Jeff Gee, Mayor Lissette Espinoza-Garnica, Vice Mayor Alicia C. Aguirre, Council Member Kaia Eakin, Council Member Diane Howard, Council Member Elmer Martinez Saballos, Council Member Chris Sturken, Council Member



MEETING LOCATION
CITY OF REDWOOD CITY
COUNCIL CHAMBERS
1017 Middlefield Road
Redwood City, CA 94063
www.redwoodcity.org

Virtual via Zoom: redwoodcity.zoom.us
Meeting ID: 994 8182 5639

# JOINT CITY COUNCIL/SUCCESSOR AGENCY/PUBLIC FINANCE AUTHORITY REGULAR MEETING AGENDA Monday, December 4, 2023 6:00 PM

A Closed Session will be held at the start of the Regular Meeting, from approximately 6:00 p.m. until approximately 6:30 p.m.

Please turn off all electronic devices before the start of the meeting to prevent disruptions

**PURSUANT TO THE RALPH M. BROWN ACT, THIS MEETING WILL BE HELD IN PERSON.** To maximize transparency and public access, while the primary meeting takes place at the Redwood City meeting location, members of the public may attend in person at the Redwood City meeting location, or observe the remotely as provided below.

**OBSERVE THE MEETING REMOTELY:** City Council meetings are broadcast live to Redwood City residents on Astound Broadband cable Channel 26 and Comcast cable Channel 27, AT&T U-verse Channel 99 and streamed live via the City's website <a href="www.redwoodcity.org">www.redwoodcity.org</a>. To observe the meeting via Zoom, visit <a href="redwoodcity.zoom.us">redwoodcity.zoom.us</a>, select "Join" and enter <a href="Meeting ID 994 8182 5639">Meeting ID 994 8182 5639</a>.

PUBLIC COMMENT: All public comments are subject to a 2-minute time limit unless otherwise determined by the Mayor, in accordance with the City Council's Guide to Communications & Business, available <a href="here">here</a>.

Public comment is accepted <a href="mailto:in-person">in-person</a> at the physical meeting location, <a href="mailto:or-via email-to-publiccomment@redwoodcity.org">or-via email-to-publiccomment@redwoodcity.org</a>. If submitting comments by email, please indicate the corresponding agenda item number in the subject line. Emailed comments within the City's subject matter jurisdiction received by 5:00 p.m. on the meeting date will be read into the record during the meeting.

#### **AGENDA MATERIALS:**

City Council agenda materials, released less than 72 hours prior to the meeting, are available to the public at the City Clerk's Office, 1017 Middlefield Road and Redwood City Library, 1044 Middlefield Road, Redwood City, CA 94063, in a public binder at each City Council meeting, and on the City's website at <a href="www.redwoodcity.org">www.redwoodcity.org</a>.

#### **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 Yessika Castro, City Clerk, at 1017 Middlefield Road, Redwood City, CA 94063 or e-mail address <a href="mailto:yeastro@redwoodcity.org">yeastro@redwoodcity.org</a> including your name, address, phone number and brief description of the requested materials and preferred alternative format or auxiliary aid or service at least 24 hours before the meeting.

THE CITY COUNCIL MEETING WILL CONCLUDE BY 11:00 P.M.
UNLESS OTHERWISE EXTENDED TO A SPECIFIC TIME BY COUNCIL VOTE

- 1. CALL TO ORDER
- 2. ROLL CALL
- 3. PLEDGE OF ALLEGIANCE Led by Council Member Eakin
- 4. CLOSED SESSION
  - 4.A. Closed session regarding existing litigation pursuant to paragraph (1) of subdivision (d) of California Government Code Section 54956.9

Recommendation:

XXX

CEQA:

This is not a project under California Environmental Quality Act (CEQA)

- 5. PRESENTATIONS/ACKNOWLEDGEMENTS
  - 5.A. Senator Josh Becker presentation of check to Redwood City and Redwood City Together for the Purposeful, Action, Creation and Engagement (PACE) program
  - 5.B. Presentation by HIP Housing
- 6. PUBLIC COMMENT ON THE CONSENT CALENDAR, MATTERS OF COUNCIL INTEREST AND ON ITEMS NOT ON THE AGENDA
- 7. CONSENT CALENDAR
  - 7.A. Rejection of general liability claim by Brenda Interiano-Lorenzo on behalf of minor E. Lemus Interiano, c/o Law Offices of Eslamboly Hakim

Recommendation:

Approve Rejection of subject claim.

CEQA:

This is not a project under California Environmental Quality Act (CEQA)

7.B. Historic Resources Advisory Committee Work Plan for FY 2023-24 and FY 2024-25

Recommendation:

By motion, approve the proposed Historic Resources Advisory Committee Work Plan for FY 2023-24 and FY 2024-25

#### CEQA:

This is not a project under California Environmental Quality Act (CEQA)

7.C. Resolution authorizing the submittal of individual grant applications for CalRecycle grant programs and authorizing the City Manager or their designee to execute all grant documents necessary to secure CalRecycle funds and implement approved grant projects

#### Recommendation:

Adopt a resolution authorizing submittal of individual grant applications for all CalRecycle grant programs for which the City of Redwood City is eligible and authorizing the City Manager or City Manager's designee to execute all grant documents necessary to secure grant funds and implement approved grant projects.

#### CEQA:

This is not a project under California Environmental Quality Act (CEQA)

7.D. Notification of the exigent use of military equipment (drone) not approved for use by Redwood City Police Department's Military Equipment Use Policy during police activity on October 26, 2023

#### Recommendation:

Receive notification of the exigent use of unapproved military equipment during police activity on October 26, 2023, as required by Police Department Military Equipment Use Policy Section 703.9.

#### CEQA:

This is not a project under California Environmental Quality Act (CEQA)

- 7.E. Approve November 27, 2023 City Council Minutes
- 7.F. Approve claims and checks from December 4, 2023 to December 18, 2023 and the usual and necessary payments through December 18, 2023

#### 8. PUBLIC HEARINGS

8.A. Public Hearing on Proposed Increase to Water Utility Service Rates and Charges and ordinance updating water service charges and water reserve policy and direction on increases to the City's Utility Rate Assistance Program

#### Recommendation:

1. Hold a Public Hearing on proposed increase to water utility service rates and charges, and if written protests are not made by a majority of the affected parcels, waive the first reading and introduce ordinance amending Article II

(Water Service and Facility Charges) and Article IV (Water Fund) of Chapter 38 of the Redwood City Municipal Code, Updating the City's water service charges, amending Resolution No. 14648 and Rescinding Resolution No. 15446 (5/7 vote) 2. Provide direction to staff on increasing the City's Utility Rate Assistance Program

#### CEQA:

This activity is not a project under California Environmental Quality Act (CEQA) Guidelines section 15378(b)(4) because the City is setting maximum rates for water utility service to be charged to fund ongoing operation and maintenance activities of the Water Enterprise of the City, and as such, the action involves a funding mechanism or fiscal activity within the meaning of the CEQA Guidelines. The activity is also exempt from CEQA as there is no possibility for causing a significant effect on the environment, per CEQA Guideline Section 15061(b)(3). No specific water projects are associated with this Ordinance. The Ordinance is policy-oriented and would create a funding mechanism for the development of future water facilities. When and if specific water projects are developed and proposed for implementation, the environmental impacts of such facilities would be evaluated in accordance with CEQA and City practice.

#### 9. STAFF REPORTS

9.A. Informational report to City Council outlining minor technical adjustments to the City Council District 7 boundaries that will result in no changes to the composition of the districts

#### Recommendation:

Receive report prepared by the City Clerk outlining minor technical adjustments to the City Council District 7 boundaries, as required by Section 2 of Ordinance No. 2506 – City Council District Elections. Adjustments made will not result in changes to the composition of the districts. Report is for informational purposes only and no Council action is required.

#### CEQA:

This is not a project under California Environmental Quality Act (CEQA)

#### 10. MATTERS OF COUNCIL INTEREST

- 10.A. City Council Member Report of Conferences Attended
- **10.B.** City Council Committee Reports
  - A. Climate Action Sub-Committee
  - B. Transportation Mobility Sub Committee

- C. Equity and Social Justice Sub-Committee
- D. Ad Hoc Committee on 101/84 Project
- 10.C. City Manager (Oral) Update
- 11. ADJOURNMENT The next City Council meeting is scheduled for December 18, 2023



# **STAFF REPORT**

# To the Honorable Mayor and City Council From the City Manager

DATE: December 4, 2023

#### **SUBJECT**

Rejection of general liability claim by Brenda Interiano-Lorenzo on behalf of minor E. Lemus Interiano, c/o Law Offices of Eslamboly Hakim

#### RECOMMENDATION

By motion, aApprove Rejection of subject claim.

#### STRATEGIC PLAN GUIDING PRINCIPLE

**Excellence in Government Operations** 

#### **BACKGROUND**

Resolution Nos. 15081 and 15624 require City Council approval for the denial, allowance, allowance in part, settlement, or compromise of a general liability claim, if it exceeds \$50,000. The amount claimed by the claimants exceeds that limit and therefore rejection must be approved by the City Council.

#### **ANALYSIS**

Eslamboly Hakim, representing Ms. Interiano-Lorenzo, alleges that on April 20, 2023, Lemus Interiano sustained injuries by a school employee while at Hoover Elementary School, located in Redwood City. Redwood City has no jurisdiction or control over the school or school district. Staff recommends that the claim be rejected.

### 7.A. - Page 2 of 2

#### **FISCAL IMPACT**

There is no funding required for the rejection of claims.

#### **ENVIRONMENTAL REVIEW**

This activity is not a project under California Environmental Quality Act (CEQA) as defined in CEQA Guidelines, section 15378, because it has no potential for resulting in either a direct or reasonably foreseeable indirect physical change in the environment.

#### **PUBLIC NOTICE**

Public Notification was achieved by posting the agenda, with the agenda items being listed, at least 72 hours prior to the meeting

#### **ALTERNATIVES**

If the claims are not rejected, the statute of limitations for the claimants to file a State courtan action on state lawthe claims is extended from six months to two years, thereby placing the City in a more difficult position in defending this matter.

#### **ATTACHMENTS**

N/A

#### **REPORT PREPARED BY:**

Sylvia Bravo Peters, Risk Manager / Principal Analyst speters@redwoodcity.org 650-780-7073

#### **APPROVED BY:**

Michelle Poché Flaherty, Assistant City Manager and Administrative Services Director Melissa Stevenson Diaz, City Manager



# **STAFF REPORT**

# To the Honorable Mayor and City Council From the City Manager

DATE: December 4, 2023

#### **SUBJECT**

Historic Resources Advisory Committee Work Plan for FY 2023-24 and FY 2024-25

#### **RECOMMENDATION**

By motion, approve the proposed Historic Resources Advisory Committee Work Plan for FY 2023-24 and FY 2024-25

#### STRATEGIC PLAN GUIDING PRINCIPLE

**Excellence in Government Operations** 

#### **BACKGROUND**

The City Council has asked each City Board, Commission, and Committee (BCC) to prepare a two-year work plan for Council review and approval. The purpose of the work plan is to align BCC work with the City Council's Strategic Initiatives and priorities, which include Equity as a foundational guiding principle, as well as Housing, Transportation, and Children and Youth.

The Historic Resources Advisory Committee (HRAC) discussed and adopted their work plan at their October 12, 2023 meeting. The HRAC makes recommendations to the Planning Commission, and the HRAC work plan was also discussed with the Planning Commission. On November 7, 2023, the Planning Commission reviewed the HRAC work plan, and made a recommendation to the City Council to approve the HRAC Work Plan for FY 2023- 24 and FY 2024-25.

#### 7.B. - Page 2 of 11

#### **ANALYSIS**

The HRAC is composed of five community members who are appointed by the Planning Commission. The HRAC's work and purpose is mainly defined in the Historic Preservation Ordinance (Municipal Code, Chapter 40). In addition, the HRAC has also developed a mission statement which can be found in Attachment A, page 3 (HRAC Work Plan).

The proposed work plan goals and projects with corresponding anticipated benefits, required resources, estimated completion time and measurements of success are described in Attachment A, pages 4-6. The HRAC is a recommending body to the Planning Commission and has a number of required functions including review of development applications, landmark designation requests and Mills Act contracts, and historic evaluations for properties built before 1940. These will continue to be the focus of HRAC's ongoing work.

The HRAC also has included goals and projects that they would like to work on as part of the work plan. These projects are informed by the Historic Preservation Ordinance's purpose and the HRAC's mission statement. The HRAC's goals and projects on the work plan include:

- Updating the Historic Preservation Ordinance (HPO) which was established in 1980
- Developing a scope to establish a process to evaluate additional areas of potential historic significance
- Providing greater access to Redwood City history expanding community interest in historic preservation and studying and highlighting Redwood City history including history not previously well documented or researched.

The process to update the HPO is one of the priorities of this workplan which is anticipated to start in 1 year. While this project is not yet scoped and may require funding for a consultant with specialized expertise, potential updates could include process improvements for a project that requires historic review, Mills Act contract guidelines, and clarity on historic designation criteria.

The HRAC's work plan aligns with the Housing strategic priority as the HRAC ensures that existing historic homes and residential structures can be improved and added onto while still maintaining historic significance. The HRAC is also interested in aligning with the Child and Youth priority by including a new goal to provide historic preservation education and outreach focusing on youth groups and local schools. The HRAC is also committed to Equity as a foundational guiding principle and has several goals and projects that align including researching and highlighting Redwood City history that has not been previously well documented or studied as well as interest in updating the City's historic preservation webpages with new information and research thereby increasing access to Redwood City history.

#### **FISCAL IMPACT**

Staff time is required to administer the work plan and to assist the HRAC in achieving their goals. In addition, consultants may be required as part of the HPO update as well as for historic evaluations of

#### 7.B. - Page 3 of 11

potentially historic structures. Historic evaluations requested by property owners are funded on a cost recovery basis. The HPO update is set to begin next fiscal year so any budget requests will be brought forward when the scope is developed.

#### **ENVIRONMENTAL REVIEW**

The HRAC Work Plan is not considered a project within the meaning of the California Environmental Quality Act (CEQA) because the Work Plan is an organizational or administrative activity that will not result in direct or indirect physical changes in the environment per Section 150378 (b).

#### **PUBLIC NOTICE**

Public notification was achieved by posting the agenda, with the agenda items being listed, at least 72 hours prior to the meeting.

#### **ALTERNATIVES**

The City Council could provide alternative or additional direction on the work plan topics and projects or prioritization.

#### **ATTACHMENTS**

Attachment A - HRAC FY 2023-24 and FY 2024-25 Work Plan

#### **REPORT PREPARED BY:**

William Chui, Senior Planner wchui@redwoodcity.org (650) 780-5916

#### **APPROVED BY:**

Jeff Schwob, Interim Community Development & Transportation Director Melissa Stevenson Diaz, City Manager

#### 7.B. - Page 4 of 11

#### **Boards, Commissions and Committees Work Plan Guidelines**

- **Step 1** Review purpose of Commission as defined by Charter/Ordinance.
- **Step 2** Develop a mission statement that reflects that purpose.
- **Step 3** Discuss and outline any priorities established by Council.
- **Step 4** Brainstorm goals, projects, or priorities of the Commission and determine the following:
  - A. Identify priorities, goals, projects, and ideas
  - B. Determine the benefit if the project or item is completed
  - C. Is it mandated by State or local law or by Council direction?
  - D. Would the task or item require a policy change at Council level?
  - E. Resources needed for completion? (Support staff, creation of subcommittees, etc.)
  - F. Completion time? (1-year, 2-year, or longer term?)
  - G. Measurement criteria? (How will you know you are on track? Is it effective?)
- **Step 5** Prioritize projects from urgent to low priority.
- Step 6 Prepare final Work Plan for submission to Council for review and approval in the following order:
  Work Plan Cover Sheet, Listing of Members, Priority List, Work Plan Worksheet Steps 1 through 8
- Step 7 Use your approved work plan throughout its term as a guide to focus on the work at hand
- **Step 8** Report out on work plan priorities to the City Council, which should include:
  - A. List of approved priorities or goals
  - B. Status of each item, including any additional resources required in order to complete
  - C. If an item on the list is not completed, indicate why it was not completed and list any additional time and/or resources that will be needed in order to complete

# **Commission Work Plan Guidelines Work Plan Worksheet**

#### Step 1

Review purpose of Commission as defined by Charter/Ordinance The purpose of this Chapter is to promote the public health, safety, and general welfare by providing for the identification, protection, enhancement, perpetuation, and use of improvements, buildings, structures, signs, objects, features, sites, places, and areas within the City that reflect special elements of the City's historic, architectural, cultural, aesthetic, and other heritage for the following reasons:

- A. To safeguard the City's heritage by providing for the protection of landmarks representing significant elements of its history;
- B. To encourage public knowledge, understanding, and appreciation of the City's past;
- C. To foster civic and neighborhood pride and a sense of identity based on the recognition and use of historic and cultural resources;
- D. To promote the enjoyment and use of historic and cultural resources appropriate for the education and recreation of the people of the City;
- E. To preserve diverse and harmonious architectural styles and design preferences reflecting phases of the City's history and to encourage complementary contemporary design and construction;
- F. To enhance property values and to increase economic and financial benefits to the City and its inhabitants;
- G. To strengthen the economy of the City by protecting and enhancing the City's attractions to residents, visitors and tourists;
- H. To identify as early as possible, and resolve conflicts between the preservation of historic and cultural resources and alternative land uses;
- I. To conserve valuable material and energy resources by ongoing use and maintenance of the existing built environment; and
- J. To implement the historic landmarks element of the general plan.

#### 7.B. - Page 6 of 11

#### Step 2

Develop or review a Mission Statement that reflects that purpose

The HRAC's mission is to equitably safeguard the City's past and heritage by protecting and identifying resources representing special elements of its history, and to encourage, educate, and advocate for historic preservation.

Who we are, what we do, who we do it for, and why we do it

#### Step 3

Discuss any priorities already established by Council as they relate to your respective BCC

#### **Strategic Initiatives**

- Housing (Ensures that existing historic homes can be improved and added onto while still maintaining historic significance, evaluates homes built before 1940 for potential historic significance, and reviews landmark designation requests and Mills Act contracts that would preserve and maintain historic homes and structures)
- Children & Youth (Historic preservation education and outreach focusing on youth groups and local schools)

#### **Foundational Guiding Principle**

• Equity (Encourage public knowledge, understanding, and appreciation for the City's past including study and research of Redwood City historic not previously explored.)

#### **Guiding Principles**

- Communication and Community Building (Foster civic and neighborhood pride and a sense of identity based on the recognition and use of historic and cultural resources.)
- Excellence in Government Operations (Uphold the highest standards of professionalism within City Operations through transparency in community engagement and public participation.)

### 7.B. - Page 7 of 11 Step 4

Goals, projects or priorities of the Commission	Benefit, if completed	Mandated by State/local law or by Council direction?	Required policy change at Council level?	Resources needed for completion? Staff or creation of subcommittees?	Estimated Completion Time	Measurement criteria How will we know how we are doing?
HRAC REQUIRED FUN	ICTIONS					
Review development applications, as required by the Historic Preservation Ordinance (HPO) of the Municipal Code	Development projects would meet process and approval criteria of HPO ensuring historic resources are not adversely affected.	Yes	No	Staff review and HRAC review	ongoing	Making recommendation to the Planning Commission that a project meets the Historic Preservation Approval Criteria and can be approved by the Planning Commission.
Review of property owner initiated Local Historic Landmark Designations	Increase in the number of historic landmarks in Redwood City.	Yes	No	Staff review and HRAC review	ongoing	Increase in the number of historic landmarks in Redwood City.
Review of property owner initiated new Mills Act contracts	Increased number of Mills Act contracts.	Yes	No	Staff review and HRAC review	ongoing	Approved 10-Year improvement plans for historic structures.
Annual Certified Local Government (CLG) report	Retain CLG certification.	Yes	No	Staff to fill out report and HRAC for continuing education training	ongoing	State continues to certify Redwood City as CLG.
Mills Act Contract 10- Year Improvement Schedule Reports & Inspections	Reports and inspections are required to ensure completion of tasks.	Yes	No	Staff time and a historic consultant may be needed to prepare reports and do inspections.	ongoing	Inspections and reporting are completed and up to date.
Review of historic evaluations for structures built prior to 1940	Ensures that substantial remodels and proposed demolitions of structures built before 1940 are evaluated for historic	Yes	No	Historic consultant to review existing property and prepare draft report	ongoing	HRAC completes review of report and advises staff on adequacy and conclusion.

# 7.B. - Page 8 of 11

	significance.					
HRAC GOALS AND PR	OJECTS					
Update the Historic Preservation Ordinance (HPO)	The HPO has not been updated since it was adopted in 1980. Staff and HRAC have noted needs for process improvements.	No	Yes	Staff, HRAC, Planning Commission, and community input	1 year	An updated Ordinance that reflects the HRAC and City goals and principles including equity, community building, and excellence in government operations.
Develop a scope to establish a process to evaluate areas of potential historic significance and potential historic resources in Redwood City	Staff and HRAC to create a scope establishing a process to evaluate potential historic resources or areas of potential significance that is not applicant driven.	No	Yes	Staff time to work with HRAC to create the scope.	1-2 years	Creation of a scope to establish a process that would evaluate potential areas of significance in Redwood City.
Research and highlight Redwood City History not previously well documented or studied and the benefits of historic preservation and the Mills Act contract by way of a dedicated website	Increases knowledge of Redwood City history not previously documented, studied, or well known. Provides HRAC with additional knowledge of Redwood City history. Increase in Mills Act benefits could increase historic landmarks in Redwood City.	No	No	HRAC research and creation of dedicated website	1-2 years	HRAC has increased knowledge of Redwood City history not previously documented, studied, or well known which will be shared with the public and increases Redwood City history and knowledge.
Education and Outreach for Historic Preservation especially focusing on youth groups and local schools	Increases public awareness and interest in Redwood City's historic preservation programs. By focusing on youth, historic preservation interest would be maintained.	No	No	HRAC research and potentially a partnership with local schools	ongoing	Creation of additional activities, tours, and digital materials that provide Redwood City history to all.
HRAC Training	HRAC members and staff receive current information on historic preservation issues.	No	No	Potentially budget for HRAC training	ongoing	HRAC completes training to maintain CLG status. Staff and HRAC is up to date on current legislation,

# 7.B. - Page 9 of 11

						regulations, and best practices in historic preservation.
Historic Landmark	Provides a visible					New plaques
Designation Plaques	acknowledgement of					manufactured and
	historic designation.	No	No	Funding for new	1-2 years	distributed.
	Promotes Redwood City's			plaques		
	historic preservation					
Historic Preservation	Continuation of					Continuation of historic
Tours	downtown historic					preservation activities
	walking tour, Union					which provides education
	Cemetery tours, and other			Staff and HRAC	ongoing	and promotion of historic
	historic preservation	No	No			preservation.
	related tours on a monthly					
	basis					

### **Historic Resources Advisory Committee:**

**Mission Statement** 

The HRAC's mission to equitably safeguard the City's past and heritage by protecting and identifying resources representing special elements of its history, and to encourage, educate, and advocate for historic preservation.



Historic Resources Advisory Committee

Historic Resources Advisory Committee FY2023-FY2024 & FY2024-FY2025

# **Commission Members**

Chair <u>Lindamarie Rodriguez Roche</u>

Vice Chair <u>Jon Goldman</u>

Committee Member Glenn Babbitt

Committee Member Roy Klebe

Committee Member Suaima Figueroa











### **STAFF REPORT**

# To the Honorable Mayor and City Council From the City Manager

DATE: December 4, 2023

#### **SUBJECT**

Resolution authorizing the submittal of individual grant applications for CalRecycle grant programs and authorizing the City Manager or their designee to execute all grant documents necessary to secure CalRecycle funds and implement approved grant projects

#### **RECOMMENDATION**

Adopt a resolution authorizing submittal of individual grant applications for all CalRecycle grant programs for which the City of Redwood City is eligible and authorizing the City Manager or City Manager's designee to execute all grant documents necessary to secure grant funds and implement approved grant projects.

#### STRATEGIC PLAN GUIDING PRINCIPLE

Sustainability

#### **BACKGROUND**

In September 2016, California Senate Bill 1383 (Lara, Chapter 395, Statutes of 2016), also known as SB 1383, established statewide emissions reduction targets for short-lived climate pollutants such as methane. Methane is a powerful greenhouse gas, which results from the landfilling of organic waste. SB 1383 requires the State to reduce the amount of organic waste disposed of in landfills by 75 percent from 2014 levels by 2025. Given that SB 1383 includes statewide targets, the California Department of Resources Recycling and Recovery, also known as CalRecycle, proposed regulations that require a more prescriptive approach for local jurisdictions to achieve specific requirements for reducing the amount of organic waste, such as food waste, that goes to landfill. To meet these requirements, the City has partnered with San Mateo County jurisdictions on establishing an edible food recovery program and developing and implementing a compost application program with San Mateo Resource Conservation District (RCD).

#### 7.C. - Page 2 of 4

On September 14, 2023, CalRecycle released and started accepting applications for a non-competitive SB 1383 Local Assistance Grant program (Grant), where \$90 million in funds will be disbursed to all approved applicants on a per capita basis. The goal of the Grant is to provide aid to local jurisdictions in the implementation of SB 1383 regulations. Eligible activities and costs for the Grant include:

- Organic waste processing capacity planning
- Collection of organic waste
- Edible food recovery activities
- Education and outreach
- Enforcement and inspection
- Procurement of required recycled organic waste products
- Program evaluation/gap analysis

The Grant includes a minimum base award of \$75,000 for each approved applicant and additional funding allocated per capita. If the City's application is approved, the estimated funding available to the City is \$152,790.

#### **ANALYSIS**

Staff intends to use the SB 1383 grant to help meet our SB 1383 procurement requirements by purchasing recycled organic waste products (compost, mulch, recycled paper, and recycled paper products) for City use and by funding our continued participation in the RCD compost application program. This program is a collaboration between every city and town within San Mateo County, the County of San Mateo, and the RCD in which RCD procures compost on behalf of the jurisdictions and applies it to farm and rangeland in San Mateo County. RCD works to identify and develop additional partnership opportunities with the county's agricultural communities to support long-term SB 1383 compliance and to assess innovative compost procurement, application, and funding strategies to build capacity for the long term. As part of the application process for the Grant, the City is required to submit a resolution approved by the governing body authorizing the submission of the application. Staff recommends adopting the attached resolution to fulfill this requirement for funding.

#### **FISCAL IMPACT**

There is no net cost to the City associated with the adoption of the resolution.

#### **ENVIRONMENTAL REVIEW**

This activity is not a project under California Environmental Quality Act (CEQA) as defined in CEQA Guidelines, section 15378, because it has no potential for resulting in either a direct or reasonably foreseeable indirect physical change in the environment.

#### 7.C. - Page 3 of 4

#### **PUBLIC NOTICE**

Public notification was achieved by posting the agenda, with the agenda items being listed, at least 72 hours prior to the meeting.

#### **ALTERNATIVES**

The City Council could elect not to adopt the resolution and forego the non-competitive funding opportunity for meeting the City's SB 1383 recovered organic waste procurement target.

#### **ATTACHMENTS**

Attachment A - Resolution

#### **REPORT PREPARED BY:**

Vicki Sherman, Environmental Initiatives Coordinator vsherman@redwoodcity.org (650) 780-7472

#### **APPROVED BY:**

Terence Kyaw, Public Works Director Melissa Stevenson Diaz, City Manager

RESOLUTION N	<b>10</b> .	
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A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF REDWOOD CITY AUTHORIZING SUBMITTAL OF INDIVIDUAL GRANT APPLICATIONS FOR ALL CALRECYCLE GRANT PROGRAMS FOR WHICH THE CITY OF REDWOOD CITY IS ELIGIBLE AND AUTHORIZING THE CITY MANAGER OR CITY MANAGER'S DESIGNEE TO EXECUTE ALL GRANT DOCUMENTS NECESSARY TO SECURE GRANT FUNDS AND IMPLEMENT APPROVED GRANT PROJECTS

**WHEREAS**, Public Resources Code sections 48000 et seq. authorize the Department of Resources Recycling and Recovery (CalRecycle) to administer various grant programs (grants) in furtherance of the State of California's (state) efforts to reduce, recycle and reuse solid waste generated in the state thereby preserving landfill capacity and protecting public health and safety and the environment; and

**WHEREAS**, in furtherance of this authority CalRecycle is required to establish procedures governing the application, awarding, and management of the grants; and

**WHEREAS**, CalRecycle grant application procedures require, among other things, an applicant's governing body to declare by resolution certain authorizations related to the administration of CalRecycle grants.

# NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF REDWOOD CITY, AS FOLLOWS:

- 1. The submittal of applications to CalRecycle for all grants for which the City of Redwood City is eligible is hereby authorized.
- 2. The City Manager, or their designee, is hereby authorized and empowered to execute in the name of the City of Redwood City all grant documents, including but not limited to, applications, agreements, amendments and requests for payment, necessary to secure grant funds and implement the approved grant projects.
- 3. These authorizations are effective for five years from the date of adoption.

ATTY/RESO.0108/CC RESO CALRECYCLE GRANT PROGRAM APPLICATIONS

REV: 11-14-23 MI



# STAFF REPORT

# To the Honorable Mayor and City Council From the City Manager

DATE: December 4, 2023

#### **SUBJECT**

Notification of the exigent use of military equipment (drone) not approved for use by Redwood City Police Department's Military Equipment Use Policy during police activity on October 26, 2023

#### RECOMMENDATION

Receive notification of the exigent use of unapproved military equipment during police activity on October 26, 2023, as required by Police Department Military Equipment Use Policy Section 703.9.

#### STRATEGIC PLAN GUIDING PRINCIPLE

**Public Safety** 

#### **BACKGROUND**

On September 30, 2021, Governor Newsom signed into law Assembly Bill 481 to address the funding, acquisition, and use of military equipment by law enforcement agencies in California. Assembly Bill 481, codified at California Government Code section 7070 et seq., has designated certain equipment as "military equipment." Pursuant to this legislation, all law enforcement agencies in the State of California must seek to have their governing body adopt an ordinance approving a policy that describes each piece of "military equipment" the agency has in its possession and its authorized use. Drones are considered military equipment under this legislation.

Drones are one of the specific items defined as "military equipment" under Government Code section 7070. The Redwood City Police Department (RCPD) does not currently own or control drones; however, the need may arise in which the use of these devices is advantageous for the safety of officers and the public as a whole. The Department is currently authorized to use specific models of drones operated by the San Mateo County Emergency Services Bureau and the Redwood City Fire Department. Items, including drones, not specifically approved for use may be used during exigent circumstances pursuant to RCPD Military Equipment Use Policy Section 703.9. In such circumstances the Police Department will notify the City Council within 30 days of such use. This report fulfills that requirement.

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#### **ANALYSIS**

On October 26, 2023 at approximately 4:23 AM the Redwood City Police Department responded to the area of Sanchez Way and Oak Avenue on the report of gunshots being heard. Two vehicles were seen fleeing from the scene. Based on the time of day, there was little traffic on the roadways. Officers located two possible suspect vehicles near the intersection of Woodside Road and Broadway. Upon seeing the marked patrol cars, the vehicles attempted to flee at a high rate of speed. One of the vehicles collided with a street sign and the vehicle became disabled. An officer witnessed a suspect flee from the disabled vehicle and disappear into vegetation near the Woodside Road and 101 cloverleaf.

A perimeter was quickly established and assistance was provided by the California Highway Patrol, San Mateo County Sheriff's Office and Atherton Police Department. The Atherton Department Police Officer was equipped with a drone. Based on the circumstances of potential armed suspects hiding in vegetation, the drone was utilized to provide aerial intelligence and attempt to identify heat signatures. Despite repeated loudspeaker announcements, the suspect was not located until the use of a police dog was utilized. The suspect was ultimately determined to be in possession of a stolen vehicle and was interrupted by diligent neighbors while in the act of attempting to steal another vehicle in Redwood City.

This Incident will be further documented in the Police Department's Annual Military Equipment Use Report due before City Council in February 2024.

#### **FISCAL IMPACT**

None.

#### **ENVIRONMENTAL REVIEW**

This activity is not a project under California Environmental Quality Act (CEQA) as defined in CEQA Guidelines, section 15378, because it has no potential for resulting in either a direct or reasonably foreseeable indirect physical change in the environment.

#### **PUBLIC NOTICE**

Public notification was achieved by posting the agenda, with the agenda items being listed, at least 72 hours prior to the meeting.

#### **ALTERNATIVES**

None. This is a required notification.

#### **ATTACHMENTS**

Attachment A – Redwood City Police Department Policy, Military Equipment Use, Section 703.9

### 7.D. - Page 3 of 4

#### **REPORT PREPARED BY**

Jeff Clements, Acting Lieutenant jclements@redwoodcity.org (650) 780-7142

#### **APPROVED BY**

Kristina Bell, Police Chief Melissa Stevenson Diaz, City Manager

# 703.9 EXIGENT CIRCUMSTANCES, MUTUAL AID, AND COORDINATION WITH OTHER JURISDICTIONS

Military equipment shall not be used by any member of this jurisdiction unless the military equipment is approved for use in accordance with this Department policy or in exigent circumstances. In exigent circumstances, it is not feasible to seek advance approval for the use of equipment needed to carry out critical operations. Exigent circumstances are defined as, "...a law enforcement agency's good faith belief that an emergency involving the danger of, or imminent threat of death or serious physical injury to any person is occurring, has occurred, or is about to occur." In the event of exigent use of unapproved military equipment, the Police Department will notify City Council within thirty (30) days of acquiring and/or using Military Equipment pursuant to this Section, as well as include any such occurrence in the Annual Military Equipment Report.

Military equipment used by other jurisdictions that are providing mutual aid to this jurisdiction shall comply with their respective military equipment use policies in rendering mutual aid. This shall be the requirement for both planned and exigent mutual aid requests.



### **STAFF REPORT**

# To the Honorable Mayor and City Council From the City Manager

DATE: December 4, 2023

#### **SUBJECT**

Public Hearing on Proposed Increase to Water Utility Service Rates and Charges and ordinance updating water service charges and water reserve policy and direction on increases to the City's Utility Rate Assistance Program

#### RECOMMENDATION

- Hold a Public Hearing on proposed increase to water utility service rates and charges, and if written protests are not made by a majority of the affected parcels, waive the first reading and introduce ordinance amending Article II (Water Service and Facility Charges) and Article IV (Water Fund) of Chapter 38 of the Redwood City Municipal Code, Updating the City's water service charges, amending Resolution No. 14648 and Rescinding Resolution No. 15446 (5/7 vote)
- 2. Provide direction to staff on increasing the City's Utility Rate Assistance Program

#### STRATEGIC PLAN GUIDING PRINCIPLE

**Excellence in Government Operations** 

#### **BACKGROUND**

Redwood City operates and maintains a potable and recycled water distribution system with approximately 24,500 customer service connections. The City's water service area covers approximately 17 square miles and includes Redwood City and portions of unincorporated San Mateo County, the Town of Woodside, and City of San Carlos. The City purchases all its potable water from the San Francisco Public Utilities Commission (SFPUC) through its Regional Water System (RWS), and the City's recycled water supply comes from the Silicon Valley Clean Water (SVCW) wastewater treatment plant. The water system infrastructure includes 280 miles of water mains, 15 storage tanks, 12 booster pump stations, and various assets, such as water meters, fire hydrants, and valves. The potable and recycled water system are part

#### 8.A. - Page 2 of 108

of the City's Water Enterprise which is paid for by revenues from water rate and fee charged to the users of the system. The Water Enterprise is not supported by tax revenue or by the City's General Fund.

Water rates are designed to recover the cost of providing service to each water customer and are comprised of a monthly or bi-monthly service charge and water use charges. A cost-of-service study was completed prior to the last water rates adoption by the City Council in 2016 that included increases for three consecutive years with the last increase going into effect on July 1, 2018. Since 2018 the SFPUC has increased its rates to Redwood City for the purchase of potable water by approximately 27%.

The City contracted HF&H Consultants to prepare an updated cost of service analysis for the Water Enterprise, and completed the Water Rate Cost-of-Service Study on October 11, 2023. The analysis determined that rate increases are recommended due to increases in the cost to purchased water from the SFPUC and the need to fund capital improvements, including ongoing repairs and replacements of aging infrastructure, as well as, to continue compliance with debt service requirements and depletion of reserves.

The City plans to develop a Recycled Water Master Plan that is estimated to be adopted in 2025. While five years of analysis are reported, the projections will likely change due to the Recycled Water Master Plan. Therefore, staff recommends setting water rates for two years and setting rates for FY 2025-26 and future years after completing another rate study.

#### **ANALYSIS**

#### Revenue Required to Fund Water Enterprise (Revenue Requirement)

The first component of the Water Rate Cost-of-Service Study was to determine the revenue required to support the Water Enterprise including operation and maintain costs, capital expenditures, and the cost to purchased water from the SFPUC which accounts for nearly 40% of the enterprise budget. The analysis was completed for a five-year horizon and included a Water Enterprise reserve target with an operating reserve component of 25% of annual operations and maintenance (O&M) expenses and a capital reserve component of \$2 million to provide working capital for pay-as-you-go construction projects. Avoiding borrowing money allows the City to avoid requiring ratepayers to pay interest associated with borrowing money to fund capital projects. Based on the revenue collected at current rates the study concluded revenue will be less than the total expenditures as shown in Figure 1. Due to expenditures exceeding revenue it is projected that water fund reserves would drop below the reserve target by FY 2025-26 and be completely depleted by FY 2026-27. For this reason and based on the analysis in the study it is recommended revenue increases would be needed over the next two years by 8% in FY 2023-24 and 7% in FY 2024-25.

Figure 1

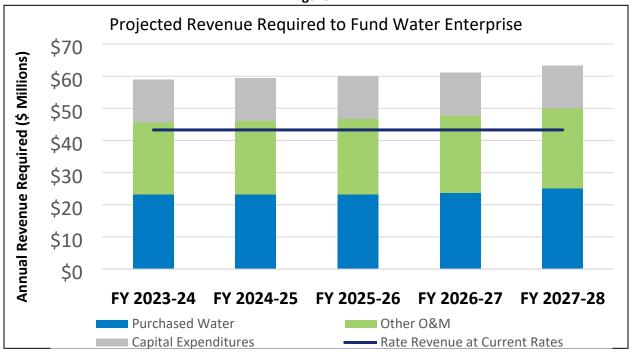
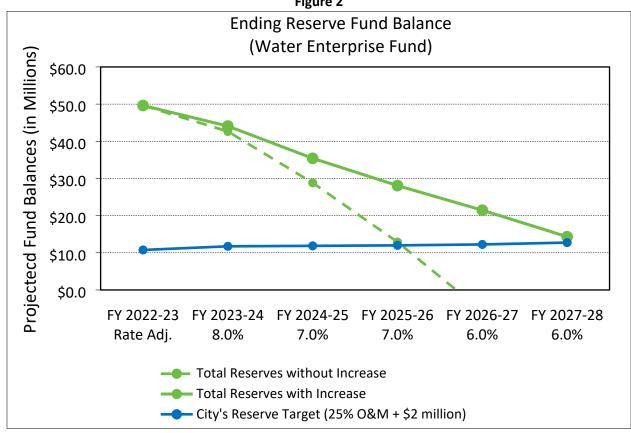


Figure 2



#### Cost of Service Analysis and Proposed Rates

After determining the revenue required to fund the Water Enterprise, the study included a cost-of-service analysis to proportionately allocate the revenue that is required from rates to the components of the rate structure, (i.e. Service Charges and Use Charges), and to the customer classes (i.e. Residential and Commercial). Costs are then further allocated to each component of the rates in proportion to the level of service required by customers. The levels of service are related to volumes of peak and non-peak demand, infrastructure capacity, and customer service. Ultimately, a cost-of-service analysis ensures that the rates yield charges that are proportional to the cost of providing service to each customer.

The study included recommended changes to the rate structure based on the cost-of-service analysis as follows:

- 1. Consolidate all Residential Irrigation customers under the Multi-Family Residential customer class, subject to the same Multi Family Residential Service Charges and Consumption Charges.
- 2. Consolidate all Commercial Irrigation and Recycled Water customers under the Commercial customer class, subject to the same Commercial Service Charges and Consumption Charges.
- 3. Revise the Multi-Family Residential Service Charge structure to a bi-monthly charge based on the meter capacity.

The proposed service charges as a result of these recommendations for residential and commercial customers are shown in Tables 1 and Table 2 below. Residential customers are billed every other month, and the services charges are shown for a bi-monthly billing period. Commercial customers are billed monthly and service charges are shown as such. Water usage charges are billed for each one hundred cubic feet (HCF) of water that passes through the water meter (One HCF = 748 gallons and is also referred to a unit of water). The proposed water use charges for all customer classes are shown in Table 3, and it should be noted that the proposed tiers for Single Family Residential customers have changed from the current rates. The revised tiers are based on the base/extra capacity method in the American Water Works Association M1 Manual which allocates costs according to the levels of water demand for the customer class. Finally, Table 4 includes the proposed service charges for fire service connections which are billed based on the size of the connection or pipe serving the property and not the size of the water meter.

Table 1

Residential Service Charges						
	Current	Proposed Water Rates				
Customer Class	Water Rates	FY 2023-24	FY 2024-25			
	<u>Bi-monthly per</u>					
Single Family Residential	<u>Dwelling Unit (DU)</u>	<u>Bi-monthl</u>	y per DU			
	\$59.04	\$76.72	\$82.09			
Multi-Family Residential						
	<u>Bi-monthly per</u>					
	Equivalent Dwelling					
(includes Residential Irrigation)	sidential Irrigation) Unit <u>(EDU)</u> <u>Bi-monthl</u>		per Meter			
5/8" Meters	\$59.04	\$76.72	\$82.09			
3/4" Meters	\$59.04	\$105.30	\$112.67			
1" Meters	\$59.04	\$162.46	\$173.83			
1.5" Meters	\$59.04	\$305.38	\$326.76			
2" Meters	\$59.04	\$476.88	\$510.26			
3" Meters	\$59.04	\$1,262.94	\$1,351.35			
4" Meters	\$59.04	\$2,163.32	\$2,314.75			
6" Meters	\$59.04	\$4,592.92	\$4,914.42			
8" Meters	\$59.04	\$8,022.96	\$8,584.57			
10" Meters	\$59.04	\$12,024.68	\$12,866.41			

Table 2

Commercial Service Charges						
	Current	Proposed W	/ater Rates			
Customer Class	Water Rates	FY 2023-24	FY 2024-25			
Commercial						
(includes Commercial Irrigation)	Monthly per Meter	Monthly p	<u>er Meter</u>			
5/8" Meters	\$29.52	\$38.36	\$41.05			
3/4" Meters	\$44.28	\$52.65	\$56.34			
1" Meters	\$73.80	\$81.23	\$86.92			
1.5" Meters	\$147.60	\$152.69	\$163.38			
2" Meters	\$236.16	\$238.44	\$255.13			
3" Meters	\$442.80	\$631.47	\$675.67			
4" Meters	\$738.00	\$1,081.66	\$1,157.38			
6" Meters	\$1,476.00	\$2,296.46	\$2,457.21			
8" Meters	\$1,476.00	\$4,011.48	\$4,292.28			
10" Meters	\$1,476.00	\$6,012.34	\$6,433.20			

Table 3

Tuble 5							
Water Use Charges							
Single Family Residential							
Current							
Rates	Proposed Tiers	Proposed FY 2023-24	Proposed FY 2024-25				
\$6.13	Tier 1 (0-10 hcf)	\$6.45	\$6.90				
\$7.35	Tier 2 (11-14 hcf)	\$7.37	\$7.89				
\$10.20	Tier 3 (15-20 hcf)	\$9.63	\$10.30				
\$13.45	Tier 4 (21+ hcf)	\$14.57	\$15.59				
Multi-Fami	ily Residential (includi	ng Residential Fire)					
Current							
Rates	Proposed Usage	Proposed FY 2023-24	Proposed FY 2024-25				
\$6.13	All Water Use	\$7.92	\$8.47				
\$7.35							
\$10.20							
\$13.45							
mercial - Includ	des Commercial, Indus	trial, Municipal, Fire, Oth	er				
Current							
Rates	Proposed Usage	Proposed FY 2023-24	Proposed FY 2024-25				
\$7.35	All Water Use	\$7.92	\$8.47				
	Landscape Irrigat	ion					
Current							
Rates	Proposed Usage	Proposed FY 2023-24	Proposed FY 2024-25				
\$7.35	All Water Use	\$7.92	\$8.47				
\$10.20							
\$13.45							
	\$6.13 \$7.35 \$10.20 \$13.45 Multi-Fami Current Rates \$6.13 \$7.35 \$10.20 \$13.45 mercial - Include Current Rates \$7.35	Single Family Resid  Current Rates  \$6.13 Tier 1 (0-10 hcf) \$7.35 Tier 2 (11-14 hcf) \$10.20 Tier 3 (15-20 hcf) Tier 4 (21+ hcf)  Multi-Family Residential (includi Current Rates Proposed Usage \$6.13 All Water Use \$7.35 \$10.20 \$13.45  mercial - Includes Commercial, Indus Current Rates Proposed Usage \$7.35 All Water Use  Landscape Irrigat Current Rates Proposed Usage \$7.35 All Water Use  \$7.35 All Water Use	Single Family Residential				

Table 4

Fire Service Connections								
Size	<b>Current Rates</b>	FY 2023-24	FY 2024-25					
1"	\$16.00	\$17.28	\$18.49					
2"	\$32.00	\$34.56	\$36.98					
3"	\$48.00	\$51.84	\$55.47					
4"	\$64.00	\$69.12	\$73.96					
6"	\$96.00	\$103.68	\$110.94					
8"	\$128.00	\$138.24	\$147.92					
10"	\$160.00	\$172.80	\$184.90					
12"	\$192.00	\$207.36	\$221.88					

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The average single-family customer in Redwood City uses 14 units of water in a bi-monthly billing period. With the proposed rates they would see an increase in water charges by 12.2% beginning February, 2024. Figure 3 below shows the range in cost for single family customers using between 1 and 50 HCF per bimonthly billing period.



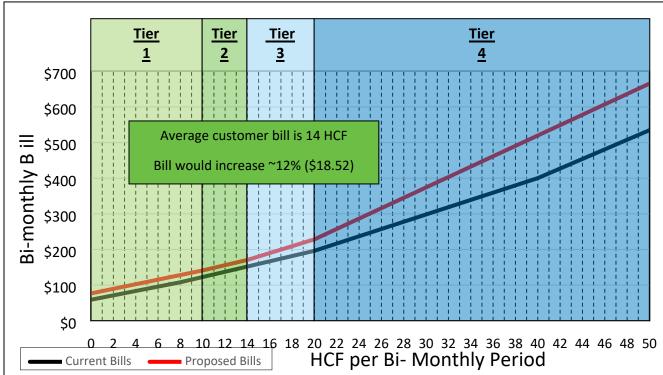


Figure 4 shows how a water bill for a Redwood City customer using 7 HCF per month compares to neighboring agencies which are members of the Bay Area Water Supply and Conservation Agency.

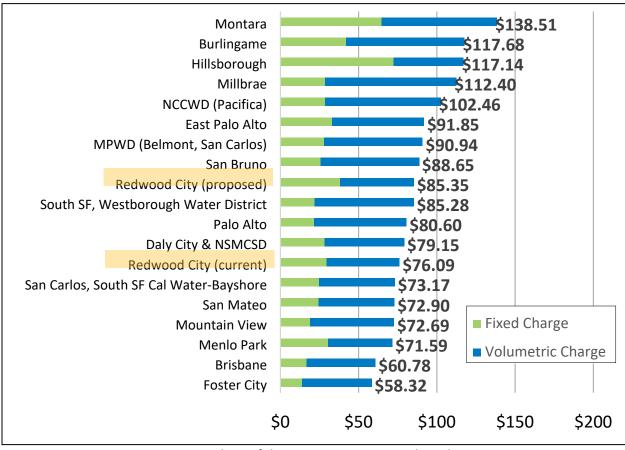


Figure 4

Note: comparison agencies are members of the Bay Area Water Supply and Conservation Agency.

#### **Utility Rate Assistance Program**

While the proposed rates are roughly in the middle of rates proposed by nearby agencies, rising City and statewide utility rates may provide challenges to Redwood City residents who are low income. The City's Utility Rate Assistance Program (URAP) aids eligible water, sewer and solid waste customers through a credit on their regular Redwood City utility bill. Eligibility is based on household income consistent with San Mateo County 50% area median income limits.

The current benefit for water customers is \$20 per month or \$40 per bi-monthly bill and is funded from penalties. Initial staff analysis indicates the City could increase the URAP benefit by 25% for a total of \$25 per month or \$50 per bill. There are separate credits for sewer and solid waste customers; additional information is available on the City's website, <a href="here">here</a>. Staff will return to the Council in early 2024 with a staff report with final recommendations for increasing URAP the benefits provided for water, sewer and garbage services.

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#### **Drought Rate Factors**

During prolonged water shortages, customers are required to conserve or even ration their water use. The magnitude of the water savings can significantly reduce water sales revenue from water use charges. Drought Rate Factors were developed based on the water use reductions in the City's Water Shortage Contingency Plan and the variable water usage cost for each customer class. The Drought Rate Factors in **Table 5** are implemented only during periods of declared water shortage emergencies. Once a mandatory shortage is declared, the City Council has discretion to enact Drought Rate Factors corresponding to the level of shortage reduction being implemented.

Table 5

Maximum Drought Rate Factors by Water Conservation Stage								
	Stage 1	Stage 2	Stage 3	Stage 4	Stage 5	Stage 6		
	Shortage	Shortage	Shortage	Shortage	Shortage	Shortage		
Customer Class	Up to (10% Reduction)	Up to (20% Reduction)	Up to (30% Reduction)	Up to (40% Reduction)	Up to (50% Reduction)	Up to (>50% Reduction)		
Ciass	Reductions	Reduction	Reduction	Reduction	Reduction	Reduction		
Single Family	1.021	1.047	1.080	1.124	1.182	1.222		
Multi-Family	1.014	1.031	1.051	1.074	1.101	1.121		
Commercial	1.018	1.039	1.064	1.096	1.135	1.162		
Irrigation	1.046	1.118	1.250	1.571	3.420	n/a		

#### **EQUITY IMPACT STATEMENT**

# Equity and/or inclusion was considered in development or implementation of item through the following:

Staff conducted an equity analysis by applying a geographic equity index to see if underserved areas (areas experiencing inequities right now) are more or less impacted by this intervention. Staff reviewed the current geographic locations of service addresses belonging to accepted applicants of the City's Utility Rate Assistance Program (URAP). Based on this data, it appears that every neighborhood within the City has customers receiving rate assistance. Staff does not believe this will disparately impact any underserved areas as URAP is available to all customers who meet eligibility criteria.

#### **FISCAL IMPACT**

Approval of these water rate increases will increase customer water bills starting February 1, 2024 by an average of 8%, and an additional 7% on January 1, 2025. The rate increases ensure the City has sufficient funding to operate and maintain the water enterprise, purchase water from the SFPUC, and provide for operating reserves and working capital for pay-as-you-go construction projects. Avoiding borrowing money allows the City to avoid requiring ratepayers to pay interest associated with borrowing money to fund capital projects.

#### **ENVIRONMENTAL REVIEW**

This activity is not a project under California Environmental Quality Act (CEQA) Guidelines section 15378(b)(4) because the City is setting maximum rates for water utility service to be charged to fund ongoing operation and maintenance activities of the Water Enterprise of the City, and as such, the action involves a funding mechanism or fiscal activity within the meaning of the CEQA Guidelines. The activity is also exempt from CEQA as there is no possibility for causing a significant effect on the environment, per CEQA Guideline Section 15061(b)(3). No specific water projects are associated with this Ordinance. The Ordinance is policy-oriented and would create a funding mechanism for the development of future water facilities. When and if specific water projects are developed and proposed for implementation, the environmental impacts of such facilities would be evaluated in accordance with CEQA and City practice.

#### **PUBLIC NOTICE**

In consideration of the proposed water rate increases staff initiated the following public notification activities.

- In accordance with the requirements of Proposition 218 notices were mailed to all active water utility customers on October 16, 2023.
- Published a notice in the San Mateo Daily Journal on November 15, 2023, and November 29, 2023
- Attended Kiwanis Farmers Market on November 4, 2023
- Community Outreach at El Mercadito Latino on November 8, 2023
- Hosted a virtual community meeting on November 14, 2023
- Hosted an in-person community meeting with Spanish translation at Public Works Service.
   November 15, 2023
- Promoted above events through City social media channels and to the Spanish speaking community through local promotores.
- Public Notification was achieved by posting the agenda, with the agenda items being listed, at least 72 hours prior to the meeting.

#### **ALTERNATIVES**

According to the requirements of Proposition 218, if written protests are received by a majority of property owners and rate-paying customers on record, the City will not adopt the proposed rate increase. Only one written protest per parcel will be counted in calculating a majority protest. The City Council could elect to reject or revise the recommended rate increase regardless of the number of protest letters received.

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#### **ATTACHMENTS**

Attachment A – Notice of Proposed Rate increase

Attachment B – Ordinance Amending Article II (Water Service and Facility Charges) and Article IV (Water Fund) of Chapter 38 of the Redwood City Municipal Code and Updating the City's Water Service Charges

## **REPORT PREPARED BY:**

Justin Chapel, Public Works Superintendent jchapel@redwoodcity.org (650)780-7469

#### **APPROVED BY:**

Terence Kyaw, Public Works Director Melissa Stevenson Diaz, City Manager



## **Notice of Public Hearing on Proposed Water Rate Increases**

Monday, December 4, 2023 at 6:00 p.m.

#### In Person:

City Council Chambers 1017 Middlefield Road Redwood City, California 94063

## <u>Via Video Conference</u> (To Observe the Meeting only):

https://redwoodcity.zoom.us/j/99481825639

Meeting ID: 994 8182 5639 Dial-in: \*67 +1 (669) 900-6833

On Monday, December 4, 2023, at 6:00 p.m., or as soon thereafter as the matter may be heard, the City Council of the City of Redwood City will hold a public hearing to consider updates and increases to all of the City's water rates, for all water customers, for Fiscal Years (FY) 2023-24 and 2024-25. If approved, these updates and increases will be effective on February 1, 2024 and January 1, 2025 respectively. Members of the public may join the public hearing in-person, or observe the meeting via video conference, using the information provided above; only <u>in-person</u> participants may provide public comment during the public hearing. The purpose of this notice is to describe the proposed rate updates and increases and to notify you of the public hearing.

## THE PROPOSAL

The proposed water rates are calculated to recover the cost of providing water services to each commercial and residential customer class. The proposed rate updates are designed to ensure that the revenue collected from the water rates is sufficient to cover, but does not exceed, the City's costs of providing potable and recycled water services to its customers. The basis upon which the proposed water rates were calculated is set forth in the City of Redwood City Water Rate Cost-of-Service Study dated October 2023 ("Water Rates Study"), which can be found on the City's website and is available upon request in the City Clerk's office.

The City Council will consider the following proposed water rate updates and increases at the City Council meeting on December 4, 2023:

- Increases to the FY 2023-24 and FY 2024-25 water service charges that are billed bi-monthly to single family residential customers per dwelling unit (DU).
- Modifying and updating the current fixed service charge to multi family residential accounts to charge according to meter size instead of per equivalent dwelling unit to set rates for FY 2023-24 and FY 2024-25.
- Increases to the FY 2023-24 and FY 2024-25 water service charges that are billed monthly to commercial customers per meter size.

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- Modifying and updating the current water use rates charged to single family customers to set rates for FY 2023-24 and FY 2024-25.
- Modifying and updating the current water use rates charged to multi family customers so that all customers now pay a uniform rate for FY 2023-24 and FY 2024-25.
- Updating and increasing the water use rates charged to commercial customers for FY 2023-24 and FY 2024-25.
- Modifying and updating the current water use rates charged to irrigation customers so that all customers will be charged a uniform rate for FY 2023-24 and FY 2024-25.

## **REGULAR SERVICE**

The proposed updated water rates are necessary to proportionately allocate increased water purchase costs, capital project costs to maintain the City's infrastructure and to ensure adequate capacity for future growth, and to sustain the City's existing potable and recycled water systems. The City's water supplier, San Francisco Public Utilities Commission (SFPUC) has increased water supply costs by 27% in the last two years. The City plans to spend an average of \$15 million per year on capital improvement projects to expand its recycled water services and to increase funding to address its distribution system replacement program. Costs related to employee salaries and benefits, materials, and utilities have also increased and require additional rate revenues to fund.

The proposed updated water rates are for both potable and recycled water customers and will replace the current potable and recycled water rates in their entirety, since the potable and recycled water systems are connected and work together as a single system to serve all customers.

The proposed water use charges adjust the tier ranges for single family customers based on historical single-family residential demand patterns and growing conservation and efficiency of water use. All non-single family residential customers are adjusted to a uniform volume charge rate. Tiered rates are more appropriate for single family customers, which have a consistent pattern of demand, whereas uniform rates are more appropriate for non-single family residential customers, which have more variable patterns of demand. These rate structures align with industry practices.

Single family and multi family customers with an Accessory Dwelling Unit (ADU) and Junior Accessory Dwelling Unit (JADU) will be assessed their respective service and water use charges. If a residential customer has a separate, additional meter for their ADU or JADU, the ADU or JADU would be charged as a separate and additional single family or multi family customer, corresponding with the customer's primary customer class.

	Service Charges		
	Current	Proposed Water Rates	
Customer Class	Water Rates	FY 2023-24	FY 2024-25
Single Family Residential	Bi-monthly per DU	<u>Bi-monthly</u>	y per DU
	\$59.04	\$76.72	\$82.09
Multi Family Residential			
(includes Residential Irrigation)	Bi-monthly per EDU	Bi-monthly per Meter	
5/8" Meters	\$59.04	\$76.72	\$82.09
3/4" Meters	\$59.04	\$105.30	\$112.67
1" Meters	\$59.04	\$162.46	\$173.83
1.5" Meters	\$59.04	\$305.38	\$326.76
2" Meters	\$59.04	\$476.88	\$510.26
3" Meters	\$59.04	\$1,262.94	\$1,351.35
4" Meters	\$59.04	\$2,163.32	\$2,314.75
6" Meters	\$59.04	\$4,592.92	\$4,914.42
8" Meters	\$59.04	\$8,022.96	\$8,584.57
10" Meters	\$59.04	\$12,024.68	\$12,866.41

Note: EDU is Equivalent Dwelling Units

	Service Charges		
	Current	Proposed W	ater Rates
Customer Class	Water Rates	FY 2023-24	FY 2024-25
Commercial			
(includes Commercial Irrigation)	Monthly per Meter	Monthly pe	er Meter
5/8" Meters	\$29.52	\$38.36	\$41.05
3/4" Meters	\$44.28	\$52.65	\$56.34
1" Meters	\$73.80	\$81.23	\$86.92
1.5" Meters	\$147.60	\$152.69	\$163.38
2" Meters	\$236.16	\$238.44	\$255.13
3" Meters	\$442.80	\$631.47	\$675.67
4" Meters	\$738.00	\$1,081.66	\$1,157.38
6" Meters	\$1,476.00	\$2,296.46	\$2,457.21
8" Meters	\$1,476.00	\$4,011.48	\$4,292.28
10" Meters	\$1,476.00	\$6,012.34	\$6,433.20

		Water Use Charge	S			
Single Family Residential						
Current Tiers	<b>Current Rates</b>	Proposed Tiers	Proposed FY 2023-24	Proposed FY 2024-25		
Tier 1 (0-8 hcf)	\$6.13	Tier 1 (0-10 hcf)	\$6.45	\$6.90		
Tier 2 (9-20 hcf)	\$7.35	Tier 2 (11-14 hcf)	\$7.37	\$7.89		
Tier 3 (21-40 hcf)	\$10.20	Tier 3 (15-20 hcf)	\$9.63	\$10.30		
Tier 4 (41+ hcf)	\$13.45	Tier 4 (21+ hcf)	\$14.57	\$15.59		
	Multi Family R	esidential (including	Residential Fire)			
Current Tiers (per EDU)	<b>Current Rates</b>	Proposed Usage	Proposed FY 2023-24	Proposed FY 2024-25		
Tier 1 (0-8 hcf)	\$6.13	All Water Use	\$7.92	\$8.47		
Tier 2 (9-20 hcf)	\$7.35					
Tier 3 (21-40 hcf)	\$10.20					
Tier 4 (41+ hcf)	\$13.45					
Comm	nercial - Includes (	Commercial, Industr	ial, Municipal, Fire, Oth	er		
Current Usage	<b>Current Rates</b>		Proposed FY 2023-24	Proposed FY 2024-25		
All Water Use	\$7.35	All Water Use	\$7.92	\$8.47		
		Landscape Irrigatio	n			
Current Usage	<b>Current Rates</b>	Proposed Usage	Proposed FY 2023-24	Proposed FY 2024-25		
Under 100% Budget	\$7.35	All Water Use	\$7.92	\$8.47		
101%-200% Budget	\$10.20					
Over 200% Budget	\$13.45					

Note: hcf is hundred cubic feet and is equal to 748 gallons

Fire Service Connections					
Meter Size	<b>Current Rates</b>	FY 2023-24	FY 2024-25		
1" Meters	\$16.00	\$17.28	\$18.49		
2" Meters	\$32.00	\$34.56	\$36.98		
3" Meters	\$48.00	\$51.84	\$55.47		
4" Meters	\$64.00	\$69.12	\$73.96		
6" Meters	\$96.00	\$103.68	\$110.94		
8" Meters	\$128.00	\$138.24	\$147.92		
10" Meters	\$160.00	\$172.80	\$184.90		
12" Meters	\$192.00	\$207.36	\$221.88		

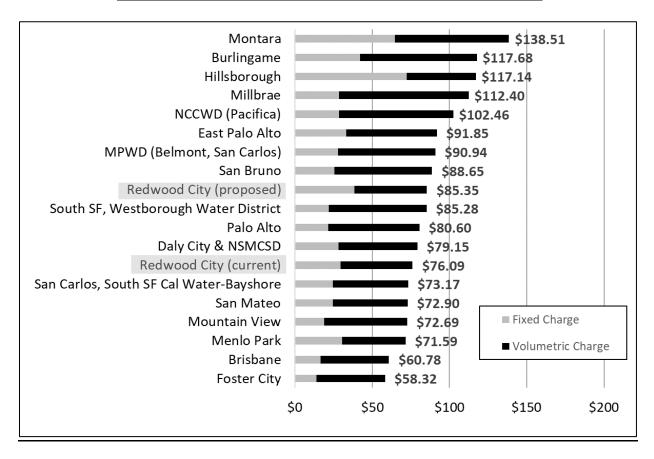
Note: monthly rates are billed based on the size of the connection serving the property.

## **COMPARISON TO NEIGHBORING AGENCIES**

Even with the proposed increases, rates for Redwood City customers with average water use will remain less than many neighboring jurisdictions. For single family residential customers using 14 hundred cubic feet (HCF; where HCF = 748 gallons) per bi-monthly billing cycle, the increase amounts to \$18.52 per bi-monthly bill (\$9.26 per month), beginning February 2024, and an additional increase of \$11.95 per bi-monthly bill (\$5.98 per month), beginning January 2025. The graph on the next page compares monthly bills assuming single family residential customers use 7 HCF per month, or the equivalent of 14 HCF per

Please note that there is a 120-day statute of limitations for challenging all water rates should the proposed adjustments be adopted.

bi-monthly billing cycle, beginning February 2024. Note: the neighboring agencies' calculated bills are based on their current rates, which may change during 2024 as they review their rates.



Single-Family Monthly Water Bills at Average Water Use (7 HCF)

## RATE ADJUSTMENTS DURING WATER SHORTAGES

The proposed drought rate revenue stabilization factors ("drought rate factors") would be applied to the water use charges for all water customers and implemented during locally declared water shortages, state mandated reductions in the level of water usage, or other natural disaster or event that requires reductions in water usage. The City Council may implement the drought rate factors as necessary, depending on the level of water use cutbacks required, to ensure that the water utility recovers sufficient revenues to meet its expenditures and debt obligations. The rates for the water use charges would be multiplied by the applicable drought rate factor to derive the water use charges to be in effect during the water shortage for each Customer Class.

The maximum drought rate factors are set forth in the following table. The actual drought rate factor to be applied at any time may be lower than the maximum drought rate factor set forth below, will depend on the level of reduction in water usage necessary at such time, and will be calculated in accordance with the methodology set forth in the rate study report, provided that the actual drought rate factor will not exceed the maximum drought rate factors set forth below.

Maximum Drought Rate Factors by Water Conservation Stage						
	Stage 1	Stage 2	Stage 3	Stage 4	Stage 5	Stage 6
	Shortage	Shortage	Shortage	Shortage	Shortage	Shortage
	Up to					
Customer Class	(10% Reduction)	(20% Reduction)	(30% Reduction)	(40% Reduction)	(50% Reduction)	(>50% Reduction)
Single Family	1.021	1.047	1.080	1.124	1.182	1.222
Multi-Family	1.014	1.031	1.051	1.074	1.101	1.121
Commercial	1.018	1.039	1.064	1.096	1.135	1.162
Irrigation	1.046	1.118	1.250	1.571	3.420	n/a

The table below includes an example of how the drought rate factors would impact the water use charges for water customers, if applied at the maximum amount to the proposed 2024 rates.

Example of 2024 Rates with Maximum Drought Rate Factors							
Water Emergency Sho	ortage Stage	Stage 1	Stage 2	Stage 3	Stage 4	Stage 5	Stage 6
		10%	20%	30%	40%	50%	>50%
Single Family Drought I	Rate Factors	1.021	1.047	1.080	1.124	1.182	1.222
Multi-Family Drought I	Rate Factors	1.014	1.031	1.051	1.074	1.101	1.121
Commercial Drought I	Rate Factors	1.018	1.039	1.064	1.096	1.135	1.162
Irrigation Drought I	Rate Factors	1.046	1.118	1.250	1.571	3.420	n/a
Proposed	Proposed 2024 Rates Rates With Drought Rate Factors Applicable to % Reductions						
Single Family							
Tier 1	\$6.45	\$6.59	\$6.76	\$6.97	\$7.25	\$7.63	\$7.88
Tier 2	\$7.37	\$7.53	\$7.72	\$7.96	\$8.28	\$8.71	\$9.01
Tier 3	\$9.63	\$9.83	\$10.09	\$10.40	\$10.82	\$11.39	\$11.77
Tier 4	\$14.57	\$14.88	\$15.26	\$15.74	\$16.37	\$17.23	\$17.80
Multi-Family	\$7.92	\$8.03	\$8.17	\$8.32	\$8.50	\$8.72	\$8.88
Commercial	\$7.92	\$8.06	\$8.23	\$8.43	\$8.68	\$8.99	\$9.21
Irrigation	\$7.92	\$8.28	\$8.85	\$9.90	\$12.44	\$27.09	N/A

Note: Rounding may occur in the rates derived from the multiplication of the drought rate factors to the applicable 2024 rates for each incremental percentage of reduction in water usage. Potable irrigation customer usage will be suspended at Stage 6.

#### PASS-THROUGH ADJUSTMENT

The proposed rates for the water use charges are based on SFPUC's projected wholesale water rates. Currently, their rates are projected to remain at the current cost of \$5.21 per HCF for Fiscal Years 2023-24 and 2024-25. Pursuant to California Government Code Section 53756, the City is proposing to pass through any variations to the projected SFPUC wholesale water rates through the City's water rates. A pass through will be implemented by increasing or decreasing the City's proposed water use charges by the amount of the SFPUC wholesale water rate increase or decrease in cents per HCF in excess or below the projected SFPUC wholesale rate. For example, if the SFPUC raises its wholesale water rate to \$5.31

Please note that there is a 120-day statute of limitations for challenging all water rates should the proposed adjustments be adopted.

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per CCF on July 1, 2024 (instead of the projected \$5.21 per HCF), the City may increase its water usage charge by an additional \$0.10 per HCF on or after July 1, 2024.

Prior to implementing a pass-through increase of the SFPUC wholesale water rates, the City will send written notification to all customers at least 30 days prior to the effective date.

## **PUBLIC HEARING ON PROPOSED RATES**

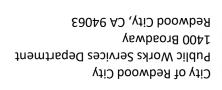
At the December 4, 2023 public hearing, the City Council will consider in-person oral and written testimony, as well as written protests by property owners and customers of record against the proposed water rates. If, prior to the close of the public input portion of the public hearing, written protests are presented by a majority of parcels that receive water services, the City Council will not increase the rates from their existing level. While in-person oral and written testimony will be considered, only written protests will be counted toward the majority protest threshold, and only one written protest per parcel will be counted in calculating a majority protest.

If you would like additional information on the proposed rates, including the Water Rates Study, please visit Public Works Services at 1400 Broadway Street, Redwood City, CA 94063, call 650-780-7464, or email jchapel@redwoodcity.org. Any person interested, including all water customers served by the City of Redwood City, may appear at the public hearing in person and be heard on any matter related to the proposed increase in rates.

If you wish to file a written protest, please submit a letter addressed to Water Rates, City Clerk, City of Redwood City, 1017 Middlefield Road, Redwood City, CA 94063 or email council@redwoodcity.org. Your written protest must: (i) Include a statement that it is a protest against the proposed change in rates; (ii) Provide the name of the record owner or customer of record; (iii) Identify the affected parcel by assessor's parcel number or service address; and (iv) Include the signature of the record owner or customer of record with respect to the identified parcel. Protests will not be counted if any of the required elements (i through iv) are omitted. Written protests must be received by the City Clerk at City Hall by 4:00 p.m. on Monday, December 4, 2023 if delivered by U.S. Mail or email. Written protests may also be hand delivered up until the close of the public input portion of the December 4, 2023 public hearing on the matter.

You are hereby notified, pursuant to Government Code, section 53759, that any judicial action or proceeding to attack, review, set aside, void, validate, or annul the City Council's adoption of the proposed water rates must be commenced within 120 days of the effective date or of the date of the final passage, adoption, or approval of the ordinance or resolution adopting the water rates, whichever is later.

PRSRT STD U.S. Postage **PAID** Redwood City, CA Permit No. 1808



ORD	<b>INANCE</b>	NO.	

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF REDWOOD CITY AMENDING ARTICLE II (WATER SERVICE AND FACILITY CHARGES) AND ARTICLE IV (WATER FUND) OF CHAPTER 38 OF THE REDWOOD CITY MUNICIPAL CODE, UPDATING THE CITY'S WATER SERVICE CHARGES, AMENDING RESOLUTION NO. 14648, AND RESCINDING RESOLUTION NO. 15446

**WHEREAS**, the Redwood City Municipal Code Chapter 38 (Water System Regulations), Article II (Water Service and Facilities Charges) imposes water service charges on all customers of the City of Redwood City's ("City") water system; and

**WHEREAS**, the City reviewed its water rates to determine if they are adequate over time to pay for the anticipated increase in wholesale water costs, ongoing maintenance and replacement projects, ongoing operations costs, and any planned capital projects; and

**WHEREAS**, the City submitted a Water Rate Cost-of-Service Study dated October 11, 2023 ("Water Rate Study"), which recommends a revised water rate schedule for Fiscal Years 2023-24 and 2024-25. The Water Rate Study is attached hereto as **Exhibit A** and hereby incorporated by reference; and

WHEREAS, pursuant to the provisions of Article XIII D, Section 6, of the California Constitution ("Proposition 218"), prior to extending, imposing or increasing water rates, property owners shall be provided at least 45 days' notice of a public hearing to consider such modifications to the water rates together with an explanation of: (1) the amount of the proposed rates, (2) the basis on which the rates are calculated, (3) the reason for the rate modifications, and (4) the date, time and place of a public hearing to consider the rate modifications, together with an explanation of the rights of property owners to submit written protests to the proposed rate modifications. The proposed rate modifications may not be imposed if, prior to the close of the public hearing, written protests are submitted by a majority of the parcels subject to the modified rates ("majority protest"); and

**WHEREAS**, notice of the public hearing to consider proposed adjustments to the water rates was mailed to property owners of record and customers of record in accordance with Proposition 218; and

**WHEREAS**, the mailed notice of public hearing included a statement that there is a 120-day statute of limitations for challenging the water rates should the proposed water rates be adopted; and

**WHEREAS**, on December 4, 2023, the City Council conducted a public hearing, considered testimony, and at the conclusion of the hearing determined that a majority protest did not exist; and

**WHEREAS**, Government Code section 53756 allows public utility providers to adopt a schedule for inflation and wholesale rate pass-throughs provided they do not apply for more than five-years and that the utility provider gives 30 days written notice to ratepayers each time a pass-through is implemented; and

**WHEREAS**, on June 6, 2005, the City Council adopted Resolution No. 14648, which established a reserve for the Water Enterprise of \$2 million; and

**WHEREAS**, on December 12, 2016, the City Council adopted Resolution No. 15446, which established a revised policy for the pricing of recycled water intended to encourage retrofits of plumbing systems for the continued use of recycled water, and since the policy was adopted, recycled water has become a desirable commodity sought out by the community; and

**WHEREAS**, the water rates are "exempt charges," within the meaning of Section 1 of Article XIII C of the California Constitution and the Taxpayer Protection and Government Accountability Act (Initiative No. 21-0042) because they are charges that are imposed in accordance with and subject to Article XIII D of the California Constitution.

# NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF REDWOOD CITY DOES ORDAIN AS FOLLOWS:

**Section 1**. The above recitals are true and correct, and incorporated herein by reference and each is relied upon independently by the City Council for its adoption of the Ordinance.

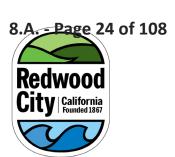
Section 2. The Ordinance has been reviewed with respect to applicability of the California Environmental Quality Act ("CEQA") and the CEQA Guidelines. The Ordinance is not a project under CEQA Guidelines Section 15378(b)(4) because the Ordinance does not have the potential for resulting in either a direct physical change in the environment, or a reasonably foreseeable indirect physical change in the environment, as the Ordinance creates government funding mechanisms which do not involve any commitment to any specific project. The Ordinance is also exempt from CEQA as there is no possibility for causing a significant effect on the environment, per CEQA Guideline Section 15061(b)(3). No specific water projects are associated with this Ordinance. The Ordinance is policy-oriented and would create a funding mechanism for the development of future water facilities. When and if specific water projects are developed and proposed for implementation, the environmental impacts of such facilities would be evaluated in accordance with CEQA and City practice.

**Section 3**. The City Council of the City of Redwood City hereby adopts the following Redwood City Municipal Code amendments, by adding the text shown in underline (<u>example</u>) and deleting the text shown in strikeout (<u>example</u>), as shown below. Wording in brackets ([example]) is informational only and is not to be included in the published ordinance.

- A. Article II of Chapter 38 of the Redwood City Municipal Code is hereby retitled and amended as set forth in **Exhibit B**; and
- B. Article IV of Chapter 38 of the Redwood City Municipal Code is hereby amended as set forth in **Exhibit C**.
- <u>Section 4</u>. The City Council finds and determines that, based on the entire record before the City Council, including but not limited to the Water Rate Study and the Staff Report and attachments thereto:
  - (1) Revenues derived from the proposed water rates will not exceed the funds required to provide water service, respectively.
  - (2) Revenues derived from the proposed water rates will not be used for any purpose other than that for they were imposed.
  - (3) The amount of the water rates imposed upon any parcel or person as an incident of property ownership will not exceed the proportional cost of the service attributable to the parcel.
  - (4) The water rates are imposed for a service or services that are actually used by, or immediately available to, the owner of the property in question.
  - (5) The water rates are not being imposed for general government services.
- **Section 5**. The City Council hereby approves and adopts the Water Rate Study attached hereto as **Exhibit A**, which sets forth the basis for the Water Rates.
- <u>Section 6</u>. The City Council finds that the procedures followed and the water rates referenced herein are in compliance with the California Constitution Article XIII D, Government Code section 53755, and Health and Safety Code section 5471.
- **Section 7**. The City Council hereby adopts the water rate schedules in **Exhibit D** attached hereto and incorporated herein by this reference.
- <u>Section 8</u>. The Water Rates for Fiscal Year 2023-24 will be effective as of February 1, 2024, and the water rates for Fiscal Year 2024-25 will be effective on January 1, 2025.
- **Section 9**. Any San Francisco Public Utility Commission ("SFPUC") increases for wholesale water rate increases, management charges or other charges implemented by the SFPUC prior to January 1, 2027, exceeding \$5.21/hcf may be passed through to water ratepayers, by including the increases in water rates. Pursuant to Government Code section 53756(d), notice must be given at least thirty (30) days prior to any water rate adjustment occurring pursuant to the adopted water rate schedule or as a result of the pass through of SFPUC wholesale rate increases.

- <u>Section 10</u>. The Water Rates, set forth in **Exhibit D**, may be amended from time to time by ordinance or resolution of the City Council.
- <u>Section 11</u>. The City Council hereby amends Resolution No. 14648, and approves and adopts a policy to maintain the following Water Enterprise reserve target. The operating reserve component will equal 25% of annual operations and maintenance (O&M) expenses. The capital reserve component will include \$2 million to provide working capital for pay-as-you-go construction projects.
- **Section 12**. Resolution No. 15546 adopting a policy for the pricing of recycled water is hereby rescinded.
- <u>Section 13</u>. If any provision, section, paragraph, sentence or word of this Ordinance, or the application thereof to any person or circumstance, is rendered or declared invalid by any court of competent jurisdiction, the remaining provisions, sections, paragraphs, sentences or words of this Ordinance, and their application to other persons or circumstances, shall not be affected thereby and shall remain in full force and effect and, to that end, the provisions of this Ordinance are severable.
- **Section 14**. This Ordinance shall become effective thirty days after the date of its adoption.
- **Section 15**. The City Clerk is directed to cause this Ordinance to be published in the manner required by law.

\* \* \*



# CITY OF REDWOOD CITY

Water Rate Cost-of-Service Study

Final Report October 11, 2023



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## **CITY OF REDWOOD CITY**

1017 Middlefield Road Redwood City, CA 94063



# **WATER RATE COST-OF-SERVICE STUDY**

October 11, 2023

# **HF&H CONSULTANTS, LLC**

590 Ygnacio Valley Rd, Suite 105 Walnut Creek, CA 94596



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October 11, 2023

Terence Kyaw Public Works Director City of Redwood City 1400 Broadway Redwood City, CA 94063

Subject: Water Rate Cost-of-Service Study – Final Report

Dear Terence Kyaw:

HF&H is pleased to submit this cost-of-service report to the City of Redwood City (City). The previous rate study was completed in 2016. The current study makes the following recommendations.

- Revenue increases. Rate increases are recommended due to increases in the cost of purchased water from the San Francisco Public Utilities Commission (SFPUC) and the need to fund capital improvements, including ongoing repairs and replacements of aging infrastructure. The cost of SFPUC water is nearly 40% of the annual revenue requirement the largest single expense. Wholesale water rates have increased 27% since 2018 when rates were last increased. Wholesale rates are projected to increase an additional 8% during the five-year planning period (Study Period). The impact of these significant increases in wholesale rates on the revenue requirements over the Study Period cannot be overstated. While the City had the ability to pass through prior, unplanned increases to wholesale rates, this mechanism was never employed. In addition, rate increases are needed to allow the City's Water Enterprise Fund to continue compliance with debt service requirements, to avoid operational cost increases, and the depletion of reserves. Over the next two years, the recommended revenue increases are 8% and 7%.
- **Service Charge rate structure modifications.** We recommend changes to the rate structures applied to Multi Family Residential customers to align with industry practice. The City's approach to treating all water, whether potable or recycled, as one system portfolio, allows for the consolidation of customer classes, affecting both the service charges and the water use charges.
- Water Use Charge rate structure modifications. The proposed Single Family Residential tiered
  rates are restructured based on projected single-family residential demand patterns, which results in adjustments to the current tier breakpoints. We recommend changes to the rate structures applied to Multi Family Residential customers to align with industry practice. We recommend all non-single family residential customers are charged a uniform Water Use Charge rate.
- **Drought Rate Revenue Stabilization Factors (Drought Rate Factors).** The drought rate factors can be adopted as part of the Proposition 218 process. Customer class drought rate factors are applied to the corresponding Water Use Charge rate(s) so that the City can maintain revenue neutrality during drought conditions when customers are required to reduce water use.
- Pass-through Adjustment. We recommend that the City incorporate annual pass-through adjustments of the SFPUC water purchase cost into its water use charge rates. Water use charge rates

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can be adjusted to track any difference between the SFPUC rates that were included in the analysis and the actual rates adopted each year by SFPUC.

The rates proposed in this report reflect the current and projected cost of providing service for the next two years. We greatly appreciate your assistance in developing the cost-of-service analysis.

Sincerely,

HF&H CONSULTANTS, LLC

Rick Simonson Senior Vice President

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# **GLOSSARY**

AMI - advanced metering infrastructure.

**AWWA** – American Water Works Association.

**BAWSCA** – Bay Area Water Supply and Conservation Agency.

**Breakpoint** – The volume of water per billing period separating tiers in tiered rate structures.

City – City of Redwood City and/or the City's Water Enterprise

**CCF** – Hundred cubic feet (see HCF below).

**CIP** - Capital Improvement Program.

**Commercial** – Refers to commercial, industrial, and municipal accounts served by the City. Includes all commercial, industrial, municipal, fire, other, and recycled water customers under the proposed Water Use Charge rates.

**Commercial/Multi Family** – Refers to all non-single family residential customers for the purposes of performing the cost-of-service analysis.

**Drought Rate Factors** – Factors applied to Water Use Charge Rates to stabilize revenue to meet the City's water revenue requirement during periods of conservation when there are significant reductions in water usage, and hence in water revenues.

**DU** – Dwelling Unit, in reference to the number of physical residences served by a Single Family Residential or Multi Family Residential meter.

**EDU** – Equivalent Dwelling Unit, (also referred to as Dwelling Unit Equivalent or (DUE) in the City's municipal code) in reference to the current Multi-Family Residential rate structure which calculates EDUs based on the number of total dwelling units served by one meter.

**EMU** – Equivalent Meter Unit.

FY - Fiscal Year.

**Flat rates** - Fixed charges per account that do not vary based on metered water use. Flat rates are found in unmetered water systems and in wastewater rates. Flat rates are not uniform rates (see below).

**GPD** - Gallons Per Day.

**HCF** - Hundred cubic feet of metered water; 748 gallons; a cube of water 4.6 feet on edge. One HCF per month is about 25 gallons per day.

**Irrigation** – Refers to the current Landscape Irrigation customer class. Includes all potable and recycled water commercial irrigation customers under the proposed rate structure.

**Meter charges** - One-time charges for the purchase of a meter. Meter charges are not Service Charges (see below).

**Multi Family Residential** – Refers to the current Multi Family Residential customer class. Includes all multifamily customer accounts, residential fire service accounts, residential irrigation, and future residential recycled water customers under the proposed Water Use Charge rates.

**O&M** - Operating and Maintenance, in reference to the costs of running facilities.

**PAYGo** - Pay-As-You-Go, in reference to funding capital improvements from cash rather than from borrowed sources such as bonds or loans.

**RWS** – Regional Water System

**Service Charges** – Fixed charges paid per account regardless of the amount of water used. The charge is proportionate to the capacity of the customer's service, which is the capacity of the pipe connecting from the main to the meter, or the meter, whichever is smaller. This is not applicable to fire services, which are charged according to the size of the connecting pipe, only. Service Charges are not meter charges (see above). The City's Service Charges are called "Fixed Service Charges."

SFPUC - San Francisco Public Utilities Commission.

**Study Period** – five-year planning period analyzed in this study, which includes fiscal year 2023-24 to fiscal year 2027-28

**SVCW** – Silicon Valley Clean Water, a Joint Powers Authority serving the communities of Belmont, Redwood City, San Carlos, and the West Bay Sanitary District.

**Uniform rates** - Constant charges per unit of water use that do not change depending on the amount used. Uniform rates are not flat rates (see above).

Water Use Charge Rates – The product of rates per unit of metered water use multiplied by a customers metered water use during the billing period.

WSCP - Water Shortage Contingency Plan.

## **ACKNOWLEDGEMENTS**

## City Council

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## **LIMITATIONS**

This document was prepared solely for the City of Redwood City in accordance with the contract between the City and HF&H and is not intended for use by any other party for any other purpose.

In preparing this study, we relied on information from the City, which we consider accurate and reliable. Our analysis is based on the best available information at the time of the study.

Rounding differences caused by stored values in electronic models may exist.

This document represents our understanding of relevant laws, regulations, and court decisions but should not be relied upon as legal advice. Questions concerning the interpretation of legal authorities referenced in this document should be referred to a qualified attorney.



# **WATER RATE COST-OF-SERVICE STUDY**

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## I. EXECUTIVE SUMMARY

## **BACKGROUND**

The City operates and maintains a potable and recycled water distribution system to serve its water users. It is a complex system with varying topography and separate but interconnected pressure zones. As of this study, the City serves 24,479 connections within its service area. The City's water service area covers approximately 17 square miles. The City purchases all its potable water from the San Francisco Public Utilities Commission (SFPUC) Regional Water System (RWS) and is a member of Bay Area Water Supply and Conservation Agency (BAWSCA). The City has also been supplying recycled water to its customers since 2000. As a member of Silicon Valley Clean Water (SVCW), the City receives disinfected tertiary-treated, recycled water for reuse. The infrastructure network includes 259 miles of water mains, 12 active storage reservoirs, 10 booster pump stations, and various assets, such as water meters, fire hydrants, and valves<sup>1</sup>. The SFPUC delivers treated wholesale water to the City from its RWS. This water is delivered through thirteen master meter locations from the SFPUC's transmission pipelines. From these connections, the City reduces pressure and pumps to deliver water to its customers.

The water rates in this study were developed using rate-making principles set forth by the American Water Works Association (AWWA) in *Principles of Water Rates, Fees and Charges* (M1 Manual). This Manual's cost-of-service principles endeavor to distribute costs to customer classes (also referred to as classes) and to individual customers in proportion to customers impacts on the water system. Pursuant to the M1 Manual, rate studies generally contain three elements: (1) a revenue requirements analysis, which determines how much revenue is needed from rates to recover a utility's projected costs; (2) a cost-of-service analysis, which allocates the revenue requirements to the rate components; 2 and (3) a rate design analysis, which determines any modifications that are required to align the rate structure with the cost of service.

Rate studies always include a revenue requirements analysis. A cost-of-service analysis is typically only conducted periodically. It is recommended that a cost-of-service analysis be conducted at least every five years to account for any material differences in the costs of providing service and in the water usage among customer classes, which will affect their respective shares of the cost of service. The City last conducted a cost-of-service study in 2016.

The City requested HF&H to conduct a cost-of-service study to analyze a period of five years (Study Period). However, the City plans to develop a Recycled Water Master Plan that is estimated to be adopted in 2025. While five years of analysis are reported, the projections will likely change due to the Recycled Water Master Plan. Therefore, the City is electing to set water rates for two years and plans to conduct a a second rate study to set rates for FY 2025-26 and future years.

<sup>&</sup>lt;sup>1</sup> 2020 Urban Water Management Plan City of Redwood City published June 2021.

<sup>&</sup>lt;sup>2</sup> The cost-of-service analysis in the current study tailors the base/extra capacity method to account for unique conditions, circumstances, and factors related to the City's cost of providing water service, which the M1 Manual does not specifically address. The adjustments to the M1 base/extra capacity method of allocating costs are described in more detail in Chapter IV.

Since the previous cost-of-service analysis, changes in demand patterns among customer classes has occurred, which affects the factors that are used to allocate costs. The costs to which the allocation factors are applied also change. Hence, there will be differences between the previous and current cost-of-service analyses. Adjustments are made to reflect the differences and rates are set accordingly.

The cost-of-service analysis proportionately allocates the revenue that is required from rates to the components of the rate structure and to the customer classes. Costs are classified corresponding to the function they serve. Each function's costs are further allocated to each component of the rates in proportion to the level of service required by customers. The levels of service are related to volumes of peak and non-peak demand, infrastructure capacity, and customer service. Ultimately, a cost-of-service analysis ensures that the rates yield charges that are proportional to the cost of providing service to each customer.

The following discussion summarizes HF&H's findings and recommendations.

## **REVENUE REQUIREMENTS**

The revenue requirements were updated to reflect projected customer demands and the costs associated with meeting those demands. The five-year projections are shown in **Figure I-1**.

Over the Study Period, the City's revenue requirement is driven by increases to water purchase costs and capital improvement expenditures. The City's water supply source, SFPUC, intends to raise rates from \$5.21 per hundred cubic feet (HCF)<sup>3</sup> to \$5.63 per HCF over the next five years. On July 1 2022, wholesale rates increased from \$4.10 to \$4.75 per HCF. Rates were increased from \$4.75 to \$5.21 per HCF, on July 1, 2023. Increases to the wholesale rates augment the water purchase expenses over the Study Period. The City's capital improvement plans include an average annual expense of \$13.2 million over the projection period, demonstrating the City's priority to continue to invest in its water system. The bulk of project expenditures are planned to support water main replacement, as well as storage and pumping infrastructure.

<sup>&</sup>lt;sup>3</sup> HCF (Hundred Cubic Feet) = 748.052 gallons

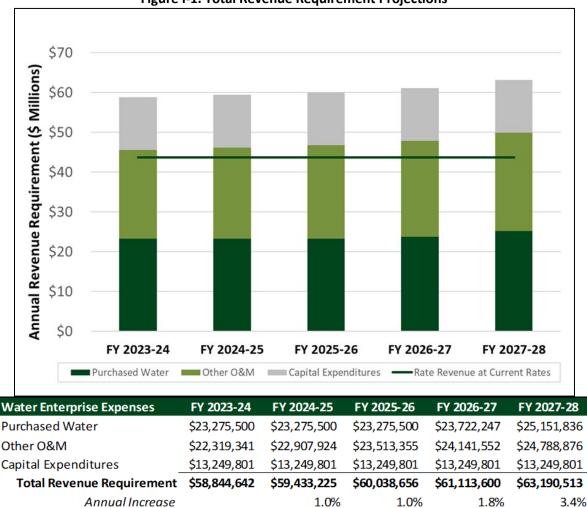


Figure I-1. Total Revenue Requirement Projections

Source: Figure III-5.

The rate and revenue increases for FY 2023-24 and FY 2024-25 are shown in **Figure I-2.** The proposed rate increases would become effective on February 1, 2024 for the first year and thereafter on January 1 of each calendar year.

The fiscal year increase in revenue and rate adjustment columns typically do not match because the City implements rate increases mid-fiscal year. Thus, any changes to the rates apply to six months instead of the whole fiscal year period. In effect, the rates of one calendar year are made up of rates set in adjoining fiscal years. In FY 2023-24, the City receives a smaller increase in revenue because of the February 2024 effective date provides only five months of increased revenue instead of six months. The rate increases, beginning January 1, 2025, are applied as equal percentages across the board to all rates.

Figure I-2. Projected Revenue Increases

		Effective Date	Revenue After	Fiscal Year
	Rate	of Rate	Rate	Increase in
Fiscal Year	Adjustments	Adjustments	Adjustments	Revenue
Revenue at 2	2023 Rates		\$43,671,145	
FY 2023-24	8.0%	2/1/2024	\$44,725,844	2.4%
FY 2024-25	7.0%	1/1/2025	\$48,381,821	8.2%

Source: Figure III-7.

As shown in **Figure I-3**, the projected increases in the revenue requirements are balanced with the City's existing level of reserves. The City's proposed reserve policy<sup>4</sup> assumes that the target reserve balance is made up of an operating reserve component and a capital reserve component. The operating reserve component will equal 25% of annual operations and maintenance (O&M) expenses. The capital reserve component will include \$2 million to provide working capital for pay-as-you-go construction projects. The sum of these components equals the City's Reserve Target<sup>5</sup> (blue line). The projected fund balance shows the use of reserves over the Study Period. The use of reserves compensates for the need to charge larger rate increases to customers. The City has not increased rates since 2018. If current rate revenues remain unchanged, the City would require a heavier dependency on Water Enterprise Fund reserves, and reserves would be reduced significantly (dashed green line), falling below a recommended minimum threshold. However, with the proposed rate increases, the projected fund balance (green solid line) remains above the City's Reserve Target by the end of the Study Period. With these proposed rate increases, debt service coverage remains strong and improves during the five-year period. **Figure I-4** projects debt coverage with the recommended revenue increases, ensuring the City continues to meet the minimum coverage ratio of 1.20.

<sup>&</sup>lt;sup>4</sup> The Water Enterprise Fund has a formal policy of maintaining two million in reserves. The proposed reserve policy will be recommended for adoption via resolution to Council.

<sup>&</sup>lt;sup>5</sup> In this study, the City has assumed a working reserve policy that is greater than its existing policy. City staff plans to recommend the working reserve policy be adopted. The proposed reserve policy assumes 25% of annual O&M expenses and \$2 million for capital projects. These reserve levels are in line with the City's existing policies and industry standards.

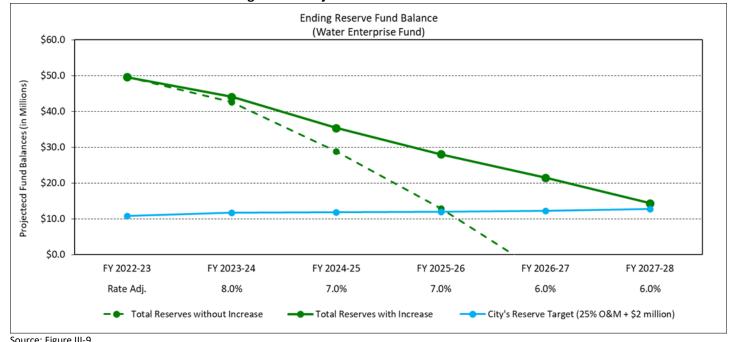


Figure I-3. Projected Year-End Fund Balance

Source: Figure III-9.

Note: City's Reserve Target is a proposed policy, recommended by City staff.

Figure I-4. Debt Service Coverage

	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28
Rate Revenue w/Increases	\$44,725,844	\$48,381,821	\$51,768,548	\$55,124,751	\$58,432,236
Non-Operating Income	\$1,345,179	\$1,399,218	\$1,456,936	\$1,512,329	\$1,571,375
Interest Income	\$466,259	\$395,566	\$315,899	\$246,471	\$178,036
Total Funds Available	\$46,537,282	\$50,176,605	\$53,541,383	\$56,883,551	\$60,181,647
O&M Expenses	(\$38,979,812)	(\$39,482,090)	(\$40,004,436)	(\$40,994,442)	(\$42,989,092)
Net Revenue	\$7,557,470	\$10,694,514	\$13,536,947	\$15,889,109	\$17,192,555
Debt Service	\$3,969,863	\$3,976,813	\$3,978,163	\$3,978,913	\$3,974,463
Debt Coverage Ratio	1.90	2.69	3.40	3.99	4.33

Source: Figure III-8.

## **RATE STRUCTURE**

## **Current Rate Structure**

The City's current rate structure is composed of two components: Service Charges and Water Use Charges.

## **Current Service Charges**

The Service Charges <sup>6</sup> are fixed rates that are charged on a dwelling unit basis for Residential (single family and multi-family residences) customers and on a fixed rate graduated in proportion to the capacity of the

<sup>&</sup>lt;sup>6</sup> The service is the connection between the public water system and the property served. The service includes the pipes, valves, and meter set (i.e., box, lid, yoke, meter, valve); in some cases, there are multiple meters. The service

service provided for Non-Residential (commercial, municipal, industrial, other, recycled water, and irrigation) customers. Residential customers are billed on a bi-monthly<sup>7</sup> basis by dwelling unit (DU) or equivalent dwelling unit (EDU) while non-residential, Commercial and irrigation customers are billed on a monthly basis. **Figures I-5 and I-6** summarizes the current Service Charges and Fire Service Charges.

**Figure I-5. Current Service Charges** 

Service Charges			
Customer Class	Current Rates		
Single Family Residential	Bi-monthly per DU		
	\$59.04		
Multi Family Residential	Bi-monthly per EDU		
5/8" Meters	\$59.04		
3/4" Meters	\$59.04		
1" Meters	\$59.04		
1.5" Meters	\$59.04		
2" Meters	\$59.04		
3" Meters	\$59.04		
4" Meters	\$59.04		
6" Meters	\$59.04		
8" Meters	\$59.04		
10" Meters	\$59.04		
Commercial (including Landscape Irrig			
5/8" Meters	Monthly per Meter \$29.52		
3/4" Meters	\$29.32 \$44.28		
1" Meters	\$73.80		
1.5" Meters	\$147.60		
2" Meters	\$236.16		
3" Meters	\$442.80		
4" Meters	\$738.00		
6" Meters	\$1,476.00		
8" Meters	\$1,476.00		
10" Meters	\$1,476.00		
Source: Figure IV-1	•		

Source: Figure IV-1.

is installed at the property owner's expense. After the meter is purchased and installed, customers pay Service Charge rates. The terminology in this report refers to the capacity of the service and the capacity of the meter interchangeably.

<sup>&</sup>lt;sup>7</sup> Bi-monthly periods assume a billing period of 60 days.

Figure I-6. Current Fire Service Charges (\$/month)

Meter Size	<b>Current Rates</b>
1" Meters	\$16.00
2" Meters	\$32.00
3" Meters	\$48.00
4" Meters	\$64.00
6" Meters	\$96.00
8" Meters	\$128.00
10" Meters	\$160.00
12" Meters	\$192.00

Source: Figure IV-2.

#### **Current Water Use Charge Rates**

The Water Use Charge Rates are the product of rates per unit of metered water use multiplied times the metered water use during the specified billing period. Water is metered in "units" of HCF of metered water use, whereby one unit or HCF equals 748 gallons. Water Use Charge rates are charged to four separate customer classes, Residential, Commercial, Landscape Irrigation, and Recycled Water customers.

For Residential customers, the Water Use Charge rates consist of four tiers that charge higher rates as the level of consumption increases. The tiers are specific to the number of equivalent dwelling units served by the parcel. Single Family Residential accounts serve one dwelling unit and are considered 1.0 EDU. Similarly, Multi Family customer accounts serving 2-9 dwelling units count each dwelling unit as 1.0 EDU. However, Multi Family customer accounts serving 10-59 dwelling units count each dwelling unit as 0.75 EDU and accounts serving more than 60 dwelling units count each dwelling unit as 0.5 EDU. The volume of water in each tier corresponds to the number of EDU calculated for each account.

For Commercial and Recycled Water customers, the Water Use Charge rate is a uniform rate<sup>8</sup> per HCF of metered water use. All customers pay the same per HCF of water use, and recycled water customers' rate is a lower rate than potable customers' rates.

For Landscape Irrigation customers, the Water Use Charge rates are based on a three-tiered, budget-based structure that charge higher rates as the level of water use relative to the customers water budget increases. **Figure I-7** reflects all current rates, excluding a recycled water discount.

All components of the rate structure were reviewed, including the composition of the customer classes, the structures of the Service Charges and Water Use Charges, and the need for Drought Rate Factors.

<sup>&</sup>lt;sup>8</sup> This report distinguishes between *uniform* rates and *flat* rates. Uniform rates are constant charges per unit of water use that do not change depending on the amount used. Flat rates are fixed amounts that do not vary based on metered water use. Flat rates are most commonly used in unmetered water systems and for residential wastewater rates.

Figure I-7. Current Water Use Charge Rates

Water Use Charges					
Single Family F	Single Family Residential				
<b>Current Tiers</b>	<b>Current Rates</b>				
Tier 1 (0-8 hcf)	\$6.13				
Tier 2 (9-20 hcf)	\$7.35				
Tier 3 (21-40 hcf)	\$10.20				
Tier 4 (41+ hcf)	\$13.45				
Multi Family Residential					
Usage	<b>Current Rates</b>				
Tier 1 (0-8 hcf)	\$6.13				
Tier 2 (9-20 hcf)	\$7.35				
Tier 3 (21-40 hcf)	\$10.20				
Tier 4 (41+ hcf)	\$13.45				
Comme	rcial				
Usage	<b>Current Rates</b>				
All Water Use	\$7.35				
Landscape Irrigation					
Usage	<b>Current Rates</b>				
Under 100% Budget	\$7.35				
101%-200% Budget	\$10.20				
Over 200% Budget	\$13.45				
Recycled Water					
Usage	<b>Current Rates</b>				
All Water Use	\$7.35				

Source: Figure IV-3.

## **Proposed Service Charge Rates**

Currently, about 36% of the rate revenue is generated by the current Service Charges. For a Single Family Residential bill of average bi-monthly water use (14 HCF), the Service Charge represents nearly 39% of the total bill.

Adjustments in FY 2023-24 are recommended to re-align the Service Charge rates with the cost-of-service. Revenues from the proposed Service Charges would continue to generate 36% of the overall rate revenue. This level of revenue from Service Charges will continue to provide adequate revenue stability when combined with the relatively fixed revenue from non-seasonal (base) water demand.

The City is moving toward a methodology of one water system. Two sources of water – potable and recycled – supply the City's water system. The use of recycled water reduces the need to purchase potable water. Therefore, the City's water system can be thought of as an integrated system. As a result, all water, whether potable or recycled, will be considered as part of the same water supply portfolio. This means existing customer classes can be consolidated. We recommend the City modify the customer classes and Service Charge rate structures as follows:

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- 1. Consolidate all Residential Irrigation customers under the Multi Family Residential customer class, subject to the same Multi Family Residential Service Charges and Consumption Charges.
- 2. Consolidate all Commercial Irrigation and Recycled Water customers under the Commercial customer class, subject to the same Commercial Service Charges and Consumption Charges.
- 3. Revise the Multi Family Residential Service Charge structure to a bi-monthly charge based on the meter capacity. This change in the rate structure aligns with the methodology used for Commercial Service Charges. As such, the charge is graduated in proportion to the capacity of the service and not the number of dwelling units served.

#### **Summary of Proposed Service Charge Rates**

**Figure I-8** summarizes the current and proposed rates to re-align with the cost of service. The proposed rates would become effective February 1, 2024 and January 1, 2025.

With the recommended increases and realignment to the cost-of-service, revenues from the Service Charges would increase 8.7% with twelve months of rate increase applied. The rebalancing of rates means twelve-month revenues collected from the Service Charges billed to Single Family Residential customers would increase. The revenues collected from the Service Charges billed to Commercial, Multi-Family, Irrigation, and Recycled Water (Commercia/Multi Family) would decrease. After the first year, all Service Charge rates would increase uniformly according to the recommended revenue increase of 7% (effective January 1, 2025).

**Figure I-8. Current and Proposed Service Charge Rates** 

	Service Charges		
Customer Class	Current	FY 2023-24 eff. 2/1/2024	FY 2024-25 eff. 1/1/2025
Single Family Residential	Bi-monthly per DU	Bi-month	
	\$59.04	\$76.72	\$82.09
Multi Family Residential			
(including Residential Irrigation)	Bi-monthly per EDU	Bi-monthly	per Meter
5/8" Meters	\$59.04	\$76.72	\$82.09
3/4" Meters	\$59.04	\$105.30	\$112.67
1" Meters	\$59.04	\$162.46	\$173.83
1.5" Meters	\$59.04	\$305.38	\$326.76
2" Meters	\$59.04	\$476.88	\$510.26
3" Meters	\$59.04	\$1,262.94	\$1,351.35
4" Meters	\$59.04	\$2,163.32	\$2,314.75
6" Meters	\$59.04	\$4,592.92	\$4,914.42
8" Meters	\$59.04	\$8,022.96	\$8,584.57
10" Meters	\$59.04	\$12,024.68	\$12,866.41
Commercial			
(including Commercial Irrigation)	Monthly per Meter	Monthly p	er Meter
5/8" Meters	\$29.52	\$38.36	\$41.05
3/4" Meters	\$44.28	\$52.65	\$56.34
1" Meters	\$73.80	\$81.23	\$86.92
1.5" Meters	\$147.60	\$152.69	\$163.38
2" Meters	\$236.16	\$238.44	\$255.13
3" Meters	\$442.80	\$631.47	\$675.67
4" Meters	\$738.00	\$1,081.66	\$1,157.38
6" Meters	\$1,476.00	\$2,296.46	\$2,457.21
8" Meters	\$1,476.00	\$4,011.48	\$4,292.28
10" Meters	\$1,476.00	\$6,012.34	\$6,433.20

Source: Figure V-4.

**Figure I-9** summarizes the current and proposed fire service charges. The existing structure requires no adjustment. Therefore, the rates shown are based on an 8% increase applied to current rates for FY 2023-24, effective February 1, 2024, followed by a 7% increase applies to rates, effective January 1, 2025.

Figure I-9. Current and Proposed Fire Service Charge Rates

		FY 2023-24	FY 2024-25
Meter Size	<b>Current Rates</b>	eff 2/1/2024	eff. 1/1/2025
1" Meters	\$16.00	\$17.28	\$18.49
2" Meters	\$32.00	\$34.56	\$36.98
3" Meters	\$48.00	\$51.84	\$55.47
4" Meters	\$64.00	\$69.12	\$73.96
6" Meters	\$96.00	\$103.68	\$110.94
8" Meters	\$128.00	\$138.24	\$147.92
10" Meters	\$160.00	\$172.80	\$184.90
12" Meters	\$192.00	\$207.36	\$221.88

Source: Figure V-5.

## **Proposed Water Use Charge Rates**

About 64% of the current water rate revenue is generated by the Water Use Charges.

Adjustments in FY 2023-24 are recommended to re-align the Water Use Charge rates with the cost-of-service. These adjustments would allow the City to continue to generate 64% of the overall rate revenue from the Water Use Charges. The rates will continue to provide adequate revenue stability, as the fixed revenue from the annualized winter water use provides additional revenue stability to the revenues received via the fixed Service Charges.

Based on industry practice and customer water use patterns, we recommend changes to the structure used for Water Use Charge rates assigned to Multi Family Residential customers. The recommended modification to change to a uniform rate would align the City with the Commercial rate structure. Further, the change in structure would align with other neighboring agencies, as shown in **Figure I-10**.

Figure I-10. Survey of Multi Family Water Rate Structures

Multi Family						
	Fixed	Consumption				
Agency	Charges	Charges				
Redwood City (Proposed)	Meter Size	Uniform				
Belmont	Meter Size	Tiered				
Foster City	Meter Size	Tiered				
San Carlos, San Mateo (CalWater)	Meter Size	Uniform				
San Carlos (Mid-Pen)	Meter Size	Tiered				
Menlo Park	Meter Size	Tiered				
Hillsborough	Meter Size	Uniform				
Daly City	Meter Size	Tiered				
Burlingame	Meter Size	Uniform				
NCCWD	Meter Size	Uniform				
East Palo Alto	Meter Size	Uniform				
Palo Alto	Meter Size	Uniform				
Millbrae	Meter Size	Uniform				
Westborough Water District	Meter Size	Uniform				
Mountain View	Meter Size	Tiered				
San Bruno	Meter Size	Uniform				
Montara	Meter Size	Combination				
Brisbane	Meter Size	Tiered				

Source: Figure IV-4.

Changing Multi Family Use Charges to a uniform rate structure would reduce the number of customers and water use considered in tiered rate structure analysis. Based on this change and shifts in demand patterns since the last cost-of-service analysis was completed for the City, we recommend changes in the breakpoints between the tiers in the Water Use Charge structure. The recommended bi-monthly breakpoints of 8, 20, and 40 HCF would shift to 10, 14, and 20 HCF.

Since the City provides water through one integrated system of potable and recycled water, it is moving toward rates that reflect the realities of the system. As a result, all water, whether potable or recycled, will be considered as part of the same system portfolio. Along with consolidation of customer classes, we recommend revising Non-Residential rate structures. The Landscape Irrigation (Irrigation) Consumption Charge structure can be revised to a uniform rate that matches the Commercial Water Use Charge rate. Also, the Recycled Water Use Charge can be set equal to the Commercial Water Use Charge rate.

We recommend implementing Drought Rate Factors that could be applied to the Water Use Charge rates during water shortages to compensate for changes in water use and varying levels of discretionary water use among the Residential and Non-Residential customer classes. There should be a Drought Rate Factor corresponding to each reduction stage in the City's *Water Shortage Contingency Plan*, which contains conservation requirements for each stage of water shortage. The Drought Rate Factors are designed only to offset the amount of revenue shortfall caused by conservation in effect in the City during the specific water shortage stage, state mandated reductions in the level of potable water usage, or other natural disaster or event that results in a water shortage and an unforeseen drop in water demand. As such, they are revenue neutral and not a means to increase rate revenue beyond the amount that would have been generated under non-water shortage conditions.

**Figure I-11** summarizes the Drought Rate Factors that correspond to the water shortage stages in the City's *Water Shortage Contingency Plan*. The Water Use Charge rates derived in this study accounted for changes to water use driven by the current water shortage. However, if the City experiences a water shortage beyond the level of water use projected, the normal-year Water Use Charge rates would be multiplied times the corresponding Drought Rate Factor to determine the Water Use Charge rates.

For example, if customers are required to cut back 20% (a Stage 2 water shortage), a Drought Rate Factor of 1.047 would be multiplied times the then-current Water Use Charge rates that are in effect for Single Family Residential customers (summarized in **Figure I-4**). If the water shortage stage increased to 40%, a Drought Rate Factor of 1.124 would be multiplied times the then-current Water Use Charge rates. If the water shortage stage then decreased to 30%, the Drought Rate Factor would be reduced from 1.124 to 1.080.

The formula<sup>9</sup> for calculating Drought Rate Factors corresponding to other levels of cutback is provided in Chapter V of this study. The Drought Rate Factors only apply to the tiered and uniform Water Use Charge rates and not to Service Charge rates, which are independent of water demand. Revenue from Service Charges is not influenced by water demand and is therefore unaffected by conservation or fluctuations in customer demand.

Figure I-11. Drought Rate Factors

	Stage 1	Stage 2	Stage 3	Stage 4	Stage 5	Stage 6
	Shortage	Shortage	Shortage	Shortage	Shortage	Shortage
	Up to					
Class	(10% Reduction)	(20% Reduction)	(30% Reduction)	(40% Reduction)	(50% Reduction)	(55% Reduction)
Single Family	1.021	1.047	1.080	1.124	1.182	1.222
Multi-Family	1.014	1.031	1.051	1.074	1.101	1.121
Commercial	1.018	1.039	1.064	1.096	1.135	1.162
Irrigation	1.046	1.118	1.250	1.571	3.420	n/a

Source: Figure V-14.

#### **Summary of Water Use Charge Rates**

**Figure I-12** summarizes the current and proposed Water Use Charge rates. The proposed rate analysis was derived using FY 2021-22 and FY 2022-23 water demand patterns. More detail is discussed in the Demand Projections section of Section III of this report.

For the proposed, tiered Water Use Charge rates for the Residential class, the number of tiers remains the same, however the breakpoints have been adjusted. The Tier 1 breakpoint is increasing, thus, compressing the width of Tier 2. Tier 3 also compresses, reflecting the increased levels of conservation by the Single Family Residential customers. Overall, the more water a Residential customer uses, the greater the increase to the Water Use Charge portion of their bill.

<sup>&</sup>lt;sup>9</sup> Following **Figure V-13** of this study.

With the recommended increases and realignment to the cost-of-service, revenues from the Water Use Charges would increase 9.2% with twelve months of rate increase applied. The adjustments to the uniform Water Use Charge rate for the Multi Family Residential, Commercial, and Irrigation customer classes would collectively increase twelve-month revenues by more than 18% to re-align with the cost-of-service. After the first year, all Water Use Charge rates would increase uniformly according to the recommended revenue increases of 7%, effective January 1, 2025.

Figure I-12. Current and Proposed Water Use Charge Rates

Figure I-1	z. current	and Proposed Wat	er use Charge R	ates				
		Water Use Charges						
	Sin	gle Family Resident	tial					
Current Tiers	Current	<b>Proposed Tiers</b>	FY 2023-24	FY 2024-25				
	Rates		eff. 2/1/2024	eff. 1/1/2025				
Tier 1 (0-8 hcf)	\$6.13	Tier 1 (0-10 hcf)	\$6.45	\$6.90				
Tier 2 (9-20 hcf)	\$7.35	Tier 2 (11-14 hcf)	\$7.37	\$7.89				
Tier 3 (21-40 hcf)	\$10.20	Tier 3 (15-20 hcf)	\$9.63	\$10.30				
Tier 4 (41+ hcf)	\$13.45	Tier 4 (21+ hcf)	\$14.57	\$15.59				
Multi	Family Res	idential (including	Residential Fire)					
Current Tiers	Current	Usage	FY 2023-24	FY 2024-25				
	Rates		eff. 2/1/2024	eff. 1/1/2025				
Tier 1 (0-8 hcf)	\$6.13	All Water Use	\$7.92	\$8.47				
Tier 2 (9-20 hcf)	\$7.35							
Tier 3 (21-40 hcf)	\$10.20							
Tier 4 (41+ hcf)	\$13.45							
Commercial - Includ	es Commer	cial, Industrial, Oth	er, Municipal, Co	ommercial Fire				
Usage	Current	Usage	FY 2023-24	FY 2024-25				
	Rates		eff. 2/1/2024	eff. 1/1/2025				
All Water Use	\$7.35	All Water Use	\$7.92	\$8.47				
	Landscape Irrigation							
Usage	Current	Usage	FY 2023-24	FY 2024-25				
	Rates		eff. 2/1/2024	eff. 1/1/2025				
Under 100% Budget	\$7.35	All Water Use	\$7.92	\$8.47				
101%-200% Budget	\$10.20							
Over 200% Budget	\$13.45							
			•					

Source: Figure V-11.

## II. INTRODUCTION

## **STUDY PURPOSE**

The purpose of this study is to conduct a cost-of-service analysis that will determine rates that proportionally recover the cost of providing the City's water service. Toward that end, the cost-of-service analysis determines how much revenue should be generated by each component of the rate structure so that rate payers within each customer class are charged for their proportionate share of the cost of providing service on a parcel basis. The cost-of-service analysis is tailored specifically to the City's customer classes and the rate structures that are appropriate for each class.

## **STUDY PROCESS**

In 2022, the City requested HF&H Consultants (HF&H) to perform a cost-of-service study to set water rates for FY 2023-24 and FY 2024-25. A ten-year analysis provided support for long-term planning. However, the City plans to develop a Recycled Water Master Plan that is estimated to be adopted in 2025. With the significant changes anticipated, the City is electing to set rates for two years. Therefore, while five years of analysis are reported, the projections will likely change due to the Recycled Water Master Plan. The City plans to conduct a a second rate study to set rates for FY 2025-26 and future years.

The primary goal of this study is to ensure that rates continue to reflect the current cost of providing water service. A comprehensive rate study comprises three steps: 1) revenue requirement projections; 2) cost-of-service analysis; and 3) rate design. Revenue requirement projections identify how much revenue is needed from rates. The cost-of-service analysis determines how much of the revenue should come from the fixed and variable charges. This step also confirms the proportionate amount to be paid by each customer class. The final step, rate design, establishes the structure of the fixed service charges and the variable volume charges for each customer class.

The cost-of-service analysis was conducted following industry practices promulgated by the American Water Works Association. <sup>10</sup> At the outset of the analysis, the types of customer classes were reviewed, as were the types of rate structures that are appropriate to the City's customer class.

#### REPORT ORGANIZATION

The report is divided into the following sections: Revenue Requirements, Cost-of-Service Analysis, Rate Design, and Customer Bill Impacts.

A Glossary of technical terms and acronyms is provided following the Table of Contents.

<sup>&</sup>lt;sup>10</sup> Principles of Water Rates, Fees, and Charges. American Water Works Association Manual M1. 2017.

# III. REVENUE REQUIREMENTS

The revenue requirements analysis starts by determining the FY 2023-24 revenue requirements based on the budgeted O&M and capital expenditures. Revenue requirements for each fiscal year are then projected over the Study Period. Revenue increases needed to cover the projected revenue requirements are then determined.

## **DEMAND PROJECTIONS**

The revenue requirements projected during the Study Period are based on the City's unique circumstances. Projected customer demand is particularly significant because it affects certain variable expenses such as the cost of purchased water as well as the revenue from water sales. Customer demand depends on the types of customers, the nature of their demands, the trends in their water use, growth, and climate, among others.

The City consists of single-family residences, multi-family residences, commercial (including schools), industrial, municipal, irrigation, and even recycled water customers. While single-family residential water use currently accounts for 47% of the total water use, future growth depends on development of multifamily and mixed-use retail. The service area is largely developed, but the City's General Housing Element identifies plans for more housing to meet future population growth. For purposes of this rate study, no growth in water demand nor in growth of accounts was assumed. Connection fee revenue from growth is assumed, but the City did not estimate increased operational costs or supply costs explicitly due to growth.

Water demand projections used in this study are shown in **Figure III-1**. Projections are based on the two-year average of billing data from FY 2021-22 to FY 2022-23.

FY 2023-24 FY 2024-25 FY 2025-26 **Customer Class** FY 2026-27 FY 2027-28 Multi Family Residential 790,781 790,781 790,781 790,781 790,781 636,936 Commercial 636,936 636,936 636,936 636,936 **Commercial Irrigation** 354,096 354,096 354,096 354,096 354,096 **Residential Irrigation** 188,564 188,564 188,564 188,564 188,564 1,723,268 Single Family Residential 1,723,268 1,723,268 1,723,268 1,723,268 9,176 9,176 Commercial Recycled 9,176 9,176 9,176 Annual Water Use (HCF) 3,702,820 3,702,820 3,702,820 3,702,820 3,702,820

Figure III-1. Five-Year Modeled Demand Projections

## REVENUE REQUIREMENT ASSUMPTIONS AND PROJECTIONS

Expense projections combined with contributions to reserves become the revenue requirements. The City's operating and capital budgets were relied on for FY 2023-24 expenses in the first-year revenue requirement. The assumptions shown in **Figure III-2** were used to project revenue requirements through FY 2027-28.

Figure III-2. Projection Assumptions

Assumptions	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28
General Inflation	Per Budget	3.00%	3.00%	3.00%	3.00%
Salaries and Wages	Per Budget	4.00%	4.00%	4.00%	4.00%
Benefits	Per Budget	4.00%	4.00%	4.00%	4.00%
Construction Cost Inflation	Per Budget	3.74%	3.74%	3.74%	3.74%
Utilities	Per Budget	7.00%	7.00%	7.00%	7.00%
Interest on Fund Balance	1.00%	1.00%	1.00%	1.00%	1.00%
SFPUC Cost of Purchased Water	\$5.21	\$5.21	\$5.21	\$5.31	\$5.63
SFPUC Cost of Purchased Water %	Per Budget	0.00%	0.00%	1.92%	6.03%

## **SFPUC Purchased Water Costs**

The City is entirely reliant on the SFPUC for its water supply. As a member of BAWSCA, the City's water supply expenses are driven by two usage-based rates: 1) SFPUC's annual rate and 2) BAWSCA's bond surcharge rate <sup>11</sup>. The SFPUC provided notice to increase the previous rate of \$4.75 per HCF to \$5.21 per HCF beginning July 1, 2023. Further, the SFPUC's notice forecasted rates would increase to \$5.31 per HCF by FYE 2027, and \$5.63 per HCF by FYE 2028.

Beginning FYE 2014, the BAWSCA bond surcharge rate was added so that each agency could pay its proportionate share of debt issuance based on purchased water have increased as bonds have been sold to fund the WSIP projects. The bond surcharge rate has been factored into the projections of water supply costs in this analysis.

Since 1984, the SFPUC's wholesale rates have been set in compliance with rate-making agreements. The agreements contain provisions that annually reconcile projected expenses and demands with actual expenses and demands. The difference is rolled forward into the ensuing year's rates. In this way, both the SFPUC and the BAWSCA 26 wholesale customers are protected. However, it also means that the annual adjustment can either increase or decrease rates, which leads to some short-term volatility in the wholesale rates that can accentuate annual rate fluctuations.

The rising SFPUC rates and current BAWSCA bond surcharge rate were built into the revenue requirement projections. The cost of SFPUC water is nearly 40% of the annual revenue requirement – the largest single item. The impact of these significant increases in wholesale rates on the revenue requirements over the study period cannot be overstated.

## **Other Operations and Maintenance Expenses**

This cost category includes direct salaries and benefits, materials and services, contract services, and overhead. These expenses are projected to increase gradually at about 3% during the projection period, according to City estimates.

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<sup>&</sup>lt;sup>11</sup> The SFPUC also charges a fixed service charge, currently 2% of total purchased water costs, which is not impacted by the amount of water the City purchases.

#### **Debt Service**

The City has three outstanding bond obligations. The annual debt service is approximately \$3.9 million. The outstanding bonds are identified in **Figure III-3**. Each refunding bond was used to refinance existing debt service issued in 2005, 2006, and 2007. In each instance, the original debt service funded capital projects related to the recycled water system, retrofitting irrigation systems, installing artificial surfaces for athletic fields in the City, and system-wide repair and replacement of Enterprise facilities. Although these projects were constructed and are in service, the debt service on these bonds will continue beyond the Study Period.

Figure III-3. Current Annual Debt Service

Current Debt	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28
Series 2013 Refunding Bonds	\$2,061,000	\$2,060,750	\$2,062,500	\$2,061,000	\$2,061,250
Series 2015 Refunding Bonds	\$1,418,444	\$1,420,644	\$1,421,244	\$1,420,244	\$1,418,294
Series 2017 Refunding Bonds	\$490,419	\$495,419	\$494,419	\$497,669	\$494,919

### **Capital Expenditures**

Even though the City has constructed facilities to provide water service, these facilities will depreciate and eventually need to be replaced. It is unrealistic to think that the system has already been built and paid for and that there will be no future capital costs. The City has in place a Water Master Plan to address long-term capital projects via its Capital Improvement Program (CIP). Based on this Plan, the revenue requirement projections show an increased level of funding in FYE 2024 needed to support the capital improvement program, which contains approximately \$75.3 million in cash-funded capital projects 12 over the Study Period as shown in **Figure III-4**.

Concurrently the City is conducting a separate study to update its water connection fees. The connection fee revenues shown in **Figure III-4** assume the new connection fees will be implemented in 2024. As a result, the average annual expenditure of \$13.2 million is the net amount that is contributed from rate revenues beginning in FYE 2024. This amount will be funded on a pay-as-you-go (PAYGo) basis.

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<sup>&</sup>lt;sup>12</sup> This figure assumes an annual inflation factor of 3.74% beginning FY 2024-25, based on the ten-year compound annual growth rate of the Engineering New Record Construction Cost Index for San Francisco.

Figure III-4. Projected Capital Improvement Program

Water Enterprise CIP	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28
Downtown Recycled Water Dist. Phase 2C Ext.	\$1,500,000	\$3,000,000	\$3,000,000	\$3,000,000	\$3,000,000
Finance & Human Resources Software	\$0	\$0	\$0	\$0	\$0
Main City Recycled Water Tank & Pump Station	\$2,000,000	\$2,000,000	\$2,000,000	\$2,000,000	\$2,000,000
Cathodic Protection Program	\$200,000	\$100,000	\$100,000	\$100,000	\$100,000
Distribution System Replacement Program	\$1,000,000	\$6,500,000	\$6,500,000	\$6,500,000	\$6,500,000
Pump Station & Tank Rehab/Replacement	\$1,000,000	\$3,000,000	\$3,000,000	\$3,000,000	\$4,000,000
Recycled Water Quality Improvements	\$200,000	\$0	\$0	\$0	\$0
Water System Seismic Improvement Program	\$2,000,000	\$500,000	\$500,000	\$500,000	\$500,000
Potable Water Projects	\$0	\$0	\$0	\$0	\$0
Recycled Water Projects	<u></u> \$0	\$0	\$0	\$0	\$0
Water Enterprise CIP Subtotal	\$7,900,000	\$15,100,000	\$15,100,000	\$15,100,000	\$16,100,000
Construction Cost Index	0.00%	3.74%	7.62%	11.65%	15.83%
Total Inflated CIP	\$7,900,000	\$15,664,954	\$16,251,046	\$16,859,066	\$18,648,101
Less Total Connection Fees	(\$1,426,133)	(\$2,994,062)	(\$2,163,033)	(\$1,219,878)	(\$1,271,056)
Net PAYGo CIP	\$6,473,867	\$12,670,892	\$14,088,013	\$15,639,188	\$17,377,045

Note: Connection Fees based on preliminary analysis conducted by HF&H.

The major expenses described above that comprise the revenue requirements are shown in **Figure III-5**. Wholesale water is the largest individual cost among these three cost categories. In the City's case nearly 40% of its revenue requirement is for the cost of water, which will vary in direct proportion to demand. Current rate revenues of \$43.3 million are insufficient to meet projected expenses. The City faces a growing deficit over the Study Period.

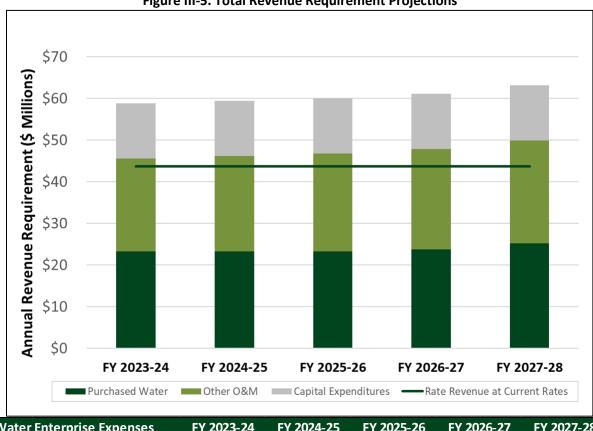


Figure III-5. Total Revenue Requirement Projections

Water Enterprise Expenses	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28
Purchased Water	\$23,275,500	\$23,275,500	\$23,275,500	\$23,722,247	\$25,151,836
Other O&M	\$22,319,341	\$22,907,924	\$23,513,355	\$24,141,552	\$24,788,876
Capital Expenditures	\$13,249,801	\$13,249,801	\$13,249,801	\$13,249,801	\$13,249,801
Total Revenue Requirement	\$58,844,642	\$59,433,225	\$60,038,656	\$61,113,600	\$63,190,513
Annual Increase		1.0%	1.0%	1.8%	3.4%

Source: Data from City's FY 2023-24 Budget.

## **RESERVES**

Rates need to generate enough revenue to cover unfunded annual operating and capital expenses. However, rates are not set to exactly match cash expenditures because the timing of cash expenditures can fluctuate. If rates were set to exactly match expenditures, rates would also fluctuate. To avoid increasing and decreasing rates from year to year, reserves are used to cover the difference so that rate increases are smooth and gradual.

The City's current level of reserves has enabled it to maintain a strong credit rating, which reduces its financing costs. The City uses its reserves to stabilize rates against annual fluctuations in capital expenditures, variances between projected and actual water demands, and unanticipated expenditures and other expenditure variances. In some years, there is surplus revenue that is available to replenish reserves. In other years, reserves are drawn down to cover the cost of service.

Rates are set to generate a constant level of revenue to maintain reserves at adequate levels. At the same time that revenue from rates is added to reserves, reserves are drawn down to fund capital projects whose costs vary from year to year. In effect, reserves are used to buffer rates from varying levels of capital expenditures and unforeseen variances in operating expenditures. For the most part, however, the variances are due to capital projects (see **Figure III-4**).

Reserves are required to stabilize rates and to provide for contingencies. Reserves can be drawn on in years when the City's Water Enterprise Fund experiences above average costs and augmented during years when costs are below average. The City's reserves are used for operating and capital purposes. Each of these purposes has its own requirements that lead to a minimum and optimum target balance. Rates must be set so that the fund balance achieves the target balance.

## **Current Policy**

The City has an existing policy to maintain \$2 million in reserves. This threshold is less than industry practice, which recommends a minimum balance sufficient to manage monthly cash flow needs. For reference, the *monthly* average of the City's FY 2023-24 revenue requirement before capital expenditures is \$3.8 million. Therefore, it is recommended the City increase the reserve threshold of its existing policy.

## **City Proposed Policy**

In this study, the City has assumed a working reserve policy that is greater than its existing policy. City staff plans to recommend the working reserve policy be adopted. The proposed reserve policy assumes 25% of annual O&M expenses and \$2 million for capital projects.

The operating component of the reserves provides working capital for month-to-month O&M expenses. With sufficient working capital, the City can operate without cash flow constraints. This proposed reserve policy tracks with HF&H's recommendation of a minimum operating reserve that is equal to at least 1.5 times the billing frequency (or three months in the City's case). The City's reserves should never drop below this minimum balance.

The capital improvement component of the reserves provides cash funding for the City's capital improvement program. The fund balance needs to be sufficient to pay contractors and purchase materials without delays caused by cash flow limitations. The City's proposed reserve policy assumes the minimum reserve balance is \$2 million. Given the City's plans to fund an average of \$13.2 million in capital projects per year with rate revenues, this component is necessary.

#### **REVENUE INCREASES**

Rates are set to generate sufficient revenue to cover annual expenses. In addition, rates are set to maintain adequate reserves. The revenue from rates does not need to match each year's revenue requirement. For example, the annual increases in the revenue requirements shown at the bottom of **Figure III-5** are different from the revenue increases in **Figure III-6**. Annual fluctuations in revenue requirements are typically uneven because they are harder to control, whereas it is desirable to have smooth annual increases in rates. The annual differences cause the fund balance to fluctuate from year to year.

Revenue increases were derived to cover the City's Enterprise costs and to maintain adequate reserves. **Figure III-6** summarizes the projected revenue from current rates, annual revenue requirements, annual variances, and the rate increases necessary to cover the City's costs.

Figure III-6. Rate Increase Calculations

	Projected				
	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28
Revenue from Current Rates	\$43,283,075	\$43,283,075	\$43,283,075	\$43,283,075	\$43,283,075
Revenue Requirement	(\$58,844,642)	(\$59,433,225)	(\$60,038,656)	(\$61,113,600)	(\$63,190,513)
Non-Operating Revenue	\$1,345,179	\$1,399,218	\$1,456,936	\$1,512,329	\$1,571,375
Use of Reserves	\$10,295,248	\$0	\$0	\$0	\$0
Net Revenue Requirement	(\$47,204,214)	(\$58,034,008)	(\$58,581,720)	(\$59,601,271)	(\$61,619,138)
Revenue Surplus/(Shortfall)	(\$3,921,140)	(\$14,750,933)	(\$15,298,646)	(\$16,318,197)	(\$18,336,063)
Proposed Rate Increase	8%	7%	7%	6%	6%

Rate increases account for rate revenue and future revenue requirements. The revenue requirement (shown in greater detail in **Figure III-5**) increases due to increasing water supply costs and capital expenditures. **Figure III-7** summarizes the resulting annual increases in rates and revenues from the proposed service and water use charges. The fiscal year increase in revenue and rate adjustment columns typically do not match, as the City implements rate increases mid-fiscal year. Thus, any changes to the rates apply to six months instead of the whole fiscal year period. In effect, the rates of one calendar year are made up of rates set in adjoining fiscal years. In FY 2023-24, the City receives a smaller increase in revenue because the February 2024 effective date provides only five months of increased revenue instead of six months. It is assumed that the rate increases for FY 2024-25 will occur on January 1, 2025.

Figure III-7. Projected Revenue Increases

		Effective Date	Revenue After	Fiscal Year				
	Rate	of Rate	Rate	Increase in				
Fiscal Year	Adjustments	Adjustments	Adjustments	Revenue				
Revenue at 2	2023 Rates		\$43,671,145					
FY 2023-24	8.0%	2/1/2024	\$44,725,844	2.4%				
FY 2024-25	7.0%	1/1/2025	\$48,381,821	8.2%				

The rates are derived in Chapter V. With these rate increases, the Enterprise is able to pay for its annual O&M and capital expenses, maintain adequate debt service coverage, and maintain adequate reserves, as further discussed below.

#### **DEBT COVERAGE**

**Figure III-8** shows the debt service coverage provided by the revenue increases in **Figure III-7**. The City is required to maintain a minimum coverage ratio of 1.20. A higher ratio provides a greater margin of safety to bondholders and enhances the credit rating on bonds. Moreover, a higher credit rating benefits rate payers by reducing the cost of borrowing.

Figure III-8. Debt Service Coverage

	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28
Rate Revenue w/ Increases	\$44,725,844	\$48,381,821	\$51,768,548	\$55,124,751	\$58,432,236
Non-Operating Income	\$1,345,179	\$1,399,218	\$1,456,936	\$1,512,329	\$1,571,375
Interest Income	\$466,259	\$395,566	\$315,899	\$246,471	\$178,036
Total Funds Available	\$46,537,282	\$50,176,605	\$53,541,383	\$56,883,551	\$60,181,647
O&M Expenses	(\$38,979,812)	(\$39,482,090)	(\$40,004,436)	(\$40,994,442)	(\$42,989,092)
Net Revenue	\$7,557,470	\$10,694,514	\$13,536,947	\$15,889,109	\$17,192,555
Debt Service	\$3,969,863	\$3,976,813	\$3,978,163	\$3,978,913	\$3,974,463
Debt Coverage Ratio	1.90	2.69	3.40	3.99	4.33

The increasing debt coverage ratio tells an incomplete narrative. Rate revenue increases are recommended to account for increasing O&M <u>and capital costs</u>. However, in **Figure III-8**, the net revenue reflects only the difference between O&M expenses and rate revenues, and does not account for \$13.2 million in annual capital expenses, as well. The rate revenue increases and resulting debt coverage ratio increases are necessary to ensure the City meets both its growing O&M and capital expenses, shown in **Figure III-5**.

### **RESERVE FUND BALANCE**

**Figure III-9** shows the annual fluctuations (solid green line) in the fund balance that are caused by the differences between the revenue requirement and revenue from rates with the rate increases; the dashed green line is the projected fund balance without rate increases. The revenue and rate increases in **Figure III-7** were derived to balance increasing rates while maintaining a level of reserves that continues to meet the City's reserve target (blue line) by FY 2027-28. Over the Study Period, the Water Enterprise projects to utilize \$35.3 million from current reserves, while continuing to meet its debt coverage requirements and the City's reserve target. Maintaining a fund balance above or equal to the City's reserve target helps to protect the City's credit rating, which lowers the cost of financing, thereby benefiting rate payers.

As shown in **Figure III-9** by the dashed green line, without revenue increases, the FY 2022-23 year-end fund balance of \$49.6 million is projected to drop below the City's reserve target. With rate increases, the reserve balance (solid green line) decreases more gradually over the Study Period, as the City uses reserves to fund the projected revenue requirement. The recommended rate increases are balanced with the use of reserves. Reserves help offset the increased costs projected, reducing the potential for larger increases to be borne by ratepayers.

By the end of FY 2024-25, with recommended increases, the Water Enterprise Fund reserve balance projects to be \$35.4 million. At that time the City will have developed a Recycled Water Master Plan and can reassess the fiscal health of the Enterprise to determine what level of future increases are necessary.

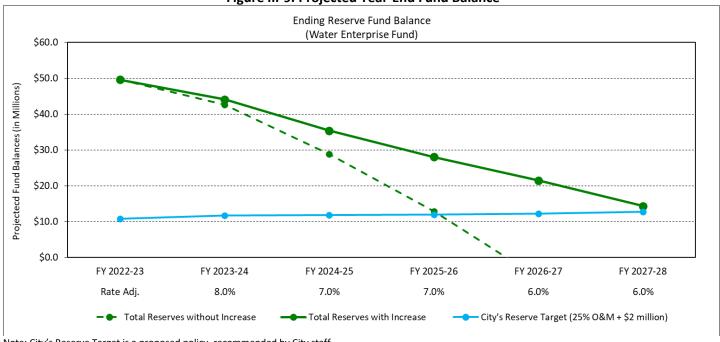


Figure III-9. Projected Year-End Fund Balance

Note: City's Reserve Target is a proposed policy, recommended by City staff.

## IV. COST-OF-SERVICE ANALYSIS

### **GENERAL APPROACH**

## **Base/Extra Capacity Method**

The revenue requirement analysis establishes how much revenue is required from rates. The next step in the analysis is determining the cost of service. Cost-of-service analysis is used to derive rates that proportionally allocate the cost of service. The cost-of-service analysis performed in this study follows a procedure described by the AWWA, which is referred to as the "base/extra capacity method." This method allocates the revenue requirements to the components of the rate structure.

The base/extra capacity method in the AWWA M1 Manual contains three categories: base, maximum day, and maximum hour. Base capacity is determined by the average daily flow during the year. The average daily flow determines how much base capacity is needed to provide that flow. Maximum day capacity is determined by the flow on the maximum day of the year. In other words, the maximum day capacity is greater than the base capacity, including the base capacity plus the additional capacity needed to provide for the maximum day flow of the year. Maximum hour capacity is determined by the flow during the maximum hour on the maximum day. In other words, the maximum hour capacity is greater than the maximum day capacity by the amount of peak hour that occurs during the maximum day flow.

We have refined AWWA's version of the base/extra capacity method. What AWWA considers "base" capacity is not purely base capacity because AWWA defines "base" as average day capacity. Average day capacity includes average peaking, which is greater than how "base" is defined in this report. In this report, "base" demand does not include peaking. We have introduced a fourth category that corresponds to base demand with no peaking, which we call Base Day. This Base Day demand is derived from average winter demand, when there is the least amount of peaking. Hence, in addition to Average Day, Maximum Day, and Maximum Hour categories, we have added Base Day. We have calculated the proportional cost of providing service for each of these four categories in this report.

For purposes of this study, the base/extra capacity method is first used for allocating the cost of service to the fixed and variable rate components. It is also used for determining the tiered Water Use Charge rates. It was appropriate to refine the base/extra capacity method in this way to address the specific circumstances within the City to ensure that rates were derived that are proportional to the cost of providing service.

The cost of serving customers depends not only on the total volume of water used but also on the rate of use. 13 The rate of use (i.e. peaking) influences the design of the system, as well. Thus, peaking demand placed on the system affects operational costs to maintain the water system, as well as the level of capital investment required to construct the water system. Assets such as pumps, reservoirs, tanks, valves, and pipelines are sized using design requirements governed by levels of peaking demand. Therefore, levels of peaking demand (e.g. Maximum Day and Maximum Hour flows) play a primary role in determining the size and level of investment in a water system. The AWWA base/extra capacity method recognizes these

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<sup>&</sup>lt;sup>13</sup> Principles of Water Rates, Fees, and Charges. American Water Works Association Manual M1. 2017.

principles. The industry practice to allocate expenses to "cost components on the basis of operating considerations or design capacity of each facility" requires that peaking expenses be allocated to customers who contribute to peaking demand.

## **CUSTOMER CLASSES**

The cost-of-service analysis distributes the revenue requirements among customer classes in proportion to their service requirements. There is no industry standard that specifies which customer classes should be used. The law allows utilities to exercise discretion in determining the appropriate customer classes provided the rates yield charges that are proportional to the cost of providing service for each category. As a result, the base/extra capacity method needs to be tailored to the customer classes.

The City currently has multiple customer classes: Single Family Residential, Multi Family Residential, Commercial, Irrigation, and Recycled Water. These classes were last reviewed as part of the previous cost-of-service study in 2016. The contrast in customer classes stems from the typical pattern of usage by each class. Residential use varies according to indoor and outdoor needs throughout the year, producing periods of peak demands for which the system must be designed to meet. However, due to smaller dwelling units and outdoor areas, Multi Family Residential use per dwelling unit during peaking periods is less than Single Family Residential customers. Non-Residential customers use produces fewer peak periods due to less homogenous use. Irrigation customers use depends on the demands of what is being irrigated. As such, irrigation customers can place both seasonal demands and peaking demands on the system.

## **CURRENT RATE STRUCTURE**

There is no industry standard that specifies what rate structure must be used. The law allows utilities to exercise discretion in determining their rate structure as long as the rates yield charges that are proportional to the cost of providing the service. As a result, the base/extra capacity method needs to be tailored to the rate structure under consideration.

In the City's case, its current water rate structure consists of a fixed Service Charge component and a variable Water Use Charge component. The use of a pair of Service and Water Use Charges is the most common standard in the industry.

The current rates for the Service and Water Use Charge rates are dependent on each customer class. The Service Charge is billed based on the number of dwelling units or the size of the meter. Billing based on meter size reflects a charge that is graduated in proportion to the capacity of the service (i.e., meter-size), which is an industry standard for metered water systems. As the name implies, this charge is related to the customer's service, which provides a fixed, upper limit on the amount of capacity that is available in the water system.

The Service Charges are fixed rates that are charged on a dwelling unit basis for Residential (single family and multi-family residences) customers and on a fixed rate graduated in proportion to the capacity of the service provided for Non-Residential (commercial, municipal, industrial, other, recycled water, and irrigation) customers. Residential customers are billed on a bi-monthly basis by dwelling unit (DU) or equivalent dwelling unit (EDU) while non-residential, Commercial and irrigation customers are billed on a monthly basis.

<sup>&</sup>lt;sup>14</sup> Bi-monthly periods assume a billing period of 60 days.

**Figures IV-1 and IV-2** summarize the current Service Charges and Fire Service Charges. Note, Customers with a separate meter for fire flow are billed a separate Fire Service Charge per meter. The charge is graduated in proportion to the capacity of the service (i.e., meter-size), which is an industry standard for metered water systems.

Figure IV-1. Current Service Charges

Service Charges						
Customer Class	Current Rates					
Single Family Residential	Bi-monthly per DU					
	\$59.04					
Multi Family Residential	Bi-monthly per EDU					
5/8" Meters	\$59.04					
3/4" Meters	\$59.04					
1" Meters	\$59.04					
1.5" Meters	\$59.04					
2" Meters	\$59.04					
3" Meters	\$59.04					
4" Meters	\$59.04					
6" Meters	\$59.04					
8" Meters	\$59.04					
10" Meters	\$59.04					
Commercial (including Landscape Irrig						
	Monthly per Meter					
5/8" Meters	\$29.52					
3/4" Meters	\$44.28					
1" Meters	\$73.80					
1.5" Meters	\$147.60					
2" Meters	\$236.16					
3" Meters	\$442.80					
4" Meters	\$738.00					
6" Meters	\$1,476.00					
8" Meters	\$1,476.00					
10" Meters	\$1,476.00					

Figure IV-2. Current Fire Service Charges (\$/month)

Meter Size	Current Rates
1" Meters	\$16.00
2" Meters	\$32.00
3" Meters	\$48.00
4" Meters	\$64.00
6" Meters	\$96.00
8" Meters	\$128.00
10" Meters	\$160.00
12" Meters	\$192.00

The Water Use Charge Rates are the product of rates per unit of metered water use multiplied times the metered water use during the specified billing period. Water is metered in "units" of HCF of metered water use, whereby one unit or HCF equals 748 gallons. Water Use Charge rates are charged to four separate customer classes, Residential, Commercial, Landscape Irrigation, and Recycled Water customers.

For Residential customers, the Water Use Charge rates consist of four tiers that charge higher rates as the level of consumption increases. The tiers are specific to the number of equivalent dwelling units served by a meter/account. Single Family Residential accounts serve one dwelling unit and are considered 1.0 EDU. Similarly, Multi Family customer accounts serving 2-9 dwelling units count each dwelling unit as 1.0 EDU. However, Multi Family customer accounts serving 10-59 dwelling units count each dwelling unit as 0.75 EDU and accounts serving more than 60 dwelling units count each dwelling unit as 0.5 EDU. The volume of water in each tier corresponds to the number of EDU calculated for each account.

For Commercial and Recycled Water customers, the Water Use Charge rate is a uniform rate <sup>15</sup> per HCF of metered water use. All customers pay the same per HCF of water use, and recycled water customers' rates are lower rate than potable customers' rates.

For Landscape Irrigation customers, the Water Use Charge rates are based a three-tiered, budget-based structure that charge higher rates as the level of water use relative to the customers water budget increases. **Figure IV-3** reflects all current Water Use Charge rates, excluding a recycled water discount.

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<sup>&</sup>lt;sup>15</sup> This report distinguishes between *uniform* rates and *flat* rates. Uniform rates are constant charges per unit of water use that do not change depending on the amount used. Flat rates are fixed amounts that do not vary based on metered water use. Flat rates are most commonly used in unmetered water systems and for residential wastewater rates.

Figure IV-3. Current Water Use Charge Rates

Water Use Charges						
Single Family Residential						
Current Tiers	<b>Current Rates</b>					
Tier 1 (0-8 hcf)	\$6.13					
Tier 2 (9-20 hcf)	\$7.35					
Tier 3 (21-40 hcf)	\$10.20					
Tier 4 (41+ hcf)	\$13.45					
Multi Family R	osidontial					
Usage	Current Rates					
Tier 1 (0-8 hcf)	\$6.13					
Tier 2 (9-20 hcf)	\$7.35					
Tier 3 (21-40 hcf)	\$10.20					
Tier 4 (41+ hcf)	\$10.20					
Her 4 (41+ hci)	\$15.45					
Commer	cial					
Usage	<b>Current Rates</b>					
All Water Use	\$7.35					
Landscape In	rigation					
Usage	Current Rates					
Under 100% Budget	\$7.35					
101%-200% Budget	\$10.20					
Over 200% Budget	\$13.45					
Recycled V	-					
Usage	Current Rates					
All Water Use	\$7.35					

## **SERVICE CHARGE MODIFICATIONS**

As stated previously, the City has an integrated water system that supplies both potable and recycled water. As a result, all water, whether potable or recycled, will be considered as part of the same system portfolio. This means existing customer classes can be consolidated. In addition, Multi Family Residential service charges are recommended to be based on the size of the meter serving the account. This change in the rate structure aligns with the methodology used for Commercial Service Charges. As such, the charge is graduated in proportion to the capacity of the service and not the number of dwelling units served. Instead, costs driven by the number of dwelling units served will be recovered through the Water Use Charges.

Our recommended modifications are as follows:

1. Consolidate all Residential Irrigation customers under the Multi Family Residential customer class, subject to the same Multi Family Residential Service Charges and Consumption Charges.

- 2. Consolidate all Commercial Irrigation and Recycled Water customers under the Commercial customer class, subject to the same Commercial Service Charges and Consumption Charges.
- 3. Revise the Multi Family Residential Service Charge structure to a bi-monthly charge based on the meter capacity.

### CONSUMPTION CHARGE MODIFICATIONS

Volume charges can be structured in a variety of ways: uniform, increasing block, decreasing block, seasonal, etc. The appropriate type of Water Use Charge rate structure depends on the customer classes. Generally speaking, increasing block tiered rates are most suitable for homogeneous classes of customers with similar water uses and demand patterns (including similar peaking demand patterns), such as single-family residential customers. These customers are a homogeneous class that uses water for indoor and outdoor needs and not for other purposes, such as providing services or for commercial production.

Tiered rates are not as suitable for non-single family residential customer classes, which may be a combination of customers that use very little or a lot of water, whose demand patterns may range from constant to summer season only, and whose types of water use vary widely (e.g., part of a product such as beverages, for cleaning, for irrigation). For non-single family residential customers, demand patterns are not limited to the number of occupants and size of irrigated landscape. Their water use may have very little discretionary use.

The City should continue to charge tiered rates for Single Family Residential and uniform rates for Commercial Consumption Charges. The design of these rates is further discussed in Chapter V of this report.

The City's shift to all water being part of one system portfolio allows for simplification of the current Irrigation rates.

Our recommended modifications are as follows:

Revise the Multi Family Residential Consumption Charge structure to a uniform rate that matches
the Commercial Consumption Charge. This reflects that water use is individual to each account
and not directly correlated to the number of dwelling units served. Further, the individual demands of each dwelling unit results in a use per Multi Family Residential account with inconsistent
water use patterns that are more conducive to a uniform rate. The recommended modifications
to the existing Multi Family Residential rate structures would align the City with other neighboring
agencies, as shown in Figure IV-4.

Figure IV-4. Survey of Multi Family Water Rate Structures

Multi Family						
	Fixed	Consumption				
Agency	Charges	Charges				
Redwood City (Proposed)	<b>Meter Size</b>	Uniform				
Belmont	<b>Meter Size</b>	Tiered				
Foster City	<b>Meter Size</b>	Tiered				
San Carlos, San Mateo (CalWater)	<b>Meter Size</b>	Uniform				
San Carlos (Mid-Pen)	<b>Meter Size</b>	Tiered				
Menlo Park	<b>Meter Size</b>	Tiered				
Hillsborough	<b>Meter Size</b>	Uniform				
Daly City	<b>Meter Size</b>	Tiered				
Burlingame	<b>Meter Size</b>	Uniform				
NCCWD	<b>Meter Size</b>	Uniform				
East Palo Alto	<b>Meter Size</b>	Uniform				
Palo Alto	<b>Meter Size</b>	Uniform				
Millbrae	<b>Meter Size</b>	Uniform				
Westborough Water District	<b>Meter Size</b>	Uniform				
Mountain View	<b>Meter Size</b>	Tiered				
San Bruno	<b>Meter Size</b>	Uniform				
Montara	<b>Meter Size</b>	Combination				
Brisbane	Meter Size	Tiered				

- 2. Revise the Irrigation Consumption Charge structure to a uniform rate that matches the Commercial Consumption Charge.
- 3. As part of consolidating customer classes, revise the Recycled Water Use Charge so that it is set equal to the Commercial Consumption Charge.

Although the City has different pressure zones, we do not recommend that the City charge rates by zone. The City's water facilities are an integral distribution network, not a series of isolated zones served by separately dedicated reservoirs, pumps, and distribution pipelines. Water facilities are designed as integral networks that balance pressures and keep water from stagnating. Water that is pumped to the highest zones not only benefits customers in the highest zones but can also benefit customers in lower zones to which the water also flows.

The cost-of-service analysis determines how much of the revenue requirement should be recovered from the fixed Service Charges and the variable Consumption Charges for each customer class.

#### COST-OF-SERVICE ALLOCATIONS

As the name implies, cost-of-service analysis is a process of determining how much services cost. To provide water service, infrastructure must be constructed, operated, and maintained, which must be paid for from cash or debt. The type and size of infrastructure depends on how much service customers require. Water systems are designed to provide sufficient capacity to meet customer demands for service wherever, whenever, and for as long as demanded.

Although each customer places unique demands on the system, water system design is based on the maximum or peak demand for service placed on the system by all customers during the peak demand period. The size of the infrastructure that is needed will depend on the maximum demand. Higher demands will obviously require larger, more costly infrastructure as well as increased operating and O&M costs. Here, the goal of a cost-of-service analysis is to allocate the cost of the capacity to meet the peak demand in proportion to how much of the capacity is required by each customer. The proportions correspond to the maximum amount of capacity provided by the infrastructure. This means that customers that place greater demands on the infrastructure – customers with greater service needs (i.e., higher peak demands) – will be apportioned a greater share of the operating and capital costs of the infrastructure required to meet that demand.

It is important to realize that once the peak demand is used to design the infrastructure, the capacity is available at all times, not just during peak demands. The capacity is available for the potential peak when it occurs. During off-peak demands, the same facilities are being used, but the capital cost of the facilities is determined by the peak demand only, and it is the peak demand that is used to allocate costs. Note that the costs are not allocated only to those who peak. Those who do not peak as much are also using the same facilities. Consequently, they are allocated a share of the costs of the facilities in proportion to their contribution to the peak demand, even though their contribution may be significantly less.

## **Analytical Procedure**

The cost-of-service analysis in this study involved a series of four steps that allow for reasonable cost allocations (see **Figure II-1**). Costs must first be classified according to the associated function. Functions provide the level of service required by customers. The cost of functions can be allocated in proportion to the service provided.

- Service function cost classification Revenue requirements are summarized by service function cost categories, which is needed for allocating costs that will be used for calculating rates. (See Figure IV-4.)
- Demand service function allocation percentages –Base and extra capacity allocation factors are needed to apportion costs related to the demand service functions and to customer classes. (See Figure IV-5 and Figure IV-7.)
- 3. **Service function allocations** Costs from Step 1 are allocated to the demand and customer service functions from Step 2. The demand service function costs are further allocated among the demand service levels. (See **Figure IV-6.**)
- 4. **Customer class allocations** The costs allocated to the demand service function in Step 3 are further apportioned between the two customer classes. (See **Figure IV-8.**)

This sequence of steps is further explained below. The steps constitute the cost-of-service analysis, which converts the revenue requirement for FY 2023-24 in **Figure IV-4** into the eventual cost of service for setting Service Charge rates and Water Use Charge rates in **Figure IV-10**.

#### **Service Function Cost Classification**

After determining a utility's revenue requirements, the cost-of-service analysis begins by aligning the budget items with the associated function. For example, some cost items are related to functions that support the ability to meet base and peak water demands while other costs are incurred to provide

customer service. In other words, "function" refers to the type of operational activity or capital cost needed to provide service. Organizing the budget by functions correlates budget items with the rate that will fund the cost.

For both indoor and outdoor water use, customers expect water to be available when they want it. The service they receive ranges from non-seasonal demand for essential indoor uses (Base Day) to discretionary peak hour outdoor water use and irrigation demands (Maximum Hour). To provide this "readiness to serve," the City's water system needs to have pipes, pumps, and storage reservoirs that are sized and operated to transmit and distribute water whenever it is needed. As previously mentioned, the capacity required to provide the required flows for facilities as well as the elevation differentials within the pressure zone determine how reservoirs, valves, and appurtenances are designed. Water main design is also influenced by the number of connections along a pipeline. Peak demands create larger flows for which larger and more costly infrastructure is needed and for which there are more operations and maintenance costs.

The service functions for each cost category determine how the capital and O&M costs are allocated. The service functions fall into two categories based on the Enterprise's chart of accounts:

- **Demand service function** functions related to delivering water to customers at varying levels of demand. These costs will be recovered from the proposed Water Use Charges.
- **Customer service function** functions related to customer service. These costs will be recovered from the proposed Service Charges.

#### **Demand Service Function**

There are five demand service functions beginning with the origin of the water through pipelines that convey the water to pumps that lift the water for storage until customers demand it. In describing each of these demand service functions, the corresponding allocation factors are indicated. The definition of each demand service function allocation factor is provided below in the discussion under Demand Service Function Allocation Factors.

- Water Purchases The City does not have its own surface water or groundwater resources; the
  City is not supplied by lakes, river diversions, or wells. Instead, the City purchases treated water
  from the SFPUC. The cost of its water supply is included in the cost paid to the SFPUC, which is
  the City's single largest O&M expense. This cost category is allocated to customers in proportion
  to their Base Day demand. Base Day costs vary with the total quantity of water used and are
  independent of rates of demand.
- Tank & Pump Station O&M Water is pumped throughout the system to service demand. Supply reservoirs are located at high points in the system so that water can flow to customers by gravity as demanded. Water fills the reservoirs from pump stations at a fairly steady rate compared to the outflow to customers, which occurs at the peak hour of the peak day. The O&M costs, such as tank maintenance and pump station operations, are allocated in proportion to Maximum Hour demands.
- Transmission Pipelines 12" and larger in diameter convey water from the SFPUC's master meters to the City's pumps, which lift the water to supply reservoirs. These 12" or larger pipes are

sized for Maximum Day demands. The O&M costs to inspect, repair, and maintain transmission lines are allocated in proportion to Maximum Day demands.

• **Distribution** – **Demand** – Water flows out of reservoirs to the customer tap through distribution pipelines (less than 12" inches in diameter). Unplanned repairs occur in reaction to distribution

main breaks, to minimize interruptions to supplying demand. Water quality testing is performed to ensure safety and compliance as water travels through the distribution system. The distribution system is sized for peak hour flows. Therefore, higher peaking demand requires larger infrastructure, which in turn results in costlier materials and more staff time to service the larger system components. In the same manner that running a vehicle at maximum horsepower shortens the life of the asset, running distribution pumps at a higher pressure to service higher peaking demand yields a similar outcome. Greater stress placed on a pump or a segment of distribution pipeline shortens the life of the asset. Therefore, the O&M costs applicable to satisfying demand and delivery of water are allocated in proportion to Maximum Hour demands, to account for the maximum level of peaking demand placed on the system. The Maximum Hour flow is based on the Maximum Day flow (i.e., Maximum Hour flow is deemed to be 2.12 times Maximum Day flow based on City demand data. In addition, greater peaking demand places larger amounts of stress on the distribution system assets.

#### **Fire Flow Cost Allocations**

The distribution system also includes hydrants for fire suppression. The design of the distribution system to meet peak hour demands provides the capacity that is also required for fire flows. The capacity for fire protection is not the governing criterion for designing the distribution system. The distribution system was not sized for fire flows with the expectation that the fire flow would be sufficient to meet Maximum Hour demands. Hence, there are no identifiable extra costs to allocate to a separate charge for fire service. The costs of providing water capacity and water for fire service is part of all water rates (§53750.5).

In systems where the cost of fire flow capacity is significant enough to track, the cost is often either combined with the customer capacity component of the Service Charge or with the Maximum Hour costs.

In systems where there are separate charges for fire flow capacity, it is often a nominal administrative charge because the capacity is already recovered from service or volume charges.

Water Resources Management – Costs in this category center on the City's water conservation
program. The City must continue to meet evolving state-issued water efficiency standards and
regulations. To meet efficiency standards, customers are expected to use water judiciously. Customers placing greater demands on the system, using water in a less-efficient manner, should pay
to support conservation programs. Thus, O&M costs applicable to conservation are allocated to
the Maximum Hour category so that customers proportionate share of fiscal responsibility increases with peaking demand.

#### **Customer Service Function**

There are seven customer service functions. Each of these functions includes costs that are not related to rates of flow.

• **Customer Services** – This administrative expense services customer accounts. These costs are independent of rates of flow and are apportioned on the basis of the number of meters.

- Distribution Capacity A portion of the O&M costs attributable to maintaining existing capacity
  of the system, such as uni-directional flushing, hydrant maintenance, and valve maintenance, are
  services that are performed for the benefit of all customers. These activities are performed to
  ensure the system can serve the capacity for which it was designed. Maintenance of the distribution system benefits all customers and ensures existing capacity can be served. Costs are allocated
  based on the capacity corresponding to each meter served.
- Revenue Services This administrative expense includes the expenses incurred for processing
  meter reads and other billing activities. These costs are independent of rates of flow and are apportioned on the basis of the number of meters served.
- Capital Expenses Investments in the Enterprise infrastructure are necessary to ensure existing
  levels of service are maintained. In addition, capital projects allow for expansion of the system's
  capacity to support growth. Costs are allocated based on the capacity corresponding to each meter served.
- Administrative Support Services As an Enterprise, the City benefits from general governmental
  services paid by the General Fund. This category of expenses includes the Enterprise's reimbursement to the general fund for its proportional share of expenses related to services provided by
  the City Attorney, City Manager's Office, City Council, use of government facilities, and other overhead benefits. These costs are independent of rates of flow and are apportioned on the basis of
  the number of meters served.
- **Non-Operating Revenue** Revenue from miscellaneous fees and fire service revenues benefit rate payers by reducing the net amount of expenses that rates need to cover. These costs are independent of rates of flow and are apportioned on the basis of the number of meters.
- Reserves Similar to non-operating revenue, rate payers benefit from the Enterprise's use of reserves. In FY 2023-24, the planned use of \$10.3 million in reserves will help offset the need for larger rate increases to meet growing expenses. As a result, the City can charge rate payers less than the total revenue requirement and phase in rates over time to reduce impacts to rate payers. These costs are independent of flow, but are apportioned using a composite allocation of all other functions analyzed. This is shown in more detail in Figure IV-9. Reductions to rates are intended to benefit customers by reducing the Service Charges and the Water Use Charges assessed.

**Figure IV-5** shows the classification of the budgeted operating and capital expenses and non-operating revenues by function.

Figure IV-5. Revenue Requirements Summary by Function (FY 2023-24)

	FY 2023-24
	Revenue
	Requirement
O&M Expenses	
65145-SFWD Water Purchases	\$23,605,500
65142-Water Customer Services	\$2,824,731
65144-Water Supply and Distribution	
Tank & Pump Station O&M	\$2,084,809
Transmission	\$1,273,126
Distribution - Demand	\$8,088,918
Distribution - Capacity	\$3,900,000
65146-Water Resource Management	\$1,651,167
61410-Revenue Services	\$2,046,863
Total Allocable O&M	\$45,475,114
Capital Expenses (PAYGo)	\$13,249,801
Subtotal - O&M and Capital	\$58,724,915
u II	
Unallocated O&M	¢440.727
61710-Administrative Support Services	\$119,727
Administrative Costs	\$119,727
Subtotal O&M, Capital, Non-Operating	\$58,844,642
Non-Operating Revenue	(\$1,345,179)
Transfers to/(from) Reserves	(\$10,295,248)
Total Revenue Requirement	\$47,204,215

Note: Rounding differences caused by stored values in electronic models may exist.

Once the costs are organized by service function, it is possible to allocate them based on the allocation percentages that correspond to each service function. The allocation percentages are derived from the units of service associated with each service function.

#### **Demand Service Function Allocation Factors**

A cost-of-service analysis categorizes costs between the demand and customer service functions. Within the demand service function, further allocations are made to varying levels of service ranging from base, non-seasonal, indoor demand, which are the least discretionary, to the highest level of seasonal peak demand for outdoor water use and irrigation during the peak hour of the peak day, which are the most discretionary. With these further allocations, rates can be designed for each customer class's Water Use Charges.

The costs allocated to the customer service function are differentiated between those that are related to accounts and those that are related to capacity. Those two categories are used in deriving the Service Charges.

As described below, there are four levels of demand used for the demand service function cost-of-service analysis. For purposes of analysis, the demand for Irrigation, Commercial, Multi-Family, and Recycled Water customers were grouped into one category, "Commercial/Multi Family" as shown in the following tables.

#### **Base Day Demand**

Base Day demand is the average daily demand in the lowest billing period of the year when most of the water use is for indoor needs and when there is the least irrigation and peaking. If there were no seasonal peaking, the City's facilities could be designed for Base Day demand, which is only 34% of the current peak demand (refer to **Figure IV-7**).

#### **Average Day demand**

Average Day demand includes Base Day demand plus average seasonal peaking. The value is the average of FY 2021-22 and FY 2022-23 customer billing data. The City's Average Day demand represents only 47% of the current peak demand.

#### **Maximum Day demand**

Maximum Day demand includes Average Day demand plus peak day demand in the irrigation season. The total value is based on systemwide flow data maintained by the City via Advanced Metering Infrastructure (AMI) data. Maximum Day demand for each customer class was prorated from the total Maximum Day demand using Average Day demands for the two customer classes. If peaking did not exceed Maximum Day demand, the City's facilities could be sized at 70% of current peak demands.

## **Maximum Hour demand**

Maximum Hour demand represents the Maximum Hour demand on the Maximum Day. The total value is based on systemwide flow data maintained by the City via Advanced Metering Infrastructure (AMI) data. Maximum Hour demand for each customer class was prorated from the total Maximum Hour demand using Average Day demands for the two customer classes.

Allocation percentages were calculated for each demand service level using load factors derived from customer billing data for FY 2021-22 and FY 2022-23 (Base and Average Day) and customer class flow data (Maximum Day and Maximum Hour). Load factors are the ratio of higher levels of demand to the Base Day demand. **Figure IV-6** summarizes the units of service and load factors for each of the service levels based on FY 2021-22 and FY 2022-23 data.

#### **Load Factors**

The load factors are the ratio of the flows for the peak service levels (i.e., Average Day, Maximum Day, and Maximum Hour) compared to the Base Day, non-seasonal flow. The load factors represent how much higher Average Day, Maximum Day, and Maximum Hour flows are compared with Base Day demand.

Figure IV-6. Service Level Demands and Load Factors

		Levels of Demand				
	_	Base	Average	Maximum	Maximum	
		Day	Day	Day	Hour	
Demand by Customer Category						
Commercial/MF		3,810	5,423	8,643	9,066	
Single Family	_	3,483	4,721	6,514	12,465	
	Total	7,293	10,145	15,157	21,531	
Ratio of Flows to Average Day						
Commercial/MF		0.70	1.00	1.59	1.67	
Single Family	_	0.74	1.00	1.38	2.64	
	Total	0.72	1.00	1.49	2.12	
Level of Service	_	7,293	10,145	15,157	21,531	
Average Day Demand		10,145	10,145	10,145	10,145	
Ratio of Level of Service to Average	Day	0.72	1.00	1.49	2.12	

Note: Daily totals are shown

The load factors indicate how much additional capacity is required to supply higher levels of service and serve as the source of the allocation percentages that are needed to allocate costs. They are derived in **Figure IV-7**. For example, the Average Day load factor for the system is 1.00. Of that total 1.00 load, 0.28 is in excess of Base Day demand and is related to the Average Day peak, which is 28% of the total Average Day load (i.e., 0.28/1.00 = 28%). For purposes of allocating costs associated with meeting Average Day demands, 28% is allocated to the Average Day service and 72% is allocated to the Base Day service.

Figure IV-7. Demand Service Levels

		1180111111	Demand Servi				
		Demand Service Levels					
	Load	Base	Average	Maximum	Maximum		
Allocation Basis	Factors	Day	Day	Day	Hour	Totals	
Base Day	0.72	0.72				0.72	
Allocation %		100%				100%	
Average Day	1.00	0.72	0.28			1.00	
Allocation %		72%	28%			100%	
Maximum Day	1.49	0.72	0.28	0.49		1.49	
Allocation %		48%	19%	33%		100%	
Maximum Hour	2.12	0.72	0.28	0.49	0.63	2.12	
Allocation %		34%	13%	23%	30%	100%	

Maximum Day demand includes Base Day, Average Day, and Maximum Day components. And Maximum Hour demand has all four service levels of demand. While system capacity is essentially designed to meet

peak demands, and peak users should assume cost responsibility for the capacity required to serve this peak demand, it is important to understand that the cost of facilities that are sized for peak demands is not borne by only customers that peak, all levels of demand utilize the facility.

Using distribution pipelines as an example, they are sized to meet Maximum Hour demands. Even though they are sized for the highest level of service, lower peak demands are also accommodated by these pipelines. Hence, the cost of the pipelines is not allocated 100% to the Maximum Hour service level. The cost is apportioned across the lower service levels, too. Thus, the costs of peaking are shared by all customers and not exclusively allocated to those who peak the most.

#### **Service Function Allocations**

All allocation factors employed in the cost-of-service allocation exercise are shown in Figure IV-8.

Figure IV-8. Cost Allocation Factors

	Demand	Services		Customer	Services		
System-Wide	Base	Average	Maximum	Maximum	castomer	50111005	
Cost Allocation Factors	Day	Day	Day	Hour	Service	Capacity	Total
Demand Services							
Base Day	100.0%						100.0%
Average Day	71.9%	28.1%					100.0%
Max Day	48.1%	18.8%	33.1%				100.0%
Max Hour	33.9%	13.2%	23.3%	29.6%			100.0%
<u>Customer Services</u>							
Capacity						100.0%	100.0%
Services					100.0%		100.0%
Composite Allocations							
Exp Composite	48.0%	3.1%	5.4%	5.9%	8.5%	29.1%	100.0%

Note: Service is interchangeable with meter. Charges are assessed per meter, independent of the level of capacity provided by the meter.

The revenue requirements in **Figure IV-5** are allocated to the demand and customer service functions in **Figure IV-9**, using the calculated factors from **Figure IV-8**. The resulting allocations indicate that about 64% of the revenue requirement is attributable to the demand service function and 36% to the customer service function. As previously mentioned, the Water Use Charge rates are designed to recover the costs allocated to the demand service function and the Service Charge rates are designed to recover the customer service function costs.

**Figure IV-9. Service Function Allocations** 

	FY 2023-24		Con	sumption Cha	ge		Service	Charge
	Revenue	Allocation	Base	Average	Maximum	Maximum		
	Requirement	Factor	Day	Day	Day	Hour	Service	Capacity
O&M Expenses								
65145-SFWD Water Purchases	\$23,605,500	Base Day	\$23,605,500	\$0	\$0	\$0	\$0	\$0
65142-Water Customer Services	\$2,824,731	Services	\$0	\$0	\$0	\$0	\$2,824,731	\$0
65144-Water Supply and Distribution								
Tank & Pump Station O&M	\$2,084,809	Max Hour	\$706,202	\$276,090	\$485,335	\$617,182	\$0	\$0
Transmission	\$1,273,126	Max Day	\$612,611	\$239,500	\$421,015	\$0	\$0	\$0
Distribution - Demand	\$8,088,918	Max Hour	\$2,740,017	\$1,071,210	\$1,883,067	\$2,394,624	\$0	\$0
Distribution - Capacity	\$3,900,000	Capacity	\$0	\$0	\$0	\$0	\$0	\$3,900,000
65146-Water Resource Management	\$1,651,167	Max Hour	\$559,312	\$218,663	\$384,385	\$488,808	\$0	\$0
61410-Revenue Services	\$2,046,863	Services	\$0	\$0	\$0	\$0	\$2,046,863	\$0
Total Allocable O&M	\$45,475,114		\$28,223,643	\$1,805,463	\$3,173,801	\$3,500,613	\$4,871,594	\$3,900,000
O&M Composite			62.1%	4.0%	7.0%	7.7%	10.7%	8.6%
Capital Expenses (PAYGo)	\$13,249,801	Capacity	\$0	\$0	\$0	\$0	\$0	\$13,249,801
Subtotal - O&M and Capital	\$58,724,915		\$28,223,643	\$1,805,463	\$3,173,801	\$3,500,613	\$4,871,594	\$17,149,801
		% of Consumption	76.9%	13.5%	11.1%	4.2%		
		% of total	48.1%	3.1%	5.4%	6.0%	8.3%	29.2%
Unallocated O&M								
61710-Administrative Support Services	\$119,727	Services	\$0	\$0	\$0	\$0	\$119,727	\$0
Administrative Costs	\$119,727		\$0	\$0	\$0	\$0	\$119,727	\$0
Subtotal O&M, Capital, Non-Operating	\$58,844,642		\$28,223,643	\$1,805,463	\$3,173,801	\$3,500,613	\$4,991,321	\$17,149,801
Expense Composite			48.0%	3.1%	5.4%	5.9%	8.5%	29.1%
Non-Operating Revenue	(\$1,345,179)	Services	\$0	\$0	\$0	\$0	(\$1,345,179)	\$0
Transfers to/(from) Reserves	(\$10,295,248)	Exp Composite	(\$4,937,908)	(\$315,877)	(\$555,277)	(\$612,455)	(\$873,264)	(\$3,000,468)
Total Revenue Requirement	\$47,204,215		\$23,285,735	\$1,489,586	\$2,618,524	\$2,888,158	\$2,772,878	\$14,149,333
						\$30,282,003	\$2,772,878	\$14,149,333
			% (	of Net Rvenue	Requirement	64.2%		35.8%
		Consumption Charge COS			Servi	ce Charge COS		

**Figure IV-10** summarizes the small shift in the Service Charge revenues from the Water Use Charge revenues to align with the cost-of-service. The exercise performed in **Figure IV-9** indicates Service Charge revenues will remain at 36% of total rate revenues, while Water Use Charge revenues will remain at 64%.

Figure IV-10. Cost-of-Service Revenue Summary

rigate iv-10. cost-of-scribe hevenue summary								
	Revenue at		Cost		Difference			
Components of Rate Structure	<b>Current Rates</b>		of Service FY 2023-24		COS Minus Current			
Single Family								
Consumption Charge Revenue	\$14,508,080	68%	\$14,611,865	62%	\$103,785	0.7%		
Fixed Service Charge Revenue	\$6,858,441	32%	\$8,911,480	38%	\$2,053,039	29.9%		
Subtotal - Single Family	\$21,366,521	100%	\$23,523,345	100%	\$2,156,824	10.1%		
Commercial/Multi Family								
Consumption Charge Revenue	\$13,211,637	60%	\$15,670,138	66%	\$2,458,501	18.6%		
Fixed Service Charge Revenue	\$8,704,917	40%	\$8,010,732	34%	(\$694,185)	-8.0%		
Subtotal - Commercial	\$21,916,554	100%	\$23,680,870	100%	\$1,764,316	8.1%		
Total								
Consumption Charge Revenue	\$27,719,717	64%	\$30,282,003	64%	\$2,562,286	9.2%		
Fixed Service Charge Revenue	\$15,563,357	36%	\$16,922,211	36%	\$1,358,854	8.7%		
Total	\$43,283,075	100%	\$47,204,215	100%	\$3,921,140	9.1%		

Note: Commercial/Multi Family includes all Commercial, Multi-Family, Irrigation, and Recycled Water customers.

#### **Customer Class Allocations**

The customer service function is independent of the customer class. Once its allocation is derived, rates for the Service Charges are derived without any further allocation to customer classes. The demand service function requires further allocations to customer classes in designing rates. When separate customer classes exist, the cost of service must be allocated proportionately to each class. **Figure IV-11** derives the cost of service for the City's two customer classes. The revenue requirement for each demand service function is apportioned between the Single Family Residential and Commercial/Multi Family customer classes based on the corresponding annual demand in units of service (i.e., flows) for each customer class. The portion of the revenue requirement to be recovered via the City's Water Use Charges (\$30,282,003) is allocated to the two customer classes according to their proportionate shares of daily demand. Because of the higher peaking demands of the Single Family Residential customer class, the Single Family Residential customer class is allocated a larger proportion of peaking costs (Maximum Day, Maximum hour). The resulting total allocations serve as the entry point for design of the Water Use Charges, discussed in Chapter V.

Figure IV-11. Customer Class Allocations for Demand Service Levels

8, 1	Base	Average	Max	Max	
Consumption Charge Cost of Service	Day	Day	Day	Hour	Total
consumption charge cost of service	Suy	Day	Juy	rioui	rotar
Operations & Maintenance	\$28,223,643	\$1,805,463	\$3,173,801	\$3,500,613	\$36,703,520
Capital Expenses (PayGo)	\$0	\$0	\$0	\$0	\$0
Non-Operating Revenue	\$0	\$0	\$0	\$0	\$0
Transfers to/(from) Reserves	(\$4,937,908)	(\$315,877)	(\$555,277)	(\$612,455)	(\$6,421,517)
Total Consumption Charge COS	\$23,285,735	\$1,489,586	\$2,618,524	\$2,888,158	\$30,282,003
Units of Service - Daily Demand (hcf)					
Single Family	3,483	4,721	6,514	12,465	
Commercial/Multi Family	3,810	5,423	8,643	9,066	
	7,293	10,145	15,157	21,531	
Proportional Allocation Factors					
Single Family	47.76%	46.54%	42.98%	57.89%	
Commercial/Multi Family	52.24%	53.46%	57.02%	42.11%	
	100.00%	100.00%	100.00%	100.00%	
Customer Class Allocations					
Single Family	\$11,121,287	\$693,243	\$1,125,344	\$1,671,992	\$14,611,865
Commercial/Multi Family	\$12,164,449	\$796,342	\$1,493,181	\$1,216,167	\$15,670,138
	\$23,285,735	\$1,489,586	\$2,618,524	\$2,888,158	\$30,282,003

## V. RATE DESIGN

The City has historically charged water customers the combination of a fixed Service Charge and a variable Water Use Charge based on metered water use. As previously discussed, this is a common set of charges that is prevalent throughout the water industry. This chapter explains the derivation of the Water Use and Service Charge rates that reflect the projected cost of service.

## SERVICE CHARGE DESIGN

Service Charge rates are fixed rates that are billed each billing period to recover the cost of the service functions. The cost-of-service analysis determined how much of the revenue requirement is attributable to the customer service function. The function has two components – customer services and customer capacity – each of which is itemized in the cost-of-service analysis in **Figure V-1**. Costs attributable to customer services are allocated to customers in proportion to the number of meters. Costs attributable to customer capacity are allocated to customers in proportion to the capacity of their services. The sum of the two components equals the Service Charge rate per connection.

**Figure V-1** lists the units of service corresponding to each of the cost components. The 23,644<sup>16</sup> services are used for apportioning the customer services cost component.

Capacity costs associated with the distribution system are apportioned among the connections in proportion to the capacity associated with each connection. Connections are converted to Equivalent Meter Units (EMUs) to apportion the customer capacity cost component. An EMU represents the number of 5/8-inch meters to which a larger meter is equivalent. For example, a 1-inch meter provides 2.50 times as much capacity as a 5/8-inch meter. The capacity multipliers are based on the meter data provided by the City of the manufacturer's nominal capacity. For larger sized meters, the City uses multiple types, such as displacement, turbine, or compound. All Single Family Residential customers were assumed to have a 5/8" meter based on the current rate structure which bills a fixed bi-monthly charge based on the smallest level of capacity (5/8"). The meter ratings used reflect the nominal capacity of the most commonly used meter type available for each size. The 240 ¾"-inch meters equal 360 EMUs. There are 41,251 total EMUs. In effect, the 23,644 services of assorted sizes have the equivalent capacity as 41,251 5/8-inch meters.

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<sup>&</sup>lt;sup>16</sup> This total includes only potable and recycled water meters. All fire service meters have been excluded.

Figure V-1. Service Charge Units of Service

		Meter	Capacity	
Service Size	Services	Ratings (gpm) <sup>1</sup>	Multiplier	<b>EMUs</b>
	а	b	$c = b \div 20$	a * c
5/8" Meters	21,156	20	1.00	21,156
3/4" Meters	187	30	1.50	281
1" Meters	748	50	2.50	1,870
1.5" Meters	450	100	5.00	2,250
2" Meters	794	160	8.00	6,352
3" Meters	223	435	21.75	4,850
4" Meters	71	750	37.50	2,663
6" Meters	0	1,600	80.00	0
8" Meters	4	2,800	140.00	560
10" Meters	3	4,200	210.00	630
_	23,644	-	•	41,251

<sup>&</sup>lt;sup>1</sup>Capacity multiplier assumes 5/8" meter = 1 EMU = 20 gallons per minute.

**Figure V-2** derives the unit costs for the customer accounts and customer capacity cost components. Each service is allocated \$9.77 per month for the customer service cost component. That amount represents the costs the City incurs to maintain each meter regardless of the capacity of the service (e.g., customer billing, administration overhead). Each service is also allocated \$28.58 per month per EMU. That amount represents a portion of the cost of providing distribution system capacity for each account, and increases based on the capacity of the meter.

Figure V-2. Service Charge Unit Costs

	Customer	Customer		
FY 2023-24 Customer	Service	Capacity		
Service Expenses	Component	Component	Total	
O&M Expenses	\$4,871,594	\$3,900,000	\$8,771,594	
Capital Expenses (PAYGo)	\$0	\$13,249,801	\$13,249,801	
Admin Support Svcs	\$119,727	\$0	\$119,727	
Non-Operating Revenue	(\$1,345,179)	\$0	(\$1,345,179)	
Transfer (from) Reserves	(\$873,264)	(\$3,000,468)	(\$3,873,732)	
Total FY 2023-24	\$2,772,878	\$14,149,333	\$16,922,211	
Units of Service	23,644	41,251		
	Service	EMUs		
Annual Unit Cost	\$117.28	\$343.00		
Monthly Unit Cost	\$9.77	\$28.58		
	per Service	per EMU		

Source: Customer Service Expenses from Figure IV-8; Units of Service from Figure V-2.

**Figure V-3** combines the customer service and capacity components into a single Service Charge for each size service and compares proposed rates to the current rates.

Figure V-3. Proposed Monthly Service Charge Rates – FY 2023-24

	Service _	Capacity Component			cos	Total	
Service	Component		Capacity	Capacity	Service Charges	Current	\$
Size	(\$/mo.)	\$/EMU	Multiplier	Total	(\$/mo.)	Charge	Difference
	a	b	С	d = b * c	e = a + d		
5/8" Meters	\$9.77	\$28.58	1.00	\$28.58	\$38.36	\$29.52	\$8.84
3/4" Meters	\$9.77	\$28.58	1.50	\$42.88	\$52.65	\$44.28	\$8.37
1" Meters	\$9.77	\$28.58	2.50	\$71.46	\$81.23	\$73.80	\$7.43
1.5" Meters	\$9.77	\$28.58	5.00	\$142.92	\$152.69	\$147.60	\$5.09
2" Meters	\$9.77	\$28.58	8.00	\$228.67	\$238.44	\$236.16	\$2.28
3" Meters	\$9.77	\$28.58	21.75	\$621.69	\$631.47	\$442.80	\$188.67
4" Meters	\$9.77	\$28.58	37.50	\$1,071.89	\$1,081.66	\$738.00	\$343.66
6" Meters	\$9.77	\$28.58	80.00	\$2,286.69	\$2,296.46	\$1,476.00	\$820.46
8" Meters	\$9.77	\$28.58	140.00	\$4,001.71	\$4,011.48	\$1,476.00	\$2,535.48
10" Meters	\$9.77	\$28.58	210.00	\$6,002.57	\$6,012.34	\$1,476.00	\$4,536.34

Source: Figures V-1 and V-2.

Note: Rounding differences caused by stored values in electronic models may exist.

With the proposed rates, all meter sizes would see an increase. The increase in rates reflects the 8.7% increase to service charge revenues calculated in **Figure IV-10**. Rates also reflect revised capacity multipliers, based on updated meter rating information provided by the City. Currently meters 6" and larger are charged the same rate. Under the proposed rates, customers with an 8" or 10" meter would pay more in proportion to the additional capacity provided by these larger meters.

**Figure V-4** shows the proposed two-year schedule of Service Charge rates. **Figure V-5** shows the proposed two-year schedule of Fire Service Charge rates that are proposed to be increased based on the revenue increases recommended in Chapter III, as the rate structure is not being recommended for adjustment.

Figure V-4. Current and Proposed Service Charge Rates

	Service Charges		
<b>Customer Class</b>	Current	FY 2023-24	FY 2024-25
		eff. 2/1/2024	eff. 1/1/2025
Single Family Residential	Bi-monthly per DU	Bi-month	ly per DU
	\$59.04	\$76.72	\$82.09
Multi Family Residential			
(including Residential Irrigation)	Bi-monthly per EDU	Bi-monthly	per Meter
5/8" Meters	\$59.04	\$76.72	\$82.09
3/4" Meters	\$59.04	\$105.30	\$112.67
1" Meters	\$59.04	\$162.46	\$173.83
1.5" Meters	\$59.04	\$305.38	\$326.76
2" Meters	\$59.04	\$476.88	\$510.26
3" Meters	\$59.04	\$1,262.94	\$1,351.35
4" Meters	\$59.04	\$2,163.32	\$2,314.75
6" Meters	\$59.04	\$4,592.92	\$4,914.42
8" Meters	\$59.04	\$8,022.96	\$8,584.57
10" Meters	\$59.04	\$12,024.68	\$12,866.41
Commercial			
(including Commercial Irrigation)	Monthly per Meter	Monthly p	er Meter
5/8" Meters	\$29.52	\$38.36	\$41.05
3/4" Meters	\$44.28	\$52.65	\$56.34
1" Meters	\$73.80	\$81.23	\$86.92
1.5" Meters	\$147.60	\$152.69	\$163.38
2" Meters	\$236.16	\$238.44	\$255.13
3" Meters	\$442.80	\$631.47	\$675.67
4" Meters	\$738.00	\$1,081.66	\$1,157.38
6" Meters	\$1,476.00	\$2,296.46	\$2,457.21
8" Meters	\$1,476.00	\$4,011.48	\$4,292.28
10" Meters	\$1,476.00	\$6,012.34	\$6,433.20

Figure V-5. Current and Proposed Fire Service Charge Rates

		FY 2023-24	FY 2024-25
Meter Size	<b>Current Rates</b>	eff 2/1/2024	eff. 1/1/2025
1" Meters	\$16.00	\$17.28	\$18.49
2" Meters	\$32.00	\$34.56	\$36.98
3" Meters	\$48.00	\$51.84	\$55.47
4" Meters	\$64.00	\$69.12	\$73.96
6" Meters	\$96.00	\$103.68	\$110.94
8" Meters	\$128.00	\$138.24	\$147.92
10" Meters	\$160.00	\$172.80	\$184.90
12" Meters	\$192.00	\$207.36	\$221.88

## WATER USE CHARGE DESIGN

As previously discussed, the City's Water Use Charges are different for its customer classes. For purposes of rate design, all customer classes are categorized as Single Family Residential and Commercial/Multi Family.

## **Single Family Residential Water Use Charges**

The City's Single Family Residential customers are currently charged a four-tier increasing block rate structure.<sup>17</sup> The structure is a series of blocks of water whose unit cost increases with each block. The structure is "progressive" in the sense that water is billed sequentially by block up to the highest block. It is not the case that all of the water is billed at the rate for the highest block. All metered water use is at least billed the Tier 1 rate. Water use beyond Tier 1 is only billed the Tier 2 rate for the volume of water allocated to Tier 2, and water use beyond the volume of water allocated to Tier 2 is billed at the Tier 3 rate, and so forth.

Increasing block rates have become more common as the need has grown to set rates that more precisely recover the cost of service. As previously discussed, increasing block rates continue to be well suited for the City's Residential customer class.

When increasing block rates are implemented, the number of tiers must be determined. There is no absolute industry standard or law that prescribes how many tiers must be used. Judgment that is supported by facts is allowed. However, no matter how many tiers are used, the rates should yield charges that do not exceed the proportional cost of service.

## **Breakpoints Between Tiers**

The base/extra capacity cost-of-service analysis leads to four distinct services defined by the functions performed by facilities that are designed to provide the services. Each service has an average flow that can be used as the division (i.e., "breakpoint") between each service, as shown in Figure V-6.

Figure V-6. Breakpoint Locations - Single Family Residential

Flow per Customer (hcf per month)				
		Average	Maximum	Maximum
Single Family Residential	Base Day	Day	Day	Hour
hcf per day	3,483	4,721	6,514	12,465
hcf per month	104,500	141,638	195,418	-
# of Dwelling Units (DU)	19,361	19,361	19,361	-
Average flow per DU (hcf/mo)	5	7	10	11+
Average flow per DU (hcf/bi-mo)	10	14	20	21+

Source: HCF per day from Figure IV-3. Bi-monthly bills calculated from Residential meter counts provided by City staff in September 2023.

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<sup>&</sup>lt;sup>17</sup> For simplicity, we use the term "tiered rates" synonymously with "increasing block rates." "Inclining block rates" is commonly used for "increasing block rates." However, because an incline can slope both up or down, it is ambiguous in this context and therefore is not used in this study.

The averages for Base Day, Average Day, and Maximum Day yield the following breakpoints for a 60-day period:

- Tier 1/Tier 2 breakpoint 10 HCF (125 GPD) per bi-monthly period.
- Tier 2/Tier 3 breakpoint 14 HCF (175 GPD) per bi-monthly period.
- Tier 3/Tier 4 breakpoint 20 HCF (250 GPD) per bi-monthly period.

## **Rates Per Tier**

With breakpoints that correspond to the service levels in the cost-of-service analysis, it is possible to calculate the rate per tier by dividing the cost of service per tier by the water demand in each tier. The resulting rates represent the *unit cost* of service for each tier. <sup>18</sup>

Figure V-7 shows the calculations of the incremental cost per tier. The costs in each column were determined in Figure IV-11, such that the allocation of \$14,611,865 is distributed to the four demand service levels. Using the Base Day service function as an example, it can be seen how much of the revenue requirement is recovered from Tier 1. The \$11,121,287 in Figures IV-11 and Figure IV-7 includes the costs that were directly attributable to the Base Day service function plus the Base Day service function's share of costs attributable to higher levels of service. The Base Day cost of service is 76% of the aggregated amount of \$14,611,865 in Figure IV-11 that is allocated to the Single Family Residential Water Use Charge. All of the water sold, including water in Tiers 2, 3, and 4, benefits from the Tier 1 costs and shares in paying them. Dividing the Base Day costs by the total demand of 1,723,268 HCF in Figure V-7 yields a Tier 1 rate of \$6.45 per HCF.

Demand that does not exceed the 10 HCF Tier 1 breakpoint is only charged the Tier 1 rate. Demand that does not exceed Tier 1 is not responsible for the additional costs of peaking that were allocated to the higher service levels. These additional peaking costs are both the initial capital cost, the subsequent rehabilitation and renewal costs, and the operations and maintenance costs for larger pipelines, additional pumps, and larger reservoirs. Bills that exceed Tier 1 pay additional rate increments. The next increment of demand is responsible for the costs allocated to Average Day service, \$693,243 in Figure IV-11. This increment of cost is divided by the demand that exceeds Tier 1, 758,177 HCF, resulting in an incremental Tier 2 rate of \$0.91 per HCF (Figure V-7).

The calculations of the Tier 3 and Tier 4 rate increments proceed similarly. The incremental rate for Tier 3 and Tier 4 is much higher than Tier 2. This is due to more costs being spread over a smaller volume of water use. For example, the \$1,125,344 in Figure IV-11 allocated to the Maximum Day service level is allocated to 496,463 HCF while the \$1,671,992 allocated to the Maximum Hour service level is allocated only to the highest 363,207 HCF. These levels of use create the need for these increments of peak capacity. To meet this peak demand, storage reservoirs distribution pipelines must be sized appropriately.

<sup>&</sup>lt;sup>18</sup> In this report, "rates" and "unit costs" are synonymous.

Figure V-7. Incremental Unit Cost – Single Family Residential

	Base	Average	Maximum	Maximum	
Residential COS per Unit	Day	Day	Day	Hour	Total
Residential COS - Consumption	\$11,121,287	\$693,243	\$1,125,344	\$1,671,992	\$14,611,865
Demand Per Tier					
Tier 1 (0-10 hcf)	965,090				
Tier 2 (11-14 hcf)	261,715	261,715			
Tier 3 (15-20 hcf)	157,832	157,832	157,832		
Tier 4 (21+ hcf)	338,631	338,631	338,631	338,631	
Total hcf per Tier	1,723,268	758,177	496,463	363,207	
Cost-of-Service per Unit (hcf)	\$6.45	\$0.91	\$2.27	\$4.94	

Source: Cost of service from Figures IV-10. Demand per tier from City's FY 2021-22 and FY 2022-23 billing data.

The incremental rates are additive. In other words, demand in Tier 1 only pays the Base Day rate. Demand in Tier 2 pays the Base Day rate plus the Average Day increment, and so forth through Tiers 3 and 4. Adding the increments yields the rates per tier, which are summarized in **Figure V-8**. Clearly, as demand progresses through the tiers, the additional costs of peaking are allocated to recover the cost of the higher levels of service.

Figure V-8. Calculation of Proposed Water Use Charge Rates – Single Family Residential

	Base	Average	Maximum	Maximum	
Proposed Rates	Day	Day	Day	Hour	Total
Tier 1 (0-10 hcf)	\$6.45				\$6.45
Tier 2 (11-14 hcf)	\$6.45	\$0.91			\$7.37
Tier 3 (15-20 hcf)	\$6.45	\$0.91	\$2.27		\$9.63
Tier 4 (21+ hcf)	\$6.45	\$0.91	\$2.27	\$4.94	\$14.57

Source: Figure V-2.

Note: Rounding differences caused by stored values in electronic models may exist

**Figure V-9** graphically compares the current structure with approved breakpoints with the proposed rate structure and breakpoint adjustments. Note that nearly two-thirds of the bills (67% of the total bills) are within the first two proposed tiers. In other words, only slightly more than one-third of the bills reflect above average water use.

The proposed breakpoints align rates with the current level of demand Single Family Residential customers place on the system. Under the current rate structure, Multi Family Residential consumption was also factored into the current tier breakpoints. Changing Multi Family Use Charges to a uniform rate structure would reduce the number of customers and water consumption considered in tiered rate structure analysis. Based on this change and shifts in demand patterns since the last cost-of-service analysis was completed, we recommend changes in the breakpoints between the tiers in the Water Use Charge structure. The recommended bi-monthly breakpoints of 8, 20, and 40 HCF would shift to 10, 14, and 20 HCF. Under the proposed adjustments, the Tier 1/Tier 2 breakpoint would increase from 8 HCF to 10 HCF. However, the Tier 2/Tier 3 breakpoint would contract from 20 HCF to 14 HCF. Also, the Tier 3/Tier 4 breakpoint

would contract from 40 HCF to 20 HCF. Customers with bills reflecting 21 HCF of water use who were paying Tier 3 rates would now pay Tier 4 rates. Further impacts to customers because of recommended adjustments will be discussed in Chapter VI.

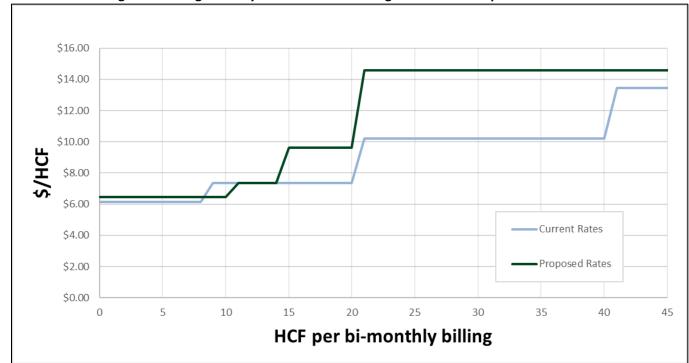


Figure V-9. Single Family Residential Use Charge Structure Comparison

## **Commercial/Multi Family Water Use Charges**

We recommend the City apply the same uniform rate structure for all Commercial, Multi-Family, Irrigation, and Recycled Water customers. The proposed adjustment for FY 2023-24 is intended to increase the uniform rate to re-align with the cost of service for this customer class. Of the total revenue requirement for FY 2023-24, \$15,670,138 was allocated to this customer class. The uniform rate is derived by dividing this class's share of the FY 2023-24 revenue requirement by the class's projected annual demand based on FY 2021-22 and FY 2022-23 City billing data in **Figure V-10**.

Figure V-10. Calculation of Commercial/Multi Family Uniform Consumption Charge

Commercial/Multi Family Rev. Req.	\$15,670,138
Annual water use (hcf)	1,979,552
Average \$ per hcf	\$7.92

Source: Revenue requirement from Figure IV-10.

Projected demand from City's FY 2021-22 and FY 2022-23 billing data.

## **Water Use Charges Summary**

The two-year schedule of proposed Water Use Charges for Single Family Residential, Multi Family Residential, Commercial, and Irrigation customers is shown in **Figure V-11**.

Figure V-11. Current and Proposed Water Use Charge Rates

Water Use Charge Rates  Water Use Charges											
Single Family Residential											
Current Tiers	Current	Proposed Tiers	FY 2023-24	FY 2024-25							
	Rates	,	eff. 2/1/2024	eff. 1/1/2025							
Tier 1 (0-8 hcf)	\$6.13	Tier 1 (0-10 hcf)	\$6.45	\$6.90							
Tier 2 (9-20 hcf)	\$7.35	Tier 2 (11-14 hcf)	\$7.37	\$7.89							
Tier 3 (21-40 hcf)	\$10.20	Tier 3 (15-20 hcf)	\$9.63	\$10.30							
Tier 4 (41+ hcf)	\$13.45	Tier 4 (21+ hcf)	\$14.57	\$15.59							
Multi	Family Res	idential (including	Residential Fire)								
Current Tiers	Current	Usage	FY 2023-24	FY 2024-25							
	Rates		eff. 2/1/2024	eff. 1/1/2025							
Tier 1 (0-8 hcf)	\$6.13	All Water Use	\$7.92	\$8.47							
Tier 2 (9-20 hcf)	\$7.35										
Tier 3 (21-40 hcf)	\$10.20										
Tier 4 (41+ hcf)	\$13.45										
Commercial - Includ	es Commer	cial, Industrial, Oth	er, Municipal, Co	ommercial Fire							
Usage	Current	Usage	FY 2023-24	FY 2024-25							
	Rates		eff. 2/1/2024	eff. 1/1/2025							
All Water Use	\$7.35	All Water Use	\$7.92	\$8.47							
	Į	andscape Irrigation									
Usage	Current	Usage	FY 2023-24	FY 2024-25							
	Rates		eff. 2/1/2024	eff. 1/1/2025							
Under 100% Budget	\$7.35	All Water Use	\$7.92	\$8.47							
101%-200% Budget	\$10.20										
Over 200% Budget	\$13.45										

Further impacts to customers because of recommended adjustments will be discussed in Chapter VI.

## **Drought Rate Factors**

During prolonged shortages, customers are required to conserve or even ration their water use. The magnitude of the water savings can significantly reduce water sales revenue from quantity charges.

The City requested HF&H to calculated a set of Drought Rate Factors that would be applied to the rates for the Water Use Charges and implemented during declared water shortage stages in accordance with the City's Water Shortage Contingency Plan (WSCP), state mandated reductions in the level of water usage, or other natural disaster or event that results in a water shortage and an unforeseen drop in water demand that requires reductions in water use.

As part of this study to calculate the Drought Rate Factors, it is proposed that the shortage reductions will vary by customer class, based on their respective abilities to conserve water. A customer classes' ability to conserve is directly related to the proportion of their current water use which is highly discretionary

and considered a non-beneficial use (e.g., water used for landscape purposes, "outdoor" water use) and less discretionary use for health and safety (e.g., water used for cooking, cleaning, bathing, "indoor" water use). Each class's reduction will be determined by reducing their proportion of water that is for "outdoor" water use (seasonal water use) 3.0 times more than their "indoor" (average winter water use) water use. As described in more detail under "Implementation" at this end of this section, the calculated factors will be applied to each tier of the Water Use Charge Rates. The higher rates will generate the revenue which was lost due to conservation and has been calculated to keep the City revenue neutral so they can cover the portion of fixed costs which have paid through the Water Use Charge Rates

## **Analysis**

Based on FY 2021-22 and FY 2022-23 metered water use data, the resulting reductions are summarized in **Figure V-12.** The reductions shown represent the customer class reductions required to achieve the reduction associated with each shortage stage. The customer class reductions are greater or less than the overall average for each stage depending on how much of each class's water demand is seasonal.

Figure V-12. WSCP Required Water Use Reductions by Class

	Stage 1 Shortage		Stage 3	Stage 4	Stage 5	Stage 6	
			Shortage Shortage		Shortage	Shortage	
	Up to	Up to	Up to	Up to	Up to	Up to	
Class	(10% Reduction)	(20% Reduction)	(30% Reduction)	(40% Reduction)	(50% Reduction)	(55% Reduction)	
Single Family	10%	19%	29%	38%	48%	52%	
Multi-Family	7%	13%	20%	27%	33%	38%	
Commercial	8%	16%	24%	32%	40%	45%	
Irrigation	18%	37%	55%	74%	92%	100%	

**Figure V-13** shows the calculation of each customer class's respective shortage reduction required during each shortage stage. The annual demand for each class is separated into indoor and outdoor water use where indoor water use is defined as the period from January through February multiplied times 6 to get the annualized indoor water use over 12 months. Subtracting indoor water use from the total annual water use determines the seasonal outdoor water use.

The percentage reductions for each customer class required to achieve the overall reduction for a particular stage are derived so that outdoor water use is reduced 3.0 times indoor water use. In a Stage 1 shortage, a 6.2% reduction in indoor water use and a 18.5% reduction in outdoor water use are required to achieve an overall 10% reduction. Applying the same reduction factors to each class results in different overall reductions for the class based on the relative proportions of their indoor and outdoor water use. In each stage reduction each customer class is required to conserve different percentages. This is because of the variation in water use patterns among the customer classes.

Figure V-13. Calculation of Shortage Reductions by Stage and Customer Class

10%	Shortage Le			% reduction	)	,			
		Annual Dema			<u>'</u>	Reduc	tions		
Class	Total	Indoor	Outdoor	Indoor	Outdoor	Indoor	Outdoor	Total	Total
Single Family	1,723,268	1,253,995	469,273	6.2%	18.5%	77,260	86,737	163,997	10%
Multi-Family	790,781	756,078	34,703	6.2%	18.5%	46,583	6,414	52,997	7%
Commercial	636,936	539,160	97,776	6.2%	18.5%	33,218	18,072	51,290	8%
Irrigation	551,835	-	551,835	0.0%	18.5%	-	101,997	101,997	18%
Total	3,702,820	2,549,233	1,153,587	0.070	10.570	157,061	213,221	370,282	10.0%
				% reduction		137,001	213,221	370,202	10.070
20,0		Annual Dema	· ·	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	<u>'</u>	Reduc	tions		
Class	Total	Indoor	Outdoor	Indoor	Outdoor	Indoor	Outdoor	Total	Total
Single Family	1,723,268	1,253,995	469,273	12.3%	37.0%	154,520	173,474	327,994	19%
Multi-Family	790,781	756,078	34,703	12.3%	37.0%	93,166	12,829	105,994	13%
Commercial	636,936	539,160	97,776	12.3%	37.0%	66,436	36,145	102,581	16%
Irrigation	551,835	-	551,835	0.0%	37.0%	-	203,995	203,995	37%
Total	3,702,820	2,549,233	1,153,587		_	314,122	426,442	740,564	20.0%
			, ,	0% reduction	n)	<u> </u>	120,112	110,001	
		Annual Dema			<u>'</u>	Reduc	tions		
Class	Total	Indoor	Outdoor	Indoor	Outdoor	Indoor	Outdoor	Total	Total
Single Family	1,723,268	1,253,995	469,273	18.5%	55.4%	231,780	260,212	491,991	29%
Multi-Family	790,781	756,078	34,703	18.5%	55.4%	139,748	19,243	158,991	20%
Commercial	636,936	539,160	97,776	18.5%	55.4%	99,655	54,217	153,871	24%
Irrigation	551,835	-	551,835	0.0%	55.4%	-	305,992	305,992	55%
Total	2 702 020	2 5 40 222							
. otai	3,702,820	2,549,233	1,153,587			471,183	639,663	1,110,846	30.0%
				0% reduction	n)	471,183	639,663	1,110,846	30.0%
40%	Shortage Le Baseline		tion (up to 4			Reduc	,		30.0%
40% Class	Shortage Le Baseline A Total	evel 4 Reduc	tion (up to 4 and (HCF) Outdoor	Indoor	Outdoor	Reduc Indoor	,	Total	Total
40% Class Single Family	Shortage Le Baseline / Total 1,723,268	evel 4 Reduc Annual Dema Indoor 1,253,995	tion (up to 4 and (HCF) Outdoor 469,273	Indoor 24.6%	Outdoor 73.9%	Reduction Reduct	Outdoor 346,949	<b>Total</b> 655,988	Total 38%
40% Class Single Family Multi-Family	Shortage Le Baseline A Total 1,723,268 790,781	Annual Dema Indoor 1,253,995 756,078	tion (up to 4 and (HCF) Outdoor 469,273 34,703	Indoor 24.6% 24.6%	Outdoor 73.9% 73.9%	Reduction 100 Re	ctions Outdoor 346,949 25,657	<b>Total</b> 655,988 211,988	Total 38% 27%
40%  Class  Single Family  Multi-Family  Commercial	Shortage Le Baseline / Total 1,723,268 790,781 636,936	evel 4 Reduc Annual Dema Indoor 1,253,995	tion (up to 4 and (HCF) Outdoor 469,273 34,703 97,776	Indoor 24.6% 24.6% 24.6%	Outdoor 73.9% 73.9% 73.9%	Reduction 100 Re	ctions  Outdoor  346,949  25,657  72,289	<b>Total</b> 655,988 211,988 205,162	Total 38% 27% 32%
Class Single Family Multi-Family Commercial Irrigation	Shortage Le Baseline / Total 1,723,268 790,781 636,936 551,835	evel 4 Reduct Annual Dema Indoor 1,253,995 756,078 539,160	tion (up to 4 and (HCF) Outdoor 469,273 34,703 97,776 551,835	Indoor 24.6% 24.6%	Outdoor 73.9% 73.9%	Reduction 100 Re	25,657 72,289 407,990	Total 655,988 211,988 205,162 407,990	Total 38% 27% 32% 74%
Class Single Family Multi-Family Commercial Irrigation Total	Shortage Le Baseline / Total 1,723,268 790,781 636,936 551,835 3,702,820	evel 4 Reduct Annual Dema Indoor 1,253,995 756,078 539,160 - 2,549,233	tion (up to 4 and (HCF) Outdoor 469,273 34,703 97,776 551,835 1,153,587	Indoor 24.6% 24.6% 24.6% 0.0%	Outdoor 73.9% 73.9% 73.9% 73.9%	Reduction 100 Re	ctions  Outdoor  346,949  25,657  72,289	<b>Total</b> 655,988 211,988 205,162	Total 38% 27% 32%
Class Single Family Multi-Family Commercial Irrigation Total	Shortage Le Baseline / Total 1,723,268 790,781 636,936 551,835 3,702,820 Shortage Le	evel 4 Reduct Annual Dema Indoor 1,253,995 756,078 539,160 - 2,549,233 vel 5 Reduct	tion (up to 4 and (HCF) Outdoor 469,273 34,703 97,776 551,835 1,153,587 ion (up to 50	Indoor 24.6% 24.6% 24.6%	Outdoor 73.9% 73.9% 73.9% 73.9%	Reduction 100 Re	25,657 72,289 407,990 852,884	Total 655,988 211,988 205,162 407,990	Total 38% 27% 32% 74%
Class Single Family Multi-Family Commercial Irrigation Total 50%	Shortage Le Baseline / Total 1,723,268 790,781 636,936 551,835 3,702,820 Shortage Le Baseline /	Annual Dema Indoor 1,253,995 756,078 539,160 - 2,549,233 vel 5 Reducti	tion (up to 4 and (HCF) Outdoor 469,273 34,703 97,776 551,835 1,153,587 ion (up to 50 and (HCF)	Indoor 24.6% 24.6% 24.6% 0.0%	Outdoor 73.9% 73.9% 73.9% 73.9%	Reduction 100 Re	ctions Outdoor 346,949 25,657 72,289 407,990 852,884	Total 655,988 211,988 205,162 407,990 1,481,128	Total 38% 27% 32% 74% 40.0%
Class Single Family Multi-Family Commercial Irrigation Total 50%	Shortage Le Baseline / Total 1,723,268 790,781 636,936 551,835 3,702,820 Shortage Le Baseline / Total	Annual Dema Indoor 1,253,995 756,078 539,160 - 2,549,233 vel 5 Reducti Annual Dema	tion (up to 4 and (HCF) Outdoor 469,273 34,703 97,776 551,835 1,153,587 ion (up to 50 and (HCF)	Indoor 24.6% 24.6% 24.6% 0.0% % reduction	Outdoor 73.9% 73.9% 73.9% 73.9% Outdoor	Reduction Reduct	ctions Outdoor 346,949 25,657 72,289 407,990 852,884 ctions Outdoor	Total 655,988 211,988 205,162 407,990 1,481,128	Total  38% 27% 32% 74% 40.0%
Class Single Family Multi-Family Commercial Irrigation Total  Class Single Family	Shortage Le  Baseline /  Total  1,723,268  790,781  636,936  551,835  3,702,820  Shortage Le  Baseline /  Total  1,723,268	Annual Dema Indoor 1,253,995 756,078 539,160 - 2,549,233 vel 5 Reducti Annual Dema Indoor 1,253,995	tion (up to 4 and (HCF) Outdoor 469,273 34,703 97,776 551,835 1,153,587 ion (up to 50 and (HCF) Outdoor 469,273	Indoor 24.6% 24.6% 24.6% 0.0% We reduction Indoor 30.8%	Outdoor 73.9% 73.9% 73.9% 73.9%  Outdoor 92.3%	Reduction 186,331 132,873 - 628,244 Reduction 186,331 132,873 - 628,244	25,657 72,289 407,990 852,884 etions Outdoor 433,252	Total 655,988 211,988 205,162 407,990 1,481,128 Total 819,166	Total  38% 27% 32% 74% 40.0%  Total 48%
Class Single Family Multi-Family Commercial Irrigation Total  Class Single Family Multi-Family	Shortage Le Baseline / Total 1,723,268 790,781 636,936 551,835 3,702,820 Shortage Le Baseline / Total 1,723,268 790,781	evel 4 Reduct Annual Dema Indoor 1,253,995 756,078 539,160 - 2,549,233 vel 5 Reduct Annual Dema Indoor 1,253,995 756,078	tion (up to 4 and (HCF) Outdoor 469,273 34,703 97,776 551,835 1,153,587 ion (up to 50 and (HCF) Outdoor 469,273 34,703	Indoor 24.6% 24.6% 0.0% We reduction Indoor 30.8% 30.8%	Outdoor 73.9% 73.9% 73.9% 73.9%  Outdoor 92.3% 92.3%	Reduction 100 Re	25,657 72,289 407,990 852,884 2tions Outdoor 433,252 32,039	Total 655,988 211,988 205,162 407,990 1,481,128 Total 819,166 264,720	Total 38% 27% 32% 74% 40.0%  Total 48% 33%
Class Single Family Multi-Family Commercial Irrigation Total  Class Single Family Multi-Family Commercial	Shortage Let Baseline / Total 1,723,268 790,781 636,936 551,835 3,702,820 Shortage Let Baseline / Total 1,723,268 790,781 636,936	evel 4 Reduct Annual Dema Indoor 1,253,995 756,078 539,160 - 2,549,233 vel 5 Reduct Annual Dema Indoor 1,253,995 756,078 539,160	tion (up to 4 and (HCF) Outdoor 469,273 34,703 97,776 551,835 1,153,587 tion (up to 50 and (HCF) Outdoor 469,273 34,703 97,776	Indoor 24.6% 24.6% 24.6% 0.0%  % reduction Indoor 30.8% 30.8% 30.8%	Outdoor 73.9% 73.9% 73.9% 73.9%  73.9%  Outdoor 92.3% 92.3% 92.3%	Reduction 186,331 132,873 - 628,244 Reduction 185,913 232,681 165,925	25,657 72,289 407,990 852,884 2tions Outdoor 433,252 32,039 90,271	Total 655,988 211,988 205,162 407,990 1,481,128  Total 819,166 264,720 256,196	Total  38% 27% 32% 74% 40.0%  Total 48% 33% 40%
Class Single Family Multi-Family Commercial Irrigation Total  Class Single Family Multi-Family Commercial Irrigation	Shortage Let Baseline / Total 1,723,268 790,781 636,936 551,835 3,702,820 Shortage Let Baseline / Total 1,723,268 790,781 636,936 551,835	evel 4 Reduct Annual Dema Indoor 1,253,995 756,078 539,160 - 2,549,233 vel 5 Reduct Annual Dema Indoor 1,253,995 756,078 539,160 -	tion (up to 4 and (HCF) Outdoor 469,273 34,703 97,776 551,835 1,153,587 ion (up to 50 and (HCF) Outdoor 469,273 34,703 97,776 551,835	Indoor 24.6% 24.6% 0.0% We reduction Indoor 30.8% 30.8%	Outdoor 73.9% 73.9% 73.9% 73.9%  Outdoor 92.3% 92.3%	Reduction 100 Re	ctions Outdoor 346,949 25,657 72,289 407,990 852,884 ctions Outdoor 433,252 32,039 90,271 509,477	Total 655,988 211,988 205,162 407,990 1,481,128  Total 819,166 264,720 256,196 509,477	Total 38% 27% 32% 74% 40.0%  Total 48% 33% 40% 92%
Class Single Family Multi-Family Commercial Irrigation Total  Class Single Family Multi-Family Commercial Irrigation Total	Shortage Let Baseline / Total 1,723,268 790,781 636,936 551,835 3,702,820 Shortage Let Baseline / Total 1,723,268 790,781 636,936 551,835 3,702,820	Annual Dema Indoor 1,253,995 756,078 539,160 - 2,549,233 vel 5 Reduct Annual Dema Indoor 1,253,995 756,078 539,160 - 2,549,233	tion (up to 4 and (HCF) Outdoor 469,273 34,703 97,776 551,835 1,153,587 ion (up to 50 and (HCF) Outdoor 469,273 34,703 97,776 551,835 1,153,587	Indoor 24.6% 24.6% 24.6% 0.0%  % reduction Indoor 30.8% 30.8% 0.0%	Outdoor 73.9% 73.9% 73.9% 73.9%  Outdoor 92.3% 92.3% 92.3%	Reduction 186,331 132,873 - 628,244 Reduction 185,913 232,681 165,925	25,657 72,289 407,990 852,884 2tions Outdoor 433,252 32,039 90,271	Total 655,988 211,988 205,162 407,990 1,481,128  Total 819,166 264,720 256,196	Total  38% 27% 32% 74% 40.0%  Total 48% 33% 40%
Class Single Family Multi-Family Commercial Irrigation Total  Class Single Family Multi-Family Commercial Irrigation Total	Shortage Let Baseline / Total 1,723,268 790,781 636,936 551,835 3,702,820 Shortage Let Baseline / Total 1,723,268 790,781 636,936 551,835 3,702,820 Shortage Let Baseline / Shortage Let Baseline / Total 1,723,268 790,781 636,936 551,835 3,702,820 Shortage Let	Annual Dema Indoor 1,253,995 756,078 539,160 - 2,549,233 vel 5 Reducti Annual Dema Indoor 1,253,995 756,078 539,160 - 2,549,233 vel 6 Reducti	tion (up to 4 and (HCF) Outdoor 469,273 34,703 97,776 551,835 1,153,587 ion (up to 50 and (HCF) Outdoor 469,273 34,703 97,776 551,835 1,153,587 ion (up to 55	Indoor 24.6% 24.6% 24.6% 0.0%  % reduction Indoor 30.8% 30.8% 30.8%	Outdoor 73.9% 73.9% 73.9% 73.9%  Outdoor 92.3% 92.3% 92.3%	Reduction 100 Re	ctions Outdoor 346,949 25,657 72,289 407,990 852,884 ctions Outdoor 433,252 32,039 90,271 509,477 1,065,039	Total 655,988 211,988 205,162 407,990 1,481,128  Total 819,166 264,720 256,196 509,477	Total 38% 27% 32% 74% 40.0%  Total 48% 33% 40% 92%
Class Single Family Multi-Family Commercial Irrigation Total  Class Single Family Multi-Family Commercial Irrigation Total  50%	Shortage Let Baseline A Total 1,723,268 790,781 636,936 551,835 3,702,820 Shortage Let Baseline A 1,723,268 790,781 636,936 551,835 3,702,820 Shortage Let Baseline A Baseline A Baseline A Baseline A Baseline A Baseline A	Annual Dema Indoor 1,253,995 756,078 539,160 - 2,549,233 vel 5 Reducti Annual Dema Indoor 1,253,995 756,078 539,160 - 2,549,233 vel 6 Reducti Annual Dema	tion (up to 4 and (HCF) Outdoor 469,273 34,703 97,776 551,835 1,153,587 ion (up to 50 and (HCF) Outdoor 469,273 34,703 97,776 551,835 1,153,587 ion (up to 55 and (HCF)	Indoor 24.6% 24.6% 24.6% 0.0%  % reduction Indoor 30.8% 30.8% 30.8% 6.0%	Outdoor 73.9% 73.9% 73.9% 73.9%  Outdoor 92.3% 92.3% 92.3%	Reduction Reduct	ctions Outdoor 346,949 25,657 72,289 407,990 852,884 ctions Outdoor 433,252 32,039 90,271 509,477 1,065,039	Total 655,988 211,988 205,162 407,990 1,481,128  Total 819,166 264,720 256,196 509,477 1,849,559	Total 38% 27% 32% 74% 40.0%  Total 48% 33% 40% 92% 50.0%
Class Single Family Multi-Family Commercial Irrigation Total  Class Single Family Multi-Family Commercial Irrigation Total  50%  Class Class Class Class Class	Shortage Let Baseline / Total 1,723,268 790,781 636,936 551,835 702,820 Shortage Let Baseline / Total 1,723,268 790,781 636,936 551,835 3,702,820 Shortage Let Baseline / Total	Annual Dema Indoor 1,253,995 756,078 539,160 - 2,549,233 vel 5 Reducti Annual Dema Indoor 1,253,995 756,078 539,160 - 2,549,233 vel 6 Reducti Annual Dema Indoor	tion (up to 4 and (HCF) Outdoor 469,273 34,703 97,776 551,835 1,153,587 tion (up to 50 and (HCF) Outdoor 469,273 34,703 97,776 551,835 1,153,587 tion (up to 55 and (HCF) Outdoor	Indoor 24.6% 24.6% 24.6% 0.0%  % reduction 30.8% 30.8% 0.0%  % reduction	Outdoor 73.9% 73.9% 73.9% 73.9% 73.9%  Outdoor 92.3% 92.3% 92.3% 92.3%	Reduction 309,040 186,331 132,873 - 628,244  Reduction 385,913 232,681 165,925 - 784,519  Reduction Reduct	ctions Outdoor 346,949 25,657 72,289 407,990 852,884 ctions Outdoor 433,252 32,039 90,271 509,477 1,065,039 ctions Outdoor	Total 655,988 211,988 205,162 407,990 1,481,128  Total 819,166 264,720 256,196 509,477 1,849,559	Total  38% 27% 32% 74% 40.0%  Total 48% 33% 40% 92% 50.0%
Class Single Family Multi-Family Commercial Irrigation Total 50% Class Single Family Multi-Family Commercial Irrigation Total 55% Class Single Family	Shortage Le  Baseline /  Total  1,723,268  790,781  636,936  551,835  3,702,820  Shortage Le  Baseline /  Total  1,723,268  790,781  636,936  551,835  3,702,820  Shortage Le  Baseline /  Total  1,723,268	evel 4 Reduct Annual Dema Indoor 1,253,995 756,078 539,160 - 2,549,233 vel 5 Reduct Annual Dema Indoor 1,253,995 756,078 539,160 - 2,549,233 vel 6 Reduct Annual Dema Indoor 1,253,995	tion (up to 4 and (HCF)  Outdoor  469,273  34,703  97,776  551,835  1,153,587  ion (up to 50 and (HCF)  Outdoor  469,273  34,703  97,776  551,835  1,153,587  ion (up to 55 and (HCF)  Outdoor  469,273	Indoor	Outdoor 73.9% 73.9% 73.9% 73.9% 73.9%  Outdoor 92.3% 92.3% 92.3% 90.3%  Outdoor 100.0%	Reduction 1309,040 186,331 132,873 - 628,244 Reduction 1385,913 232,681 165,925 - 784,519 Reduction 1434,339	ctions Outdoor 346,949 25,657 72,289 407,990 852,884 ctions Outdoor 433,252 32,039 90,271 509,477 1,065,039 ctions Outdoor 469,273	Total 655,988 211,988 205,162 407,990 1,481,128  Total 819,166 264,720 256,196 509,477 1,849,559  Total 903,612	Total  38% 27% 32% 74% 40.0%  Total 48% 40% 92% 50.0%  Total 52%
Class Single Family Multi-Family Commercial Irrigation Total 50% Class Single Family Multi-Family Commercial Irrigation Total 55% Class Single Family Multi-Family Multi-Family	Shortage Le  Baseline /  Total  1,723,268  790,781  636,936  551,835  3,702,820  Shortage Le  Baseline /  Total  1,723,268  790,781  636,936  551,835  3,702,820  Shortage Le  Baseline /  Total  1,723,268  790,781	evel 4 Reduct Annual Dema Indoor 1,253,995 756,078 539,160 - 2,549,233 vel 5 Reduct Annual Dema Indoor 1,253,995 756,078 539,160 - 2,549,233 vel 6 Reduct Annual Dema Indoor 1,253,995 756,078	tion (up to 4 and (HCF)  Outdoor  469,273  34,703  97,776  551,835  1,153,587  ion (up to 50 and (HCF)  Outdoor  469,273  34,703  97,776  551,835  1,153,587  ion (up to 55 and (HCF)  Outdoor  469,273  34,703  97,776  551,835  1,000	Indoor	Outdoor 73.9% 73.9% 73.9% 73.9% 73.9%  Outdoor 92.3% 92.3% 92.3% 92.3% 100.0%	Reduction 309,040 186,331 132,873 - 628,244  Reduction 385,913 232,681 165,925 - 784,519  Reduction 434,339 261,879	ctions Outdoor 346,949 25,657 72,289 407,990 852,884 ctions Outdoor 433,252 32,039 90,271 509,477 1,065,039 ctions Outdoor 469,273 34,703	Total 655,988 211,988 205,162 407,990 1,481,128  Total 819,166 264,720 256,196 509,477 1,849,559  Total 903,612 296,582	Total  38% 27% 32% 74% 40.0%  Total  48% 33% 40% 92% 50.0%  Total  52% 38%
Class Single Family Multi-Family Commercial Irrigation Total  Class Single Family Multi-Family Commercial Irrigation Total  55%  Class Single Family Multi-Family Commercial Irrigation Total	Shortage Le  Baseline /  Total  1,723,268  790,781  636,936  551,835  3,702,820  Shortage Le  Baseline /  Total  1,723,268  790,781  636,936  551,835  3,702,820  Shortage Le  Baseline /  Total  1,723,268  790,781  636,936	Annual Dema Indoor 1,253,995 756,078 539,160 - 2,549,233 vel 5 Reducti Annual Dema Indoor 1,253,995 756,078 539,160 - 2,549,233 vel 6 Reducti Annual Dema Indoor 1,253,995 756,078 539,160	tion (up to 4 and (HCF) Outdoor 469,273 34,703 97,776 551,835 1,153,587 ion (up to 50 and (HCF) Outdoor 469,273 34,703 97,776 551,835 1,153,587 ion (up to 55 and (HCF) Outdoor 469,273 34,703 97,776 Outdoor 469,273 34,703 97,776	Indoor	Outdoor 73.9% 73.9% 73.9% 73.9% 73.9%  Outdoor 92.3% 92.3% 92.3% 92.3% 100.0% 100.0%	Reduction 100	ctions Outdoor 346,949 25,657 72,289 407,990 852,884  ctions Outdoor 433,252 32,039 90,271 509,477 1,065,039  ctions Outdoor 469,273 34,703 97,776	Total 655,988 211,988 205,162 407,990 1,481,128  Total 819,166 264,720 256,196 509,477 1,849,559  Total 903,612 296,582 284,522	Total  38% 27% 32% 74% 40.0%  Total  48% 33% 40% 92% 50.0%  Total  52% 38% 45%
Class Single Family Multi-Family Commercial Irrigation Total  Class Single Family Multi-Family Commercial Irrigation Total  55%  Class Single Family Multi-Family Multi-Family	Shortage Le  Baseline /  Total  1,723,268  790,781  636,936  551,835  3,702,820  Shortage Le  Baseline /  Total  1,723,268  790,781  636,936  551,835  3,702,820  Shortage Le  Baseline /  Total  1,723,268  790,781	evel 4 Reduct Annual Dema Indoor 1,253,995 756,078 539,160 - 2,549,233 vel 5 Reduct Annual Dema Indoor 1,253,995 756,078 539,160 - 2,549,233 vel 6 Reduct Annual Dema Indoor 1,253,995 756,078	tion (up to 4 and (HCF)  Outdoor  469,273  34,703  97,776  551,835  1,153,587  ion (up to 50 and (HCF)  Outdoor  469,273  34,703  97,776  551,835  1,153,587  ion (up to 55 and (HCF)  Outdoor  469,273  34,703  97,776  551,835  1,000	Indoor	Outdoor 73.9% 73.9% 73.9% 73.9% 73.9%  Outdoor 92.3% 92.3% 92.3% 92.3% 100.0%	Reduction 309,040 186,331 132,873 - 628,244  Reduction 385,913 232,681 165,925 - 784,519  Reduction 434,339 261,879	ctions Outdoor 346,949 25,657 72,289 407,990 852,884 ctions Outdoor 433,252 32,039 90,271 509,477 1,065,039 ctions Outdoor 469,273 34,703	Total 655,988 211,988 205,162 407,990 1,481,128  Total 819,166 264,720 256,196 509,477 1,849,559  Total 903,612 296,582	Total  38% 27% 32% 74% 40.0%  Total 48% 40% 92% 50.0%  Total 52%

The service charges are fixed and generate 36% of the total rate revenue regardless of shortages. The remaining 64% of revenue is generated by the volumetric rates. In deriving the Drought Rate Factors, the factors will only apply to the volumetric rates because short-term reductions in water use correlate with

short-term fluctuations in variable costs. Conversely, short-term reductions in water use would not affect fixed costs, or costs that would require a long-term change in customer demand (e.g. population decline) to be affected. Each customer class has its own set of Drought Rate Factors corresponding to its reduction in each stage of shortage.

The formula for the Drought Rate Factors comprises conservation and variable cost components. The conservation component adjusts to account for the required reduction in water demand. A portion, not all, of the costs (e.g., power, water purchases) covered by Water Use Charge rates are variable and will not be incurred when less water is used during short-term demand reductions. To ensure the Drought Rate Factors do not result in excess revenue collection, the variable cost component of the calculation reduces the factor to account for the portion of variable costs, which is covered by the quantity charges, and will not be incurred when demand decreases.

The Drought Rate Factors are the product of the conservation component multiplied by the variable cost component. Each component is defined as follows:

Drought Rate Factor = Conservation Component multiplied times Variable Cost Component, where

**Conservation Component** = 1/(1 - a), where

a = required percentage reduction, which varies by customer class.

**Variable Cost Component** = (b - (c \* a))/b, where

a = required percentage reduction, which varies by customer class.

b = percentage of revenue from total service charges and volumetric rates for all customer classes that is attributable to volumetric rates, an amount that is 64% based on the costof-service analysis.

c = percentage of total revenue requirement covered by service charges and volumetric rates that varies based on fluctuations in demand, an amount that is currently 51%. 19

The following example illustrates how the formula determined the 1.047 Drought Rate Factor in Figure V-14 for the Single Family Residential customer class in a Stage 2 shortage in which an overall conservation goal of 20% if required.

**Conservation Component**: 1/(1 - a) = 1/(1 - 0.19033) = 1.23507, where

a = required percentage reduction is 19.033% for the Residential customer class (see Figure V-13 where a rounded 19% is shown).

**Variable Cost Component:** (b - (c \* a))/b = (0.6415 - (0.5124 \* 0.19033))/0.6415 = 0.84796, where

REV: 11-27-23 MI

<sup>&</sup>lt;sup>19</sup> The cost of SFPUC water is the largest example of a variable cost, which varies with water demand.

a = 19.033% reduction for Residential customers in a Stage 1 shortage.

b = 64.15% of total rate revenue is generated by quantity charges; and

c = 51.24% of revenue requirement is related to variable costs.

**Drought Rate Factor** = 1.23507 \* 0.84796 = 1.047, as it is shown in **Figure V-14**.

The Single Family Residential Water Use Charge rates in effect under non-shortage conditions would be multiplied by 1.047 to derive the quantity charge rates to be in effect during a Stage 2 water shortage. **Figure V-14** shows the Drought Rate Factors that would be applied to the rates that would normally be in effect absent declared shortages.

Figure V-14. Drought Rate Factors by WSCP-Defined Shortage Stage

	Stage 1	Stage 2	Stage 3	Stage 4	Stage 5	Stage 6	
	Shortage	Shortage	Shortage	Shortage	Shortage	Shortage	
	Up to	Up to	Up to	Up to	Up to	Up to	
Class	(10% Reduction) (20% Redu		(30% Reduction)	(40% Reduction)	(50% Reduction)	(55% Reduction)	
Single Family	1.021	1.047	1.080	1.124	1.182	1.222	
Multi-Family	1.014	1.031	1.051	1.074	1.101	1.121	
Commercial	1.018	1.039	1.064	1.096	1.135	1.162	
Irrigation	1.046	1.118	1.250	1.571	3.420	n/a	

## **Implementation**

The recommended Drought Rate Factors in **Table V-14** are implemented only during periods of declared water shortage emergencies. Once a mandatory shortage is declared, the City Council has discretion to enact Drought Rate Factors corresponding to the level of shortage reduction implemented using the factors provided in **Table V-14 or** calculated using the formula for a specific level of reduction. The adjustments can go in either direction from stage to stage depending on whether the level of reduction is increasing or decreasing during the shortage. At least 30 days prior to making the adjustment, notice must be provided to rate payers, which can be included in the customer's bills. No protest process is required. These adjustments would be temporary, and rates would return to the regular schedule at the conclusion of the water shortage emergency.

The Drought Rate Factors could be applied when the City requires its customers to reduce water use. At such times, the Drought Rate Factors would be multiplied times the Water Use Charge rates proposed in the current rate study. These proposed Water Use Charge rates are based the specific demand projections for each year listed in **Figure III-1**. The City can choose to enact Drought Rate Factors when the water emergency demand levels will fall short of the respective year of modeled demand.

The Drought Rate Factors only apply to the tiered and uniform Water Use Charge rates and not to Service Charge rates, which are independent of water demand. The Drought Rate Factors are multiplied times the non-water shortage, normal-year Water Use Charge rates proposed in this report. The Drought Rate Factors would be adopted as part of the rate notification in the Proposition 218 implementation process. Once adopted, the City could apply the Drought Rate Factors as needed during conservation stages.

As a further example, **Figure V-15** has Water Use Charge rates after applying the Drought Rate Factors to the rates proposed for 2024. The table shows the proposed rates followed by the rates that correspond to each stage of conservation.

Figure V-15. Sample Rates With Drought Rate Factors – FY 2023-24 Rates

Water Emergency Shortage Stage		Stage 1	Stage 2	Stage 3	Stage 4	Stage 5	Stage 6
		10%	20%	30%	40%	50%	>50%
Single Family Droug	ht Rate Factors	1.021	1.047	1.080	1.124	1.182	1.222
Multi-Family Droug	ht Rate Factors	1.014	1.031	1.051	1.074	1.101	1.121
Commercial Droug	ht Rate Factors	1.018	1.039	1.064	1.096	1.135	1.162
Irrigation Droug	ht Rate Factors	1.046	1.118	1.250	1.571	3.420	n/a
Propo	sed 2024 Rates	R	ates With Drou	ght Rate Facto	rs Applicable to	% Reductions	
Single Family							
Tier 1	\$6.45	\$6.59	\$6.76	\$6.97	\$7.25	\$7.63	\$7.88
Tier 2	\$7.37	\$7.53	\$7.72	\$7.96	\$8.28	\$8.71	\$9.01
Tier 3	\$9.63	\$9.83	\$10.09	\$10.40	\$10.82	\$11.39	\$11.77
Tier 4	\$14.57	\$14.88	\$15.26	\$15.74	\$16.37	\$17.23	\$17.80
Multi-Family	\$7.92	\$8.03	\$8.17	\$8.32	\$8.50	\$8.72	\$8.88
Commercial	\$7.92	\$8.06	\$8.23	\$8.43	\$8.68	\$8.99	\$9.21
Irrigation \$7.92		\$8.28	\$8.85	\$9.90	\$12.44	\$27.09	N/A

Note that if reductions in water use are higher or lower than the specified stages set in the WSCP due to state mandated reductions in the level of potable water usage, or other natural disaster or event that results in a water shortage and an unforeseen drop in water demand, the Drought Rate Factors will be adjusted in accordance with the formula above.

## **Pass-Through Adjustment**

The cost of SFPUC water is the single largest component of the City's revenue requirements. Because the City has no control over the SFPUC's wholesale water rate, this cost is simply passed through to the City's customers. The SFPUC provides projections of its future wholesale water rates, which are built into the rate projections in this study. The SFPUC updates its projections each year as part of the rate-making process legally prescribed in the wholesale Water Supply Agreement. California Government Code Section 53756 authorizes water suppliers to adjust their rates in response to changes in pass-through costs. We recommend that the City incorporate annual pass-through adjustments in its volumetric rates.

Each year the City should determine how much, if any, pass-through adjustment is required as soon as the SFPUC submits its updated wholesale rates, which is typically in April or May each year. The wholesale rate used for the projections in this study should be compared with the updated rate and the difference

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either added or subtracted from the City's Water Use Charge rates for Residential and Non-Residential customers. The wholesale rates per HCF used in this study<sup>20</sup> are as follows:

FY 2023-24 - \$5.21 FY 2024-25 - \$5.21 FY 2025-26 - \$5.21 FY 2026-27 - \$5.31 FY 2027-28 - \$5.63

For example, if the updated SFPUC rate for FY 2023-24 is \$5.31, the \$0.10 difference should be added to the Water Use Charge rates charged to Residential and Non-Residential water customers. If the updated SFPUC rate is less than the foregoing rates, the difference should be subtracted from the City's volumetric rates. In other words, the adjustment should be made in either direction.

The pass-through adjustment acts similarly to the Drought Rate Factors, and can be incorporated into the Proposition 218 notice. The pass-through adjustment allows the City to adjust Water Use Charge rates to track any difference between the SFPUC rates that were included in the analysis and the actual rates adopted each year by SFPUC. The pass-through adjustment can also be made by providing 30-day notice in the customer bills without triggering the need for a Proposition 218 protest process.

<sup>&</sup>lt;sup>20</sup> Rates included in letter from SFPUC to Nicole Sandkulla RE: Fiscal Year 2023-24 Wholesale Water Rates Notice, dated April 6, 2023.

## VI. CUSTOMER BILL IMPACTS

In the previous chapter, the Volume and Service Charge structures were compared for the current and proposed rates. A further understanding of the differences between the two structures can be gained by comparing bills based on both rate structures.

## **BILL COMPARISON**

## **Single Family Residential Bills Under Proposed Rates**

Customers pay the sum of the Service Charge corresponding to the capacity of their service plus a Water Use Charge for water use during the billing period.

**Figure VI-1** provides perspective on the impact of the proposed (red line) and current rates (blue line). This graph plots bills across a range of water use. The top of the graph indicates the ranges of demand corresponding to the tiers developed in the cost-of-service analysis. Customers can expect an increase for a given level of water use when the proposed rate structure line is above the current rate structure line.

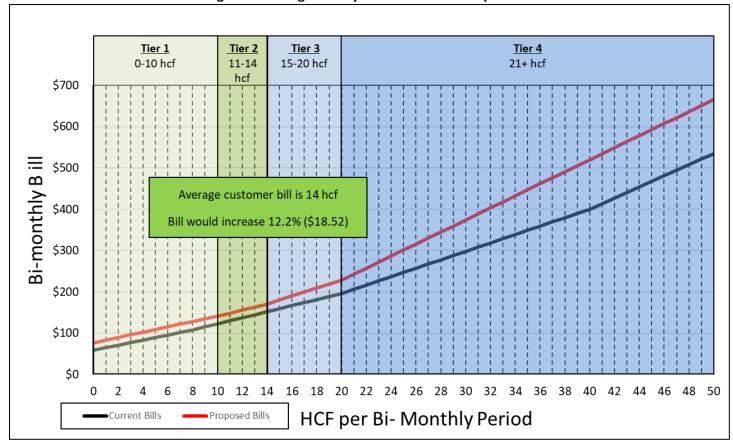


Figure VI-1. Single Family Residential Bill Comparison

Source: City billing data for FY 2021-22 and FY 2022-23.

The scale of the graph makes it difficult to discern the variance between bills at current rates and proposed rates for customers falling within the Tier 1 or Tier 2 range. Customers using 10 HCF (Tier 1) or less will see a bill increase ranging from \$17.68 to \$20.24, depending on the specific level of water use. Customers using between 11 and 14 HCF (Tier 2) will see a bill increase ranging from \$18.46 to \$18.52, depending on the specific level of water use. Since 67% of residential bills report water use equal to or less than 14 HCF, then the majority of bi-monthly bills will increase by no more than \$20.24. Customers using between 15 and 20 HCF (Tier 3) will see a bill increase ranging from \$20.80 to \$27.64, depending on the specific level of water use. Based on prior billing data, this is applicable to approximately 15% of all bills. Customers using at least 21 HCF (Tier 4) will see a minimum increase of \$29.92. The increase from the current bill grows as water use increases beyond 21 HCF. For example, an account using 23 HCF would see an increase of \$45.31 while a customer using 30 HCF would see an increase of \$75.90. For reference, customers with Tier 4 water use would account for 18% of bills. Further, almost 93% of bills report water use less than or equal to 30 HCF. The extraordinary water users represent a small fraction of the service population that should pay more for the peaking demands placed on the system.

## **Neighboring Agency Comparison**

The bill for average water use by a Single Family household in Redwood City was compared to a water bill subject to neighboring agency rates in Figure VI-2. For a monthly comparison, the average bi-monthly water use of 14 HCF was halved to 7 HCF to calculate the Volumetric charge. The bi-monthly Service Charge was halved to calculate the Fixed Charge. With the recommend increases, the customer bill for average water use increases slightly among neighboring agencies. However, the Redwood City bill under proposed rates is now closer to the median of rates surveyed.

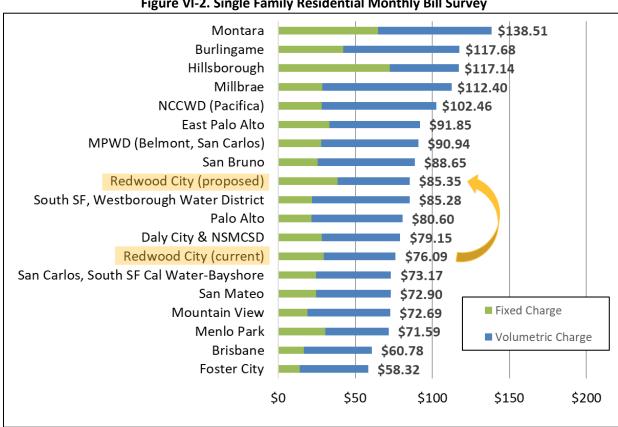


Figure VI-2. Single Family Residential Monthly Bill Survey

## **Multi Family Bills Under Proposed Rates**

It is challenging to provide sample multi-family bills impacts due to the change in rate structure. There is a weak correlation between the number of dwelling units served and the size of the meter. In addition, water use is individual to each account and not directly correlated to the number of dwelling units served. Therefore, whether customers see an increase or decrease depends on two factors: 1) the number of dwelling units previously charged versus the proposed capacity-based Service Charge; and 2) the amount of water consumed by all residents served by the account as the Water Use Charges adjust from a tiered-rate structure to a uniform rate.

## **Commercial Bills Under Proposed Rates**

Commercial bills will increase proportionately to the level of water use. This is reflected by the widening gap between the two lines in each chart shown in **Figures VI-3 to VI-5**. The three comparisons shown are for three of the most common meter sizes and represent 59% of commercial customers. Regardless of the meter size and level of water use, customers can expect monthly bills will increase.

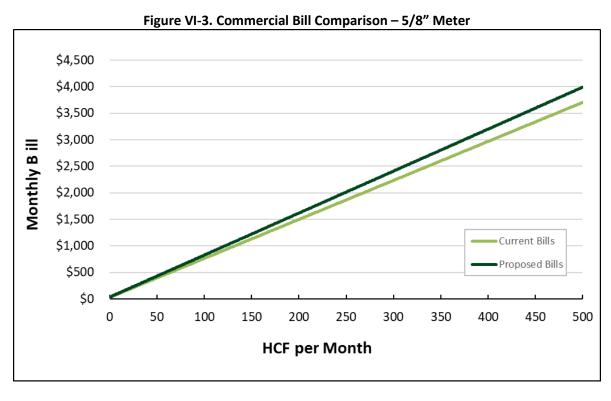
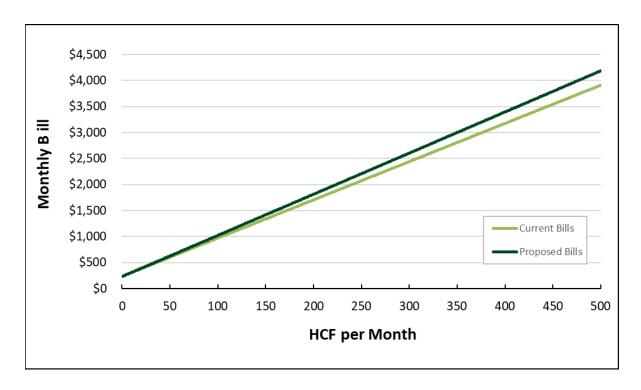
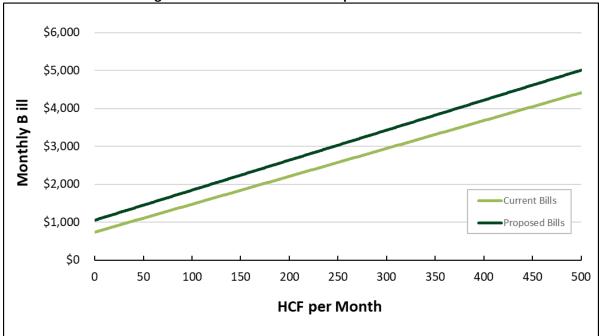


Figure VI-4. Commercial Bill Comparison - 2" Meter







The scale of each graph makes it difficult to discern the variance between bills at current rates and proposed rates. **Figure VI-6** provides specific bill impacts by incremental water use and meter size.

Figure VI-6. Sample Commercial Bill Impacts by Meter Size and Water Use

	5/8" meter				2" meter			4" meter		
Water		Bill with			Bill with			Bill with		
Use		Proposed	Monthly		Proposed	Monthly		Proposed	Monthly	
(HCF)	<b>Current Bill</b>	Rates	Increase	<b>Current Bill</b>	Rates	Increase	<b>Current Bill</b>	Rates	Increase	
0	\$29.52	\$38.36	\$8.84	\$236.16	\$238.44	\$2.28	\$738.00	\$1,081.66	\$343.66	
10	\$103.02	\$117.56	\$14.54	\$309.66	\$317.64	\$7.98	\$811.50	\$1,160.86	\$349.36	
20	\$176.52	\$196.76	\$20.24	\$383.16	\$396.84	\$13.68	\$885.00	\$1,240.06	\$355.06	
30	\$250.02	\$275.96	\$25.94	\$456.66	\$476.04	\$19.38	\$958.50	\$1,319.26	\$360.76	
40	\$323.52	\$355.16	\$31.64	\$530.16	\$555.24	\$25.08	\$1,032.00	\$1,398.46	\$366.46	
50	\$397.02	\$434.36	\$37.34	\$603.66	\$634.44	\$30.78	\$1,105.50	\$1,477.66	\$372.16	
100	\$764.52	\$830.36	\$65.84	\$971.16	\$1,030.44	\$59.28	\$1,473.00	\$1,873.66	\$400.66	
200	\$1,499.52	\$1,622.36	\$122.84	\$1,706.16	\$1,822.44	\$116.28	\$2,208.00	\$2,665.66	\$457.66	
300	\$2,234.52	\$2,414.36	\$179.84	\$2,441.16	\$2,614.44	\$173.28	\$2,943.00	\$3,457.66	\$514.66	
400	\$2,969.52	\$3,206.36	\$236.84	\$3,176.16	\$3,406.44	\$230.28	\$3,678.00	\$4,249.66	\$571.66	
500	\$3,704.52	\$3,998.36	\$293.84	\$3,911.16	\$4,198.44	\$287.28	\$4,413.00	\$5,041.66	\$628.66	

## **EXHIBIT B**

## ARTICLE II. WATER SERVICE AND FACILITIES CHARGES

## Sec. 38.5. WATER SERVICE CHARGE:

- <u>A</u>. In addition to all other charges and fees applicable to users of water from the water system owned or operated by the City of Redwood City, as established by the Water Rules and Regulations of the Public Works Services Department, as amended, and this chapter, residential and non-residential water service charges shall be paid for <u>by</u> each <u>parcel receiving</u> water service provided by the City at the rates <u>set forth in this Section</u>: adopted by ordinance or resolution of the City Council.
- (a) Residential Basic Water Service Charge. A monthly water service charge per dwelling unit equivalent ("DUE") for residential customers, irrespective of whether such service is furnished through a single meter for multiple dwelling units or through individual meters for each dwelling unit, is hereby established as follows:

Service Charge per DUE* Per Month	
Effective Date:	08/01/16
	<del>\$25.39</del>
Effective Date:	<del>07/01/17</del>
	<del>\$27.38</del>
Effective Date:	07/01/18
	<del>\$29.52</del>

## \* DUEs shall be determined as follows:

- (i) A single-family residence consisting of one (1) independent dwelling unit on a parcel of property shall be deemed 1 DUE; and
- (ii) Multi-family residences, consisting of more than one (1) dwelling unit on a parcel of property shall be deemed to consist of the number of DUEs derived from applying the following conversion table.

## **Multi-Family Dwelling Unit Equivalent Conversion Schedule**

Residential	Conversion
<del>Dwelling</del>	<del>Schedule</del>
<u>Units</u>	<del>Per Residential</del>
	Dwelling Unit
Up to 9	1 DUE
<del>10 to 59</del>	0.75 DUE
60 or more	0.50 DUE

(b) Non-Residential Basic Water Service Charge. Monthly water service charges for water service to non-residential customers are hereby established as follows and are calculated based on the size of each meter served by the City:

## Service Charges Per Meter Category Per Month

Meter	Effective Date:	Effective Date:	Effective Date:
Sizes **	<del>08/01/16</del>	<del>07/01/17</del>	<del>07/01/18</del>
<del>5/8-inch</del>	<del>\$25.39</del>	<del>\$27.38</del>	<del>\$29.52</del>
3/4-inch	<del>38.09</del>	<del>41.07</del>	44.28
1-inch	63.48	68.45	<del>73.80</del>
<del>1-1/2-inch</del>	<del>126.95</del>	<del>136.90</del>	<del>147.60</del>
2-inch	<del>203.12</del>	<del>219.04</del>	<del>236.16</del>
3-inch	<del>380.85</del>	<del>410.70</del>	442.80
4-inch	634.75	<del>684.50</del>	<del>738.00</del>
Over 4-inch	<del>1,269.50</del>	<del>1,369.00</del>	<del>1,476.00</del>

- (c) Manifold Meters. The service charge for a manifold meter installation shall be the sum of the applicable individual meter service charges for each such installation.
- (d) Fire Meter Service Charge. Monthly charges for water service furnished to fire service connections for the corresponding fire connection sizes after the effective date are hereby established as follows:

Fire Meter Service Sizes	
1 inch	<del>\$16.00</del>
2 inch	<del>32.00</del>
3 inch	48.00
4 inch	64.00
6 inch	96.00
8 inch	<del>128.00</del>
10 inch	<del>160.00</del>
12 inch	192.00

Fire meters are not a part of a regular meter billing system and are only billed when the usage is registered.

## (e) [Reserved]

(f) Water Quantity Charges. In addition to the monthly basic charges set forth in subdivisions (a) and (b) of this Section, each customer shall be charged consumption rates, based on meter readings, for each hundred cubic feet ("water unit") of water delivered by the City to customer premises in accordance with the following schedules:

Residential Water	Quantity	v Charges	_Potable
<del>Nesidential Water</del>	<del>Quantit</del>	<del>y onarges</del>	<del>i otabic</del>

Monthly	Tier	Charge per	Charge per	Charge per
Consumption		Water	Water	Water
Ranges		Unit Effective	Unit Effective	Unit Effective
(Water Unit)		<del>08/01/2016</del>	<del>07/01/2017</del>	<del>07/01/2018</del>
1-4	4	<del>\$5.27</del>	<del>\$5.68</del>	<del>\$6.13</del>
<del>5—10</del>	2	<del>6.32</del>	<del>6.82</del>	<del>7.35</del>
<del>11—20</del>	3	8 <del>.77</del>	<del>9.46</del>	<del>10.20</del>
21 and above	4	<del>11.57</del>	<del>12.47</del>	<del>13.45</del>

Ranges are stated on a per DUE per month basis. The ranges stated above shall be multiplied by the number of DUEs served and by the number of months in the billing period.

## Commercial Water Quantity Charges—Potable

	<del>Tier</del>	Charge per	Charge per	Charge per
		<del>Water</del>	<del>Water</del>	<del>Water</del>
		Unit Effective	Unit Effective	Unit Effective
		<del>08/01/2016</del>	<del>07/01/2017</del>	<del>07/01/2018</del>
All Water Use	_	<del>\$6.32</del>	<del>\$6.82</del>	<del>\$7.35</del>

## **Landscape Irrigation Water Quantity Charges—Potable**

Portion of Water Budget	Charge per Water Unit Effective	Charge per Water Unit Effective	Charge per Water Unit Effective
	<del>08/01/2016</del>	<del>07/01/2017</del>	<del>07/01/2018</del>
<del>0—100%</del>	<del>\$6.32</del>	<del>\$6.82</del>	<del>\$7.35</del>
<del>101—200%</del>	8 <del>.77</del>	9.46	<del>10.20</del>
<del>)201%</del>	<del>11.57</del>	12.47	<del>13.45</del>

Potable Landscape Water Quantity Charge Tiers are based on a 'water budget' calculated according to the City's 'water budget methodology', which is available at www.redwoodcity.org/utilityrates.

## Water Quantity Charges—Recycled Water

	Charge per Water	Charge per Water	Charge per Water
	Unit Effective	Unit Effective	Unit Effective
	<del>08/01/2016</del>	<del>07/01/2017</del>	<del>07/01/2018</del>
All Water Use	<del>\$6.32</del>	<del>\$6.82</del>	<del>\$7.35</del>

(g) <u>B.</u> Bi-Monthly Billing. Water meters or classes of water meters may be read bimonthly, and the corresponding billing period shall be for a two-month period.

- (h) After-Hour Turn-on Fee. The fee for direct costs associated with turning on water meters or classes of water meters during non-business hours of the Public Works Division shall be in an amount set by resolution of the City Council. When after-hour turn-on is requested by a user, this fee shall be charged and collected on the user's next ensuing utility bill.
- (i) <u>C.</u> Separate Landscape Water Meters. For all new landscapes and existing landscapes of one acre or more the installation of separate water meter is required except for single-family homes.
- (j) <u>D.</u> Submeters. For all <u>All</u> newly constructed residential buildings, where one meter is furnished by the City for more than one residential dwelling unit, shall be required to install a separate meter for each distinct dwelling unit downstream of the City water meter. Maintenance and billing for water use of submeters shall be the responsibility of the property owner.
- (k) Pass Through Provision for Wholesale Water Rates. All potable water distributed by the City through its water system is purchased by the City at wholesale from the San Francisco Public Utilities Commission. The potable water service charges set forth in subdivision (f) of this Section were calculated based on the assumption that SFPUC would set its rates to \$4.10 per unit on July 1, 2016; to \$4.28 per unit on July 1, 2017; and to \$4.68 per unit on July 1, 2018. If there are additional wholesale rate increases adopted by the SFPUC, each potable water charge, as set forth in subdivision (f) of this Section, will automatically adjust by the exact number of cents per water unit that the SFPUC increases its wholesale rate above the assumed wholesale rates set forth in this subdivision (k). The City will mail notification of any such adjustment to customers at least 30 days prior to the effective date of such automatic adjustment.

## Sec. 38.6. PAYMENT; DISCONTINUANCE OF SERVICE; PRORATION:

The water meter service charge shall be paid at the same time as the regular billing for water service based upon the amount of water consumed, and the nonpayment of the water meter service charge shall result in the discontinuance of water service under the same rules and regulations that are applicable to nonpayment of the billing for water consumed. The water meter service charge shall be prorated where water service is utilized for only a portion of a billing period.

## Sec. 38.7. WATER SERVICE ADMINISTRATION:

## A. Charges when meter is inoperative.

If a meter fails to register due to any cause except the nonuse of potable or recycled water, the charge for potable or recycled water will be estimated based on previous consumption for a comparable period or by such other method as is determined by the City. In the preparation of such averaged bills, due consideration will be given to fluctuations caused by seasonal changes or any interruption to the service known to have occurred.

## B. Charges for vacant premises.

If a property is vacant, the fixed component of the water service charge and any water used in the billing period will be billed to the active account holder on record. The account holder or authorized representative shall be responsible for notifying the City and requesting to discontinue service.

Secs. 38.78-38.9 RESERVED

## **EXHIBIT C**

## ARTICLE IV. WATER FUND

## Sec. 38.20. ESTABLISHED; REVENUES; USE OF REVENUES:

A special fund to be known as the Water Fund is hereby established. All revenues arising from the imposition of the charges and fees provided in this Chapter, and all revenues arising from the imposition of the charges and fees established by the rules and regulations (and all amendments thereto) of the Water Department of the City or such other revenues derived from the operation of water utilities owned or operated by the City as are or may be provided shall be deposited in the Water Fund. Such revenues shall be expended solely for the following purposes; provided, however, that such revenues derived from the operation of such water utilities serving water service Area 3 shall be expended exclusively for the following purposes related to said water service area: the acquisition, construction, reconstruction (including the extension or replacement of existing mains and transmission lines), maintenance, management, operation and repair of such water facilities; the payment of bond interest and principal or charges due on any bond issue (including facilities bonds, all or any portion of the proceeds of which are used for the following purposes) sold for the purpose of acquiring, constructing, or reconstructing water facilities; and for such other lawful purposes of the City as the City Council may provide from time to time. Within the Water Fund, the City shall maintain separate and segregated accounts for the revenues for each charge, rate, or fee imposed pursuant to this Chapter. The revenues from each charge, rate, or fee shall be used for the purposes for which they were imposed.

Secs. 38.21—38.24. RESERVED:

**Exhibit D** 

## **Water Service Charges**

	Effective	Effective
Fixed Service Charges	2/1/2024	1/1/2025
Single Family Residential	Bi-monthly per l	Dwelling Unit
	\$76.72	\$82.09
Multi Family Residential		
(including Residential Irrigation)	Bi-monthly រុ	oer Meter
5/8" Meters	\$76.72	\$82.09
3/4" Meters	\$105.30	\$112.67
1" Meters	\$162.46	\$173.83
1.5" Meters	\$305.38	\$326.76
2" Meters	\$476.88	\$510.26
3" Meters	\$1,262.94	\$1,351.35
4" Meters	\$2,163.32	\$2,314.75
6" Meters	\$4,592.92	\$4,914.42
8" Meters	\$8,022.96	\$8,584.57
10" Meters	\$12,024.68	\$12,866.41
Commercial		
(including Commercial Irrigation)	Monthly pe	er Meter
5/8" Meters	\$38.36	\$41.05
3/4" Meters	\$52.65	\$56.34
1" Meters	\$81.23	\$86.92
1.5" Meters	\$152.69	\$163.38
2" Meters	\$238.44	\$255.13
3" Meters	\$631.47	\$675.67
4" Meters	\$1,081.66	\$1,157.38
6" Meters	\$2,296.46	\$2,457.21
8" Meters	\$4,011.48	\$4,292.28
10" Meters	\$6,012.34	\$6,433.20

Water Use Charges	Effective	Effective
	2/1/2024	1/1/2025
Single Family Residential		
_	Per HCF	Per HCF
Tier 1 (0-10 HCF)	\$6.45	\$6.90
Tier 2 (11-14 HCF)	\$7.37	\$7.89
Tier 3 (15-20 HCF)	\$9.63	\$10.30
Tier 4 (21+ HCF)	\$14.57	\$15.59
Multi Family Residential (including	Residential Fire)	
_	Per HCF	Per HCF
All Water Use	\$7.92	\$8.47
Commercial		
(Includes Commercial, Industrial, C	ther, Municipal, Con	nmercial Fire)
_	Per HCF	Per HCF
All Water Use	\$7.92	\$8.47
Landscape Irrigation		
_	Per HCF	Per HCF
All Water Use	\$7.92	\$8.47

HCF= Hundred Cubic Feet, 748 gallons, or 1 unit

Fire Service Connections	Effective	Effective
Size	2/1/2024	1/1/2025
1"	\$17.28	\$18.49
2"	\$34.56	\$36.98
3"	\$51.84	\$55.47
4"	\$69.12	\$73.96
6"	\$103.68	\$110.94
8"	\$138.24	\$147.92
10"	\$172.80	\$184.90
12"	\$207.36	\$221.88

Note: monthly rates are billed based on the size of the connection serving the property.

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Maximum Drought Rate Factors by Water Conservation Stage							
	Stage 1	Stage 2	Stage 3	Stage 4	Stage 5	Stage 6	
Customer Class	Shortage Up to 10% Reduction	Shortage Up to 20% Reduction	Shortage Up to 30% Reduction	Shortage Up to 40% Reduction	Shortage Up to 50% Reduction	Shortage Up to >50% Reduction	
Single Family	1.021	1.047	1.080	1.124	1.182	1.222	
Multi-Family	1.014	1.031	1.051	1.074	1.101	1.121	
Commercial	1.018	1.039	1.064	1.096	1.135	1.162	
Irrigation	1.046	1.118	1.250	1.571	3.420	n/a	



## **STAFF REPORT**

# To the Honorable Mayor and City Council From the City Manager

DATE: December 4, 2023

## **SUBJECT**

Informational report to City Council outlining minor technical adjustments to the City Council District 7 boundaries that will result in no changes to the composition of the districts

## **RECOMMENDATION**

Receive report prepared by the City Clerk outlining minor technical adjustments to the City Council District 7 boundaries, as required by Section 2 of Ordinance No. 2506 – City Council District Elections. Adjustments made will not result in changes to the composition of the districts. Report is for informational purposes only and no Council action is required.

#### STRATEGIC PLAN GUIDING PRINCIPLE

**Excellence in Government Operations** 

#### **BACKGROUND**

On May 20, 2019, the City Council adopted <u>Ordinance 2463</u> adding Section 2.27.7 to Chapter 2, Article I "District Elections Ordinance" to the Redwood City Code establishing seven districts for the election of City Councilmembers, and establishing boundaries and the identification number of each district.

On February 28, 2022, the City Council adopted <u>Ordinance 2506</u> amending Section 2.27.7, Chapter 2, Article I (City Council District Elections) of the Redwood City Code to establish new City Council district boundaries and Identification number of each district using 2020 Federal Census data.

Both ordinances stipulate that the City Clerk is authorized to make technical adjustments to the district boundaries that do not substantively affect the populations in the districts, the eligibility of candidates, or the residence of elected officials within any district, and must advise the City Council of the adjustments.

## 9.A. - Page 2 of 6

It was recently brought to the City's attention by the County of San Mateo Elections Office and the Local Agency Formation Commission (LAFCo) that three parcels identified in the approved 2022 district elections map as being within unincorporated Redwood City (County of San Mateo) jurisdiction, should be included in incorporated Redwood City. Upon further analysis, it was found that the parcels were annexed to Redwood City in the 1950s (Ordinance 643 and Ordinance 730), prior to the formation of LAFCo, and the City had in fact been treating the parcels as being within jurisdictional boundaries for permitting purposes. As such, the current district elections map, specifically for District 7, requires technical adjustments to include these three additional parcels for voting purposes.

#### **ANALYSIS**

The three parcels in question are:

- APN 058253320 635 Upland Rd
- APN 058253190 340 Alameda de las Pulgas
- APN 085253310 344 Alameda de las Pulgas

As prescribed in Ordinance 2506, the City Clerk consulted with the City Manager and City Attorney, and confirmed with appropriate staff that the parcels do belong within Redwood City's jurisdiction based on past Council action and permitting history. The City, the County of San Mateo Elections Office, and LAFCo agree that this was an error requiring technical adjustments. Furthermore, these technical adjustments to the district boundaries do not substantively affect the populations in the districts, the eligibility of candidates, or the residence of elected officials within any district.

Subsequently, the City Clerk arranged for the minor revisions to be made to the district map (Attachment A) and directed the City's demographer to provide a metes and bounds description of each district. In this case, it was determined that no changes to the metes and bounds description for District 7 were required, as the current language will still accurately represent the district's composition after the adjustments are made.

As the requirements under <u>Ordinance 2506</u> have been met, the City Clerk will submit the revised district map to the County of San Mateo (County) in order for the added parcels to be included in voting District 7 for future elections.

Finally, the County Assessor's Office has notified the City that adjustments may be necessary for the Tax Rate Areas of both the City and the unincorporated County. The County has committed to collaborating with the LAFCo and the Board of Equalization (BOE) to determine if any modifications are required. If changes are deemed necessary, the City will actively work with all parties involved to finalize the process. This report is for informational purposes only and no Council action is required.

## 9.A. - Page 3 of 6

## **EQUITY IMPACT STATEMENT**

As this is a technical clarification to the district election boundary map, an Equity Impact Statement does not apply. However, equity and inclusion elements were considered in the development of the City Council voting districts during the City's redistricting process.

#### **FISCAL IMPACT**

There is no fiscal impact associated with this report.

#### **ENVIRONMENTAL REVIEW**

This activity is not a project under California Environmental Quality Act (CEQA) as defined in CEQA Guidelines, section 15378, because it has no potential for resulting in either a direct or reasonably foreseeable indirect physical change in the environment.

#### **PUBLIC NOTICE**

Public notification was achieved by posting the agenda, with the agenda items being listed, at least 72 hours prior to the meeting. On November 27, courtesy letters were mailed to the property owners of the three parcels to notify them of the jurisdictional boundary changes.

### **ALTERNATIVES**

None. This report is for informational purposes only and no Council action is required.

## **ATTACHMENTS**

Attachment A – Revised district election map adding 3 parcels to District 7

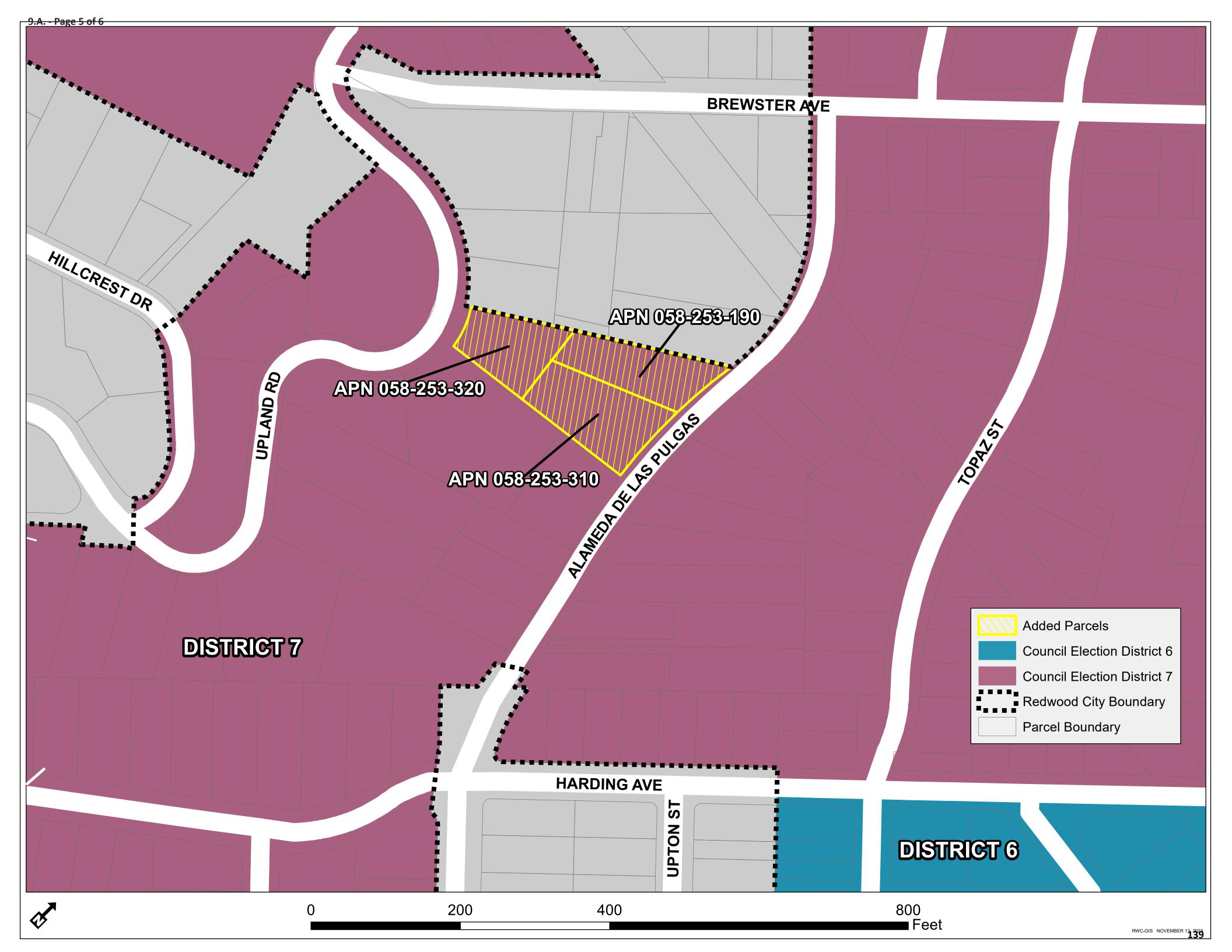
## **REPORT PREPARED BY:**

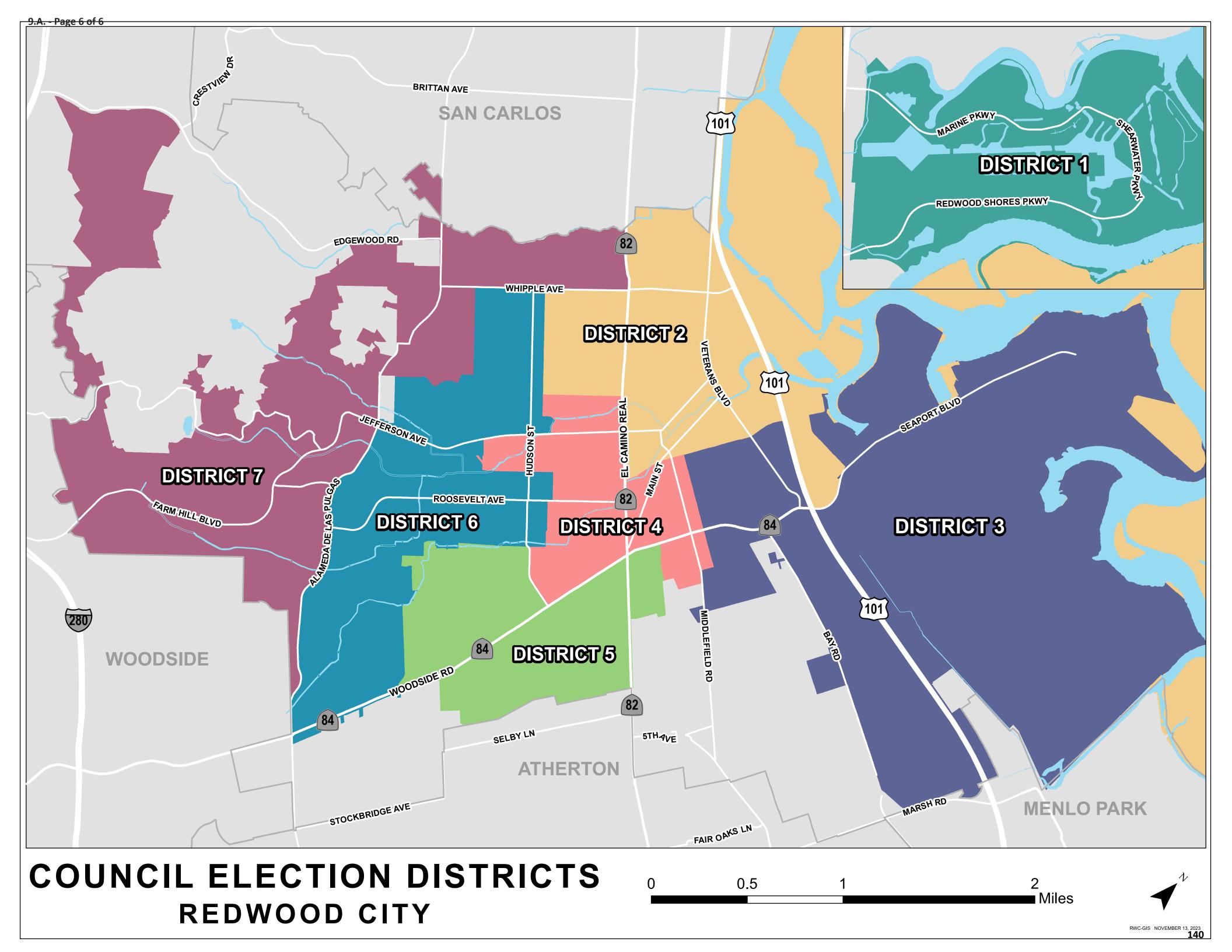
Yessika Castro, City Clerk ycastro@redwoodcity.org (650) 780-7221

## 9.A. - Page 4 of 6

## **APPROVED BY:**

Melissa Stevenson Diaz, City Manager





<b>ORDI</b>	<b>NANCE</b>	NO.	

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF REDWOOD CITY AMENDING ARTICLE II (WATER SERVICE AND FACILITY CHARGES) AND ARTICLE IV (WATER FUND) OF CHAPTER 38 OF THE REDWOOD CITY MUNICIPAL CODE, UPDATING THE CITY'S WATER SERVICE CHARGES, AMENDING RESOLUTION NO. 14648, AND RESCINDING RESOLUTION NO. 15446

**WHEREAS**, the Redwood City Municipal Code Chapter 38 (Water System Regulations), Article II (Water Service and Facilities Charges) imposes water service charges on all customers of the City of Redwood City's ("City") water system; and

**WHEREAS**, the City reviewed its water rates to determine if they are adequate over time to pay for the anticipated increase in wholesale water costs, ongoing maintenance and replacement projects, ongoing operations costs, and any planned capital projects; and

**WHEREAS**, the City submitted a Water Rate Cost-of-Service Study dated October 11, 2023 ("Water Rate Study"), which recommends a revised water rate schedule for Fiscal Years 2023-24 and 2024-25. The Water Rate Study is attached hereto as **Exhibit A** and hereby incorporated by reference; and

WHEREAS, pursuant to the provisions of Article XIII D, Section 6, of the California Constitution ("Proposition 218"), prior to extending, imposing or increasing water rates, property owners shall be provided at least 45 days' notice of a public hearing to consider such modifications to the water rates together with an explanation of: (1) the amount of the proposed rates, (2) the basis on which the rates are calculated, (3) the reason for the rate modifications, and (4) the date, time and place of a public hearing to consider the rate modifications, together with an explanation of the rights of property owners to submit written protests to the proposed rate modifications. The proposed rate modifications may not be imposed if, prior to the close of the public hearing, written protests are submitted by a majority of the parcels subject to the modified rates ("majority protest"); and

**WHEREAS**, notice of the public hearing to consider proposed adjustments to the water rates was mailed to customers of record in accordance with Proposition 218; and

**WHEREAS**, the mailed notice of public hearing included a statement that there is a 120-day statute of limitations for challenging the water rates should the proposed water rates be adopted; and

**WHEREAS**, on December 4, 2023, the City Council conducted a public hearing, considered testimony, and at the conclusion of the hearing determined that a majority protest did not exist; and

**WHEREAS**, Government Code section 53756 allows public utility providers to adopt a schedule for inflation and wholesale rate pass-throughs provided they do not apply for more than five-years and that the utility provider gives 30 days written notice to ratepayers each time a pass-through is implemented; and

**WHEREAS**, on June 6, 2005, the City Council adopted Resolution No. 14648, which established a reserve for the Water Enterprise of \$2 million; and

**WHEREAS**, on December 12, 2016, the City Council adopted Resolution No. 15446, which established a revised policy for the pricing of recycled water intended to encourage retrofits of plumbing systems for the continued use of recycled water, and since the policy was adopted, recycled water has become a desirable commodity sought out by the community; and

**WHEREAS**, the water rates are "exempt charges," within the meaning of Section 1 of Article XIII C of the California Constitution and the Taxpayer Protection and Government Accountability Act (Initiative No. 21-0042) because they are charges that are imposed in accordance with and subject to Article XIII D of the California Constitution.

## NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF REDWOOD CITY DOES ORDAIN AS FOLLOWS:

<u>Section 1</u>. The above recitals are true and correct, and incorporated herein by reference and each is relied upon independently by the City Council for its adoption of the Ordinance.

Section 2. The Ordinance has been reviewed with respect to applicability of the California Environmental Quality Act ("CEQA") and the CEQA Guidelines. The Ordinance is not a project under CEQA Guidelines Section 15378(b)(4) because the Ordinance does not have the potential for resulting in either a direct physical change in the environment, or a reasonably foreseeable indirect physical change in the environment, as the Ordinance creates government funding mechanisms which do not involve any commitment to any specific project. The Ordinance is also exempt from CEQA as there is no possibility for causing a significant effect on the environment, per CEQA Guideline Section 15061(b)(3). No specific water projects are associated with this Ordinance. The Ordinance is policy-oriented and would create a funding mechanism for the development of future water facilities. When and if specific water projects are developed and proposed for implementation, the environmental impacts of such facilities would be evaluated in accordance with CEQA and City practice.

<u>Section 3</u>. The City Council of the City of Redwood City hereby adopts the following Redwood City Municipal Code amendments, by adding the text shown in underline (<u>example</u>) and deleting the text shown in strikeout (<u>example</u>), as shown below. Wording in brackets ([example]) is informational only and is not to be included in the published ordinance.

- A. Article II of Chapter 38 of the Redwood City Municipal Code is hereby retitled and amended as set forth in **Exhibit B**; and
- B. Article IV of Chapter 38 of the Redwood City Municipal Code is hereby amended as set forth in **Exhibit C**.
- <u>Section 4</u>. The City Council finds and determines that, based on the entire record before the City Council, including but not limited to the Water Rate Study and the Staff Report and attachments thereto:
  - (1) Revenues derived from the proposed water rates will not exceed the funds required to provide water service, respectively.
  - (2) Revenues derived from the proposed water rates will not be used for any purpose other than that for they were imposed.
  - (3) The amount of the water rates imposed upon any parcel or person as an incident of property ownership will not exceed the proportional cost of the service attributable to the parcel.
  - (4) The water rates are imposed for a service or services that are actually used by, or immediately available to, the owner of the property in question.
  - (5) The water rates are not being imposed for general government services.
- <u>Section 5</u>. The City Council hereby approves and adopts the Water Rate Study attached hereto as **Exhibit A**, which sets forth the basis for the Water Rates.
- <u>Section 6</u>. The City Council finds that the procedures followed and the water rates referenced herein are in compliance with the California Constitution Article XIII D, Government Code section 53755, and Health and Safety Code section 5471.
- <u>Section 7</u>. The City Council hereby adopts the water rate schedules in **Exhibit D** attached hereto and incorporated herein by this reference.
- <u>Section 8</u>. The Water Rates for Fiscal Year 2023-24 will be effective as of February 1, 2024, and the water rates for Fiscal Year 2024-25 will be effective on January 1, 2025.
- **Section 9**. Any San Francisco Public Utility Commission ("SFPUC") increases for wholesale water rate increases, management charges or other charges implemented by the SFPUC prior to January 1, 2027, exceeding \$5.21/hcf may be passed through to water ratepayers, by including the increases in water rates. Pursuant to Government Code section 53756(d), notice must be given at least thirty (30) days prior to any water rate adjustment occurring pursuant to the adopted water rate schedule or as a result of the pass through of SFPUC wholesale rate increases.

- <u>Section 10</u>. The Water Rates, set forth in **Exhibit D**, may be amended from time to time by ordinance or resolution of the City Council.
- <u>Section 11</u>. The City Council hereby amends Resolution No. 14648, and approves and adopts a policy to maintain the following Water Enterprise reserve target. The operating reserve component will equal 25% of annual operations and maintenance (O&M) expenses. The capital reserve component will include \$2 million to provide working capital for pay-as-you-go construction projects.
- <u>Section 12</u>. Resolution No. 15546 adopting a policy for the pricing of recycled water is hereby rescinded.
- <u>Section 13</u>. If any provision, section, paragraph, sentence or word of this Ordinance, or the application thereof to any person or circumstance, is rendered or declared invalid by any court of competent jurisdiction, the remaining provisions, sections, paragraphs, sentences or words of this Ordinance, and their application to other persons or circumstances, shall not be affected thereby and shall remain in full force and effect and, to that end, the provisions of this Ordinance are severable.
- **Section 14**. This Ordinance shall become effective thirty days after the date of its adoption.
- **Section 15**. The City Clerk is directed to cause this Ordinance to be published in the manner required by law.

\* \* \*



# CITY OF REDWOOD CITY

Water Rate Cost-of-Service Study

Final Report October 11, 2023



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ATTY/ORD.0016/CC ORD ADOPTING WATER RATES - EXHIBIT A (ALT) REV: 12-04-23 MI Page 2 of 76

### **CITY OF REDWOOD CITY**

1017 Middlefield Road Redwood City, CA 94063



## **WATER RATE COST-OF-SERVICE STUDY**

October 11, 2023

## **HF&H CONSULTANTS, LLC**

590 Ygnacio Valley Rd, Suite 105 Walnut Creek, CA 94596



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October 11, 2023

Terence Kyaw Public Works Director City of Redwood City 1400 Broadway Redwood City, CA 94063

Subject: Water Rate Cost-of-Service Study – Final Report

Dear Terence Kyaw:

HF&H is pleased to submit this cost-of-service report to the City of Redwood City (City). The previous rate study was completed in 2016. The current study makes the following recommendations.

- Revenue increases. Rate increases are recommended due to increases in the cost of purchased water from the San Francisco Public Utilities Commission (SFPUC) and the need to fund capital improvements, including ongoing repairs and replacements of aging infrastructure. The cost of SFPUC water is nearly 40% of the annual revenue requirement the largest single expense. Wholesale water rates have increased 27% since 2018 when rates were last increased. Wholesale rates are projected to increase an additional 8% during the five-year planning period (Study Period). The impact of these significant increases in wholesale rates on the revenue requirements over the Study Period cannot be overstated. While the City had the ability to pass through prior, unplanned increases to wholesale rates, this mechanism was never employed. In addition, rate increases are needed to allow the City's Water Enterprise Fund to continue compliance with debt service requirements, to avoid operational cost increases, and the depletion of reserves. Over the next two years, the recommended revenue increases are 8% and 7%.
- **Service Charge rate structure modifications.** We recommend changes to the rate structures applied to Multi Family Residential customers to align with industry practice. The City's approach to treating all water, whether potable or recycled, as one system portfolio, allows for the consolidation of customer classes, affecting both the service charges and the water use charges.
- Water Use Charge rate structure modifications. The proposed Single Family Residential tiered
  rates are restructured based on projected single-family residential demand patterns, which results in adjustments to the current tier breakpoints. We recommend changes to the rate structures applied to Multi Family Residential customers to align with industry practice. We recommend all non-single family residential customers are charged a uniform Water Use Charge rate.
- **Drought Rate Revenue Stabilization Factors (Drought Rate Factors).** The drought rate factors can be adopted as part of the Proposition 218 process. Customer class drought rate factors are applied to the corresponding Water Use Charge rate(s) so that the City can maintain revenue neutrality during drought conditions when customers are required to reduce water use.
- Pass-through Adjustment. We recommend that the City incorporate annual pass-through adjustments of the SFPUC water purchase cost into its water use charge rates. Water use charge rates

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can be adjusted to track any difference between the SFPUC rates that were included in the analysis and the actual rates adopted each year by SFPUC.

The rates proposed in this report reflect the current and projected cost of providing service for the next two years. We greatly appreciate your assistance in developing the cost-of-service analysis.

Sincerely,

HF&H CONSULTANTS, LLC

Rick Simonson Senior Vice President

ATTY/ORD.0016/CC ORD ADOPTING WATER RATES - EXHIBIT A (ALT)
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## **GLOSSARY**

AMI - advanced metering infrastructure.

**AWWA** – American Water Works Association.

**BAWSCA** – Bay Area Water Supply and Conservation Agency.

**Breakpoint** – The volume of water per billing period separating tiers in tiered rate structures.

City – City of Redwood City and/or the City's Water Enterprise

**CCF** – Hundred cubic feet (see HCF below).

**CIP** - Capital Improvement Program.

**Commercial** – Refers to commercial, industrial, and municipal accounts served by the City. Includes all commercial, industrial, municipal, fire, other, and recycled water customers under the proposed Water Use Charge rates.

**Commercial/Multi Family** – Refers to all non-single family residential customers for the purposes of performing the cost-of-service analysis.

**Drought Rate Factors** – Factors applied to Water Use Charge Rates to stabilize revenue to meet the City's water revenue requirement during periods of conservation when there are significant reductions in water usage, and hence in water revenues.

**DU** – Dwelling Unit, in reference to the number of physical residences served by a Single Family Residential or Multi Family Residential meter.

**EDU** – Equivalent Dwelling Unit, (also referred to as Dwelling Unit Equivalent or (DUE) in the City's municipal code) in reference to the current Multi-Family Residential rate structure which calculates EDUs based on the number of total dwelling units served by one meter.

**EMU** – Equivalent Meter Unit.

FY - Fiscal Year.

**Flat rates** - Fixed charges per account that do not vary based on metered water use. Flat rates are found in unmetered water systems and in wastewater rates. Flat rates are not uniform rates (see below).

**GPD** - Gallons Per Day.

**HCF** - Hundred cubic feet of metered water; 748 gallons; a cube of water 4.6 feet on edge. One HCF per month is about 25 gallons per day.

**Irrigation** – Refers to the current Landscape Irrigation customer class. Includes all potable and recycled water commercial irrigation customers under the proposed rate structure.

**Meter charges** - One-time charges for the purchase of a meter. Meter charges are not Service Charges (see below).

**Multi Family Residential** – Refers to the current Multi Family Residential customer class. Includes all multifamily customer accounts, residential fire service accounts, residential irrigation, and future residential recycled water customers under the proposed Water Use Charge rates.

**O&M** - Operating and Maintenance, in reference to the costs of running facilities.

**PAYGo** - Pay-As-You-Go, in reference to funding capital improvements from cash rather than from borrowed sources such as bonds or loans.

**RWS** – Regional Water System

**Service Charges** – Fixed charges paid per account regardless of the amount of water used. The charge is proportionate to the capacity of the customer's service, which is the capacity of the pipe connecting from the main to the meter, or the meter, whichever is smaller. This is not applicable to fire services, which are charged according to the size of the connecting pipe, only. Service Charges are not meter charges (see above). The City's Service Charges are called "Fixed Service Charges."

SFPUC - San Francisco Public Utilities Commission.

**Study Period** – five-year planning period analyzed in this study, which includes fiscal year 2023-24 to fiscal year 2027-28

**SVCW** – Silicon Valley Clean Water, a Joint Powers Authority serving the communities of Belmont, Redwood City, San Carlos, and the West Bay Sanitary District.

**Uniform rates** - Constant charges per unit of water use that do not change depending on the amount used. Uniform rates are not flat rates (see above).

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Water Use Charge Rates – The product of rates per unit of metered water use multiplied by a customers metered water use during the billing period.

WSCP - Water Shortage Contingency Plan.

### **ACKNOWLEDGEMENTS**

#### City Council

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### **LIMITATIONS**

This document was prepared solely for the City of Redwood City in accordance with the contract between the City and HF&H and is not intended for use by any other party for any other purpose.

In preparing this study, we relied on information from the City, which we consider accurate and reliable. Our analysis is based on the best available information at the time of the study.

Rounding differences caused by stored values in electronic models may exist.

This document represents our understanding of relevant laws, regulations, and court decisions but should not be relied upon as legal advice. Questions concerning the interpretation of legal authorities referenced in this document should be referred to a qualified attorney.

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## **WATER RATE COST-OF-SERVICE STUDY**

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### I. EXECUTIVE SUMMARY

#### **BACKGROUND**

The City operates and maintains a potable and recycled water distribution system to serve its water users. It is a complex system with varying topography and separate but interconnected pressure zones. As of this study, the City serves 24,479 connections within its service area. The City's water service area covers approximately 17 square miles. The City purchases all its potable water from the San Francisco Public Utilities Commission (SFPUC) Regional Water System (RWS) and is a member of Bay Area Water Supply and Conservation Agency (BAWSCA). The City has also been supplying recycled water to its customers since 2000. As a member of Silicon Valley Clean Water (SVCW), the City receives disinfected tertiary-treated, recycled water for reuse. The infrastructure network includes 259 miles of water mains, 12 active storage reservoirs, 10 booster pump stations, and various assets, such as water meters, fire hydrants, and valves<sup>1</sup>. The SFPUC delivers treated wholesale water to the City from its RWS. This water is delivered through thirteen master meter locations from the SFPUC's transmission pipelines. From these connections, the City reduces pressure and pumps to deliver water to its customers.

The water rates in this study were developed using rate-making principles set forth by the American Water Works Association (AWWA) in *Principles of Water Rates, Fees and Charges* (M1 Manual). This Manual's cost-of-service principles endeavor to distribute costs to customer classes (also referred to as classes) and to individual customers in proportion to customers impacts on the water system. Pursuant to the M1 Manual, rate studies generally contain three elements: (1) a revenue requirements analysis, which determines how much revenue is needed from rates to recover a utility's projected costs; (2) a cost-of-service analysis, which allocates the revenue requirements to the rate components; 2 and (3) a rate design analysis, which determines any modifications that are required to align the rate structure with the cost of service.

Rate studies always include a revenue requirements analysis. A cost-of-service analysis is typically only conducted periodically. It is recommended that a cost-of-service analysis be conducted at least every five years to account for any material differences in the costs of providing service and in the water usage among customer classes, which will affect their respective shares of the cost of service. The City last conducted a cost-of-service study in 2016.

The City requested HF&H to conduct a cost-of-service study to analyze a period of five years (Study Period). However, the City plans to develop a Recycled Water Master Plan that is estimated to be adopted in 2025. While five years of analysis are reported, the projections will likely change due to the Recycled Water Master Plan. Therefore, the City is electing to set water rates for two years and plans to conduct a a second rate study to set rates for FY 2025-26 and future years.

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<sup>&</sup>lt;sup>1</sup> 2020 Urban Water Management Plan City of Redwood City published June 2021.

<sup>&</sup>lt;sup>2</sup> The cost-of-service analysis in the current study tailors the base/extra capacity method to account for unique conditions, circumstances, and factors related to the City's cost of providing water service, which the M1 Manual does not specifically address. The adjustments to the M1 base/extra capacity method of allocating costs are described in more detail in Chapter IV.

Since the previous cost-of-service analysis, changes in demand patterns among customer classes has occurred, which affects the factors that are used to allocate costs. The costs to which the allocation factors are applied also change. Hence, there will be differences between the previous and current cost-of-service analyses. Adjustments are made to reflect the differences and rates are set accordingly.

The cost-of-service analysis proportionately allocates the revenue that is required from rates to the components of the rate structure and to the customer classes. Costs are classified corresponding to the function they serve. Each function's costs are further allocated to each component of the rates in proportion to the level of service required by customers. The levels of service are related to volumes of peak and non-peak demand, infrastructure capacity, and customer service. Ultimately, a cost-of-service analysis ensures that the rates yield charges that are proportional to the cost of providing service to each customer.

The following discussion summarizes HF&H's findings and recommendations.

## **REVENUE REQUIREMENTS**

The revenue requirements were updated to reflect projected customer demands and the costs associated with meeting those demands. The five-year projections are shown in **Figure I-1**.

Over the Study Period, the City's revenue requirement is driven by increases to water purchase costs and capital improvement expenditures. The City's water supply source, SFPUC, intends to raise rates from \$5.21 per hundred cubic feet (HCF)<sup>3</sup> to \$5.63 per HCF over the next five years. On July 1 2022, wholesale rates increased from \$4.10 to \$4.75 per HCF. Rates were increased from \$4.75 to \$5.21 per HCF, on July 1, 2023. Increases to the wholesale rates augment the water purchase expenses over the Study Period. The City's capital improvement plans include an average annual expense of \$13.2 million over the projection period, demonstrating the City's priority to continue to invest in its water system. The bulk of project expenditures are planned to support water main replacement, as well as storage and pumping infrastructure.

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<sup>&</sup>lt;sup>3</sup> HCF (Hundred Cubic Feet) = 748.052 gallons

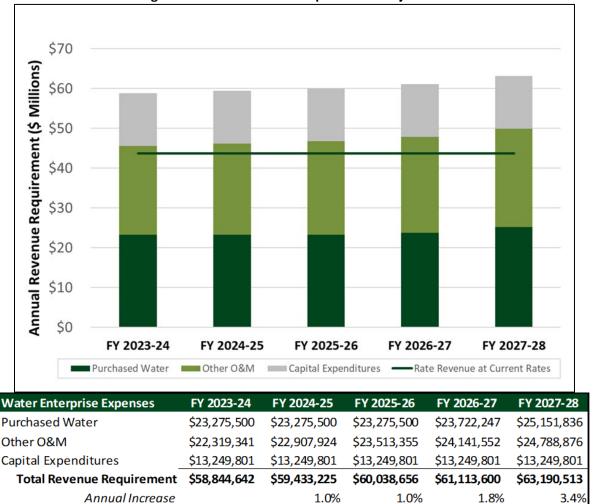


Figure I-1. Total Revenue Requirement Projections

Source: Figure III-5.

The rate and revenue increases for FY 2023-24 and FY 2024-25 are shown in **Figure I-2.** The proposed rate increases would become effective on February 1, 2024 for the first year and thereafter on January 1 of each calendar year.

The fiscal year increase in revenue and rate adjustment columns typically do not match because the City implements rate increases mid-fiscal year. Thus, any changes to the rates apply to six months instead of the whole fiscal year period. In effect, the rates of one calendar year are made up of rates set in adjoining fiscal years. In FY 2023-24, the City receives a smaller increase in revenue because of the February 2024 effective date provides only five months of increased revenue instead of six months. The rate increases, beginning January 1, 2025, are applied as equal percentages across the board to all rates.

Figure I-2. Projected Revenue Increases

		Effective Date	Revenue After	Fiscal Year		
	Rate	of Rate	Rate	Increase in		
Fiscal Year	Adjustments	Adjustments	Adjustments	Revenue		
Revenue at 2	2023 Rates		\$43,671,145			
FY 2023-24	8.0%	2/1/2024	\$44,725,844	2.4%		
FY 2024-25	7.0%	1/1/2025	\$48,381,821	8.2%		

Source: Figure III-7.

As shown in **Figure 1-3**, the projected increases in the revenue requirements are balanced with the City's existing level of reserves. The City's proposed reserve policy<sup>4</sup> assumes that the target reserve balance is made up of an operating reserve component and a capital reserve component. The operating reserve component will equal 25% of annual operations and maintenance (O&M) expenses. The capital reserve component will include \$2 million to provide working capital for pay-as-you-go construction projects. The sum of these components equals the City's Reserve Target<sup>5</sup> (blue line). The projected fund balance shows the use of reserves over the Study Period. The use of reserves compensates for the need to charge larger rate increases to customers. The City has not increased rates since 2018. If current rate revenues remain unchanged, the City would require a heavier dependency on Water Enterprise Fund reserves, and reserves would be reduced significantly (dashed green line), falling below a recommended minimum threshold. However, with the proposed rate increases, the projected fund balance (green solid line) remains above the City's Reserve Target by the end of the Study Period. With these proposed rate increases, debt service coverage remains strong and improves during the five-year period. **Figure I-4** projects debt coverage with the recommended revenue increases, ensuring the City continues to meet the minimum coverage ratio of 1.20.

<sup>&</sup>lt;sup>4</sup> The Water Enterprise Fund has a formal policy of maintaining two million in reserves. The proposed reserve policy will be recommended for adoption via resolution to Council.

<sup>&</sup>lt;sup>5</sup> In this study, the City has assumed a working reserve policy that is greater than its existing policy. City staff plans to recommend the working reserve policy be adopted. The proposed reserve policy assumes 25% of annual O&M expenses and \$2 million for capital projects. These reserve levels are in line with the City's existing policies and industry standards.

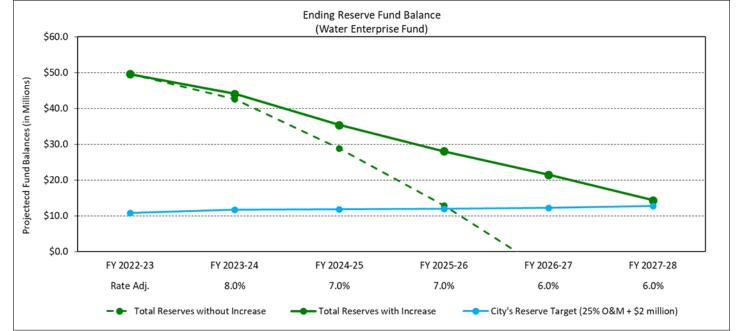


Figure I-3. Projected Year-End Fund Balance

Source: Figure III-9.

Note: City's Reserve Target is a proposed policy, recommended by City staff.

Figure I-4. Debt Service Coverage

Tigare 1 41 Best Service Coverage					
	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28
Rate Revenue w/Increases	\$44,725,844	\$48,381,821	\$51,768,548	\$55,124,751	\$58,432,236
Non-Operating Income	\$1,345,179	\$1,399,218	\$1,456,936	\$1,512,329	\$1,571,375
Interest Income	\$466,259	\$395,566	\$315,899	\$246,471	\$178,036
Total Funds Available	\$46,537,282	\$50,176,605	\$53,541,383	\$56,883,551	\$60,181,647
O&M Expenses	(\$38,979,812)	(\$39,482,090)	(\$40,004,436)	(\$40,994,442)	(\$42,989,092)
Net Revenue	\$7,557,470	\$10,694,514	\$13,536,947	\$15,889,109	\$17,192,555
Debt Service	\$3,969,863	\$3,976,813	\$3,978,163	\$3,978,913	\$3,974,463
Debt Coverage Ratio	1.90	2.69	3.40	3.99	4.33

Source: Figure III-8.

#### RATE STRUCTURE

#### **Current Rate Structure**

The City's current rate structure is composed of two components: Service Charges and Water Use Charges.

#### **Current Service Charges**

The Service Charges <sup>6</sup> are fixed rates that are charged on a dwelling unit basis for Residential (single family and multi-family residences) customers and on a fixed rate graduated in proportion to the capacity of the

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<sup>&</sup>lt;sup>6</sup> The service is the connection between the public water system and the property served. The service includes the pipes, valves, and meter set (i.e., box, lid, yoke, meter, valve); in some cases, there are multiple meters. The service

service provided for Non-Residential (commercial, municipal, industrial, other, recycled water, and irrigation) customers. Residential customers are billed on a bi-monthly<sup>7</sup> basis by dwelling unit (DU) or equivalent dwelling unit (EDU) while non-residential, Commercial and irrigation customers are billed on a monthly basis. **Figures I-5 and I-6** summarizes the current Service Charges and Fire Service Charges.

**Figure I-5. Current Service Charges** 

Service Charges					
Customer Class Current Rates					
Single Family Residential	Bi-monthly per DU				
	\$59.04				
Multi Family Residential	Bi-monthly per EDU				
5/8" Meters	\$59.04				
3/4" Meters	\$59.04				
1" Meters	\$59.04				
1.5" Meters	\$59.04				
2" Meters	\$59.04				
3" Meters	\$59.04				
4" Meters	\$59.04				
6" Meters	\$59.04				
8" Meters	\$59.04				
10" Meters	\$59.04				
Commercial (including Landscape Irrig	gation, Recycled Water)				
	Monthly per Meter				
5/8" Meters	\$29.52				
3/4" Meters	\$44.28				
1" Meters	\$73.80				
1.5" Meters	\$147.60				
2" Meters	\$236.16				
3" Meters	\$442.80				
4" Meters	\$738.00				
6" Meters	\$1,476.00				
8" Meters	\$1,476.00				
10" Meters	\$1,476.00				

Source: Figure IV-1.

is installed at the property owner's expense. After the meter is purchased and installed, customers pay Service Charge rates. The terminology in this report refers to the capacity of the service and the capacity of the meter interchangeably.

<sup>&</sup>lt;sup>7</sup> Bi-monthly periods assume a billing period of 60 days.

Figure I-6. Current Fire Service Charges (\$/month)

Meter Size	<b>Current Rates</b>
1" Meters	\$16.00
2" Meters	\$32.00
3" Meters	\$48.00
4" Meters	\$64.00
6" Meters	\$96.00
8" Meters	\$128.00
10" Meters	\$160.00
12" Meters	\$192.00

Source: Figure IV-2.

#### **Current Water Use Charge Rates**

The Water Use Charge Rates are the product of rates per unit of metered water use multiplied times the metered water use during the specified billing period. Water is metered in "units" of HCF of metered water use, whereby one unit or HCF equals 748 gallons. Water Use Charge rates are charged to four separate customer classes, Residential, Commercial, Landscape Irrigation, and Recycled Water customers.

For Residential customers, the Water Use Charge rates consist of four tiers that charge higher rates as the level of consumption increases. The tiers are specific to the number of equivalent dwelling units served by the parcel. Single Family Residential accounts serve one dwelling unit and are considered 1.0 EDU. Similarly, Multi Family customer accounts serving 2-9 dwelling units count each dwelling unit as 1.0 EDU. However, Multi Family customer accounts serving 10-59 dwelling units count each dwelling unit as 0.75 EDU and accounts serving more than 60 dwelling units count each dwelling unit as 0.5 EDU. The volume of water in each tier corresponds to the number of EDU calculated for each account.

For Commercial and Recycled Water customers, the Water Use Charge rate is a uniform rate<sup>8</sup> per HCF of metered water use. All customers pay the same per HCF of water use, and recycled water customers' rate is a lower rate than potable customers' rates.

For Landscape Irrigation customers, the Water Use Charge rates are based on a three-tiered, budget-based structure that charge higher rates as the level of water use relative to the customers water budget increases. **Figure I-7** reflects all current rates, excluding a recycled water discount.

All components of the rate structure were reviewed, including the composition of the customer classes, the structures of the Service Charges and Water Use Charges, and the need for Drought Rate Factors.

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<sup>&</sup>lt;sup>8</sup> This report distinguishes between *uniform* rates and *flat* rates. Uniform rates are constant charges per unit of water use that do not change depending on the amount used. Flat rates are fixed amounts that do not vary based on metered water use. Flat rates are most commonly used in unmetered water systems and for residential wastewater rates.

**Figure I-7. Current Water Use Charge Rates** 

Water Use Charges				
Single Family R	esidential			
Current Tiers	<b>Current Rates</b>			
Tier 1 (0-8 hcf)	\$6.13			
Tier 2 (9-20 hcf)	\$7.35			
Tier 3 (21-40 hcf)	\$10.20			
Tier 4 (41+ hcf)	\$13.45			
Multi Family R	esidential			
Usage	<b>Current Rates</b>			
Tier 1 (0-8 hcf)	\$6.13			
Tier 2 (9-20 hcf)	\$7.35			
Tier 3 (21-40 hcf)	\$10.20			
Tier 4 (41+ hcf)	\$13.45			
Commer	cial			
Usage	<b>Current Rates</b>			
All Water Use	\$7.35			
Landscape In	rigation			
Usage	<b>Current Rates</b>			
Under 100% Budget	\$7.35			
101%-200% Budget	\$10.20			
Over 200% Budget	\$13.45			
Recycled V	Vater			
Usage	<b>Current Rates</b>			
All Water Use	\$7.35			

Source: Figure IV-3.

#### **Proposed Service Charge Rates**

Currently, about 36% of the rate revenue is generated by the current Service Charges. For a Single Family Residential bill of average bi-monthly water use (14 HCF), the Service Charge represents nearly 39% of the total bill.

Adjustments in FY 2023-24 are recommended to re-align the Service Charge rates with the cost-of-service. Revenues from the proposed Service Charges would continue to generate 36% of the overall rate revenue. This level of revenue from Service Charges will continue to provide adequate revenue stability when combined with the relatively fixed revenue from non-seasonal (base) water demand.

The City is moving toward a methodology of one water system. Two sources of water – potable and recycled – supply the City's water system. The use of recycled water reduces the need to purchase potable water. Therefore, the City's water system can be thought of as an integrated system. As a result, all water, whether potable or recycled, will be considered as part of the same water supply portfolio. This means existing customer classes can be consolidated. We recommend the City modify the customer classes and Service Charge rate structures as follows:

- 1. Consolidate all Residential Irrigation customers under the Multi Family Residential customer class, subject to the same Multi Family Residential Service Charges and Consumption Charges.
- 2. Consolidate all Commercial Irrigation and Recycled Water customers under the Commercial customer class, subject to the same Commercial Service Charges and Consumption Charges.
- 3. Revise the Multi Family Residential Service Charge structure to a bi-monthly charge based on the meter capacity. This change in the rate structure aligns with the methodology used for Commercial Service Charges. As such, the charge is graduated in proportion to the capacity of the service and not the number of dwelling units served.

#### **Summary of Proposed Service Charge Rates**

**Figure I-8** summarizes the current and proposed rates to re-align with the cost of service. The proposed rates would become effective February 1, 2024 and January 1, 2025.

With the recommended increases and realignment to the cost-of-service, revenues from the Service Charges would increase 8.7% with twelve months of rate increase applied. The rebalancing of rates means twelve-month revenues collected from the Service Charges billed to Single Family Residential customers would increase. The revenues collected from the Service Charges billed to Commercial, Multi-Family, Irrigation, and Recycled Water (Commercia/Multi Family) would decrease. After the first year, all Service Charge rates would increase uniformly according to the recommended revenue increase of 7% (effective January 1, 2025).

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Figure I-8. Current and Proposed Service Charge Rates

	Service Charges						
Customer Class	Current	FY 2023-24 eff. 2/1/2024	FY 2024-25 eff. 1/1/2025				
Single Family Residential	Bi-monthly per DU	Bi-month	ly per DU				
	\$59.04	\$76.72	\$82.09				
Multi Family Residential							
(including Residential Irrigation)	Bi-monthly per EDU	Bi-monthly	per Meter				
5/8" Meters	\$59.04	\$76.72	\$82.09				
3/4" Meters	\$59.04	\$105.30	\$112.67				
1" Meters	\$59.04	\$162.46	\$173.83				
1.5" Meters	\$59.04	\$305.38	\$326.76				
2" Meters	\$59.04	\$476.88	\$510.26				
3" Meters	\$59.04	\$1,262.94	\$1,351.35				
4" Meters	\$59.04	\$2,163.32	\$2,314.75				
6" Meters	\$59.04	\$4,592.92	\$4,914.42				
8" Meters	\$59.04	\$8,022.96	\$8,584.57				
10" Meters	\$59.04	\$12,024.68	\$12,866.41				
Commercial							
(including Commercial Irrigation)	Monthly per Meter	Monthly p					
5/8" Meters	\$29.52	\$38.36	\$41.05				
3/4" Meters	\$44.28	\$52.65	\$56.34				
1" Meters	\$73.80	\$81.23	\$86.92				
1.5" Meters	\$147.60	\$152.69	\$163.38				
2" Meters	\$236.16	\$238.44	\$255.13				
3" Meters	\$442.80	\$631.47	\$675.67				
4" Meters	\$738.00	\$1,081.66	\$1,157.38				
6" Meters	\$1,476.00	\$2,296.46	\$2,457.21				
8" Meters	\$1,476.00	\$4,011.48	\$4,292.28				
10" Meters	\$1,476.00	\$6,012.34	\$6,433.20				

Source: Figure V-4.

**Figure I-9** summarizes the current and proposed fire service charges. The existing structure requires no adjustment. Therefore, the rates shown are based on an 8% increase applied to current rates for FY 2023-24, effective February 1, 2024, followed by a 7% increase applies to rates, effective January 1, 2025.

Figure I-9. Current and Proposed Fire Service Charge Rates

		FY 2023-24	FY 2024-25
Meter Size	<b>Current Rates</b>	eff 2/1/2024	eff. 1/1/2025
1" Meters	\$16.00	\$17.28	\$18.49
2" Meters	\$32.00	\$34.56	\$36.98
3" Meters	\$48.00	\$51.84	\$55.47
4" Meters	\$64.00	\$69.12	\$73.96
6" Meters	\$96.00	\$103.68	\$110.94
8" Meters	\$128.00	\$138.24	\$147.92
10" Meters	\$160.00	\$172.80	\$184.90
12" Meters	\$192.00	\$207.36	\$221.88

Source: Figure V-5.

#### **Proposed Water Use Charge Rates**

About 64% of the current water rate revenue is generated by the Water Use Charges.

Adjustments in FY 2023-24 are recommended to re-align the Water Use Charge rates with the cost-of-service. These adjustments would allow the City to continue to generate 64% of the overall rate revenue from the Water Use Charges. The rates will continue to provide adequate revenue stability, as the fixed revenue from the annualized winter water use provides additional revenue stability to the revenues received via the fixed Service Charges.

Based on industry practice and customer water use patterns, we recommend changes to the structure used for Water Use Charge rates assigned to Multi Family Residential customers. The recommended modification to change to a uniform rate would align the City with the Commercial rate structure. Further, the change in structure would align with other neighboring agencies, as shown in **Figure I-10**.

Figure I-10. Survey of Multi Family Water Rate Structures

Multi Family					
	Consumption				
Agency	Charges	Charges			
Redwood City (Proposed)	Meter Size	Uniform			
Belmont	Meter Size	Tiered			
Foster City	Meter Size	Tiered			
San Carlos, San Mateo (CalWater)	Meter Size	Uniform			
San Carlos (Mid-Pen)	Meter Size	Tiered			
Menlo Park	Meter Size	Tiered			
Hillsborough	Meter Size	Uniform			
Daly City	Meter Size	Tiered			
Burlingame	Meter Size	Uniform			
NCCWD	Meter Size	Uniform			
East Palo Alto	Meter Size	Uniform			
Palo Alto	Meter Size	Uniform			
Millbrae	Meter Size	Uniform			
Westborough Water District	Meter Size	Uniform			
Mountain View	Meter Size	Tiered			
San Bruno	Meter Size	Uniform			
Montara	Meter Size	Combination			
Brisbane	Meter Size	Tiered			

Source: Figure IV-4.

Changing Multi Family Use Charges to a uniform rate structure would reduce the number of customers and water use considered in tiered rate structure analysis. Based on this change and shifts in demand patterns since the last cost-of-service analysis was completed for the City, we recommend changes in the breakpoints between the tiers in the Water Use Charge structure. The recommended bi-monthly breakpoints of 8, 20, and 40 HCF would shift to 10, 14, and 20 HCF.

Since the City provides water through one integrated system of potable and recycled water, it is moving toward rates that reflect the realities of the system. As a result, all water, whether potable or recycled, will be considered as part of the same system portfolio. Along with consolidation of customer classes, we recommend revising Non-Residential rate structures. The Landscape Irrigation (Irrigation) Consumption Charge structure can be revised to a uniform rate that matches the Commercial Water Use Charge rate. Also, the Recycled Water Use Charge can be set equal to the Commercial Water Use Charge rate.

We recommend implementing Drought Rate Factors that could be applied to the Water Use Charge rates during water shortages to compensate for changes in water use and varying levels of discretionary water use among the Residential and Non-Residential customer classes. There should be a Drought Rate Factor corresponding to each reduction stage in the City's *Water Shortage Contingency Plan*, which contains conservation requirements for each stage of water shortage. The Drought Rate Factors are designed only to offset the amount of revenue shortfall caused by conservation in effect in the City during the specific water shortage stage, state mandated reductions in the level of potable water usage, or other natural disaster or event that results in a water shortage and an unforeseen drop in water demand. As such, they are revenue neutral and not a means to increase rate revenue beyond the amount that would have been generated under non-water shortage conditions.

**Figure I-11** summarizes the Drought Rate Factors that correspond to the water shortage stages in the City's *Water Shortage Contingency Plan*. The Water Use Charge rates derived in this study accounted for changes to water use driven by the current water shortage. However, if the City experiences a water shortage beyond the level of water use projected, the normal-year Water Use Charge rates would be multiplied times the corresponding Drought Rate Factor to determine the Water Use Charge rates.

For example, if customers are required to cut back 20% (a Stage 2 water shortage), a Drought Rate Factor of 1.047 would be multiplied times the then-current Water Use Charge rates that are in effect for Single Family Residential customers (summarized in **Figure I-4**). If the water shortage stage increased to 40%, a Drought Rate Factor of 1.124 would be multiplied times the then-current Water Use Charge rates. If the water shortage stage then decreased to 30%, the Drought Rate Factor would be reduced from 1.124 to 1.080.

The formula<sup>9</sup> for calculating Drought Rate Factors corresponding to other levels of cutback is provided in Chapter V of this study. The Drought Rate Factors only apply to the tiered and uniform Water Use Charge rates and not to Service Charge rates, which are independent of water demand. Revenue from Service Charges is not influenced by water demand and is therefore unaffected by conservation or fluctuations in customer demand.

Figure I-11. Drought Rate Factors

	Stage 1	Stage 2	Stage 3	Stage 4	Stage 5	Stage 6
	Shortage	Shortage	Shortage	Shortage	Shortage	Shortage
	Up to					
Class	(10% Reduction)	(20% Reduction)	(30% Reduction)	(40% Reduction)	(50% Reduction)	(55% Reduction)
Single Family	1.021	1.047	1.080	1.124	1.182	1.222
Multi-Family	1.014	1.031	1.051	1.074	1.101	1.121
Commercial	1.018	1.039	1.064	1.096	1.135	1.162
Irrigation	1.046	1.118	1.250	1.571	3.420	n/a

Source: Figure V-14.

#### **Summary of Water Use Charge Rates**

**Figure I-12** summarizes the current and proposed Water Use Charge rates. The proposed rate analysis was derived using FY 2021-22 and FY 2022-23 water demand patterns. More detail is discussed in the Demand Projections section of Section III of this report.

For the proposed, tiered Water Use Charge rates for the Residential class, the number of tiers remains the same, however the breakpoints have been adjusted. The Tier 1 breakpoint is increasing, thus, compressing the width of Tier 2. Tier 3 also compresses, reflecting the increased levels of conservation by the Single Family Residential customers. Overall, the more water a Residential customer uses, the greater the increase to the Water Use Charge portion of their bill.

<sup>&</sup>lt;sup>9</sup> Following **Figure V-13** of this study.

With the recommended increases and realignment to the cost-of-service, revenues from the Water Use Charges would increase 9.2% with twelve months of rate increase applied. The adjustments to the uniform Water Use Charge rate for the Multi Family Residential, Commercial, and Irrigation customer classes would collectively increase twelve-month revenues by more than 18% to re-align with the cost-of-service. After the first year, all Water Use Charge rates would increase uniformly according to the recommended revenue increases of 7%, effective January 1, 2025.

Figure I-12. Current and Proposed Water Use Charge Rates

Figure I-12. Current and Proposed Water Use Charge Rates							
Water Use Charges							
Single Family Residential							
<b>Current Tiers</b>	Current	<b>Proposed Tiers</b>	FY 2023-24 FY 2024-				
	Rates		eff. 2/1/2024	eff. 1/1/2025			
Tier 1 (0-8 hcf)	\$6.13	Tier 1 (0-10 hcf)	\$6.45	\$6.90			
Tier 2 (9-20 hcf)	\$7.35	Tier 2 (11-14 hcf)	\$7.37	\$7.89			
Tier 3 (21-40 hcf)	\$10.20	Tier 3 (15-20 hcf)	\$9.63	\$10.30			
Tier 4 (41+ hcf)	\$13.45	Tier 4 (21+ hcf)	\$14.57	\$15.59			
Multi	Family Res	idential (including	Residential Fire)				
Current Tiers	Current	Usage	FY 2023-24	FY 2024-25			
	Rates		eff. 2/1/2024	eff. 1/1/2025			
Tier 1 (0-8 hcf)	\$6.13	All Water Use	\$7.92	\$8.47			
Tier 2 (9-20 hcf)	\$7.35						
Tier 3 (21-40 hcf)	\$10.20						
Tier 4 (41+ hcf)	\$13.45						
Commercial - Includ							
Usage	Current	Usage	FY 2023-24	FY 2024-25			
	Rates		eff. 2/1/2024	eff. 1/1/2025			
All Water Use	\$7.35	All Water Use	\$7.92	\$8.47			
Landscape Irrigation							
Usage	Current	Usage	FY 2023-24	FY 2024-25			
	Rates		eff. 2/1/2024	eff. 1/1/2025			
Under 100% Budget	\$7.35	All Water Use	\$7.92	\$8.47			
101%-200% Budget	\$10.20						
Over 200% Budget	\$13.45						

Source: Figure V-11.

### II. INTRODUCTION

#### STUDY PURPOSE

The purpose of this study is to conduct a cost-of-service analysis that will determine rates that proportionally recover the cost of providing the City's water service. Toward that end, the cost-of-service analysis determines how much revenue should be generated by each component of the rate structure so that rate payers within each customer class are charged for their proportionate share of the cost of providing service on a parcel basis. The cost-of-service analysis is tailored specifically to the City's customer classes and the rate structures that are appropriate for each class.

#### **STUDY PROCESS**

In 2022, the City requested HF&H Consultants (HF&H) to perform a cost-of-service study to set water rates for FY 2023-24 and FY 2024-25. A ten-year analysis provided support for long-term planning. However, the City plans to develop a Recycled Water Master Plan that is estimated to be adopted in 2025. With the significant changes anticipated, the City is electing to set rates for two years. Therefore, while five years of analysis are reported, the projections will likely change due to the Recycled Water Master Plan. The City plans to conduct a a second rate study to set rates for FY 2025-26 and future years.

The primary goal of this study is to ensure that rates continue to reflect the current cost of providing water service. A comprehensive rate study comprises three steps: 1) revenue requirement projections; 2) cost-of-service analysis; and 3) rate design. Revenue requirement projections identify how much revenue is needed from rates. The cost-of-service analysis determines how much of the revenue should come from the fixed and variable charges. This step also confirms the proportionate amount to be paid by each customer class. The final step, rate design, establishes the structure of the fixed service charges and the variable volume charges for each customer class.

The cost-of-service analysis was conducted following industry practices promulgated by the American Water Works Association.<sup>10</sup> At the outset of the analysis, the types of customer classes were reviewed, as were the types of rate structures that are appropriate to the City's customer class.

#### REPORT ORGANIZATION

The report is divided into the following sections: Revenue Requirements, Cost-of-Service Analysis, Rate Design, and Customer Bill Impacts.

A Glossary of technical terms and acronyms is provided following the Table of Contents.

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<sup>&</sup>lt;sup>10</sup> Principles of Water Rates, Fees, and Charges. American Water Works Association Manual M1. 2017.

## **III. REVENUE REQUIREMENTS**

The revenue requirements analysis starts by determining the FY 2023-24 revenue requirements based on the budgeted O&M and capital expenditures. Revenue requirements for each fiscal year are then projected over the Study Period. Revenue increases needed to cover the projected revenue requirements are then determined.

#### **DEMAND PROJECTIONS**

The revenue requirements projected during the Study Period are based on the City's unique circumstances. Projected customer demand is particularly significant because it affects certain variable expenses such as the cost of purchased water as well as the revenue from water sales. Customer demand depends on the types of customers, the nature of their demands, the trends in their water use, growth, and climate, among others.

The City consists of single-family residences, multi-family residences, commercial (including schools), industrial, municipal, irrigation, and even recycled water customers. While single-family residential water use currently accounts for 47% of the total water use, future growth depends on development of multifamily and mixed-use retail. The service area is largely developed, but the City's General Housing Element identifies plans for more housing to meet future population growth. For purposes of this rate study, no growth in water demand nor in growth of accounts was assumed. Connection fee revenue from growth is assumed, but the City did not estimate increased operational costs or supply costs explicitly due to growth.

Water demand projections used in this study are shown in **Figure III-1**. Projections are based on the two-year average of billing data from FY 2021-22 to FY 2022-23.

FY 2023-24 FY 2024-25 FY 2025-26 **Customer Class** FY 2026-27 FY 2027-28 Multi Family Residential 790,781 790,781 790,781 790,781 790,781 636,936 Commercial 636,936 636,936 636,936 636,936 **Commercial Irrigation** 354,096 354,096 354,096 354,096 354,096 **Residential Irrigation** 188,564 188,564 188,564 188,564 188,564 1,723,268 Single Family Residential 1,723,268 1,723,268 1,723,268 1,723,268 9,176 Commercial Recycled 9,176 9,176 9,176 9,176 Annual Water Use (HCF) 3,702,820 3,702,820 3,702,820 3,702,820 3,702,820

Figure III-1. Five-Year Modeled Demand Projections

### REVENUE REQUIREMENT ASSUMPTIONS AND PROJECTIONS

Expense projections combined with contributions to reserves become the revenue requirements. The City's operating and capital budgets were relied on for FY 2023-24 expenses in the first-year revenue requirement. The assumptions shown in **Figure III-2** were used to project revenue requirements through FY 2027-28.

Figure III-2. Projection Assumptions

Assumptions	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28
General Inflation	Per Budget	3.00%	3.00%	3.00%	3.00%
Salaries and Wages	Per Budget	4.00%	4.00%	4.00%	4.00%
Benefits	Per Budget	4.00%	4.00%	4.00%	4.00%
Construction Cost Inflation	Per Budget	3.74%	3.74%	3.74%	3.74%
Utilities	Per Budget	7.00%	7.00%	7.00%	7.00%
Interest on Fund Balance	1.00%	1.00%	1.00%	1.00%	1.00%
SFPUC Cost of Purchased Water	\$5.21	\$5.21	\$5.21	\$5.31	\$5.63
SFPUC Cost of Purchased Water %	Per Budget	0.00%	0.00%	1.92%	6.03%

#### **SFPUC Purchased Water Costs**

The City is entirely reliant on the SFPUC for its water supply. As a member of BAWSCA, the City's water supply expenses are driven by two usage-based rates: 1) SFPUC's annual rate and 2) BAWSCA's bond surcharge rate <sup>11</sup>. The SFPUC provided notice to increase the previous rate of \$4.75 per HCF to \$5.21 per HCF beginning July 1, 2023. Further, the SFPUC's notice forecasted rates would increase to \$5.31 per HCF by FYE 2027, and \$5.63 per HCF by FYE 2028.

Beginning FYE 2014, the BAWSCA bond surcharge rate was added so that each agency could pay its proportionate share of debt issuance based on purchased water have increased as bonds have been sold to fund the WSIP projects. The bond surcharge rate has been factored into the projections of water supply costs in this analysis.

Since 1984, the SFPUC's wholesale rates have been set in compliance with rate-making agreements. The agreements contain provisions that annually reconcile projected expenses and demands with actual expenses and demands. The difference is rolled forward into the ensuing year's rates. In this way, both the SFPUC and the BAWSCA 26 wholesale customers are protected. However, it also means that the annual adjustment can either increase or decrease rates, which leads to some short-term volatility in the wholesale rates that can accentuate annual rate fluctuations.

The rising SFPUC rates and current BAWSCA bond surcharge rate were built into the revenue requirement projections. The cost of SFPUC water is nearly 40% of the annual revenue requirement – the largest single item. The impact of these significant increases in wholesale rates on the revenue requirements over the study period cannot be overstated.

#### **Other Operations and Maintenance Expenses**

This cost category includes direct salaries and benefits, materials and services, contract services, and overhead. These expenses are projected to increase gradually at about 3% during the projection period, according to City estimates.

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<sup>&</sup>lt;sup>11</sup> The SFPUC also charges a fixed service charge, currently 2% of total purchased water costs, which is not impacted by the amount of water the City purchases.

#### **Debt Service**

The City has three outstanding bond obligations. The annual debt service is approximately \$3.9 million. The outstanding bonds are identified in **Figure III-3**. Each refunding bond was used to refinance existing debt service issued in 2005, 2006, and 2007. In each instance, the original debt service funded capital projects related to the recycled water system, retrofitting irrigation systems, installing artificial surfaces for athletic fields in the City, and system-wide repair and replacement of Enterprise facilities. Although these projects were constructed and are in service, the debt service on these bonds will continue beyond the Study Period.

Figure III-3. Current Annual Debt Service

Current Debt	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28
Series 2013 Refunding Bonds	\$2,061,000	\$2,060,750	\$2,062,500	\$2,061,000	\$2,061,250
Series 2015 Refunding Bonds	\$1,418,444	\$1,420,644	\$1,421,244	\$1,420,244	\$1,418,294
Series 2017 Refunding Bonds	\$490,419	\$495,419	\$494,419	\$497,669	\$494,919

#### **Capital Expenditures**

Even though the City has constructed facilities to provide water service, these facilities will depreciate and eventually need to be replaced. It is unrealistic to think that the system has already been built and paid for and that there will be no future capital costs. The City has in place a Water Master Plan to address long-term capital projects via its Capital Improvement Program (CIP). Based on this Plan, the revenue requirement projections show an increased level of funding in FYE 2024 needed to support the capital improvement program, which contains approximately \$75.3 million in cash-funded capital projects 12 over the Study Period as shown in **Figure III-4**.

Concurrently the City is conducting a separate study to update its water connection fees. The connection fee revenues shown in **Figure III-4** assume the new connection fees will be implemented in 2024. As a result, the average annual expenditure of \$13.2 million is the net amount that is contributed from rate revenues beginning in FYE 2024. This amount will be funded on a pay-as-you-go (PAYGo) basis.

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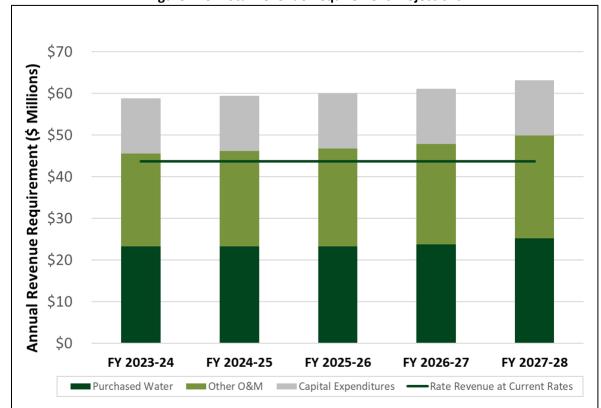
<sup>&</sup>lt;sup>12</sup> This figure assumes an annual inflation factor of 3.74% beginning FY 2024-25, based on the ten-year compound annual growth rate of the Engineering New Record Construction Cost Index for San Francisco.

Figure III-4. Projected Capital Improvement Program

Water Enterprise CIP	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28
Downtown Recycled Water Dist. Phase 2C Ext.	\$1,500,000	\$3,000,000	\$3,000,000	\$3,000,000	\$3,000,000
Finance & Human Resources Software	\$0	\$0	\$0	\$0	\$0
Main City Recycled Water Tank & Pump Station	\$2,000,000	\$2,000,000	\$2,000,000	\$2,000,000	\$2,000,000
Cathodic Protection Program	\$200,000	\$100,000	\$100,000	\$100,000	\$100,000
Distribution System Replacement Program	\$1,000,000	\$6,500,000	\$6,500,000	\$6,500,000	\$6,500,000
Pump Station & Tank Rehab/Replacement	\$1,000,000	\$3,000,000	\$3,000,000	\$3,000,000	\$4,000,000
Recycled Water Quality Improvements	\$200,000	\$0	\$0	\$0	\$0
Water System Seismic Improvement Program	\$2,000,000	\$500,000	\$500,000	\$500,000	\$500,000
Potable Water Projects	\$0	\$0	\$0	\$0	\$0
Recycled Water Projects	\$0	\$0	\$0	\$0	\$0
Water Enterprise CIP Subtotal	\$7,900,000	\$15,100,000	\$15,100,000	\$15,100,000	\$16,100,000
Construction Cost Index	0.00%	3.74%	7.62%	11.65%	15.83%
Total Inflated CIP	\$7,900,000	\$15,664,954	\$16,251,046	\$16,859,066	\$18,648,101
Less Total Connection Fees	(\$1,426,133)	(\$2,994,062)	(\$2,163,033)	(\$1,219,878)	(\$1,271,056)
Net PAYGo CIP	\$6,473,867	\$12,670,892	\$14,088,013	\$15,639,188	\$17,377,045

Note: Connection Fees based on preliminary analysis conducted by HF&H.

The major expenses described above that comprise the revenue requirements are shown in **Figure III-5**. Wholesale water is the largest individual cost among these three cost categories. In the City's case nearly 40% of its revenue requirement is for the cost of water, which will vary in direct proportion to demand. Current rate revenues of \$43.3 million are insufficient to meet projected expenses. The City faces a growing deficit over the Study Period.



**Figure III-5. Total Revenue Requirement Projections** 

Water Enterprise Expenses	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28
Purchased Water	\$23,275,500	\$23,275,500	\$23,275,500	\$23,722,247	\$25,151,836
Other O&M	\$22,319,341	\$22,907,924	\$23,513,355	\$24,141,552	\$24,788,876
Capital Expenditures	\$13,249,801	\$13,249,801	\$13,249,801	\$13,249,801	\$13,249,801
<b>Total Revenue Requirement</b>	\$58,844,642	\$59,433,225	\$60,038,656	\$61,113,600	\$63,190,513
Annual Increase		1.0%	1.0%	1.8%	3.4%

Source: Data from City's FY 2023-24 Budget.

#### **RESERVES**

Rates need to generate enough revenue to cover unfunded annual operating and capital expenses. However, rates are not set to exactly match cash expenditures because the timing of cash expenditures can fluctuate. If rates were set to exactly match expenditures, rates would also fluctuate. To avoid increasing and decreasing rates from year to year, reserves are used to cover the difference so that rate increases are smooth and gradual.

The City's current level of reserves has enabled it to maintain a strong credit rating, which reduces its financing costs. The City uses its reserves to stabilize rates against annual fluctuations in capital expenditures, variances between projected and actual water demands, and unanticipated expenditures and other expenditure variances. In some years, there is surplus revenue that is available to replenish reserves. In other years, reserves are drawn down to cover the cost of service.

Rates are set to generate a constant level of revenue to maintain reserves at adequate levels. At the same time that revenue from rates is added to reserves, reserves are drawn down to fund capital projects whose costs vary from year to year. In effect, reserves are used to buffer rates from varying levels of capital expenditures and unforeseen variances in operating expenditures. For the most part, however, the variances are due to capital projects (see **Figure III-4**).

Reserves are required to stabilize rates and to provide for contingencies. Reserves can be drawn on in years when the City's Water Enterprise Fund experiences above average costs and augmented during years when costs are below average. The City's reserves are used for operating and capital purposes. Each of these purposes has its own requirements that lead to a minimum and optimum target balance. Rates must be set so that the fund balance achieves the target balance.

#### **Current Policy**

The City has an existing policy to maintain \$2 million in reserves. This threshold is less than industry practice, which recommends a minimum balance sufficient to manage monthly cash flow needs. For reference, the *monthly* average of the City's FY 2023-24 revenue requirement before capital expenditures is \$3.8 million. Therefore, it is recommended the City increase the reserve threshold of its existing policy.

#### **City Proposed Policy**

In this study, the City has assumed a working reserve policy that is greater than its existing policy. City staff plans to recommend the working reserve policy be adopted. The proposed reserve policy assumes 25% of annual O&M expenses and \$2 million for capital projects.

The operating component of the reserves provides working capital for month-to-month O&M expenses. With sufficient working capital, the City can operate without cash flow constraints. This proposed reserve policy tracks with HF&H's recommendation of a minimum operating reserve that is equal to at least 1.5 times the billing frequency (or three months in the City's case). The City's reserves should never drop below this minimum balance.

The capital improvement component of the reserves provides cash funding for the City's capital improvement program. The fund balance needs to be sufficient to pay contractors and purchase materials without delays caused by cash flow limitations. The City's proposed reserve policy assumes the minimum reserve balance is \$2 million. Given the City's plans to fund an average of \$13.2 million in capital projects per year with rate revenues, this component is necessary.

#### **REVENUE INCREASES**

Rates are set to generate sufficient revenue to cover annual expenses. In addition, rates are set to maintain adequate reserves. The revenue from rates does not need to match each year's revenue requirement. For example, the annual increases in the revenue requirements shown at the bottom of **Figure III-5** are different from the revenue increases in **Figure III-6**. Annual fluctuations in revenue requirements are typically uneven because they are harder to control, whereas it is desirable to have smooth annual increases in rates. The annual differences cause the fund balance to fluctuate from year to year.

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Revenue increases were derived to cover the City's Enterprise costs and to maintain adequate reserves. **Figure III-6** summarizes the projected revenue from current rates, annual revenue requirements, annual variances, and the rate increases necessary to cover the City's costs.

Figure III-6. Rate Increase Calculations

	0					
	Projected					
	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	
Revenue from Current Rates	\$43,283,075	\$43,283,075	\$43,283,075	\$43,283,075	\$43,283,075	
Revenue Requirement	(\$58,844,642)	(\$59,433,225)	(\$60,038,656)	(\$61,113,600)	(\$63,190,513)	
Non-Operating Revenue	\$1,345,179	\$1,399,218	\$1,456,936	\$1,512,329	\$1,571,375	
Use of Reserves	\$10,295,248	\$0	\$0	\$0	\$0	
Net Revenue Requirement	(\$47,204,214)	(\$58,034,008)	(\$58,581,720)	(\$59,601,271)	(\$61,619,138)	
Revenue Surplus/(Shortfall)	(\$3,921,140)	(\$14,750,933)	(\$15,298,646)	(\$16,318,197)	(\$18,336,063)	
Proposed Rate Increase	8%	7%	7%	6%	6%	

Rate increases account for rate revenue and future revenue requirements. The revenue requirement (shown in greater detail in **Figure III-5**) increases due to increasing water supply costs and capital expenditures. **Figure III-7** summarizes the resulting annual increases in rates and revenues from the proposed service and water use charges. The fiscal year increase in revenue and rate adjustment columns typically do not match, as the City implements rate increases mid-fiscal year. Thus, any changes to the rates apply to six months instead of the whole fiscal year period. In effect, the rates of one calendar year are made up of rates set in adjoining fiscal years. In FY 2023-24, the City receives a smaller increase in revenue because the February 2024 effective date provides only five months of increased revenue instead of six months. It is assumed that the rate increases for FY 2024-25 will occur on January 1, 2025.

Figure III-7. Projected Revenue Increases

- I Agus C III 7 7 7 7 9 9 0 0 0 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1						
		Effective Date	Revenue After	Fiscal Year		
	Rate	of Rate	Rate	Increase in		
Fiscal Year	Adjustments	Adjustments	Adjustments	Revenue		
Revenue at 2023 Rates			\$43,671,145			
FY 2023-24	8.0%	2/1/2024	\$44,725,844	2.4%		
FY 2024-25	7.0%	1/1/2025	\$48,381,821	8.2%		

The rates are derived in Chapter V. With these rate increases, the Enterprise is able to pay for its annual O&M and capital expenses, maintain adequate debt service coverage, and maintain adequate reserves, as further discussed below.

#### **DEBT COVERAGE**

**Figure III-8** shows the debt service coverage provided by the revenue increases in **Figure III-7**. The City is required to maintain a minimum coverage ratio of 1.20. A higher ratio provides a greater margin of safety to bondholders and enhances the credit rating on bonds. Moreover, a higher credit rating benefits rate payers by reducing the cost of borrowing.

Figure III-8. Debt Service Coverage

	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28
Rate Revenue w/ Increases	\$44,725,844	\$48,381,821	\$51,768,548	\$55,124,751	\$58,432,236
Non-Operating Income	\$1,345,179	\$1,399,218	\$1,456,936	\$1,512,329	\$1,571,375
Interest Income	\$466,259	\$395,566	\$315,899	\$246,471	\$178,036
Total Funds Available	\$46,537,282	\$50,176,605	\$53,541,383	\$56,883,551	\$60,181,647
O&M Expenses	(\$38,979,812)	(\$39,482,090)	(\$40,004,436)	(\$40,994,442)	(\$42,989,092)
Net Revenue	\$7,557,470	\$10,694,514	\$13,536,947	\$15,889,109	\$17,192,555
Debt Service	\$3,969,863	\$3,976,813	\$3,978,163	\$3,978,913	\$3,974,463
Debt Coverage Ratio	1.90	2.69	3.40	3.99	4.33

The increasing debt coverage ratio tells an incomplete narrative. Rate revenue increases are recommended to account for increasing O&M <u>and capital costs</u>. However, in **Figure III-8**, the net revenue reflects only the difference between O&M expenses and rate revenues, and does not account for \$13.2 million in annual capital expenses, as well. The rate revenue increases and resulting debt coverage ratio increases are necessary to ensure the City meets both its growing O&M and capital expenses, shown in **Figure III-5**.

## **RESERVE FUND BALANCE**

**Figure III-9** shows the annual fluctuations (solid green line) in the fund balance that are caused by the differences between the revenue requirement and revenue from rates with the rate increases; the dashed green line is the projected fund balance without rate increases. The revenue and rate increases in **Figure III-7** were derived to balance increasing rates while maintaining a level of reserves that continues to meet the City's reserve target (blue line) by FY 2027-28. Over the Study Period, the Water Enterprise projects to utilize \$35.3 million from current reserves, while continuing to meet its debt coverage requirements and the City's reserve target. Maintaining a fund balance above or equal to the City's reserve target helps to protect the City's credit rating, which lowers the cost of financing, thereby benefiting rate payers.

As shown in **Figure III-9** by the dashed green line, without revenue increases, the FY 2022-23 year-end fund balance of \$49.6 million is projected to drop below the City's reserve target. With rate increases, the reserve balance (solid green line) decreases more gradually over the Study Period, as the City uses reserves to fund the projected revenue requirement. The recommended rate increases are balanced with the use of reserves. Reserves help offset the increased costs projected, reducing the potential for larger increases to be borne by ratepayers.

By the end of FY 2024-25, with recommended increases, the Water Enterprise Fund reserve balance projects to be \$35.4 million. At that time the City will have developed a Recycled Water Master Plan and can reassess the fiscal health of the Enterprise to determine what level of future increases are necessary.

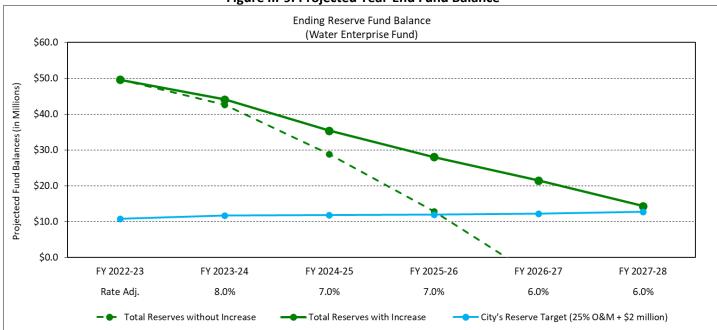


Figure III-9. Projected Year-End Fund Balance

Note: City's Reserve Target is a proposed policy, recommended by City staff.

# IV. COST-OF-SERVICE ANALYSIS

## **GENERAL APPROACH**

# **Base/Extra Capacity Method**

The revenue requirement analysis establishes how much revenue is required from rates. The next step in the analysis is determining the cost of service. Cost-of-service analysis is used to derive rates that proportionally allocate the cost of service. The cost-of-service analysis performed in this study follows a procedure described by the AWWA, which is referred to as the "base/extra capacity method." This method allocates the revenue requirements to the components of the rate structure.

The base/extra capacity method in the AWWA M1 Manual contains three categories: base, maximum day, and maximum hour. Base capacity is determined by the average daily flow during the year. The average daily flow determines how much base capacity is needed to provide that flow. Maximum day capacity is determined by the flow on the maximum day of the year. In other words, the maximum day capacity is greater than the base capacity, including the base capacity plus the additional capacity needed to provide for the maximum day flow of the year. Maximum hour capacity is determined by the flow during the maximum hour on the maximum day. In other words, the maximum hour capacity is greater than the maximum day capacity by the amount of peak hour that occurs during the maximum day flow.

We have refined AWWA's version of the base/extra capacity method. What AWWA considers "base" capacity is not purely base capacity because AWWA defines "base" as average day capacity. Average day capacity includes average peaking, which is greater than how "base" is defined in this report. In this report, "base" demand does not include peaking. We have introduced a fourth category that corresponds to base demand with no peaking, which we call Base Day. This Base Day demand is derived from average winter demand, when there is the least amount of peaking. Hence, in addition to Average Day, Maximum Day, and Maximum Hour categories, we have added Base Day. We have calculated the proportional cost of providing service for each of these four categories in this report.

For purposes of this study, the base/extra capacity method is first used for allocating the cost of service to the fixed and variable rate components. It is also used for determining the tiered Water Use Charge rates. It was appropriate to refine the base/extra capacity method in this way to address the specific circumstances within the City to ensure that rates were derived that are proportional to the cost of providing service.

The cost of serving customers depends not only on the total volume of water used but also on the rate of use. <sup>13</sup> The rate of use (i.e. peaking) influences the design of the system, as well. Thus, peaking demand placed on the system affects operational costs to maintain the water system, as well as the level of capital investment required to construct the water system. Assets such as pumps, reservoirs, tanks, valves, and pipelines are sized using design requirements governed by levels of peaking demand. Therefore, levels of peaking demand (e.g. Maximum Day and Maximum Hour flows) play a primary role in determining the size and level of investment in a water system. The AWWA base/extra capacity method recognizes these

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<sup>&</sup>lt;sup>13</sup> Principles of Water Rates, Fees, and Charges. American Water Works Association Manual M1. 2017.

principles. The industry practice to allocate expenses to "cost components on the basis of operating considerations or design capacity of each facility" requires that peaking expenses be allocated to customers who contribute to peaking demand.

## **CUSTOMER CLASSES**

The cost-of-service analysis distributes the revenue requirements among customer classes in proportion to their service requirements. There is no industry standard that specifies which customer classes should be used. The law allows utilities to exercise discretion in determining the appropriate customer classes provided the rates yield charges that are proportional to the cost of providing service for each category. As a result, the base/extra capacity method needs to be tailored to the customer classes.

The City currently has multiple customer classes: Single Family Residential, Multi Family Residential, Commercial, Irrigation, and Recycled Water. These classes were last reviewed as part of the previous cost-ofservice study in 2016. The contrast in customer classes stems from the typical pattern of usage by each class. Residential use varies according to indoor and outdoor needs throughout the year, producing periods of peak demands for which the system must be designed to meet. However, due to smaller dwelling units and outdoor areas, Multi Family Residential use per dwelling unit during peaking periods is less than Single Family Residential customers. Non-Residential customers use produces fewer peak periods due to less homogenous use. Irrigation customers use depends on the demands of what is being irrigated. As such, irrigation customers can place both seasonal demands and peaking demands on the system.

# **CURRENT RATE STRUCTURE**

There is no industry standard that specifies what rate structure must be used. The law allows utilities to exercise discretion in determining their rate structure as long as the rates yield charges that are proportional to the cost of providing the service. As a result, the base/extra capacity method needs to be tailored to the rate structure under consideration.

In the City's case, its current water rate structure consists of a fixed Service Charge component and a variable Water Use Charge component. The use of a pair of Service and Water Use Charges is the most common standard in the industry.

The current rates for the Service and Water Use Charge rates are dependent on each customer class. The Service Charge is billed based on the number of dwelling units or the size of the meter. Billing based on meter size reflects a charge that is graduated in proportion to the capacity of the service (i.e., meter-size), which is an industry standard for metered water systems. As the name implies, this charge is related to the customer's service, which provides a fixed, upper limit on the amount of capacity that is available in the water system.

The Service Charges are fixed rates that are charged on a dwelling unit basis for Residential (single family and multi-family residences) customers and on a fixed rate graduated in proportion to the capacity of the service provided for Non-Residential (commercial, municipal, industrial, other, recycled water, and irrigation) customers. Residential customers are billed on a bi-monthly <sup>14</sup> basis by dwelling unit (DU) or equivalent dwelling unit (EDU) while non-residential, Commercial and irrigation customers are billed on a monthly basis.

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<sup>&</sup>lt;sup>14</sup> Bi-monthly periods assume a billing period of 60 days.

**Figures IV-1 and IV-2** summarize the current Service Charges and Fire Service Charges. Note, Customers with a separate meter for fire flow are billed a separate Fire Service Charge per meter. The charge is graduated in proportion to the capacity of the service (i.e., meter-size), which is an industry standard for metered water systems.

Figure IV-1. Current Service Charges

Figure IV-1. Current Service Charges						
Service Charges						
Customer Class	<b>Current Rates</b>					
Single Family Residential	Bi-monthly per DU					
	\$59.04					
Multi Family Residential	Bi-monthly per EDU					
5/8" Meters	\$59.04					
3/4" Meters	\$59.04					
1" Meters	\$59.04					
1.5" Meters	\$59.04					
2" Meters	\$59.04					
3" Meters	\$59.04					
4" Meters	\$59.04					
6" Meters	\$59.04					
8" Meters	\$59.04					
10" Meters	\$59.04					
Commercial (including Landscape Irrig						
	Monthly per Meter					
5/8" Meters	\$29.52					
3/4" Meters	\$44.28					
1" Meters	\$73.80					
1.5" Meters	\$147.60					
2" Meters	\$236.16					
3" Meters	\$442.80					
4" Meters	\$738.00					
6" Meters	\$1,476.00					
8" Meters	\$1,476.00					
10" Meters	\$1,476.00					

Figure IV-2. Current Fire Service Charges (\$/month)

Meter Size	<b>Current Rates</b>
1" Meters	\$16.00
2" Meters	\$32.00
3" Meters	\$48.00
4" Meters	\$64.00
6" Meters	\$96.00
8" Meters	\$128.00
10" Meters	\$160.00
12" Meters	\$192.00

The Water Use Charge Rates are the product of rates per unit of metered water use multiplied times the metered water use during the specified billing period. Water is metered in "units" of HCF of metered water use, whereby one unit or HCF equals 748 gallons. Water Use Charge rates are charged to four separate customer classes, Residential, Commercial, Landscape Irrigation, and Recycled Water customers.

For Residential customers, the Water Use Charge rates consist of four tiers that charge higher rates as the level of consumption increases. The tiers are specific to the number of equivalent dwelling units served by a meter/account. Single Family Residential accounts serve one dwelling unit and are considered 1.0 EDU. Similarly, Multi Family customer accounts serving 2-9 dwelling units count each dwelling unit as 1.0 EDU. However, Multi Family customer accounts serving 10-59 dwelling units count each dwelling unit as 0.75 EDU and accounts serving more than 60 dwelling units count each dwelling unit as 0.5 EDU. The volume of water in each tier corresponds to the number of EDU calculated for each account.

For Commercial and Recycled Water customers, the Water Use Charge rate is a uniform rate <sup>15</sup> per HCF of metered water use. All customers pay the same per HCF of water use, and recycled water customers' rates are lower rate than potable customers' rates.

For Landscape Irrigation customers, the Water Use Charge rates are based a three-tiered, budget-based structure that charge higher rates as the level of water use relative to the customers water budget increases. **Figure IV-3** reflects all current Water Use Charge rates, excluding a recycled water discount.

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<sup>&</sup>lt;sup>15</sup> This report distinguishes between *uniform* rates and *flat* rates. Uniform rates are constant charges per unit of water use that do not change depending on the amount used. Flat rates are fixed amounts that do not vary based on metered water use. Flat rates are most commonly used in unmetered water systems and for residential wastewater rates.

Figure IV-3. Current Water Use Charge Rates

Water Use Charges						
Single Family F	Single Family Residential					
Current Tiers	<b>Current Rates</b>					
Tier 1 (0-8 hcf)	\$6.13					
Tier 2 (9-20 hcf)	\$7.35					
Tier 3 (21-40 hcf)	\$10.20					
Tier 4 (41+ hcf)	\$13.45					
Multi Family R	esidential					
Usage	<b>Current Rates</b>					
Tier 1 (0-8 hcf)	\$6.13					
Tier 2 (9-20 hcf)	\$7.35					
Tier 3 (21-40 hcf)	\$10.20					
Tier 4 (41+ hcf)	\$13.45					
Comme	rcial					
Usage	<b>Current Rates</b>					
All Water Use	\$7.35					
Landscape Ir	rigation					
Usage	<b>Current Rates</b>					
Under 100% Budget	\$7.35					
101%-200% Budget	\$10.20					
Over 200% Budget	\$13.45					
Recycled V	Vater					
Usage	<b>Current Rates</b>					
All Water Use	\$7.35					

# **SERVICE CHARGE MODIFICATIONS**

As stated previously, the City has an integrated water system that supplies both potable and recycled water. As a result, all water, whether potable or recycled, will be considered as part of the same system portfolio. This means existing customer classes can be consolidated. In addition, Multi Family Residential service charges are recommended to be based on the size of the meter serving the account. This change in the rate structure aligns with the methodology used for Commercial Service Charges. As such, the charge is graduated in proportion to the capacity of the service and not the number of dwelling units served. Instead, costs driven by the number of dwelling units served will be recovered through the Water Use Charges.

Our recommended modifications are as follows:

1. Consolidate all Residential Irrigation customers under the Multi Family Residential customer class, subject to the same Multi Family Residential Service Charges and Consumption Charges.

- 2. Consolidate all Commercial Irrigation and Recycled Water customers under the Commercial customer class, subject to the same Commercial Service Charges and Consumption Charges.
- 3. Revise the Multi Family Residential Service Charge structure to a bi-monthly charge based on the meter capacity.

## CONSUMPTION CHARGE MODIFICATIONS

Volume charges can be structured in a variety of ways: uniform, increasing block, decreasing block, seasonal, etc. The appropriate type of Water Use Charge rate structure depends on the customer classes. Generally speaking, increasing block tiered rates are most suitable for homogeneous classes of customers with similar water uses and demand patterns (including similar peaking demand patterns), such as single-family residential customers. These customers are a homogeneous class that uses water for indoor and outdoor needs and not for other purposes, such as providing services or for commercial production.

Tiered rates are not as suitable for non-single family residential customer classes, which may be a combination of customers that use very little or a lot of water, whose demand patterns may range from constant to summer season only, and whose types of water use vary widely (e.g., part of a product such as beverages, for cleaning, for irrigation). For non-single family residential customers, demand patterns are not limited to the number of occupants and size of irrigated landscape. Their water use may have very little discretionary use.

The City should continue to charge tiered rates for Single Family Residential and uniform rates for Commercial Consumption Charges. The design of these rates is further discussed in Chapter V of this report.

The City's shift to all water being part of one system portfolio allows for simplification of the current Irrigation rates.

Our recommended modifications are as follows:

Revise the Multi Family Residential Consumption Charge structure to a uniform rate that matches
the Commercial Consumption Charge. This reflects that water use is individual to each account
and not directly correlated to the number of dwelling units served. Further, the individual demands of each dwelling unit results in a use per Multi Family Residential account with inconsistent
water use patterns that are more conducive to a uniform rate. The recommended modifications
to the existing Multi Family Residential rate structures would align the City with other neighboring
agencies, as shown in Figure IV-4.

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Figure IV-4. Survey of Multi Family Water Rate Structures

Multi Family							
	Fixed	Consumption					
Agency	Charges	Charges					
Redwood City (Proposed)	<b>Meter Size</b>	Uniform					
Belmont	Meter Size	Tiered					
Foster City	Meter Size	Tiered					
San Carlos, San Mateo (CalWater)	Meter Size	Uniform					
San Carlos (Mid-Pen)	Meter Size	Tiered					
Menlo Park	<b>Meter Size</b>	Tiered					
Hillsborough	Meter Size	Uniform					
Daly City	<b>Meter Size</b>	Tiered					
Burlingame	<b>Meter Size</b>	Uniform					
NCCWD	<b>Meter Size</b>	Uniform					
East Palo Alto	Meter Size	Uniform					
Palo Alto	Meter Size	Uniform					
Millbrae	Meter Size	Uniform					
Westborough Water District	Meter Size	Uniform					
Mountain View	<b>Meter Size</b>	Tiered					
San Bruno	Meter Size	Uniform					
Montara	Meter Size	Combination					
Brisbane	Meter Size	Tiered					

- 2. Revise the Irrigation Consumption Charge structure to a uniform rate that matches the Commercial Consumption Charge.
- 3. As part of consolidating customer classes, revise the Recycled Water Use Charge so that it is set equal to the Commercial Consumption Charge.

Although the City has different pressure zones, we do not recommend that the City charge rates by zone. The City's water facilities are an integral distribution network, not a series of isolated zones served by separately dedicated reservoirs, pumps, and distribution pipelines. Water facilities are designed as integral networks that balance pressures and keep water from stagnating. Water that is pumped to the highest zones not only benefits customers in the highest zones but can also benefit customers in lower zones to which the water also flows.

The cost-of-service analysis determines how much of the revenue requirement should be recovered from the fixed Service Charges and the variable Consumption Charges for each customer class.

### COST-OF-SERVICE ALLOCATIONS

As the name implies, cost-of-service analysis is a process of determining how much services cost. To provide water service, infrastructure must be constructed, operated, and maintained, which must be paid for from cash or debt. The type and size of infrastructure depends on how much service customers require. Water systems are designed to provide sufficient capacity to meet customer demands for service wherever, whenever, and for as long as demanded.

Although each customer places unique demands on the system, water system design is based on the maximum or peak demand for service placed on the system by all customers during the peak demand period. The size of the infrastructure that is needed will depend on the maximum demand. Higher demands will obviously require larger, more costly infrastructure as well as increased operating and O&M costs. Here, the goal of a cost-of-service analysis is to allocate the cost of the capacity to meet the peak demand in proportion to how much of the capacity is required by each customer. The proportions correspond to the maximum amount of capacity provided by the infrastructure. This means that customers that place greater demands on the infrastructure – customers with greater service needs (i.e., higher peak demands) – will be apportioned a greater share of the operating and capital costs of the infrastructure required to meet that demand.

It is important to realize that once the peak demand is used to design the infrastructure, the capacity is available at all times, not just during peak demands. The capacity is available for the potential peak when it occurs. During off-peak demands, the same facilities are being used, but the capital cost of the facilities is determined by the peak demand only, and it is the peak demand that is used to allocate costs. Note that the costs are not allocated only to those who peak. Those who do not peak as much are also using the same facilities. Consequently, they are allocated a share of the costs of the facilities in proportion to their contribution to the peak demand, even though their contribution may be significantly less.

# **Analytical Procedure**

The cost-of-service analysis in this study involved a series of four steps that allow for reasonable cost allocations (see **Figure II-1**). Costs must first be classified according to the associated function. Functions provide the level of service required by customers. The cost of functions can be allocated in proportion to the service provided.

- Service function cost classification Revenue requirements are summarized by service function cost categories, which is needed for allocating costs that will be used for calculating rates. (See Figure IV-4.)
- Demand service function allocation percentages –Base and extra capacity allocation factors are needed to apportion costs related to the demand service functions and to customer classes. (See Figure IV-5 and Figure IV-7.)
- 3. **Service function allocations** Costs from Step 1 are allocated to the demand and customer service functions from Step 2. The demand service function costs are further allocated among the demand service levels. (See **Figure IV-6.**)
- 4. **Customer class allocations** The costs allocated to the demand service function in Step 3 are further apportioned between the two customer classes. (See **Figure IV-8.**)

This sequence of steps is further explained below. The steps constitute the cost-of-service analysis, which converts the revenue requirement for FY 2023-24 in **Figure IV-4** into the eventual cost of service for setting Service Charge rates and Water Use Charge rates in **Figure IV-10**.

#### **Service Function Cost Classification**

After determining a utility's revenue requirements, the cost-of-service analysis begins by aligning the budget items with the associated function. For example, some cost items are related to functions that support the ability to meet base and peak water demands while other costs are incurred to provide

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customer service. In other words, "function" refers to the type of operational activity or capital cost needed to provide service. Organizing the budget by functions correlates budget items with the rate that will fund the cost.

For both indoor and outdoor water use, customers expect water to be available when they want it. The service they receive ranges from non-seasonal demand for essential indoor uses (Base Day) to discretionary peak hour outdoor water use and irrigation demands (Maximum Hour). To provide this "readiness to serve," the City's water system needs to have pipes, pumps, and storage reservoirs that are sized and operated to transmit and distribute water whenever it is needed. As previously mentioned, the capacity required to provide the required flows for facilities as well as the elevation differentials within the pressure zone determine how reservoirs, valves, and appurtenances are designed. Water main design is also influenced by the number of connections along a pipeline. Peak demands create larger flows for which larger and more costly infrastructure is needed and for which there are more operations and maintenance costs.

The service functions for each cost category determine how the capital and O&M costs are allocated. The service functions fall into two categories based on the Enterprise's chart of accounts:

- **Demand service function** functions related to delivering water to customers at varying levels of demand. These costs will be recovered from the proposed Water Use Charges.
- **Customer service function** functions related to customer service. These costs will be recovered from the proposed Service Charges.

#### **Demand Service Function**

There are five demand service functions beginning with the origin of the water through pipelines that convey the water to pumps that lift the water for storage until customers demand it. In describing each of these demand service functions, the corresponding allocation factors are indicated. The definition of each demand service function allocation factor is provided below in the discussion under Demand Service Function Allocation Factors.

- Water Purchases The City does not have its own surface water or groundwater resources; the
  City is not supplied by lakes, river diversions, or wells. Instead, the City purchases treated water
  from the SFPUC. The cost of its water supply is included in the cost paid to the SFPUC, which is
  the City's single largest O&M expense. This cost category is allocated to customers in proportion
  to their Base Day demand. Base Day costs vary with the total quantity of water used and are
  independent of rates of demand.
- Tank & Pump Station O&M Water is pumped throughout the system to service demand. Supply reservoirs are located at high points in the system so that water can flow to customers by gravity as demanded. Water fills the reservoirs from pump stations at a fairly steady rate compared to the outflow to customers, which occurs at the peak hour of the peak day. The O&M costs, such as tank maintenance and pump station operations, are allocated in proportion to Maximum Hour demands.
- Transmission Pipelines 12" and larger in diameter convey water from the SFPUC's master meters to the City's pumps, which lift the water to supply reservoirs. These 12" or larger pipes are

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sized for Maximum Day demands. The O&M costs to inspect, repair, and maintain transmission lines are allocated in proportion to Maximum Day demands.

• **Distribution – Demand –** Water flows out of reservoirs to the customer tap through distribution pipelines (less than 12" inches in diameter). Unplanned repairs occur in reaction to distribution

main breaks, to minimize interruptions to supplying demand. Water quality testing is performed to ensure safety and compliance as water travels through the distribution system. The distribution system is sized for peak hour flows. Therefore, higher peaking demand requires larger infrastructure, which in turn results in costlier materials and more staff time to service the larger system components. In the same manner that running a vehicle at maximum horsepower shortens the life of the asset, running distribution pumps at a higher pressure to service higher peaking demand yields a similar outcome. Greater stress placed on a pump or a segment of distribution pipeline shortens the life of the asset. Therefore, the O&M costs applicable to satisfying demand and delivery of water are allocated in proportion to Maximum Hour demands, to account for the maximum level of peaking demand placed on the system. The Maximum Hour flow is based on the Maximum Day flow (i.e., Maximum Hour flow is deemed to be 2.12 times Maximum Day flow based on City demand data. In addition, greater peaking demand places larger amounts of stress on the distribution system assets.

#### Fire Flow Cost Allocations

The distribution system also includes hydrants for fire suppression. The design of the distribution system to meet peak hour demands provides the capacity that is also required for fire flows. The capacity for fire protection is not the governing criterion for designing the distribution system. The distribution system was not sized for fire flows with the expectation that the fire flow would be sufficient to meet Maximum Hour demands. Hence, there are no identifiable extra costs to allocate to a separate charge for fire service. The costs of providing water capacity and water for fire service is part of all water rates (§53750.5).

In systems where the cost of fire flow capacity is significant enough to track, the cost is often either combined with the customer capacity component of the Service Charge or with the Maximum Hour costs.

In systems where there are separate charges for fire flow capacity, it is often a nominal administrative charge because the capacity is already recovered from service or volume charges.

Water Resources Management – Costs in this category center on the City's water conservation
program. The City must continue to meet evolving state-issued water efficiency standards and
regulations. To meet efficiency standards, customers are expected to use water judiciously. Customers placing greater demands on the system, using water in a less-efficient manner, should pay
to support conservation programs. Thus, O&M costs applicable to conservation are allocated to
the Maximum Hour category so that customers proportionate share of fiscal responsibility increases with peaking demand.

# **Customer Service Function**

There are seven customer service functions. Each of these functions includes costs that are not related to rates of flow.

• **Customer Services** – This administrative expense services customer accounts. These costs are independent of rates of flow and are apportioned on the basis of the number of meters.

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- Distribution Capacity A portion of the O&M costs attributable to maintaining existing capacity
  of the system, such as uni-directional flushing, hydrant maintenance, and valve maintenance, are
  services that are performed for the benefit of all customers. These activities are performed to
  ensure the system can serve the capacity for which it was designed. Maintenance of the distribution system benefits all customers and ensures existing capacity can be served. Costs are allocated
  based on the capacity corresponding to each meter served.
- Revenue Services This administrative expense includes the expenses incurred for processing
  meter reads and other billing activities. These costs are independent of rates of flow and are apportioned on the basis of the number of meters served.
- Capital Expenses Investments in the Enterprise infrastructure are necessary to ensure existing
  levels of service are maintained. In addition, capital projects allow for expansion of the system's
  capacity to support growth. Costs are allocated based on the capacity corresponding to each meter served.
- Administrative Support Services As an Enterprise, the City benefits from general governmental
  services paid by the General Fund. This category of expenses includes the Enterprise's reimbursement to the general fund for its proportional share of expenses related to services provided by
  the City Attorney, City Manager's Office, City Council, use of government facilities, and other overhead benefits. These costs are independent of rates of flow and are apportioned on the basis of
  the number of meters served.
- **Non-Operating Revenue** Revenue from miscellaneous fees and fire service revenues benefit rate payers by reducing the net amount of expenses that rates need to cover. These costs are independent of rates of flow and are apportioned on the basis of the number of meters.
- Reserves Similar to non-operating revenue, rate payers benefit from the Enterprise's use of reserves. In FY 2023-24, the planned use of \$10.3 million in reserves will help offset the need for larger rate increases to meet growing expenses. As a result, the City can charge rate payers less than the total revenue requirement and phase in rates over time to reduce impacts to rate payers. These costs are independent of flow, but are apportioned using a composite allocation of all other functions analyzed. This is shown in more detail in Figure IV-9. Reductions to rates are intended to benefit customers by reducing the Service Charges and the Water Use Charges assessed.

**Figure IV-5** shows the classification of the budgeted operating and capital expenses and non-operating revenues by function.

Figure IV-5. Revenue Requirements Summary by Function (FY 2023-24)

	FY 2023-24
	Revenue
	Requirement
O&M Expenses	
65145-SFWD Water Purchases	\$23,605,500
65142-Water Customer Services	\$2,824,731
65144-Water Supply and Distribution	
Tank & Pump Station O&M	\$2,084,809
Transmission	\$1,273,126
Distribution - Demand	\$8,088,918
Distribution - Capacity	\$3,900,000
65146-Water Resource Management	\$1,651,167
61410-Revenue Services	\$2,046,863
Total Allocable O&M	\$45,475,114
Capital Expenses (PAYGo)	\$13,249,801
Subtotal - O&M and Capital	\$58,724,915
Unallocated O&M	
61710-Administrative Support Services	\$119,727
Administrative Costs	\$119,727
Subtotal O&M, Capital, Non-Operating	\$58,844,642
Non-Operating Revenue	(\$1,345,179)
Transfers to/(from) Reserves	(\$10,295,248)
Total Revenue Requirement	\$47,204,215

Note: Rounding differences caused by stored values in electronic models may exist.

Once the costs are organized by service function, it is possible to allocate them based on the allocation percentages that correspond to each service function. The allocation percentages are derived from the units of service associated with each service function.

#### **Demand Service Function Allocation Factors**

A cost-of-service analysis categorizes costs between the demand and customer service functions. Within the demand service function, further allocations are made to varying levels of service ranging from base, non-seasonal, indoor demand, which are the least discretionary, to the highest level of seasonal peak demand for outdoor water use and irrigation during the peak hour of the peak day, which are the most discretionary. With these further allocations, rates can be designed for each customer class's Water Use Charges.

The costs allocated to the customer service function are differentiated between those that are related to accounts and those that are related to capacity. Those two categories are used in deriving the Service Charges.

As described below, there are four levels of demand used for the demand service function cost-of-service analysis. For purposes of analysis, the demand for Irrigation, Commercial, Multi-Family, and Recycled Water customers were grouped into one category, "Commercial/Multi Family" as shown in the following tables.

#### **Base Day Demand**

Base Day demand is the average daily demand in the lowest billing period of the year when most of the water use is for indoor needs and when there is the least irrigation and peaking. If there were no seasonal peaking, the City's facilities could be designed for Base Day demand, which is only 34% of the current peak demand (refer to **Figure IV-7**).

#### **Average Day demand**

Average Day demand includes Base Day demand plus average seasonal peaking. The value is the average of FY 2021-22 and FY 2022-23 customer billing data. The City's Average Day demand represents only 47% of the current peak demand.

#### **Maximum Day demand**

Maximum Day demand includes Average Day demand plus peak day demand in the irrigation season. The total value is based on systemwide flow data maintained by the City via Advanced Metering Infrastructure (AMI) data. Maximum Day demand for each customer class was prorated from the total Maximum Day demand using Average Day demands for the two customer classes. If peaking did not exceed Maximum Day demand, the City's facilities could be sized at 70% of current peak demands.

#### **Maximum Hour demand**

Maximum Hour demand represents the Maximum Hour demand on the Maximum Day. The total value is based on systemwide flow data maintained by the City via Advanced Metering Infrastructure (AMI) data. Maximum Hour demand for each customer class was prorated from the total Maximum Hour demand using Average Day demands for the two customer classes.

Allocation percentages were calculated for each demand service level using load factors derived from customer billing data for FY 2021-22 and FY 2022-23 (Base and Average Day) and customer class flow data (Maximum Day and Maximum Hour). Load factors are the ratio of higher levels of demand to the Base Day demand. **Figure IV-6** summarizes the units of service and load factors for each of the service levels based on FY 2021-22 and FY 2022-23 data.

#### **Load Factors**

The load factors are the ratio of the flows for the peak service levels (i.e., Average Day, Maximum Day, and Maximum Hour) compared to the Base Day, non-seasonal flow. The load factors represent how much higher Average Day, Maximum Day, and Maximum Hour flows are compared with Base Day demand.

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Figure IV-6. Service Level Demands and Load Factors

		Levels of Demand				
	Base	Average	Maximum	Maximum		
	Day	Day	Day	Hour		
Demand by Customer Category						
Commercial/MF	3,810	5,423	8,643	9,066		
Single Family	3,483	4,721	6,514	12,465		
Tot	tal 7,293	10,145	15,157	21,531		
Ratio of Flows to Average Day						
Commercial/MF	0.70	1.00	1.59	1.67		
Single Family	0.74	1.00	1.38	2.64		
Tot	tal 0.72	1.00	1.49	2.12		
Level of Service	7,293	10,145	15,157	21,531		
Average Day Demand	10,145	10,145	10,145	10,145		
Ratio of Level of Service to Average Day	0.72	1.00	1.49	2.12		

Note: Daily totals are shown

The load factors indicate how much additional capacity is required to supply higher levels of service and serve as the source of the allocation percentages that are needed to allocate costs. They are derived in **Figure IV-7**. For example, the Average Day load factor for the system is 1.00. Of that total 1.00 load, 0.28 is in excess of Base Day demand and is related to the Average Day peak, which is 28% of the total Average Day load (i.e., 0.28/1.00 = 28%). For purposes of allocating costs associated with meeting Average Day demands, 28% is allocated to the Average Day service and 72% is allocated to the Base Day service.

Figure IV-7. Demand Service Levels

		Demand Service Levels					
	Load	Base	Average	Maximum	Maximum		
Allocation Basis	Factors	Day	Day	Day	Hour	Totals	
Base Day	0.72	0.72				0.72	
Allocation %		100%				100%	
Average Day	1.00	0.72	0.28			1.00	
Allocation %		72%	28%			100%	
Maximum Day	1.49	0.72	0.28	0.49		1.49	
Allocation %		48%	19%	33%		100%	
Maximum Hour	2.12	0.72	0.28	0.49	0.63	2.12	
Allocation %		34%	13%	23%	30%	100%	

Maximum Day demand includes Base Day, Average Day, and Maximum Day components. And Maximum Hour demand has all four service levels of demand. While system capacity is essentially designed to meet

peak demands, and peak users should assume cost responsibility for the capacity required to serve this peak demand, it is important to understand that the cost of facilities that are sized for peak demands is not borne by only customers that peak, all levels of demand utilize the facility.

Using distribution pipelines as an example, they are sized to meet Maximum Hour demands. Even though they are sized for the highest level of service, lower peak demands are also accommodated by these pipelines. Hence, the cost of the pipelines is not allocated 100% to the Maximum Hour service level. The cost is apportioned across the lower service levels, too. Thus, the costs of peaking are shared by all customers and not exclusively allocated to those who peak the most.

#### **Service Function Allocations**

All allocation factors employed in the cost-of-service allocation exercise are shown in Figure IV-8.

**Figure IV-8. Cost Allocation Factors** 

	1.84.6.1. 0. 000170041.01.1.4.010.								
	Demand Services				<b>Customer Services</b>				
System-Wide	Base	Average	Maximum	Maximum					
<b>Cost Allocation Factors</b>	Day	Day	Day	Hour	Service	Capacity	Total		
Demand Services									
Base Day	100.0%						100.0%		
Average Day	71.9%	28.1%					100.0%		
Max Day	48.1%	18.8%	33.1%				100.0%		
Max Hour	33.9%	13.2%	23.3%	29.6%			100.0%		
<u>Customer Services</u>									
Capacity						100.0%	100.0%		
Services					100.0%		100.0%		
Composite Allocations									
Exp Composite	48.0%	3.1%	5.4%	5.9%	8.5%	29.1%	100.0%		

Note: Service is interchangeable with meter. Charges are assessed per meter, independent of the level of capacity provided by the meter.

The revenue requirements in **Figure IV-5** are allocated to the demand and customer service functions in **Figure IV-9**, using the calculated factors from **Figure IV-8**. The resulting allocations indicate that about 64% of the revenue requirement is attributable to the demand service function and 36% to the customer service function. As previously mentioned, the Water Use Charge rates are designed to recover the costs allocated to the demand service function and the Service Charge rates are designed to recover the customer service function costs.

**Figure IV-9. Service Function Allocations** 

	FY 2023-24		Consumption Charge				Service Charge	
	Revenue	Allocation	Base	Average	Maximum	Maximum		
	Requirement	Factor	Day	Day	Day	Hour	Service	Capacity
O&M Expenses								
65145-SFWD Water Purchases	\$23,605,500	Base Day	\$23,605,500	\$0	\$0	\$0	\$0	\$0
65142-Water Customer Services	\$2,824,731	Services	\$0	\$0	\$0	\$0	\$2,824,731	\$0
65144-Water Supply and Distribution								
Tank & Pump Station O&M	\$2,084,809	Max Hour	\$706,202	\$276,090	\$485,335	\$617,182	\$0	\$0
Transmission	\$1,273,126	Max Day	\$612,611	\$239,500	\$421,015	\$0	\$0	\$0
Distribution - Demand	\$8,088,918	Max Hour	\$2,740,017	\$1,071,210	\$1,883,067	\$2,394,624	\$0	\$0
Distribution - Capacity	\$3,900,000	Capacity	\$0	\$0	\$0	\$0	\$0	\$3,900,000
65146-Water Resource Management	\$1,651,167	Max Hour	\$559,312	\$218,663	\$384,385	\$488,808	\$0	\$0
61410-Revenue Services	\$2,046,863	Services	\$0	\$0	\$0	\$0	\$2,046,863	\$0
Total Allocable O&M	\$45,475,114		\$28,223,643	\$1,805,463	\$3,173,801	\$3,500,613	\$4,871,594	\$3,900,000
O&M Composite			62.1%	4.0%	7.0%	7.7%	10.7%	8.6%
Capital Expenses (PAYGo)	\$13,249,801	Capacity	\$0	\$0	\$0	\$0	\$0	\$13,249,801
Subtotal - O&M and Capital	\$58,724,915		\$28,223,643	\$1,805,463	\$3,173,801	\$3,500,613	\$4,871,594	\$17,149,801
·		% of Consumption	76.9%	13.5%	11.1%	4.2%		
		% of total	48.1%	3.1%	5.4%	6.0%	8.3%	29.2%
Unallocated O&M								
61710-Administrative Support Services	\$119,727	Services	\$0	\$0	\$0	\$0	\$119,727	\$0
Administrative Costs	\$119,727		\$0	\$0	\$0	\$0	\$119,727	\$0
Subtotal O&M, Capital, Non-Operating	\$58,844,642		\$28,223,643	\$1,805,463	\$3,173,801	\$3,500,613	\$4,991,321	\$17,149,801
Expense Composite			48.0%	3.1%	5.4%	5.9%	8.5%	29.1%
Non-Operating Revenue	(\$1,345,179)	Services	\$0	\$0	\$0	\$0	(\$1,345,179)	\$0
Transfers to/(from) Reserves	(\$10,295,248)	Exp Composite	(\$4,937,908)	(\$315,877)	(\$555,277)	(\$612,455)	(\$873,264)	(\$3,000,468)
Total Revenue Requirement	\$47,204,215		\$23,285,735	\$1,489,586	\$2,618,524	\$2,888,158	\$2,772,878	\$14,149,333
·						\$30,282,003	\$2,772,878	\$14,149,333
			% of Net Rvenue Requirement 64.2%				35.8%	
					•	n Charge COS	Servi	ce Charge COS

**Figure IV-10** summarizes the small shift in the Service Charge revenues from the Water Use Charge revenues to align with the cost-of-service. The exercise performed in **Figure IV-9** indicates Service Charge revenues will remain at 36% of total rate revenues, while Water Use Charge revenues will remain at 64%.

Figure IV-10. Cost-of-Service Revenue Summary

	Revenue at		Cost		Difference	
Components of Rate Structure	Current Rates		of Service FY 2023-24		COS Minus Current	
Single Family						
Consumption Charge Revenue	\$14,508,080	68%	\$14,611,865	62%	\$103,785	0.7%
Fixed Service Charge Revenue	\$6,858,441	32%	\$8,911,480	38%	\$2,053,039	29.9%
Subtotal - Single Family	\$21,366,521	100%	\$23,523,345	100%	\$2,156,824	10.1%
Commercial/Multi Family						
Consumption Charge Revenue	\$13,211,637	60%	\$15,670,138	66%	\$2,458,501	18.6%
Fixed Service Charge Revenue	\$8,704,917	40%	\$8,010,732	34%	(\$694,185)	-8.0%
Subtotal - Commercial	\$21,916,554	100%	\$23,680,870	100%	\$1,764,316	8.1%
Total						
Consumption Charge Revenue	\$27,719,717	64%	\$30,282,003	64%	\$2,562,286	9.2%
Fixed Service Charge Revenue	\$15,563,357	36%	\$16,922,211	36%	\$1,358,854	8.7%
Total	\$43,283,075	100%	\$47,204,215	100%	\$3,921,140	9.1%

Note: Commercial/Multi Family includes all Commercial, Multi-Family, Irrigation, and Recycled Water customers.

#### **Customer Class Allocations**

The customer service function is independent of the customer class. Once its allocation is derived, rates for the Service Charges are derived without any further allocation to customer classes. The demand service function requires further allocations to customer classes in designing rates. When separate customer classes exist, the cost of service must be allocated proportionately to each class. **Figure IV-11** derives the cost of service for the City's two customer classes. The revenue requirement for each demand service function is apportioned between the Single Family Residential and Commercial/Multi Family customer classes based on the corresponding annual demand in units of service (i.e., flows) for each customer class. The portion of the revenue requirement to be recovered via the City's Water Use Charges (\$30,282,003) is allocated to the two customer classes according to their proportionate shares of daily demand. Because of the higher peaking demands of the Single Family Residential customer class, the Single Family Residential customer class is allocated a larger proportion of peaking costs (Maximum Day, Maximum hour). The resulting total allocations serve as the entry point for design of the Water Use Charges, discussed in Chapter V.

Figure IV-11. Customer Class Allocations for Demand Service Levels

Figure IV-11. Custo	Figure IV-11. Customer Class Allocations for Demand Service Levels									
	Base	Average	Max	Max						
Consumption Charge Cost of Service	Day	Day	Day	Hour	Total					
	-	-	-							
Operations & Maintenance	\$28,223,643	\$1,805,463	\$3,173,801	\$3,500,613	\$36,703,520					
Capital Expenses (PayGo)	\$0	\$0	\$0	\$0	\$0					
Non-Operating Revenue	\$0	\$0	\$0	\$0	\$0					
Transfers to/(from) Reserves	(\$4,937,908)	(\$315,877)	(\$555,277)	(\$612,455)	(\$6,421,517)					
Total Consumption Charge COS	\$23,285,735	\$1,489,586	\$2,618,524	\$2,888,158	\$30,282,003					
Units of Service - Daily Demand (hcf)										
Single Family	3,483	4,721	6,514	12,465						
Commercial/Multi Family	3,810	5,423	8,643	9,066						
	7,293	10,145	15,157	21,531						
Proportional Allocation Factors										
Single Family	47.76%	46.54%	42.98%	57.89%						
Commercial/Multi Family	52.24%	53.46%	57.02%	42.11%						
	100.00%	100.00%	100.00%	100.00%						
Customer Class Allocations										
Single Family	\$11,121,287	\$693,243	\$1,125,344	\$1,671,992	\$14,611,865					
Commercial/Multi Family	\$12,164,449	\$796,342	\$1,493,181	\$1,216,167	\$15,670,138					
	\$23,285,735	\$1,489,586	\$2,618,524	\$2,888,158	\$30,282,003					

# V. RATE DESIGN

The City has historically charged water customers the combination of a fixed Service Charge and a variable Water Use Charge based on metered water use. As previously discussed, this is a common set of charges that is prevalent throughout the water industry. This chapter explains the derivation of the Water Use and Service Charge rates that reflect the projected cost of service.

# SERVICE CHARGE DESIGN

Service Charge rates are fixed rates that are billed each billing period to recover the cost of the service functions. The cost-of-service analysis determined how much of the revenue requirement is attributable to the customer service function. The function has two components – customer services and customer capacity – each of which is itemized in the cost-of-service analysis in **Figure V-1**. Costs attributable to customer services are allocated to customers in proportion to the number of meters. Costs attributable to customer capacity are allocated to customers in proportion to the capacity of their services. The sum of the two components equals the Service Charge rate per connection.

**Figure V-1** lists the units of service corresponding to each of the cost components. The 23,644<sup>16</sup> services are used for apportioning the customer services cost component.

Capacity costs associated with the distribution system are apportioned among the connections in proportion to the capacity associated with each connection. Connections are converted to Equivalent Meter Units (EMUs) to apportion the customer capacity cost component. An EMU represents the number of 5/8-inch meters to which a larger meter is equivalent. For example, a 1-inch meter provides 2.50 times as much capacity as a 5/8-inch meter. The capacity multipliers are based on the meter data provided by the City of the manufacturer's nominal capacity. For larger sized meters, the City uses multiple types, such as displacement, turbine, or compound. All Single Family Residential customers were assumed to have a 5/8" meter based on the current rate structure which bills a fixed bi-monthly charge based on the smallest level of capacity (5/8"). The meter ratings used reflect the nominal capacity of the most commonly used meter type available for each size. The 240 ¾"-inch meters equal 360 EMUs. There are 41,251 total EMUs. In effect, the 23,644 services of assorted sizes have the equivalent capacity as 41,251 5/8-inch meters.

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<sup>&</sup>lt;sup>16</sup> This total includes only potable and recycled water meters. All fire service meters have been excluded.

Figure V-1. Service Charge Units of Service

		Meter	Capacity	
Service Size	Services	Ratings (gpm) <sup>1</sup>	Multiplier	<b>EMUs</b>
	a	b	$c = b \div 20$	a * c
5/8" Meters	21,156	20	1.00	21,156
3/4" Meters	187	30	1.50	281
1" Meters	748	50	2.50	1,870
1.5" Meters	450	100	5.00	2,250
2" Meters	794	160	8.00	6,352
3" Meters	223	435	21.75	4,850
4" Meters	71	750	37.50	2,663
6" Meters	0	1,600	80.00	0
8" Meters	4	2,800	140.00	560
10" Meters	3	4,200	210.00	630
	23,644	-	•	41,251

<sup>&</sup>lt;sup>1</sup>Capacity multiplier assumes 5/8" meter = 1 EMU = 20 gallons per minute.

**Figure V-2** derives the unit costs for the customer accounts and customer capacity cost components. Each service is allocated \$9.77 per month for the customer service cost component. That amount represents the costs the City incurs to maintain each meter regardless of the capacity of the service (e.g., customer billing, administration overhead). Each service is also allocated \$28.58 per month per EMU. That amount represents a portion of the cost of providing distribution system capacity for each account, and increases based on the capacity of the meter.

Figure V-2. Service Charge Unit Costs

	Customer	Customer	
FY 2023-24 Customer	Service	Capacity	
Service Expenses	Component	Component	Total
O&M Expenses	\$4,871,594	\$3,900,000	\$8,771,594
Capital Expenses (PAYGo)	\$0	\$13,249,801	\$13,249,801
Admin Support Svcs	\$119,727	\$0	\$119,727
Non-Operating Revenue	(\$1,345,179)	\$0	(\$1,345,179)
Transfer (from) Reserves	(\$873,264)	(\$3,000,468)	(\$3,873,732)
Total FY 2023-24	\$2,772,878	\$14,149,333	\$16,922,211
Units of Service	23,644	41,251	
	Service	EMUs	
Annual Unit Cost	\$117.28	\$343.00	
Monthly Unit Cost	\$9.77	\$28.58	
	per Service	per EMU	

Source: Customer Service Expenses from Figure IV-8; Units of Service from Figure V-2.

**Figure V-3** combines the customer service and capacity components into a single Service Charge for each size service and compares proposed rates to the current rates.

Figure V-3. Proposed Monthly Service Charge Rates – FY 2023-24

	Service _	Ca	pacity Compone	ent	cos	Total	
Service	Component		Capacity	Capacity	Service Charges	Current	\$
Size	(\$/mo.)	\$/EMU	Multiplier	Total	(\$/mo.)	Charge	Difference
	a	b	С	d = b * c	e = a + d		
5/8" Meters	\$9.77	\$28.58	1.00	\$28.58	\$38.36	\$29.52	\$8.84
3/4" Meters	\$9.77	\$28.58	1.50	\$42.88	\$52.65	\$44.28	\$8.37
1" Meters	\$9.77	\$28.58	2.50	\$71.46	\$81.23	\$73.80	\$7.43
1.5" Meters	\$9.77	\$28.58	5.00	\$142.92	\$152.69	\$147.60	\$5.09
2" Meters	\$9.77	\$28.58	8.00	\$228.67	\$238.44	\$236.16	\$2.28
3" Meters	\$9.77	\$28.58	21.75	\$621.69	\$631.47	\$442.80	\$188.67
4" Meters	\$9.77	\$28.58	37.50	\$1,071.89	\$1,081.66	\$738.00	\$343.66
6" Meters	\$9.77	\$28.58	80.00	\$2,286.69	\$2,296.46	\$1,476.00	\$820.46
8" Meters	\$9.77	\$28.58	140.00	\$4,001.71	\$4,011.48	\$1,476.00	\$2,535.48
10" Meters	\$9.77	\$28.58	210.00	\$6,002.57	\$6,012.34	\$1,476.00	\$4,536.34

Source: Figures V-1 and V-2.

Note: Rounding differences caused by stored values in electronic models may exist.

With the proposed rates, all meter sizes would see an increase. The increase in rates reflects the 8.7% increase to service charge revenues calculated in **Figure IV-10**. Rates also reflect revised capacity multipliers, based on updated meter rating information provided by the City. Currently meters 6" and larger are charged the same rate. Under the proposed rates, customers with an 8" or 10" meter would pay more in proportion to the additional capacity provided by these larger meters.

**Figure V-4** shows the proposed two-year schedule of Service Charge rates. **Figure V-5** shows the proposed two-year schedule of Fire Service Charge rates that are proposed to be increased based on the revenue increases recommended in Chapter III, as the rate structure is not being recommended for adjustment.

**Figure V-4. Current and Proposed Service Charge Rates** 

Service Charges								
Customer Class	Current	FY 2023-24 eff. 2/1/2024	FY 2024-25 eff. 1/1/2025					
Single Family Residential	Bi-monthly per DU	Bi-monthly per DU						
	\$59.04	\$76.72	\$82.09					
Multi Family Residential								
(including Residential Irrigation)	Bi-monthly per EDU	Bi-monthly	per Meter					
5/8" Meters	\$59.04	\$76.72	\$82.09					
3/4" Meters	\$59.04	\$105.30	\$112.67					
1" Meters	\$59.04	\$162.46	\$173.83					
1.5" Meters	\$59.04	\$305.38	\$326.76					
2" Meters	\$59.04	\$476.88	\$510.26					
3" Meters	\$59.04	\$1,262.94	\$1,351.35					
4" Meters	\$59.04	\$2,163.32	\$2,314.75					
6" Meters	\$59.04	\$4,592.92	\$4,914.42					
8" Meters	\$59.04	\$8,022.96	\$8,584.57					
10" Meters	\$59.04	\$12,024.68	\$12,866.41					
Commercial								
(including Commercial Irrigation)	Monthly per Meter	Monthly p	er Meter					
5/8" Meters	\$29.52	\$38.36	\$41.05					
3/4" Meters	\$44.28	\$52.65	\$56.34					
1" Meters	\$73.80	\$81.23	\$86.92					
1.5" Meters	\$147.60	\$152.69	\$163.38					
2" Meters	\$236.16	\$238.44	\$255.13					
3" Meters	\$442.80	\$631.47	\$675.67					
4" Meters	\$738.00	\$1,081.66	\$1,157.38					
6" Meters	\$1,476.00	\$2,296.46	\$2,457.21					
8" Meters	\$1,476.00	\$4,011.48	\$4,292.28					
10" Meters	\$1,476.00	\$6,012.34	\$6,433.20					

Figure V-5. Current and Proposed Fire Service Charge Rates

	·	FY 2023-24	FY 2024-25
Meter Size	<b>Current Rates</b>	eff 2/1/2024	eff. 1/1/2025
1" Meters	\$16.00	\$17.28	\$18.49
2" Meters	\$32.00	\$34.56	\$36.98
3" Meters	\$48.00	\$51.84	\$55.47
4" Meters	\$64.00	\$69.12	\$73.96
6" Meters	\$96.00	\$103.68	\$110.94
8" Meters	\$128.00	\$138.24	\$147.92
10" Meters	\$160.00	\$172.80	\$184.90
12" Meters	\$192.00	\$207.36	\$221.88

## WATER USE CHARGE DESIGN

As previously discussed, the City's Water Use Charges are different for its customer classes. For purposes of rate design, all customer classes are categorized as Single Family Residential and Commercial/Multi Family.

# **Single Family Residential Water Use Charges**

The City's Single Family Residential customers are currently charged a four-tier increasing block rate structure. The structure is a series of blocks of water whose unit cost increases with each block. The structure is "progressive" in the sense that water is billed sequentially by block up to the highest block. It is not the case that all of the water is billed at the rate for the highest block. All metered water use is at least billed the Tier 1 rate. Water use beyond Tier 1 is only billed the Tier 2 rate for the volume of water allocated to Tier 2, and water use beyond the volume of water allocated to Tier 2 is billed at the Tier 3 rate, and so forth.

Increasing block rates have become more common as the need has grown to set rates that more precisely recover the cost of service. As previously discussed, increasing block rates continue to be well suited for the City's Residential customer class.

When increasing block rates are implemented, the number of tiers must be determined. There is no absolute industry standard or law that prescribes how many tiers must be used. Judgment that is supported by facts is allowed. However, no matter how many tiers are used, the rates should yield charges that do not exceed the proportional cost of service.

#### **Breakpoints Between Tiers**

The base/extra capacity cost-of-service analysis leads to four distinct services defined by the functions performed by facilities that are designed to provide the services. Each service has an average flow that can be used as the division (i.e., "breakpoint") between each service, as shown in **Figure V-6**.

Figure V-6. Breakpoint Locations – Single Family Residential

Flow per Customer (hcf per month)		vice Levels		
		Average	Maximum	Maximum
Single Family Residential	Base Day	Day	Day	Hour
hcf per day	3,483	4,721	6,514	12,465
hcf per month	104,500	141,638	195,418	-
# of Dwelling Units (DU)	19,361	19,361	19,361	-
Average flow per DU (hcf/mo)	5	7	10	11+
Average flow per DU (hcf/bi-mo)	10	14	20	21+

Source: HCF per day from Figure IV-3. Bi-monthly bills calculated from Residential meter counts provided by City staff in September 2023.

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<sup>&</sup>lt;sup>17</sup> For simplicity, we use the term "tiered rates" synonymously with "increasing block rates." "Inclining block rates" is commonly used for "increasing block rates." However, because an incline can slope both up or down, it is ambiguous in this context and therefore is not used in this study.

The averages for Base Day, Average Day, and Maximum Day yield the following breakpoints for a 60-day period:

- Tier 1/Tier 2 breakpoint 10 HCF (125 GPD) per bi-monthly period.
- Tier 2/Tier 3 breakpoint 14 HCF (175 GPD) per bi-monthly period.
- Tier 3/Tier 4 breakpoint 20 HCF (250 GPD) per bi-monthly period.

#### **Rates Per Tier**

With breakpoints that correspond to the service levels in the cost-of-service analysis, it is possible to calculate the rate per tier by dividing the cost of service per tier by the water demand in each tier. The resulting rates represent the *unit cost* of service for each tier. <sup>18</sup>

**Figure V-7** shows the calculations of the incremental cost per tier. The costs in each column were determined in **Figure IV-11**, such that the allocation of \$14,611,865 is distributed to the four demand service levels. Using the Base Day service function as an example, it can be seen how much of the revenue requirement is recovered from Tier 1. The \$11,121,287 in **Figures IV-11 and Figure IV-7** includes the costs that were directly attributable to the Base Day service function plus the Base Day service function's share of costs attributable to higher levels of service. The Base Day cost of service is 76% of the aggregated amount of \$14,611,865 in **Figure IV-11** that is allocated to the Single Family Residential Water Use Charge. All of the water sold, including water in Tiers 2, 3, and 4, benefits from the Tier 1 costs and shares in paying them. Dividing the Base Day costs by the total demand of 1,723,268 HCF in **Figure V-7** yields a Tier 1 rate of \$6.45 per HCF.

Demand that does not exceed the 10 HCF Tier 1 breakpoint is only charged the Tier 1 rate. Demand that does not exceed Tier 1 is not responsible for the additional costs of peaking that were allocated to the higher service levels. These additional peaking costs are both the initial capital cost, the subsequent rehabilitation and renewal costs, and the operations and maintenance costs for larger pipelines, additional pumps, and larger reservoirs. Bills that exceed Tier 1 pay additional rate increments. The next increment of demand is responsible for the costs allocated to Average Day service, \$693,243 in **Figure IV-11**. This increment of cost is divided by the demand that exceeds Tier 1, 758,177 HCF, resulting in an incremental Tier 2 rate of \$0.91 per HCF (**Figure V-7**).

The calculations of the Tier 3 and Tier 4 rate increments proceed similarly. The incremental rate for Tier 3 and Tier 4 is much higher than Tier 2. This is due to more costs being spread over a smaller volume of water use. For example, the \$1,125,344 in **Figure IV-11** allocated to the Maximum Day service level is allocated to 496,463 HCF while the \$1,671,992 allocated to the Maximum Hour service level is allocated only to the highest 363,207 HCF. These levels of use create the need for these increments of peak capacity. To meet this peak demand, storage reservoirs distribution pipelines must be sized appropriately.

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<sup>&</sup>lt;sup>18</sup> In this report, "rates" and "unit costs" are synonymous.

Figure V-7. Incremental Unit Cost – Single Family Residential

	Base	Average	Maximum	Maximum	
Residential COS per Unit	Day	Day	Day	Hour	Total
Residential COS - Consumption	\$11,121,287	\$693,243	\$1,125,344	\$1,671,992	\$14,611,865
Demand Per Tier					
Tier 1 (0-10 hcf)	965,090				
Tier 2 (11-14 hcf)	261,715	261,715			
Tier 3 (15-20 hcf)	157,832	157,832	157,832		
Tier 4 (21+ hcf)	338,631	338,631	338,631	338,631	
Total hcf per Tier	1,723,268	758,177	496,463	363,207	
Cost-of-Service per Unit (hcf)	\$6.45	\$0.91	\$2.27	\$4.94	

Source: Cost of service from Figures IV-10. Demand per tier from City's FY 2021-22 and FY 2022-23 billing data.

The incremental rates are additive. In other words, demand in Tier 1 only pays the Base Day rate. Demand in Tier 2 pays the Base Day rate plus the Average Day increment, and so forth through Tiers 3 and 4. Adding the increments yields the rates per tier, which are summarized in **Figure V-8**. Clearly, as demand progresses through the tiers, the additional costs of peaking are allocated to recover the cost of the higher levels of service.

Figure V-8. Calculation of Proposed Water Use Charge Rates – Single Family Residential

	Base	Average	Maximum	Maximum	
Proposed Rates	Day	Day	Day	Hour	Total
Tier 1 (0-10 hcf)	\$6.45				\$6.45
Tier 2 (11-14 hcf)	\$6.45	\$0.91			\$7.37
Tier 3 (15-20 hcf)	\$6.45	\$0.91	\$2.27		\$9.63
Tier 4 (21+ hcf)	\$6.45	\$0.91	\$2.27	\$4.94	\$14.57

Source: Figure V-2.

Note: Rounding differences caused by stored values in electronic models may exist

**Figure V-9** graphically compares the current structure with approved breakpoints with the proposed rate structure and breakpoint adjustments. Note that nearly two-thirds of the bills (67% of the total bills) are within the first two proposed tiers. In other words, only slightly more than one-third of the bills reflect above average water use.

The proposed breakpoints align rates with the current level of demand Single Family Residential customers place on the system. Under the current rate structure, Multi Family Residential consumption was also factored into the current tier breakpoints. Changing Multi Family Use Charges to a uniform rate structure would reduce the number of customers and water consumption considered in tiered rate structure analysis. Based on this change and shifts in demand patterns since the last cost-of-service analysis was completed, we recommend changes in the breakpoints between the tiers in the Water Use Charge structure. The recommended bi-monthly breakpoints of 8, 20, and 40 HCF would shift to 10, 14, and 20 HCF. Under the proposed adjustments, the Tier 1/Tier 2 breakpoint would increase from 8 HCF to 10 HCF. However, the Tier 2/Tier 3 breakpoint would contract from 20 HCF to 14 HCF. Also, the Tier 3/Tier 4 breakpoint

would contract from 40 HCF to 20 HCF. Customers with bills reflecting 21 HCF of water use who were paying Tier 3 rates would now pay Tier 4 rates. Further impacts to customers because of recommended adjustments will be discussed in Chapter VI.

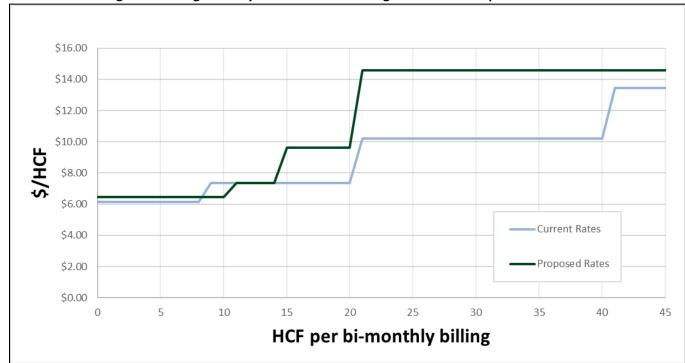


Figure V-9. Single Family Residential Use Charge Structure Comparison

# **Commercial/Multi Family Water Use Charges**

We recommend the City apply the same uniform rate structure for all Commercial, Multi-Family, Irrigation, and Recycled Water customers. The proposed adjustment for FY 2023-24 is intended to increase the uniform rate to re-align with the cost of service for this customer class. Of the total revenue requirement for FY 2023-24, \$15,670,138 was allocated to this customer class. The uniform rate is derived by dividing this class's share of the FY 2023-24 revenue requirement by the class's projected annual demand based on FY 2021-22 and FY 2022-23 City billing data in **Figure V-10**.

Figure V-10. Calculation of Commercial/Multi Family Uniform Consumption Charge

Commercial/Multi Family Rev. Req.	\$15,670,138
Annual water use (hcf)	1,979,552
Average \$ per hcf	\$7.92

Source: Revenue requirement from Figure IV-10. Projected demand from City's FY 2021-22 and FY 2022-23 billing data.

#### **Water Use Charges Summary**

The two-year schedule of proposed Water Use Charges for Single Family Residential, Multi Family Residential, Commercial, and Irrigation customers is shown in **Figure V-11**.

Figure V-11. Current and Proposed Water Use Charge Rates

		Water Use Charges	<u> </u>	
	Sin	gle Family Resident	tial	
Current Tiers	Current	Proposed Tiers	FY 2023-24	FY 2024-25
	Rates		eff. 2/1/2024	eff. 1/1/2025
Tier 1 (0-8 hcf)	\$6.13	Tier 1 (0-10 hcf)	\$6.45	\$6.90
Tier 2 (9-20 hcf)	\$7.35	Tier 2 (11-14 hcf)	\$7.37	\$7.89
Tier 3 (21-40 hcf)	\$10.20	Tier 3 (15-20 hcf)	\$9.63	\$10.30
Tier 4 (41+ hcf)	\$13.45	Tier 4 (21+ hcf)	\$14.57	\$15.59
Multi	Family Res	idential (including	Residential Fire)	
Current Tiers	Current	Usage	FY 2023-24	FY 2024-25
	Rates		eff. 2/1/2024	eff. 1/1/2025
Tier 1 (0-8 hcf)	\$6.13	All Water Use	\$7.92	\$8.47
Tier 2 (9-20 hcf)	\$7.35			
Tier 3 (21-40 hcf)	\$10.20			
Tier 4 (41+ hcf)	\$13.45			
Commercial - Includ	es Commer	cial, Industrial, Oth	er, Municipal, Co	ommercial Fire
Usage	Current	Usage	FY 2023-24	FY 2024-25
	Rates		eff. 2/1/2024	eff. 1/1/2025
All Water Use	\$7.35	All Water Use	\$7.92	\$8.47
	L	andscape Irrigation	ı	
Usage	Current	Usage	FY 2023-24	FY 2024-25
	Rates		eff. 2/1/2024	eff. 1/1/2025
Under 100% Budget	\$7.35	All Water Use	\$7.92	\$8.47
101%-200% Budget	\$10.20			
Over 200% Budget	\$13.45			

Further impacts to customers because of recommended adjustments will be discussed in Chapter VI.

# **Drought Rate Factors**

During prolonged shortages, customers are required to conserve or even ration their water use. The magnitude of the water savings can significantly reduce water sales revenue from quantity charges.

The City requested HF&H to calculated a set of Drought Rate Factors that would be applied to the rates for the Water Use Charges and implemented during declared water shortage stages in accordance with the City's Water Shortage Contingency Plan (WSCP), state mandated reductions in the level of water usage, or other natural disaster or event that results in a water shortage and an unforeseen drop in water demand that requires reductions in water use.

As part of this study to calculate the Drought Rate Factors, it is proposed that the shortage reductions will vary by customer class, based on their respective abilities to conserve water. A customer classes' ability to conserve is directly related to the proportion of their current water use which is highly discretionary

and considered a non-beneficial use (e.g., water used for landscape purposes, "outdoor" water use) and less discretionary use for health and safety (e.g., water used for cooking, cleaning, bathing, "indoor" water use). Each class's reduction will be determined by reducing their proportion of water that is for "outdoor" water use (seasonal water use) 3.0 times more than their "indoor" (average winter water use) water use. As described in more detail under "Implementation" at this end of this section, the calculated factors will be applied to each tier of the Water Use Charge Rates. The higher rates will generate the revenue which was lost due to conservation and has been calculated to keep the City revenue neutral so they can cover the portion of fixed costs which have paid through the Water Use Charge Rates

## **Analysis**

Based on FY 2021-22 and FY 2022-23 metered water use data, the resulting reductions are summarized in **Figure V-12.** The reductions shown represent the customer class reductions required to achieve the reduction associated with each shortage stage. The customer class reductions are greater or less than the overall average for each stage depending on how much of each class's water demand is seasonal.

Figure V-12. WSCP Required Water Use Reductions by Class

	Stage 1	Stage 2	Stage 3	Stage 4	Stage 5	Stage 6
	Shortage	Shortage	Shortage	Shortage	Shortage	Shortage
	Up to					
Class	(10% Reduction)	(20% Reduction)	(30% Reduction)	(40% Reduction)	(50% Reduction)	(55% Reduction)
Single Family	10%	19%	29%	38%	48%	52%
Multi-Family	7%	13%	20%	27%	33%	38%
Commercial	8%	16%	24%	32%	40%	45%
Irrigation	18%	37%	55%	74%	92%	100%

**Figure V-13** shows the calculation of each customer class's respective shortage reduction required during each shortage stage. The annual demand for each class is separated into indoor and outdoor water use where indoor water use is defined as the period from January through February multiplied times 6 to get the annualized indoor water use over 12 months. Subtracting indoor water use from the total annual water use determines the seasonal outdoor water use.

The percentage reductions for each customer class required to achieve the overall reduction for a particular stage are derived so that outdoor water use is reduced 3.0 times indoor water use. In a Stage 1 shortage, a 6.2% reduction in indoor water use and a 18.5% reduction in outdoor water use are required to achieve an overall 10% reduction. Applying the same reduction factors to each class results in different overall reductions for the class based on the relative proportions of their indoor and outdoor water use. In each stage reduction each customer class is required to conserve different percentages. This is because of the variation in water use patterns among the customer classes.

Figure V-13. Calculation of Shortage Reductions by Stage and Customer Class

	Shortage Lev	vel 1 Reducti	ion (up to 10	% reduction					
2070		Annual Dema			,	Reduc	tions		
Class	Total	Indoor	Outdoor	Indoor	Outdoor	Indoor	Outdoor	Total	Total
Single Family	1,723,268	1,253,995	469,273	6.2%	18.5%	77,260	86,737	163,997	10%
Multi-Family	790,781	756,078	34,703	6.2%	18.5%	46,583	6,414	52,997	7%
Commercial	636,936	539,160	97,776	6.2%	18.5%	33,218	18,072	51,290	8%
Irrigation	551,835	-	551,835	0.2%	18.5%	-	101,997	101,997	18%
Total	3,702,820	2,549,233	1,153,587	0.070	10.570	157,061	213,221	370,282	10.0%
			, ,	)% reduction		157,001	213,221	370,202	10.070
20/0		Annual Dema		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	<u>'</u>	Reduc	tions		
Class	Total	Indoor	Outdoor	Indoor	Outdoor	Indoor	Outdoor	Total	Total
Single Family	1,723,268	1,253,995	469,273	12.3%	37.0%	154,520	173,474	327,994	19%
Multi-Family	790,781	756,078	34,703	12.3%	37.0%	93,166	12,829	105,994	13%
Commercial	636,936	539,160	97,776	12.3%	37.0%	66,436	36,145	102,581	16%
Irrigation	551,835	-	551,835	0.0%	37.0%	-	203,995	203,995	37%
Total	3,702,820	2,549,233	1,153,587		_	314,122	426,442	740,564	20.0%
			-	0% reduction	n)	02.1,222	120,112	110,00	
		Annual Dema			,	Reduc	tions		
Class	Total	Indoor	Outdoor	Indoor	Outdoor	Indoor	Outdoor	Total	Total
Single Family	1,723,268	1,253,995	469,273	18.5%	55.4%	231,780	260,212	491,991	29%
Multi-Family	790,781	756,078	34,703	18.5%	55.4%	139,748	19,243	158,991	20%
Commercial	636,936	539,160	97,776	18.5%	55.4%	99,655	54,217	153,871	24%
Irrigation	551,835	-	551,835	0.0%	55.4%	-	305,992	305,992	55%
Total	3,702,820	2,549,233	1,153,587		_	471,183	639,663	1,110,846	30.0%
40%	Shortage Le	evel 4 Reduc	tion (up to 4	0% reduction	n)				
40%		Annual Dema		0% reductior		Reduc	tions		
40% Class				0% reductior Indoor	n) Outdoor	Reduc Indoor	ctions Outdoor	Total	Total
	Baseline /	Annual Dema	and (HCF)					<b>Total</b> 655,988	Total 38%
Class	Baseline A	Annual Dema Indoor	and (HCF) Outdoor	Indoor	Outdoor	Indoor	Outdoor		
Class Single Family	Baseline / Total 1,723,268	Annual Dema Indoor 1,253,995	Outdoor 469,273	Indoor 24.6%	Outdoor 73.9%	Indoor 309,040	Outdoor 346,949	655,988	38%
Class Single Family Multi-Family	Total 1,723,268 790,781	Annual Dema Indoor 1,253,995 756,078	Outdoor 469,273 34,703	Indoor 24.6% 24.6%	Outdoor 73.9% 73.9%	Indoor 309,040 186,331	Outdoor 346,949 25,657	655,988 211,988	38% 27%
Class Single Family Multi-Family Commercial	Total 1,723,268 790,781 636,936	Annual Dema Indoor 1,253,995 756,078 539,160	and (HCF) Outdoor 469,273 34,703 97,776	Indoor 24.6% 24.6% 24.6%	Outdoor 73.9% 73.9% 73.9%	309,040 186,331 132,873	Outdoor 346,949 25,657 72,289	655,988 211,988 205,162	38% 27% 32%
Class Single Family Multi-Family Commercial Irrigation Total	Total 1,723,268 790,781 636,936 551,835 3,702,820	Annual Dema Indoor 1,253,995 756,078 539,160 - 2,549,233	and (HCF) Outdoor 469,273 34,703 97,776 551,835 1,153,587	Indoor 24.6% 24.6% 24.6%	Outdoor 73.9% 73.9% 73.9% 73.9%	186,331 132,873	Outdoor 346,949 25,657 72,289 407,990	655,988 211,988 205,162 407,990	38% 27% 32% 74%
Class Single Family Multi-Family Commercial Irrigation Total	Total 1,723,268 790,781 636,936 551,835 3,702,820 Shortage Le	Annual Dema Indoor 1,253,995 756,078 539,160 - 2,549,233	and (HCF) Outdoor 469,273 34,703 97,776 551,835 1,153,587 ion (up to 50	Indoor 24.6% 24.6% 24.6% 0.0%	Outdoor 73.9% 73.9% 73.9% 73.9%	Indoor 309,040 186,331 132,873 - 628,244	Outdoor 346,949 25,657 72,289 407,990 852,884	655,988 211,988 205,162 407,990	38% 27% 32% 74%
Class Single Family Multi-Family Commercial Irrigation Total	Total 1,723,268 790,781 636,936 551,835 3,702,820 Shortage Le Baseline A	Annual Dema Indoor 1,253,995 756,078 539,160 - 2,549,233 vel 5 Reducti Annual Dema	and (HCF) Outdoor 469,273 34,703 97,776 551,835 1,153,587 ion (up to 50	Indoor 24.6% 24.6% 24.6% 0.0%	Outdoor 73.9% 73.9% 73.9% 73.9%	Indoor 309,040 186,331 132,873 - 628,244	Outdoor 346,949 25,657 72,289 407,990 852,884	655,988 211,988 205,162 407,990	38% 27% 32% 74%
Class Single Family Multi-Family Commercial Irrigation Total 50% Class Single Family	Total 1,723,268 790,781 636,936 551,835 3,702,820 Shortage Le Baseline A Total 1,723,268	Annual Dema Indoor 1,253,995 756,078 539,160 - 2,549,233 vel 5 Reduct Annual Dema Indoor 1,253,995	and (HCF) Outdoor 469,273 34,703 97,776 551,835 1,153,587 ion (up to 50 and (HCF) Outdoor 469,273	Indoor 24.6% 24.6% 24.6% 0.0% % reduction Indoor 30.8%	Outdoor 73.9% 73.9% 73.9% 73.9%	Indoor 309,040 186,331 132,873 - 628,244 Reductindoor 385,913	Outdoor 346,949 25,657 72,289 407,990 852,884 etions Outdoor 433,252	655,988 211,988 205,162 407,990 1,481,128 Total 819,166	38% 27% 32% 74% <b>40.0%</b> Total
Class Single Family Multi-Family Commercial Irrigation Total 50%	Total 1,723,268 790,781 636,936 551,835 3,702,820 Shortage Le Baseline A Total 1,723,268	Annual Dema Indoor 1,253,995 756,078 539,160 - 2,549,233 vel 5 Reducti Annual Dema	and (HCF) Outdoor 469,273 34,703 97,776 551,835 1,153,587 ion (up to 50 and (HCF) Outdoor	Indoor 24.6% 24.6% 24.6% 0.0% % reduction	Outdoor 73.9% 73.9% 73.9% 73.9% Outdoor	Indoor 309,040 186,331 132,873 - 628,244 Reductindoor 385,913	Outdoor 346,949 25,657 72,289 407,990 852,884 etions Outdoor 433,252	655,988 211,988 205,162 407,990 1,481,128	38% 27% 32% 74% <b>40.0%</b> Total
Class Single Family Multi-Family Commercial Irrigation Total 50% Class Single Family	Total 1,723,268 790,781 636,936 551,835 3,702,820 Shortage Le Baseline A Total 1,723,268	Annual Dema Indoor 1,253,995 756,078 539,160 - 2,549,233 vel 5 Reduct Annual Dema Indoor 1,253,995	and (HCF) Outdoor 469,273 34,703 97,776 551,835 1,153,587 ion (up to 50 and (HCF) Outdoor 469,273	Indoor 24.6% 24.6% 24.6% 0.0%  % reduction Indoor 30.8% 30.8% 30.8%	Outdoor 73.9% 73.9% 73.9% 73.9% Outdoor 92.3%	Indoor 309,040 186,331 132,873 - 628,244 Reductindoor 385,913	Outdoor  346,949 25,657 72,289 407,990 852,884  etions Outdoor 433,252 32,039 90,271	655,988 211,988 205,162 407,990 1,481,128 Total 819,166	38% 27% 32% 74% <b>40.0%</b> Total 48% 33% 40%
Class Single Family Multi-Family Commercial Irrigation Total  Class Single Family Multi-Family	Baseline / Total 1,723,268 790,781 636,936 551,835 3,702,820 Shortage Le Baseline / Total 1,723,268 790,781	Annual Dema Indoor 1,253,995 756,078 539,160 - 2,549,233 vel 5 Reduct Annual Dema Indoor 1,253,995 756,078	outdoor 469,273 34,703 97,776 551,835 1,153,587 ion (up to 50 and (HCF) Outdoor 469,273 34,703	Indoor 24.6% 24.6% 24.6% 0.0%  We reduction Indoor 30.8% 30.8%	Outdoor 73.9% 73.9% 73.9% 73.9%  Outdoor 92.3% 92.3%	Indoor 309,040 186,331 132,873 - 628,244  Reduction Indoor 385,913 232,681	Outdoor 346,949 25,657 72,289 407,990 852,884 etions Outdoor 433,252 32,039	655,988 211,988 205,162 407,990 1,481,128 Total 819,166 264,720	38% 27% 32% 74% <b>40.0%</b> Total 48% 33%
Class Single Family Multi-Family Commercial Irrigation Total  Class Single Family Multi-Family Commercial Irrigation Total	Total 1,723,268 790,781 636,936 551,835 3,702,820 Shortage Let Baseline / Total 1,723,268 790,781 636,936 551,835 3,702,820	Annual Dema Indoor 1,253,995 756,078 539,160 - 2,549,233 vel 5 Reducti Annual Dema Indoor 1,253,995 756,078 539,160 - 2,549,233	and (HCF) Outdoor 469,273 34,703 97,776 551,835 1,153,587 ion (up to 50 and (HCF) Outdoor 469,273 34,703 97,776 551,835 1,153,587	Indoor 24.6% 24.6% 24.6% 0.0%  24.69 0.0%  Indoor 30.8% 30.8% 0.0%	Outdoor 73.9% 73.9% 73.9% 73.9%  Outdoor 92.3% 92.3% 92.3%	Reduction 385,913 232,681 165,925	Outdoor  346,949 25,657 72,289 407,990 852,884  etions Outdoor 433,252 32,039 90,271	655,988 211,988 205,162 407,990 1,481,128 Total 819,166 264,720 256,196	38% 27% 32% 74% <b>40.0%</b> Total 48% 33% 40%
Class Single Family Multi-Family Commercial Irrigation Total  Class Single Family Multi-Family Commercial Irrigation Total	Baseline / Total  1,723,268 790,781 636,936 551,835 3,702,820 Shortage Le Baseline / Total  1,723,268 790,781 636,936 551,835 3,702,820 Shortage Le	Annual Dema Indoor 1,253,995 756,078 539,160 - 2,549,233 vel 5 Reducti Annual Dema Indoor 1,253,995 756,078 539,160 - 2,549,233 vel 6 Reducti	ond (HCF) Outdoor 469,273 34,703 97,776 551,835 1,153,587 ion (up to 50 and (HCF) Outdoor 469,273 34,703 97,776 551,835 1,153,587 ion (up to 55	Indoor 24.6% 24.6% 24.6% 0.0%  % reduction Indoor 30.8% 30.8% 30.8%	Outdoor 73.9% 73.9% 73.9% 73.9%  Outdoor 92.3% 92.3% 92.3%	Indoor 309,040 186,331 132,873 - 628,244  Reduction Indoor 385,913 232,681 165,925 - 784,519	Outdoor  346,949  25,657  72,289  407,990  852,884  Etions  Outdoor  433,252  32,039  90,271  509,477  1,065,039	655,988 211,988 205,162 407,990 1,481,128 Total 819,166 264,720 256,196 509,477	38% 27% 32% 74% 40.0% Total 48% 33% 40% 92%
Class Single Family Multi-Family Commercial Irrigation Total  Class Single Family Multi-Family Commercial Irrigation Total  55%	Baseline / Total  1,723,268 790,781 636,936 551,835 3,702,820 Shortage Le Baseline / Total  1,723,268 790,781 636,936 551,835 3,702,820 Shortage Le Baseline /	Annual Dema Indoor 1,253,995 756,078 539,160 - 2,549,233 vel 5 Reducti Annual Dema Indoor 1,253,995 756,078 539,160 - 2,549,233 vel 6 Reducti Annual Dema	and (HCF) Outdoor 469,273 34,703 97,776 551,835 1,153,587 ion (up to 50 and (HCF) Outdoor 469,273 34,703 97,776 551,835 1,153,587 ion (up to 55 and (HCF)	Indoor 24.6% 24.6% 24.6% 0.0%  7% reduction 30.8% 30.8% 30.8% 60.0%	Outdoor 73.9% 73.9% 73.9% 73.9%  Outdoor 92.3% 92.3% 92.3%	Indoor 309,040 186,331 132,873 - 628,244  Reduct Indoor 385,913 232,681 165,925 - 784,519  Reduct	Outdoor  346,949  25,657  72,289  407,990  852,884  Etions  Outdoor  433,252  32,039  90,271  509,477  1,065,039	655,988 211,988 205,162 407,990 1,481,128  Total 819,166 264,720 256,196 509,477 1,849,559	38% 27% 32% 74% 40.0% Total 48% 33% 40% 92% 50.0%
Class Single Family Multi-Family Commercial Irrigation Total  Class Single Family Multi-Family Commercial Irrigation Total  55%  Class	Baseline / Total  1,723,268 790,781 636,936 551,835 3,702,820  Shortage Le Baseline / Total  1,723,268 790,781 636,936 551,835 3,702,820  Shortage Le Baseline / Total	Annual Dema Indoor 1,253,995 756,078 539,160 - 2,549,233 vel 5 Reduct Annual Dema Indoor 1,253,995 756,078 539,160 - 2,549,233 vel 6 Reduct Annual Dema Indoor	and (HCF) Outdoor 469,273 34,703 97,776 551,835 1,153,587 ion (up to 50 and (HCF) Outdoor 469,273 34,703 97,776 551,835 1,153,587 ion (up to 55 and (HCF) Outdoor	Indoor 24.6% 24.6% 24.6% 0.0%  We reduction 30.8% 30.8% 30.8% 0.0%  Indoor Indoor	Outdoor 73.9% 73.9% 73.9% 73.9% 73.9%  Outdoor 92.3% 92.3% 92.3% 92.3%	Reduction 165,925 - 784,519  Indoor	Outdoor  346,949 25,657 72,289 407,990 852,884  etions Outdoor 433,252 32,039 90,271 509,477 1,065,039  etions Outdoor	655,988 211,988 205,162 407,990 1,481,128  Total 819,166 264,720 256,196 509,477 1,849,559  Total	38% 27% 32% 74% 40.0% Total 48% 33% 40% 92% 50.0%
Class Single Family Multi-Family Commercial Irrigation Total 50% Class Single Family Multi-Family Commercial Irrigation Total 55% Class Single Family	Baseline / Total  1,723,268 790,781 636,936 551,835 3,702,820 Shortage Le Baseline / Total  1,723,268 790,781 636,936 551,835 3,702,820 Shortage Le Baseline / Total  1,723,268	Annual Dema Indoor 1,253,995 756,078 539,160 - 2,549,233 vel 5 Reducti Annual Dema Indoor 1,253,995 756,078 539,160 - 2,549,233 vel 6 Reducti Annual Dema Indoor 1,253,995	and (HCF) Outdoor 469,273 34,703 97,776 551,835 1,153,587 ion (up to 50 and (HCF) Outdoor 469,273 34,703 97,776 551,835 1,153,587 ion (up to 55 and (HCF) Outdoor 469,273	Indoor	Outdoor 73.9% 73.9% 73.9% 73.9% 73.9%  Outdoor 92.3% 92.3% 92.3% 92.3% 90.00%	Reductindoor 309,040 186,331 132,873 - 628,244  Reductindoor 385,913 232,681 165,925 - 784,519  Reductindoor 434,339	Outdoor  346,949 25,657 72,289 407,990 852,884  etions Outdoor 433,252 32,039 90,271 509,477 1,065,039  etions Outdoor 469,273	655,988 211,988 205,162 407,990 1,481,128  Total 819,166 264,720 256,196 509,477 1,849,559  Total 903,612	38% 27% 32% 74% 40.0% Total 48% 33% 40% 92% 50.0%
Class Single Family Multi-Family Commercial Irrigation Total 50% Class Single Family Multi-Family Commercial Irrigation Total 55% Class Single Family Multi-Family Multi-Family	Baseline / Total  1,723,268 790,781 636,936 551,835 3,702,820 Shortage Le Baseline / Total  1,723,268 790,781 636,936 551,835 3,702,820 Shortage Le Baseline / Total  1,723,268 790,781	Annual Dema Indoor 1,253,995 756,078 539,160 - 2,549,233 vel 5 Reducti Annual Dema Indoor 1,253,995 756,078 539,160 - 2,549,233 vel 6 Reducti Annual Dema Indoor 1,253,995 756,078	and (HCF) Outdoor 469,273 34,703 97,776 551,835 1,153,587 ion (up to 50 and (HCF) Outdoor 469,273 34,703 97,776 551,835 1,153,587 ion (up to 55 and (HCF) Outdoor 469,273 34,703 34,703	Indoor	Outdoor 73.9% 73.9% 73.9% 73.9% 73.9%  Outdoor 92.3% 92.3% 92.3% 92.3% 91.3% 92.3% 90.0%	Indoor 309,040 186,331 132,873 - 628,244  Reduct Indoor 385,913 232,681 165,925 - 784,519  Reduct Indoor 434,339 261,879	Outdoor  346,949 25,657 72,289 407,990 852,884  etions Outdoor 433,252 32,039 90,271 509,477 1,065,039  etions Outdoor 469,273 34,703	655,988 211,988 205,162 407,990 1,481,128  Total 819,166 264,720 256,196 509,477 1,849,559  Total 903,612 296,582	38% 27% 32% 74% 40.0%  Total 48% 33% 40% 92% 50.0%  Total 52% 38%
Class Single Family Multi-Family Commercial Irrigation Total 50%  Class Single Family Multi-Family Commercial Irrigation Total 55%  Class Single Family Multi-Family Commercial Class	Baseline / Total  1,723,268 790,781 636,936 551,835 3,702,820 Shortage Le Baseline / Total  1,723,268 790,781 636,936 551,835 3,702,820 Shortage Le Baseline / Total  1,723,268 790,781 636,936	Annual Dema Indoor 1,253,995 756,078 539,160 - 2,549,233 vel 5 Reducti Annual Dema Indoor 1,253,995 756,078 539,160 - 2,549,233 vel 6 Reducti Annual Dema Indoor 1,253,995	and (HCF) Outdoor 469,273 34,703 97,776 551,835 1,153,587 ion (up to 50 and (HCF) Outdoor 469,273 34,703 97,776 551,835 1,153,587 ion (up to 55 and (HCF) Outdoor 469,273 34,703 97,776	Indoor	Outdoor 73.9% 73.9% 73.9% 73.9% 73.9%  Outdoor 92.3% 92.3% 92.3% 92.3% 100.0% 100.0%	Indoor 309,040 186,331 132,873 - 628,244  Reduct Indoor 385,913 232,681 165,925 - 784,519  Reduct Indoor 434,339 261,879 186,746	Outdoor  346,949 25,657 72,289 407,990 852,884  etions Outdoor 433,252 32,039 90,271 509,477 1,065,039  etions Outdoor 469,273 34,703 97,776	655,988 211,988 205,162 407,990 1,481,128  Total 819,166 264,720 256,196 509,477 1,849,559  Total 903,612 296,582 284,522	38% 27% 32% 74% 40.0%  Total 48% 33% 40% 92% 50.0%  Total 52% 38% 45%
Class Single Family Multi-Family Commercial Irrigation Total 50% Class Single Family Multi-Family Commercial Irrigation Total 55% Class Single Family Multi-Family Multi-Family	Baseline / Total  1,723,268 790,781 636,936 551,835 3,702,820 Shortage Le Baseline / Total  1,723,268 790,781 636,936 551,835 3,702,820 Shortage Le Baseline / Total  1,723,268 790,781	Annual Dema Indoor 1,253,995 756,078 539,160 - 2,549,233 vel 5 Reducti Annual Dema Indoor 1,253,995 756,078 539,160 - 2,549,233 vel 6 Reducti Annual Dema Indoor 1,253,995 756,078	and (HCF) Outdoor 469,273 34,703 97,776 551,835 1,153,587 ion (up to 50 and (HCF) Outdoor 469,273 34,703 97,776 551,835 1,153,587 ion (up to 55 and (HCF) Outdoor 469,273 34,703 34,703	Indoor	Outdoor 73.9% 73.9% 73.9% 73.9% 73.9%  Outdoor 92.3% 92.3% 92.3% 92.3% 91.3% 92.3% 90.0%	Indoor 309,040 186,331 132,873 - 628,244  Reduct Indoor 385,913 232,681 165,925 - 784,519  Reduct Indoor 434,339 261,879	Outdoor  346,949 25,657 72,289 407,990 852,884  etions Outdoor 433,252 32,039 90,271 509,477 1,065,039  etions Outdoor 469,273 34,703	655,988 211,988 205,162 407,990 1,481,128  Total 819,166 264,720 256,196 509,477 1,849,559  Total 903,612 296,582	38% 27% 32% 74% 40.0%  Total 48% 33% 40% 92% 50.0%  Total 52% 38%

The service charges are fixed and generate 36% of the total rate revenue regardless of shortages. The remaining 64% of revenue is generated by the volumetric rates. In deriving the Drought Rate Factors, the factors will only apply to the volumetric rates because short-term reductions in water use correlate with

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short-term fluctuations in variable costs. Conversely, short-term reductions in water use would not affect fixed costs, or costs that would require a long-term change in customer demand (e.g. population decline) to be affected. Each customer class has its own set of Drought Rate Factors corresponding to its reduction in each stage of shortage.

The formula for the Drought Rate Factors comprises conservation and variable cost components. The conservation component adjusts to account for the required reduction in water demand. A portion, not all, of the costs (e.g., power, water purchases) covered by Water Use Charge rates are variable and will not be incurred when less water is used during short-term demand reductions. To ensure the Drought Rate Factors do not result in excess revenue collection, the variable cost component of the calculation reduces the factor to account for the portion of variable costs, which is covered by the quantity charges, and will not be incurred when demand decreases.

The Drought Rate Factors are the product of the conservation component multiplied by the variable cost component. Each component is defined as follows:

**Drought Rate Factor** = Conservation Component multiplied times Variable Cost Component, where

Conservation Component = 1/(1 - a), where

a = required percentage reduction, which varies by customer class.

**Variable Cost Component** = (b - (c \* a))/b, where

a = required percentage reduction, which varies by customer class.

b = percentage of revenue from total service charges and volumetric rates for all customer classes that is attributable to volumetric rates, an amount that is 64% based on the cost-of-service analysis.

c = percentage of total revenue requirement covered by service charges and volumetric rates that varies based on fluctuations in demand, an amount that is currently 51%. <sup>19</sup>

The following example illustrates how the formula determined the 1.047 Drought Rate Factor in **Figure V-14** for the Single Family Residential customer class in a Stage 2 shortage in which an overall conservation goal of 20% if required.

**Conservation Component**: 1/(1 - a) = 1/(1 - 0.19033) = 1.23507, where

a = required percentage reduction is 19.033% for the Residential customer class (see **Figure V-13** where a rounded 19% is shown).

**Variable Cost Component:** (b - (c \* a))/b = (0.6415 - (0.5124 \* 0.19033))/0.6415 = 0.84796, where

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<sup>&</sup>lt;sup>19</sup> The cost of SFPUC water is the largest example of a variable cost, which varies with water demand.

a = 19.033% reduction for Residential customers in a Stage 1 shortage.

b = 64.15% of total rate revenue is generated by quantity charges; and

c = 51.24% of revenue requirement is related to variable costs.

**Drought Rate Factor** = 1.23507 \* 0.84796 = 1.047, as it is shown in **Figure V-14**.

The Single Family Residential Water Use Charge rates in effect under non-shortage conditions would be multiplied by 1.047 to derive the quantity charge rates to be in effect during a Stage 2 water shortage. **Figure V-14** shows the Drought Rate Factors that would be applied to the rates that would normally be in effect absent declared shortages.

Figure V-14. Drought Rate Factors by WSCP-Defined Shortage Stage

	Stage 1	Stage 2	Stage 3	Stage 4	Stage 5	Stage 6	
	Shortage	Shortage	Shortage	Shortage	Shortage	Shortage	
	Up to						
Class	(10% Reduction)	(20% Reduction)	(30% Reduction)	(40% Reduction)	(50% Reduction)	(55% Reduction)	
Single Family	1.021	1.047	1.080	1.124	1.182	1.222	
Multi-Family	1.014	1.031	1.051	1.074	1.101	1.121	
Commercial	1.018	1.039	1.064	1.096	1.135	1.162	
Irrigation	1.046	1.118	1.250	1.571	3.420	n/a	

#### <u>Implementation</u>

The recommended Drought Rate Factors in **Table V-14** are implemented only during periods of declared water shortage emergencies. Once a mandatory shortage is declared, the City Council has discretion to enact Drought Rate Factors corresponding to the level of shortage reduction implemented using the factors provided in **Table V-14 or** calculated using the formula for a specific level of reduction. The adjustments can go in either direction from stage to stage depending on whether the level of reduction is increasing or decreasing during the shortage. At least 30 days prior to making the adjustment, notice must be provided to rate payers, which can be included in the customer's bills. No protest process is required. These adjustments would be temporary, and rates would return to the regular schedule at the conclusion of the water shortage emergency.

The Drought Rate Factors could be applied when the City requires its customers to reduce water use. At such times, the Drought Rate Factors would be multiplied times the Water Use Charge rates proposed in the current rate study. These proposed Water Use Charge rates are based the specific demand projections for each year listed in **Figure III-1**. The City can choose to enact Drought Rate Factors when the water emergency demand levels will fall short of the respective year of modeled demand.

The Drought Rate Factors only apply to the tiered and uniform Water Use Charge rates and not to Service Charge rates, which are independent of water demand. The Drought Rate Factors are multiplied times the non-water shortage, normal-year Water Use Charge rates proposed in this report. The Drought Rate Factors would be adopted as part of the rate notification in the Proposition 218 implementation process. Once adopted, the City could apply the Drought Rate Factors as needed during conservation stages.

As a further example, **Figure V-15** has Water Use Charge rates after applying the Drought Rate Factors to the rates proposed for 2024. The table shows the proposed rates followed by the rates that correspond to each stage of conservation.

Figure V-15. Sample Rates With Drought Rate Factors – FY 2023-24 Rates

Water Emergency Shortage Stage		Stage 1	Stage 2	Stage 3	Stage 4	Stage 5	Stage 6
		10%	20%	30%	40%	50%	>50%
Single Family Drought Rate Factors		1.021	1.047	1.080	1.124	1.182	1.222
Multi-Family Drought Rate Factors		1.014	1.031	1.051	1.074	1.101	1.121
Commercial Drought Rate Factors		1.018	1.039	1.064	1.096	1.135	1.162
Irrigation Drought Rate Factors		1.046	1.118	1.250	1.571	3.420	n/a
Proposed 20	Rates With Drought Rate Factors Applicable to % Reductions						
Single Family							
Tier 1	\$6.45	\$6.59	\$6.76	\$6.97	\$7.25	\$7.63	\$7.88
Tier 2	\$7.37	\$7.53	\$7.72	\$7.96	\$8.28	\$8.71	\$9.01
Tier 3	\$9.63	\$9.83	\$10.09	\$10.40	\$10.82	\$11.39	\$11.77
Tier 4	\$14.57	\$14.88	\$15.26	\$15.74	\$16.37	\$17.23	\$17.80
Multi-Family	\$7.92	\$8.03	\$8.17	\$8.32	\$8.50	\$8.72	\$8.88
Commercial	\$7.92	\$8.06	\$8.23	\$8.43	\$8.68	\$8.99	\$9.21
Irrigation	\$7.92	\$8.28	\$8.85	\$9.90	\$12.44	\$27.09	N/A

Note that if reductions in water use are higher or lower than the specified stages set in the WSCP due to state mandated reductions in the level of potable water usage, or other natural disaster or event that results in a water shortage and an unforeseen drop in water demand, the Drought Rate Factors will be adjusted in accordance with the formula above.

#### **Pass-Through Adjustment**

The cost of SFPUC water is the single largest component of the City's revenue requirements. Because the City has no control over the SFPUC's wholesale water rate, this cost is simply passed through to the City's customers. The SFPUC provides projections of its future wholesale water rates, which are built into the rate projections in this study. The SFPUC updates its projections each year as part of the rate-making process legally prescribed in the wholesale Water Supply Agreement. California Government Code Section 53756 authorizes water suppliers to adjust their rates in response to changes in pass-through costs. We recommend that the City incorporate annual pass-through adjustments in its volumetric rates.

Each year the City should determine how much, if any, pass-through adjustment is required as soon as the SFPUC submits its updated wholesale rates, which is typically in April or May each year. The wholesale rate used for the projections in this study should be compared with the updated rate and the difference

either added or subtracted from the City's Water Use Charge rates for Residential and Non-Residential customers. The wholesale rates per HCF used in this study<sup>20</sup> are as follows:

FY 2023-24 - \$5.21 FY 2024-25 - \$5.21 FY 2025-26 - \$5.21 FY 2026-27 - \$5.31 FY 2027-28 - \$5.63

For example, if the updated SFPUC rate for FY 2023-24 is \$5.31, the \$0.10 difference should be added to the Water Use Charge rates charged to Residential and Non-Residential water customers. If the updated SFPUC rate is less than the foregoing rates, the difference should be subtracted from the City's volumetric rates. In other words, the adjustment should be made in either direction.

The pass-through adjustment acts similarly to the Drought Rate Factors, and can be incorporated into the Proposition 218 notice. The pass-through adjustment allows the City to adjust Water Use Charge rates to track any difference between the SFPUC rates that were included in the analysis and the actual rates adopted each year by SFPUC. The pass-through adjustment can also be made by providing 30-day notice in the customer bills without triggering the need for a Proposition 218 protest process.

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<sup>&</sup>lt;sup>20</sup> Rates included in letter from SFPUC to Nicole Sandkulla RE: Fiscal Year 2023-24 Wholesale Water Rates Notice, dated April 6, 2023.

# VI. CUSTOMER BILL IMPACTS

In the previous chapter, the Volume and Service Charge structures were compared for the current and proposed rates. A further understanding of the differences between the two structures can be gained by comparing bills based on both rate structures.

# **BILL COMPARISON**

# **Single Family Residential Bills Under Proposed Rates**

Customers pay the sum of the Service Charge corresponding to the capacity of their service plus a Water Use Charge for water use during the billing period.

**Figure VI-1** provides perspective on the impact of the proposed (red line) and current rates (blue line). This graph plots bills across a range of water use. The top of the graph indicates the ranges of demand corresponding to the tiers developed in the cost-of-service analysis. Customers can expect an increase for a given level of water use when the proposed rate structure line is above the current rate structure line.

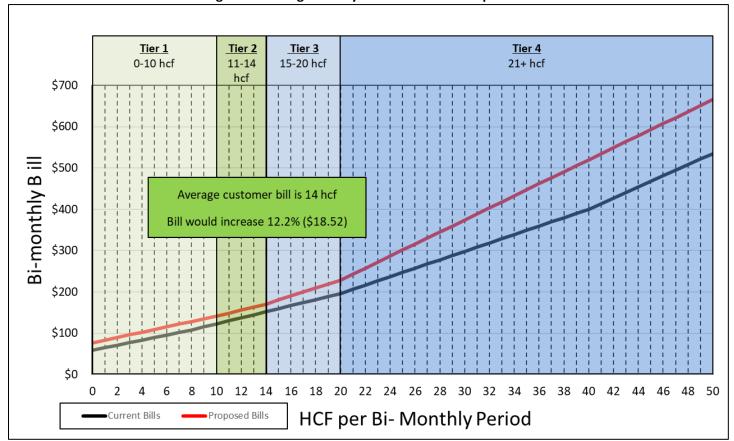


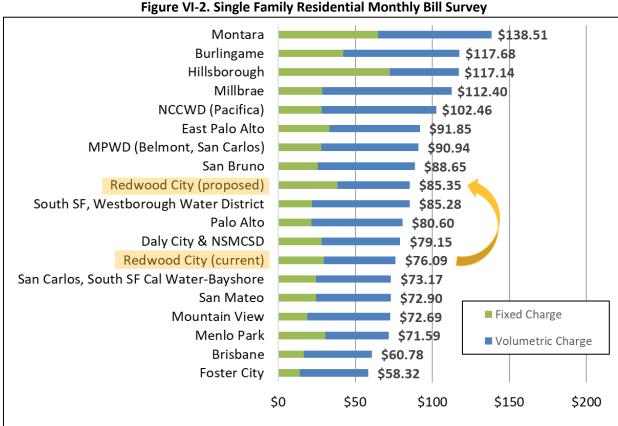
Figure VI-1. Single Family Residential Bill Comparison

Source: City billing data for FY 2021-22 and FY 2022-23.

The scale of the graph makes it difficult to discern the variance between bills at current rates and proposed rates for customers falling within the Tier 1 or Tier 2 range. Customers using 10 HCF (Tier 1) or less will see a bill increase ranging from \$17.68 to \$20.24, depending on the specific level of water use. Customers using between 11 and 14 HCF (Tier 2) will see a bill increase ranging from \$18.46 to \$18.52, depending on the specific level of water use. Since 67% of residential bills report water use equal to or less than 14 HCF, then the majority of bi-monthly bills will increase by no more than \$20.24. Customers using between 15 and 20 HCF (Tier 3) will see a bill increase ranging from \$20.80 to \$27.64, depending on the specific level of water use. Based on prior billing data, this is applicable to approximately 15% of all bills. Customers using at least 21 HCF (Tier 4) will see a minimum increase of \$29.92. The increase from the current bill grows as water use increases beyond 21 HCF. For example, an account using 23 HCF would see an increase of \$45.31 while a customer using 30 HCF would see an increase of \$75.90. For reference, customers with Tier 4 water use would account for 18% of bills. Further, almost 93% of bills report water use less than or equal to 30 HCF. The extraordinary water users represent a small fraction of the service population that should pay more for the peaking demands placed on the system.

### **Neighboring Agency Comparison**

The bill for average water use by a Single Family household in Redwood City was compared to a water bill subject to neighboring agency rates in Figure VI-2. For a monthly comparison, the average bi-monthly water use of 14 HCF was halved to 7 HCF to calculate the Volumetric charge. The bi-monthly Service Charge was halved to calculate the Fixed Charge. With the recommend increases, the customer bill for average water use increases slightly among neighboring agencies. However, the Redwood City bill under proposed rates is now closer to the median of rates surveyed.



### **Multi Family Bills Under Proposed Rates**

It is challenging to provide sample multi-family bills impacts due to the change in rate structure. There is a weak correlation between the number of dwelling units served and the size of the meter. In addition, water use is individual to each account and not directly correlated to the number of dwelling units served. Therefore, whether customers see an increase or decrease depends on two factors: 1) the number of dwelling units previously charged versus the proposed capacity-based Service Charge; and 2) the amount of water consumed by all residents served by the account as the Water Use Charges adjust from a tiered-rate structure to a uniform rate.

### **Commercial Bills Under Proposed Rates**

Commercial bills will increase proportionately to the level of water use. This is reflected by the widening gap between the two lines in each chart shown in **Figures VI-3 to VI-5**. The three comparisons shown are for three of the most common meter sizes and represent 59% of commercial customers. Regardless of the meter size and level of water use, customers can expect monthly bills will increase.

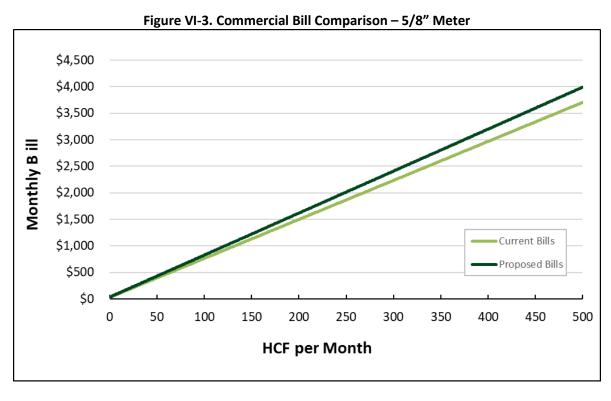
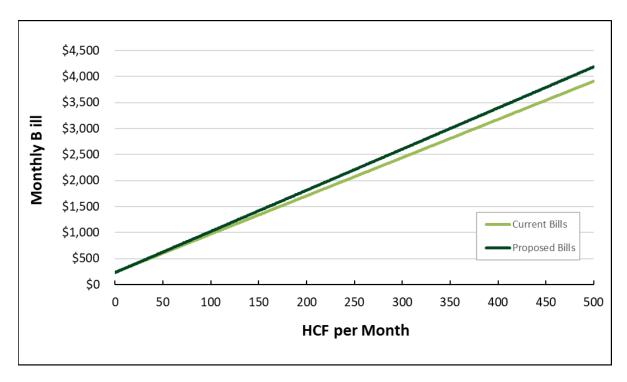
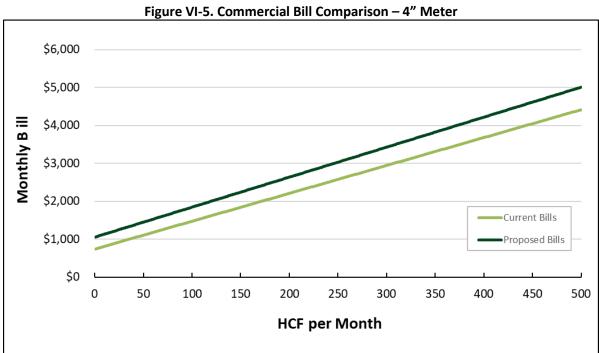


Figure VI-4. Commercial Bill Comparison - 2" Meter





The scale of each graph makes it difficult to discern the variance between bills at current rates and proposed rates. **Figure VI-6** provides specific bill impacts by incremental water use and meter size.

Figure VI-6. Sample Commercial Bill Impacts by Meter Size and Water Use

	5/8" meter		2" meter		4" meter				
Water		Bill with			Bill with			Bill with	
Use		Proposed	Monthly		Proposed	Monthly		Proposed	Monthly
(HCF)	<b>Current Bill</b>	Rates	Increase	<b>Current Bill</b>	Rates	Increase	<b>Current Bill</b>	Rates	Increase
0	\$29.52	\$38.36	\$8.84	\$236.16	\$238.44	\$2.28	\$738.00	\$1,081.66	\$343.66
10	\$103.02	\$117.56	\$14.54	\$309.66	\$317.64	\$7.98	\$811.50	\$1,160.86	\$349.36
20	\$176.52	\$196.76	\$20.24	\$383.16	\$396.84	\$13.68	\$885.00	\$1,240.06	\$355.06
30	\$250.02	\$275.96	\$25.94	\$456.66	\$476.04	\$19.38	\$958.50	\$1,319.26	\$360.76
40	\$323.52	\$355.16	\$31.64	\$530.16	\$555.24	\$25.08	\$1,032.00	\$1,398.46	\$366.46
50	\$397.02	\$434.36	\$37.34	\$603.66	\$634.44	\$30.78	\$1,105.50	\$1,477.66	\$372.16
100	\$764.52	\$830.36	\$65.84	\$971.16	\$1,030.44	\$59.28	\$1,473.00	\$1,873.66	\$400.66
200	\$1,499.52	\$1,622.36	\$122.84	\$1,706.16	\$1,822.44	\$116.28	\$2,208.00	\$2,665.66	\$457.66
300	\$2,234.52	\$2,414.36	\$179.84	\$2,441.16	\$2,614.44	\$173.28	\$2,943.00	\$3,457.66	\$514.66
400	\$2,969.52	\$3,206.36	\$236.84	\$3,176.16	\$3,406.44	\$230.28	\$3,678.00	\$4,249.66	\$571.66
500	\$3,704.52	\$3,998.36	\$293.84	\$3,911.16	\$4,198.44	\$287.28	\$4,413.00	\$5,041.66	\$628.66

### **EXHIBIT B**

### ARTICLE II. WATER SERVICE AND FACILITIES CHARGES

### Sec. 38.5. WATER SERVICE CHARGE:

- <u>A</u>. In addition to all other charges and fees applicable to users of water from the water system owned or operated by the City of Redwood City, as established by the Water Rules and Regulations of the Public Works Services Department, as amended, and this chapter, residential and non-residential water service charges shall be paid for <u>by</u> each <u>parcel receiving</u> water service provided by the City at the rates <u>set forth in this Section:</u> adopted by ordinance or resolution of the City Council.
- (a) Residential Basic Water Service Charge. A monthly water service charge per dwelling unit equivalent ("DUE") for residential customers, irrespective of whether such service is furnished through a single meter for multiple dwelling units or through individual meters for each dwelling unit, is hereby established as follows:

Service Charge per DUE* Per Month		
Effective Date:	08/01/16	
	<del>\$25.39</del>	
Effective Date:	<del>07/01/17</del>	
	<del>\$27.38</del>	
Effective Date:	07/01/18	
	<del>\$29.52</del>	

### \* DUEs shall be determined as follows:

- (i) A single-family residence consisting of one (1) independent dwelling unit on a parcel of property shall be deemed 1 DUE; and
- (ii) Multi-family residences, consisting of more than one (1) dwelling unit on a parcel of property shall be deemed to consist of the number of DUEs derived from applying the following conversion table.

# **Multi-Family Dwelling Unit Equivalent Conversion Schedule**

Residential  Dwelling  Units	Conversion Schedule Per Residential Dwelling Unit
Up to 9	1 DUE
<del>10 to 59</del>	0.75 DUE
60 or more	0.50 DUE

(b) Non-Residential Basic Water Service Charge. Monthly water service charges for water service to non-residential customers are hereby established as follows and are calculated based on the size of each meter served by the City:

# Service Charges Per Meter Category Per Month

Meter Sizes **	Effective Date: 08/01/16	Effective Date: 07/01/17	Effective Date: 07/01/18
5/8-inch	\$25.39	\$27.38	\$29.52
3/4-inch	<del>38.09</del>	<del>41.07</del>	44.28
1-inch	63.48	<del>68.45</del>	<del>73.80</del>
1-1/2-inch	<del>126.95</del>	<del>136.90</del>	<del>147.60</del>
2-inch	<del>203.12</del>	<del>219.04</del>	<del>236.16</del>
3-inch	<del>380.85</del>	410.70	442.80
4-inch	634.75	684.50	<del>738.00</del>
Over 4-inch	<del>1,269.50</del>	<del>1,369.00</del>	<del>1,476.00</del>

- (c) Manifold Meters. The service charge for a manifold meter installation shall be the sum of the applicable individual meter service charges for each such installation.
- (d) Fire Meter Service Charge. Monthly charges for water service furnished to fire service connections for the corresponding fire connection sizes after the effective date are hereby established as follows:

Fire Meter Service Sizes	
1 inch	<del>\$16.00</del>
2 inch	<del>32.00</del>
3 inch	48.00
4 inch	64.00
6 inch	96.00
8 inch	<del>128.00</del>
10 inch	<del>160.00</del>
12 inch	192.00

Fire meters are not a part of a regular meter billing system and are only billed when the usage is registered.

### (e) [Reserved]

(f) Water Quantity Charges. In addition to the monthly basic charges set forth in subdivisions (a) and (b) of this Section, each customer shall be charged consumption rates, based on meter readings, for each hundred cubic feet ("water unit") of water delivered by the City to customer premises in accordance with the following schedules:

# Residential Water Quantity Charges—Potable

Monthly	Tier	Charge per	Charge per	Charge per
Consumption		Water	Water	Water
Ranges		Unit Effective	Unit Effective	Unit Effective
(Water Unit)		<del>08/01/2016</del>	<del>07/01/2017</del>	<del>07/01/2018</del>
1—4	1	<del>\$5.27</del>	<del>\$5.68</del>	<del>\$6.13</del>
<del>5—10</del>	2	<del>6.32</del>	<del>6.82</del>	<del>7.35</del>
<del>11—20</del>	3	8 <del>.77</del>	9.46	<del>10.20</del>
21 and above	4	<del>11.57</del>	<del>12.47</del>	<del>13.45</del>

Ranges are stated on a per DUE per month basis. The ranges stated above shall be multiplied by the number of DUEs served and by the number of months in the billing period.

## Commercial Water Quantity Charges—Potable

	<del>Tier</del>	Charge per	Charge per	Charge per
		<del>Water</del>	<del>Water</del>	<del>Water</del>
		Unit Effective	Unit Effective	Unit Effective
		<del>08/01/2016</del>	<del>07/01/2017</del>	<del>07/01/2018</del>
All Water Use	1	<del>\$6.32</del>	<del>\$6.82</del>	<del>\$7.35</del>

# **Landscape Irrigation Water Quantity Charges—Potable**

Portion of Water Budget	Charge per Water Unit Effective	Charge per Water Unit Effective	Charge per Water Unit Effective
	<del>08/01/2016</del>	<del>07/01/2017</del>	<del>07/01/2018</del>
<del>0—100%</del>	<del>\$6.32</del>	\$ <del>6.82</del>	<del>\$7.35</del>
<del>101—200%</del>	<del>8.77</del>	9.46	<del>10.20</del>
<del>)201%</del>	<del>11.57</del>	<del>12.47</del>	<del>13.45</del>

Potable Landscape Water Quantity Charge Tiers are based on a 'water budget' calculated according to the City's 'water budget methodology', which is available at www.redwoodcity.org/utilityrates.

## Water Quantity Charges—Recycled Water

	Charge per Water	Charge per Water	Charge per Water
	Unit Effective	Unit Effective	Unit Effective
	<del>08/01/2016</del>	<del>07/01/2017</del>	<del>07/01/2018</del>
All Water Use	<del>\$6.32</del>	<del>\$6.82</del>	<del>\$7.35</del>

(g) <u>B.</u> Bi-Monthly Billing. Water meters or classes of water meters may be read bimonthly, and the corresponding billing period shall be for a two-month period.

- (h) After-Hour Turn-on Fee. The fee for direct costs associated with turning on water meters or classes of water meters during non-business hours of the Public Works Division shall be in an amount set by resolution of the City Council. When after-hour turn-on is requested by a user, this fee shall be charged and collected on the user's next ensuing utility bill.
- (i) <u>C.</u> Separate Landscape Water Meters. For all new landscapes and existing landscapes of one acre or more the installation of separate water meter is required except for single-family homes.
- (j) <u>D.</u> Submeters. For all <u>All</u> newly constructed residential buildings, where one meter is furnished by the City for more than one residential dwelling unit, shall be required to install a separate meter for each distinct dwelling unit downstream of the City water meter. Maintenance and billing for water use of submeters shall be the responsibility of the property owner.
- (k) Pass Through Provision for Wholesale Water Rates. All potable water distributed by the City through its water system is purchased by the City at wholesale from the San Francisco Public Utilities Commission. The potable water service charges set forth in subdivision (f) of this Section were calculated based on the assumption that SFPUC would set its rates to \$4.10 per unit on July 1, 2016; to \$4.28 per unit on July 1, 2017; and to \$4.68 per unit on July 1, 2018. If there are additional wholesale rate increases adopted by the SFPUC, each potable water charge, as set forth in subdivision (f) of this Section, will automatically adjust by the exact number of cents per water unit that the SFPUC increases its wholesale rate above the assumed wholesale rates set forth in this subdivision (k). The City will mail notification of any such adjustment to customers at least 30 days prior to the effective date of such automatic adjustment.

### Sec. 38.6. PAYMENT; DISCONTINUANCE OF SERVICE; PRORATION:

The water meter service charge shall be paid at the same time as the regular billing for water service based upon the amount of water consumed, and the nonpayment of the water meter service charge shall result in the discontinuance of water service under the same rules and regulations that are applicable to nonpayment of the billing for water consumed. The water meter service charge shall be prorated where water service is utilized for only a portion of a billing period.

### Sec. 38.7. WATER SERVICE ADMINISTRATION:

### A. Charges when meter is inoperative.

If a meter fails to register due to any cause except the nonuse of potable or recycled water, the charge for potable or recycled water will be estimated based on previous consumption for a comparable period or by such other method as is determined by the City. In the preparation of such averaged bills, due consideration will be given to fluctuations caused by seasonal changes or any interruption to the service known to have occurred.

# B. Charges for vacant premises.

If a property is vacant, the fixed component of the water service charge and any water used in the billing period will be billed to the active account holder on record. The account holder or authorized representative shall be responsible for notifying the City and requesting to discontinue service.

Secs. 38.78-38.9 RESERVED

### **EXHIBIT C**

### **ARTICLE IV. WATER FUND**

### Sec. 38.20. ESTABLISHED; REVENUES; USE OF REVENUES:

A special fund to be known as the Water Fund is hereby established. All revenues arising from the imposition of the charges and fees provided in this Chapter, and all revenues arising from the imposition of the charges and fees established by the rules and regulations (and all amendments thereto) of the Water Department of the City or such other revenues derived from the operation of water utilities owned or operated by the City as are or may be provided shall be deposited in the Water Fund. Such revenues shall be expended solely for the following purposes; provided, however, that such revenues derived from the operation of such water utilities serving water service Area 3 shall be expended exclusively for the following purposes related to said water service area: the acquisition, construction, reconstruction (including the extension or replacement of existing mains and transmission lines), maintenance, management, operation and repair of such water facilities; the payment of bond interest and principal or charges due on any bond issue (including facilities bonds, all or any portion of the proceeds of which are used for the following purposes) sold for the purpose of acquiring, constructing, or reconstructing water facilities; and for such other lawful purposes of the City as the City Council may provide from time to time. Within the Water Fund, the City shall maintain separate and segregated accounts for the revenues for each charge, rate, or fee imposed pursuant to this Chapter. The revenues from each charge, rate, or fee shall be used for the purposes for which they were imposed.

Secs. 38.21—38.24. RESERVED:

# **Exhibit D**

# **Water Service Charges**

	Effective	Effective
Fixed Service Charges	2/1/2024	1/1/2025
Single Family Residential	Bi-monthly per l	Dwelling Unit
	\$76.72	\$82.09
Multi Family Residential		
(including Residential Irrigation)	Bi-monthly រុ	oer Meter
5/8" Meters	\$76.72	\$82.09
3/4" Meters	\$105.30	\$112.67
1" Meters	\$162.46	\$173.83
1.5" Meters	\$305.38	\$326.76
2" Meters	\$476.88	\$510.26
3" Meters	\$1,262.94	\$1,351.35
4" Meters	\$2,163.32	\$2,314.75
6" Meters	\$4,592.92	\$4,914.42
8" Meters	\$8,022.96	\$8,584.57
10" Meters	\$12,024.68	\$12,866.41
Commercial		
(including Commercial Irrigation)	Monthly pe	er Meter
5/8" Meters	\$38.36	\$41.05
3/4" Meters	\$52.65	\$56.34
1" Meters	\$81.23	\$86.92
1.5" Meters	\$152.69	\$163.38
2" Meters	\$238.44	\$255.13
3" Meters	\$631.47	\$675.67
4" Meters	\$1,081.66	\$1,157.38
6" Meters	\$2,296.46	\$2,457.21
8" Meters	\$4,011.48	\$4,292.28
10" Meters	\$6,012.34	\$6,433.20

Water Use Charges	Effective	Effective
_	2/1/2024	1/1/2025
Single Family Residential		
_	Per HCF	Per HCF
Tier 1 (0-10 HCF)	\$6.45	\$6.90
Tier 2 (11-14 HCF)	\$7.37	\$7.89
Tier 3 (15-20 HCF)	\$9.63	\$10.30
Tier 4 (21+ HCF)	\$14.57	\$15.59
Multi Family Residential (including	Residential Fire)	
_	Per HCF	Per HCF
All Water Use	\$7.92	\$8.47
Commercial	Maria Maria di Cari	······································
(Includes Commercial, Industrial, O	•	-
<u>-</u>	Per HCF	Per HCF
All Water Use	\$7.92	\$8.47
Landscape Irrigation		
_	Per HCF	Per HCF
All Water Use	\$7.92	\$8.47

HCF= Hundred Cubic Feet, 748 gallons, or 1 unit

Fire Service Connections	Effective	Effective
Size	2/1/2024	1/1/2025
1"	\$17.28	\$18.49
2"	\$34.56	\$36.98
3"	\$51.84	\$55.47
4"	\$69.12	\$73.96
6"	\$103.68	\$110.94
8"	\$138.24	\$147.92
10"	\$172.80	\$184.90
12"	\$207.36	\$221.88

Note: monthly rates are billed based on the size of the connection serving the property.

Maximum Drought Rate Factors by Water Conservation Stage						
	Stage 1	Stage 2	Stage 3	Stage 4	Stage 5	Stage 6
Customer Class	Shortage Up to 10% Reduction	Shortage Up to 20% Reduction	Shortage Up to 30% Reduction	Shortage Up to 40% Reduction	Shortage Up to 50% Reduction	Shortage Up to >50% Reduction
Single Family	1.021	1.047	1.080	1.124	1.182	1.222
Multi-Family	1.014	1.031	1.051	1.074	1.101	1.121
Commercial	1.018	1.039	1.064	1.096	1.135	1.162
Irrigation	1.046	1.118	1.250	1.571	3.420	n/a





# 1. CALL TO ORDER





# 3. PLEDGE OF ALLEGIANCE



# Led by Council Member Eakin



# 4. CLOSED SESSION

4.A. Closed session regarding existing litigation pursuant to paragraph (1) of subdivision (d) of California Government Code Section 54956.9



# CONFERENCE WITH LEGAL COUNSEL – EXISTING LITIGATION

Litigation has been initiated formally pursuant to paragraph (1) of subdivision (d) of California Government Code Section 54956.9.

Name of Case: Stephen Fine v. City of Redwood City –
Workers' Compensation Appeals Board
Case Nos. ADJ11026382, ADJ10869273, ADJ1155500,
and ADJ15070830

# **6. PUBLIC COMMENT**

Closed Session



# IN-PERSON PUBLIC COMMENT

# **HOW TO PROVIDE LIVE PUBLIC COMMENTS** IN-PERSON AT REDWOOD CITY COUNCIL MEETINGS

- Meetings take place in the Council Chambers at City Hall, 1017 Middlefield Road
- Seating capacity will be limited to maintain social distancing to protect health and safety

- Masks will be strongly encouraged for all in-person attendees
- - Fill out a Speaker Card (please include Agenda Item # you wish to speak on)



- Place the completed card in the tray in front of the City Clerk
- **Listen for** the item vou would like to comment on
- Wait to be .... announced by your name and provide remarks at the podium

Once public comment begins, no additional speakers will be allowed to join the speakers list

# 6. PUBLIC COMMENT

Closed Session



# Public comments within the City's subject matter jurisdiction received via email by 5:00 p.m.



# \*\*CLOSED SESSION\*\*

The City Council is currently in Closed Session, the regular meeting will resume immediately following the Closed Session.

# 5. PRESENTATIONS/ACKNOWLEDGEMENTS



5.A. Senator Josh Becker presentation of check to Redwood City and Redwood City Together for the Purposeful, Action, Creation and Engagement (PACE) program

# 5. PRESENTATIONS/ACKNOWLEDGEMENTS - continued



5.B. Presentation by HIP Housing

# 6. PUBLIC COMMENT ON THE CONSENT CALENDAR, MATTERS OF COUNCIL INTEREST, AND ITEMS NOT ON THE AGENDA



# **IN-PERSON PUBLIC COMMENT**



Once public comment begins, no additional speakers will be allowed to join the speakers list

6. PUBLIC COMMENT ON THE CONSENT CALENDAR,
MATTERS OF COUNCIL INTEREST, AND ITEMS NOT ON
THE AGENDA



Public comments within the City's subject matter jurisdiction received via email by 5:00 p.m.

# 7. CONSENT CALENDAR

7.A. Rejection of general liability claim by Brenda Interiano-Lorenzo on behalf of minor E. Lemus Interiano, c/o Law Offices of Eslamboly Hakim



Recommendation:
Approve rejection of subject claim.

# 7. CONSENT CALENDAR

# 7.B. Historic Resources Advisory Committee Work Plan for FY 2023-24 and FY 2024-25



# Recommendation:

By motion, approve the proposed Historic Resources Advisory Committee Work Plan for FY 2023-24 and FY 2024-25

7.C. Resolution authorizing the submittal of individual grant applications for CalRecycle grant programs and authorizing the City Manager or their designee to execute all grant documents necessary to secure CalRecycle funds and implement approved grant projects

# Recommendation:

Adopt a resolution authorizing submittal of individual grant applications for all CalRecycle grant programs for which the City of Redwood City is eligible and authorizing the City Manager or City Manager's designee to execute all grant documents necessary to secure grant funds and implement approved grant projects.

7.D. Notification of the exigent use of military equipment (drone) not approved for use by Redwood City Police Department's Military Equipment Use Policy during police activity on October 26, 2023

# Recommendation:

Receive notification of the exigent use of unapproved military equipment during police activity on October 26, 2023, as required by Police Department Military Equipment Use Policy Section 703.9.

7.E. Approve November 27, 2023 City Council Minutes



7.F. Approve claims and checks from December 4, 2023 to December 18, 2023 and the usual and necessary payments through December 18, 2023



# 8. PUBLIC HEARINGS



# 8. PUBLIC HEARINGS

8.A. Public Hearing on proposed increase to water utility service rates and charges and ordinance updating water service charges and water reserve policy and direction on increases to the City's Utility Rate Assistance Program

# Recommendation:

- 1. Hold a Public Hearing on proposed increase to water utility service rates and charges, and if written protests are not made by a majority of the affected parcels, waive the first reading and introduce ordinance amending Article II (Water Service and Facility Charges) and Article IV (Water Fund) of Chapter 38 of the Redwood City Municipal Code, Updating the City's water service charges, amending Resolution No. 14648 and Rescinding Resolution No. 15446 (5/7 vote); and
- 2. Provide direction to staff on increasing the City's Utility Rate Assistance Program.

# **8.A. PUBLIC COMMENT**

Public Hearing on proposed increase to water utility service rates and charges and ordinance updating water service charges and water reserve policy and direction on increases to the City's Utility Rate Assistance Program



# **IN-PERSON PUBLIC COMMENT**



Once public comment begins, no additional speakers will be allowed to join the speakers list

# **8.A. PUBLIC COMMENT**

Public Hearing on proposed increase to water utility service rates and charges and ordinance updating water service charges and water reserve policy and direction on increases to the City's Utility Rate Assistance Program



# Public comments within the City's subject matter jurisdiction received via email by 5:00 p.m.

# 9. STAFF REPORTS

9.A. Informational report to City Council outlining minor technical adjustments to the City Council District 7 boundaries that will result in no changes to the composition of the districts



# Recommendation:

Receive report prepared by the City Clerk outlining minor technical adjustments to the City Council District 7 boundaries, as required by Section 2 of Ordinance No. 2506 – City Council District Elections. Adjustments made will not result in changes to the composition of the districts. Report is for informational purposes only and no Council action is required.

### 9.A. PUBLIC COMMENT

in front of the City Clerk

Informational report to City Council outlining minor technical adjustments to the City Council District 7 boundaries that will result in no changes to the composition of the districts



### **IN-PERSON PUBLIC COMMENT**



Once public comment begins, no additional speakers will be allowed to join the speakers list

to comment on

remarks at the podium

### 9.A. PUBLIC COMMENT

Informational report to City Council outlining minor technical adjustments to the City Council District 7 boundaries that will result in no changes to the composition of the districts



# Public comments within the City's subject matter jurisdiction received via email by 5:00 p.m.

### **10. MATTERS OF COUNCIL INTEREST**

10.A. City Council Member Report of Meetings and Conferences

Attended

### **10. MATTERS OF COUNCIL INTEREST**



### **10.B. City Council Committee Reports**

- A. Climate Action Sub-Committee
- **B. Transportation Mobility Sub Committee**
- C. Equity and Social Justice Sub-Committee
- D. Ad Hoc Committee on 101/84 Project

### 10. MATTERS OF COUNCIL INTEREST - continued

Redwood City | California Founded 1867

10.C. City Manager (Oral) Update





The next City Council meeting is scheduled for December 18, 2023

## **FUTURE COUNCIL MEETING DATES**



- ✓ December 18, 2023
- ✓ January 8, 2024
- ✓ January 22, 2024

# CITY OF REDWOOD CITY STRATEGIC INITIATIVES





# SEND A SERVICE REQUEST WITH EASE

www.redwoodcity.org/myrwc







# Neighborhood Associations

Connecting Neighbors & Building a Great Community Together



WWW.REDWOODCITY.ORG/NASIGNUP

# CITY OFFERS ONLINE TOOLS TO ANSWER YOUR QUESTIONS!



## Would you like to...

- Find a Downtown restaurant?
- ► Learn about City construction projects?
- Search the library's catalog?
- Locate community centers or parks?
- Apply for a job?

Go to www.redwoodcity.org for the answers!

# REDWOOD CITY PUBLIC LIBRARY



The Redwood City Public Library offers many programs and services for all to enjoy!

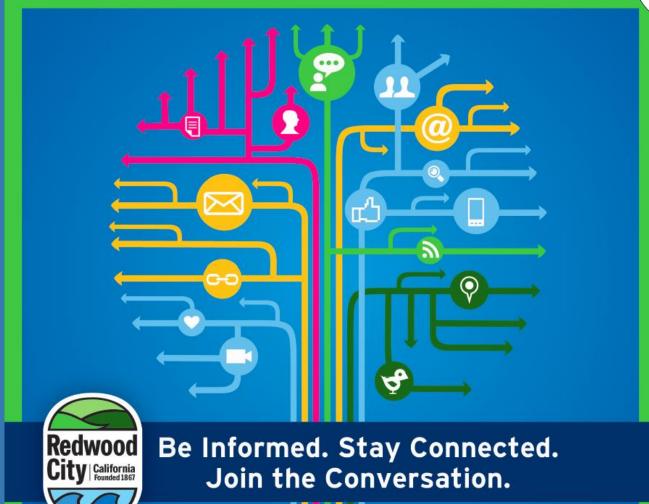
The Redwood City Downtown Branch is located at 1044 Middlefield Road

You can also call to ask questions over the phone at 650-780-7026, or visit the library online, 24 hours a day, 7 days a week at

http://www.redwoodcity.org/library

# CONNECT & STAY INFORMED www.redwoodcity.org/connect





# **CONNECT WITH US!**



# Ways To Connect With Us



www.redwoodcity.org/myrwc



@RedwoodCityGov



@RedwoodCity



www.youtube.com/ cityofredwoodcity



www.facebook.com/ cityofredwoodcity



Nextdoor **Redwood City** 



@CityofRedwoodCity



Redwood City VOICE



www.downtownredwoodcity.org



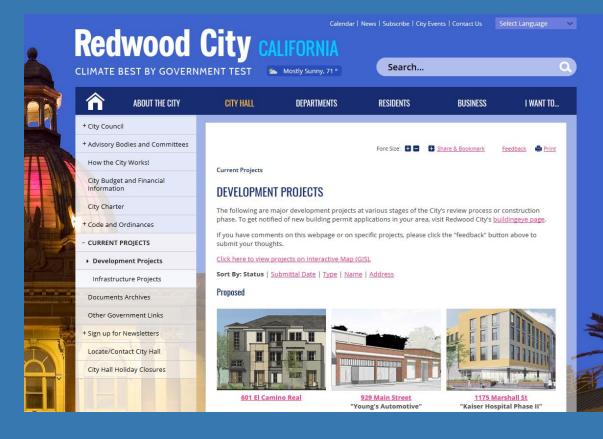
www.redwoodcity.org

# NEW DEVELOPMENT PROJECT WEBPAGE



www.redwoodcity.org/currentprojects

Learn more about development projects at various stages of review at the City's NEW development project webpage.



# UTILITY RATE ASSISTANCE PROGRAM



Need help paying your utilities?

The City of Redwood City offers the Water and Sewer Rate Assistance Program (WSRAP) to qualifying utility rate payers.

Eligibility is based on household income and qualifying applicants will receive a credit of around \$20 on their utility bill each month.

Learn more at <u>www.redwoodcity.org/rateassistance</u>

# TIPS FOR SAVING WATER



Use the EPA WaterSense website to find out if your household has water efficient products. Redwood City offers rebates for WaterSense toilets.



Turn off the tap while shaving or brushing your teeth. The City offers low flow faucet aerators for FREE!



Take a shower over a bath...just be aware of how long you are showering! We offer residents FREE low flow showerheads and shower timers!



In the kitchen...plug the sink or use a wash basin if washing dishes by hand.



5 Use a dishwasher, and fill it up before you do!

6



Scrape your plate instead of rinsing before loading it into the dishwasher.



Keep a pitcher of drinking water in the refrigerator so you're not waiting for water to cool as it comes out of the faucet.



Avoid the garbage disposal...it's not good for your pipes or water conservation. Throw food scraps in the compost bin.



9 Wash only full loads of laundry or use the appropriate load size selection on your machine. The City and PG&E offer rebates for High Efficiency Washing Machines!



10 Check plumbing fixtures and irrigation systems for leaks.



Give your garden hose a break. Sweep driveways, sidewalks, and steps rather than hosing off.



Wash the car with water from a bucket, or use a commercial car wash that recycles water.



# PENINSULA CLEAN ENERGY





Find out what the buzz is about!





## **LEARN MORE HERE:**

www.peninsulacleanenergy.com

# **NEW PARKING OPTIONS**

## **PARKING** DOWNTOWN REDWOOD CITY

Street parking free Mon - Sat before 10am and after 6pm; free all day Sunday.

#### Commuter

Street parking 25¢ per hour Mon-Sat, 10am-6pm; First 11/2 hours free in garages at all times

#### GARAGES 1. MARSHALL

387 spaces (\$1 per hour before 6pm) 2. JEFFERSON 585 spaces

(25¢ per hour

before 6pm)

#### Downtown Event & Dinner Visitor (FREE with validation)

\$2.50 per hour after 6pm (First 11/2 hours free at all times/first 4 hours free with validation from Century Theater)

- GARAGES 1. MARSHALL 387 spaces
- 2. JEFFERSON 585 spaces 3. CROSSING 900 900 spaces
- (Open to the public nights & weekends)

#### Downtown Event & Dinner Visitor (FREE)

Free Mon - Fri after 6pm, all day on weekends

4 COUNTY GARAGE 797 spaces 5. CALTRAIN LOT 160 spaces

#### Lunchtime/ **Daytime** Visitor

\$1 per hour Mon-Sat, 10am-6pm; lots free Mon-Sat after 6pm and all day Sunday

- 6. MAIN STREET LOT
- 150 spaces 7. CITY HALL LOT
- 15 spaces 8. LIBRARY LOT A
- 88 spaces
- 9. LIBRARY LOT B 98 spaces
- 10. PERRY STREET LOT 52 spaces



Find the parking new map and more details online at www.redwoodcity.org/parking

Redwood

| California | Founded 1867

- A. Courthouse Square
- D. Fox Theatre
- C. Century Theatre
- E. Dragon Theatre F. Caltrain Station
- G. San Mateo County History Museum H. City Hall

# JOIN THE CONVERSATION

The City is looking for your input!

Learn about ways to share your ideas, concerns and input on issues facing the City.

Visit <a href="https://www.redwoodcity.org/jointheconversation">www.redwoodcity.org/jointheconversation</a> for more details!





# DOWNTOWN REDWOOD CITY





Retail, restaurants, events, and more are located right here in downtown Redwood City.

Visit <u>www.downtownredwoodcity.org</u> to learn more.

# **VOLUNTEER IN REDWOOD CITY**





Thanks to our volunteers for their time and involvement supporting our community!

Join thousands of volunteers who have contributed <u>over</u> <u>200,000 hours</u> of service!

Make an impact in the community by volunteering today!

Visit <a href="www.redwoodcity.org/volunteer">www.redwoodcity.org/volunteer</a> to learn more and get involved.



# REDWOOD CITY FIRE DEPARTMENT





The **CERT** program will provide participants with basic training in disaster survival and rescue skills.

**For More Information Please Contact:** 

Redwood City Fire Department (650) 780-7400

www.redwoodcity.org/cert

# HOME IMPROVEMENT LOAN PROGRAM!







# DO YOU NEED HELP WITH HOME IMPROVEMENT PROJECTS?



Apply now and we can help you enjoy a more comfortable home environment with a new heating system, roof and/or windows as well as improved energy efficiency.



If your roof is 15 years or older or leaks, it may be time to consider getting a new roof. Window leaks can also be a problem.



Protect your investment and don't allow water damage to ruin your home. Energy-efficient windows, and heating systems can pay for themselves with energy cost savings over time.

These improvements will provide energy efficiency, comfort, better home value, and peace of mind.

#### TAKE ADVANTAGE OF REDWOOD CITY'S HOME IMPROVEMENT LOAN PROGRAM!

Low interest home improvement loans are available to eligible owners of single-family homes and owners of rental property located within incorporated Redwood City. Single-family homes include structures of 1–4 units, one of which must be owner-occupied. Rental property owners must rent 51% of their units to low-income tenants. Rehabilitate your home and take advantage of these generous loan terms — 2% interest fully amortized over 15 years. There are no points and no "out-of-pocket" expenses for loan fees.

MORE INFORMATION CALL US AT 650.780.7290
OR GO TO WWW.REDWOODCITY.ORG/HILP

# Housing Resource Guide/Guía de Recursos de Vivienda

Do you need help with a challenging rental housing issue? Are you looking for affordable housing?

For a list of programs and services to help, go to the City's website for a housing resource guide.

¿Necesita ayuda con un problema de difícil vivienda de alquiler? ¿Está buscando una vivienda asequible?

Para obtener una lista de programas/servicios traducido en español ve aquí: www.redwoodcity.org/housingresourceguide





### **Presentation Outline**



- Background
- Revenue Required to Fund the Water Enterprise
- Proposed Rates
- Bill Comparisons
- Recommended increase to Utility Rate Assistance Program
- Public Hearing
- Council Action

### **Questions for Council**



- Does Council have any questions regarding:
  - Revenue required for the Water Enterprise?
  - Proposed rates?
  - Bill impacts resulting from the proposed rates?
  - Drought rate factors?
  - Proposed increase to Utility Rate Assistance Program?

## Background



- Self-Supporting Water Enterprise
- All water from San Francisco Public Utilities Commission (SFPUC)
- Redwood City Water Rates have not increased since 2018
- Water Rate Cost-of-Service Study completed October 11, 2023

## **Background**



- Avoid borrowing funds for capital projects
- Minimize water losses
  - Survey system for leaks
  - Test water meters for accuracy
- Water Conservation Programs
- Recycled Water

## Revenue Requirement



- SFPUC Purchased Water Costs
  - 40% of Water Enterprise costs
  - 27% increase over last two years
- SFPUC cost increasing due to:
  - Increased personnel costs
  - Increased debt service
  - Infrastructure upgrades
- No projected increases until FY 2027-28 then increase 3%

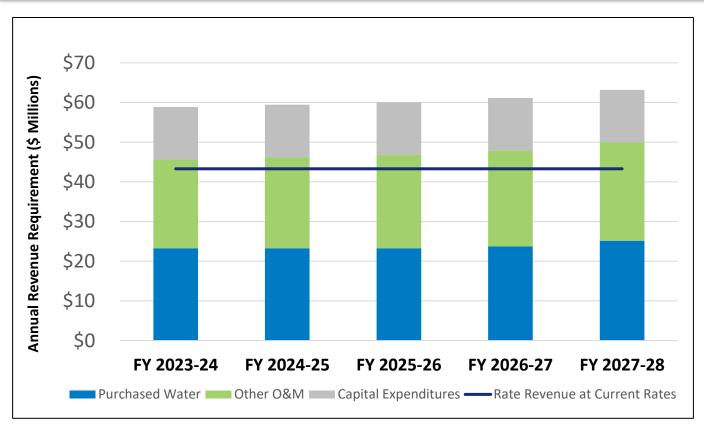
### **Revenue Requirement**



- Operations & Maintenance
  - Supplies & Materials
  - Equipment
  - Utilities
  - Employee
  - Projected to increase 3% each year
- Capital Projects
  - -\$13.2 million average per year
  - -5-Year Capital Improvement Program

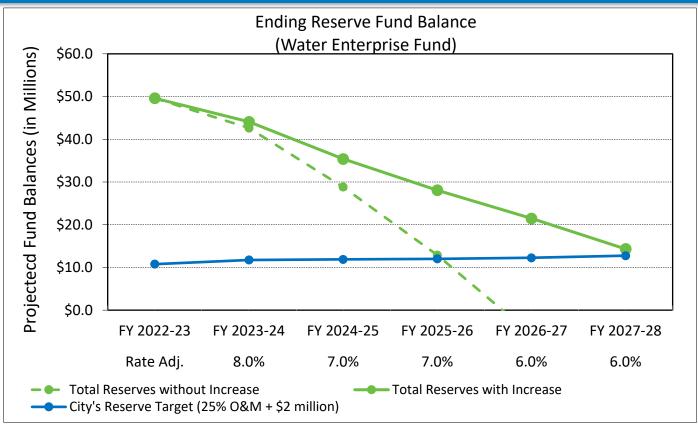
## Revenue Requirement





## **Current Plan for Rate Adjustments**





## **Proposed Rates**



- Customer Classes
  - Single Family Residential
  - Multi Family Residential
  - Commercial (includes: Industrial, Municipal, Fire, Landscape Irrigation)
- Two Charge Types
  - Fixed Service Charge
  - Water Usage Charge
- Billing Period
  - Residential bi-monthly
  - Commercial monthly

## **Residential Service Charges**



Service Charges				
	Current	Proposed Water Rates		
Customer Class	Water Rates	FY 2023-24	FY 2024-25	
Single Family Residential	<u>Bi-monthly per DU</u>	<u>Bi-monthly</u>	<u>Bi-monthly per DU</u>	
	\$59.04	\$76.72	\$82.09	
Multi Family Residential				
(includes Residential Irrigation)	<u>Bi-monthly per EDU</u>	<u>Bi-monthly p</u>	Bi-monthly per Meter	
5/8" Meters	\$59.04	\$76.72	\$82.09	
3/4" Meters	\$59.04	\$105.30	\$112.67	
1" Meters	\$59.04	\$162.46	\$173.83	
1.5" Meters	\$59.04	\$305.38	\$326.76	
2" Meters	\$59.04	\$476.88	\$510.26	

# **Residential Use Charges**



Water Use Charges						
Single Family Residential						
	Current		Proposed	Proposed		
<b>Current Tiers</b>	Rates	Proposed Tiers	FY 2023-24	FY 2024-25		
Tier 1 (0-8 hcf)	\$6.13	Tier 1 (0-10 hcf)	\$6.45	\$6.90		
Tier 2 (9-20 hcf)	\$7.35	Tier 2 (11-14 hcf)	\$7.37	\$7.89		
Tier 3 (21-40 hcf)	\$10.20	Tier 3 (15-20 hcf)	\$9.63	\$10.30		
Tier 4 (41+ hcf)	\$13.45	Tier 4 (21+ hcf)	\$14.57	\$15.59		
Multi Family Residential (including Residential Fire)						
<b>Current Tiers</b>	Current		Proposed			
(per EDU)	Rates	Proposed Usage	FY 2023-24	FY 2024-25		
Tier 1 (0-8 hcf)	\$6.13	All Water Use	\$7.92	\$8.47		
Tier 2 (9-20 hcf)	\$7.35					
Tier 3 (21-40 hcf)	\$10.20					
Tier 4 (41+ hcf)	\$13.45					

## **Commercial Service Charges**



Service Charges					
Commercial	Current	Proposed Water Rates			
(includes Commercial Irrigation)	Water Rates	FY 2023-24	FY 2024-25		
<u>Meter Size</u>	Monthly per Meter	<u>Monthly per Meter</u>			
5/8" Meters	\$29.52	\$38.36	\$41.05		
3/4" Meters	\$44.28	\$52.65	\$56.34		
1" Meters	\$73.80	\$81.23	\$86.92		
1.5" Meters	\$147.60	\$152.69	\$163.38		
2" Meters	\$236.16	\$238.44	\$255.13		
3" Meters	\$442.80	\$631.47	\$675.67		
4" Meters	\$738.00	\$1,081.66	\$1,157.38		
6" Meters	\$1,476.00	\$2,296.46	\$2,457.21		
8" Meters	\$1,476.00	\$4,011.48	\$4,292.28		
10" Meters	\$1,476.00	\$6,012.34	\$6,433.20		

# **Commercial Use Charges**



Water Use Charges						
Commercial - Includes Commercial, Industrial, Municipal, Fire, Other						
	Current	Proposed	Proposed Proposed			
<b>Current Usage</b>	Rates	Usage	FY 2023-24	FY 2024-25		
All Water Use	\$7.35	All Water Use	\$7.92	\$8.47		
Landscape Irrigation						
	Current	Proposed	Proposed	Proposed		
Current Usage	Current Rates	Proposed Usage	Proposed FY 2023-24	Proposed FY 2024-25		
Current Usage Under 100% Budget		The state of the s				
	Rates	Usage	FY 2023-24	FY 2024-25		

### **Drought Rate Factors**

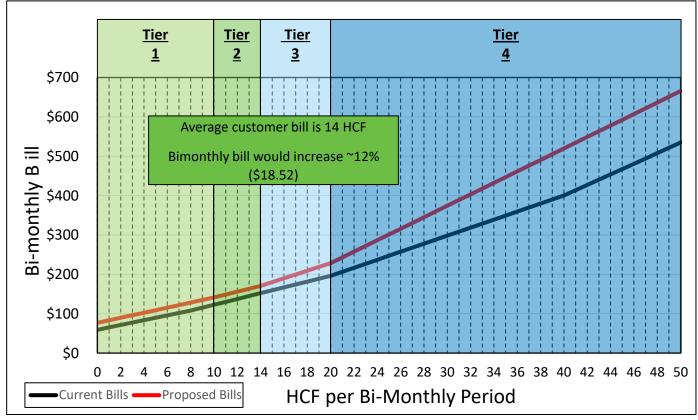


Maximum Drought Rate Factors by Water Conservation Stage						
	Stage 1	Stage 2	Stage 3	Stage 4	Stage 5	Stage 6
	Shortage	Shortage	Shortage	Shortage	Shortage	Shortage
	Up to					
	10%	20%	30%	40%	50%	>50%
<b>Customer Class</b>	Reduction	Reduction	Reduction	Reduction	Reduction	Reduction
Single Family	1.021	1.047	1.080	1.124	1.182	1.222
Multi-Family	1.014	1.031	1.051	1.074	1.101	1.121
Commercial	1.018	1.039	1.064	1.096	1.135	1.162
Irrigation	1.046	1.118	1.250	1.571	3.420	n/a

- Propose to be available in times of water shortages
- Water reductions vary by customer class
- Factors could be applied to current consumption charges at the City Council discretion

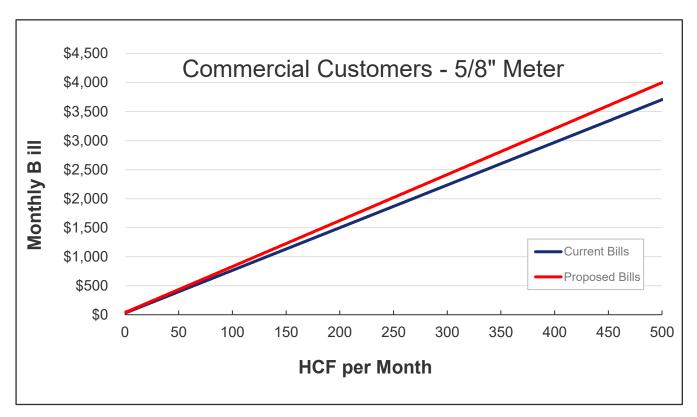
### **Bi-Monthly Bill Comparison (SFR)**





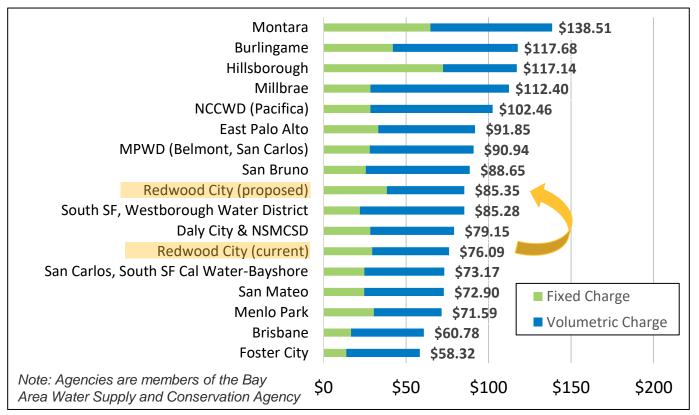
### **Monthly Bill Comparison (Commercial)**





### **Neighboring Monthly Bill Comparison (SFR)**





# Proposed Increase to Utility Rate Assistance Program (URAP)



- Program Summary
  - Assistance for water, sewer, and solid waste
  - For households meeting 50% San Mateo County Area Median Income
  - Credit on regular Redwood City utility bill
- Water customers receive \$20/month or \$40/bi-monthly bill
  - Funded from penalties not rate payers
- Return to Council in early 2024 with proposed increase
  - 25% increase to \$25/month or \$50/bi-monthly bill
- More information and applications at: <a href="www.redwoodcity.org/urap">www.redwoodcity.org/urap</a>

### **Public Hearing**



Written protests received prior to the meeting

Public Comment

Council Discussion and Action

### **Questions for Council**



- Does Council have any questions regarding:
  - Revenue required for the Water Enterprise?
  - Proposed rates?
  - Bill impacts resulting from the proposed rates?
  - Drought rate factors?
  - Proposed increase to Utility Rate Assistance Program?

### **Council Action**



### Recommendation:

- 1. Hold a Public Hearing on proposed increase to water utility service rates and charges, and if written protests are not made by a majority of the affected parcels, waive the first reading and introduce ordinance amending Article II (Water Service and Facility Charges) and Article IV (Water Fund) of Chapter 38 of the Redwood City Municipal Code, Updating the City's water service charges, amending Resolution No. 14648 and Rescinding Resolution No. 15446 (5/7 vote)
- 2. Provide direction to staff on increasing the City's Utility Rate Assistance Program



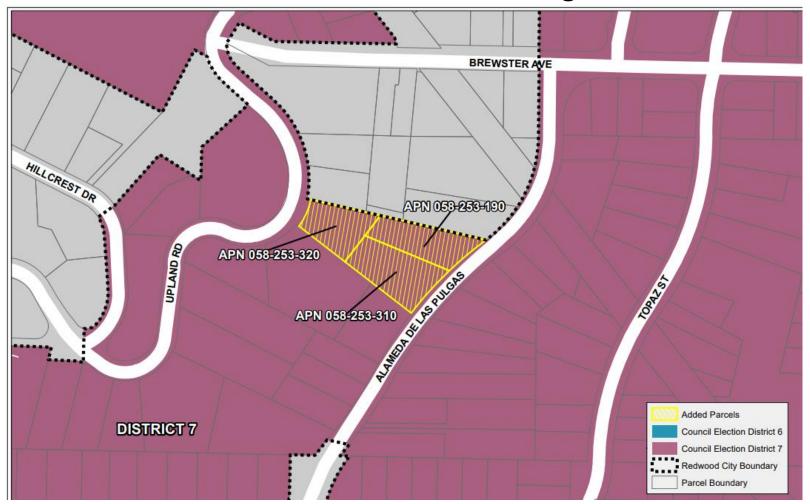
# **BACKGROUND / ANALYSIS**

- Council adopted Ordinance No. 2463 transitioning to District Elections on May 20, 2019 and establishing the seven City Council districts
- Ordinance No. 2506 was adopted on February 28, 2022 establishing new
   City Council district boundaries using 2020 Federal Census data
- City notified that three parcels annexed to Redwood City in the 1950's are incorrectly shown on the district elections map as being in unincorporated Redwood City (County of San Mateo)
- City is making technical boundary adjustments to the approved map, adding the 3 parcels to the City Council District 7 map



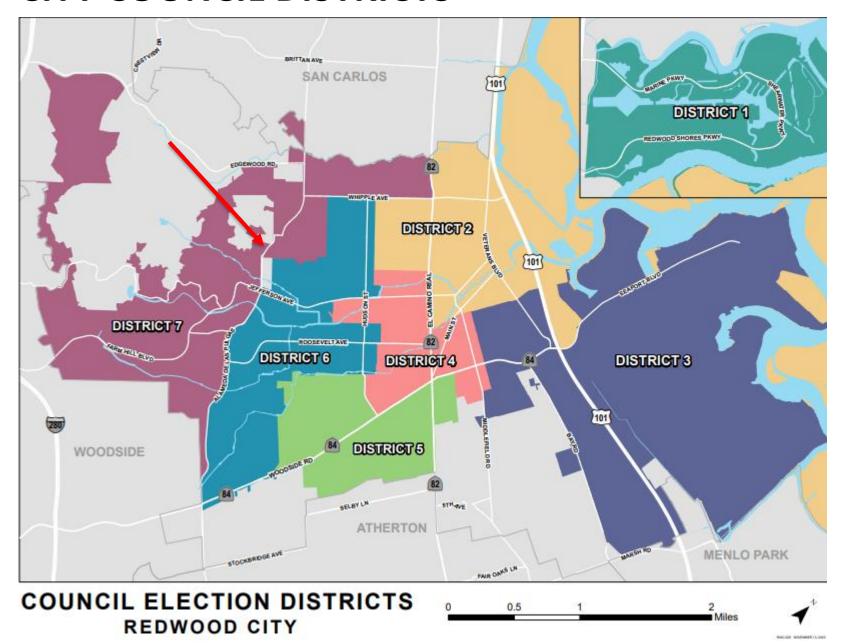
## **PARCELS IN QUESTION**

- APN 058253320 635 Upland Rd
- APN 058253190 340 Alameda de las Pulgas
- APN 085253310 344 Alameda de las Pulgas





## **CITY COUNCIL DISTRICTS**

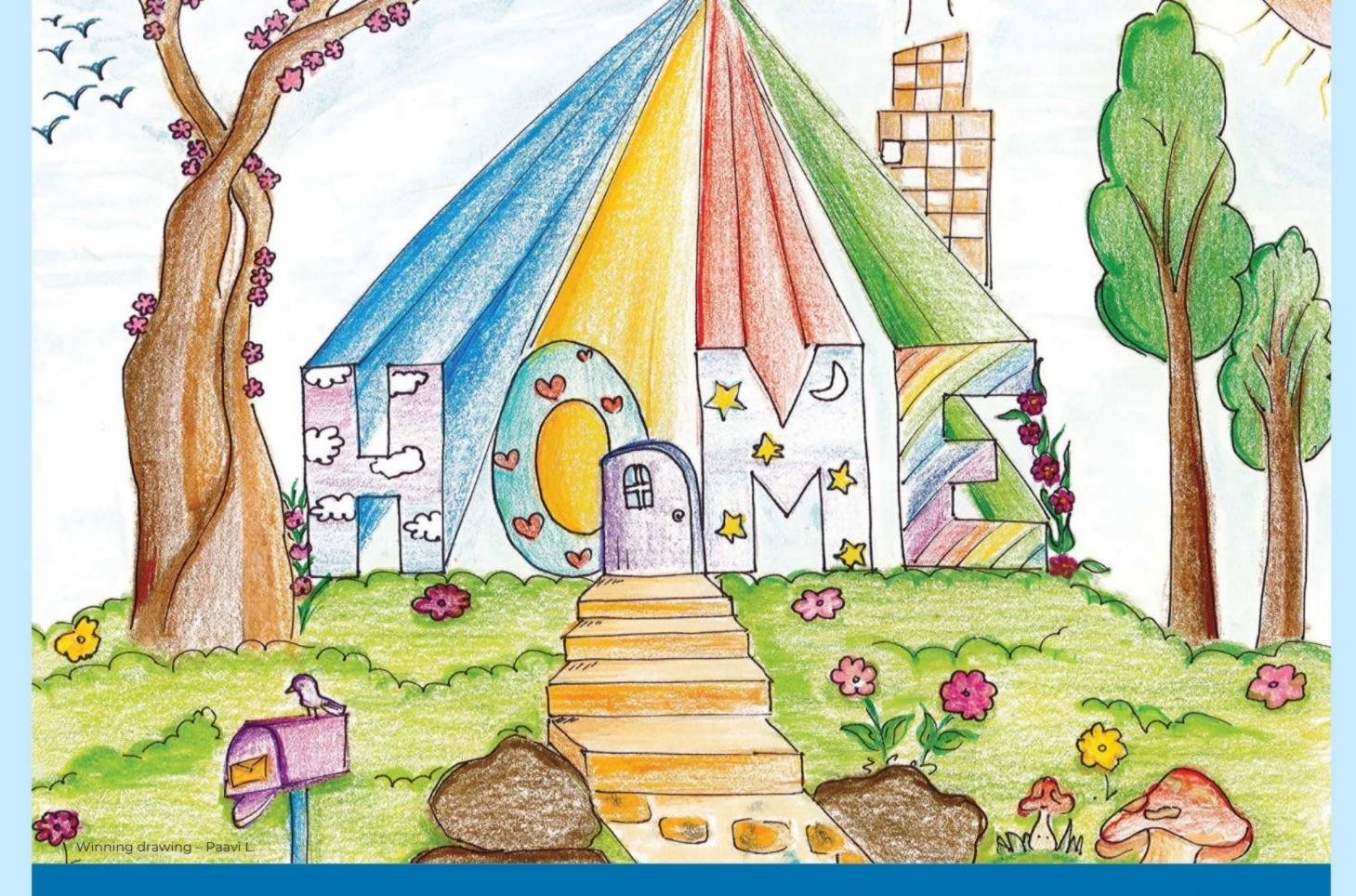




### **RECOMMENDATION**

This report is for informational purposes only. No Council action is required.







2024 Calendar



# Paavi L.

Redwood City | 5th Grade

"Home is the place you get homesick for. It's the place you want to return to, if you're somewhere else. Even if you're having fun. Home is the place you feel welcome."



# É





From: To: annette parker GRP-City Council

Subject: Date: Proposed Increase in Water Rates Thursday, October 19, 2023 2:34:42 PM

### Dear Council:

As a lifelong Redwood City resident (66 years) I wanted to express my dismay at the City's proposal to raise our water rates!! My husband and I are on Social Security and are being slowly squeezed out of this once-nice City! How on earth will we afford to live here any longer. The drought is over!

PLEASE, I URGE YOU COUNCIL MEMBERS TO VOTE NO ON ANY INCREASE.

The record shows that you all (except Diane Howard) vote yes on everything put in front of you. Have a backbone and fight for the residents for once.

Again, please think of the families you represent!!

Sincerely,

Annette Parker Resident since 1957 From:

mckee0586@sbcglobal.net

To: Subject: GRP-City Council; Mark Toney; PWS-Terence Kyaw; Charlavne Wright 10/20/23--WATER RATE INCREASE PROTEST, RWC CITY COUNCIL

**Date:** Friday, October 20, 2023 8:55:37 PM

HELLO REDWOOD CITY COUNCIL, PUBLIC WORKS & CC TURN, SF, CALIF

I AM RESPONDING TO THE PROPOSED WATER RATE INCREASE DOCUMENTATION I GOT FROM REDWOOD CITY THIS WEEK FOR THE DEC. 4TH, '23 PUBLIC HEARING ON THE THE WATER RATE INCREASE ISSUE.

FOR ONE, THIS IS NOTHING BUT A SCAM TO PUBLIC, AS THERE IS NO CURRENT DECLARED DROUGHT FOR 2023 OR NOW 2024 WITH A HEAVY 2024 RAIN YEAR LIKE WE HAD IN 2023. THE STATE HAS CLEARED THE DROUGHT STATUS BACK TO NORMAL NOW.

WHY DOES THE CITY OF REDWOOD CITY KEEP TRYING TO PUNISH RESIDENTS WITH RATE INCREASES ON SEWER AND WATER, AND GARBAGE, ETC. THIS MONEY MUST BE USED FOR SALARIES AND PENSIONS IN DISGUISSE. FOR THIS I AM SENDING COPY OF THIS EMAIL TO THE UTLITY REFORM NETWORK IN SAN FRANCISCO, MARK TONEY, EXE. DIRECTOR. FOR TURN ADVOCATES TO KNOW WHAT'S GOING ON WITH UTILITY INCREASES. THERE NOW IS A NEW GROUP, TOO OF CALIFORNIANS ORGANZING AN ALL UTILITY REFORM NETWORK TO GET CALIF LAW /LEGISLATORS LIKE ASSEMBY, STATE SENATORS TO START TO BLOCK SCAM INCREASES BY CITIES UTILITY DEPTS AS WELL AS PG&E UTILITIY AS

NON AFFORDABLE SITUATION FOR EVERY SINGLE RESIDENT OF THIS STATE AND THE SINK HOLE THAT IS ARISING FROM THIS ONGOING CRY POOR BY CITY HALLS' SCAMS TO GET MORE MONEY FROM LOW INCOME FOLKS. THE MORTAGE RATE IS ALMOST 8% RIGHT NOW AND NOW FOLKS CAN BUY A HOME UNLESS THEY MAKE ALMOST HALF BILLION DOLLARS A YEAR ACCORING TO SF CBS BAY AREA ON TODAY'S NEWS. I HAVE SEEN ABOUT 30 HOUSES SOLD AND ALL NEIGBORS HAVE MOVED OUT OF STATE OR FAR, FAR FROM THE PENINSULA AND SF BAY AREA IN THE LAST YEAR. THAT IS A LOT OF HOMES THAT WERE SOLD CAUSE THE COST OF LIVING IN REDWOOD CITY IS WAY TOO, TOO, TOO, HIGH. I MYSELF MAY HAVE TO GO OUT OF STATE OR FAR, FAR FAR AWAY CAUSE I LIVE ON \$23, 000 APPROX GIVE OR TAKE PER YEAR AND CAN'T AFFORD PROPERTY TAX ALONG WITH CONSTANT UTILITY HIKES. LIKE WATER, GARBAGE, PG&e AND AND COMCAST/XFINITY ALL SCAMMERS TO PUBLIC FOR NOTHING MORE THAN \$\$\$\$ GREED. WHERE WILL REDWOOD CITY AN ITS' RESIDENTS THAT ARE LEFT BE IN 5 MORE YEARS AT THIS RATE OF EXPENSE TO HAVE UTILILITES TURNED ON? ALSO, TOO, THE GROCERY STORES ARE IN VIOLATION, TOO OF SCAMMING PUBLIC WITH WEIGHTS AND MEASURE

VIOLATIONS ON PRICE GAGOOGING FOR WHICH CITY COUNCIL DOES NOT CARE ABOUT. CALIF ATTORNEY GENERAL SAYS THAT LOCAL GROCERY STORE SCAMS AND WEEKLY PRICE JUMPS ON ALL PRODUCTS NEEDS TO BE REPORTED TO CITY HALL AND SAN MATEO CO. WEIGHTS AND MEASURES. A BOTTLE OF MAYONNAISE IS ALMOST \$9 IN LUCKY SUPER MARKET, AND SAFEWAY IS SELLING GROCERIES INCLUDING A CAN OF SOUP FOR ALMOST \$5 REMEMBER WHEN CAMPELLS' SOUP WAS 35 CENTS A CAN NOT LONG AGO. WHEN FOODS CO WAS AROUND? WELL THE PROBLEM IS EACH WEEK THESE ITEMS GET MORE EXPENSIVE AND UNAFFORDABLE WHICH IS JUST A BAD SCAM HABIT BY RETAIL /WHOLESALERS FOOD INDUSTRY AND HAS NOTHING TO DO WITH COVID OR A SUGGESTED INFLATION NOT WHEN THIS IS NOW GOING ON FOR 3 FOR 4 YEARS EVERY WEEK. SO HOW CAN POOR PEOPLE NOW BE SCAMMED BY CITY/AND OTHER PUBLIC UTILITIES IN THE NAME OF DROUGHT OR NEVER ENDING INFLATION WHICH IS A VERY SERIOUS SURVIVAL SINK HOLE WE WILL ALL BE AWARD OF THE STATE AND OUR UTILITY BILLS WILL FALL TO STATE TO PAY FOR SO REDWOOD CITY UTILITIES MAY HAVE TO GET PAID FOR ALL RESIDENTS BILLS MONTHLY BY STATE OF CALIF. OR FEDERAL GOVERNMENT.

AND THE CPUC IS A VERY POORLY RUN OUTFIT THAT IS NOT HELPFUL TO ANY CALIFORNIAN RICH OR POOR AND IS ONLY A PARTNER OF UTILITY AGENCIES FOR KICKBACKS IN MY OPINION OR FAVORS.

SANDRA MCKEE\
1003 CHESTERTON AVE
REDWOOD CITY, CALIF 94061

P/S IN THE SAN MATEO JOURNAL A NEW ACTIVIST AGAINST PG&e AND THE CPCU POSTED A LONG DETAILED OPINION TO THE EDITOR ON OCT. 19TH ON PAGE 7, AGAINST PG&e AND THE CPCU HER NAME IS SUSANNE THIEF OF FOSTER CITY. SHE COULD BE A GOOD ADDITIONAL VOLUNTEER ADVOCATE FOR TURN WHO IS TRYING WITH LAWYERS TO BLOCK PG&E PRICE INCREASES THAT ARE NOTHING BUT SCAMS TO GET PUBLIC TO PAY FOR ALL THEIR BAD MISTAKES AND LAWSUITS.

Water Rates City Clerk, City of Redwood City 1017 Middlefield Road, Redwood City, CA 94063

Date: October 24, 2023

Assessor's Parcel Number (APN): 059-082-330

1584 Regent ST Redwood City CA 94061

Subject: Protest Proposed Water Rate Increases

To whom it may concern,

- 1. This is to notify you of my Objection/Protest against the proposed change in rates.
- 2. Property Owner: Varaporn Suwanmethanond
- 3. Affected APN **059-082-330**, Address 1584 Regent St, Redwood City CA 94061

Regards,

Dainson Suvannethanonal

Varaporn Suwanmethanond The Trustee of Prosperity Trust Owner Water Rates City Cleark, City of Redwood City 1017 Middlefield Road, Redwood City, CA 94063

Date: October 24, 2023

### Assessor's Parcel Number (APN): 052-263-100

401 Standish St Redwood City CA 94063

Subject: Protest Proposed Water Rate Increases

To whom it may concern,

- 1. This is to notify you of my Objection/Protest against the proposed change in rates.
- 2. Property Owner: Varaporn Suwanmethanond
- 3. Affected APN **052-263-100**, Address 401 Standish St, Redwood City CA 94063

Regards,

Dainson Suvannethannel

Varaporn Suwanmethanond The Trustee of Prosperity Trust Owner From:

Nadla Boyer

To:

GRP-City Council

Subject:

Attn: Water Rates, City Clerk, City of Redwood City

Date:

Tuesday, October 24, 2023 2:17:51 PM

You don't often get email from nshahin2@gmail.com. Learn why this is important

- (i) This email is a protest against the proposed change in rates.
- (ii) Name: Nadia Shahin Boyer
- (iii) Parcel: 3520 Glenwood Ave, Redwood City, CA 94062
- (iv) Nadia S. Boyer (this is my electronic signature).

From:

Abe Kleinfeld

To: Subject: **GRP-City Council** 

Date:

Protest of proposed increase in water rates Thursday, October 26, 2023 5:21:01 PM

**Attachments:** 

image001.png image002.png

You don't often get email from abe@abekleinfeld.com. Learn why this is important

TO:

Water Rates, City Clerk, City of Redwood City

1017 Middlefield Road Redwood City, CA 94063

FROM:

Abraham Kleinfeld & Jan Marie Robinson 353 Lakeview Way, Emerald Hills, CA 94062

Parcel #s: 057-102-220 and 057-102-230

This email message is our written protest against the proposed changes in water rates.

Water rates are already exorbitant in this area, especially in summer months. When combined with ever-increasing property taxes and the general cost of living in this area, increased water rates are simply too much to bear. You can't simply keep raising the price of everything and think people will stand for it. It's why the Bay Area is losing population and housing costs continue to skyrocket. Something has to give. We are retired and at this rate you will force people like us out.

Thank you for listening.

Abraham Kleinfeld and Jan Marie Robinson

Al Jan Marie Rahuson

From: To: Alicia Kabelac GRP-City Council

Subject:

Protest to Water Rate Increase

Date:

Sunday, October 29, 2023 11:40:06 PM

[You don't often get email from a.kabelac@comcast.net. Learn why this is important at <a href="https://aka.ms/LearnAboutSenderIdentification">https://aka.ms/LearnAboutSenderIdentification</a>]

To whom it may concern,

I am writing in protest of the proposed water rate increases. We had record rainfall this year and Hetch Hetchy is fuller than it's been in years. It doesn't make sense to be increasing rates and frankly with all the of the rate increases across the city, many residents cannot afford it. Please consider my "note" vote on these dramatic rate increases.

Sincerely,

Alucia Kabelac

Alicia Kabelac 108 Wika Ranch Ct Redwood City, CA 94062 From:

<u>area cuti</u>

To:

**GRP-City Council** 

Subject: Date: Protest against proposed change in water rates Thursday, November 2, 2023 10:59:06 AM

You don't often get email from gcuti@yahoo.com. Learn why this is important

Dear Council Members,

I am writing you to protest the proposed increased 2023/24 and 2024/25 water rates. Redwood City residents already suffer enough from the incredibly high cost of living that has been exacerbated over the last 24 months due to the inflation-related cost increases of most consumer goods. Most of us have not had the benefit of pay increases to help offset these additional costs. I ask for your support in holding water rates at their current levels.

Regards,

Gregory Cuti

Gregory Cuti 128 E Street Redwood City, CA 94063 Parcel 052-094-040 From: Dolly Ford
To: GRP-City Council

Subject: Request from Redwood City Resident to Not Increase Water Rates

Date: Saturday, November 4, 2023 1:48:24 PM

[You don't often get email from dollymford@yahoo.com. Learn why this is important at <a href="https://aka.ms/LearnAboutSenderIdentification">https://aka.ms/LearnAboutSenderIdentification</a>]

### Dear Council Members,

As a long time Redwood City resident, I am writing you to state that I am firmly against the proposed 2023/24 & 2024/25 water rate increases. On top of the already high cost of living in Redwood City, we residents have suffered due to the increased prices of food, fuel and other necessities due to inflation. Wages have remained stagnant and some have lost their jobs. I ask that you please take these factors into consideration and hold water rates at their current levels.

Thank you for your time and consideration,

Dolly Ford 128 E St Redwood City, CA 94063 Parcel 052-094-040 From:

Jiangeng Huang

To:

**GRP-City Council** 

Subject:

Protest Against the Proposed Water Rate Increases

Date:

Monday, November 6, 2023 10:41:58 AM

Attachments:

image.png

You don't often get email from jiangengh@gmail.com. Learn why this is important

### Dear Public Work Services,

- (i) This is a written protest against the proposed water rate increases (Public hearing on Monday Dec. 4, 2023).
- (ii) The name of the record owner is: Jiangeng Huang.
- (iii) The affected parcel is: 058-172-040 (Address: 2003 Madison Ave, Redwood City, CA 94061).
- (iv) Here is a signature of the record owner:

Jiangeng Huang

Please let me know if I can provide any additional information regarding this protest.

Best regards, Jiangeng Huang November 6, 2023

**Water Rates** 

City Clerk

City of Redwood City

1017 Middlefield Rd.

Redwood City, Ca. 94063

My name is Thomas William Rosa, and my wife and I are the owners of 54 Eddystone Ct., Redwood City, Ca., 94065

I am hereby protesting the increasing of the water rates to my home located at 54 Eddystone Ct., Redwood City, Ca., 94065, Parcel #111-180-130.

The increase in rates will create a financial hardship for my wife and myself.

Please, do not increase the water rates to our home.

Thomas millin Rose

Be sure to contact me with any questions.

Tom Rosa

54 Eddystone Ct.

Redwood City, Ca. 94065

Parcel#111-180-130

 From:
 t\_rosa@sbcglobal.net

 To:
 GRP-City Council

Subject: Proposed Water Rates for 54 Eddystone Ct., Redwood City, Ca. 94065. Parcel #111-180-130

Date: Tuesday, November 7, 2023 1:40:43 PM
Attachments: Oppose Water Rate Increase.pdf

You don't often get email from t\_rosa@sbcglobal.net. Learn why this is important

I am the owner of 54 Eddystone Ct., Redwood City, Ca., 94065, parcel#111-180-130

I hereby oppose the increase in water rates to my home.

Please review the attached, signed letter regarding my opposition to the proposed water rate increase.

Tom Rosa 54 Eddystone Ct. Redwood City, Ca. 94065

**November 8, 2023** 

Water Rates

City Clerk

City of Redwood City

RE: parcel numbers: 052-191-160/052-241-190

Grabianowski Steven Michel Trust, Grabianowski Patricia Ann Trust, Grabianowski Trust

Protest Against proposed change in rates.

We protest the proposed water rate increases to be decided on December 4, 2023, on the following grounds.

- 1. Governor Gavin Newsom on March 23, 2023, eased water restrictions and is not asking for the 15% reduction by California citizens.
- 1% drought as opposed to 100% drought in the beginning of 2023, a 99% improvement. 2. The US Drought monitor as of October 19, 2023, stated that the year so far ended in a
- 3. Rates in our region have not decreased this year, yet in drought years they increased.
  - what? It appears that mother nature provided water California did not create or import rates are calculated to recover the cost of providing water services to each commercial Second paragraph, page 1 in Notice of Public Hearing states that "the proposed water and residential customer class." The question I have is what "recovery", recovery from
- Second page Notice of Public Hearing, under Regular Service, paragraph three, states the conservation and efficiency of water use." How will they adjust and since we conserved customers based on historical single-family residential demand patterns and growing following. "The proposed water uses charges adjust the tier ranges for single family 15% thating the drought years, why not at minimum leave the rates as they stand. μń
  - It is not the fault of most California citizens that water is allowed to waste into the ocean because there are not enough reservoirs to catch the water.

My suggestion is, as a compromise:

- a) Increase base allotment (especially to those who have shown restraint in conservation over the YEARS.
- b) Do away with the tiers, they are too confusing and expensive.
- c) Repeating what I stated earlier. If you can raise the rates during drought, you should be able to lower the cost during water increase.

Sincerely,

wen and Patricia Grabianowski

From:

mckee0586@sbcglobal.net

To:

Redwood City City Council; GRP-City Council; Charlayne Wright; mturney@turn.org; Public.advisor

Subject:

Fw: Finally! Historic Drought Is Over - Thu 03:49:17PM

**Date:** Friday, November 10, 2023 12:17:29 AM

addendum to my protest of absolutely unnecessary scam water rate increases for dec. redwood city council meeting note-- city council wants residents to think there is a drought and now the statew water resource board announces that THERE IS NO DROUGHT ---IT'S OVER FOR 2023-20234 AT LEASTIF NOT LONGER. SANDRA MCKEE REDWOOD CITY RESIDENT 1003 CHESTERTON AVE REDWOOD CITY CA 94061 LOW INCOME SENIOR CITIZEN.

---- Forwarded Message -----

From: Belmont Patch <noreply@patch.com>

To: "mckee0586@sbcglobal.net" <mckee0586@sbcglobal.net>
Sent: Thursday, November 9, 2023 at 03:50:22 PM PST
Subject: Finally! Historic Drought Is Over – Thu 03:49:17PM



Carifornia's most extrans drought in the last 126 years was offerflay doctored ever Thursday after materia serimer and winter alongs



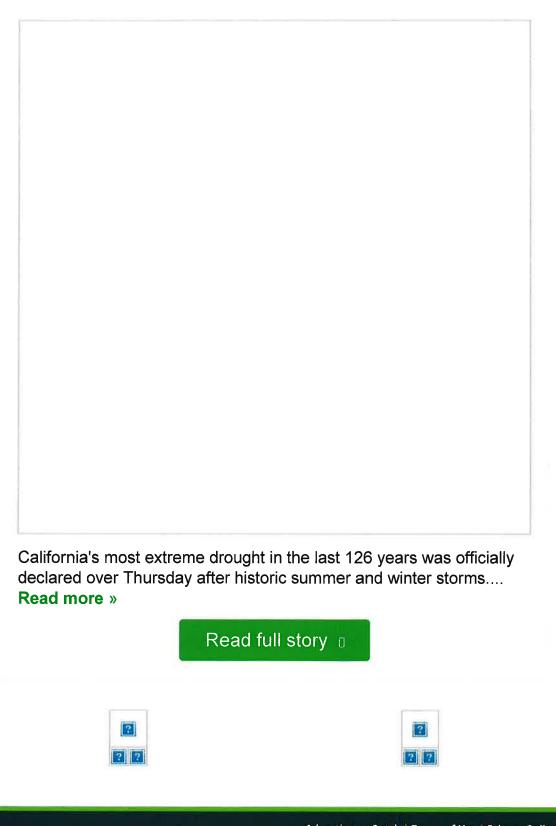
**BREAKING NEWS** 

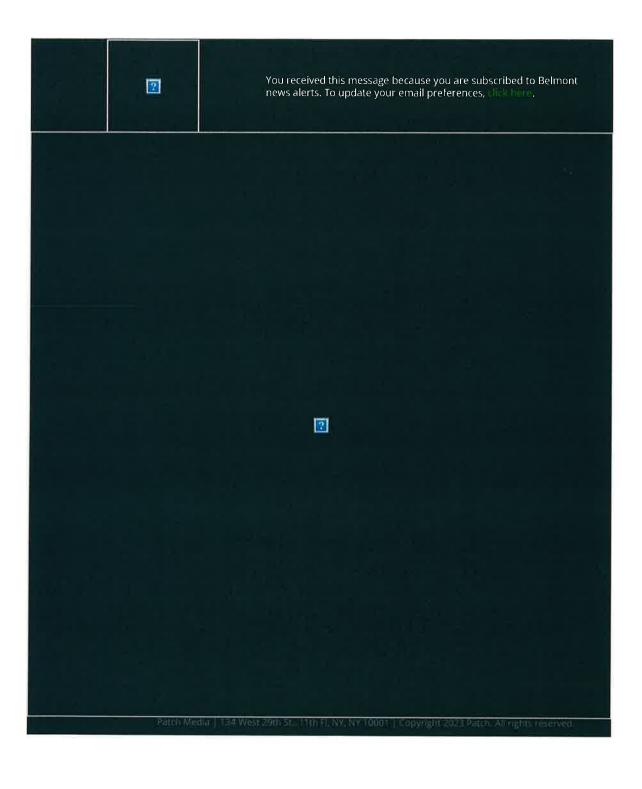
**Belmont** 

ADVERTISEMEN



### **Finally! Historic Drought Is Over**





# RECEIVED

NOV **21** 2023

City of Redwood City City Clerk

November 6, 2023

**Water Rates** 

City Clerk

City of Redwood City

1017 Middlefield Rd.

Redwood City, Ca. 94063

My name is Thomas William Rosa, and my wife and I are the owners of 54 Eddystone Ct., Redwood City, Ca., 94065

I am hereby protesting the increasing of the water rates to my home located at 54 Eddystone Ct., Redwood City, Ca., 94065, Parcel #111-180-130.

The increase in rates will create a financial hardship for my wife and myself.

Please, do not increase the water rates to our home.

Be sure to contact me with any questions.

Thomas Millin Roof

54 Eddystone Ct.

Redwood City, Ca. 94065

Parcel#111-180-130

Lynda Collins GRP-City Council Water Rate Increase

Subject: Date:

Wednesday, November 29, 2023 12:14:15 PM

[You don't often get email from lynda.collins@comcast.net. Learn why this is important at https://aka.ms/LearnAboutSenderIdentification ]

Water Rate City Clerk, Redwood City.

Owner: Lynda A Collins & Stephen M. Collins

059-215-190 1923 Goodwin Ave. Redwood City, CA 94061

We are out of the drought during which time we cut back on our water usage drastically to do our part to help the city save water. Now we are being punished with a water rate increase that does not seem to be justified, especially since we had a record rainfall last winter and the projection for this winter is for another wet one.

We see new construction everywhere in the city which will put more of a strain on water consumption that the rest of us are having to pay for. This seems like mismanagement of our water fee's. How about a two tier system for newer homes and buildings and leave the existing homeowners rates alone.

We are senior citizens that have lived in this home since 1979 and your proposed rate increase will harm us.

Thank you for your consideration,

Lynda A. Collins & Stephen M. Collins (Please refer to the attachment for our signatures)

ipward@earthlink.net

To:

GRP-City Council

Cc:

own

Subject:

Raising Water rates for Fiscal years 2023-2024 and 2024-2025

Date:

Wednesday, November 29, 2023 2:36:59 PM

You don't often get email from jpward@earthlink.net. Learn why this is important

November 29, 2023

Dear Redwood City Council Members, Water Rates City Clerk

This is my written PROTEST to the proposal to raise our water rates in Redwood City. The first raise hike you are asking to approve for the Bi-monthly per DU for single Family Residence is from \$59.04 to \$76.72---THAT IS A 29.9% raise in one year!!! This is absurd!!! Then for 2024-2025 you propose another hike from \$76.72 to \$82.09 which is another .069 % raise.

I have been a resident of Redwood City for more than 36 years and I implore you to reject this proposal to raise the water rates in Redwood City. There are many of us who have lived in Redwood City for many years and we are retired and are on a FIXED INCOME. This huge rate hike you are proposing will hurt all of us older citizens greatly!!

If you pass this Water Rate Hike it will put Redwood City in the top half of highest rates paid for all the local city's. We don't need this rate hike!!!! If this proposed Water Rate Hike passes it will put many of the older residence in danger of not being able to make payments.

There are other ways to generate revenue for employee salaries and benefits which have increased. There are other ways to fund these costs without raising the Water Rates for the Redwood City Residences.

I am 100% opposed to this proposal to raise our Water Rates!!!

Name of Record Owner---Joseph Ward

Service Address---974 Lakeview Way, Redwood City---

Parcel #---068-191-050

Signed---Joseph Ward

Jon Frymann

To:

publiccomment

Subject:

Comment on agenda item 8A for the December 4, 2023 City Council Meeting

Date:

Thursday, November 30, 2023 5:34:58 PM

You don't often get email from jonathanfrymann@gmail.com. Learn why this is important

I would like to register my objection to the proposed increase in water rates in item 8A.

regards,

Jon

001

Jon Frymann

From: To: Subject: Merrily Robinson GRP-City Council Water rate hlke!!

Date:

Sunday, December 3, 2023 2:09:09 PM

Please postpone this raise until you study this increase!!!

Nancy Reagan taught us to just say "NO!" NO to all of your ideas to remove the middle and lower classes out of RC!

Do you wish for more homeless & unhoused here???

NO!!

Sent from my iPhone

From: sen@senlink.net
To: GRP-City Council

Subject: Statement of Protest Against Proposed RWC Water Rate Increase

Date: Sunday, December 3, 2023 2:49:12 PM

You don't often get email from sen@senlink.net. Learn why this is important

[Recipient's Name]
[Water Utility Company]
[Address]
[City, State, Zip Code]

Dear [Recipient's Name],

I am writing this letter to express my deep concern and vehement opposition to the proposed water rate increase that has been recently announced by the City of Redwood City. As a loyal customer and a responsible member of our community, I find it imperative to voice my dissatisfaction with this decision, which I believe will have severe consequences for residents and businesses alike.

Water is an essential resource, and access to clean and affordable water is a basic human right. The proposed rate hike, however, not only places an undue financial burden on individuals and families but also undermines the principles of fairness and affordability that should guide such decisions.

I understand that maintaining and upgrading water infrastructure is crucial for ensuring a reliable water supply. However, I urge Redwood City to explore alternative funding solutions, prioritize cost-effective measures, and seek government assistance to alleviate the financial strain on consumers. It is unfair to shift the entire burden onto the shoulders of the already struggling populace.

Moreover, I request transparency and accountability in the decision-making process that led to this rate increase. It is essential for customers to have a clear understanding of how their hard-earned money will be utilized to improve water services and infrastructure.

I am also concerned about the potential impact of this increase on vulnerable populations, including low-income households and fixed-income seniors. Water is a necessity for daily living, and any increase in rates disproportionately affects those who can least afford it.

In light of these concerns, I urge the City of Redwood City to reconsider this decision and engage in meaningful dialogue with the community to explore alternative solutions that ensure the sustainability of our water system without unfairly burdening residents.

I appreciate your attention to this matter and trust that you will carefully consider the welfare of the community in your decision-making process.

Sincerely,

Subhro and Sonali Sen 2446 Lake Blvd Emerald Hills, CA 94062 Parcel 057-162-530 From: Lindy Sherwood
To: GRP-City Council
Subject: Water rate increase

**Date:** Sunday, December 3, 2023 5:12:22 PM

[You don't often get email from lsherwood1107@gmail.com. Learn why this is important at <a href="https://aka.ms/LearnAboutSenderIdentification">https://aka.ms/LearnAboutSenderIdentification</a>]

While I understand that inflation has impacted costs everywhere, the proposed increase is just too much.

Many of us are on a fixed income, not to mention those who can barely make it living in Redwood City. We're facing increases everywhere!

Government, like everyone needs to tighten belts, improve efficiency and productivity.

Thank you and please know that many of us are being forced to leave.

Lindy Sherwood 45 Belle Roche Ave Redwood City

Sent from my iPhone

Robin Okada

To:

**GRP-City Council** 

Subject:

Proposed water rate increase

Date:

Sunday, December 3, 2023 5:29:30 PM

Attachments:

image.png

You don't often get email from rokada@gmail.com. Learn why this is important

Dear City Council members:

I am writing to oppose the proposed water rate increase.

It is a bad time to be increasing bills for citizens when inflation is still so high.

A 30% increase is very large and it is followed by another 15% increase! This is unconscionable and is being proposed by people who can afford it. What about people who can not afford it? I would like to know why a 45% increase is necessary. Has the supplier increased their rate by this amount? Is the council padding the increase for some reason. Are garbage and sewer costs not covered and this increase is meant to make up the loss? I want to see more details.

It is a sign of poor management of any program that requires an increase of almost 50% in income.

It would be better to increase in smaller increments over time, a much longer time. Much easier for lower income families to absorb.

Sincerely,

Robin and Ron Okada 1613 Pecan Court

Redwood City, CA 94061

wende bitler GRP-City Council

Subject:

proposed rate change for water

Date:

Sunday, December 3, 2023 7:25:53 PM

You don't often get email from wcb1224@hotmail.com. Learn why this is important

## To Whom It May Concern:

I am protesting the proposed change rate for fixed rate water charges. This proposed increase comes on top of increases in sewer and garbage rates as well as across the board over the top "inflation."

I am the owner of the parcel affected. My name is Wende Bitler Bailon and the service address is 921 Vera Ave, 94061.

Thank you for considering my objection to the intended rate change.

Sincerely, Wende Bitler Bailon

Karen Lopiparo GRP-City Council Water rate increase

Subject: Date:

Sunday, December 3, 2023 7:36:32 PM

[You don't often get email from momlopp5@icloud.com. Learn why this is important at <a href="https://aka.ms/LearnAboutSenderIdentification">https://aka.ms/LearnAboutSenderIdentification</a>]

How can you expect the families in this city to handle another rate increase Please do not allow this to happen. Do you realize most families in this community have lived here all of our lives and are just middle class citizens. Our incomes do not increase because you increase our rates.

Respectfully and exhausted

Karen Lopiparo

Sent from my iPhone

Lori McBride

To:

publiccomment

Subject:

Fw: Proposed water rate increases

Date:

Sunday, December 3, 2023 11:00:38 AM

You don't often get email from bawsum@aol.com. Learn why this is important

Per the email I received from Jeff Gee, please see my email below regarding proposed water rate increases.

Thanks,

Lori

"Volunteers do not necessarily have the time; they just have the heart."

Elizabeth Andrew

---- Forwarded Message -----

From: Lori McBride <bawsum@aol.com>

**To:** council@redwoodcity.org <council@redwoodcity.org> **Sent:** Sunday, December 3, 2023 at 10:52:45 AM PST

Subject: Proposed water rate increases

I am writing about the proposed water rate increases that will be discussed by the City Council of the City of Redwood City tomorrow, 12-4-23.

My husband, Dennis McBride, and I are homeowners of 514 Oak Park Way, Redwood City, CA 94062. Our assessor's parcel number is 068-151-430.

We understand the need for improvement projects. However going from the current rate of \$59.04 to the proposed rate of \$76.72 for 2023-2024 is a 30% increase and much too high. The amount for the increase should be substantially less than 30%. PG&E is raising our rates dramatically also. This puts a financial hardship on many people.

ori E. McBride

We encourage the City Council to reduce the rate proposed for the water rate increase.

Lori E. McBride 514 Oak Park Way Redwood City, CA 94062

"Volunteers do not necessarily have the time; they just have the heart."

Elizabeth Andrew

Liat Perlman publiccomment

Subject:

No water rate hike.

Date:

Sunday, December 3, 2023 1:46:09 PM

[You don't often get email from liatperlman@gmail.com. Learn why this is important at <a href="https://aka.ms/LearnAboutSenderIdentification">https://aka.ms/LearnAboutSenderIdentification</a>]

Stop punishing us for saving water.

Liat Perlman Emerald Hills

Nisha Thatte-Potter

To:

GRP-City Council; publiccomment

Subject: Date: Do not agree with the water rate increase Sunday, December 3, 2023 3:50:11 PM

Some people who received this message don't often get email from nthattepotter@gmail.com. <u>Learn why this is important</u>

We would like to record our disagreement with the water rate increase. Most of the people in Redwood City have already made significant decreases in the amount of the water that they use. This increase is just one of the many increases that the city is proposing despite the fact that the city has been running a surplus. Increasing this puts a burden on existing households and will only discourage others to move to the city.

Do not approve this water rate increase

Nisha & John Potter 1131 James Ave, RWC

Kathy Waddell publiccomment

Subject:

RWC proposed water increase

Date:

Sunday, December 3, 2023 7:14:54 PM

[You don't often get email from kathy\_waddell@yahoo.com. Learn why this is important at <a href="https://aka.ms/LearnAboutSenderIdentification">https://aka.ms/LearnAboutSenderIdentification</a>]

Dear Redwood City descion makers.

Raising the water rates by 30% is not acceptable

Please keep the interests of your residents/ customers in mind. Times are tough for many...

Please consider a more reasonable imcrease of

10-12 %.... Water is a necessity for all.

Please look elsewhere to raise city funds AND decrease costs internally.

Redwood City has an opportunity to elevate its value & reputation.

Thank you for reading and for considering the importance of not passing a 30% increase.

Kathy Waddell

965 Upland Rd.

Redwood City, CA

Kristin Forbes
publiccomment

Subject:

NO on water rate increases!

Date:

Sunday, December 3, 2023 7:18:20 PM

You don't often get email from forbes,kris@outlook.com. Learn why this is important

To all City Council members,

We are against the 39% increase you are proposing for Redwood Coty water uses. This is an absurd percentage increase and this increase along with others this council is proposing as well as proposed new taxes (when a home is sold) is outrageous.

Collectively, this council is fiscally irresponsible, and are making this community more and more expensive for it's residents and are not exemplary representatives for the well-being of Redwood City residents.

As elected officials you should be watching the bottom line and looking for belt tightening opportunities and cost cutting BEFORE you consider and vote to raise rates.

Sincerely,

Kris Forbes
Get Outlook for Android

Diane Stow publiccomment 8A- Water Rates

Subject: Date:

Sunday, December 3, 2023 7:42:39 PM

[You don't often get email from stowdm@icloud.com. Learn why this is important at <a href="https://aka.ms/LearnAboutSenderIdentification">https://aka.ms/LearnAboutSenderIdentification</a>]

I understand this public comment will fall on deaf ears, after watching you swat away over 100 comments from concerned residents as though they were pesky flies disturbing your picnic.

I listening to the City Council shamelessly peddle the City's false narrative about property transfer taxes, while disdainfully dismissing residents as misinformed.

So, I am very aware that residents no longer have representation on the City Council.

However, as a matter of civic duty, I am submitting my comment for the public record.

I am opposed to the exorbitant increases being proposed for water service over the next two years. The 39% proposed, along with the increases in garbage and sewer rates are extortionate.

Many residents are struggling to pay for these services as it is, while continuing to put food on the table for their families.

Unless your intentions are to make Redwood City a home for only the most wealthy among us, I urge the City Council to reconsider these increases and explore cost savings options and spending reductions instead.

Diane Stow

mollytinney publiccomment Agenda item 8a

Subject: Date:

Sunday, December 3, 2023 8:36:12 PM

[You don't often get email from mollytinney@gmail.com. Learn why this is important at <a href="https://aka.ms/LearnAboutSenderIdentification">https://aka.ms/LearnAboutSenderIdentification</a>]

#### Dear council,

I implore you not to approve any more increases in utility rates in Redwood City at at this time. We are being hit from every angle (water, sewer, garbage, PGE) and struggling with astronomical increases I cost of living in the bay area. I work as an RN and make what I believe is a very good living but I am struggling to keep up with all these increases and will be forced to retire elsewhere.

If you approve these proposed increases you are not representing me and you will no longer have my vote. We need a break!

Thank you, Molly Tinney Harrison Ave Sent from my iPhone From: Lynelle Gordon
To: publiccomment
Subject: Water rate increase

Date: Sunday, December 3, 2023 8:48:09 PM

[You don't often get email from lynellegordon@comcast.net. Learn why this is important at <a href="https://aka.ms/LearnAboutSenderIdentification">https://aka.ms/LearnAboutSenderIdentification</a>]

I just want to go on record that I oppose the water rate increase. The name on my bill is Lynelle Gordon and my address of service is 628 Quartz St., Redwood City 94061.
Enjoy your day!
Lynelle

Ekaterina Stomakhina

To:

publiccomment

Subject: Date: Increase in water service charge Sunday, December 3, 2023 9:24:28 PM

You don't often get email from katerina192@gmail.com. Learn why this is important

#### Hello,

I would like to voice my opinion on the proposal to make a 39% increase in our fixed-rate water service charge over the next two years. I am opposing this increase given how many taxes we are already paying in comparison to other cities. I cannot stress enough that what is needed is to focus on the money management system that is currently in place. It clearly does not give results as expected. Or maybe there is something we can definitely learn from other cities.

Similarly, I am opposing New City Property Transfer Tax, Increase in the Business License Tax, Increase in 20-gallon garbage rates of 29% next year, Increase in sewer rates of 26% over the next three years. Let's learn from others and be mindful of the average american.

Best, Ekaterina Stomakhina

Mina Barzanian publiccomment

Subject:

Item 8A

**Date:** Sunday, December 3, 2023 9:33:49 PM

You don't often get email from mbarzanian@gmail.com. Learn why this is important

I would like to protest against water rate increase in Redwood City. I'm a single woman home owner in my 60s with high mortgage and can't afford to pay this increase. Please reconsider. As it is, already very expensive to manage the home repair and cost so this increase is huge burden.

Mina Barzanian

From: Brent Adams
To: publiccomment

**Subject:** More Taxes and fees for the Redwood City residents

**Date:** Sunday, December 3, 2023 10:17:49 PM

You don't often get email from brent.adams49@gmail.com. Learn why this is important

This is Brent Adams, 50 year resident of Redwood City.

I just learned that on Monday evening, the City Council will consider whether to proceed with a 39% increase in our fixed-rate water service charge over the next two years! This proposed increase is on top of the earlier proposed increases in taxes and fees: New City Property Transfer Tax Increase in the Business License Tax Increase in 20-gallon garbage rates of 29% next year Increase in sewer rates of 26% over the next three years There has been no discussion at City Council to drive cost reduction. In fact, last week one city council member said the \$393k base salary for our city manager is a "bargain". So, are you also considering huge salary increases for city employees, and you as council members?

This is insane!!! Will you stop increasing our taxes and fees!

<u>c delarosa</u> publiccomment

Subject:

Money, Money, Money, Money

Date:

Sunday, December 3, 2023 10:35:05 PM

[You don't often get email from cpdelarosa7@hotmail.com. Learn why this is important at https://aka.ms/LearnAboutSenderIdentification ]

I've lived in Redwood City since 1981. Trust me when I say that I will never vote for any of the ballot measures wherein you are asking for more funds. Additionally, I will never vote for reelection of any of the current Redwood City Council members or the current Mayor. I don't think any of you are fiscally knowledgeable and depend entirely too much on your "experts" for their self motivated guidance. You were elected and pledged a commitment to serve Redwood City residents. The way I see it, you are giving away funds to the developers and committed to self serving your personal agendas. It's not fair. Collect more taxes from the likes of Zuckerberg and figure out how to reduce the pensions we pay. No one paid me a pension. We had to figure that out for ourselves. Be gone, all of you.

Sent from my iPhone

November 27, 2023 City clerk/ City Council, stop nickel and dirning people to death. The deagiest trick to date by the atty Council is tacking on one thousand dollars a year to property tax, that is ten-thousand dollars overtern years. It is easy to understand why one-million people have moved out of state to get away from work but. Sincerely Michael A. Gallagler 509 trident Dr. Redwood City, CA 94065 Parcel Number: 095-052-070

To: Water Rates, City Clerk, City of Redwood City 1018 Middlefield Road, CA, 94063



From: William Leslie Dailey and Andree Colley Dailey (owners)

718 California Way, Redwood City, CA 94062

Parcel number; 068-172-340

Date: 12/4/2023

This is to a statement to protest the proposed increase in in water rates. While some rate increase may be justified the City of Redwood city has provided no data that justifies the need for or amount of proposed rate increases.

William Leslie Dailey

William Leskie Durly
Andree Colley Dailey
Ounches ( Dailey

elizabeth starks

Subject:

publiccomment
More Taxes in Redwood City

Date:

Monday, December 4, 2023 6:13:41 AM

[You don't often get email from lizstarks@hotmail.com. Learn why this is important at <a href="https://aka.ms/LearnAboutSenderIdentification">https://aka.ms/LearnAboutSenderIdentification</a>]

To whom it may concern:

As a property owner, we are very disappointed of the City,

Having many Developing buildings in our area.

Water shortages?

More garbage.

Homeless

Drug addiction

People are leaving, they can not afford buying groceries.

What is going to happen with the seniors living here since 1950.

Residents need to be involve and receive an Statement every year You spend our Money.

We need a list of every item you pay, to whom and the total amount of payment.

Thank you,

Elizabeth Starks

1058 Valota Road

Redwood City

Annette Parker

To:

publiccomment

Subject: Date: Fwd: Proposed Increase in Water Rates Monday, December 4, 2023 7:39:28 AM

You don't often get email from swimmom702@yahoo.com. Learn why this is important

#### Sent from my iPhone

## Begin forwarded message:

From: annette parker <swimmom702@yahoo.com>

Date: October 19, 2023 at 2:34:32 PM PDT

To: GRP-City Council < council@redwoodcity.org>

**Subject: Proposed Increase in Water Rates** 

#### Dear Council:

As a lifelong Redwood City resident (66 years) I wanted to express my dismay at the City's proposal to raise our water rates!! My husband and I are on Social Security and are being slowly squeezed out of this once-nice City! How on earth will we afford to live here any longer. The drought is over!

PLEASE, I URGE YOU COUNCIL MEMBERS TO VOTE NO ON ANY INCREASE.

The record shows that you all (except Diane Howard) vote yes on everything put in front of you. Have a backbone and fight for the residents for once.

Again, please think of the families you represent!!

Sincerely,

Annette Parker Resident since 1957

Janet Whittemore publiccomment Budget Increases

Subject: Date:

Monday, December 4, 2023 8:32:44 AM

[You don't often get email from jntwhittemore@gmail.com. Learn why this is important at https://aka.ms/LearnAboutSenderIdentification]

Hello,

At this time, the government really needs to do what the private sector always has to do; work within the constraints of their budget. As revenues have increased from many sources (property tax etc), it is incumbent upon elected officials to be responsible with a budget and work within it. Large rate increases passed on to the public require individual families to shoulder a burden that government is avoiding. Families can't just pass on a tax to an entity pay for increases. They must make hard decisions. They already are - and now it is time for city and county governments to do the same. Think of the city as a family and work within the budget as the private sector must do.

Regards, Janet Whittemore Resident San Mateo County Sent from my iPhone

Yvonne Prudhomme

To:

publiccomment

Subject: Date: More Taxes!!! Higher Utility bills. Ugh!!! Monday, December 4, 2023 9:04:35 AM

You don't often get email from mspru2@gmail.com. Learn why this is important

Noticing the consideration of increased taxes proposed has my heart a flutter!!! As a senior living on limited income I am very concerned. All the utility increases with our economic level is quite disturbing.

Have you taken this to our citizens for a vote-as we are the ones who pay.

City council members don't seem to care about others since they are making a fair & more than decent wage...& getting paid well to spend the citizens money, it seems relentlessly at times.

I am getting very disturbed by all the building & expenses that seem to be pushed to the residents.

Please reconsider these increases as they seem exorbitant & start thinking of ways to reduce the City spending. You are not a corporate CEO where profit is made to cover the large salaries.

THINK AGAIN PLEASE!!!

From: Doraine Couillard
To: publiccomment

Subject: Another week, another new tax or price hike Date: Monday, December 4, 2023 9:29:10 AM

[You don't often get email from doecouillard@yahoo.com. Learn why this is important at <a href="https://aka.ms/LearnAboutSenderIdentification">https://aka.ms/LearnAboutSenderIdentification</a>]

When will it all end? Stop spending money foolishly in our city, ...example: all the new curb extensions, ridiculous roundabouts, giant boulder placement, and on and on. Give us all a break if you value your positions in our city gov't. People are talking and we're all pretty fed up. Get a clue. Stop the madness!

Sent from my iPad

Cindy Asrir

Subject:

publiccomment

Date:

New rates and increases

Monday, December 4, 2023 11:51:56 AM

You don't often get email from casrir@gmail.com. Learn why this is important

## Hello City Council.

I am writing to oppose the proposed increases in water rates, garbage rates and sewage rates, as well as the new property transfer tax.

Redwood City is becoming too expensive to live in, especially for working families or folks on a limited income. Is this what we want--to drive out all the residents and families and become an unrecognizable city that only the very rich can afford?

PLEASE do the right thing and oppose these increases. Remember that we voted for you to represent the people, not only the rich, the companies and the special interests. As we voted you in, we can vote you out.

Thank you, Cindy Asrir Redwood City

Robin Okada

Subject:

publiccomment

Subject: Date: Fwd: Proposed water rate increase Monday, December 4, 2023 12:42:04 PM

Attachments:

image001.png

You don't often get email from rokada@gmail.com. Learn why this is important

From: Robin Okada < rokada@gmail.com > Sent: Sunday, December 3, 2023 5:29 PM

To: GRP-City Council < council@redwoodcity.org>

Subject: Proposed water rate increase

You don't often get email from rokada@gmail.com. Learn why this is important

Dear City Council members:

I am writing to oppose the proposed water rate increase.

It is a bad time to increase bills for citizens when inflation is still so high.

A 30% increase is very large and it is followed by another 15% increase. This is unconscionable and is being proposed by people who can afford it. This will be a bit shocking, especially for those who are having difficulties making ends meet? I would like to know why a 45% increase is necessary. Has the supplier increased their rate by this amount? Is the increase padded for some reason? Are garbage and sewer costs not covered and this increase is meant to make up the loss? I would like to see more details.

It is a sign of poor management of any program that requires an increase of almost 50% in income over such a short period of time.

It would be far better to increase in smaller increments over a much longer time period. Much easier for families to absorb.

Sincerely,

Robin and Ron Okada

Robin Okada

1613 Pecan Court

Redwood City, CA 94061

May you always have: Love to share, Cash to spare, Tires with air, And friends who care. From: Cheryl Clawson
To: GRP-City Council

Subject: Oppose water rate increase

Date: Monday, December 4, 2023 1:01:22 PM

[You don't often get email from cheryl654@aol.com. Learn why this is important at <a href="https://aka.ms/LearnAboutSenderIdentification">https://aka.ms/LearnAboutSenderIdentification</a>]

I'm retired and have lived in Redwood City since 1975. The continued increase in various service rates and taxes are unsustainable. Everyone lives on a budget and the city and county must too; nobody bails out individuals when there are living increases and continued rate/tax hikes are quite a burden for seniors on fixed budgets. We all cut down water use due to drought, and now that has diminished, tax/rate hikes seem to be the answer!! Please reconsider and do not increase taxes or service rates, like water etc.

Cheryl Clawson Sent from my iPhone

ichandler94131@yahoo.com

To:

**GRP-City Council** 

Subject:

water

Date: Mo

Monday, December 4, 2023 10:58:13 AM

You don't often get email from jchandler94131@yahoo.com. Learn why this is important

We are protesting the proposed water rate hike.

Jennifer and Stephen Chandler 2018 Harding Ave. Redwood City, CA 94062

Sincerely, Jennifer and Stephen Chandler

Sudylin



Sindy Tan
1204-1212 Peese St
Redwood City, CA 94061
Acct \$ 1004767-01

Notice of Public Hearing on Proposed Water Rate Increases

Monday, December 4, 2023 at 6:00 p.m.

In Person:

City Council Chambers 1017 Middlefield Road Redwood City, California 94063

Via Video Conference (To Observe the Meeting only):

https://redwoodcity.zoom.us/j/99481825639

Meeting ID: 994 8182 5639 Dial-in: \*67 +1 (669) 900-6833

On Monday, December 4, 2023, at 6:00 p.m., or as soon thereafter as the matter may be heard, the City Council of the City of Redwood City will hold a public hearing to consider updates and increases to all of the City's water rates, for all water customers, for Fiscal Years (FY) 2023-24 and 2024-25. If approved, these updates and increases will be effective on February 1, 2024 and January 1, 2025 respectively. Members of the public may join the public hearing in-person, or observe the meeting via video conference, using the information provided above; only in-person participants may provide public comment during the public hearing. The purpose of this notice is to describe the proposed rate updates and increases and to notify you of the public hearing.

#### THE PROPOSAL

The proposed water rates are calculated to recover the cost of providing water services to each commercial and residential customer class. The proposed rate updates are designed to ensure that the revenue collected from the water rates is sufficient to cover, but does not exceed, the City's costs of providing potable and recycled water services to its customers. The basis upon which the proposed water rates were calculated is set forth in the City of Redwood City Water Rate Cost-of-Service Study dated October 2023 ("Water Rates Study"), which can be found on the City's website and is available upon request in the City Clerk's office.

The City Council will consider the following proposed water rate updates and increases at the City Council meeting on December 4, 2023:

- Increases to the FY 2023-24 and FY 2024-25 water service charges that are billed bi-monthly to single family residential customers per dwelling unit (DU).
- Modifying and updating the current fixed service charge to multi family residential accounts to charge according to meter size instead of per equivalent dwelling unit to set rates for FY 2023-24 and FY 2024-25.
- Increases to the FY 2023-24 and FY 2024-25 water service charges that are billed monthly to commercial customers per meter size.

November 29,2023

Re: Proposal to raise water rates in Redwood City DEC

City of Redwood City

City Clerk

Dear Redwood City City Council Members,

I am aware that the City Council is meeting on December 4, 2023 to discuss the matter of Raising The Water Rates for Redwood City. This is my official WRITTEN PROTEST to this proposal to raise our water rates in Redwood City!!

The first raise hike you are proposing for Bi-Monthly per DU for single family residences is from \$59.04 to \$76.72---THAT IS A 29.9% raise in one year( 2023-2024)!! This is ludicrous and absurd!!! Then for 2024-2025 you want to raise the rates from \$76.72 to \$82.09 which is another .069% hike.

My wife and I have been a residence of Redwood City for over 36 years. I implore you to reject this proposal to raise our Redwood City Water Rates. There are many of us who have lived in Redwood City for many years and we are retired and are on a FIXED INCOME. This huge rate hike you are proposing would seriously hurt us older citizens.

If you pass this proposed Water Rate Hike it will put Redwood City in the top half of highest rates rates paid by all the other local cities. Please don't do this!! We DO NOT need this rate hike!! If this proposed rate hike passes it will put many of the older residences in danger of not being able to make the payments.

There are other ways to generate revenue for employee salaries and benefits which have increased. There are other ways to fund these costs without raising the Water Rates for the Redwood City Residences.

I am 100% opposed to this proposal to raise our Water Rates for 2023-2024 and 2024-2025

Name of Record Owner/ Customer of Record---Joseph Ward Service Address-----974 Lakeview Way, Redwood City, 94062 Parcel Number---068-191-050

Respectfully,

Joseph Ward

From: c sconzert

To: publiccomment

Subject: Agenda Item 8A

Date: Monday, December 4, 2023 3:12:30 PM

You don't often get email from c.sconzert@gmail.com. Learn why this is important

I'm writing in opposition of the proposed increases in Water rates for Redwood City. Before any increases are requested, what other steps are considered by the Council and Departments to address budget needs, specifically cost-cutting measures?

The slew of increases in taxes and fees from this council is mind-boggling. I can't believe that the cumulative effect upon the residents is not a concern to you. Your collective actions and selective responses are condescending and out of touch with your constituency.

Before you attempt to side-step responsibility by saying the vendors are increasing rates, please describe in detail your efforts to contain costs and tighten budget accountability. From the viewpoint of the citizens of Redwood City, we can see TONS of wasted money projects --why can't you?

Carol J Sconzert 650-291-1023

From: Michelle G
To: publiccomment

**Subject:** Raising Water Rates Item 8.A

**Date:** Monday, December 4, 2023 3:28:18 PM

You don't often get email from michelle@michelleron.com. Learn why this is important

Hello, I am writing to you today to state that I do not support raising water rates. Along with that, I do not support raising the costs for any other services until the City Council shows efforts toward cost reductions. I ask that you please think about Redwood City residents as people and not dollar signs. Many families are struggling to pay the bills as it is, wages are not growing along with the increases you suggest. How do you expect people to continue to pay more year after year? We do not have the money. And if the city does not have the money, then reduce costs! This is what we do in our household budgets, the city needs to do the same.

Michelle G.

From: <u>Elaine De La Cruz</u>

To: <u>publiccomment</u>; <u>GRP-City Council</u>

**Subject:** Agenda Item LINE 8

**Date:** Monday, December 4, 2023 3:33:13 PM

Some people who received this message don't often get email from elaineqdlc@gmail.com. <u>Learn why this is important</u>

I can't believe that I find myself yet writing another email to show my disappointment and my opposition to the City Council's non-brilliant idea to raise the water rates and subject residents to yet another increase.

Year after year, the City Council happily proposes that the residents can once again pick up the tab for mismanaged expenses.

Did any of you consider the rapid overgrowth and the pressure it has put on the existing residents to cover the costs of a broken infrastructure?

Can you please explain with a truthful answer why the City Manager continues to get raises in a not so good economy? What has her leadership been to grant her raises like this?

Good Leaders take pay cuts or remain flat- but none of this happens with this town! Instead, it's always pinned back on the residents over and over...

ENOUGH- learn to manage funds correctly, efficiently and with honesty!

Sincerely, Elaine and Christian De La Cruz From: Dennis Weaver
To: publiccomment

**Subject:** Objection to Water Increase

**Date:** Monday, December 4, 2023 3:33:37 PM

You don't often get email from poolcop@pacbell.net. Learn why this is important

I object to the City Council increasing water rates. A 39% increase in our fixed-rate water service charge over the next two years as well as the following proposed increases in taxes and fees such as:

New Property Transfer Tax Increase in the Business License Tax Increase in 20-gallon garbage rates of 29% next year Increase in sewer rates of 26% over the next three years

If the City Council continues the trend of using their taxpayers as ATM machines the result will be the middle class in Redwood City will disappear. Many residents are on fixed incomes or living paycheck to paycheck and can't afford all these increases in tax and services. Perhaps the City Council should curb their spending and reduce expenses.

Thank you,

Dennis Weaver 455 Iris Street Redwood City, CA 94062 From: IgnacioM94062

To: publiccomment

Subject: Council Public Co

**Subject:** Council Public Comment

**Date:** Monday, December 4, 2023 4:24:05 PM

You don't often get email from ignaciom94062@proton.me. Learn why this is important

A few weeks ago, you all voted to raise the City Manager's pay by 6%, after just having raised her pay by over 7% in July of this year. That translates to \$45,000 dollars more than she was making just a few months ago. And you did that with no discussion whatsoever. Now I've heard the defensive comments about how pay has to be competitive, etc., but I don't buy it. When was the last time you had no qualified applicants for the position of City Manager?! Until that happens, there is no need to raise pay more than the standard 3% cost of living each year. And as far as equity is concerned, something I often hear each of you and the City Manager herself tout as a Council Priority, name one other position in City that received a 13% pay increase in 2023. As I have before, I am again asking you to put her contract back on the agenda, preferably with more than the minimum required 72 hours notice, and have a fair discussion about the matter. If you are going to take our money through "new revenue streams" to fund extravagant pay for city executives, at least do it with some transparency instead of as a late item voted on with no comments just before the clock struck midnight.

## Nacho

Sent with Proton Mail secure email.

From: Rajeev Seth
To: GRP-City Council

**Subject:** I am filing a written protest for Redwood City"s proposal to increase water rates

**Date:** Monday, December 4, 2023 3:05:06 PM

[You don't often get email from rajeevseth@yahoo.com. Learn why this is important at <a href="https://aka.ms/LearnAboutSenderIdentification">https://aka.ms/LearnAboutSenderIdentification</a>]

This is my letter to File a written protest for Redwood City's proposal to increase water rates

1. I am protesting against the proposed change in water rates

Pajain Jeth

- 2. I am the owner of the house at 1840 Anamor St, Redwood City, CA 94061
- 3. The affected parcel APN is 059-202-100
- 4. My (owner of record's) signature is

Thanks

Rajeev Seth Tel 415 413 7587

1840 Anamor St, Redwood City, CA 94061

From: Kevin Thorpe
To: GRP-City Council
Subject: Water rate Increase

**Date:** Monday, December 4, 2023 3:05:59 PM

To the Honorable Mayor, Vice Mayor and esteemed City Council members:

Since we already have two tax increases coming up in the near future with a home sell tax increase and the business tax increase which will affect all businesses in Redwood City and then subsequently the general buying public, hold off on adding any more increases to citizens of the City.

Thank you,

Kevin Thorpe

From: Paul Bocanegra
To: publiccomment

Subject:Support of a permanent cease-fireDate:Monday, December 4, 2023 4:42:03 PM

You don't often get email from pdbocanegra05@gmail.com. Learn why this is important

Good afternoon. My name is Paul Bocanegra and I live in Eagle Hill with my family. I want to write this public comment to urge our Redwood City leadership on the City Council to support a permanent cease-fire in the Middle East. The jurisdiction of humanity knows no boundary and that should not be an excuse for our leadership to avoid taking a side on what is right and what is wrong in our country.

I cofounded an organization that works with all youth, that are system impacted in our county, and in the region. As a mentor, as a leader, as an advocate, I did not cofound this organization to assist and guide our youth at home, but I cofounded this organization to stand for all youth in our county, outside of our county and across the world. Every youthful life matters.

This email is intended to urge this City Counsel, where I live to stand for the same thing. Thank you for providing me this space to be heard and I look forward to your partnership in standing with peace on this issue.

Respectfully submitted,

Paul Bocanegra, Your neighbor From: Julie Pardini
To: Citycouncil@rwc.org
Cc: publiccomment

**Subject:** Public Comments at City Council Meetings re: Increased Tax & Fees

**Date:** Monday, December 4, 2023 4:42:34 PM

[You don't often get email from juliepardini@yahoo.com. Learn why this is important at <a href="https://aka.ms/LearnAboutSenderIdentification">https://aka.ms/LearnAboutSenderIdentification</a>]

This is a comment about how Chris Rodell's public comment and fact-based Editorial was mercilously criticized by some members of the City Council.

I was shocked.

The function of the Public Speaking portion of a City Council Meeting is provided to the public so that they may make comments regarding planned or ongoing legislation which will affect their lives.

For a resident to be involved and have opinions and collect information to explain or substantiate their point-of-view should be welcomed.

I did not witness that happening at the November 27, 2023 meeting, with Chris Rodell's expression of his views. Quite the opposite.

The kind of hostile reception he received will do damage to the future of City Council Public Speaking segments, in that it may discourage residents from interacting at meetings at all.

It is an important function of Democracy and should be encouraged and welcomed, no matter the expressed views of the speakers.

Very truly,

Julie Pardini juliepardini@yahoo.com 16507221892 Sent from my iPhone From: <u>valley.barbara@comcast.net</u>

To: <u>publiccomment; GRP-City Council</u>

**Subject:** December 4, 2023 City Council Meeting Public Comment on Agenda Item 8A

**Date:** Monday, December 4, 2023 4:59:44 PM

You don't often get email from valley.barbara@comcast.net. Learn why this is important

Esteemed Members of the City Council of Redwood City: Good evening.

I have lived in Redwood City since June 1972. In th past 51 years I have received numerous notices of public hearings for utility increases, attended outreach workshops, and viewed presentations to the Council.

In every instance it has been made very clear that Water Dept revenues must cover expenses. General Fund monies are not part of the equation. This is true for Sewer charges and Solid Waste as well.

In the past two years the SFPUC has increased water supply costs by 27%. In addition, the City plans to spend an average of \$15 million per year on capital improvement projects. Like milk, eggs, and gas, salaries and benefits, materials, etc have also increased. Even with the proposed increase Redwood City is still lower than many of our neighboring cities.

Residents gather on Facebook and Next Door armed with pitchforks and torches spurred on by keyboard warriors using innuendo, unfounded allegations, and cherry picked facts decrying the Council as being corrupt and fiscally irresponsible, and uncaring. Council members are threatened with recall. Do these folks not realize that you Council members live here in Redwood City and will pay the same rates as they do?

You have my sympathy; you also have my admiration and gratitude for your service to our community.

Happy Holidays, Barb Valley From: Breslin Jeffery
To: publiccomment

Subject: I DO NOT SUPPORT ~>> (8A. ) Public Hearing on proposed increase to water utility service rates and charges

Date: Monday, December 4, 2023 8:30:45 PM

You don't often get email from jeff.breslin@gmail.com. Learn why this is important

JUST as many others have voiced their concerns during the meeting, I too can not support YET ANOTHER INCREASE being received by your group that is supposed to be looking out for what's best for our community!!

I took my time previously to voice my concerns regarding the GARBAGE RATE INCREASES that you all completely IGNORED ANY POINT that was being made and instead deferred to their friends that worked for Waste Management companies or referred to what they would personally do in order to accommodate the increase in rates...which weren't relevant at all and completely dismissed any point that was being made!!

Furthermore, when listening to the presentation on this topic and looking further through the mailer that was received...one point that jumps out at me is this... WHY when the gentlemen that talked through the slides clearly STATED the fact that the AVG. Usage per SINGLE FAMILY HOME is 14 HCF
Then WHY is it that the slide that compares RWC to ALL Other Neighboring cities, why are you USING a comparative chart @ 7 HCF (which is the LOWEST RATE ONLY), and doesn't carry any weight when you consider the fact that as you stated was DOUBLE that USAGE, so WHY NOT BE TRANSPARENT based on what the ACTUAL AVERAGE USAGE IS???

SEEMS REALLY SHADY and SNEAKY to try and MISLEAD the community regarding how our rates actually compare to other communities, and in fact it's very clear that you guys are quite aware that the slide showing this information is undoubtedly MISLEADING, and should actually be referencing at the very least what the AVERAGE USAGE is, & NOT the 7 HCF that was actually being referenced!

Another point that I observed that appears to be very confusing, is the fact that the rate increases seem to be MOSTLY hitting the CONSUMERS and NOT the ENTERPRISES (who per your presentation seem to be the ones who are primary drivers regarding these proposed increases are!!!)!! Additionally, If we are to increase rates, then WHY is it that under your <u>WATER USAGE</u> <u>CHARGES</u> slide:

## **UNDER TIER 3:**

- <u>SINGLE FAMILY</u>...you are actually PROPOSING A REDUCTION to their rate under this plan from \$10.20 down to \$ 9.63.... WHY???
- MORE importantly is the REDUCTIONS PROVIDED to ALL OTHER Groups (MULTI FAMILY, COMMERCIAL, & LANDSCAPE):

- MULTI FAMILY ~ If the AVG. SINGLE FAMILY usage is approx. 14 HCF then it should be safe to assume that a MUTLI FAMILY is at least 25+ HCF (but I would guess it's much HIGHER than that!)?? THEY should NOT received a single rate for ALL TIERS, which only encourages water wasting since they are not impacted by volume like SINGLE FAMILY USERS are! IT's REDICULOUS!
- <u>COMMERCIAL CUSTOMERS:</u> ~ They should absolutely be receiving a larger INCREASE than everyone else by %...especially considering that they are HUGE USERS (of mas volumes...at least more than residents) of water consumption by volume, per single address location. That includes for both the water & the service (for ALL Meter SIZES) & VOLUMES CONSUMED!
- LANDSCAPE CUSTOMERS: same as COMMERCIAL NOTES!!

On that note you have my OBJECTIONS, and my opinions regarding the matter as provided pertaining to these increases, and as was expected by your team, they pretty much ignored all of the concerns & comments provided by citizens and instead championed the increase (Aguirre is worthless)!! I'm appalled to feel as though I may have had some part in allowing your office to mislead me by possibly voting for ANY ONE of you...but rest assured I will take note and be sure to NOT MAKE THIS MISTAKE AGAIN!!

Jeff Breslin

From: <u>linda green</u>
To: <u>publiccomment</u>

**Date:** Monday, December 4, 2023 11:33:18 PM

You don't often get email from Igreenski@gmail.com. Learn why this is important

Please. Do not raise the water. I am a widow and 78 yrs old and on a fixed income. Every thing is going up i.e. food, P

G &E, gas, house payment etc. except my social security. What am I supposed to do as I am really upset. How am I supposed to live. Please, any help for a senior citizen.

Please answer Thank you Linda Green Redwood city 94061 650 722 3630 From: <u>Lynn Pereira</u>
To: <u>publiccomment</u>

Subject: STOP MAKING RWC UNAFFORDABLE

Date: Tuesday, December 5, 2023 10:24:39 AM

You don't often get email from lynnmarie.pereira@gmail.com. Learn why this is important

I have lived in Redwood City all my life. I will soon not be able to afford to live here or without renting a room to a total stranger! STOP MAKING RWC UNAFFORDABLE!!!

I am almost ready to retire and if taxes and rates keep going up, I will have to either sell and move or rent a room! I have worked for the Courts for 20 years and probably would qualify for low income housing if I did not own my house!

Property taxes have significantly increased over the years... every 6 months I wonder how I am going to pay them!

Enough with raises for city officials!!!! Stop the increases in taxes and fees - garbage, water, etc!!!! The officials just care for themselves and their income!

**ENOUGH!** 

--

Lynn Marie Pereira 650-400-8778

SPEAKER'S	CARD

## **City of Redwood City**

Please fill out and submit to the City Clerk to speak to the City Council.  Providing your contact information below is optional, but if you do provide it, it is a public record.			
DATE: 12/4/23 PHONE NO 650-245-7395			
NAME: Chris Robell			
ADDRESS: ZIP:			
EMAIL ADDRESS			
☐ Please check this box if you would like to receive the Redwood City E-News.			
AGENDA ITEM NO. OR SUBJECT			
ORGANIZATION REPRESENTED (if any):			



## SPEAKER'S CARD

City of Redwood City

Please fill out and submit to the City Clerk to speak to the City Council.  Providing your contact information below is optional, but if you do provide it, it is a public record.  DATE: 12/4/23 PHONE NO 650-245-7395  NAME: Chils Robell
ADDRESS: ZIP:
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