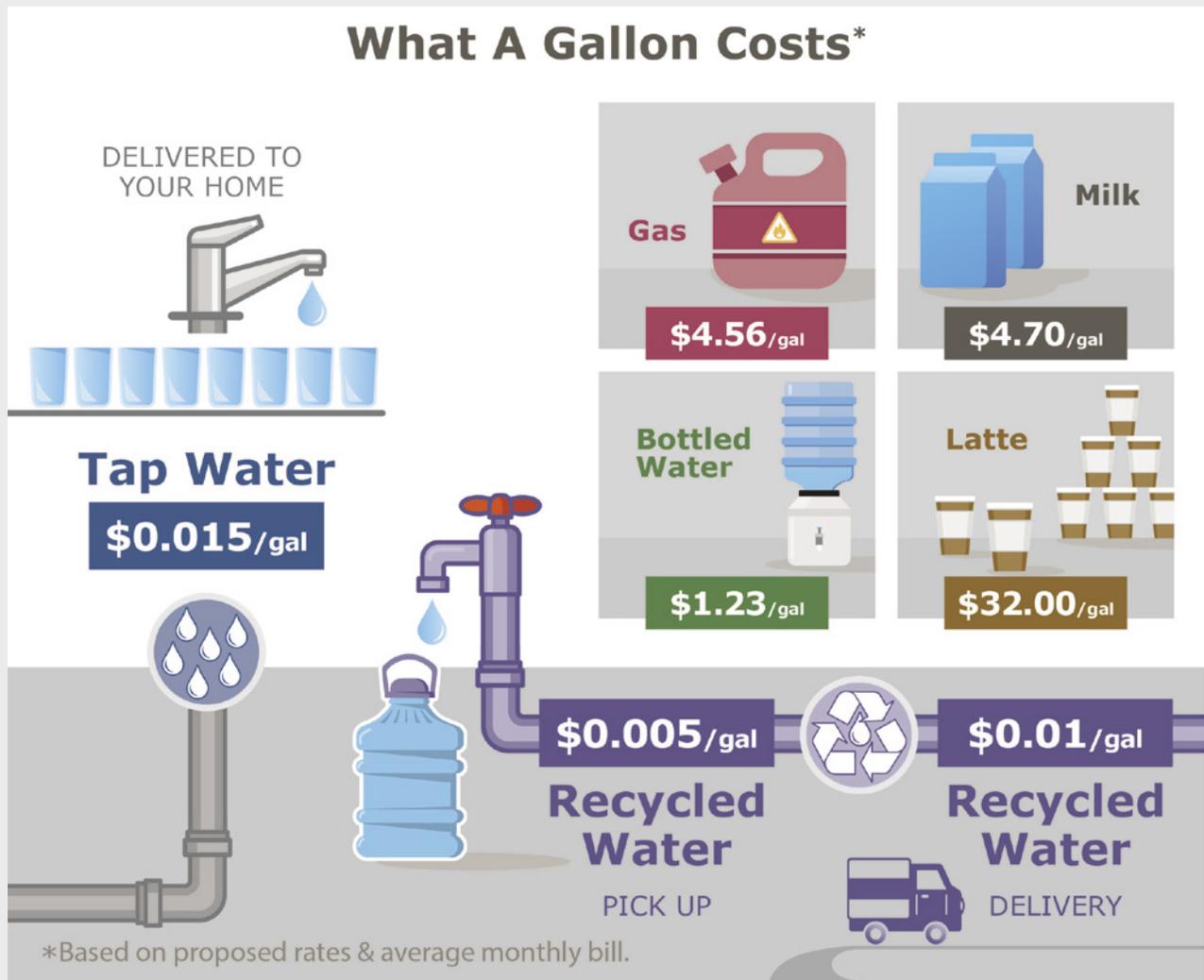
Water Rate Schedule (Continued)	Current Rates	Proposed Rates				
		FY 2023/24	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28
Raw Water						
< 1" meter	n/a	\$31.32	\$34.14	\$37.21	\$38.70	\$39.86
1" meter	\$44.42	\$31.32	\$34.14	\$37.21	\$38.70	\$39.86
1 1/2" meter	n/a	\$58.53	\$63.80	\$69.55	\$72.33	\$74.50
2" meter	\$141.99	\$91.19	\$99.40	\$108.35	\$112.68	\$116.06
3" meter	n/a	\$178.29	\$194.33	\$211.82	\$220.30	\$226.91
4" meter	\$443.74	\$276.27	\$301.13	\$328.23	\$341.36	\$351.60
6" meter	\$887.48	\$548.43	\$597.79	\$651.59	\$677.66	\$697.99
8" meter	n/a	\$875.03	\$953.78	\$1,039.63	\$1,081.21	\$1,113.65
Variable Charges for All Water Consumed (in \$/hcf)						
Residential Use						
Tier 1 (0 - 6 units)	\$7.54	\$7.07	\$7.70	\$8.40	\$8.73	\$8.99
Tier 2 (> 6 units)	\$8.15	\$9.76	\$10.64	\$11.60	\$12.06	\$12.42
Multi-Family, Commercial and Landscape	\$7.72	\$7.62	\$8.30	\$9.05	\$9.41	\$9.70
Private Fire Protection	\$3.86	\$7.62	\$8.30	\$9.05	\$9.41	\$9.70
Temporary Hydrant Meters						
Potable	\$7.72	\$7.62	\$8.30	\$9.05	\$9.41	\$9.70
Recycled	\$0.90	\$6.69	\$7.36	\$8.10	\$8.50	\$8.93
Raw Water	\$3.44	\$7.62	\$8.30	\$9.05	\$9.41	\$9.70

Sewer Rate Schedule

Sewer Rate Schedule	Description	Current Rates	Proposed Sewer Rates				
			FY 2023/24	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28
Residential — Monthly Fixed Service Charges							
Single Family Residential	Per Dwelling Unit	\$60.48	\$74.94	\$89.93	\$100.72	\$112.81	\$112.81
Multi-Family Residential	Per Dwelling Unit	\$45.36	\$48.70	\$58.44	\$65.45	\$73.31	\$73.31
Commercial Customers							
Monthly Fixed Service Charge	Per Account	\$60.48	\$115.21	\$138.25	\$154.84	\$173.42	\$173.42
Volumetric Charge	Per HCF	\$5.40	\$1.92	\$2.31	\$2.58	\$2.89	\$2.89
Industrial Customers							
Monthly Fixed Administrative Charge	Per Account	n/a	\$2.52	\$3.02	\$3.38	\$3.79	\$3.79
Fixed Charges							
Flow - per HCF per day	Per HCF per day Sewage Flow	n/a	\$517	\$620	\$695	\$778	\$778
BOD - per pound per day	Per pound per day	n/a	\$221	\$266	\$298	\$334	\$334
TSS - per pound per day	Per pound per day	n/a	\$217	\$261	\$292	\$327	\$327
Sewer Use Charges							
Flow - per HCF	Per HCF Sewage Flow	n/a	\$3.54	\$4.25	\$4.76	\$5.33	\$5.33
BOD - per pound	Per pound	n/a	\$1.10	\$1.32	\$1.48	\$1.66	\$1.66
TSS - pound	Per pound	n/a	\$1.11	\$1.33	\$1.49	\$1.67	\$1.67

Recycled Water Rate Schedule

Recycled Water Rate Schedule	Current Rates	Proposed Rates				
		FY 2023/24	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28
Monthly Fixed Service Charges (in \$/mo)						
< 1" meter	\$26.56	\$38.89	\$42.78	\$47.05	\$49.41	\$51.88
1" meter	\$44.42	\$64.81	\$71.29	\$78.42	\$82.34	\$86.46
1 1/2" meter	\$88.75	\$129.62	\$142.58	\$156.84	\$164.69	\$172.92
2" meter	\$141.99	\$207.40	\$228.14	\$250.95	\$263.50	\$276.67
3" meter	\$283.98	\$414.79	\$456.27	\$501.90	\$526.99	\$553.34
4" meter	\$443.74	\$648.11	\$712.92	\$784.22	\$823.43	\$864.60
6" meter	\$887.48	\$1,296.23	\$1,425.85	\$1,568.43	\$1,646.85	\$1,729.20
8" meter	\$1,420.06	\$2,073.96	\$2,281.36	\$2,509.49	\$2,634.97	\$2,766.71
Commodity Charges for All Water Consumed (in \$/hcf)						
Variable Charge	\$0.90	\$6.69	\$7.36	\$8.10	\$8.50	\$8.93
Variable Charge - Self-Haul	\$0.00	\$4.00	\$4.41	\$4.85	\$5.09	\$5.34



Drought Rate Schedule

Drought rates are only effective upon City Council action consistent with the City of American Canyon Municipal Code Chapter 13.14, Water Conservation Plan.

Drought Rate Schedule	Proposed Drought Rate (in addition to Proposed Water Rate Schedule on pages 2 & 3)				
	FY 2023/24	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28
Conservation Target					
Up to 10%	\$0.35	\$0.44	\$0.53	\$0.58	\$0.62
Up to 20%	\$0.79	\$0.98	\$1.19	\$1.30	\$1.39
Up to 30%	\$1.36	\$1.68	\$2.03	\$2.23	\$2.39
Up to 40%	\$2.12	\$2.61	\$3.16	\$3.46	\$3.71
Up to 50%	\$3.17	\$3.92	\$4.75	\$5.20	\$5.57
>50%	\$4.76	\$5.88	\$7.12	\$7.79	\$8.36

Any property owner of record and/or ratepayer whose property is subject to the proposed new rates for the City’s utility service fees may submit a written protest against the proposed rate increases.

Only one written protest will be counted per identified parcel.

To be valid, each written protest must:

- State that the identified property owner and/or ratepayer is in opposition to the proposed rate increases;
- Provide the location of the identified parcel (by assessor’s parcel number, street address, or customer account);
- Include the name and original signature of the property owner and/or ratepayer submitting the protest; and
- If the person protesting was not shown on Napa County’s last equalized assessment roll as the property owner and/or ratepayer of record, provide written evidence that the person is the property owner and/or ratepayer (example: current copy of city services bill).

Written protests may be submitted by mail or in person to:

City of American Canyon, Attention: City Clerk, 4381 Broadway, Suite 201, American Canyon, CA 94503

Any protest submitted via e-mail or other electronic means will not qualify as a written protest. Written protests may also be submitted at the public hearing (date and time noted above). All written protests must be submitted to the City prior to the conclusion of the public comment portion of the public hearing.

At the public hearing, the City Council will accept and consider all written protests and hear all oral comments on the proposed rate increases. Oral comments at the public hearing will not qualify as formal protests unless accompanied by a written protest. At the conclusion of the public hearing, the City Council will consider adoption of the proposed changes as follows:

1. If less than a majority of property owners or ratepayers file a protest, the City Council will consider increasing water rates, effective May 1, 2024.
2. If a majority of affected property owners or ratepayers protest the increase before the conclusion of a required public hearing, the City is prohibited by law from increasing water rates.

Please note that there is a 120-day statute of limitations from the effective date of the resolution or ordinance adopting the rates to challenge any of the rates described herein.





TITLE

New 'Environmental Sustainability' Goal

RECOMMENDATION

Adopt a Resolution approving a new 'Environmental Sustainability' Goal and various strategies.

CONTACT

Jason Holley, City Manager

BACKGROUND & ANALYSIS

From 2013-2015, the City Council led a community-wide 'visioning' resulting in the creation of a Vision, Mission, Values and Goals (Attachment 2). This effort memorialized the community's ethos since Incorporation (in 1992) and established a trajectory for the next two decades. At the time, American Canyon residents were generally pleased with how things had turned out and wanted more of the same. Today, community's sentiment generally remains the same.

American Canyon's Vision Statement is as follows:

*Home to an engaged, diverse community;
Destination for outdoor recreation and natural beauty;
Hub of opportunity and economic vitality.*

The City of American Canyon is the primary service provider within the community. The community's input during the visioning process led to the organization's Mission Statement is as follows:

Our mission is to deliver exemplary services that are responsive to community priorities, ensure a healthy and sustainable organization, and drive us toward our shared vision for the future.

In addition, the Council and staff developed a myriad of strategies and key initiatives to support the Vision, Mission, Values and Goals (Attachments 3 & 4). These items continue to guide our decision-making and work plans (Attachment 5).

In 2023, the City Council confirmed the 'trajectory' envisioned by the community in 1992, and later

memorialized in 2013-2015, was still the guiding path today. However, at the February 2 strategic planning workshop, the Council explored the dearth of emphasis on the topic of 'environmental sustainability'.

Over the past decade, American Canyon has become known state-wide as leader in environmental suitability, particularly in the areas of land use/housing, water conservation and recycled water.

For example, in 2022, American Canyon's per capita GHG emissions were estimated to be 13% less the state-wide average and 39% less than the national average.

Prior success include:

- 2012 Energy Efficiency Climate Action Plan
- 2016 ILG Beacon Award
- 2017 CA Water Re-Use Award
- 2018 Green Building Code
- 2020 Climate Action Proclamation
- 2021 Gas Station Moratorium
- 2022 Climate Action Resolution
- 2022 Countywide Climate Action Committee – GHG Baseline

This topic of environmental sustainability has gained importance to the community and it is appropriate to recognize the City's prior efforts and future interests with a new proposed Goal: "Demonstrate Leadership in Environmental Sustainability."

As we start to develop strategies to support this new goal, a few guiding principles arise:

- "Focus on City operations first, before trying to impose changes on other (potentially unwilling) participants".
- "Sea level change impacts western edge and fire impacts in open spaces like Newell and Clark Ranch are a concern".
- "Supporting regional efforts (instead of going first alone and/or opposing) is desirable."
- "Educating residents and businesses is essential to obtaining the 'buy-in' precedent to behavior change".
- "Balance new development while preserving other lands as open space".
- "Implement strategies that 'make sense' for American Canyon instead of chasing feel-good accolades or capitulating to outsiders.

Below are proposed new strategies to support the new goal:

1. Pursue net-zero climate pollution for city operations.
2. Fortify locations vulnerable to climate change.
3. Collaborate with regional partners to reduce climate pollutants.
4. Identify lands for new development while preserving other lands as open space.
5. Educate the community to obtain buy-in for behavior change.

Staff recommends adopting the new Goal - "Demonstrate Leadership in Environmental Sustainability" and the above strategies (Attachment 1).

COUNCIL PRIORITY PROGRAMS AND PROJECTS

Organizational Effectiveness: "Deliver exemplary government services."

FISCAL IMPACT

There is no fiscal impact of adopting a new goal. The various strategies and key initiative may have positive or negative fiscal impacts, but it would be too speculative to prognostic at this time.

ENVIRONMENTAL REVIEW

15378(b) - The action is not a "Project" subject to the California Environmental Quality Act ("CEQA") because it does not qualify as a "Project" under Public Resources Code Sections 21065 and 21080 and in Section 15378(b) of Title 14 of the California Code of Regulations.

ATTACHMENTS:

1. [Resolution - Environmental Sustainability Goal](#)
2. [Visioning Drawing](#)
3. [Hierarchy](#)
4. [Goals and Strategies](#)
5. [Strategic Work Plan](#)

RESOLUTION NO. 2024-_____

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF AMERICAN CANYON APPROVING A NEW 'ENVIRONMENTAL SUSTAINABILITY' GOAL AND VARIOUS STRATEGIES.

WHEREAS, from 2013-2015, the City Council led a community-wide 'visioning' resulted in the creation of American Canyon's Vision, Mission, Values and Goals; and

WHEREAS, American Canyon's Vision Statement is: *Home to an engaged, diverse community. Destination for outdoor recreation and natural beauty. Hub of opportunity and economic vitality.*

WHEREAS, American Canyon's Public Safety Goal is: "Ensure that American Canyon remains a safe community"; and

WHEREAS, American Canyon's Community & Sense of Place Goal is: "Build on the strength of our local community to develop a clear sense of place and establish our unique identity."; and

WHEREAS, American Canyon's Economic Development & Vitality Goal is: "Attract and expand diverse business and employment opportunities."; and

WHEREAS, American Canyon's Outdoors & Recreation Goal is: "Expand opportunities for use of outdoor recreation and an active lifestyle."; and

WHEREAS, American Canyon's Transportation Goal is: "Improve the City's transportation network to mitigate traffic and enhance the quality of life for the community."; and

WHEREAS, American Canyon's Infrastructure Goal is: "Develop and upgrade infrastructure resources to support sustainable growth."; and

WHEREAS, American Canyon's Quality Services & Organizational Effectiveness Goal is: "Deliver exemplary government services."; and

WHEREAS, the City Council desires a goal related to 'environmental sustainability'.

NOW, THEREFORE, BE IT RESOLVED that the City Council of the City of American Canyon hereby approves the following "Environmental Sustainability Goal: Demonstrate leadership in environmental sustainability."

NOW, THEREFORE, BE IT FURTHER RESOLVED that the City Council of the City of American Canyon hereby approves the following strategies to support the Environmental Sustainability Goal:

1. Pursue net-zero climate pollution for city operations.
2. Fortify locations vulnerable to climate change.
3. Collaborate with regional partners to reduce climate pollutants.
4. Identify lands for new development while preserving other lands as open space.
5. Educate the community to obtain buy-in for behavior change.

PASSED, APPROVED and ADOPTED at a regularly scheduled meeting of the City Council of the City of American Canyon held on the 2nd day of April, 2024 by the following vote:

AYES:

NOES:

ABSTAIN:

ABSENT:

Leon Garcia, Mayor

ATTEST:

APPROVE AS TO FORM:

Taresa Geilfuss, CMC, City Clerk

William D. Ross, City Attorney

VISION

American Canyon ...

HOME TO AN ENGAGED, DIVERSE COMMUNITY
DESTINATION FOR OUTDOOR RECREATION and NATURAL BEAUTY
HUB OF OPPORTUNITY and ECONOMIC VITALITY

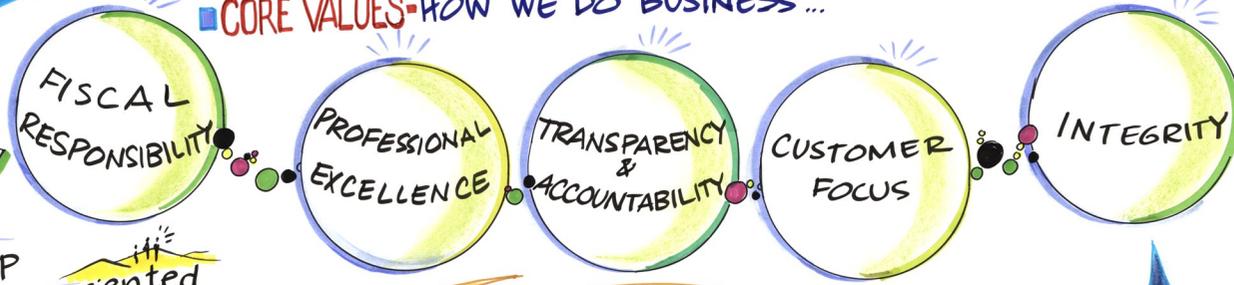
STRATEGIC VALUES - HOW WE ACCOMPLISH THE CORE VALUES...



OUR COMMUNITY VISION and STRATEGIC PLAN

OUR ORGANIZATIONAL VALUES

CORE VALUES - HOW WE DO BUSINESS...



OUR MISSION

OUR MISSION IS TO DELIVER EXEMPLARY SERVICES THAT ARE RESPONSIVE TO COMMUNITY PRIORITIES, ENSURE A HEALTHY and SUSTAINABLE ORGANIZATION, AND DRIVE US TOWARD OUR SHARED VISION FOR THE FUTURE.

SEVEN STRATEGIC GOAL AREAS



CITY OF AMERICAN CANYON



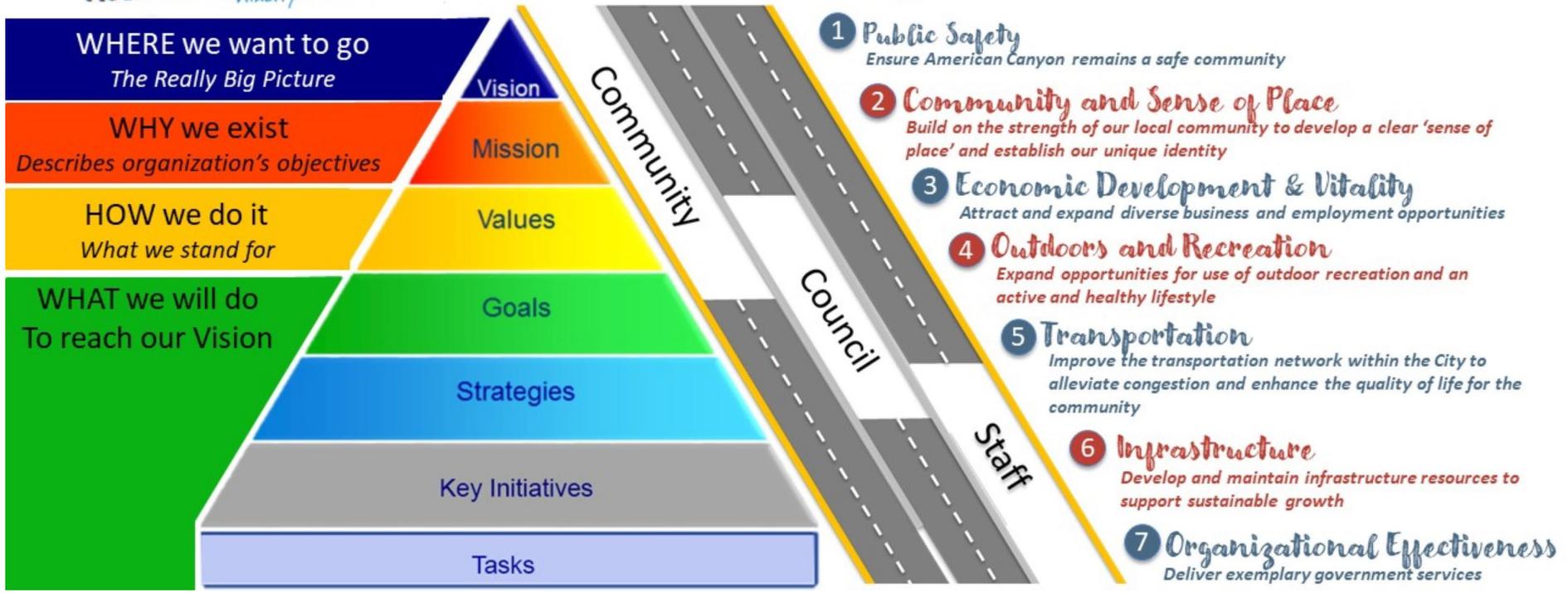


VISION
American Canyon ...
HOME TO AN ENGAGED, DIVERSE COMMUNITY
DESTINATION FOR OUTDOOR RECREATION and NATURAL BEAUTY
HUB OF OPPORTUNITY and ECONOMIC VITALITY

OUR MISSION
OUR MISSION IS TO DELIVER EXEMPLARY SERVICES THAT ARE RESPONSIVE TO COMMUNITY PRIORITIES, ENSURE A HEALTHY and SUSTAINABLE ORGANIZATION, AND DRIVE us TOWARD OUR SHARED VISION FOR THE FUTURE.

STRATEGIC VALUES—HOW WE ACCOMPLISH THE CORE VALUES...

- creativity and innovation
- collaboration and teamwork
- leadership
- community engagement
- results oriented



Goals

- 1 Public Safety**
Ensure American Canyon remains a safe community
- 2 Community and Sense of Place**
Build on the strength of our local community to develop a clear 'sense of place' and establish our unique identity
- 3 Economic Development & Vitality**
Attract and expand diverse business and employment opportunities
- 4 Outdoors and Recreation**
Expand opportunities for use of outdoor recreation and an active and healthy lifestyle
- 5 Transportation**
Improve the transportation network within the City to alleviate congestion and enhance the quality of life for the community
- 6 Infrastructure**
Develop and maintain infrastructure resources to support sustainable growth
- 7 Organizational Effectiveness**
Deliver exemplary government services

American Canyon's Goals and Strategies

Public Safety Goal - Ensure American Canyon remains a safe community

Strategy PS-1: Ensure American Canyon is prepared for emergencies and disasters.

Strategy PS-2: Engage and respond to the community's safety concerns.

Community and Sense of Place Goal - Build on the strength of our local community to develop a clear

Strategy CD-1: Develop and strengthen placemaking opportunities

Strategy CD-2: Promote a unique community identity.

Strategy CD-3: Encourage residential/commercial development within Watson Ranch.

Strategy CD-4: Expand network of community groups and volunteer opportunities.

Economic Development and Vitality Goal - Attract and expand diverse business and employment

Strategy ED -1: Identify opportunities for businesses.

Strategy ED-2: Facilitate industrial/commercial development within Green Island Industrial Area.

Strategy ED-3: Facilitate mixed-use development within Broadway District Specific Plan Area.

Strategy ED-4: Encourage and facilitate tourism.

Strategy ED-5: Expand jurisdictional boundaries to provide areas for future growth.

Outdoors and Recreation Goal - Expand opportunities for use of outdoor recreation and an active

Strategy RE-1: Ensure recreation programming and events attract a broad spectrum of residents.

Strategy RE-2: Partner with community groups to deliver opportunities for organized activity.

Strategy RE-3: Enhance parks and open space amenities.

Strategy RE-4: Facilitate the development of interconnected trail systems.

Transportation Goal - Improve the transportation network within the City to alleviate congestion and

Strategy TR-1: Improve traffic flow along Highway 29.

Strategy TR-2: Better the condition of local streets.

Strategy TR-3: Expand network of local streets and parallel routes to Highway 29.

Strategy TR-4: Improve safety and expand access for bicyclists, pedestrians and transit users.

Infrastructure Goal - Develop and maintain infrastructure resources to support sustainable growth.

Strategy IN-1: Deliver high-quality drinking water from a stable, long-term supply.

Strategy IN-2: Provide recycled water alternatives for non-potable uses.

Strategy IN-3: Collect and treat non-industrial and industrial wastes effectively and efficiently.

Strategy IN-4: Prevent flooding of natural and man-made drainage systems.

Organizational Effectiveness Goal - Deliver exemplary government services.

Strategy OR-1: Ensure fiscal stability to deliver services and maintain assets.

Strategy OR-2: Emphasize customer service and community priorities.

Strategy OR-3: Engage the entire community.

Strategy OR-4: Implement new technology.

Strategy OR-5: Encourage continuous improvement and best practices.

Strategy OR-6: Increase employee engagement and development programs.

Strategy OR-7: Demonstrate leadership in environmental sustainability.

Public Safety Goal - Ensure American Canyon remains a safe community

Strategy PS-1: Ensure American Canyon is prepared for emergencies and disasters.

Key Initiative	Category	2024 Milestone
Formalize interagency relationship with ACFPD.	City Organizational Improvement	Approve Operating Agreement MOU.
Update 'Emergency Operations Plan'.	City Organizational Effort	Evaluate staffing need/service delivery model.

Strategy PS-2: Engage and respond to the community's safety concerns.

Key Initiative	Category	2024 Milestone
Evaluate law enforcement service levels.	City Organizational Improvement	Approve Amendment 20 with Napa Sheriff.

Community and Sense of Place Goal - Build on the strength of our local community to develop

Strategy CD-1: Develop and strengthen placemaking opportunities

Key Initiative	Category	2024 Milestone
Complete Napa Valley Ruins and Gardens.	3rd Party Development Project	Approve on-site utility plans. Approved special event permit.

Strategy CD-2: Promote a unique community identity.

Key Initiative	Category	2024 Milestone
Develop Eco-Center.	3rd Party Development Project	Approved Design Permit. Approve Long-Term Lease.
Complete wetlands restoration/kayack launch at former Corporation Yard.	Future City Capital Project	Complete 'Feasibility Assessment'.

Strategy CD-3: Encourage residential/commercial development within Watson Ranch.

Key Initiative	Category	2024 Milestone
Extend Rio Del Mar to Hwy 29.	Future City Capital Project	Aquire right-of-way from Adobe Property
Update AC-1 Development Agreement.	3rd Party Development Project	Approve DA Amendment

Strategy CD-4: Expand network of community groups and volunteer opportunities.

Key Initiative	Category	2024 Milestone
N/A	N/A	N/A

Economic Development and Vitality Goal - Attract and expand diverse business and

Strategy ED -1: Identify opportunities for businesses.

Key Initiative	Category	2024 Milestone
N/A	N/A	N/A

Strategy ED-2: Facilitate industrial/commercial development within Green Island Industrial

Key Initiative	Category	2024 Milestone
Respond to voter initiative (Measure K).	3rd Party Planning Effort	Council approve as-is or submit to voters.
Upgrade WRF to treat industrial high-strength waste.	Future City Capital Project	Basis of Design Report complete.

Strategy ED-3: Facilitate mixed-use development within Broadway District Specific Plan Area.

Key Initiative	Category	2024 Milestone
Re-develop Adobe Property.	3rd Party Development Project	Apply for grant funding to maximize development potential
Underground overhead utilities along Highway 29.	City Planning Effort	Approve nexus fee program.

Strategy ED-4: Encourage and facilitate tourism.

Key Initiative	Category	2024 Milestone
Complete Home 2 Suites Hotel.	3rd Party Development Project	Approve final occupancy.
Complete Watson Ranch Hotel.	3rd Party Development Project	Submit building permit.

Strategy ED-5: Expand jurisdictional boundaries to provide areas for future growth.

Key Initiative	Category	2024 Milestone
Annex Watson Lane Territory.	Litigation	Refer to City Attorney
Expand Urban Limit Line.	City Planning Effort	Initiate discussion with County about ULL changes

Outdoors and Recreation Goal - Expand opportunities for use of outdoor recreation and an

Strategy RE-1: Ensure recreation programming and events attract a broad spectrum of

Key Initiative	Category	2024 Milestone
Solicit resident satisfaction feedback.	City Organizational Improvement	Complete NCS. Implement post-program surveys.

Strategy RE-2: Partner with community groups to deliver opportunities for organized activity.

Key Initiative	Category	2024 Milestone
Implement Clark Ranch Master Plan.	3rd Party Capital Project	Napa Firewise to complete fire hazard mitigation project.

Strategy RE-3: Enhance parks and open space amenities.

Key Initiative	Category	2024 Milestone
Update Newell Open Space Management Plan.	City Planning Effort	Establish trail operations and maintenance standards.

Strategy RE-4: Facilitate the development of interconnected trail systems.

Key Initiative	Category	2024 Milestone
Add trails adjacent to Newell Open Space.	3rd Party Development Project	Acquire Jaeger Open Space

Transportation Goal - Improve the transportation network within the City to alleviate

Strategy TR-1: Improve traffic flow along Highway 29.

Key Initiative	Category	2024 Milestone
Complete 'Hwy 29 Multi-Modal Operational Improvement Project'.	3rd Party Capital Project	NVTA hire consultant and initiate PE-AD Phase

Strategy TR-2: Better the condition of local streets.

Key Initiative	Category	2024 Milestone
Adopt Measure X Ordinance.	3rd Party Planning Effort	NVTA-TA places Measure X on November 2024 ballot
Implement paving project.	Future City Capital Project	Refer to CIP

Strategy TR-3: Expand network of local streets and parallel routes to Highway 29.

Key Initiative	Category	2024 Milestone
Update Traffic Impact Fee.	City Organizational Effort	Approve nexus study and fee program.
Extend Newell Drive to Hwy 29.	Litigation	Refer to City Attorney

Strategy TR-4: Improve safety and expand access for bicyclists, pedestrians and transit users.

Key Initiative	Category	2024 Milestone
Implement 'Complete Streets' on Paving Projects	Future City Capital Project	Refer to CIP

Infrastructure Goal - Develop and maintain infrastructure resources to support sustainable

Strategy IN-1: Deliver high-quality drinking water from a stable, long-term supply.

Key Initiative	Category	2024 Milestone
Complete Sites Reservoir Project.	3rd Party Capital Project	Approve Benefits and Obligations Agreement.
Resolve Vallejo Water litigation.	Litigation	Refer to City Attorney
Secure new capital for infrastructure investments.	City Organizational Effort	Adopt new water rates.

Strategy IN-2: Provide recycled water alternatives for non-potable uses.

Key Initiative	Category	2024 Milestone
Connect Tower Road customers.	Future City Capital Project	Install new services to 6 customers.
Secure new capital for infrastructure investments.	City Organizational Effort	Establish recycled water rates.

Strategy IN-3: Collect and treat non-industrial and industrial wastes effectively and efficiently.

Key Initiative	Category	2024 Milestone
Prepare Water Reclamation Facility Master Plan.	Future City Capital Project	None
Secure new capital for infrastructure investments.	City Organizational Effort	Adopt new sewer rates.

Strategy IN-4: Prevent flooding of natural and man-made drainage systems.

Key Initiative	Category	2024 Milestone
N/A	N/A	N/A

Organizational Effectiveness Goal - Deliver exemplary government services.

Strategy OR-1: Ensure fiscal stability to deliver services and maintain assets.

Key Initiative	Category	2024 Milestone
Update Governance Protocols.	City Organizational Effort	Approve fiscal policy confirming 'capital set aside'.

Strategy OR-2: Emphasize customer service and community priorities.

Key Initiative	Category	2024 Milestone
Update General Plan.	City Planning Effort	DEIR circulated for public comment

Strategy OR-3: Engage the entire community.

Key Initiative	Category	2024 Milestone
Create Communications Strategic Plan.	City Organizational Effort	Approve plan
Develop new website.	City Organizational Effort	Go live.

Strategy OR-4: Implement new technology.

Key Initiative	Category	2024 Milestone
Upgrade accounts payable system.	City Organizational Effort	Implement Invoice Cloud
Implement Computerized Maint. Management System.	City Organizational Effort	

Strategy OR-5: Encourage continuous improvement and best practices.

Key Initiative	Category	2024 Milestone
Upgrade financial system.	City Organizational Effort	Migrate to Springbrook Cloud
Upgrade payroll system.	City Organizational Effort	Implement ESS module

Strategy OR-6: Increase employee engagement and development programs.

Key Initiative	Category	2024 Milestone
Implement PWD/MUD OA recomendations.	City Organizational Effort	Hire utilities leader.
Implement P&R OA recommedations.	City Organizational Effort	Employee training and special projects.



City Council Committee Report

Submitted by: * Councilmember Mark Joseph

Council Meeting Date: 04/02/2024

Event Date: 2024-03-22 Event Type: Committee Report

Event Title: * Climate Action Committee

Event Report: Attended the monthly meeting. The main topic was a model Food ware Ordinance. The main points included only compostable food ware, if reusable is not available; offering a discount if the customer brings their own utensils; charging customers 25 cents to \$1.00 if they do not bring their own cups, utensils or reusable plates. The goal is to send this to all the jurisdictions, and encourage them to adopt something similar. This will require a lot of outreach to our local restaurants, and implementation may take time to allow the outreach/educational process to unfold, as well as to reduce the inventory of disallowed products. Some documentation was presented that showed restaurants could actually save money from this ordinance.

We also heard an update on the Bay-Ren programs and staffing opportunity. There are a number of existing regional programs that would benefit our residents and businesses. The challenge is getting the word out and having support staff to work with the customer.

Also met with Assembly Majority Leader, Cecilia Aguiar-Curry, to discuss the 24/7 GHG monitoring project. Although she pointed out the State cannot help at this time, she did give us several people to contact that might be able to help us fund the project.

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Event Date: 2024-03-20 Event Type: Committee Report

Event Title: * Napa Valley Transportation Authority (NVTA)

Event Report: Held our monthly meeting. We adopted bus fare increases for our transit system. There hadn't been an increase since 2015, and this bump was required to ensure we keep our farebox recovery rate in compliance with State Law. We also received a report on our Audit, and a preview of our upcoming two-year budget. We received an update on our Transit Operations, and approved an increase for the Calistoga-St. Helena portion of the Vine Trail. A wet winter and delays due to PGE has forced cost overruns and project delays for this project. Hopefully, we will receive some reimbursement from PGE when this is over.

I also participated in NVTA's efforts to secure support for the updated Measure T Road Tax. I was at our City's first presentation and also attended St. Helena's Council meeting. This is not a new tax; just a better program. In particular, it allows bonding and creates two regional programs: traffic relief and emergency response/evacuation routes.

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Event Date: Event Type: Other

Event Title: * City Activities and Events

Event Report: • Attended the "Gator" meeting at Napa Junction Community Center. We discussed the nominees and also agreed to meet again to provide revisions to the current Resolution. These revisions would reflect the Gators' longstanding views on the program.

- Stopped by the City's "Bunny Brunch." There was a good stream of parents and children attending. Discussed how the Arts Foundation might partner with the City next time and bring back our Chalk Art Egg Drawing event.
- Represented the City (along with most of the Council and many community leaders) at the "check drop" for the Eco-Center. Thanks to Congressman Thompson, the Eco-Center will receive \$800,000, which will go towards developing the design drawings. It was also a beautiful day, and holding the event at the Wetlands was great.
- Fielded a few calls regarding our Utility Rate increases. It helps that we have reworked some of the numbers so the increases are not as great. We'll see what happens next Tuesday.

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Event Date:

Event Type Community Event

Event Title:* Various Community Events and Activities

- Event Report:**
- The Arts Foundation produced their second ACHS Arts & Music Fest event at the High School. Thanks to a grant from Napa Valley Presents, we were able to put on the event and provide funding for our Visual and Performing Arts classes. We were more organized this year; next year we will further refine the process and begin reaching out to the community.
 - Held another successful Open Mic event at Napa Junction Community Center. Some of the best performances yet!
 - Helped with the monthly Kiwanis Food Drive. This is the second time we ran out of food. We are finally settling into our new spaces, and we're getting ready to move towards adding the "choice" model to our program (allowing customers to select their own nonperishables).
 - Attended the monthly Kiwanis General Membership Meeting. A small crowd but plenty of food. We welcomed back a member (Clarence Mamari), and watched a video on Youth Protective Services. Preliminary numbers suggest our Crab Feed netted over \$20,000--more than we have made since March 2020 (pre-pandemic).
 - Participated in Arvind Nischal's annual [Holi Festival of Colors](#). It was another great event; good turnout, plenty of food and colors! The Arts Foundation was able to help support this event, and hope to expand our support in the future.

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Future Agenda Items of Note:

April 16, 2024; 6:30 p.m.

Proclamation - April Volunteer Week
Proclamation - Earth Day
Proclamation - National Building Safety Month
Presentation - Spirit Horse
Presentation - ACPD Cadets
Watson Ranch Lot 8
Police Services Agreement
Staffing Plan - FY 24/25 and Beyond

May 7, 2024; 6:30 p.m.

Presentation - Municipal Clerk Week
Proclamation - Older Americans Month
Presentation - Historic Preservation Month
Proclamation - Mental Health Matters Month
Proclamation - AAPI Heritage Month
LLAD FY 24/25 Engineer's Report Set Public Hearing Date
Traffic Calming Program Update
2024 Water Supply Update
CalGreen Building Code

May 21, 2024; 6:30 p.m.

Proclamation - Memorial Day
Proclamation - Public Works Week
Proclamation - Bike Month
Presentation - Juneteenth 2023 Event
LLAD FY 24/25 Engineer's Report
Proposed FY 24/25 Budget
Salary Schedule Adjustment for FY24/25
Kids Commerce Fee Waiver