



8:00 A.M. OPERATIONS CENTER - 1200 SOUTH GENE AUTRY TRAIL – PALM SPRINGS – CALIFORNIA

This meeting will be held virtually and in person. The link and the telephone option provided is for the convenience of the public.

Toll Free: (253) 215-8782
Meeting ID: 896 7354 6608
Passcode: 261147

or Via Computer:
<https://dwa-org.zoom.us/j/89673546608?pwd=RTNmemZFd042SWNiT1VNeDV5MW55dz09>
Meeting ID: 896 7354 6608

Members of the public who wish to comment on any item within the jurisdiction of the Agency or any item on the agenda may submit comments by emailing sbaca@dwa.org or may do so during the meeting. Comments will become part of the Board meeting record.

****In order to reduce feedback, please mute your audio when you are not speaking.***

Esta reunión se llevará a cabo virtualmente y en persona. El enlace y la opción telefónica proporcionada es para la comodidad del público.

Número gratuito: (253) 215-8782
ID de reunión: 896 7354 6608
código de acceso: 261147

o a través de la computadora:
<https://dwa-org.zoom.us/j/89673546608?pwd=RTNmemZFd042SWNiT1VNeDV5MW55dz09>
ID de reunión: 896 7354 6608

Los miembros del público que deseen comentar sobre cualquier tema dentro de la jurisdicción de la Agencia o cualquier tema en la agenda pueden enviar comentarios por correo electrónico a sbaca@dwa.org o pueden hacerlo durante la reunión. Los comentarios pasarán a formar parte del registro de la reunión de la Junta.

****Para reducir los comentarios, silencia el audio cuando no estés hablando.***

1. **CALL TO ORDER/PLEDGE OF ALLEGIANCE** **ORTEGA**
2. **ROLL CALL** **BACA**
3. **PUBLIC COMMENT ON ITEMS NOT ON THE AGENDA:** Members of the public may comment on any item not listed on the agenda, but within the jurisdiction of the Agency. Speakers are requested to keep their comments to no more than three (3) minutes. As provided in the Brown Act, the Board is prohibited from acting on items not listed on the agenda.
4. **PUBLIC COMMENT ON ITEMS LISTED ON THE AGENDA:** Members of the public may also comment on items listed on the agenda that are not the subject of a public hearing at this time. Again, speakers are requested to keep their comments to no more than three (3) minutes.

5. CONSENT CALENDAR ITEMS: Items listed under the Consent Calendar are considered to be routine and will be acted upon by one motion of the Board without discussion. There will be no separate discussion on these items unless a Board Member requests a specific item to be discussed and/or removed from the Consent Calendar for separate action.

- A. Approve Minutes of the March 9, 2023 Finance Committee Meeting
- B. Receive and File Minutes of the March 16, 2023 Executive Committee Meeting
- C. Receive and File – February 2023 Outreach and Conservation Activities & Events
- D. Request Approval of Contract Amendment for General Manager and Updated Salary and Classification Chart Dated March 3, 2023

6. ACTION ITEMS:

- A. Request Adoption of Bill Position Recommendations
- B. Request Authorization to Call for Bids on Constructing Phase 1 of 30" Avenida Caballeros Pipeline Replacement (Ramon Road to Tahquitz Canyon Way)

**KRAUSE/REEB
TATE**

7. DISCUSSION ITEM:

- A. Presentation of Draft Cost of Service Study for Potable, Recycled & Wastewater Rates

SAENZ

8. GENERAL MANAGER'S REPORT

KRAUSE

9. DIRECTORS REPORTS ON MEETINGS/EVENTS ATTENDED ON BEHALF OF THE AGENCY

10. DIRECTORS COMMENTS/REQUESTS

11. CLOSED SESSION

- A. CONFERENCE WITH LEGAL COUNSEL – EXISTING LITIGATION
Pursuant to Government Code Section 54956.9 (d) (1)
Name of Case: Agua Caliente Band of Cahuilla Indians vs. Coachella Valley Water District, et al
(Two Cases)
- B. CONFERENCE WITH LEGAL COUNSEL – EXISTING LITIGATION
Pursuant to Government Code Section 54956.9 (d) (1)
Name of Case: Mission Springs Water District vs. Desert Water Agency
- C. CONFERENCE WITH LEGAL COUNSEL – EXISTING LITIGATION
Pursuant to Government Code Section 54956.9 (d) (1)
Name of Case: AT&T vs. County of Riverside

12. RECONVENE INTO OPEN SESSION – REPORT FROM CLOSED SESSION

13. ADJOURN

Upon request, this agenda will be made available in appropriate alternative formats to persons with disabilities, as required by Section 202 of the Americans with Disabilities Act of 1990. Any person with a disability who requires a modification or accommodation in order to participate in a meeting is asked to contact Desert Water Agency's Assistant Secretary of the Board, at (760) 323-4971, at least 48 working hours prior to the meeting to enable the Agency to make reasonable arrangements. Copies of records provided to Board members that relate to any agenda item to be discussed in open session may be obtained from the Agency at the address indicated on the agenda.

DECLARATION OF POSTING

Pursuant to Government Code Section 54954.2, I certify that this agenda has been posted at least 72 hours prior to the meeting on the Agency's website at www.dwa.org and at the Agency's office located at 1200 South Gene Autry Trail, Palm Springs, CA.

Sylvia Baca, MMC, Assistant Secretary of the Board

Minutes
Finance Committee Meeting
March 9, 2023

Directors Present: Gerald McKenna, Kristin Bloomer

Staff Present: Mark Krause, Steve Johnson, Esther Saenz

Consultant Present: Greg Clumpner, NBS

Call to Order

1. Public Comments - None

2. Discussion Items

A. Review Draft Rate Study Report

Greg Clumpner of NBS presented the Draft Cost of Service Study for the Potable, Recycled & Wastewater Rates.

Key areas of concern:

- Inflation factors used in rate projection
- Capital improvement budget used in rate projection
- Funding sources for capital improvement projects
- Fixed to variable cost ratio
- Fixed rate variability across customer classes
- Uniform rate versus tiered rate

The Committee recommended that the rate study be presented to the full Board for review. Chair McKenna will present his extensive list of proposed future changes to the Board in writing.

B. Review Revenue Source & Use

The Committee reviewed a presentation on the Agency's major revenue generating sources in each of the Agency's four funds and the allowable uses of these revenues.

C. Review Investment Strategy

The Committee reviewed the Agency's Investment Strategy document which outlines how Agency Staff operates to ensure compliance with the Agency's Investment Policy.

D. Review Budget Process Overview

The Committee reviewed the 2023/2024 budget preparation schedule and an overview of the overall budgetary process.

Adjourn

Minutes
Executive Committee Meeting
March 16, 2023

Directors Present: Paul Ortega, Jeff Bowman
Staff Present: Mark Krause, Steve Johnson, Esther Saenz, Sylvia Baca
 Jamie Hoffman
Consultant Present: Ashley Metzger

Call to Order

1. Public Comments - None

2. Discussion Items

A. Review agenda for March 21, 2023 Board meeting

The proposed agenda for the March 21, 2023 meeting was reviewed.

Scheduling a study session subsequent to the March 21, 2023 Board meeting to discuss the draft rate study was discussed.

B. Expense reports

The February expense reports were reviewed.

Adjourn

**DESERT WATER AGENCY
OUTREACH & CONSERVATION
ACTIVITIES**

FEBRUARY 2023

Activities

- 2/1 Ashley Metzger attended an ACWA/CMUA WUE Methodology meeting.
- 2/1 Melinda Weinrich toured Snow Creek and Well 39.
- 2/2 Xochitl Peña was on a live segment with KESQ.
- 2/3 Staff attended the MSWD 70th Anniversary event.
- 2/7 Staff met with Lobbyist Bob Reeb.
- 2/7 Ashley Metzger met with City of Palm Springs.
- 2/8 Ashley Metzger attended a CV-SNMP Outreach Sub Committee meeting.
- 2/8 Staff attended a CVRWGMG business meeting.
- 2/8 Staff attended an Indio Subbasin GSA's Leadership Council meeting.
- 2/9 Xochitl Peña was on a live segment with KESQ.
- 2/9 Xochitl Peña attended a CV Water Counts academy 2023 meeting.
- 2/14 Staff attended a Conservation & Public Affairs Committee meeting.
- 2/15 Ashley Metzger attended an ACWA Water Management Committee Meeting.
- 2/15 Ashley Metzger attended an ACWA meeting with executive Director Dave Eggerton.
- 2/16 Ashley Metzger was on a live segment with KESQ.
- 2/16 Staff attended a CV Water Counts Academy.
- 2/17 Ashley Metzger attended an ACWA Climate Change Working Group meeting.
- 2/21 Staff attended a CV Water Counts monthly meeting.
- 2/22 Staff attended a CV-SNMP monthly meeting.
- 2/22 Ashley Metzger attended an ACWA Communications Committee meeting.
- 2/23 Xochitl Peña recorded a radio interview with Joey English.
- 2/23 Xochitl Peña was on a live segment with KESQ.
- 2/27 Staff attended a weekly State leg check in meeting.

Public Information Releases/eblasts/Customer Notifications

- 2/2 Nextdoor - Desert Water Agency – Water Construction Start/End 02/07/2023
- 2/3 Nextdoor - Desert Water Agency – Water Construction Start/End 02/07/2023
- 2/21 Nextdoor - Desert Water Agency – Water Construction Start/End 02/23/2023
- 2/21 Nextdoor – Desert Water Agency – Water Construction Start/End 02/28/2023

2/28 eBlast – Join DWA for a behind the scenes tour to learn about your water

Upcoming Events

3/23 – Landscaper Workshop

3/25 – One-PS Community Picnic at Ruth Hardy Park

3/30 – DWA Facility tours

4/12 – Family Fun Fest at Palm Springs Stadium

4/29 & 4/30 – Preservation Matters Symposium on Water and Tourism

Conservation Programs

Grass Removal:

- 38 Inspections
- 93 Projects pre-approved
- 30 Projects given final approval

Devices:

- 18 Washing machine rebates requested
- 16 Washing machine rebates approved
- 15 Smart controller rebates requested
- 5 Smart controller rebates approved
- 97 Nozzles requested for rebate
- 46 Nozzles approved for rebate
- 14 Toilet rebates requested (commercial only)
- 0 Toilet rebates approved (commercial only)

Water waste:

- 40 Total complaints submitted
- 17 Contacts to customers
- 8 Site inspections scheduled
- 12 Citations
- 1 Citation waived

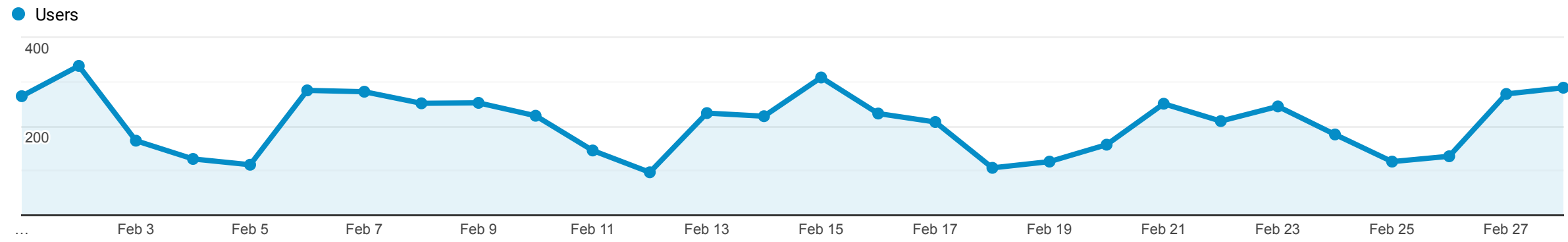
Audience Overview

All Users

100.00% Users

Feb 1, 2023 - Feb 28, 2023

Overview



Users

4,907

New Users

4,218

Sessions

6,435

Number of Sessions per User

1.31

Pageviews

13,130

Pages / Session

2.04

Avg. Session Duration

00:01:48

Bounce Rate

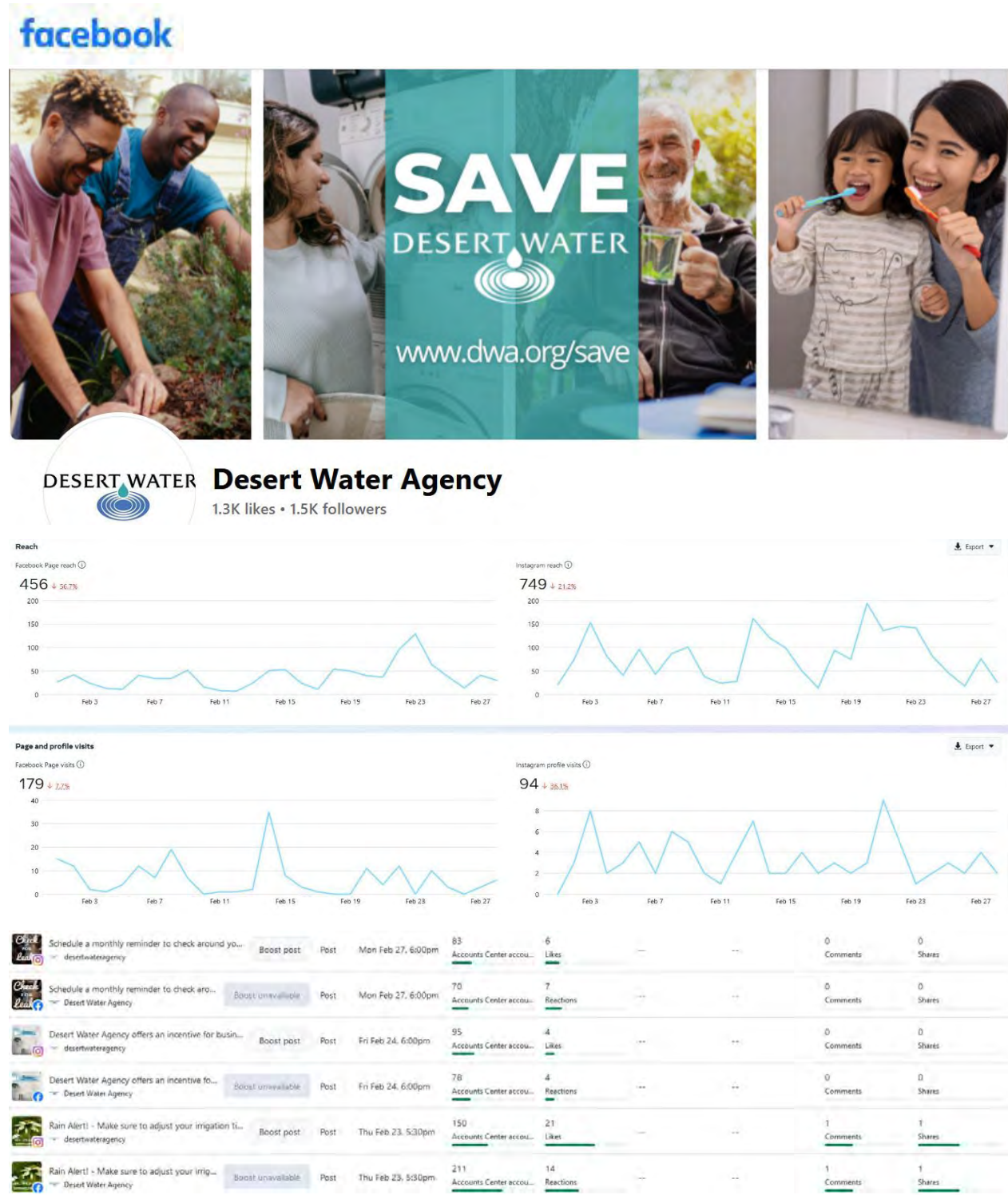
52.39%

■ New Visitor ■ Returning Visitor






















Visitor Type	Percentage
New Visitor	77.8%
Returning Visitor	22.2%

Language		Users	% Users
1.	en-us	4,663	95.01%
2.	en-ca	64	1.30%
3.	en-gb	60	1.22%
4.	en	47	0.96%
5.	zh-cn	12	0.24%
6.	en-au	9	0.18%
7.	en-us@posix	6	0.12%
8.	es-419	5	0.10%
9.	es-us	4	0.08%
10.	fr-fr	4	0.08%

Desert Water Agency Facebook & Instagram Analytics February 2023



Desert Water Agency Facebook & Instagram Analytics February 2023

	It is Engineers Week, so let's take a moment to ap...	Boost post	Post	Wed Feb 22, 6:00pm	175 Accounts Center accou...	28 Likes	--	--	0 Comments	0 Shares
	It is Engineers Week, so let's take a momen...	Boost unavailable	Post	Wed Feb 22, 6:00pm	231 Accounts Center accou...	20 Reactions	--	--	1 Comments	0 Shares
	Although not for sale, you may find our canned w...	Boost post	Post	Mon Feb 20, 6:01pm	349 Accounts Center accou...	35 Likes	--	--	3 Comments	2 Shares
	Although not for sale, you may find our ca...	Boost unavailable	Post	Mon Feb 20, 6:00pm	78 Accounts Center accou...	7 Reactions	--	--	0 Comments	0 Shares
	Desert Water Agency is a proud to have helped P...	Boost post	Post	Sat Feb 18, 6:00pm	213 Accounts Center accou...	29 Likes	--	--	0 Comments	0 Shares
	Desert Water Agency is a proud to have he...	Boost unavailable	Post	Sat Feb 18, 6:00pm	118 Accounts Center accou...	6 Reactions	--	--	0 Comments	0 Shares
	Give a nod to mod! The @modernism_week Mod...	Boost post	Post	Wed Feb 15, 6:01pm	124 Accounts Center accou...	7 Likes	--	--	0 Comments	0 Shares
	Give a nod to mod! The Modernism Week...	Boost unavailable	Post	Wed Feb 15, 6:00pm	63 Accounts Center accou...	4 Reactions	--	--	0 Comments	0 Shares
	Roses are red, violets are blue, both love water, a...	Boost post	Post	Tue Feb 14, 6:00pm	73 Accounts Center accou...	5 Likes	--	--	0 Comments	0 Shares
	Roses are red, violets are blue, both love w...	Boost unavailable	Post	Tue Feb 14, 6:00pm	69 Accounts Center accou...	9 Reactions	--	--	0 Comments	0 Shares
	I Spy. Can you spot our incentive signage? You ca...	Boost post	Post	Mon Feb 13, 6:01pm	249 Accounts Center accou...	8 Likes	--	--	0 Comments	1 Shares
	I Spy. Can you spot our incentive signage? ...	Boost unavailable	Post	Mon Feb 13, 6:00pm	55 Accounts Center accou...	5 Reactions	--	--	0 Comments	0 Shares
	Today was the first session of the 2023 Water Co...	Boost post	Post	Thu Feb 9, 6:01pm	140 Accounts Center accou...	11 Likes	--	--	1 Comments	0 Shares
	Today was the first session of the 2023 Wa...	Boost unavailable	Post	Thu Feb 9, 6:00pm	36 Accounts Center accou...	4 Reactions	--	--	0 Comments	0 Shares
	Introducing the Echeveria Succulent variety as ou...	Boost post	Post	Wed Feb 8, 6:01pm	104 Accounts Center accou...	8 Likes	--	--	2 Comments	0 Shares
	Introducing the Echeveria Succulent variety...	Boost unavailable	Post	Wed Feb 8, 6:00pm	71 Accounts Center accou...	7 Reactions	--	--	0 Comments	0 Shares
	Take advantage of the cool weather while you still...	Boost post	Post	Mon Feb 6, 6:01pm	131 Accounts Center accou...	13 Likes	--	--	0 Comments	0 Shares
	Take advantage of the cool weather while y...	Boost unavailable	Post	Mon Feb 6, 6:00pm	66 Accounts Center accou...	6 Reactions	--	--	0 Comments	0 Shares
	Congrats to Mission Springs Water District on 70 ...	Boost post	Post	Fri Feb 3, 5:36pm	207 Accounts Center accou...	29 Likes	--	--	0 Comments	0 Shares
	There is snow on our mountains that will soon m...	Boost post	Post	Thu Feb 2, 6:01pm	149 Accounts Center accou...	22 Likes	--	--	0 Comments	1 Shares
	There is snow on our mountains that will s...	Boost unavailable	Post	Thu Feb 2, 6:00pm	58 Accounts Center accou...	8 Reactions	--	--	0 Comments	0 Shares

Desert Water Agency Facebook & Instagram Analytics February 2023

Reach

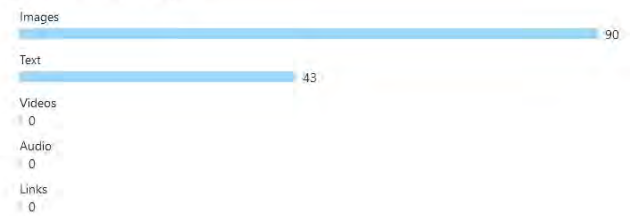
Post reach ⓘ

1K ⬇️ 51%

Total from last 90 days vs 90 days prior



Median post reach per media type ⓘ
For posts created in the last 90 days



Engagement

Post reactions, comments and shares ⓘ

597 ⬆️ 40.8%

Total from last 90 days vs 90 days prior



Median post reactions, comments and shares per media type ⓘ
For posts created in the last 90 days



Reach

Post reach ⓘ

6.2K ⬆️ 217.2%

Total from last 90 days vs 90 days prior



Median post reach per media type ⓘ
For posts created in the last 90 days



Median post reach per content format ⓘ
For posts created in the last 90 days

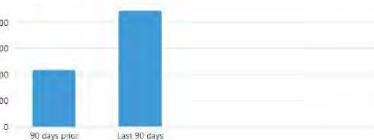


Engagement

Post likes, comments and shares ⓘ

889 ⬆️ 134.4%

Total from last 90 days vs 90 days prior



Median post likes, comments and shares per media type ⓘ
For posts created in the last 90 days



Median post likes, comments and shares per content format ⓘ
For posts created in the last 90 days



nextdoor



Desert Water Agency

1200 S Gene Autry Trl, Palm Springs

Desert Water Agency is the water utility for the Palm Springs area including outlying county areas, Desert Hot Springs, part of Cathedral City and Palm Springs. It is our responsibility to provide a safe, reliable water supply to the area we serve while protecting See more...



Desert Water Agency

37,824 members

25,483 claimed households

144 neighborhoods

Invite

E

Desert Water Agency ✓
Public Affairs & Water Planning Coordinator Ernye Valenciano • 21 Feb

Desert Water Agency - Water Construction. Starting/ending on Tuesday, February 28th (7am - 4pm). Desert Water Agency crews will be performing service line

See more...

Posted to **Subscribers of Desert Water Agency** in 8 neighborhoods

Be the first to react

Like

Comment

Share

E

Desert Water Agency ✓
Public Affairs & Water Planning Coordinator Ernye Valenciano • 21 Feb

Desert Water Agency - Water Construction Start/End 02/23/2023

See more...

Posted to **Subscribers of Desert Water Agency** in 31 neighborhoods

1

Like

Comment

Share



Desert Water Agency ✓

Public Affairs & Water Planning Coordinator Ernye Valenciano • 3 Feb



Desert Water Agency - Water Construction Start/End 02/07/2023

[See more...](#)

Posted to **Subscribers of Desert Water Agency** in 19 neighborhoods

Be the first to react



Like



Comment



Share



Desert Water Agency ✓

Public Affairs & Water Planning Coordinator Ernye Valenciano • 2 Feb



Desert Water Agency - Water Construction Start/End 02/07/2023

[See more...](#)

Posted to **Subscribers of Desert Water Agency** in 8 neighborhoods

Be the first to react



Like



Comment



Share

Desert Water Agency Twitter Analytics February 2023





Desert Water Agency
2,767 Tweets





Desert Water Agency
@DWAwater

Desert Water Agency is a public, non-profit agency and State Water Contractor, serving a 325-square-mile area in the Palm Springs area. Follow/RT not endorsement

📍 Palm Springs, CA dwa.org 📅 Joined February 2014

1,479 Following 1,218 Followers

Tweets

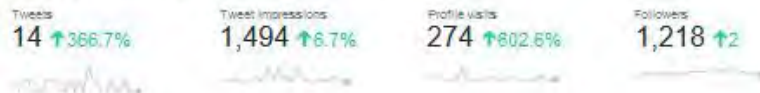
Replies

Media

Likes

[Edit profile](#)

28 day summary with change over previous period



Mar 2023 • 6 days so far...

TWEET HIGHLIGHTS

Top Tweet earned 89 Impressions

📍 It's a sign! Not only do we have new signage out front, but also some lovely snow covered mountains to make it pop.
pic.twitter.com/KbiyBEsLHA



👍 2

[View Tweet activity](#)

[View all Tweet activity](#)

Top media Tweet earned 3 Impressions

Desert Water Agency offers an incentive for businesses who are looking to replace their existing toilets with a more water friendly model. Visit our website to apply and learn more. dwa.org/toilet
pic.twitter.com/kKxQxuJub7



👍 1

[View Tweet activity](#)

[View all Tweet activity](#)

Get your Tweets in front of more people

Promoted Tweets and content open up your reach on Twitter to more people.

[Get started](#)

MAR 2023 SUMMARY

Tweets	Tweet Impressions
1	173
Profile visits	New followers
42	-1

No new followers in March

Grow your audience and deliver your content to more people on Twitter.

[Learn more about increasing your followers](#)



**STAFF REPORT
TO
DESERT WATER AGENCY
BOARD OF DIRECTORS**

MARCH 21, 2023

**RE: REQUEST APPROVAL OF CONTRACT AMENDMENT FOR
GENERAL MANAGER AND UPDATED SALARY AND
CLASSIFICATION CHART DATED MARCH 3, 2023**

On March 7, 2023, the Board of Directors approved a salary increase for the General Manager of 4.5% to be effective March 3, 2023. The Board also approved continuing the auto allowance of \$2,000 to be paid on an annual basis. The General Manager's Employment Agreement has been amended to reflect a 4.5% base salary increase and auto allowance (see Attachment #1 and Attachment #2).

Staff has updated the Desert Water Agency's Monthly Salary Schedule to reflect the new salary for the General Manager (see Attachment #3).

Fiscal Impact

The total fiscal impact to the 2022-2023 year budget is \$6,642.48. Finance Director Saenz has reviewed this report.

Recommendation:

Staff recommends that the Board of Directors:

1. Approve ninth amendment to the General Manager's Employment Agreement to reflect a 4.5% increase to the base salary and auto allowance.
2. Approve the updated salary and classification listing dated March 3, 2023.

Attachments

Attachment #1 – General Manager's Employment Agreement

Attachment #2 – Ninth Amendment to General Manager Employment Agreement

Attachment #3 – Classification and Salary Chart dated March 3, 2023

**EMPLOYMENT AGREEMENT BETWEEN
DESERT WATER AGENCY AND MARK S. KRAUSE**

This EMPLOYMENT AGREEMENT ("Agreement") is made by and between MARK S. KRAUSE ("General Manager – Chief Engineer") and the Board of Directors of the DESERT WATER AGENCY, a local governmental entity ("Agency"), hereinafter also referred to as "Board of Directors." The Parties hereto agree as follows:

Section 1. Employment.

1.1 The Board of Directors agrees to employ said MARK S. KRAUSE as General Manager – Chief Engineer ("GM – CE" or "Krause"), and he agrees and does accept employment as GM-CE upon the terms and conditions set forth herein.

1.2 GM-CE agrees to perform the functions and duties of GM-CE as may be established or directed by the Board of Directors. GM-CE agrees to perform all such functions and duties to the best of his ability and in an efficient and competent manner.

Section 2. Term of the Agreement.

2.1 This Agreement shall be for an initial term of five (5) years, beginning January 30, 2016 and ending January 29, 2021. Subject to the Agency's right to terminate this Agreement and GM-CE's employment at any time pursuant to Section 3 of this Agreement, this Agreement shall automatically be renewed for subsequent three (3) year periods unless the Agency provides written notice to the GM-CE no less than eighteen (18) months prior to the expiration of the current term or an extended term that the Agreement will be terminated. Unless otherwise provided for by a subsequent written agreement between the Parties, the terms and conditions of this Agreement shall apply to any extended term of this Agreement.

2.2 Nothing in this Agreement shall prevent, limit or otherwise interfere with the right of the Board of Directors to terminate the services of GM-CE at any time, subject only to the provisions set forth in this Agreement.

2.3 Nothing in this Agreement shall prevent, limit or otherwise interfere with the right of the GM-CE to resign at any time from his position with the Agency, subject only to the provisions set forth in this Agreement.

2.4 GM-CE agrees to remain in the exclusive employment of the Agency during the term of this Agreement, and he shall neither accept other employment nor become employed by any other person, business, or organization during the term of this Agreement. As used in this section, the term "employed" shall not be construed to include occasional teaching, writing, or consulting on GM-CE's time off, which may be undertaken by the GM-CE, provided they are conducted with persons, businesses, or organizations not within the agency service area.

Section 3. Termination and Severance Pay.

3.1 GM-CE serves at the will and pleasure of the Board of Directors and may be terminated with or without cause at any time. Consequently, nothing in this Agreement shall in any way affect the Board of Director's right to terminate the employment of GM-CE and this Agreement on an at-will basis, with or without cause, at any time, as provided herein. The Parties agree that the GM-CE is at will and shall not have appeal or so-called *Skelly* rights related to his employment.

3.2 This Agreement shall automatically terminate upon Employee's death, retirement, unforeseen extended unavailability (defined as six months), or permanent incapacity from being able to perform the essential functions of the General Manager position with reasonable accommodation.

3.3 In the event that GM-CE and this Agreement are terminated without cause, Agency agrees to provide GM-CE with severance pay in a lump sum cash payment equal to eighteen (18) months base salary, less wage and employment deductions required by law, (2) final pay cashing out the value of unused attendance bonus plan, vacation, and floating holidays, and (3) continuation of health benefits for nine months or until the GM-CE finds other employment that provides health benefits, whichever occurs first. These terms are subject to reduction as required by Government Code sections 53260, *et seq.* Thus, notwithstanding the above, in no event shall the total cash value of the severance pay exceed the value of the base salary for the remaining unexpired effective term of this Agreement, nor may the continuation of health benefits exceed the remaining unexpired effective term of this Agreement.

3.4 The provisions of California Government Code sections 53243 to 53243.4, as those sections now or hereafter exist are hereby incorporated by reference into this Agreement. Thus, if Employee is convicted of a crime involving an abuse of his office or position, whether before or after release from employment, Employee shall fully reimburse the Agency for any severance pay, paid leave salary disbursed pending an investigation related to the crime, or legal criminal defense funds relevant to the crime.

3.5 In the event GM-CE and this Agreement are terminated for cause, GM-CE shall not be entitled to any severance pay, but Krause shall be eligible for continued benefits as provided below. Termination for cause is defined as follows:

- (a) A willful breach of this Agreement.
- (b) Habitual neglect of duties required to be performed under this Agreement.
- (c) Any acts of dishonesty, fraud, misrepresentation, or other acts of moral turpitude (no pending criminal prosecution need be in effect for termination due to fraud, embezzlement or public conduct reflecting on the Agency; rather the Board must only have a good faith belief based on a good faith investigation).
- (d) Refusal or failure to act in accordance with any legal directive or order of the Board of Directors.

3.6 In the event that GM-CE and this Agreement are terminated for cause, GM-CE will be presented with written notice of the basis for said cause. Upon receipt of said written notice, GM-CE, within five (5) business days, may request a hearing before the Board of Directors. The issue at the hearing shall be limited solely to whether or not there is sufficient evidence to support a finding of termination for cause such that the GM-CE would not be entitled to any severance pay. Under no circumstances shall the GM-CE be entitled to reinstatement as a result of such hearing.

3.7 Nothing in this Agreement shall prevent, limit or otherwise interfere with the right of GM-CE to resign at any time from his position with Agency, subject only to the provisions set forth in this Agreement. In the event the GM-CE resigns from his position with the Agency, then the GM-CE shall provide the Board of Directors ten (10) days notice in advance, unless the Parties agree otherwise. In the event the GM-CE resigns, he shall not be entitled to any severance pay, but the Board of Directors shall pay the GM-CE for accrued vacation and attendance bonus plan benefits.

Section 4. Salary and Expenses.

4.1 Board of Directors agrees to pay the GM-CE for his services rendered a base salary of Nineteen Thousand, Four Hundred and Sixty-Three Dollars (\$19,463.00) per month in installments at the same time as other employees of the Agency are paid, commencing January 30, 2016. The base salary will be adjusted annually by the same percentage adjustment provided to all Agency employees for changes in the cost of living, if any.

In addition, the Board shall have the right to grant merit increases as the Board deems appropriate, in its discretion. The GM-CE will be eligible for a discretionary annual incentive award not to exceed ten percent (10%) of his total annual base salary based on the results of his annual performance evaluation. The incentive may be based, in part, on the accomplishment of specific goals set by the Board of Directors that are achieved by the GM-CE. Any performance incentive awarded under this section shall be in a lump sum payment, subject to all legally required wage and employment deductions. Notwithstanding the above, the issuance of any incentive awards is at the sole discretion of the Board of Directors. Further any performance pay awarded under this Section shall not become a part of the GM-CE's established base salary going forward.

4.2 Except for the use of his vehicle for the performance of his duties, for which a vehicle is provided under Section 5.8 of this Agreement, Agency shall reimburse GM-CE, within its budget and upon approval of the Board of Directors, for all actual and necessary expenses incurred in connection with the performance of his official duties. GM-CE agrees to maintain and submit accurate records of all expenses for which reimbursement is claimed.

Section 5. Benefits.

5.1 Vacation. The GM-CE shall receive and use vacation benefits under the same terms and conditions applicable to Agency employees generally.

5.2 Attendance Bonus Plan (ABP). The GM-CE shall accrue and use paid ABP benefits under the same terms and conditions applicable to agency employees generally.

5.3 Retirement. The Agency agrees to provide for participation in and pay all Employer and Employee contributions in the California Public Employees Retirement System (CalPERS). The Agency will enroll the GM-CE in the CalPERS under the same terms as other miscellaneous employees of the Agency who are considered “classic members” of CalPERS. The Agency’s current contract with CalPERS for classic members provides for a retirement benefit formula of 2.5% at age 55, with the highest single year compensation determining the benefit.

5.4 Retiree Medical. The Agency agrees to provide GM-CE with medical, dental, and vision coverage upon his retirement. Such coverage shall extend to the GM-CE’s dependants who are eligible during the time of coverage.

5.5 Deferred Compensation Plans. The Agency will adopt and establish a qualified pension plan pursuant to either Section 401(a) or 457 of the Internal Revenue Code for the benefit of the Employee and will make an annual “matching” contribution in the Employee’s name. The Agency’s matching contribution may be up to the maximum amount of the GM-CE’s contribution permitted under the law. The Agency shall be responsible for all expenses associated with the deferred compensation account during the term of this Agreement, including but not limited to administrative services fees and commissions.

5.6 Disability, Health, and Life Insurance. The Agency agrees to keep in force and to make required premium payments for the GM-CE for insurance policies covering the GM-CE and his dependents the same as are provided to all regular employees of the Agency. The Agency agrees to purchase and to pay the required premium on a term life insurance policy in an amount equal to one (1) times the GM-CE’s annual salary. The Agency also agrees to purchase and to pay the required premium on short-term and long-term disability insurance the same as are provided to all regular employees of the Agency. If required by the insurance provider, the GM-CE agrees to submit once per calendar year to a complete physical examination by a qualified physician of his choice, the cost of which shall be paid by the Agency. The Agency agrees to maintain the GM-CE’s medical records in confidence.

5.7 Membership Dues, Subscription, and License Fees. To the extent the Agency’s approved annual budget designates sufficient funds for the purposes identified in this section, the Agency agrees to pay for the professional dues and subscriptions necessary for the GM-CE’s continued and full participation in national, state, regional and local associations and organizations necessary or desirable for his continued professional participation, growth and advancement, and for the good of the Agency.

5.8 Professional Development. To the extent the Agency’s approved annual budget designates sufficient funds for the following purposes, the Agency agrees to pay registration fees and travel subsistence expenses of the GM-CE for professional and official travel, meetings, and occasions adequate to continue the professional development of the GM-CE and to adequately pursue necessary and/or appropriate official business and other functions for the Agency. Upon the prior approval of the Board of Directors, the Agency also agrees to pay for related tuition, fees, and travel and subsistence expenses of the GM-CE for educational degree programs, short courses, institutes, and seminars that are necessary for his professional development and the good of the Agency.

5.9 Other Leave. GM-CE shall accrue sick leave and shall be provided with holiday leave and bereavement leave as are provided to other regular employees of the Agency.

5.10 Vehicle. The Agency shall furnish Krause with a vehicle and shall provide for the fueling and maintenance thereof. The Agency vehicle shall be used for Agency business and discretionary personal use.

Section 6. Performance Evaluation.

The Agency shall review and evaluate the performance of the GM-CE each year within thirty (30) days prior to this Agreement's anniversary date. Said review and evaluation shall be conducted by an ad hoc committee, the members of which shall be established by the Board of Directors. Evaluation criteria shall be developed and adopted by the Board of Directors.

In addition, the Board of Directors will meet with the GM-CE on or around each anniversary date of this Agreement to discuss and create goals and other metrics that can provide the basis for the Board of Directors determining the subsequent year's performance incentive.

Section 7. Bonding.

The Agency shall bear the full costs of any fidelity or other bonds required of the GM-CE under any law or ordinance. The Agency shall further indemnify and defend the GM-CE for discharge of his duties as required by law.

Section 8. General Provisions.

8.1 Integration. This Agreement integrates all of the terms and conditions mentioned herein, or incidental hereto, and this Agreement supersedes all negotiations and previous agreements between the parties with respect to all or any part of the subject matter hereof. This Agreement wholly supersedes and replaces the terms of any prior agreements, and any rights contained in such agreement.

8.2 Governing Law. This Agreement shall be governed by the laws of the State of California. The parties agree that venue for any dispute is appropriate in the Superior Court of Riverside County, California.

8.3 Waiver. A waiver of any term or condition of this Agreement shall not be construed as a general waiver by either party to this Agreement, and either party shall be free to reinstate any such term or condition, with or without notice, to the other.

8.4 Amendment. This Agreement may be amended from time to time, as mutually agreed by the parties in writing. No amendment or variation of the terms of this Agreement shall be valid unless made in writing, signed by the Employee and approved by the Board.

8.5 Binding Effect. This Agreement shall be binding upon and inure to the benefit of the heirs at law and executors of Employee, but nothing herein shall be construed as an authorization or right of any party to assign his/its rights or obligations hereunder. Any

assignment of the rights or obligations of Employee hereunder without the express written approval of Agency shall be void.

8.6 Partial Invalidity. If any provision or any portion thereof, contained in this Agreement is held to be unconstitutional, invalid, or unenforceable, the remainder of this Agreement or portion thereof, shall not be affected, and shall remain in full force and effect.

8.7 Legal Consultation. Employee acknowledges that he has had the opportunity to consult legal counsel in regard to this Agreement, that he has read and understands this Agreement, that he is fully aware of its legal effect, and that he has entered into it freely and voluntarily and based on his own judgment and not on any representations or promises other than those contained in this Agreement.

IN WITNESS WHEREOF, the DESERT WATER AGENCY has caused this Agreement to be signed and duly executed by its President, and the Employee has signed and executed this Agreement, both in duplicate, as of the day and year first above written.

By: Mark S. Krause
MARK S. KRAUSE

DESERT WATER AGENCY

By: Craig A. Ewing
Craig A. Ewing, President
Board of Directors

APPROVED AS TO FORM:

By: Michael T. Riddell
Michael T. Riddell, General Counsel
Best Best & Krieger LLP

**DESERT WATER AGENCY
NINTH AMENDMENT TO EMPLOYMENT AGREEMENT**

This Ninth Amendment to Employment Agreement (this "Ninth Amendment") between the DESERT WATER AGENCY (the "Agency") and MARK S. KRAUSE ("General Manager – Chief Engineer") is entered into this 21st day of March, 2023.

Except as modified in this Ninth Amendment and the preceding First through Eighth Amendments, the underlying Employment Agreement originally dated December 2015 ("Agreement") between the Agency and the General Manager – Chief Engineer shall remain in full force and effect.

The parties to this Ninth Amendment agree to the following changes:

Section 4.1 entitled "Salary and Expenses" is hereby amended to reflect the 2023 salary and auto allowance:

"Section 4. Salary and Expenses.

4.1 Effective March 3, 2023, the Board of Directors agrees to pay the GM-CE for his services rendered a base salary of Twenty-seven thousand, Three Hundred and Seven dollars (\$27,307) per month in installments at the same time as other employees of the Agency are paid. The base salary will be adjusted annually by the same percentage adjustment provided to all Agency employees for changes in the cost of living, if any.

In addition, the Board shall have the right to grant merit increases as the Board deems appropriate, in its discretion. The GM-CE will be eligible for a discretionary annual incentive award not to exceed ten percent (10%) of his total annual base salary based on the results of his annual performance evaluation. The incentive may be based, in part, on the accomplishment of specific goals set by the Board of Directors that are achieved by the GM-CE. Any performance incentive awarded under this section shall be in a lump sum payment, subject to all legally required wage and employment deductions. Notwithstanding the above, the issuance of any incentive awards is at the sole discretion of the Board of Directors. Any performance pay awarded under this Section shall not become a part of the GM-CE's established base salary going forward.

The Board approved an annual auto allowance of \$2,000 to be paid to the General Manager.

The Agency and the General Manager – Chief Engineer have duly executed this Ninth Amendment as of the date first written above.

DESERT WATER AGENCY

MARK S. KRAUSE

By: _____
President, Board of Directors

By: Mark S. Krause

Attachment #3

Desert Water Agency

Position Classification and Monthly Salary Schedule

Effective 03/03/2023 for RDO2 Pay Period Employees. Effective 03/10/2023 for RDO1 and Classic Pay Period Employees.

DEPARTMENT	POSITION TITLE	RANGE	STEP 1	STEP 2	STEP 3	STEP 4	STEP 5
ACCOUNTING	Account Clerk I	24	\$ 4,293	\$ 4,513	\$ 4,731	\$ 4,980	\$ 5,226
	Account Clerk II	31	\$ 5,101	\$ 5,363	\$ 5,634	\$ 5,923	\$ 6,217
	Account Clerk III	34	\$ 5,496	\$ 5,771	\$ 6,064	\$ 6,369	\$ 6,697
	Account Clerk/Telephone Operator	20	\$ 3,891	\$ 4,087	\$ 4,293	\$ 4,513	\$ 4,731
	Accountant	46	\$ 7,382	\$ 7,766	\$ 8,159	\$ 8,567	\$ 9,005
	Accounting Supervisor	55	\$ 9,222	\$ 9,684	\$ 10,165	\$ 10,681	\$ 11,217
	Controller	66	\$ 12,071	\$ 12,674	\$ 13,317	\$ 14,000	\$ 14,706
	Computer Operator I	31	\$ 5,101	\$ 5,363	\$ 5,634	\$ 5,923	\$ 6,217
	Computer Operator II	40	\$ 6,369	\$ 6,697	\$ 7,033	\$ 7,382	\$ 7,766
	Senior Account Clerk	40	\$ 6,369	\$ 6,697	\$ 7,033	\$ 7,382	\$ 7,766
ADMINISTRATIVE	Administrative Assistant I	33	\$ 5,363	\$ 5,634	\$ 5,923	\$ 6,217	\$ 6,532
	Administrative Assistant II	38	\$ 6,064	\$ 6,369	\$ 6,697	\$ 7,033	\$ 7,382
	Administrative Assistant III	40	\$ 6,369	\$ 6,697	\$ 7,033	\$ 7,382	\$ 7,766
	Executive Secretary/Assistant Secretary to the Board	54	\$ 9,005	\$ 9,457	\$ 9,928	\$ 10,430	\$ 10,946
	Senior Administrative Assistant	46	\$ 7,382	\$ 7,766	\$ 8,159	\$ 8,567	\$ 9,005
CONSTRUCTION - FLEET MAINTENANCE							
Construction	Assistant Construction Superintendent	53	\$ 8,787	\$ 9,222	\$ 9,684	\$ 10,165	\$ 10,681
	Construction Superintendent	65	\$ 11,781	\$ 12,370	\$ 12,999	\$ 13,656	\$ 14,349
	Equipment Operator	36	\$ 5,771	\$ 6,064	\$ 6,369	\$ 6,697	\$ 7,033
	Water Service Foreman	46	\$ 7,382	\$ 7,766	\$ 8,159	\$ 8,567	\$ 9,005
	Water Service Worker I	28	\$ 4,731	\$ 4,980	\$ 5,226	\$ 5,496	\$ 5,771
	Water Service Worker II	33	\$ 5,363	\$ 5,634	\$ 5,923	\$ 6,217	\$ 6,532
	Water Service Worker III	37	\$ 5,923	\$ 6,217	\$ 6,532	\$ 6,861	\$ 7,208
Fleet Maintenance	Fleet Mechanic Foreman	43	\$ 6,861	\$ 7,208	\$ 7,573	\$ 7,957	\$ 8,361
	Fleet Mechanic I	31	\$ 5,101	\$ 5,363	\$ 5,634	\$ 5,923	\$ 6,217
	Fleet Mechanic II	36	\$ 5,771	\$ 6,064	\$ 6,369	\$ 6,697	\$ 7,033

Attachment #3

Desert Water Agency

Position Classification and Monthly Salary Schedule

Effective 03/03/2023 for RDO2 Pay Period Employees. Effective 03/10/2023 for RDO1 and Classic Pay Period Employees.

DEPARTMENT	POSITION TITLE	RANGE	STEP 1	STEP 2	STEP 3	STEP 4	STEP 5
FIELD SERVICES	Field Services Representative I	34	\$ 5,496	\$ 5,771	\$ 6,064	\$ 6,369	\$ 6,697
	Field Services Representative II	37	\$ 5,923	\$ 6,217	\$ 6,532	\$ 6,861	\$ 7,208
	Field Services Supervisor	53	\$ 8,787	\$ 9,222	\$ 9,684	\$ 10,165	\$ 10,681
	Field Services Technician I	27	\$ 4,628	\$ 4,859	\$ 5,101	\$ 5,363	\$ 5,634
	Field Services Technician II	31	\$ 5,101	\$ 5,363	\$ 5,634	\$ 5,923	\$ 6,217
	Field Services Technician III	37	\$ 5,923	\$ 6,217	\$ 6,532	\$ 6,861	\$ 7,208
ENGINEERING - OPERATIONS							
Engineering	Associate Engineer	56	\$ 9,457	\$ 9,928	\$ 10,430	\$ 10,946	\$ 11,499
	Construction Inspector I	40	\$ 6,369	\$ 6,697	\$ 7,033	\$ 7,382	\$ 7,766
	Construction Inspector II	44	\$ 7,033	\$ 7,382	\$ 7,766	\$ 8,159	\$ 8,567
	Engineering Technician I	34	\$ 5,496	\$ 5,771	\$ 6,064	\$ 6,369	\$ 6,697
	Engineering Technician II	39	\$ 6,217	\$ 6,532	\$ 6,861	\$ 7,208	\$ 7,573
	Engineering Technician III	43	\$ 6,861	\$ 7,208	\$ 7,573	\$ 7,957	\$ 8,361
	Laboratory Director	53	\$ 8,787	\$ 9,222	\$ 9,684	\$ 10,165	\$ 10,681
	Operations and Engineering Manager	72	\$ 14,000	\$ 14,706	\$ 15,448	\$ 16,215	\$ 17,030
	Senior Engineer	64	\$ 11,499	\$ 12,071	\$ 12,674	\$ 13,317	\$ 14,000
	Senior Engineering Technician	45	\$ 7,208	\$ 7,573	\$ 7,957	\$ 8,361	\$ 8,787
	Staff Engineer	51	\$ 8,361	\$ 8,787	\$ 9,222	\$ 9,684	\$ 10,165
Operations	Operations Technician Foreman	51	\$ 8,361	\$ 8,787	\$ 9,222	\$ 9,684	\$ 10,165
	Operations Technician I	37	\$ 5,923	\$ 6,217	\$ 6,532	\$ 6,861	\$ 7,208
	Operations Technician II	41	\$ 6,532	\$ 6,861	\$ 7,208	\$ 7,573	\$ 7,957
	Operations Technician III	46	\$ 7,382	\$ 7,766	\$ 8,159	\$ 8,567	\$ 9,005
	Operations Technician in Training	30	\$ 4,980	\$ 5,226	\$ 5,496	\$ 5,771	\$ 6,064
	System Operator I	35	\$ 5,634	\$ 5,923	\$ 6,217	\$ 6,532	\$ 6,861
	System Operator II	38	\$ 6,064	\$ 6,369	\$ 6,697	\$ 7,033	\$ 7,382
	System Operator III	41	\$ 6,532	\$ 6,861	\$ 7,208	\$ 7,573	\$ 7,957
	System Operator in Training	30	\$ 4,980	\$ 5,226	\$ 5,496	\$ 5,771	\$ 6,064
	Water Operations Supervisor	60	\$ 10,430	\$ 10,946	\$ 11,499	\$ 12,071	\$ 12,674

Attachment #3

Desert Water Agency

Position Classification and Monthly Salary Schedule

Effective 03/03/2023 for RDO2 Pay Period Employees. Effective 03/10/2023 for RDO1 and Classic Pay Period Employees.

DEPARTMENT	POSITION TITLE	RANGE	STEP 1	STEP 2	STEP 3	STEP 4	STEP 5
FACILITIES MAINTENANCE AND SAFETY	Facilities and Safety Officer	54	\$ 9,005	\$ 9,457	\$ 9,928	\$ 10,430	\$ 10,946
	Facilities and Safety Technician	43	\$ 6,861	\$ 7,208	\$ 7,573	\$ 7,957	\$ 8,361
INFORMATION TECHNOLOGY	Information Technology Manager	65	\$ 11,781	\$ 12,370	\$ 12,999	\$ 13,656	\$ 14,349
	PC Support Technician I	37	\$ 5,923	\$ 6,217	\$ 6,532	\$ 6,861	\$ 7,208
	PC Support Technician II	43	\$ 6,861	\$ 7,208	\$ 7,573	\$ 7,957	\$ 8,361
	Senior PC Support Technician	51	\$ 8,361	\$ 8,787	\$ 9,222	\$ 9,684	\$ 10,165
	Programmer I	50	\$ 8,159	\$ 8,567	\$ 9,005	\$ 9,457	\$ 9,928
	Programmer II	54	\$ 9,005	\$ 9,457	\$ 9,928	\$ 10,430	\$ 10,946
MANAGEMENT	General Manager	Contract	N/A	N/A	N/A	N/A	\$ 27,307
	Assistant General Manager	83	\$ 18,326	\$ 19,240	\$ 20,202	\$ 21,216	\$ 22,276
	Finance Director	81	\$ 17,457	\$ 18,326	\$ 19,240	\$ 20,202	\$ 21,216
	Human Resources Director	69	\$ 12,999	\$ 13,656	\$ 14,349	\$ 15,072	\$ 15,835
	Director of Public Affairs and Water Planning	74	\$ 14,706	\$ 15,448	\$ 16,215	\$ 17,030	\$ 17,877
PUBLIC AFFAIRS AND WATER PLANNING	Outreach and Conservation Manager	60	\$ 10,430	\$ 10,946	\$ 11,499	\$ 12,071	\$ 12,674
	Conservation Specialist I	38	\$ 6,064	\$ 6,369	\$ 6,697	\$ 7,033	\$ 7,382
	Conservation Specialist II	43	\$ 6,861	\$ 7,208	\$ 7,573	\$ 7,957	\$ 8,361
	GIS Specialist I	46	\$ 7,382	\$ 7,766	\$ 8,159	\$ 8,567	\$ 9,005
	GIS Specialist II	49	\$ 7,957	\$ 8,361	\$ 8,787	\$ 9,222	\$ 9,684
	Outreach and Conservation Associate	45	\$ 7,208	\$ 7,573	\$ 7,957	\$ 8,361	\$ 8,787
	Outreach Specialist I	41	\$ 6,532	\$ 6,861	\$ 7,208	\$ 7,573	\$ 7,957
	Outreach Specialist II	45	\$ 7,208	\$ 7,573	\$ 7,957	\$ 8,361	\$ 8,787
	Public Affairs and Water Planning Coordinator	42	\$ 6,697	\$ 7,033	\$ 7,382	\$ 7,766	\$ 8,159
	Senior Conservation Specialist	47	\$ 7,573	\$ 7,957	\$ 8,361	\$ 8,787	\$ 9,222
	Senior GIS Specialist	52	\$ 8,567	\$ 9,005	\$ 9,457	\$ 9,928	\$ 10,430
	Senior Outreach Specialist	48	\$ 7,766	\$ 8,159	\$ 8,567	\$ 9,005	\$ 9,457
	Senior Water Resources Specialist	53	\$ 8,787	\$ 9,222	\$ 9,684	\$ 10,165	\$ 10,681
	Water Resources Manager	64	\$ 11,499	\$ 12,071	\$ 12,674	\$ 13,317	\$ 14,000
	Water Resources Specialist I	42	\$ 6,697	\$ 7,033	\$ 7,382	\$ 7,766	\$ 8,159
	Water Resources Specialist II	49	\$ 7,957	\$ 8,361	\$ 8,787	\$ 9,222	\$ 9,684

Attachment #3

Desert Water Agency

Position Classification and Monthly Salary Schedule

Effective 03/03/2023 for RDO2 Pay Period Employees. Effective 03/10/2023 for RDO1 and Classic Pay Period Employees.

DEPARTMENT	POSITION TITLE	RANGE	STEP 1	STEP 2	STEP 3	STEP 4	STEP 5
SNOW CREEK SECURITY	Snow Creek Security	17	\$ 2,751	\$ 2,889	\$ 3,035	\$ 3,184	\$ 3,343

**STAFF REPORT
TO
DESERT WATER AGENCY
BOARD OF DIRECTORS**

MARCH 21, 2023

RE: REQUEST ADOPTION OF BILL POSITION RECOMMENDATIONS

The legislative packet provides a description of legislation and proposed positions, which are tied to DWA's recently adopted Legislative and Regulatory Policy Platform. The Legislative Committee has reviewed the packet.

Mr. Reeb is in attendance at today's meeting and will provide a brief overview of the recommendations.

Fiscal Impact:

None

Recommendation:

Staff recommends that the Board of Directors review and adopt positions on the bills included in the packet that Mr. Reeb prepared.

Attachments:

Attachment #1 – Recommended State Bill Positions, Calendar Year 2023

Desert Water Agency 2023-24 Regular Session, First Year

[AB 62](#)

(Mathis R) Statewide water storage: expansion.

Current Text: Amended: 2/27/2023 [html](#) [pdf](#)

Introduced: 12/6/2022

Last Amend: 2/27/2023

Status: 2/28/2023-Re-referred to Com. on W., P., & W.

Is Urgency: N

Is Fiscal: Y

Location: 1/26/2023-A. W.,P. & W.

Summary: Would establish a statewide goal to increase above- and below-ground water storage capacity by a total of 3,700,000 acre-feet by the year 2030 and a total of 4,000,000 acre-feet by the year 2040. The bill would require the State Water Resources Control Board, in consultation with the Department of Water Resources, to design and implement measures to increase statewide water storage to achieve the statewide goal. The bill would require the state board, beginning July 1, 2027, and on or before July 1 every 2 years thereafter until January 1, 2043, in consultation with the department, to prepare and submit a report to the Legislature on the progress made in designing and implementing measures to achieve the statewide goal.

Notes: This legislation is similar to AB 366 (Caballero) in that it that would establish a target for adding surface water and groundwater storage capacity for California and direct state agencies to develop and implement measures to achieve those targets. Establishing targets and directing state agencies to design and implement measures to increase statewide water storage to achieve the statewide goal could indirectly benefit the Agency to the extent the Department of Water Resources, State Water Contractors, or individual State Water Contractor agencies participate in future storage projects. While it would not benefit from this legislation, should it become law, the Sites Reservoir Project is an example of one type of surface water storage project that might be identified for construction in the future.

DWR is responsible for the California Water Plan update every five years, therefore, it makes sense for the Department to be responsible for planning pursuant to the targets and consult with the State Board due to the role of the latter in determining available water supply.

Agency Legislative and Regulatory Policy Platform: Policy Directive 2

Current Position: Not Yet Considered

Recommended Position: Favor if Amended

[AB 249](#)

(Holden D) Water: schoolsites: lead testing: conservation.

Current Text: Amended: 3/7/2023 [html](#) [pdf](#)

Introduced: 1/18/2023

Last Amend: 3/7/2023

Status: 3/8/2023-Re-referred to Com. on E.S. & T.M.

Is Urgency: N

Is Fiscal: Y

Location: 2/2/2023-A. E.S. & T.M.

Calendar: 3/14/2023 1:30 p.m. - State Capitol, Room 444 ASSEMBLY ENVIRONMENTAL SAFETY AND TOXIC MATERIALS, LEE, ALEX, Chair

Summary: Would require a community water system that serves a schoolsite to test for lead in the potable water system outlets of the schoolsite before January 1, 2027, except for potable water system outlets in buildings that were either constructed after January 1, 2010, or modernized after January 1, 2010, and all faucets and other end point devices used for providing potable water were replaced as part of the modernization. The bill would require the community water system to report its findings to the applicable school or local educational agency and to the State Water Resources Control Board. The bill would require the local educational agency or school, if the lead level exceeds a specified level at a schoolsite, to notify the parents and guardians of the pupils who attend the schoolsite or preschool, take immediate steps to make inoperable and shut down from use all fountains and faucets where the excess lead levels may exist, and work with the schoolsites under its jurisdiction to ensure that a potable source of drinking water is provided for pupils, as specified. The bill would require a community water system to prepare a sampling plan for each schoolsite where lead sampling is required under these provisions. The bill would require the state board to make the results of schoolsite lead sampling publicly available by posting the results on its internet website.

Notes: This legislation would impose significant costs on public water systems by requiring additional testing and aligning action levels at the 5 ppb action level that the State Water Board established by regulation for child day care centers. The Association of California Water Agencies is concerned that

this legislation proposes a new and more expansive testing program while USEPA is developing a Federal Lead and Copper Rule Improvement. Differences between USEPA action and this legislation could result in conflicting requirements and a requirement that public water systems test school sites again after they would have to comply with the requirements of the legislation (January 1, 2027).

Agency Legislative and Regulatory Policy Platform: Policy Directive 3, Policy Directive 4

Current Position: Not Yet Considered

Recommended Position: Not Favor

AB 340 (Fong, Vince R) California Environmental Quality Act: grounds for noncompliance.

Current Text: Introduced: 1/30/2023 [html](#) [pdf](#)

Introduced: 1/30/2023

Status: 2/9/2023-Referred to Coms. on NAT. RES. and JUD.

Is Urgency: N

Is Fiscal: Y

Location: 2/9/2023-A. NAT. RES.

Summary: The California Environmental Quality Act (CEQA) prohibits an action or proceeding from being brought in a court to challenge the approval of a project by a public agency unless the alleged grounds for noncompliance are presented to the public agency orally or in writing by a person during the public comment period provided by CEQA or before the close of the public hearing on the project before the issuance of the notice of determination. This bill would require the alleged grounds for noncompliance with CEQA presented to the public agency in writing be presented at least 10 days before the public hearing on the project before the issuance of the notice of determination. The bill would prohibit the inclusion of written comments presented to the public agency after that time period in the record of proceedings and would prohibit those documents from serving as basis on which an action or proceeding may be brought.

Notes: CEQA Guidelines provide that a lead agency must evaluate comments on environmental issues received from persons who reviewed the draft EIR and shall prepare a written response. The lead agency shall respond to comments raising significant environmental issues received during the noticed comment period and any extensions and may respond to late comments. The lead agency shall provide a written proposed response, either in a printed copy or in an electronic format, to a public agency on comments made by that public agency at least 10 days prior to certifying an environmental impact report (Section 15088).

Authority cited for Section 15088 of the Guidelines include Section 21083, Public Resources Code and reference: Sections 21091, 21092.5, 21104 and 21153, Public Resources Code; People v. County of Kern, (1974) 39 Cal. App. 3d 830; Cleary v. County of Stanislaus, (1981) 118 Cal. App. 3d 348; Friends of the Eel River v. Sonoma County Water Agency (2003) 108 Cal. App. 4th 859; Citizens for Responsible Equitable Environmental Development v. City of San Diego (2011) 196 Cal.App.4th 515; and Consolidated Irrigation Dist. v. Superior Court (2012) 205 Cal. App. 4th 697.

The lead agency has the discretion, therefore, to respond to written comments that are submitted after the noticed comment period closes. Regarding comments submitted by a public agency, the lead agency must respond to comments that are submitted at least 10 days prior to the certification of an EIR--typically well after the notice written comment period closes.

Existing law provides that an action or proceeding shall not be brought unless the alleged grounds for noncompliance with CEQA were presented to the public agency orally or in writing by any a person during the public comment period or before the close of the public hearing on the project before the issuance of the notice of determination. Existing law provides that a person shall not maintain an action or proceeding unless that person objected to the approval of the project orally or in writing during the public comment period provided or before the close of the public hearing on the project before the filing of notice of determination

This legislation would require alleged grounds for noncompliance to be presented to the public agency in writing at least 10 days before the public hearing on the project before the issuance of the notice of determination. Written comments presented to the public agency after that time period shall not be included in the record of proceedings and shall not serve as basis on which an action or proceeding.

This legislation would place the burden on persons and public agencies to submit comments in a timely manner, and prohibit legal actions based on late comments, which would provide greater certainty to a lead agency that the environmental review process may be completed without increasing litigation risk or project delay due to receiving late comments.

Agency Legislative and Regulatory Policy Platform: Policy Directive 1, Policy Directive 3

Current Position: Not Yet Considered

Recommended Position: Favor

AB 460

(Bauer-Kahan D) State Water Resources Control Board: interim relief.

Current Text: Introduced: 2/6/2023 [html](#) [pdf](#)

Introduced: 2/6/2023

Status: 2/17/2023-Referred to Coms. on W., P., & W. and JUD.

Is Urgency: N

Is Fiscal: Y

Location: 2/17/2023-A. W.,P. & W.

Summary: The State Water Resources Control Board and the California regional water quality control boards are required to set forth water quality objectives in state and regional water quality control plans. Current law establishes the Water Rights Fund, which consists of various fees and penalties. The moneys in the Water Rights Fund are available upon appropriation by the Legislature for the administration of the board's water rights program. Current law requires that the owner of any dam allow sufficient water at all times to pass through a fishway, or in the absence of a fishway, allow sufficient water to pass over, around, or through the dam, to keep in good condition any fish that may be planted or exist below the dam, as specified. This bill would authorize the board to issue, on its own motion or upon the petition of an interested party, an interim relief order in appropriate circumstances to implement or enforce these and related provisions of law. The bill would provide that a person or entity that violates any interim relief order issued by the board would be liable to the board for a civil penalty in an amount not to exceed the sum of \$10,000 for each day in which a violation occurs and \$5,000 for each acre-foot of water diverted in violation of the interim relief order. The bill would require these funds to be deposited in the Water Rights Fund.

Notes: This legislation was introduced in response to a direct diversion in the summer of 2022 that was made in violation of a curtailment order issued by the State Water Resources Control Board. This legislation, however, is written very broadly and would provide the State Board greater authority to enjoin the diversion of water. An interim relief order could enforce any of the following: (1) Section 2 of Article X of the California Constitution, (2) The public trust doctrine, (3) Water quality objectives or principals and guidelines adopted under subdivision (b) of Section 13142, Section 13149, Section 13170, or 13241, (4) The requirements set forth in permits, licenses, certificates, and registrations issued under Part 2 (commencing with Section 1200), including actions that invoke the board's reserved jurisdiction or continuing authority, and (5) Section 5937 of the Fish and Game Code. The bill would provide that a person or entity that violates any interim relief order issued by the State Board would be liable to the board for a civil penalty in an amount not to exceed the sum of \$10,000 for each day in which a violation occurs and \$5,000 for each acre-foot of water diverted in violation of the interim relief order.

This legislation could expose the Agency to State Board enforcement actions under a broad array of constitutional and statutory provisions, as well as the public trust doctrine, which protects sovereign lands, such as tide and submerged lands and the beds of navigable waterways, for the benefit, use and enjoyment of the public. Traditionally, the public trust applied to commerce and fishing in navigable waters, but its uses were expanded in California in 1971 to include fish, wildlife, habitat and recreation. In a landmark case filed to protect the Mono Lake Basin from water diversions by the City of Los Angeles based on permits issued by the State Board, California's Supreme Court ruled in 1983 that reasonable and beneficial uses of water must be interpreted in accordance with public trust needs. This was the first case in California where the public trust doctrine was applied.

This legislation authorizes the State Board to commence an interim relief proceeding on its own motion or upon the petition of an interested party. Unless the State Board concludes that consideration of the matter is urgent, the board shall provide notice at least 20 days before the hearing date. If the board issues an interim relief order without providing at least 20 days' notice before the hearing date the interim relief order can remain in effect for a period not to exceed 180 days. This period could cover the entire time for diversion to storage or direct diversion pursuant to a water right permit, thus depriving a water right permittee or licensee from storing or diverting water under a permit or license.

Agency Legislative and Regulatory Policy Platform: Policy Directive 2

Current Position: Not Yet Considered

Recommended Position: Oppose

AB 779

(Wilson D) Groundwater: adjudication.

Current Text: Introduced: 2/13/2023 [html](#) [pdf](#)

Introduced: 2/13/2023

Status: 2/23/2023-Referred to Coms. on W., P., & W. and JUD.

Is Urgency: N

Is Fiscal: Y

Location: 2/23/2023-A. W.,P. & W.

Calendar: 3/28/2023 9 a.m. - State Capitol, Room 444 ASSEMBLY WATER, PARKS AND WILDLIFE, BAUER-KAHAN, REBECCA, Chair

Summary: Would require the court to invite a representative from the department or the State Water Resources Control Board to provide technical assistance or expert testimony on the amount of water in the basin subject to adjudication, equitable and sustainable pumping allocations for the basin, and sustainable groundwater management best practices and recommendations. The bill would require the court to take into account the needs of small farmers and disadvantaged communities, as those terms are defined, when entering a judgment. This bill contains other related provisions and other existing laws.

Notes: Existing law establishes various methods and procedures for a comprehensive adjudication of groundwater rights in civil court.

This legislation would require the court to invite a representative from the department or the State Water Resources Control Board to provide technical assistance or expert testimony on the amount of water in the basin subject to adjudication, equitable and sustainable pumping allocations for the basin, and sustainable groundwater management best practices and recommendations. The bill would require the court to take into account the needs of small farmers and disadvantaged communities when entering a judgment. This legislation also would require a groundwater sustainability agency with jurisdiction over a basin subject to an adjudication proceeding to submit a comprehensive monitoring plan to the court, and to report monitoring data to the court and the department. The bill would prescribe pumping restrictions on groundwater users during an adjudication proceeding. The bill would require a groundwater sustainability agency to hold a public meeting to explain the adjudication process to water users within its basin and the public upon receiving notice that an adjudication has commenced in its basin. The bill would authorize a groundwater sustainability agency to invite the state board or the department to send a representative to the meeting in order to help explain the adjudication process.

Desert Water Agency, pursuant to Section 10723 of the Water Code, is the exclusive local agency within its statutory boundaries with powers to comply with the Sustainable Groundwater Management Act and elected to become a groundwater sustainability agency. The Agency collaborates with other local agencies to manage the Indio Basin and various subbasins by means of an alternative plan approved by the California Department of Water Resources. The Indio Basin is not an adjudicated basin.

This legislation presents several concerns relating to the adjudication of groundwater. Section 849 of the Code of Civil Procedure provides that the court shall have the authority and the duty to impose a physical solution on the parties in a comprehensive adjudication where necessary and consistent with Article 2 of Section X of the California Constitution (waste and unreasonable use). Before adopting a physical solution, subdivision (b) of Section 849 requires the court to consider any existing groundwater sustainability plan or program. Section 837.5 of the Code of Civil Procedure authorizes the State to intervene in a comprehensive adjudication.

Chapter 7 (commencing with Section 830) was added to Title 10 of Part 2 of the Code of Civil Procedure by Chapter 672, Statutes of 2015. The law authorizes a groundwater sustainability agency for the basin or a portion of the basin, a city, county, or city and county that overlies the basin or a portion of the basin, and certain persons to intervene in a comprehensive adjudication. The law requires the court to convene a case management conference and authorizes the court to consider certain matters, including dividing the case into phases to resolve legal and factual issues, in the initial case management conference or as soon as practicable. In addition, the law requires each party to serve within 6 months of appearing in the comprehensive adjudication, specified initial disclosures made under penalty of perjury to all other named parties and a special master, if one has been appointed in the action. The law authorizes the court to appoint one or more special masters in a comprehensive adjudication, whose duties could include, among other things, investigating technical and legal issues, as directed by the court, and compiling a report of the findings, as specified. The bill authorizes the court to request the State Water Resources Control Board or the Department of Water Resources to recommend candidates for appointment as a special master or to review the qualifications of candidates.

The law also authorizes the court, upon a showing that the basin is in a condition of long-term overdraft, to issue a preliminary injunction that could include, among other things, a moratorium on new or increased appropriations of water. Finally, the law requires the Department of Water Resources and each county and groundwater sustainability agency that overlies the basin or a portion of the basin to post and maintain the notice and form answer on their Internet Web sites.

The provisions of this legislation are somewhat duplicative of provisions of the 2015 law. One of the principal differences between the 2015 law and this legislation is that the latter would require the court to invite a representative from the department or the State Water Resources Control Board to provide technical assistance or expert testimony on the amount of water in the basin subject to adjudication, equitable and sustainable pumping allocations for the basin, and sustainable groundwater management best practices and recommendations. Also, the legislation would require

the court to take into account the needs of small farmers and disadvantaged communities, as those terms are defined, when entering a judgment. Neither are appropriate for a comprehensive adjudication, especially for a basin that is covered by a groundwater sustainability plan and a groundwater sustainability agency. Further, in a comprehensive adjudication, the court may determine all groundwater rights of a basin, whether based on appropriation, overlying right, or other basis of right, and use of storage space in the basin.

Section 850 of the Code of Civil Procedure requires a judgment in a comprehensive adjudication to be consistent with the water right priorities of all non-stipulating parties and exempt parties (parties that pump less than 5 acre-feet per year); and treat all objecting parties and exempt parties equitably as compared to the stipulating parties. Providing special consideration of the needs of small farmers and disadvantaged communities is not likely appropriate given the criteria regarding established water right priorities and the ensuring the equitable treatment of all parties, as well as the doctrine of waste and unreasonable use.

This legislation would not have an immediate effect on the Agency or the Indio Basin, but should it become law as introduced, its provisions would not be in the interest of the Agency, the Agency as the groundwater sustainability agency, and local control over management of the basin.

Agency Legislative and Regulatory Program: Policy Directive 1, Policy Directive 2

Current Position: Not Yet Considered

Recommended Position: Oppose

AB 838 (Connolly D) California Water Affordability and Infrastructure Transparency Act of 2023.

Current Text: Introduced: 2/14/2023 [html](#) [pdf](#)

Introduced: 2/14/2023

Status: 2/23/2023-Referred to Com. on E.S. & T.M.

Is Urgency: N

Is Fiscal: Y

Location: 2/23/2023-A. E.S. & T.M.

Calendar: 3/28/2023 1:30 p.m. - State Capitol, Room 444 ASSEMBLY ENVIRONMENTAL SAFETY AND TOXIC MATERIALS, LEE, ALEX, Chair

Summary: Would require, on January 1, 2025, and annually thereafter, public water systems to provide specified information and data related to customer water bills and efforts to replace aging infrastructure to the State Water Resources Control Board. By requiring information and data to be provided to the state board, this bill would expand the scope of a crime and create a state-mandated local program.

Notes: This legislation would require public water systems to annually provide specified information and data related to customer water bills and efforts to replace aging infrastructure to the state board. This information would include Information and data related to the average water bill paid by customers, and information and data related to the public water system's completed and planned efforts to replace aging infrastructure.

The State Water Resources Control Board is responsible for ensuring that all public water systems are operated in compliance with the Federal and State Safe Drinking Water acts and any regulations adopted thereunder. The Board directly enforces the California Safe Drinking Water Act for all public water systems but does not exercise authority for rate setting or capital expenditures. The Board does not have the staff capacity or resources to interpret the data that would be required to be submitted by this legislation. Therefore, the expense incurred by public water systems to calculate the average water bill paid by customers on an annual basis and submit data on infrastructure investments regarding replacement would be wasted effort. Spending on new infrastructure in anticipation of population growth as well as expenditures on infrastructure; e.g., drinking water and wastewater treatment facilities, to comply with new regulations also is important. This legislation would not address either of the latter expenditures.

Agency Legislative and Regulatory Program: Policy Directive 1, Policy Directive 3, Policy Directive 4

Current Position: Not Yet Considered

Recommended Position: Oppose

AB 1337 (Wicks D) State Water Resources Control Board: water shortage enforcement.

Current Text: Introduced: 2/16/2023 [html](#) [pdf](#)

Introduced: 2/16/2023

Status: 3/2/2023-Referred to Coms. on W., P., & W. and JUD.

Is Urgency: N

Is Fiscal: Y

Location: 3/2/2023-A. W.,P. & W.

Summary: Would authorize the State Water Resources Control Board to adopt regulations for various water conservation purposes, including, but not limited to, to prevent the waste, unreasonable use, unreasonable method of use, or unreasonable method of diversion of water, and to implement these regulations through orders curtailing the diversion or use of water under any claim of right. The bill would require the board to provide notice and an opportunity to be heard before issuing an order, except where an opportunity to be heard before the issuance of an order would be impractical given the likelihood of harm to the purposes of the various water conservation regulations. The bill would provide that a person or entity may be civilly liable for a violation of any regulation or order issued by the board pursuant to these provisions in an amount not to exceed \$1,000 for each day in which the violation has occurred and \$2,500 for each acre-foot of water diverted or used in violation of the applicable requirement. The bill would authorize the imposition of this civil liability by the superior court, as specified, or administratively by the board. The bill would provide that a regulation or order issued by the board pursuant to these provisions, or by emergency regulation, is exempt from the California Environmental Quality Act (CEQA).

Notes: This legislation would authorize the State Water Resources Control Board to adopt regulations on regard to the prevention of waste and unreasonable use and the public trust doctrine that would be applicable to all water users without proper due process or meaningful consideration of existing beneficial uses of water, e.g., municipal and industrial use and agricultural use. The legislation would allow the State Board to determine the water rights of users, including pre-1914, riparian, and groundwater users over which the State Board has no permitting authority. The CEQA exemption proposed by this legislation would preclude environmental review of the potential significant impacts of the regulations on the place of use for water rights that would be impacted.

This legislation would authorize the board to adopt regulations for various water conservation purposes, including, but not limited to, to prevent the waste, unreasonable use, unreasonable method of use, or unreasonable method of diversion of water, and to implement these regulations through orders curtailing the diversion or use of water under any claim of right. The bill would require the board to provide notice and an opportunity to be heard before issuing an order, except where an opportunity to be heard before the issuance of an order would be impractical given the likelihood of harm to the purposes of the various water conservation regulations. The bill would provide that a person or entity may be civilly liable for a violation of any regulation or order issued by the board pursuant to these provisions in an amount not to exceed \$1,000 for each day in which the violation has occurred and \$2,500 for each acre-foot of water diverted or used in violation of the applicable requirement. The bill would authorize the imposition of this civil liability by the superior court, as specified, or administratively by the board. The bill would provide that a regulation or order issued by the board pursuant to these provisions, or by emergency regulation, is exempt from CEQA.

This legislation would authorize the board, for example, to curtail the diversion and use of water for violation of a regulation regarding water conservation. The legislation would exempt from CEQA such action and other actions taken by the board, meaning the potential significant environmental effects of reducing available water supply would not be subject to identification, analysis, avoidance or mitigation. Relying on the public trust doctrine to curtail water rights generally requires a balance to be struck between fish and wildlife uses and consumptive uses. The board would not be required to provide notice and an opportunity to be heard if it determines, under its sole discretion, that issuance of an order would be impractical given the likelihood of harm to public trust resources.

Agency Legislative and Regulatory Program: Policy Directive 1, Policy Directive 2

Current Position: Not Yet Considered

Recommended Position: Oppose

AB 1567 (Garcia D) Safe Drinking Water, Wildfire Prevention, Drought Preparation, Flood Protection, Extreme Heat Mitigation, and Workforce Development Bond Act of 2023.

Current Text: Introduced: 2/17/2023 [html](#) [pdf](#)

Introduced: 2/17/2023

Status: 2/18/2023-From printer. May be heard in committee March 20.

Is Urgency: N

Is Fiscal: Y

Location: 2/17/2023-A. PRINT

Summary: The California Drought, Water, Parks, Climate, Coastal Protection, and Outdoor Access For All Act of 2018, approved by the voters as Proposition 68 at the June 5, 2018, statewide primary election, authorizes the issuance of bonds in the amount of \$4,100,000,000 pursuant to the State General Obligation Bond Law to finance a drought, water, parks, climate, coastal protection, and outdoor access for all program. Article XVI of the California Constitution requires measures authorizing general obligation bonds to specify the single object or work to be funded by the bonds and further requires a bond act to be approved by a 2/3 vote of each house of the Legislature and a majority of

the voters. This bill would enact the Safe Drinking Water, Wildfire Prevention, Drought Preparation, Flood Protection, Extreme Heat Mitigation, and Workforce Development Bond Act of 2023, which, if approved by the voters, would authorize the issuance of bonds in the amount of \$15,105,000,000 pursuant to the State General Obligation Bond Law to finance projects for safe drinking water, wildfire prevention, drought preparation, flood protection, extreme heat mitigation, and workforce development programs. This bill contains other related provisions.

Notes: This legislation is the Assembly Democratic Caucus proposal for a state general obligation bond for resources programs. Among the proposed programs and expenditures included that could benefit the Agency or its members, the legislation includes: \$250 million to be available, upon appropriation by the Legislature, to the Department of Water Resources in collaboration with the water board, for grants and projects that advance groundwater sustainability consistent with the Sustainable Groundwater Management Act. Funds may be used for projects, including groundwater recharge or water banking projects, and management actions identified in a groundwater sustainability plan; (4) \$200 million to be available, upon appropriation by the Legislature, for expenditures on, and competitive grants and loans to, projects that are included in, and implemented in, an adopted integrated regional water management plan; (5) \$400 million dollars, upon appropriation by the Legislature, to the State Water Board for competitive grants or loans for clean, safe, and reliable drinking water to all Californians; and (6) \$300 million dollars, upon appropriation by the Legislature, to the water board for grants or loans for water recycling projects.

Our firm will closely review the above provisions in the legislation to ensure that Agency projects are eligible for funding.

Agency Legislative and Regulatory Program: Policy Directive 4

Current Position: Not Yet Considered

Recommended Position: Support/Amend

AB 1572 (Friedman D) Potable water: nonfunctional turf.

Current Text: Introduced: 2/17/2023 [html](#) [pdf](#)

Introduced: 2/17/2023

Status: 2/18/2023-From printer. May be heard in committee March 20.

Is Urgency: N

Is Fiscal: Y

Location: 2/17/2023-A. PRINT

Summary: (1) Existing law establishes various state water policies, including the policy that the use of water for domestic purposes is the highest use of water. This bill would make legislative findings and declarations concerning water use, including that the use of potable water to irrigate nonfunctional turf is wasteful and incompatible with state policy relating to climate change, water conservation, and reduced reliance on the Sacramento-San Joaquin Delta ecosystem. The bill would direct all appropriate state agencies to encourage and support the elimination of irrigation of nonfunctional turf with potable water. This bill contains other related provisions and other existing laws.

Notes: This legislation would define "Nonfunctional turf" as any turf that is not located in areas designated by a property owner or a government agency for recreational use or public assembly. Nonfunctional turf does not include turf located in cemeteries. The legislation would prohibit the use of potable water for the irrigation of nonfunctional turf located on commercial, industrial, municipal, institutional, and multifamily residential properties, as specified.

The legislation cites an introductory statement contained in the Newsom Administration's August 2022 Water Strategy that states that climate change will leave less water to meet the needs of California. Current climate models indicate that rising temperatures will intensify the Earth's water cycle, increasing evaporation. Increased evaporation will result in more frequent and intense storms, but will also contribute to drying over some land areas. As a result, storm-affected areas are likely to experience increases in precipitation and increased risk of flooding, while areas located far away from storm tracks are likely to experience less precipitation and increased risk of drought. To date, climate assessments indicate that the Southwestern United States is likely to experience less rainfall. The prediction includes the Lower Colorado River Basin where Agency supply emanates through an exchange agreement with MWD of Southern California. There is little evidence to support a finding that "climate change will bring significant enduring reductions in California's water supply" in terms of water supply from Northern California.

The Legislature only five years ago enacted legislation by this author (AB 1668) that established a method to "estimate the aggregate amount of water that would have been delivered the previous year by an urban retail water supplier if all that water had been used efficiently. This estimated aggregate water use is the urban retail water supplier's urban water use objective. The method is based on water use efficiency standards and local service area characteristics for that year. By comparing the amount of water actually used in the previous year with the urban water use objective, local urban water suppliers will be in a better position to help eliminate unnecessary use of water;

that is, water used in excess of that needed to accomplish the intended beneficial use." Residential outdoor water use and outdoor water use by commercial, institutional and industrial users made up two of the four components of the urban water use objective. AB 1668 stated the intent of the Legislature that urban retail water suppliers should have primary responsibility for meeting standards-based water use targets, and shall retain the flexibility to develop their water supply portfolios, design and implement water conservation strategies, educate their customers, and enforce their rules.

This legislation would impose a statewide prohibition against the use of potable water to irrigate nonfunctional turf. The proposed statewide prohibition ignores variabilities among local water supply and water use factors and is counter to legislative intent that a local urban retail water supplier should retain the flexibility to develop and implement their own water conservation strategies. Beginning July 1, 2028, this legislation would require the State Water Board, in collaboration with the Department of Water Resources, and with assistance from urban water suppliers, to annually conduct a compliance audit for two of the state's hydrologic regions, so that all of the state's hydrologic regions receive an audit once every five years. The audit shall include all of the following: (A) Visual inspections of commercial and industrial properties known to have large lots and significant landscaping; (B) Visual inspections of nonresidential properties with extraordinarily high water use; and (C) Visual inspections of addresses that have been the subject of water waste complaints in the past year. Visual inspections would be conducted without entry to nonpublic properties or premises. The legislation would require an urban water supplier to provide to the board information to facilitate compliance audits.

This legislation would impose significant new costs on an urban retail water supplier even though the Office of the Legislative Counsel has identified this legislation as not imposing a local mandated program. Increasing resilience and enhancing adaptive capacity will provide opportunities to strengthen water resources management and plan for climate change impacts. Identifying and rectifying the institutional, scientific, economic, and political barriers to implementing adaptive strategies provides a better path to ensure future water supplies are available to meet demand. This legislation, like other proposals, is based on a path of scarcity, and therefore would impose restrictions or prohibitions on a selective basis.

Agency Legislative and Regulatory Program: Policy Directive 1, Policy Directive 2

Current Position: Not Yet Considered

Recommended Position: Oppose

ACA 2

(Alanis R) Public resources: Water and Wildfire Resiliency Act of 2023.

Current Text: Introduced: 12/5/2022 [html](#) [pdf](#)

Introduced: 12/5/2022

Status: 12/6/2022-From printer. May be heard in committee January 5.

Is Urgency:

Is Fiscal: Y

Location: 12/5/2022-A. PRINT

Summary: Would establish the Water and Wildfire Resiliency Fund within the State Treasury, and would require the Treasurer to annually transfer an amount equal to 3% of all state revenues that may be appropriated as described from the General Fund to the Water and Wildfire Resiliency Fund. The measure would require the moneys in the fund to be appropriated by the Legislature and would require that 50% of the moneys in the fund be used for water projects, as specified, and that the other 50% of the moneys in the fund be used for forest maintenance and health projects, as specified.

Notes: This is a proposed constitutional amendment that, if approved by the Legislature, would be subject to voter approval. Similar to constitutional amendments that were previously approved; e.g., Proposition 98 for school funding, this measure would require 3 percent of all state revenues that may be appropriated pursuant to Article XIII B, from the General Fund to the Water and Wildfire Resiliency Fund. Fifty percent of the money in the fund could be expended for water projects, including, but not limited to, water supply projects, water conveyance projects, water recycling projects, flood safety projects and levy maintenance, seismic retrofitting of existing facilities, desalination, habitat restoration projects, and projects that improve the quality of drinking water. Fifty percent of the money in the fund could be expended for forest maintenance and health projects that protect threatened communities, including, but not limited to, home hardening, defensible space, and fuel breaks, and workforce development programs for forest maintenance and fire protection.

It is not the first time this concept has found its way into legislation; prior efforts have been unsuccessful. There are two options to securing state financial assistance for water and forest health projects. One option is through a state general obligation bond--see AB 1567 and SB 867 in this bill packet. The other is through the annual state budget relying on the General Fund or special funds. Appropriations can be made available to a state administering agency for competitive grants or to a project or local agency through a line item appropriation.

The proposed constitutional amendment would require that 3 percent of state revenues into the General Fund be set aside for the purposes specified in ACA 2. Setting aside funds makes it easier for state agencies and local agencies to access state financial assistance for infrastructure projects regardless of the fluctuations in state revenues from year to year. Setting aside funds--as would occur with this proposal and prior measures like Proposition 98--reduces the flexibility of the Governor and the Legislature to respond to economic downturns and their effect on state revenues. Finally, setting aside state revenues for infrastructure on a pay-go basis is more cost-effective over time than issuing general obligation bonds, which end up costing 1.5x the issue amount due to issuance costs and interest payments.

Agency Legislative and Regulatory Program: Policy Directive 4

Current Position: Not Yet Considered

Recommended Position: Favor

SB 23

(Caballero D) Water supply and flood risk reduction projects: expedited permitting.

Current Text: Amended: 2/9/2023 [html](#) [pdf](#)

Introduced: 12/5/2022

Last Amend: 2/9/2023

Status: 2/22/2023-Re-referred to Coms. on N.R. & W. and E.Q.

Is Urgency: N

Is Fiscal: Y

Location: 2/22/2023-S. N.R. & W.

Summary: Current law prohibits an entity from substantially diverting or obstructing the natural flow of, or substantially changing or using any material from the bed, channel, or bank of, any river, stream, or lake, or deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it may pass into any river, stream, or lake, except under specified conditions, including requiring the entity to send written notification to the Department of Fish and Wildlife regarding the activity in the manner prescribed by the department. This bill would require a project proponent, if already required to submit a notification to the department, to complete and submit environmental documentation to the department for the activity in the notification.

Notes: The Association of California Water Agencies is the sponsor of this legislation, the intent of which is to expedite specified project permitting decisions by the Department of Fish and Wildlife and the State Water Resources Control Board or regional boards.

Section 1602 of the Fish and Game Code provides that an entity shall not substantially divert or obstruct the natural flow of stream, river, or lake unless the entity (1) The Department of Fish and Wildlife receives written notification regarding the activity in the manner prescribed by the department, (2) The department determines the notification is complete, (3) The entity pays the applicable fees, and (4) one of the following occurs: (a) The department informs the entity, in writing, that the activity will not substantially adversely affect an existing fish or wildlife resource, and that the entity may commence the activity without an agreement, if the entity conducts the activity as described in the notification, including any measures in the notification that are intended to protect fish and wildlife resources, (b) The department determines that the activity may substantially adversely affect an existing fish or wildlife resource and issues a final agreement to the entity that includes reasonable measures necessary to protect the resource, and the entity conducts the activity in accordance with the agreement, (c) A panel of arbitrators issues a final agreement to the entity in accordance with subdivision (b) of Section 1603, and the entity conducts the activity in accordance with the agreement, or (d) The department does not issue a draft agreement to the entity within 60 days from the date notification is complete, and the entity conducts the activity as described in the notification, including any measures in the notification that are intended to protect fish and wildlife resources.

Section 1603 specifies that after the notification is complete, the department shall determine whether the activity may substantially adversely affect an existing fish and wildlife resource. If the department determines that the activity may have that effect, the department shall provide a draft agreement to the entity within 60 days after the notification is complete. The draft agreement shall describe the fish and wildlife resources that the department has determined the activity may substantially adversely affect and include measures to protect those resources. The department's description of the affected resources shall be specific and detailed, and the department shall make available, upon request, the information upon which its determination of substantial adverse effect is based. Within 30 days of the date of receipt of the draft agreement, the entity shall notify the department whether the measures to protect fish and wildlife resources in that draft agreement are acceptable.

This legislation would require, if the department determines that a water supply project or flood risk reduction project will substantially adversely affect an existing fish and wildlife resource and the project proponent submits a complete application and environmental documentation, the department to issue the final agreement that includes any reasonable measures mutually agreed to by the project proponent and the department within 180 days of receipt of a notification from the project proponent.

Notably, this provision of the legislation does not require the payment of fees to the department. Whether the latter provision in this legislation is an oversight is unknown. Existing law requires the department to determine that the notification is complete. Whether the lack of a determination that a notification is complete requirement in this legislation is an oversight is unknown.

This legislation would authorize a project proponent to proceed in accordance with a final agreement issued by an arbitration panel. Existing law (Section 1603) already provides that any decision by the panel of arbitrators shall be binding on the department and the affected entity.

This legislation would require the state board or regional boards to issue project certification within 180 days if a water supply or flood risk reduction project proponent does all of the following: (1) Requests a preapplication consultation, (2) Files a complete application for project certification, (3) If required for the project, files a complete application or petition under Chapter 2 (commencing with Section 1250) of Part 2 of Division 2 for all water rights approvals or amendments necessary to implement the project, and (4) Completes and submits completed environmental documentation to the state board or regional boards for the project certification required under Division 13 (commencing with Section 21000) of the Public Resources Code.

This legislation would provide that unless the state board or regional boards issuing a project certification determine in writing that an approved plan does not substantially meet the definition of a watershed plan, the state board or regional boards shall use the following approved plans as watershed plans for purposes of implementing the procedures in issuing a project certification: (1) Habitat conservation plans that include biological goals for aquatic resources, (2) Natural communities conservation plans that include biological goals for aquatic resources, (3) Habitat management plans that include biological goals for aquatic resources.

Agency Legislative and Regulatory Program: Policy Directive 2, Policy Directive 3

Current Position: Not Yet Considered

Recommended Position: Favor

SB 366

(Caballero D) The California Water Plan: long-term supply targets.

Current Text: Introduced: 2/8/2023 [html](#) [pdf](#)

Introduced: 2/8/2023

Status: 2/15/2023-Referred to Com. on RLS.

Is Urgency: N

Is Fiscal: N

Location: 2/8/2023-S. RLS.

Summary: Would make legislative findings and declarations and state the intent of the Legislature to enact future legislation that modernizes the California Water Plan, including the establishment of long-term water supply targets.

Notes: This bill is a placeholder (spot bill) and will require substantive amendments before it can be referred to a policy committee for hearing. The bill is sponsored by the California Municipal Utilities Association (CMUA) to establish a statewide goal for increasing water supply. The bill would amend statutes regarding the California Water Plan. ACWA has not yet been a part of these conversations and has not made a commitment to be supportive of these efforts.

SB 366 would establish water supply increase targets in the California Water Plan for 2033 and 2043 and require the Plan to include a discussion of various strategies, including, but not limited to, those relating to the development of new surface and ground water storage facilities, water conservation, water recycling, desalination, conjunctive use, improved regional and statewide conveyance, stormwater capture, and water transfers that may be pursued in order to meet the water supply targets. The legislation also would require the Department of Water Resources to consult with an advisory committee to develop and make recommendations for specific actions that should be taken to streamline state permits and approvals for such projects.

While a "watch" position is appropriate at this time, our firm will recommend that the Agency support SB 366 following amendments to the bill and work with CMUA and water agencies throughout the state to formalize a requirement for the Department of Water Resources to focus on the identification of future water supply needs across all beneficial uses of water and identification of the alternatives for meeting those projected demands.

Agency Legislative and Regulatory Program: Policy Directive 2

Current Position: Not Yet Considered

Recommended Position: Watch

SB 389**(Allen D) State Water Resources Control Board: determination of water right.****Current Text:** Introduced: 2/9/2023 [html](#) [pdf](#)**Introduced:** 2/9/2023**Status:** 2/22/2023-Referred to Com. on N.R. & W.**Is Urgency:** N**Is Fiscal:** Y**Location:** 2/22/2023-S. N.R. & W.

Summary: Current law provides that it is the intent of the Legislature that the state take vigorous action to enforce the terms and conditions of permits, licenses, certifications, and registrations to appropriate water, to enforce state board orders and decisions, and to prevent the unlawful diversion of water. This bill would authorize the State Water Resources Control Board to investigate the diversion and use of water from a stream system to determine whether the diversion and use are based upon appropriation, riparian right, or other basis of right, as specified.

Notes: This bill would authorize the State Water Resources Control Board to investigate the diversion and use of water from a stream system to determine whether the diversion and use are based upon appropriation, riparian right, or other basis of right. This legislation, therefore, would significantly expand board jurisdiction to act on pre-1914 water and riparian rights and to do so without regard to priority (first in time, first in right).

According to the Association of California Water Agencies, Section 1051 of the Water Code authorizes the board to investigate stream systems, but "it does not explicitly grant them the power to verify the water rights of persons that claim they are riparian users or possess pre-1914 water rights. ACWA also notes that while the board can determine all rights to water in a stream or other watercourse, it cannot initiate an adjudication of rights to a stream system.

Agency Legislative and Regulatory Policy Platform: Policy Directive 2

Current Position: Not Yet Considered

Recommended Position: Oppose

SB 414**(Allen D) Drought-tolerant landscaping: local incentive programs: synthetic grass: artificial turf.****Current Text:** Introduced: 2/9/2023 [html](#) [pdf](#)**Introduced:** 2/9/2023**Status:** 2/22/2023-Referred to Coms. on GOV. & F. and E.Q.**Is Urgency:** N**Is Fiscal:** Y**Location:** 2/22/2023-S. GOV. & F.

Summary: Current law prohibits a city, including a charter city, county, and city and county, from enacting or enforcing any ordinance or regulation that prohibits the installation of drought-tolerant landscaping, synthetic grass, or artificial turf on residential property, as specified. The Personal Income Tax Law and the Corporation Tax Law, in conformity with federal income tax law, generally defines "gross income" as income from whatever source derived, except as specifically excluded. Current law provides, among other exclusions, an exclusion from gross income for any amount received as a rebate, voucher, or other financial incentive issued by a public water system, as defined, local government, or state agency for participation in a turf replacement water conservation program. This bill would prohibit a city, including a charter city, county, city and county, or special district, from issuing a rebate, voucher, or other financial incentive for the use of synthetic grass or artificial turf that contains contaminants, including zinc, plastic, or perfluoroalkyl and polyfluoroalkyl substances (PFAS).

Notes: There is growing concern among certain environmental and medical communities that long-term exposure to artificial turf may lead to chronic or acute disease, including cancer, or could leach chemical compounds into the environment; e.g., PFAS contamination into surface water and groundwater. The science, however, is not settled on exposure risk or the release of chemical compounds used in the manufacture of artificial turf. PFAS, for example, is added to the plastic compound to enable the process of extrusion that creates the blades of artificial blades of turf.

This legislation, however, would eliminate an important tool for urban retail water suppliers to achieve their urban water use objectives, in particular, residential and CII outdoor water use. Water agencies have successfully pursued state legislation to exempt turf replacement rebates from state personal income taxation. Existing law provides, among other exclusions, an exclusion from gross income for any amount received as a rebate, voucher, or other financial incentive issued by a public water system, as defined, local government, or state agency for participation in a turf replacement water conservation program. This legislation would prohibit a local agency from offering a rebate.

At best, this legislation is premature, given the lack of a scientific basis for its supposed goal of eliminating the use of artificial turf. Rather than impose an outright ban on artificial turf, this legislation would seek to reduce one incentive to the installation of artificial turf by reducing an incentive for persons to replace natural turf with artificial turf. There is no comparison to the length of time, for

example, that a person may spend playing on artificial turf at their home, as compared to a college or professional athlete on a institutional playing field.

Agency Legislative and Regulatory Program: Policy Directive 1, Policy Directive 3

Current Position: Not Yet Considered

Recommended Position: Not Favor

SB 537 (Becker D) Open meetings: local agencies: teleconferences.

Current Text: Introduced: 2/14/2023 [html](#) [pdf](#)

Introduced: 2/14/2023

Status: 2/22/2023-Referred to Com. on RLS.

Is Urgency: N

Is Fiscal: N

Location: 2/14/2023-S. RLS.

Summary: Would state the intent of the Legislature to enact subsequent legislation that expands local government's access to hold public meetings through teleconferencing and remote access.

Notes: This bill states the intent to enact subsequent legislation that expands local government's access to hold public meetings through teleconferencing and remote access. The bill is a placeholder (spot bill) and will require substantive amendments before it can be referred to a policy committee for hearing. The Agency should considered taking a watch position on this legislation given the subject matter.

Agency Legislative and Regulatory Program: Policy Directive 3

Current Position: Not Yet Considered

Recommended Position: Watch

SB 867 (Allen D) Drought and Water Resilience, Wildfire and Forest Resilience, Coastal Resilience, Extreme Heat Mitigation, Biodiversity and Nature-Based Climate Solutions, Climate Smart Agriculture, and Park Creation and Outdoor Access Bond Act of 2023.

Current Text: Introduced: 2/17/2023 [html](#) [pdf](#)

Introduced: 2/17/2023

Status: 3/7/2023-Set for hearing March 28.

Is Urgency: N

Is Fiscal: Y

Location: 3/1/2023-S. N.R. & W.

Calendar: 3/28/2023 9:30 a.m. - 1021 O Street, Room 2100 SENATE NATURAL RESOURCES AND WATER, MIN, DAVE, Chair

Summary: Would enact the Drought and Water Resilience, Wildfire and Forest Resilience, Coastal Resilience, Extreme Heat Mitigation, Biodiversity and Nature-Based Climate Solutions, Climate Smart Agriculture, and Park Creation and Outdoor Access Bond Act of 2023, which, if approved by the voters, would authorize the issuance of bonds in an unspecified amount pursuant to the State General Obligation Bond Law to finance projects for drought and water resilience, wildfire and forest resilience, coastal resilience, extreme heat mitigation, biodiversity and nature-based climate solutions, climate smart agriculture, and park creation and outdoor access programs.

Notes: This bill would enact the Drought and Water Resilience, Wildfire and Forest Resilience, Coastal Resilience, Extreme Heat Mitigation, Biodiversity and Nature-Based Climate Solutions, Climate Smart Agriculture, and Park Creation and Outdoor Access Bond Act of 2023, which, if approved by the voters, would authorize the issuance of bonds in an unspecified amount pursuant to the State General Obligation Bond Law to finance projects for drought and water resilience, wildfire and forest resilience, coastal resilience, extreme heat mitigation, biodiversity and nature-based climate solutions, climate smart agriculture, and park creation and outdoor access programs. The total dollar amount and the allocation among its sections has not yet been determined. The bill would fund drought and water resilience programs, wildfire and forest resilience programs, and biodiversity protection and nature-based climate solution programs, among its provisions.

Our firm will closely monitor the progress toward filling in the blanks in the legislation to ensure that Agency projects are eligible for funding.

Agency Legislative and Regulatory Program: Policy Directive 4

Current Position: Not Yet Considered

Recommended Position: Watch/Amend

Total Measures: 16
Total Tracking Forms: 16

**STAFF REPORT
TO
DESERT WATER AGENCY
BOARD OF DIRECTORS**

MARCH 21, 2023

**RE: REQUEST FOR AUTHORIZATION TO CALL FOR BIDS FOR
CONSTRUCTING PHASE I of 30" AVENIDA CABALLEROS
PIPELINE REPLACEMENT PROJECT (RAMON ROAD TO
TAHQUITZ CANYON WAY)**

The 2020/2021 Capital Improvement Budget includes Work Order No. 20-160 for a replacement pipeline project (approximately 2,500 linear feet of 30" ductile iron pipe), with a budget amount of \$3,545,000, to include engineering, construction, inspection, and overhead costs.

The project has been divided into two phases. Phase I includes the installation of approximately 1,870 linear feet of 30" ductile iron pipe by traditional open trench method.

Phase II, to be installed at a later date, includes approximately 600 lineal feet of 30" ductile iron pipe that must be installed under an existing storm channel by the bore & jack method. The existing channel is managed by Riverside County Flood Control but was originally installed by the Army Corp of Engineers. As such, the pipeline plans must be submitted to the Corp for review and approval. This process is estimated to take 8 to 12 months. Once the plans are approved by the Corp, staff will return to the Board for bid authorization.

The attached map shows the location for the replacement pipeline. The existing 14" diameter, unlined steel pipeline within Avenida Caballeros was constructed in 1953 and has exhibited over 60 leak occurrences during the last 3 years.

With authorization to call for bids being granted today, the bid opening for the project will tentatively be held on May 4, 2023, with the contract award scheduled for the Board Meeting on May 16, 2023. Based on recent material delays, staff anticipates construction to begin in Fall 2023, with completion expected in Spring 2024.

Fiscal Impact:

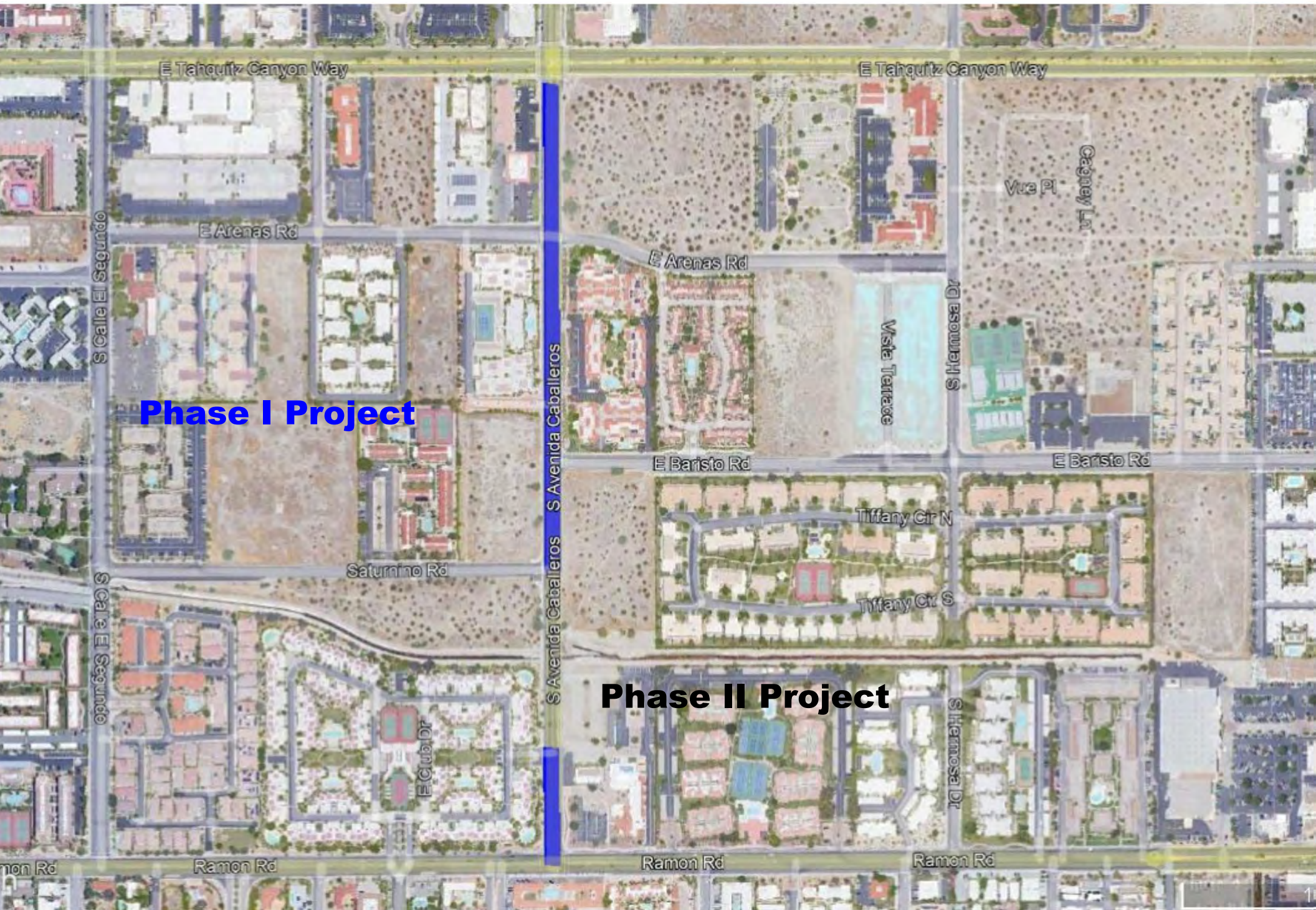
The Engineer's construction cost estimate for Phase I is \$1,850,000, with an estimated inspection and Agency labor costs of \$450,000. Staff estimates a total cost for construction and inspection of the pipeline to be \$2.3M of the \$3.545M W.O. 20-160 budget. Finance Director Saenz has reviewed this report.

Recommendation:

Staff recommends Board authorization to call for bids for Phase I of the 30" Avenida Caballeros Pipeline Replacement Project (Ramon Road to Tahquitz Canyon Way).

Attachments:

Attachment #1 – Pipeline Project Location Map



**STAFF REPORT
TO
DESERT WATER AGENCY
BOARD OF DIRECTORS**

MARCH 21, 2023

**RE: PRESENTATION OF DRAFT COST OF SERVICE STUDY FOR
POTABLE, RECYCLED & WASTEWATER RATES**

In order for the Agency to maintain revenues sufficient to sustain Agency operations, it is necessary for the Agency to evaluate the need for rate increases to keep up with rising costs, inflation, and sufficient funding to address the Agency's aging infrastructure.

The Agency's Potable, Recycled & Wastewater rates are defined as Property-related fees and charges according to Article XIII, Section 6 of the California State Constitution (Prop 218). The substantive provisions of Proposition 218 appear in sections 6(b)(1)-(5). In accordance with these provisions, a property-related fee must meet all of the following requirements:

- Revenues derived from the fee or charge shall not exceed the funds required to provide the property-related service.
- Revenues derived from the fee or charge shall not be used for any purpose other than that for which the fee or charge was imposed.
- The amount of a fee or charge imposed upon any parcel or person as an incident of property ownership shall not exceed the proportional cost of the service attributable to the parcel.
- No fee or charge may be imposed for a service unless that service is actually used by, or immediately available to, the owner of the property in question.
- No fee or charge may be imposed for general governmental services, such as police, fire, ambulance, or libraries, where the service is available to the public in substantially the same manner as it is to property owners.

In order to develop rates that comply with the requirements of Prop 218, the Agency contracted with NBS to perform the Agency's rate study and propose a 5-year rate plan for potable water, recycled water and wastewater rates. This proposed 5-year rate plan provides the necessary revenues to fund the Agency's Potable, Recycled and Wastewater operations & maintenance as well as fund the planned capital expenditures while maintaining sufficient reserve target levels according to the Agency's Reserve Policy (Resolution 1262).

Gregg Clumpner and Alice Bou of NBS are in attendance and will present the Draft Cost of Service Study for Potable, Recycled & Wastewater Rates.

The Draft Cost of Service Study has been reviewed by the Finance Committee.

Since presentation to the Finance Committee, the following revisions have been made.

- Refinement of the Capital Improvements General Plan timeline of projects and associated capital expenditures.
- Addition of reoccurring rate funded routine capital projects that are not yet budgeted but carried forward at anticipated levels. For example, routine service and meter replacements.

Next Steps:

- If there are no requested revisions by the Board, the Board may elect to approve the Cost of Service Study as presented
- If there are any requested revisions, NBS will revise, and staff will bring the Cost of Service Study Final Draft to the Board for approval
- The rates within the approved Cost of Service Study will be used in the Prop 218 Notice to Customers
- Prop 218 Notices will be mailed to customers providing the opportunity for protest ballots to be submitted to the Agency
- Rate increase workshops will be held for Customers to present the rate increase plan and address customer questions
- The proposed 5-year rate increase plan will be presented to the Board for adoption at a public hearing
- Prior to any rate increase taking effect, the Board will adopt each rate increase by resolution of the Board up to the maximum amount allowed by the 5-year rate increase plan

Attachments:

1. Draft Cost of Service Study

DESERT WATER AGENCY

Draft Report for:

Cost of Service Study

March 2023

DRAFT

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SECTION 1. PURPOSE AND OVERVIEW OF THE STUDY

Purpose

Desert Water Agency (DWA or “the Agency”) retained NBS to conduct a comprehensive Cost of Service Study which includes the Water, Sewer, and Recycled Water utilities. In DWA’s 2016 rate study, the Agency adopted drought rates and adjusted the water rate structure to recover about 10% more revenue from fixed charges.

Due to the continuing changes in customer consumption patterns, with gradual increases in consumption across all customer classes, the need to recover an appropriate amount of revenue from fixed charges and concerns over conservation and drought-related matters are even more important. The Agency’s broader objectives in this study include ensuring adequate funding for operating and capital costs, maintaining reasonable reserves, ensuring revenue stability in water rates, and updating drought rates to reflect the revenue requirements at various stages of water conservation.

The rates proposed in this study are consistent with industry standards and cost-of-service principles. In addition to documenting the rate study methodology, this report also assists DWA in its continuing efforts to maintain transparent communications with its customers.

NBS worked cooperatively with DWA staff throughout this study to develop rate alternatives that meet the Agency’s goals and objectives. The Board of Directors has the final decision regarding the adoption of the proposed rates and whether to proceed with the Proposition 218 (Prop 218) approval process.

Desert Water Agency Background

DWA was formed in 1961 to import water from the State Water Project (SWP) and create a reliable local water supply, and currently serves an area of 325 square miles. DWA is the water utility for Palm Springs and outlying county areas, such as Desert Hot Springs and parts of Cathedral City.

Potable Water Utility

DWA provides potable water service to approximately 23,581 metered customers. Approximately 85% of the potable water customers are residential, including single-family (67.6% of the total), condos (16.5%), and multi-family users (1.3%). Recent consumption records indicate that residential households use 64% of total water sold compared to all other non-residential customers who use the remaining 36%.

The primary source of water is groundwater, provided through 29 wells which represents 95% of the agency’s potable water supply. The aquifer is replenished with water from the State Water Project (SWP), while additional supply comes from local mountain streams (i.e., Chino Creek, Snow Creek, and Falls Creek). The water system includes over 369 miles of water pipeline and 28 reservoirs.

Recycled Water Utility

Until recently, DWA provided recycled water service to 12 metered customers. Two of these customers switched to groundwater, including the largest irrigation customer who switched in August 2020 and accounted for approximately one-third of recycled water use. This has reduced the total annual consumption of recycled water considerably. Additionally, a third golf course customer converted the property from a golf course to a desert preserve, eliminating all of the turf. Currently, this recycled water customer is only irrigating the remaining trees. The remaining customers use recycled water to irrigate golf courses, parks, medians, and Palm Springs High School fields. The DWA reclamation plant provides the additional treatment to wastewater from the City of Palm Springs that is necessary to distribute it for irrigation use.

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

Wastewater Utility

The Wastewater Operations Division protects public health and safety by ensuring that wastewater is properly collected and transported to one of two treatment facilities in the area, Coachella Valley Water District, or the City of Palm Springs. The wastewater utility is smaller than the water utility with approximately 2,200 connections; the vast majority (90%) of which are single-family residential or condo users. The remainder of the customers are primarily commercial users. The sewer system includes 23 miles of pipeline with mains ranging from 6 to 18 inches in size and two lift stations.

Overview of the Study

Comprehensive rate studies, such as this one, typically include three components: (1) preparation of a financial plan which identifies the net revenue requirements for the utility; (2) analysis of the cost to serve each customer class, and (3) the rate structure design. These steps are shown in **Figure 1** and are intended to follow industry standards and reflect the fundamental principles of cost-of-service rate making embodied in the American Water Works Association's (AWWA) *Principles of Water Rates, Fees, and Charges*,¹ also referred to as Manual M1. They also address requirements under Proposition 218 that rates not exceed the cost of providing the service and be proportionate to the cost of providing service for all customers. In terms of the chronology of the study, these three steps represent the order in which they were performed in this Study.

¹ *Principles of Water Rates, Fees, and Charges, Manual of Water Supply Practices, M1 Manual*, American Water Works Association (AWWA), Seventh Edition, 2017.

Figure 1. Primary Components of a Rate Study



As in the previous 2016 rate study, NBS projected revenues and expenditures, developed net revenue requirements, performed cost-of-service rate analyses, and developed new potable water, recycled water, and wastewater rates for DWA using this approach. The following sections in this report present an overview of the methodologies, assumptions, and data used along with the financial plans and rates developed. Appendix A provides the rate schedules necessary for the Prop 218 notices; more detailed tables and figures documenting the development of the proposed rates are provided in Appendices B and C.

Rate Design Criteria – It is important for utilities to send proper price signals to its customers about the actual cost of their water usage. However, many agencies emphasize conservation objectives at the expense of revenue stability. In the 2016 rate study, DWA increased the amount of revenue recovered from fixed charges to improve overall revenue stability. Balancing conservation and price signals with revenue stability is primarily addressed through the rate structure design. In other words, the amount of revenue collected from both fixed vs. volumetric charges are important.

Several criteria are typically considered in setting rates and developing sound rate structures. The fundamentals of this process have been documented in a number of rate-setting manuals, such as the AWWA Manual M1. The foundation for evaluating rate structures is generally credited to James C. Bonbright in the *Principles of Public Utility Rates*² which outlines pricing policies, theories, and economic concepts along with various rate designs. The following is a simplified list of the attributes of a sound structure:

- Rates should be easy to understand from the customer’s perspective.
- Rates should be easy to administer from the utility’s perspective.
- Rates should promote the efficient allocation of the resource.
- Rates should be equitable and non-discriminating (i.e., cost based).
- There should be continuity in the rate making philosophy over time.

² James C. Bonbright, Albert L. Danielsen, and David R. Kamerschen, *Principles of Public Utility Rates*, Arlington, VA: Public Utilities Report, Inc., Second Edition, 1988, pp. 383-384.

- Rates should address other utility policies (e.g., encouraging conservation & economic development).
- Rates should provide month-to-month and year-to-year revenue stability.

This section covers basic rate design criteria that NBS and DWA staff considered as a part of their review of the rate structure alternatives.

Examining the Rate Structure – The starting point in considering rate structures is the relationship between fixed costs and variable costs. Fixed costs typically do not vary with the amount of water consumed. Debt service payments and personnel costs are examples of fixed costs. In contrast, variable costs, such as the cost of purchased water, chemicals, and electricity, tend to change with the quantity of water sold. The vast majority of rate structures contain a fixed, or minimum charge, in combination with a volumetric charge.

Fixed Charges – Fixed charges can be called base charges, minimum monthly charges, customer charges, fixed meter charges, etc. Fixed charges for water utilities typically increase by meter size. For example, a customer with a 2-inch meter has a fixed meter charge that is more than five times greater than the typical residential customer charge (which in DWA’s case is a 5/8 x 3/4-inch or 1-inch meter³). Residential meters (single-family and condos), represent approximately 85% of all meters in the potable system based on the meter’s safe operating capacity.⁴ Because a large portion of water utilities’ costs are typically related to meeting system capacity requirements, capacity demands of individual customer classes are an important factor in establishing rates.

Volumetric (Consumption-Based) Charges – In contrast to fixed charges, variable costs, such as purchased water, groundwater replenishment costs, and the cost of electricity used in pumping water and chemicals for treatment, tend to change with the quantity of water produced. For a water utility, variable charges are calculated based on a metered consumption per unit price (e.g., per 100 cubic feet, or HCF). There are significant variations in the basic philosophy of variable charge rate structure alternatives. Under a uniform (single tier) rate structure, the cost per unit does not change with consumption, and provides a simple and straightforward approach from the perspective of customer understanding and rate administration/billing. Given that DWA’s primary water supply is groundwater, multiple tiers would be difficult to justify, particularly considering the 2015 San Juan Capistrano court decision that imposed stricter requirements for justifying the cost basis of tiered rates.

Drought and Water Conservation – Beginning in June 2016, communities like DWA were allowed to “self-certify” that they had sufficient supply to meet customer demand for three years but were no longer mandated to achieve a specific conservation target. Today, DWA continues to ask customers to conserve, and while the level of conservation DWA is achieving is beneficial from a supply standpoint, placing a priority on conservation creates financial risks for the utility. To help offset these risks, the drought rates proposed in this study account for various stages of water conservation to allow DWA to continue meeting its financial obligations going forward. The proposed drought rates were developed to

³ Currently, about 59% of DWA residential meters are 5/8 x 3/4-inch, 33% are 1-inch, and 5% are larger.

⁴ *Principles of Water Rates, Fees, and Charges, Manual of Water Supply Practices*, M1 Manual, AWWA, Seventh Edition, 2017, pp. 151-152.

align with the Agency's Water Shortage Contingency Plan which requires a Board Action that would allow the DWA Board to mandate the conservation. In addition to drought rates, "revenue stabilization rates" were also developed as a second tool for the Agency to use to offset the financial risks during times of reduced consumption and/or rate revenue.

Modifications to Rate Structure – The changes implemented since the 2016 rate study have increased the percentage of revenue collected from the fixed monthly meter charge and transitioned from a fixed charge that previously only collected 17% of potable water rate revenue to one that now collects 30%. The previous study also developed separate rates for the recycled water system and updated the hydraulic capacity factors used to develop monthly fixed service charges. Those changes are continued in the rates proposed below. The continuation of a rate design that collects 70% of the rate revenue from volume-based rates still provides significant incentives for DWA's customers to practice conservation. While DWA will continue to use drought rates, the addition of the revenue stabilization rates adds one more tool to the Agency's toolbox for financial management.

Key Financial Assumptions – The following are the key financial assumptions used in the water rate analyses:

- **Funding of Water Utility Capital Projects** – DWA will fund all planned capital costs using incoming rate revenue and existing reserves. The capital projects listed in the financial plan are from DWA's projection of costs through FY 2042/43.
- **Reserve Targets** – For each utility (i.e., potable water, recycled water, and wastewater), DWA maintains reserves for operations, capital, and other specific needs. The details for each utility's reserve targets are covered in their respective section of this report.
- **Inflation and Growth Projections** – Assumptions were made in the analysis with regard to cost inflation in order to project future revenues and expenses for the study period. The following inflation factors were used in the analysis:
 - ✓ Customer growth for the potable water system is projected to be a little more than 1% per year, or about 223 new connections per year.
 - ✓ Customer growth for wastewater is projected to increase at the same 1% rate.
 - ✓ No growth is expected in the recycled water system.
 - ✓ General cost inflation is 4.8% annually.
 - ✓ Labor cost inflation is 4% annually.
 - ✓ Energy cost inflation is 4% annually.
 - ✓ Transportation cost inflation is 3% annually.
 - ✓ Utilities cost inflation is 5.6% annually.
 - ✓ Construction cost inflation is 3.91% annually.

These inflation factors are based on longer term trends. However, considering current short-term inflation, the Agency should re-examine these factors in another year to assess whether short-term trends are a better reflection of the costs going forward.

SECTION 2. POTABLE WATER RATE STUDY

Key Potable Water Rate Study Issues

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

- Generating additional revenue needed to meet projected operating and planned capital costs.
- Continuing with a rate design that promotes revenue stability.
- Updating drought rates.
- Developing new revenue stabilization rates as an additional tool to further protect the Agency from the financial risks of temporary revenue shortfalls.

NBS developed various water rate alternatives as requested by DWA staff over the course of this study. All rate structure alternatives were developed based on industry standards and cost-of-service principles. The fixed and volume-based charges were calculated based on the net revenue requirements, number of customer accounts, water consumption, and other information provided by staff. The rate alternative that will be implemented is ultimately the decision of DWA's Board of Directors. The following are the basic components included in this analysis:

- **Developing Functionalized Costs:** The potable water system revenue requirements were "functionalized" into five categories: (1) commodity (or volume-based) costs; (2) recycled water costs; (3) fixed capacity costs; (4) customer service costs; and (5) fire protection costs.
- **Determining Revenue Requirements by Customer Class:** Costs for each of these functional categories were then allocated to customer classes based on allocation factors, such as water consumption, peaking factors, and number of accounts by meter size. The total revenue collected from each customer class was determined using these functional costs and allocation factors. For example:
 - ✓ Volume-related costs are allocated based on the water consumption for each class.
 - ✓ Fixed capacity costs are allocated based on peaking requirements.
 - ✓ Customer service costs are allocated based on number of meters.

Once the costs are allocated and the revenue requirement for each customer class is determined, collecting these revenue requirements from each customer class is addressed in the rate design task.

- **Evaluating Rate Design and Fixed vs. Variable Charges:** The revenue requirements for each customer class are collected from both fixed monthly service charges and volumetric rates. Based on direction from DWA staff, the rates proposed in this report will continue to collect 30% of rate revenue from the fixed charge and 70% from the variable charges.

Potable Water Utility Revenue Requirements

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

- **Meeting Net Revenue Requirements:** For FY 2023/24 through FY 2027/28, the projected net revenue requirement (that is, total annual expenses plus debt service and rate-funded capital costs, less non-rate revenues) for the potable system range from approximately \$45.8 million to \$57.4 million. If no rate adjustments are implemented, the water utility would be operating at a loss beginning in Year 1 (i.e., FY 2023/24), so very moderate increases of 6.25% are needed to fund planned capital projects. Additional adjustments made to the capital improvement projects resulted in an additional \$14 million that DWA will need to fund with rate revenue during the 5-year rate adoption period.
- **Funding Capital Improvement Projects:** In order to maintain current service levels, DWA must ensure sufficient funding is available to fund necessary capital improvement and rehabilitation projects. DWA has identified roughly \$70.1 million in expected capital expenditures for FY 2023/24 through FY 2027/28 which is an average of \$14 million in capital expenditures annually over the next five-year period.⁵
- **Building and Maintaining Reserve Funds:** DWA has an established reserve policy⁶ which documents the purpose and target balances of the Agency's various reserve funds. Therefore, NBS evaluated cash balances through FY 2027/28 to identify the year-end reserve balances compared to target ending reserve balances.

The reserves that should be the highest priority are the operating and capital replacements reserves, which are DWA's "primary reserve funds." NBS recommends that DWA target a minimum of approximately \$29 million in FY 2023/24 which would increase to \$35 million by the end of FY 2027/28. The minimum target ending balances for the District's reserve funds are as follows:

- **Operating Reserve** should equal approximately 6 months of operating expenses, or \$17 million in FY 2023/24. An Operating Reserve is intended to promote financial viability in the event of any short-term fluctuation in revenues and/or expenditures, such as those caused by weather patterns, the natural inflow and outflow of cash during billing cycles, natural variability in demand-based revenue streams (e.g., volumetric charges), and particularly in periods of economic distress – changes or trends in the age of receivables.
- **Capital and Infrastructure Reserve**, at a minimum, should equal roughly 6% of net capital assets, or approximately \$12 million in FY 2023/24, which increases to \$14 million in FY

⁵ These costs are presented in future-year dollars and include inflation.

⁶ Resolution No. 1187.

2027/28. This reserve is intended to be a cash resource set aside to address long-term capital system replacement and rehabilitation needs.

- **Additional Reserves** are intended to account for various other purposes, such as retirement benefits, disaster response, and land acquisitions. These additional reserves total approximately \$8.2 million in FY 2023/24.

At the end of the five-year rate period, it is projected that the Potable Water Utility will have \$34.7 million in these three reserves, which is very close to the reserve target of \$35 million.

- **Maintaining Adequate Bond Coverage:** DWA is required by its bond covenants to maintain a debt service coverage ratio of at least 1.15 for the outstanding 2016 Revenue Bonds. The Agency is projected to far exceed this minimum which strengthens DWA's credit rating and, in turn, helps lower the interest rates for any future debt-funded capital projects. If DWA adopts the proposed rate increases, the debt coverage requirement will be 10.8 or higher each year, exceeding the required 1.15 debt service coverage ratio throughout the 5-year period.

Figure 2 summarizes the sources and uses of funds, net revenue requirements, and the recommended annual increases in total potable rate revenue proposed for the next 5 years.

Figure 2. Summary of Potable Water Revenue Requirements

Summary of Sources and Uses of Funds and Net Revenue Requirements	Budget	5-Year Rate Projected Period				
	FY 2022/23	FY 2023/24	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28
Sources of Water Funds						
Rate Revenue Under Prevailing Rates ¹	\$ 41,614,000	\$ 42,053,272	\$ 42,497,180	\$ 42,941,089	\$ 43,384,998	\$ 43,828,906
Power Sales	111,000	111,000	111,000	111,000	111,000	111,000
Reclamation Water Sales	897,000	906,469	916,037	925,606	935,174	944,743
Other Revenue	3,868,100	4,060,037	4,056,908	4,077,700	4,110,715	4,153,958
Total: Sources of Water Funds	\$ 46,490,100	\$ 47,130,778	\$ 47,581,125	\$ 48,055,395	\$ 48,541,887	\$ 49,038,607
Uses of Water Funds						
Operating Expenses	\$ 33,889,440	\$ 36,407,964	\$ 38,502,040	\$ 40,682,699	\$ 42,983,820	\$ 45,420,163
Debt Service	1,344,150	1,344,650	1,342,650	1,344,450	1,339,850	1,345,100
Rate-Funded Capital Expenses	10,460,946	12,234,410	13,040,394	13,554,183	14,370,585	14,936,385
Total: Uses of Water Funds	\$ 45,694,536	\$ 49,987,024	\$ 52,885,084	\$ 55,581,332	\$ 58,694,256	\$ 61,701,648
Surplus (Deficiency) before Rate Increase	\$ 795,564	\$ (2,856,246)	\$ (5,303,958)	\$ (7,525,937)	\$ (10,152,369)	\$ (12,663,041)
Additional Revenue from Rate Increases ¹	-	1,330,610	5,546,630	8,672,109	12,054,642	15,712,400
Surplus (Deficiency) after Rate Increase	\$ 795,564	\$ (1,525,636)	\$ 242,672	\$ 1,146,172	\$ 1,902,274	\$ 3,049,359
Projected Annual Rate Increase²	0.00%	6.25%	6.25%	6.25%	6.25%	6.25%
Cumulative Rate Increases	0.00%	6.25%	12.89%	19.95%	27.44%	35.41%
Net Revenue Requirement²	\$ 41,715,436	\$ 45,815,986	\$ 48,717,176	\$ 51,392,632	\$ 54,472,541	\$ 57,436,690
Debt Coverage Ratio (After rate increases)	11.14	10.81	12.82	13.94	15.25	16.56

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

2. This is the annual amount needed from rates. Net Revenue Requirement = Total Uses of Water Funds - Power Sales - Other Revenue.

Figure 3 summarizes the projected primary reserve fund balances and reserve targets. A summary of the utility's proposed 5-year financial plan is included in Appendix B. The appendix tables include the revenue requirement analysis, reserve fund projections, capital improvement program, and the proposed rate increases needed to meet DWA's funding requirements. As Figure 3 shows, given the proposed rate increases, the Operating and Capital Replacement reserves do not meet their individual minimum targets, but including the additional reserves exceeds the total minimum target balances in each year. Overall, reserves are still healthy and continue to increase.

Figure 3. Summary of Primary Potable Water Reserve Funds

Beginning Reserve Fund Balances and Recommended Reserve Targets	Budget	5-Year Rate Projected Period				
	FY 2022/23	FY 2023/24	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28
Operating Reserve						
Ending Balance	\$ 15,758,460	\$ 14,232,824	\$ 14,475,496	\$ 15,621,668	\$ 17,523,942	\$ 20,573,300
<i>Recommended Minimum Target</i>	<i>15,758,460</i>	<i>16,965,422</i>	<i>17,957,836</i>	<i>18,991,112</i>	<i>20,082,082</i>	<i>21,238,010</i>
Capital Rehabilitation & Replacement Reserve						
Ending Balance	\$ 3,739,804	\$ 5,328,804	\$ 5,428,804	\$ 5,528,804	\$ 5,628,804	\$ 5,728,804
<i>Recommended Minimum Target</i>	<i>11,507,200</i>	<i>11,988,200</i>	<i>12,415,100</i>	<i>12,859,100</i>	<i>13,337,300</i>	<i>13,834,100</i>
Additional Reserves						
Ending Balance	\$ 7,883,842	\$ 7,990,494	\$ 8,098,590	\$ 8,208,147	\$ 8,319,187	\$ 8,431,729
Ending Balance - All Reserves	\$ 27,382,105	\$ 27,552,122	\$ 28,002,889	\$ 29,358,619	\$ 31,471,933	\$ 34,733,833
Total Recommended Minimum Target	\$ 27,265,660	\$ 28,953,622	\$ 30,372,936	\$ 31,850,212	\$ 33,419,382	\$ 35,072,110

Characteristics of Potable Water Customers by Customer Class

The amount of consumption, the peaking factors, and the number of meters by size are used in allocating costs as a part of the cost-of-service analysis (COSA). These components of the COSA are presented in the following figures.

In **Figure 4**, the impact of continued customer conservation appears to be decreasing, as seen by the annual increases over the three-year period shown. As a result, the Agency, in its attempt to conserve water supply, has included a 5% water conservation adjustment to the total consumption for FY 2020/21. Aside from the small amount of growth (about 1% per year), the consumption for FY 2020/21 adjusted for conservation represents the expected consumption over the 5-year rate period.

Figure 4. Water Consumption by Customer Class

Customer Class ¹	FY 2018/19	FY 2019/20	FY 2020/21	% Adjustment for Conservation ²	Est. FY'18/19 Volume Adjusted for Conservation	Est. FY'19/20 Volume Adjusted for Conservation	Est. FY'20/21 Volume Adjusted for Conservation	FY 2020/21 % of Total Volume
Potable Water								
Residential	7,056,019	7,153,240	7,834,756	5.0%	6,703,218	6,795,578	7,443,018	57.9%
Multi-Family	264,289	261,779	281,838	5.0%	251,075	248,690	267,746	2.1%
Condo	452,879	443,669	483,124	5.0%	430,235	421,486	458,968	3.6%
Commercial	2,576,791	2,438,961	2,599,571	5.0%	2,447,951	2,317,013	2,469,592	19.2%
Irrigation/Condo	1,385,718	1,432,364	1,587,227	5.0%	1,316,432	1,360,746	1,507,866	11.7%
Fire Private	3,801	1,697	2,486	5.0%	3,611	1,612	2,362	0.0%
Fire Public	-	1	2	5.0%	-	1	2	0.0%
Public Authority	592,089	570,586	625,458	5.0%	562,485	542,057	594,185	4.6%
Potable Water Total	12,331,586	12,302,297	13,414,462		11,715,007	11,687,182	12,743,739	99.2%
Other Water								
Recycled Water ³	1,299,012	1,369,739	1,309,726	5.0%	1,234,061	1,301,252	1,244,239	n/a
Whitewater	n/a	n/a	n/a	5.0%	n/a	n/a	n/a	n/a
Commercial Mains	100,819	83,668	105,939	5.0%	95,778	79,485	100,642	0.8%
Total	13,731,417	13,755,704	14,830,127		13,044,846	13,067,919	14,088,620	100.0%

1. Consumption data is based on the Desert Water Agency's billing data.

2. Conservation factor applied to consumption based on discussions with Agency staff.

3. Recycled water data for FY 2018/19 through FY 2020/21 was updated to exclude the two (2) accounts that switched to groundwater as well as adjust the water consumption based on actual usage for Escena Golf Club and Palms Partners Capital LLC.

Figure 5 shows the peaking factors for each customer class. A “peaking factor” is the relationship between the average use by meter size to its peak use. Both operating costs and capital infrastructure costs incurred to accommodate peak system capacity events are generally allocated to each meter size according to its

contribution to peak capacity events. These peaking factors are used to allocate the capacity-related costs to each customer class and are described in more detail later in this study.

Figure 5. Peaking Factors by Customer Class

Customer Class	Average Monthly Use (ccf) ¹	Peak Monthly Use (ccf) ²	Peak Monthly Factor	Max Month Capacity Factor
Potable Water				
Residential	652,896	861,098	1.32	57.6%
Multi-Family	23,487	28,801	1.23	1.9%
Condo	40,260	47,217	1.17	3.2%
Commercial	216,631	270,361	1.25	18.1%
Irrigation/Condo	132,269	190,597	1.44	12.7%
Fire Private	207	293	1.41	0.0%
Fire Public	0	1	6.00	0.0%
Public Authority	52,122	74,692	1.43	5.0%
Potable Water Total	1,117,872	1,473,060	1.32	98.5%
Other Water				
Recycled Water ³	109,144	151,346	1.39	n/a
Whitewater	575	1,188	2.07	0.1%
Commercial Mains	8,828	21,540	2.44	1.4%
Total	1,236,418	1,647,134	1.33	100.0%

1. Average monthly use is calculated by dividing the FY 2020/21 consumption (see Figure 4) by 12 months.

2. Based on DWA's average monthly use.

3. Recycled water data for FY 2018/19 through FY 2020/21 was updated to exclude the two (2) accounts that switched to groundwater as well as adjust the water consumption for Escena Golf Club and Palms Partners Capital LLC.

Figure 6 shows the number of meters for each customer class. The percent of total customers by customer class is then used to develop the customer allocation factors and allocate customer costs. Customer costs are those costs associated with having customers connected to the water system and include costs related to meter reading, postage, and billing.

Figure 6. Number of Meters by Customer Class

Customer Class	No. of Meters FY 2020/21 ¹	Percent of Total
Potable Water		
Residential	15,981	67.6%
Multi-Family	310	1.3%
Condo	3,901	16.5%
Commercial	2,172	9.2%
Irrigation/Condo	378	1.6%
Fire Private	568	2.4%
Fire Public	1	0.0%
Public Authority	270	1.1%
Potable Water Total	23,581	99.7%
Other Water		
Reclaimed Water	10	n/a
Whitewater	4	0.0%
Commercial Mains	71	0.3%
Total	23,666	100.0%

1. From Desert Water Agency's billing data for June 2021.

Cost-of-Service Analysis

The revenue requirements previously shown in Figure 2 are distributed in the cost-of-service analysis to each component of the water rate structure by allocating costs through the functionalization and classification process.

Functionalization, Classification, and Allocations

Most costs are not typically allocated just to fixed or variable categories and, therefore, can be allocated to multiple functions of water service. Those costs are then classified for the purpose of allocating costs to the following five cost causation components:

- **Commodity** related costs are those costs associated with the total consumption of water over a specified period of time (e.g., annual).
- **Capacity** related costs are those costs associated with the maximum demand required or the maximum size of facilities required to meet this demand.
- **Customer** related costs are those costs associated with having a customer on the water system, such as meter reading, postage, and billing.
- **Recycled Water** related costs are those costs associated with the irrigation needs of the Agency's ten recycled water customers.
- **Fire Protection** costs are those costs associated with providing sufficient capacity in the system for fire meters and other operating and maintenance costs of providing water to properties for private fire service protection.

Once costs have been organized in DWA's functional categories and allocated to these cost causation components, they are used to establish new water rates in the form of fixed and variable charges. Appendix B shows in detail how DWA's expenses were allocated to these cost causation components.

Fixed costs generally consist of costs that a utility incurs to serve customers irrespective of the amount of water they use. These include: (1) infrastructure (capacity-related facilities) required to provide service to customers; (2) costs associated with the peaking requirements, or maximum demand which affects the maximum size of the water supply system, treatment and delivery system, operations, and maintenance costs; and (3) administrative and billing costs associated with meter reading, postage, and billing.

Variable costs are those that change as the volume of water produced and delivered changes. These commonly include the costs for groundwater replenishment, groundwater pumping, chemicals used in the treatment process, energy related to pumping for transmission and distribution, and source of supply.

Collecting Fixed vs. Variable Costs – Ideally, all fixed costs would be recovered from fixed charges and all variable costs would be recovered from volumetric charges. When this is the case, fluctuations in water sales revenues would be directly offset by reductions or increases in variable expenses, which provides greater revenue stability for the utility. However, water conservation goals as well as ease of understanding, ease of administration, and customer bill impacts are also considered.⁷ Further, revenue

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

losses resulting from decreased consumption can be mitigated by developing drought rates and/or revenue stabilization rates, both of which were developed in this study.

Figure 7 summarizes how the percentage of costs are allocated to each cost component and used to establish new water rates. **Figure 8** shows the resulting projected costs allocated to each cost classification component. The top line (Commodity-Related Costs) in Figure 7 matches the total commodity-related costs allocated in Figure 8. The remaining revenue requirements are allocated to capacity, customer, and fire protection cost categories.

Figure 7. Allocation Percentages of Revenue Requirements

Classification Components	ALTERNATIVE 1 (30% Fixed / 70% Variable) Cost-of-Service Net Revenue Requirements (FY 2023/24)	
Commodity-Related Costs ¹	\$ 30,558,350	70.0%
Capacity-Related Costs	11,350,244	26.0%
Customer-Related Costs	1,309,644	3.0%
Fire Protection-Related Costs	436,548	1.0%
Net Revenue Requirement	\$ 43,654,785	100.0%

1. Includes under-charged recycled water

Figure 8. Allocated Net Revenue Requirements

Customer Classes	Classification Components				Cost of Service Net Rev. Req'ts.
	Commodity- Related Costs	Capacity- Related Costs	Customer- Related Costs	Fire Protection- Related Costs	
Potable Water					
Residential	\$ 17,707,849	\$ 6,534,130	\$ 884,740	\$ -	\$ 25,126,718
Multi-Family	637,001	218,546	17,162	-	872,709
Condo	1,091,940	358,289	215,967	-	1,666,197
Commercial	5,875,462	2,051,536	120,246	-	8,047,244
Irrigation/Condo	3,587,396	1,446,276	20,927	-	5,054,599
Fire Private	5,619	2,223	31,446	435,799	475,087
Fire Public	5	8	55	748	816
Public Authority	1,413,639	566,773	14,948	-	1,995,360
Potable Water Total	30,318,910	11,177,781	1,305,491	436,548	43,238,730
Other Water					
Whitewater	n/a	9,015	221	-	9,236
Commercial Mains	239,440	163,448	3,931	-	406,819
Total Net Revenue Requirement	\$ 30,558,350	\$ 11,350,244	\$ 1,309,644	\$ 436,548	\$ 43,654,785

Proposed Potable Water Rates

As discussed above, the proposed water rates will continue to collect 70% of the rate revenue from volumetric rates and 30% from fixed charges. The following sections summarize the calculation of volumetric rates and fixed charges.

Volumetric Rates

DWA will continue to use a flat uniform rate for all customers. **Figure 9** summarizes the annual revenue collected from each customer class through variable rates, the water consumption that includes a 5% adjustment for conservation, and the calculated uniform rate.

Figure 9. Volumetric Rate Revenue Requirements and Calculated Rate

Customer Classes	FY 2020/21 Number of Meters ¹	FY 2020/21 Water Consumption (ccf/yr) ²	Total Target Rev. Req't from Vol. Charges	% of Total Rate Revenue	Uniform Commodity Rates (\$/ccf)	Proposed Rate Structure
Potable Water						
Residential	15,981	7,443,018	\$ 17,707,849	40.6%	\$2.38	Uniform
Multi-Family	310	267,746	637,001	1.5%	\$2.38	Uniform
Condo	3,901	458,968	1,091,940	2.5%	\$2.38	Uniform
Commercial	2,172	2,469,592	5,875,462	13.5%	\$2.38	Uniform
Irrigation/Condo	378	1,507,866	3,587,396	8.2%	\$2.38	Uniform
Fire Private	568	2,362	5,619	0.0%	\$2.38	Uniform
Fire Public	1	2	5	0.0%	\$2.38	Uniform
Public Authority	270	594,185	1,413,639	3.2%	\$2.38	Uniform
Potable Water Total	23,581	12,743,739	\$ 30,318,910	69.5%		
Other Water						
Whitewater	4	n/a	n/a	n/a	n/a	Uniform
Commercial Mains	71	100,642	239,440	0.5%	\$2.38	Uniform
Total	75	100,642	239,440	70%		

1. Number of meters is based on DWA's billing data.

2. Projected FY 2020/21 consumption based on actual usage and a 5% adjustment for conservation. See Table 37.

Fixed Service Charges

Given the projected volumetric rate revenue shown in Figure 9, the remaining rate revenue must be collected from fixed service charges. The fixed service charge recognizes that the water utility incurs fixed costs regardless of whether customers use any water. The two components that comprise the fixed charge are the capacity and customer costs.

The customer service costs do not differ based on meter sizes; therefore, the rate for this component of the fixed meter charge is the same for each meter size. The capacity component recovers costs associated with sizing the water system to ensure there is sufficient capacity in the system to meet peak demand. A user class with higher peaking (capacity) needs is allocated a proportionately higher share of the capacity related costs compared to customer classes with lower peaking needs.

Meter sizes have different fixed charges based on their capacity requirements, where larger meters have the potential to use more of the system's capacity⁸ or, said differently, they can have higher peaking factors compared to smaller meters. The potential capacity demanded (peaking) is proportional to the maximum

⁸ System capacity is the system's ability to supply water to all delivery points at the time when demanded.

hydraulic flow through each meter size as established by the AWWA hydraulic capacity ratios.⁹ The AWWA capacity ratios used for this report are shown in **Figure 10**.

Figure 10. Hydraulic Capacity Factors (Standard Meters)

Meter Size	Standard Meters	
	Meter Capacity (gpm) ¹	Equivalency to 1-inch ²
<i>Displacement</i>		
5/8 x 3/4 inch	20	1.00
1 inch	50	1.00
1.5 inch	100	2.00
2 inch	160	3.20
<i>Compound Type Class I</i>		
3 inch	350	7.00
4 inch	630	12.60
6 inch	1,300	26.00
<i>Turbine Class II</i>		
8 inch	2,400	48.00
10 inch	3,800	76.00
12 inch	5,000	100.00

1. Per AWWA, M1, Table 6-1.

2. Per DWA Staff, base meter is 1-inch; therefore, the meter equivalency is set to 1.0 for 5/8 x 3/4 and 1-inch meters.

The actual number of meters by size is multiplied by the corresponding capacity ratios to calculate equivalent meters. The number of equivalent meters is used as a proxy for the potential demand that each customer can place on the water system. **Figure 11** summarizes the number of meters, the hydraulic capacity factors, and the number of equivalent meters (i.e., the number of meters times their hydraulic capacity factor).

Figure 11. Equivalent Meters

Number of Meters by Class and Size	FY 2023/24										Total
	5/8 x 3/4 inch	1 inch	1.5 inch	2 inch	3 inch	4 inch	6 inch	8 inch	10 inch	12 inch	
Potable Water											
Residential	8,640	6,470	594	270	7	0	0	0	0	0	15,981
Multi-Family	1	29	186	94	0	0	0	0	0	0	310
Condo	3,342	235	256	68	0	0	0	0	0	0	3,901
Commercial	590	589	517	470	3	1	2	0	0	0	2,172
Irrigation/Condo	12	60	98	208	0	0	0	0	0	0	378
Public Authority	40	61	82	85	1	0	1	0	0	0	270
Potable Water Total	12,625	7,444	1,733	1,195	11	1	3	0	0	0	23,012
Other Water											
Whitewater	0	0	0	3	1	0	0	0	0	0	4
Commercial Mains	0	0	0	0	70	0	1	0	0	0	71
Total Meters/Accounts	12,625	7,444	1,733	1,198	82	1	4	0	0	0	23,087
<i>Hydraulic Capacity Factor</i>	<i>1.00</i>	<i>1.00</i>	<i>2.00</i>	<i>3.20</i>	<i>7.00</i>	<i>12.60</i>	<i>26.00</i>	<i>48.00</i>	<i>76.00</i>	<i>100.00</i>	
Total Equivalent Meters	12,625	7,444	3,466	3,834	574	13	104	0	0	0	28,059

Figure 12 shows the calculation of the fixed service charges, which includes the customer service charge and the fixed capacity-related charge. As previously mentioned, the customer service charge is calculated

⁹ American Water Works Association, *Principles of Water Rates, Fees and Charges: Manual of Water Supply Practices M1*, p. 386, (7th ed. 2012) and American Water Works Association, *Water Meters – Selection, Installation, Testing and Maintenance M6*, pp. 63-65 (5th ed. 2012).

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

Figure 12. Calculation of Fixed-Capacity and Customer Service Charges

Number of Meters by Class and Size	FY 2023/24										Total
	5/8 x 3/4 inch	1 inch	1.5 inch	2 inch	3 inch	4 inch	6 inch	8 inch	10 inch	12 inch	
Monthly Fixed Service Charges											
Customer Costs (\$/Acct/month)	\$4.61	\$4.61	\$4.61	\$4.61	\$4.61	\$4.61	\$4.61	\$4.61	\$4.61	\$4.61	
Capacity Costs (\$/Acct/month)	\$33.70	\$33.70	\$67.41	\$107.85	\$235.92	\$424.65	\$876.27	\$1,617.72	\$2,561.40	\$3,370.26	
Total Monthly Meter Charge	\$38.32	\$38.32	\$72.02	\$112.46	\$240.53	\$429.27	\$880.88	\$1,622.34	\$2,566.01	\$3,374.87	
Annual Fixed Costs Allocated to Monthly Meter Charges											
Customer Costs	\$ 1,278,143										
Capacity Costs	11,348,013										
Total Fixed Meter Costs	\$ 12,626,156										
Annual Revenue from Monthly Meter Charges											
Customer Charges	\$ 698,945	\$ 412,115	\$ 95,942	\$ 66,324	\$ 4,540	\$ 55	\$ 221	\$ -	\$ -	\$ -	\$ 1,278,143
Capacity Charges	5,105,943	3,010,585	1,401,758	1,550,427	232,143	5,096	42,061	-	-	-	11,348,013
Total Revenue from Mo. Meter Charges	\$ 5,804,888	\$3,422,700	\$1,497,701	\$1,616,751	\$ 236,683	\$ 5,151	\$ 42,282	\$ -	\$ -	\$ -	12,626,156

Fixed Service Charges (Fire Service)

The same methodology is used to calculate fixed charges for fire service meters. However, fire service customers differ from other water service customers because their service is more of a standby nature, where a readiness-to-serve charge is more appropriate. Except in the event of a fire, these users are not intended to use water on a regular basis. While DWA still needs to provide sufficient capacity for fire meters and recover other operating and maintenance costs, the overall cost to serve these users is less than that of a standard service; therefore, the fixed charges are less.

Figure 13 summarizes the hydraulic capacity factors for fire service meters and **Figure 14** summarizes the results of the fixed charge calculations for fire meters.

Figure 13. Hydraulic Capacity Factors (Fire Meters)

Meter Size	Fire Service Meters	
	Meter Capacity (gpm) ¹	Equivalency to 1-inch ²
<i>Displacement</i>		
5/8 x 3/4 inch	20	1.00
1 inch	50	1.00
1.5 inch	100	2.00
2 inch	160	3.20
<i>Fire Service Type I & II³</i>		
3 inch	350	7.00
4 inch	630	12.60
6 inch	1,400	28.00
8 inch	2,400	48.00
10 inch	3,800	76.00
12 inch	5,000	100.00

1. Per AWWA, M1, Table 6-1.

2. Per DWA Staff, base meter is 1-inch; therefore, the meter equivalency is set to 1.0 for 5/8 x 3/4 and 1-inch meters.

3. Capacity factors are for Fire Service Type I and II meters from AWWA, M6, Table 5-3.

Figure 14. Calculation of Fire Meter Fixed Charges

Number of Meters by Class and Size	FY 2023/24										Total
	5/8 x 3/4 inch	1 inch	1.5 inch	2 inch	3 inch	4 inch	6 inch	8 inch	10 inch	12 inch	
Fire Private	0	0	0	2	0	237	177	135	14	3	568
Fire Public	0	0	0	0	0	0	0	1	0	0	1
Total Meters/Accounts	0	0	0	2	0	237	177	136	14	3	569
Hydraulic Capacity Factor	1.00	1.00	2.00	3.20	7.00	12.60	28.00	48.00	76.00	100.00	
Total Equivalent Meters	0	0	0	6	0	2,986	4,956	6,528	1,064	300	15,841
Monthly Fixed Service Charges											
Customer Costs (\$/Acct/month)	\$4.61	\$4.61	\$4.61	\$4.61	\$4.61	\$4.61	\$4.61	\$4.61	\$4.61	\$4.61	
Capacity Costs (\$/Acct/month)	\$2.31	\$2.31	\$4.62	\$7.39	\$16.16	\$29.08	\$64.63	\$110.80	\$175.43	\$230.83	
Total Monthly Meter Charge	\$6.92	\$6.92	\$9.23	\$12.00	\$20.77	\$33.70	\$69.25	\$115.41	\$180.04	\$235.44	
Annual Fixed Costs Allocated to Monthly Meter Charges											
Customer Costs	\$ 31,501										
Capacity & Fire Protection Costs	438,779										
Total Fixed Meter Costs	\$ 470,280										
Annual Revenue from Monthly Meter Charges											
Customer Charges	\$ -	\$ -	\$ -	\$ 111	\$ -	\$ 13,121	\$ 9,799	\$ 7,529	\$ 775	\$ 166	\$ 31,501
Capacity Charges	\$ -	\$ -	\$ -	\$ 177	\$ -	\$ 82,717	\$ 137,279	\$ 180,823	\$ 29,472	\$ 8,310	\$ 438,779
Total Revenue from Mo. Meter Charges	\$ -	\$ -	\$ -	\$ 288	\$ -	\$ 95,837	\$ 147,078	\$ 188,352	\$ 30,247	\$ 8,476	\$ 470,280

Current and Proposed Water Rates

Figure 15 provides a comparison of the current and proposed water rates for FY 2023/24 through 2027/28. While the overall increase in rate revenue is the same each year (i.e., 6.25%), the cost-of-service analysis (COSA) by nature “re-balances” how costs are allocated between customer classes and, as a result, there are uneven adjustments in the first year of the analysis. In contrast, in the following years (Years 2 through 5), rate increases are applied evenly “across-the-board” to all rates (i.e., both fixed and volumetric).

In addition to the 6.25% annual increase in the projected rate revenue, the potable water rates included a small adjustment necessitated by the decrease in the current recycled water rate from \$0.79 to \$0.60, effective July 1, 2022. This adjustment decreases each year as the recycled water rate increases by \$0.05 annually.

The decision by Agency staff to decrease the recycled water rate was necessitated by the fact that two (2) of DWA’s largest recycled water connections recently switched to well water and, in response to the concerns of the remaining recycled water customers, the Agency needs to maintain affordable rates to incentivize the remaining recycled water customers to continue using recycled water. These recycled customers have their own wells and, without this incentive, may be inclined to use their own well water vs. recycled water from DWA’s reclamation plant.

More detailed tables on the development of the proposed water rates are documented in Appendix B.

Figure 15. Current and Proposed Water Rates

Water Rate Schedule	Current Rates	Proposed Rates				
		FY 2023/24	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28
Fixed Monthly Service Charge						
Meter Size - Standard Meters:						
5/8 x 3/4 inch	\$33.53	\$38.32	\$40.72	\$43.27	\$45.97	\$48.84
1 inch	\$33.53	\$38.32	\$40.72	\$43.27	\$45.97	\$48.84
1.5 inch	\$64.02	\$72.02	\$76.52	\$81.30	\$86.38	\$91.78
2 inch	\$100.61	\$112.46	\$119.49	\$126.96	\$134.90	\$143.33
3 inch	\$198.18	\$240.53	\$255.56	\$271.53	\$288.50	\$306.53
4 inch	\$307.94	\$429.27	\$456.10	\$484.61	\$514.90	\$547.08
6 inch	\$612.85	\$880.88	\$935.94	\$994.44	\$1,056.59	\$1,122.63
8 inch	\$978.73	\$1,622.34	\$1,723.74	\$1,831.47	\$1,945.94	\$2,067.56
10 inch	\$2,564.22	\$2,566.01	\$2,726.39	\$2,896.79	\$3,077.84	\$3,270.21
12 inch	\$3,235.01	\$3,374.87	\$3,585.80	\$3,809.91	\$4,048.03	\$4,301.03
Monthly Fixed Service Charge - Fire Service Meters:						
2 inch	--	\$12.00	\$12.75	\$13.55	\$14.40	\$15.30
3 inch	--	\$20.77	\$22.07	\$23.45	\$24.92	\$26.48
4 inch	\$30.15	\$33.70	\$35.81	\$38.05	\$40.43	\$42.96
6 inch	\$64.99	\$69.25	\$73.58	\$78.18	\$83.07	\$88.26
8 inch	\$111.46	\$115.41	\$122.62	\$130.28	\$138.42	\$147.07
10 inch	\$173.41	\$180.04	\$191.29	\$203.25	\$215.95	\$229.45
12 inch	\$208.26	\$235.44	\$250.16	\$265.80	\$282.41	\$300.06
Commodity Charges for All Water Consumed						
Uniform Rate for All Customers	\$2.28	\$2.38	\$2.53	\$2.69	\$2.86	\$3.04

Comparison of Current and Proposed Water Bills

Figure 16 and **Figure 17** compare a range of monthly water bills under the current and proposed water rates for single-family residential (SFR) customers and commercial customers. These monthly bills are based on typical meter sizes and highlight the average consumption levels for each customer.

Figure 16. Monthly Water Bill Comparison for Single-Family Customers

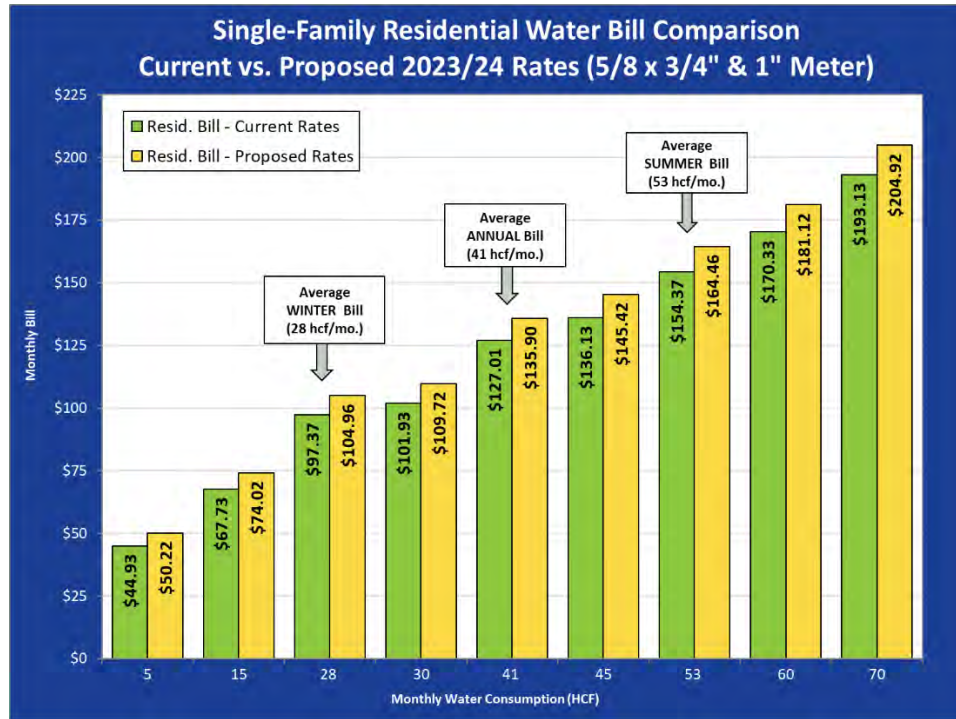
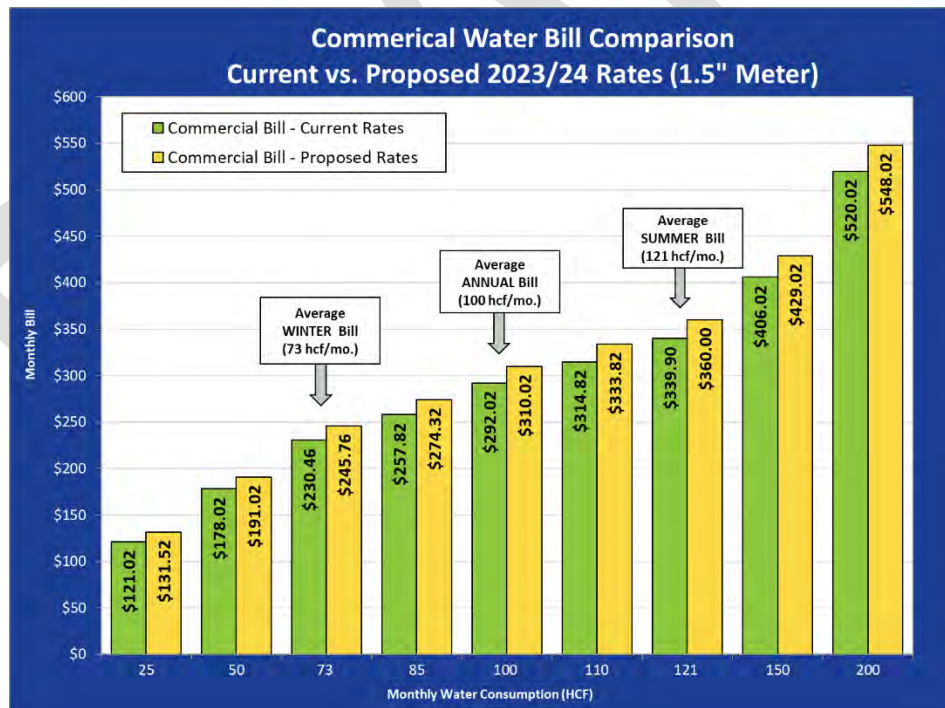


Figure 17. Monthly Water Bill Comparison for Commercial Customers



Drought and Revenue Stabilization Rates

Drought Rates – DWA is obligated to meet its annual net revenue requirements regardless of whether consumption levels decline due to conservation or other unexpected events (e.g., unseasonal weather, natural disasters, etc.). To this end, drought rates are intended to maintain the necessary level of revenues and have also taken into consideration the fact that, in these cases, some costs will also decrease.¹⁰

Figure 18 shows baseline consumption and consumption at each increased drought level for FY 2023/24.

Figure 19 shows the expenses that are expected to decrease as consumption decreases. **Figure 20** shows the proposed drought response charge that would replace the uniform volumetric rate (shown in Figure 15) at each stage of conservation through FY 2027/28.

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

- The drought response charge was developed using water usage for FY 2020/21 less the 5% conservation factor, the same assumption used in the proposed volumetric rates.
- The Desert Water Agency Board must activate the drought response charge. If the response charge is activated, it will remain in effect as necessary and will be reviewed by the Agency Board at a minimum of every six (6) months for determination of necessity until the response charge is deactivated.
- The drought response charge level may not exceed the corresponding Water Shortage Contingency Plan Shortage Level.
- The drought response charge is added to the uniform volumetric rate on a per unit basis to cover the cost of water service during times of mandated conservation and/or extreme water supply shortage.

Figure 18. Projected Consumption at Baseline and Each Successive Drought Stage

2020/21 Consumption Assumptions				
Shortage Level ¹	Percent Shortage Range ²	Potable Water Consumption (AF/yr.)	Potable Water Consumption (hcf/yr.)	Difference to Baseline (hcf)
1	Less than 10% Conservation ³	29,256	12,743,739	0
2	Up to 20% Conservation	26,330	11,469,365	(1,274,374)
3	Up to 30% Conservation	23,404	10,194,991	(2,548,748)
4	Up to 40% Conservation	20,479	8,920,617	(3,823,122)
5	Up to 50% Conservation	17,553	7,646,243	(5,097,496)
6	Greater than 50% Conservation	14,628	6,371,869	(6,371,869)

1. DWA Water Shortage Contingency Plan Shortage Level.

2. Drought levels based on the Agency's Water Shortage Contingency Plan. Source file: *DWA_WSCP 2020 FINAL.pdf*.

3. This represents the baseline consumption for FY 2020/21 consumption (excludes recycled water).

Conservation percentage for each drought stage is relative to the baseline consumption.

¹⁰ Details regarding the calculation of the drought rates can be found in Appendix B.

Figure 19. Projected Variable Expenses Considered

Expenses Directly Effected By Consumption Changes							
Fund	Division	Expense Name	Commodity-Related Costs				
			2023/24	2024/25	2025/26	2026/27	2027/28
Operating Fund	Pumping	Power Purchases	\$ 3,728,736	\$ 3,877,885	\$ 4,033,001	\$ 4,194,321	\$ 4,362,094
Operating Fund	Water Treatment	Chemicals & Filtering Material	294,027	308,140	322,931	338,432	354,676
Total:			\$ 4,022,763	\$ 4,186,026	\$ 4,355,932	\$ 4,532,752	\$ 4,716,770

Figure 20. Proposed Drought Rates

Drought Rate Schedule	Current Rates	FY 2023/24	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28
Up to 20% Conservation	\$2.65	\$2.61	\$2.72	\$2.93	\$3.14	\$3.38
Up to 30% Conservation	\$2.91	\$2.89	\$3.02	\$3.25	\$3.49	\$3.75
Up to 40% Conservation	\$3.26	\$3.26	\$3.41	\$3.67	\$3.94	\$4.23
Up to 50% Conservation	\$3.74	\$3.70	\$3.92	\$4.22	\$4.54	\$4.88
Greater than 50% Conservation	\$4.48	\$4.38	\$4.64	\$4.99	\$5.37	\$5.78

Revenue Stabilization Rates – These rates are similar to drought rates except that they are not tied to drought stages, but instead are triggered whenever the Agency’s monthly volumetric rate revenue falls 10% or more below projected monthly volumetric revenue. Also, they are set at increments of 5% vs. the 10% increments used for drought rates.

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

- The implementation is an administrative process adopted as part of the Prop 218 process.
- The General Manager (or designated staff) informs the Agency Board that monthly volumetric revenue has fallen below projected levels by 10% or more and that this triggers the use of revenue stabilization rates.
- The Agency Board, at their discretion, can vote to rescind the use of revenue stabilization rates at any time. Otherwise, revenue stabilization rates will remain in effect until monthly volumetric rate revenue returns to projected levels. When this happens, the General Manager or designated staff will inform the Board that revenue stabilization rates have now been rescinded.
- This mechanism will require careful review and wording by legal counsel.

The volumetric rate revenue requirements for the proposed revenue stabilization rates are shown in **Figure 21** for FY 2023/24. **Figure 22** shows the proposed revenue stabilization rates for the 5-year rate period.

Figure 21. Calculation of Proposed Revenue Stabilization Rates for FY 2023/24

Customer Class	Total Target Rev. Req't from Vol. Charges	10%	15%	20%	25%	30%
Potable Water	\$ 30,318,910					
Other Water	239,440	\$2.64	\$2.80	\$2.97	\$3.17	\$3.40
Total Net Revenue Requirement	\$ 30,558,350					

Figure 22. Proposed Revenue Stabilization Rates

Revenue Stabilization Rate Schedule*	FY 2023/24	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28
10% Revenue Stabilization Rate	\$2.64	\$2.81	\$2.98	\$3.17	\$3.37
15% Revenue Stabilization Rate	\$2.80	\$2.97	\$3.16	\$3.36	\$3.57
20% Revenue Stabilization Rate	\$2.97	\$3.16	\$3.36	\$3.57	\$3.79
25% Revenue Stabilization Rate	\$3.17	\$3.37	\$3.58	\$3.80	\$4.04
30% Revenue Stabilization Rate	\$3.40	\$3.61	\$3.84	\$4.08	\$4.33

* Revenue Stabilization Rates would be implemented if current revenue from water sales are below the percentages indicated.

SECTION 3. RECYCLED WATER RATE STUDY

Key Recycled Water Rate Study Issues

Recycled water rates face a unique set of challenges in determining what rates should be charged. Regardless of actual system costs, rates cannot exceed what the “market” can bear, or else recycled water customers will likely use alternative sources. This has often resulted in setting these rates arbitrarily low so that they do not exceed the costs of alternative sources (or exceed potable prices). Actual costs are also unclear because typically wastewater customers often benefit from recycled water as it tends to reduce wastewater disposal costs. Additionally, DWA has lost three 18-hole golf courses as customers, Indian Canyon's North and South Golf Courses and Mesquite Golf Course. Escena Golf Course and the City of Palm Springs Tahquitz Creek Golf Courses requested a more competitive rate as compared to groundwater pumping costs.

The primary issues addressed in this study for the recycled water system were: (1) ensuring rates generate a reasonable level of revenue to pay for operating costs of the system, and (2) establishing reasonable rates considering the Indian Canyons Golf Courses are now pumping groundwater, Mesquite Golf Course has gone out of business for financial reasons and the remaining golf courses are struggling financially. DWA currently charges recycled water customers a reduced rate compared to potable customers. On July 1, 2022, DWA reduced the recycled water rate from \$0.79 to \$0.60 per HCF. This new rate is intended to match cost of pumping groundwater from a private well. The plan is to increase this rate by \$0.05 each year on July 1, through year 2028 and thereafter a new rate study will be performed to determine the new recycled water rate. As a condition of this reduced rate, Escena Golf Course has ceased pumping groundwater from their private well and is now contractually obligated to use recycled water for 95% of its golf course irrigation needs in perpetuity.

Recycled Water Utility Revenue Requirements

The costs allocated to recycled water were previously determined in the functionalization analysis that allocated a percent of the system costs to recycled water. **Figure 23** summarizes the recycled water revenue requirements for FY 2023/24.

Figure 23. Summary of Recycled Water Revenue Requirements

Classification Components	PROPOSED ALTERNATIVE Cost-of-Service Net Revenue Requirements (FY 2023/24)	
	\$ - Allocated ¹	% - Allocated ²
Commodity Related Costs	\$ 1,578,013	99.5%
Capacity-Related Costs	7,930	0.5%
Customer-Related Costs	-	0.0%
Net Revenue Requirement	\$ 1,585,943	100%

1. Based on functionalization allocations. See *Functionalization & Classification* tab.

2. Reflects percentage allocation from the 2016 Rate Study.

Proposed Recycled Water Rates

Variable Charges

Given the amount of consumption relative to the number of meters in the recycled water system, it is expected that almost all (99.5%) of the rate revenue will be collected from the variable charge. **Figure 24** summarizes the variable rate calculation for FY 2023/24.

Figure 24. Recycled Water Variable Rate Calculation

Rate Structure Type	Number of Meters ¹	Water Consumption (hcf/yr.) ²	Target Rev. Req't from Vol. Charges ³	Uniform Commodity Rates (\$/hcf)	Proposed Rate Structure
Uniform Commodity Rate (\$/hcf)	10	1,244,239	\$ 746,544	\$0.60	Uniform

1. Meter counts, consumption rates, and customer class from source file: *Summary Tables_FS v9.xlsx*.

2. Projected FY 2020/21 consumption based on actual usage and a 5% adjustment for conservation. See Table 37.

3. Target revenue adjusted based on DWA's recently adopted uniform commodity rate of \$0.60 per hcf.

Fixed Charges

Fixed charges have been calculated in the same manner as potable water fixed charges. **Figure 25** shows the calculation of the monthly fixed meter charges. In total, the fixed and variable charges collect the target revenue from recycled water customers as shown previously in Figure 24.

Figure 25. Recycled Water Fixed Rate Calculation

Number of Meters by Class and Size	FY 2023/24										Total
	5/8 x 3/4 inch	1 inch	1.5 inch	2 inch	3 inch	4 inch	6 inch	8 inch	10 inch	12 inch	
Recycled Water	5	0	0	0	0	1	4	0	0	0	10
Total Meters/Accounts	5	0	0	0	0	1	4	0	0	0	10
Hydraulic Capacity Factor	1.00	1.00	2.00	3.20	6.40	10.00	20.00	32.00	84.00	106.00	
Total Equivalent Meters	5	0	0	0	0	10	80	0	0	0	95
Monthly Fixed Service Charges											
Customer Costs (\$/Acct/mo.)	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
Capacity Costs (\$/Acct/mo.)	6.96	6.96	13.91	22.26	44.52	69.56	139.12	222.59	584.29	737.32	
Total Monthly Meter Charge	\$6.96	\$6.96	\$13.91	\$22.26	\$44.52	\$69.56	\$139.12	\$222.59	\$584.29	\$737.32	
Annual Fixed Costs Allocated to Monthly Meter Charges											
Customer Costs	\$ -										
Capacity Costs	7,930										
Total Fixed Meter Costs	\$ 7,930										
Annual Revenue from Monthly Meter Charges											
Customer Charges	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Capacity Charges	417	-	-	-	-	835	6,678	-	-	-	7,930
Total Revenue from Mo. Meter Charges	\$ 417	\$ -	\$ -	\$ -	\$ -	\$ 835	\$ 6,678	\$ -	\$ -	\$ -	\$ 7,930

Current vs. Proposed Recycled Water Rates

Figure 26 shows the current and proposed recycled water rates for FY 2023/24 through FY 2027/28.

Figure 26. Current and Proposed Recycled Water Rates

Recycled Water Rate Schedule	Current Rates ¹	Proposed Rates ²				
		FY 2023/24	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28
Fixed Monthly Service Charge						
Fixed Monthly Service Charge:						
5/8 x 3/4 inch	--	\$6.96	\$7.40	\$7.86	\$8.35	\$8.87
1 inch	--	\$6.96	\$7.40	\$7.86	\$8.35	\$8.87
1.5 inch	--	\$13.91	\$14.78	\$15.70	\$16.68	\$17.72
2 inch	\$15.00	\$22.26	\$23.65	\$25.13	\$26.70	\$28.37
3 inch	\$21.00	\$44.52	\$47.30	\$50.26	\$53.40	\$56.74
4 inch	\$45.00	\$69.56	\$73.91	\$78.53	\$83.44	\$88.66
6 inch	\$115.00	\$139.12	\$147.82	\$157.06	\$166.88	\$177.31
8 inch	\$205.00	\$222.59	\$236.50	\$251.28	\$266.99	\$283.68
10 inch	\$225.00	\$584.29	\$620.81	\$659.61	\$700.84	\$744.64
12 inch	\$225.00	\$737.32	\$783.40	\$832.36	\$884.38	\$939.65
Commodity Charges for All Water Consumed						
Uniform Rate for All Customers ³	\$0.79	\$0.60	\$0.65	\$0.70	\$0.75	\$0.80

1. Current recycled water fixed charges set by Resolution No. 978 and does not include the \$35 flow control valve charge for meters 8" or larger.

2. Initial adjustment to rates would be effective January 1, 2024.

3. Uniform commodity rates are effective as of July 1, 2022.

SECTION 4. WASTEWATER RATE STUDY

Key Wastewater Rate Study Issues

DWA manages a wastewater collection system for approximately 2,200 customers within its service area. While DWA bills all wastewater customers for services for collection and treatment, the portion of rate revenue that is retained by DWA represents only the percentage necessary to recover costs for collection and transmission. The remainder of the revenue is passed through to the agencies responsible for treatment. Depending on the customer's location, it is either the City of Palm Springs or Coachella Valley Water District.

Revenue Requirements

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

- **Meeting Net Revenue Requirements:** For FY 2023/24 through FY 2027/28, the projected net revenue requirements (total operating expenses plus rate-funded capital costs, less non-rate revenues) for the wastewater utility are approximately \$308,000 to \$381,000. This is an increase of more than 70% since the last rate study.

Even though current rate revenue is sufficient to fund all operating costs, capital costs, and maintain sufficient reserve funds, NBS is recommending an annual increase of 4.8% each year, which is the general inflation rate, to address the small deficits in the financial plan which will continue to grow without rate increases. Therefore, the charge per EDU increased as a result of this recommendation.

- **Maintaining Reserve Funds:** For the wastewater utility, NBS recommends that DWA target a minimum of approximately \$560,000 in unrestricted reserve funds over the 5-year period. The reserve funds, which are considered unrestricted, consist of the following:
 - **Operating Reserve** should equal 6 months of operating expenses, or approximately \$164,000 in FY 2023/24, which is consistent with existing DWA policy for the potable water utility. An Operating Reserve is intended to promote financial viability in the event of any short-term fluctuation in revenues and/or expenditures.
 - **Reserve for Replacements** should equal 3% of net capital assets, or approximately \$402,000 in FY 2023/24, which is set aside to address long-term capital system replacement and rehabilitation needs. Since DWA does not maintain a capital replacement reserve for the wastewater utility, we have included this amount in the operating reserve which together total approximately \$560,000.

It is projected that the wastewater utility will exceed these reserve targets throughout the 5-year rate period as the current reserve balance is estimated at \$2.0 million.

Figure 27 summarizes the sources and uses of funds, net revenue requirements, and the recommended annual increases in wastewater rate revenue proposed for the next 5 years. **Figure 28** summarizes the projected reserve fund balances and reserve targets.

Figure 27. Summary of Wastewater Revenue Requirements

Summary of Sources and Uses of Funds and Net Revenue Requirements	Budget	5-Year Rate Adoption Period				
	FY 2022/23	FY 2023/24	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28
Sources of Wastewater Funds						
Rate Revenue Under Current Rates	\$ 277,200	\$ 280,126	\$ 283,052	\$ 285,978	\$ 288,904	\$ 291,830
Other Operating Revenue	29,880	30,195	30,511	30,826	31,142	31,457
Non-Rate Revenues	-	-	-	-	-	-
Interest Income	10,800	26,531	26,342	26,156	25,977	25,807
Total Sources of Funds	\$ 317,880	\$ 336,852	\$ 339,905	\$ 342,961	\$ 346,023	\$ 349,095
Uses of Wastewater Funds						
Operating Expenses	\$ 312,850	\$ 327,816	\$ 343,502	\$ 359,940	\$ 377,169	\$ 395,225
Existing Debt Service	-	-	-	-	-	-
New Debt Service	-	-	-	-	-	-
Rate Funded Capital Expenses	35,631	37,024	38,472	39,976	41,539	43,163
Total Use of Funds	\$ 348,481	\$ 364,841	\$ 381,974	\$ 399,916	\$ 418,708	\$ 438,388
Surplus (Deficiency) before Rate Increase	\$ (30,601)	\$ (27,988)	\$ (42,069)	\$ (56,956)	\$ (72,685)	\$ (89,294)
Additional Revenue from Rate Increases ¹	-	13,446	27,825	43,189	59,593	77,094
Surplus (Deficiency) after Rate Increase	\$ (30,601)	\$ (14,542)	\$ (14,244)	\$ (13,766)	\$ (13,092)	\$ (12,200)
Increase in Rate Revenue Needed to Avoid Deficit	0.00%	4.80%	4.80%	4.80%	4.80%	4.80%
Cumulative Increases	0.00%	4.80%	9.83%	15.10%	20.63%	26.42%
Net Revenue Requirement²	\$ 307,801	\$ 308,115	\$ 325,121	\$ 342,934	\$ 361,589	\$ 381,124

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

2. This is the annual amount needed from rates. Net Revenue Requirement = Total Uses of Water Funds - Other Operating Revenue - Non-Rate Revenues - Interest

Figure 28. Summary of Wastewater Reserve Funds

Beginning Reserve Fund Balances and Recommended Reserve Targets	Budget	5-Year Rate Adoption Period				
	FY 2022/23	FY 2023/24	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28
Unappropriated Reserve Fund¹						
Ending Balance	\$ 2,040,818	\$ 2,026,276	\$ 2,012,032	\$ 1,998,266	\$ 1,985,174	\$ 1,972,974
<i>Recommended Minimum Target</i>	<i>570,425</i>	<i>565,908</i>	<i>563,751</i>	<i>560,970</i>	<i>559,584</i>	<i>558,613</i>
Total Ending Balance (Unrestricted)	\$ 2,040,818	\$ 2,026,276	\$ 2,012,032	\$ 1,998,266	\$ 1,985,174	\$ 1,972,974
<i>Recommended Minimum Target</i>	<i>\$ 570,425</i>	<i>\$ 565,908</i>	<i>\$ 563,751</i>	<i>\$ 560,970</i>	<i>\$ 559,584</i>	<i>\$ 558,613</i>

1. The Agency only maintains an Unappropriated Reserve Fund rather than separate operating and capital reserves.

Current vs. Proposed Wastewater Rates

The current wastewater rate structure is based on a rate per Equivalent Dwelling Unit (EDU) which is assigned to each customer according to the expected volume of flow and the strength of effluent produced by each customer. DWA currently collects a charge of \$6.15 per EDU each month to cover operating, maintenance, and administrative costs. However, the number of EDUs and the annual revenue requirements have changed since the previous rate study, and DWA has increased sewer rates by 3.5% per year in an across-the-board manner. Current rates generate approximately \$295,000 to \$300,000 per year which means that the Agency requires minimal rate increases of 4.8% throughout the rate adoption period to keep up with inflation and address the annual deficits.

DWA has chosen to maintain the existing rate structure. However, as a result of the cost-of-service analysis, different rates are recommended going forward. **Figure 29** summarizes the original charge of \$5.36/EDU from the 2017 rate study, the current rate of \$6.15/EDU, which is the result of 3.5% annual rate increases

since 2017, and the updated rate of \$7.31/EDU. The proposed new rate is the 2023 total revenue requirement of \$293,572 divided by the current number of EDUs and reflects the recommended rate increase of 4.8%.

Figure 29. Summary of EDUs, Revenue Requirements, and Wastewater Rates

Customer Class	No. of EDUs	Total Revenue Requirement	Monthly Fixed Charge Per EDU
Total 2017	3,242	\$ 208,553	\$5.36
Current Rate		\$ 296,799	\$6.15
Total 2023	3,348	\$ 293,572	\$7.31

Figure 30 shows DWA’s current and proposed wastewater rates for FY 2023/24 through FY 2027/28. Although the \$/EDU “rate” is the same for all customers, the total monthly charges will differ based on the number of EDUs assigned to each customer.

DWA collects their charges along with charges for treatment provided by outside agencies. Therefore, the total projected charges per EDU will vary depending on what agency provides treatment. **Figure 31** summarizes DWA charges along with treatment charges for various customer classes.

Figure 30. Current and Projected Wastewater Rates

Wastewater Rate Schedule	Current Rates	Proposed Rates				
		FY 2023/24	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28
Projected Increase in Rate Revenue per Financial Plan:		4.80%	4.80%	4.80%	4.80%	4.80%
Fixed Monthly Service Charge Per EDU	\$6.15	\$7.31	\$7.66	\$8.03	\$8.41	\$8.81

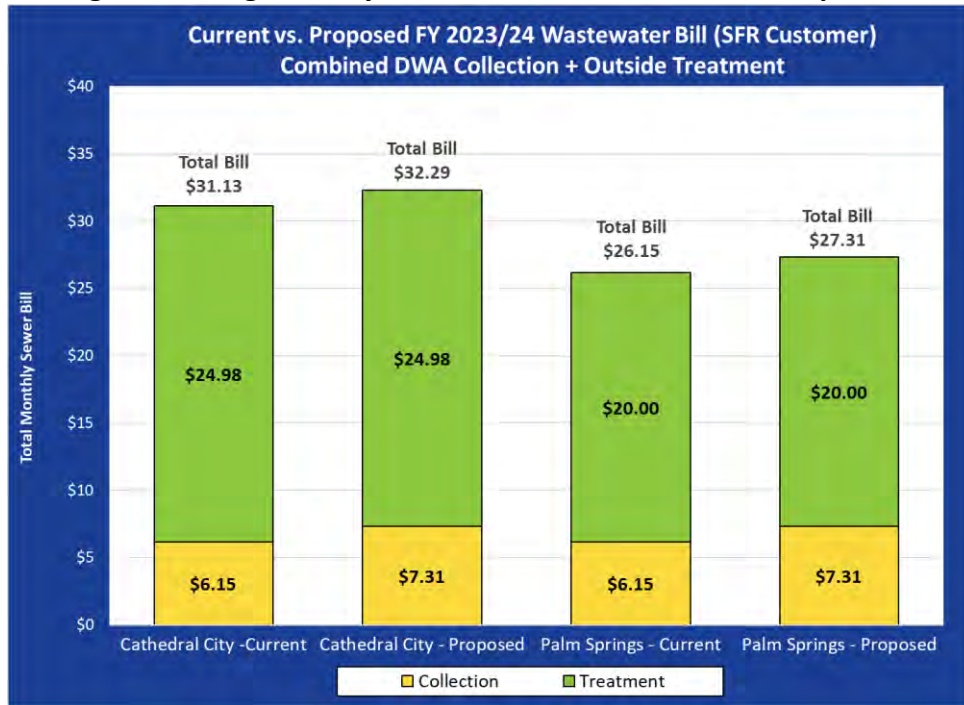
Figure 31. Proposed Wastewater Rates for FY 2023/24

Wastewater Rate Schedule ¹							
Customer Types	EDU Scale	CVWD Treatment - Cathedral City			City Treatment - Palm Oasis / Dream Homes Only		
		CVWD Charges per EDU	DWA Charges per EDU	Total Charges	City of Palm Springs Charges (per EDU)	DWA Charges (per EDU)	Total Charges
Single Family/Condo	1 EDU = 1 Unit	\$24.98	\$7.31	\$32.29	\$20.00	\$7.31	\$27.31
Mobile Home Park	1 EDU = 1 Space	\$24.98	\$7.31	\$32.29	\$20.00 + \$1.98/FU	\$7.31	\$29.29
Apartments	1 EDU = 1 Unit	\$24.98	\$7.31	\$32.29	\$20.00	\$7.31	\$27.31
Hotel/Motel	1/2 EDU = 1 Room	\$24.98	\$7.31	\$32.29	N/A	N/A	N/A
RV Park	1/2 EDU = 1 Space	\$24.98	\$7.31	\$32.29	N/A	N/A	N/A
Comm./Ind./ Inst.	V & F	\$24.98	\$7.31	\$32.29	\$1.98/FU (Min. \$20.00)	\$7.31	\$27.31 Min.
Schools and Colleges	Per Student & EDU	\$24.98	\$7.31	\$32.29	\$1.98/FU (Min. \$20.00)	\$7.31	\$27.31 Min.
All Other Schools	Per Student & EDU	\$24.98	\$7.31	\$32.29	N/A	N/A	N/A

Figure 32 compares the total monthly bill for residential customers under current and proposed rates and includes the outside treatment component, depending on where the customer is located.¹¹

¹¹ Coachella Valley Water District treats the wastewater for customers located in Cathedral City. The City of Palm Springs treats the wastewater for customers located in Palm Springs.

Figure 32. Single Family Residential Wastewater Bill Comparison



SECTION 5. RECOMMENDATIONS AND NEXT STEPS

Consultant Recommendations

NBS recommends DWA take the following actions:

- **Approve and Accept this Study:** NBS recommends the DWA Board of Directors formally approve and adopt this Study and its recommendations and proceed with the next steps outlined below to implement the proposed rates. This will provide documentation of the rate study analyses and the basis for analyzing potential changes to future rates.
- **Implement Recommended Levels of Rate Increases and Proposed Rates:** Based on successfully meeting the Proposition 218 procedural requirements, DWA should proceed with implementing the 5-year schedule of proposed rates (including drought and revenue stabilization rates) and rate increases¹² previously shown in Figure 15, Figure 20, Figure 22, Figure 26, and Figure 30. This will help ensure the continued financial health of DWA's utilities.

Next steps

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

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

NBS' Principal Assumptions and Considerations

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

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

¹² A full rate schedule for Prop 218 purposes is shown in Appendix A at the end of this report.

TECHNICAL APPENDICES

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Appendix A - Prop 218 Rate Tables

Potable Water Rates:

Water Rate Schedule	Current Rates	Proposed Rates				
		FY 2023/24	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28
Fixed Monthly Service Charge						
Meter Size - Standard Meters:						
5/8 x 3/4 inch	\$33.53	\$38.32	\$40.72	\$43.27	\$45.97	\$48.84
1 inch	\$33.53	\$38.32	\$40.72	\$43.27	\$45.97	\$48.84
1.5 inch	\$64.02	\$72.02	\$76.52	\$81.30	\$86.38	\$91.78
2 inch	\$100.61	\$112.46	\$119.49	\$126.96	\$134.90	\$143.33
3 inch	\$198.18	\$240.53	\$255.56	\$271.53	\$288.50	\$306.53
4 inch	\$307.94	\$429.27	\$456.10	\$484.61	\$514.90	\$547.08
6 inch	\$612.85	\$880.88	\$935.94	\$994.44	\$1,056.59	\$1,122.63
8 inch	\$978.73	\$1,622.34	\$1,723.74	\$1,831.47	\$1,945.94	\$2,067.56
10 inch	\$2,564.22	\$2,566.01	\$2,726.39	\$2,896.79	\$3,077.84	\$3,270.21
12 inch	\$3,235.01	\$3,374.87	\$3,585.80	\$3,809.91	\$4,048.03	\$4,301.03
Monthly Fixed Service Charge - Fire Service Meters:						
2 inch	--	\$12.00	\$12.75	\$13.55	\$14.40	\$15.30
3 inch	--	\$20.77	\$22.07	\$23.45	\$24.92	\$26.48
4 inch	\$30.15	\$33.70	\$35.81	\$38.05	\$40.43	\$42.96
6 inch	\$64.99	\$69.25	\$73.58	\$78.18	\$83.07	\$88.26
8 inch	\$111.46	\$115.41	\$122.62	\$130.28	\$138.42	\$147.07
10 inch	\$173.41	\$180.04	\$191.29	\$203.25	\$215.95	\$229.45
12 inch	\$208.26	\$235.44	\$250.16	\$265.80	\$282.41	\$300.06
Commodity Charges for All Water Consumed						
Uniform Rate for All Customers	\$2.28	\$2.38	\$2.53	\$2.69	\$2.86	\$3.04

Drought Rates:

Drought Rate Schedule	Current Rates	FY 2023/24	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28
Up to 20% Conservation	\$2.65	\$2.61	\$2.72	\$2.93	\$3.14	\$3.38
Up to 30% Conservation	\$2.91	\$2.89	\$3.02	\$3.25	\$3.49	\$3.75
Up to 40% Conservation	\$3.26	\$3.26	\$3.41	\$3.67	\$3.94	\$4.23
Up to 50% Conservation	\$3.74	\$3.70	\$3.92	\$4.22	\$4.54	\$4.88
Greater than 50% Conservation	\$4.48	\$4.38	\$4.64	\$4.99	\$5.37	\$5.78

Detail of Rates and Drought Response Charge for Each Drought Stage:

Proposed Drought Rates										
Drought Rate Schedule ¹	FY 2023/24		FY 2024/25		FY 2025/26		FY 2026/27		FY 2027/28	
Uniform Rate for All Customers	\$2.38		\$2.53		\$2.69		\$2.86		\$3.04	
Water Consumption Baseline (hcf/yr) ²	12,743,739 hcf		12,743,739 hcf		12,743,739 hcf		12,743,739 hcf		12,743,739 hcf	
Conservation Target	Drought Response Charge ³	Drought Rate ⁴	Drought Response Charge ³	Drought Rate ⁴	Drought Response Charge ³	Drought Rate ⁴	Drought Response Charge ³	Drought Rate ⁴	Drought Response Charge ³	Drought Rate ⁴
Less than 10% Conservation	\$0.00	\$2.38	\$0.00	\$2.53	\$0.00	\$2.69	\$0.00	\$2.86	\$0.00	\$3.04
Up to 20% Conservation	\$0.23	\$2.61	\$0.19	\$2.72	\$0.24	\$2.93	\$0.28	\$3.14	\$0.34	\$3.38
Up to 30% Conservation	\$0.52	\$2.89	\$0.49	\$3.02	\$0.56	\$3.25	\$0.63	\$3.49	\$0.71	\$3.75
Up to 40% Conservation	\$0.88	\$3.26	\$0.88	\$3.41	\$0.98	\$3.67	\$1.08	\$3.94	\$1.19	\$4.23
Up to 50% Conservation	\$1.32	\$3.70	\$1.39	\$3.92	\$1.53	\$4.22	\$1.68	\$4.54	\$1.84	\$4.88
Greater than 50% Conservation	\$2.00	\$4.38	\$2.11	\$4.64	\$2.30	\$4.99	\$2.51	\$5.37	\$2.74	\$5.78

1. ACTIVATION - The Drought Response Charge will NOT be added on water bills unless approved by the Desert Water Agency Board. If the response charge is activated, it will remain in effect as necessary and will be reviewed by the Agency Board a minimum of every six (6) months for a determination of necessity until the response charge is deactivated.
2. Baseline water consumption is based on water usage for FY 2020/21 less 5% for conservation, the same assumption used in the proposed volumetric rates.
3. Drought Response Charge is added to the Uniform Rate on a per unit basis to cover the cost of water service during times of State Agency mandated conservation and/or extreme water supply shortage, resulting in water consumption below the established baseline.
4. The Drought Rate equals the Volumetric Rate plus Volumetric Response Charge. This does not include pumping charges which will apply where applicable.

Revenue Stabilization Rates:

Revenue Stabilization Rate Schedule*	FY 2023/24	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28
10% Revenue Stabilization Rate	\$2.64	\$2.81	\$2.98	\$3.17	\$3.37
15% Revenue Stabilization Rate	\$2.80	\$2.97	\$3.16	\$3.36	\$3.57
20% Revenue Stabilization Rate	\$2.97	\$3.16	\$3.36	\$3.57	\$3.79
25% Revenue Stabilization Rate	\$3.17	\$3.37	\$3.58	\$3.80	\$4.04
30% Revenue Stabilization Rate	\$3.40	\$3.61	\$3.84	\$4.08	\$4.33

* Revenue Stabilization Rates would be implemented if current revenue from water sales are below the percentages indicated.

Recycled Water Rates:

Recycled Water Rate Schedule	Current Rates ¹	Proposed Rates ²				
		FY 2023/24	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28
Fixed Monthly Service Charge						
Fixed Monthly Service Charge:						
5/8 x 3/4 inch	--	\$6.96	\$7.40	\$7.86	\$8.35	\$8.87
1 inch	--	\$6.96	\$7.40	\$7.86	\$8.35	\$8.87
1.5 inch	--	\$13.91	\$14.78	\$15.70	\$16.68	\$17.72
2 inch	\$15.00	\$22.26	\$23.65	\$25.13	\$26.70	\$28.37
3 inch	\$21.00	\$44.52	\$47.30	\$50.26	\$53.40	\$56.74
4 inch	\$45.00	\$69.56	\$73.91	\$78.53	\$83.44	\$88.66
6 inch	\$115.00	\$139.12	\$147.82	\$157.06	\$166.88	\$177.31
8 inch	\$205.00	\$222.59	\$236.50	\$251.28	\$266.99	\$283.68
10 inch	\$225.00	\$584.29	\$620.81	\$659.61	\$700.84	\$744.64
12 inch	\$225.00	\$737.32	\$783.40	\$832.36	\$884.38	\$939.65
Commodity Charges for All Water Consumed						
Uniform Rate for All Customers ³	\$0.79	\$0.60	\$0.65	\$0.70	\$0.75	\$0.80

1. Current recycled water fixed charges set by Resolution No. 978 and does not include the \$35 flow control valve charge for meters 8" or larger.
2. Initial adjustment to rates would be effective January 1, 2024.
3. Uniform commodity rates are effective as of July 1, 2022.

Wastewater Rates:

Wastewater Rate Schedule ¹							
Customer Types	EDU Scale	CVWD Treatment - Cathedral City			City Treatment - Palm Oasis / Dream Homes Only		
		CVWD Charges per EDU	DWA Charges per EDU	Total Charges	City of Palm Springs Charges (per EDU)	DWA Charges (per EDU)	Total Charges
Single Family/Condo	1 EDU = 1 Unit	\$24.98	\$7.31	\$32.29	\$20.00	\$7.31	\$27.31
Mobile Home Park	1 EDU = 1 Space	\$24.98	\$7.31	\$32.29	\$20.00 + \$1.98/FU	\$7.31	\$29.29
Apartments	1 EDU = 1 Unit	\$24.98	\$7.31	\$32.29	\$20.00	\$7.31	\$27.31
Hotel/Motel	1/2 EDU = 1 Room	\$24.98	\$7.31	\$32.29	N/A	N/A	N/A
RV Park	1/2 EDU = 1 Space	\$24.98	\$7.31	\$32.29	N/A	N/A	N/A
Comm./Ind./ Inst.	V & F	\$24.98	\$7.31	\$32.29	\$1.98/FU (Min. \$20.00)	\$7.31	\$27.31 Min.
Schools and Colleges	Per Student & EDU	\$24.98	\$7.31	\$32.29	\$1.98/FU (Min. \$20.00)	\$7.31	\$27.31 Min.
All Other Schools	Per Student & EDU	\$24.98	\$7.31	\$32.29	N/A	N/A	N/A

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

Appendix B - Detailed Water & Recycled Water Rate Study Tables & Figures

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TABLE 1 : FINANCIAL PLAN AND SUMMARY OF REVENUE REQUIREMENTS

RATE REVENUE REQUIREMENTS SUMMARY ¹	Actuals	Actuals	Budget	5-Year Rate Projected Period					Projected				
	FY 2020/21	FY 2021/22	FY 2022/23	FY 2023/24	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30	FY 2030/31	FY 2031/32	FY 2032/33
Sources of Water Funds													
<u>Operating Fund Revenues:</u>													
Water Sales	\$ 37,855,469	\$ 39,412,065	\$ 41,614,000	\$ 42,053,272	\$ 42,497,180	\$ 42,941,089	\$ 43,384,998	\$ 43,828,906	\$ 44,272,815	\$ 44,716,724	\$ 45,160,632	\$ 45,604,655	\$ 46,048,677
Power Sales ³	23,184	97,688	111,000	111,000	111,000	111,000	111,000	111,000	111,000	111,000	111,000	111,000	111,000
Reclamation Water Sales	1,182,864	1,212,480	897,000	906,469	916,037	925,606	935,174	944,743	954,311	963,880	973,449	983,020	992,591
Fire Protection	386,089	412,730	410,900	415,237	419,621	424,004	428,387	432,770	437,153	441,537	445,920	450,304	454,688
Interest Income ⁴	209,824	232,528	583,200	213,180	192,542	195,825	211,330	237,064	278,316	301,174	313,532	313,970	339,336
Other Revenue	3,473,232	1,942,009	2,874,000	3,431,620	3,444,746	3,457,872	3,470,998	3,484,124	3,497,250	3,510,376	3,523,629	3,537,127	3,550,256
Total: Sources of Water Funds	\$ 43,130,663	\$ 43,309,500	\$ 46,490,100	\$ 47,130,778	\$ 47,581,125	\$ 48,055,395	\$ 48,541,887	\$ 49,038,607	\$ 49,550,845	\$ 50,044,690	\$ 50,528,162	\$ 51,000,075	\$ 51,496,548
Uses of Water Funds: ⁵													
<u>Operating Fund Expenses:</u>													
Source of Supply - Groundwater Replenish. Assm't.	\$ 5,765,675	\$ 5,914,733	\$ 5,506,800	\$ 6,648,313	\$ 7,301,000	\$ 7,972,840	\$ 8,694,515	\$ 9,477,431	\$ 9,926,519	\$ 10,077,279	\$ 10,216,833	\$ 10,298,874	\$ 10,380,703
Source of Supply - Other Supply Costs	527,026	424,237	1,290,720	1,351,545	1,415,244	1,481,953	1,551,816	1,624,981	1,701,606	1,781,853	1,865,895	1,953,912	2,046,091
Pumping Expenses	3,761,844	4,382,413	4,759,800	5,013,859	5,281,589	5,563,729	5,861,061	6,174,409	6,504,639	6,852,669	7,219,463	7,606,039	8,013,472
Regulatory Water Treatment	720,936	869,423	873,720	912,904	953,859	996,666	1,041,407	1,088,173	1,137,054	1,188,148	1,241,555	1,297,380	1,355,734
Transmission & Distribution	2,738,176	2,939,952	4,317,240	4,518,832	4,729,876	4,950,815	5,182,115	5,424,264	5,677,773	5,943,175	6,221,032	6,511,930	6,816,482
Customer Account	1,072,404	991,507	1,272,600	1,329,909	1,389,873	1,452,615	1,518,268	1,586,967	1,658,856	1,734,084	1,812,809	1,895,194	1,981,413
Administrative & General	10,646,479	8,686,005	14,606,160	15,245,137	15,912,440	16,609,336	17,337,155	18,097,284	18,891,172	19,720,336	20,586,361	21,490,904	22,435,696
Regulatory Expenditures	312,270	361,092	426,360	446,825	468,273	490,750	514,306	538,993	564,864	591,978	620,393	650,172	681,380
Net Other Operating Expenditures	(973,279)	(739,335)	(1,536,480)	(1,536,480)	(1,536,480)	(1,536,480)	(1,536,480)	(1,536,480)	(1,536,480)	(1,536,480)	(1,536,480)	(1,536,480)	(1,536,480)
Total: Operating Fund Expenses	\$ 24,571,531	\$ 23,830,027	\$ 31,516,920	\$ 33,930,845	\$ 35,915,673	\$ 37,982,225	\$ 40,164,164	\$ 42,476,021	\$ 44,526,002	\$ 46,353,042	\$ 48,247,860	\$ 50,167,924	\$ 52,174,491
<u>Other Expenditures:</u>													
Non Operating Expenses	\$ 1,125,806	\$ 1,109,144	\$ 943,560	\$ 981,747	\$ 1,021,483	\$ 1,062,830	\$ 1,105,855	\$ 1,150,625	\$ 1,197,212	\$ 1,245,689	\$ 1,296,134	\$ 1,348,626	\$ 1,403,249
Snow Creek Hydro Expenses	33,809	69,661	60,000	62,880	65,898	69,061	72,376	75,850	79,491	83,307	87,305	91,496	95,888
Recycled Water System Expenses	885,837	1,203,590	1,368,960	1,432,492	1,498,986	1,568,582	1,641,425	1,717,667	1,797,466	1,880,991	1,968,415	2,059,921	2,155,701
Total: Other Operating Expenses	\$ 2,045,452	\$ 2,382,395	\$ 2,372,520	\$ 2,477,119	\$ 2,586,367	\$ 2,700,474	\$ 2,819,656	\$ 2,944,142	\$ 3,074,170	\$ 3,209,987	\$ 3,351,855	\$ 3,500,044	\$ 3,654,838
<u>Debt Service and Capital Expenditures:</u>													
Existing Debt Service	\$ 1,342,750	\$ 1,338,950	\$ 1,344,150	\$ 1,344,650	\$ 1,342,650	\$ 1,344,450	\$ 1,339,850	\$ 1,345,100	\$ 1,342,850	\$ 1,343,250	\$ 1,342,050	\$ 1,344,250	\$ 1,344,650
New Debt Service	-	-	-	-	-	-	-	-	-	-	-	-	-
Rate-Funded Capital Expenses	10,567,231	11,329,351	10,460,946	12,234,410	13,040,394	13,554,183	14,370,585	14,936,385	16,274,221	17,563,374	18,827,665	13,944,400	14,493,536
Subtotal: Debt Service and Capital Expenditures	\$ 11,909,981	\$ 12,668,301	\$ 11,805,096	\$ 13,579,060	\$ 14,383,044	\$ 14,898,633	\$ 15,710,435	\$ 16,281,485	\$ 17,617,071	\$ 18,906,624	\$ 20,169,715	\$ 15,288,650	\$ 15,838,186
Total: Uses of Water Funds	\$ 38,526,964	\$ 38,880,723	\$ 45,694,536	\$ 49,987,024	\$ 52,885,084	\$ 55,581,332	\$ 58,694,256	\$ 61,701,648	\$ 65,217,242	\$ 68,469,653	\$ 71,769,430	\$ 68,956,618	\$ 71,667,515
Plus: Revenue from Rate Increases	-	-	-	1,330,610	5,546,630	8,672,109	12,054,642	15,712,400	17,692,314	19,763,878	21,273,629	22,835,767	24,451,554
Annual Surplus/(Deficit)	\$ 4,603,700	\$ 4,428,777	\$ 795,564	\$ (1,525,636)	\$ 242,672	\$ 1,146,172	\$ 1,902,274	\$ 3,049,359	\$ 2,025,917	\$ 1,338,915	\$ 32,360	\$ 4,879,225	\$ 4,280,587
Net Revenue Req't. (Total Uses less Non-Rate Revenue)	\$ 34,434,634	\$ 36,195,769	\$ 41,715,436	\$ 45,815,986	\$ 48,717,176	\$ 51,392,632	\$ 54,472,541	\$ 57,436,690	\$ 60,893,523	\$ 64,105,567	\$ 67,375,349	\$ 64,544,217	\$ 67,212,234
Total Rate Revenue After Rate Increases	\$ 38,264,743	\$ 39,922,483	\$ 42,135,900	\$ 43,910,119	\$ 48,574,431	\$ 52,148,202	\$ 55,979,027	\$ 60,085,076	\$ 62,513,282	\$ 65,033,138	\$ 66,991,181	\$ 69,001,726	\$ 71,065,919
Projected Annual Rate Revenue Increase⁶	0.00%	0.00%	0.00%	6.25%	6.25%	6.25%	6.25%	6.25%	3.00%	3.00%	2.00%	2.00%	2.00%
Cumulative Increase from Annual Revenue Increases	0.00%	0.00%	0.00%	6.25%	12.89%	19.95%	27.44%	35.41%	39.47%	43.65%	46.53%	49.46%	52.45%
Debt Coverage After Rate Increase⁷	13.82	14.55	11.14	10.81	12.82	13.94	15.25	16.56	16.92	17.46	17.55	17.61	17.68

1. Revenue and expenses for FY 2020/21 through FY 2022/23 provided by Agency staff. Source files: [2] 2021-06 - OP Revenue.PDF, [12d] 2021-06 - OP Expense.pdf, 2022-06- OP Revenue & Expense.PDF, 2022-2023 BUDGETREV.xlsx, & 2022-2023 BUDGETEXP - Augmented 8-2-2022.xlsx.

2. Initial rate increases are anticipated to be effective January 1, 2024 and each January 1st thereafter.

3. Power sales are projected to remain steady with no increases.

4. Interest income for FY 2020/21 through FY 2022/23 provided by Agency staff and calculated for all future years. This is the estimated interest income in the Operating Reserve. See Table 2 below for the calculation of the Interest income for all other reserves funds.

5. Operating fund expenses do not include depreciation since it is a non-cash expense.

6. Newly proposed rates are for FY 2023/24 through FY 2027/28 with an implementation data of January 1, 2024.

7. Debt coverage requirement (excluding the Franchise Fee) is 1.15. Source file: [7b] 2016 Bond Preliminary Official Statement.pdf. Conditional formatting has been applied to highlight years where the debt coverage ratio is not met.

3	<-- Select Financial Plan Scenario Here													
Financial Plan Alternatives		FY 2020/21	FY 2021/22	FY 2022/23	FY 2023/24	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30	FY 2030/31	FY 2031/32	FY 2032/33
1	Alternative 1 - 1% Annual Rate Increases	0.00%	0.00%	0.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%
2	Alternative 2 - 3% Inflationary Rate Increases	0.00%	0.00%	0.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
3	Alternative 3 - Custom Rate Increases	0.00%	0.00%	0.00%	6.25%	6.25%	6.25%	6.25%	6.25%	6.25%	6.25%	6.25%	6.25%	6.25%
4	Alternative 4 - No Rate Increases	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

TABLE 2 : WATER RESERVE FUND SUMMARY

SUMMARY OF CASH ACTIVITY	Actuals	Actuals	Budget	5-Year Rate Projected Period					Projected				
	FY 2020/21	FY 2021/22	FY 2022/23	FY 2023/24	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30	FY 2030/31	FY 2031/32	FY 2032/33
Unrestricted Reserves:													
Total Beginning Cash¹	\$ 14,080,000	\$ 15,626,000	\$ 18,227,700										
Operating Reserve (Contingency Reserve)													
Beginning Reserve Balance	\$ 11,320,000	\$ 12,866,000	\$ 15,467,700	\$ 15,758,460	\$ 14,232,824	\$ 14,475,496	\$ 15,621,668	\$ 17,523,942	\$ 20,573,300	\$ 22,263,001	\$ 23,176,521	\$ 23,208,881	\$ 25,083,962
Plus: Net Cash Flow (After Rate Increases)	4,603,700	4,428,777	795,564	(1,525,636)	242,672	1,146,172	1,902,274	3,049,359	2,025,917	1,338,915	32,360	4,879,225	4,280,587
Plus: Transfer of Debt Reserve Surplus	-	-	-	-	-	-	-	-	-	-	-	-	-
Less: Transfer Out to Capital Replacement Reserve	(3,637,934)	(5,379,763)	(504,804)	-	-	-	-	-	(336,216)	(425,395)	-	(3,004,144)	(3,277,303)
Ending Operating Reserve Balance	\$ 12,285,765	\$ 11,915,014	\$ 15,758,460	\$ 14,232,824	\$ 14,475,496	\$ 15,621,668	\$ 17,523,942	\$ 20,573,300	\$ 22,263,001	\$ 23,176,521	\$ 23,208,881	\$ 25,083,962	\$ 26,087,245
Target Ending Balance (6-months of O&M)²	\$ 12,285,765	\$ 11,915,014	\$ 15,758,460	\$ 16,965,422	\$ 17,957,836	\$ 18,991,112	\$ 20,082,082	\$ 21,238,010	\$ 22,263,001	\$ 23,176,521	\$ 24,123,930	\$ 25,083,962	\$ 26,087,245
Capital Replacement Reserve													
Beginning Reserve Balance	\$ 2,760,000	\$ 2,760,000	\$ 2,760,000	\$ 3,739,804	\$ 5,328,804	\$ 5,428,804	\$ 5,528,804	\$ 5,628,804	\$ 5,728,804	\$ 6,165,020	\$ 6,690,414	\$ 6,790,414	\$ 9,894,559
Plus: Grant Proceeds	-	475,000	475,000	1,589,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000
Plus: Transfer of Operating Reserve Surplus	3,637,934	5,379,763	504,804	-	-	-	-	-	336,216	425,395	-	3,004,144	3,277,303
Less: Use of Reserves for Capital Projects	-	-	-	-	-	-	-	-	-	-	-	-	-
Ending Capital and Infrastructure Reserve Balance	\$ 6,397,934	\$ 8,614,763	\$ 3,739,804	\$ 5,328,804	\$ 5,428,804	\$ 5,528,804	\$ 5,628,804	\$ 5,728,804	\$ 6,165,020	\$ 6,690,414	\$ 6,790,414	\$ 9,894,559	\$ 13,271,862
Target Ending Balance (6% of Net Assets)	\$ 10,799,600	\$ 11,184,400	\$ 11,507,200	\$ 11,988,200	\$ 12,415,100	\$ 12,859,100	\$ 13,337,300	\$ 13,834,100	\$ 14,393,800	\$ 15,011,800	\$ 15,684,800	\$ 16,053,500	\$ 16,443,000
Ending Balance - Unrestricted Reserves Only	\$ 18,683,700	\$ 20,529,777	\$ 19,498,264	\$ 19,561,628	\$ 19,904,299	\$ 21,150,472	\$ 23,152,745	\$ 26,302,104	\$ 28,428,021	\$ 29,866,935	\$ 29,999,296	\$ 34,978,521	\$ 39,359,107
Min. Target Ending Balance - Unrestricted Reserves	\$ 23,085,365	\$ 23,099,414	\$ 27,265,660	\$ 28,953,622	\$ 30,372,936	\$ 31,850,212	\$ 33,419,382	\$ 35,072,110	\$ 36,656,801	\$ 38,188,321	\$ 39,808,730	\$ 41,137,462	\$ 42,530,245
Ending Surplus/(Deficit) Compared to Reserve Targets	\$ (4,401,666)	\$ (2,569,637)	\$ (7,767,396)	\$ (9,391,995)	\$ (10,468,637)	\$ (10,699,741)	\$ (10,266,636)	\$ (8,770,006)	\$ (8,228,780)	\$ (8,321,386)	\$ (9,809,434)	\$ (6,158,941)	\$ (3,171,138)
Days Cash on Hand	264	298	217	203	195	197	204	220	227	229	221	248	269
Additional Reserves:													
Beginning Reserve Balances		\$ 7,675,000	\$ 7,778,613	\$ 7,883,842	\$ 7,990,494	\$ 8,098,590	\$ 8,208,147	\$ 8,319,187	\$ 8,431,729	\$ 8,545,794	\$ 8,661,401	\$ 8,778,572	\$ 8,897,329
Additional Water ³	-	-	-	-	-	-	-	-	-	-	-	-	-
Land Acquisitions	675,000	-	-	-	-	-	-	-	-	-	-	-	-
Retirement Benefits	5,000,000	-	-	-	-	-	-	-	-	-	-	-	-
Disaster Response	2,000,000	-	-	-	-	-	-	-	-	-	-	-	-
Plus: Interest Earnings	-	103,613	105,229	106,653	108,095	109,558	111,040	112,542	114,064	115,607	117,171	118,757	120,363
Ending Balance - Additional Reserves	\$ 7,675,000	\$ 7,778,613	\$ 7,883,842	\$ 7,990,494	\$ 8,098,590	\$ 8,208,147	\$ 8,319,187	\$ 8,431,729	\$ 8,545,794	\$ 8,661,401	\$ 8,778,572	\$ 8,897,329	\$ 9,017,692
Grand Total Ending Balance - All Reserves	\$ 26,358,700	\$ 28,308,389	\$ 27,382,105	\$ 27,552,122	\$ 28,002,889	\$ 29,358,619	\$ 31,471,933	\$ 34,733,833	\$ 36,973,814	\$ 38,528,336	\$ 38,777,868	\$ 43,875,850	\$ 48,376,800
Days Cash on Hand	359	392	292	274	264	263	267	279	284	284	275	299	318
Annual Interest Earnings Rate⁴	1.35%	1.35%	1.35%	1.35%	1.35%	1.35%	1.35%	1.35%	1.35%	1.35%	1.35%	1.35%	1.35%

1. Beginning cash balances provided by Agency staff for FY 2020/21 and FY 2021/22. Source files: [5] 2021-06 - OP Trial Balance.PDF & Updated Operating Fund Trial Balance 06-30-2022 (3).PDF.

2. Target Operating Reserve balance is set to 50%, or 6 months, of annual operating expenditures.

3. The reserve for additional water is funded with property taxes and the supplemental imported water fee.

4. Historical interest earning rates are per the average annual yields for funds invested in LAIF (2018-2022). The source is the California State Treasurer's website: <https://www.treasurer.ca.gov/pmia-laif/historical/annual.asp>.

CHART 1

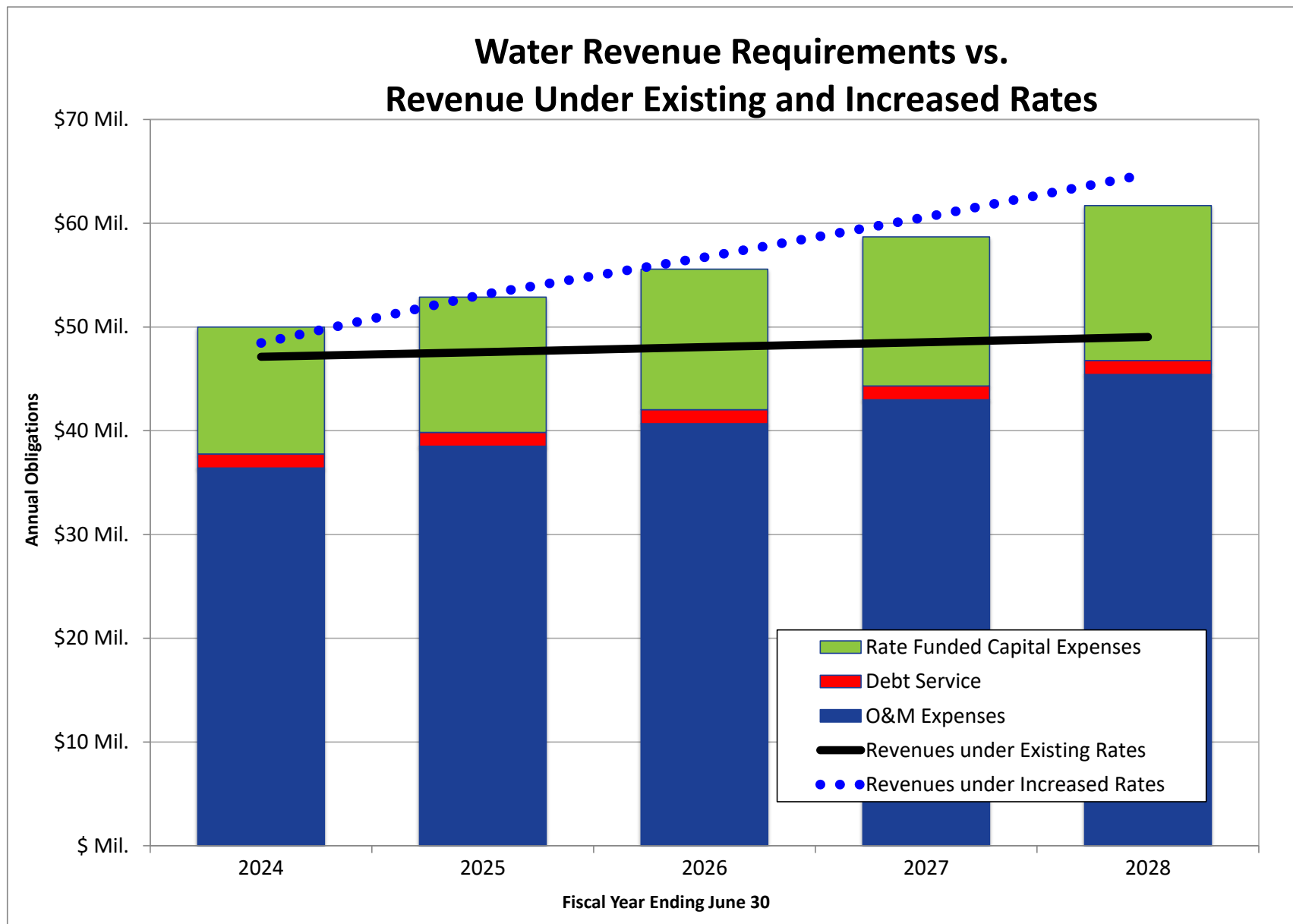


CHART 2

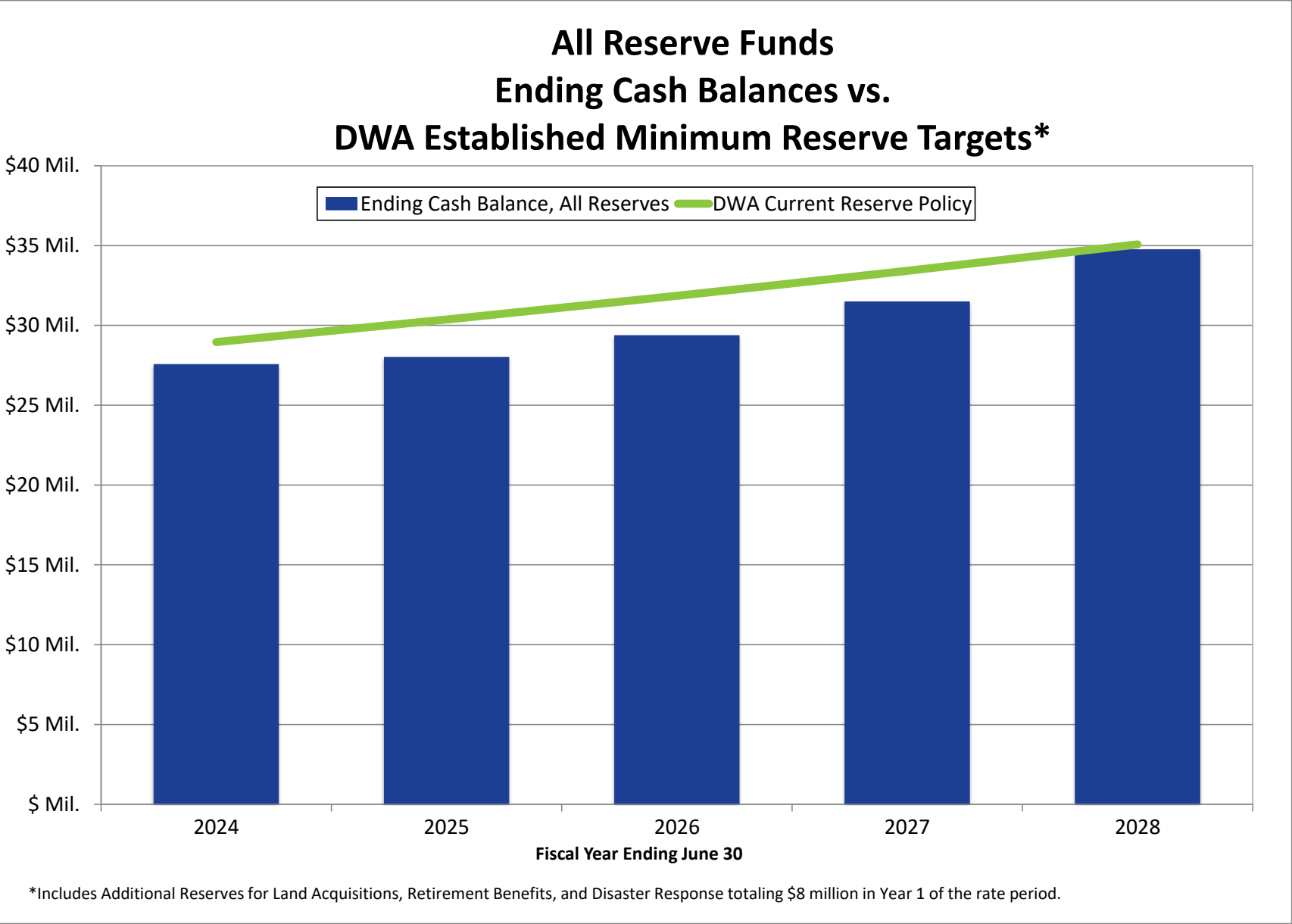


CHART 3

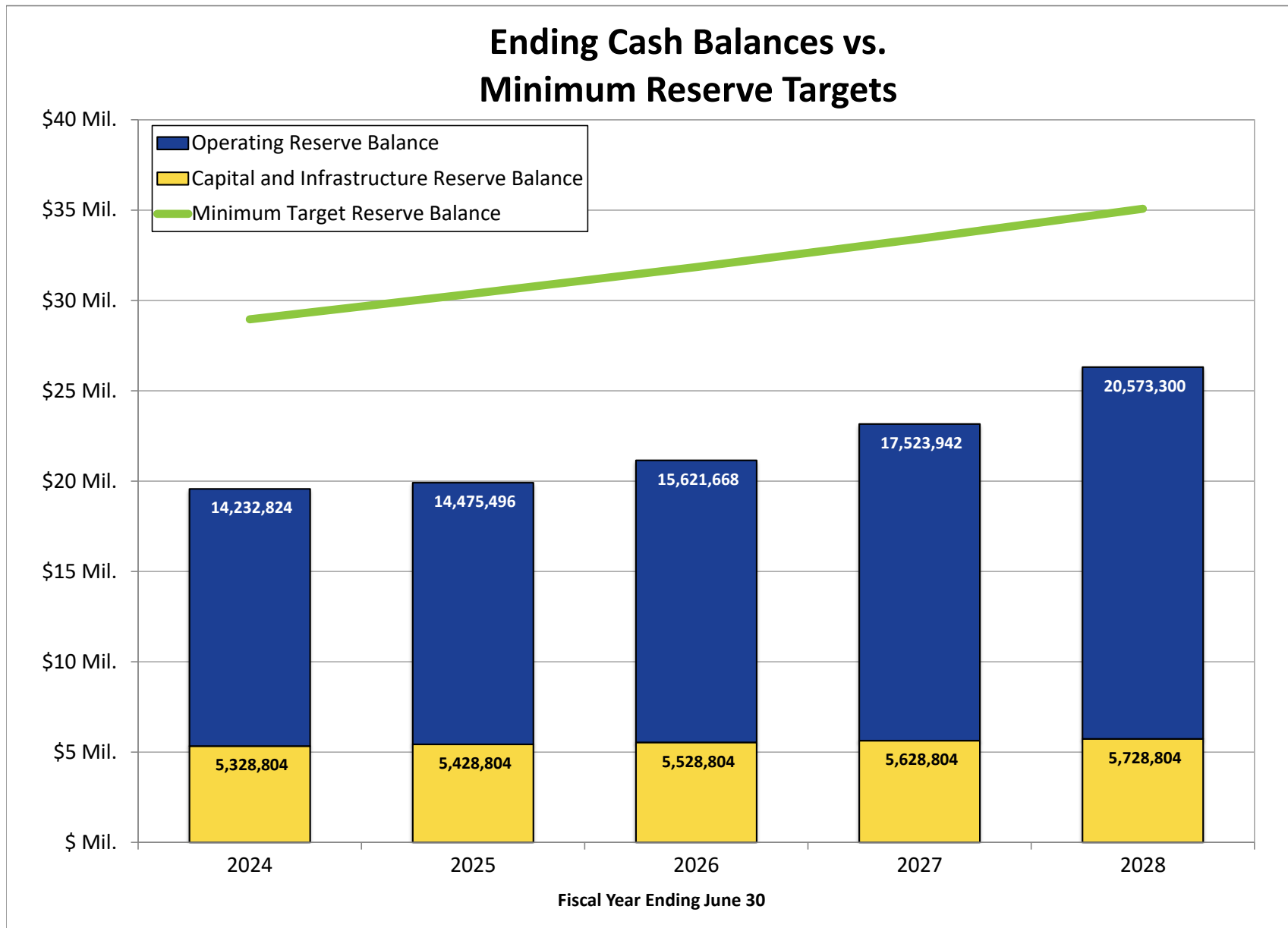


CHART 4

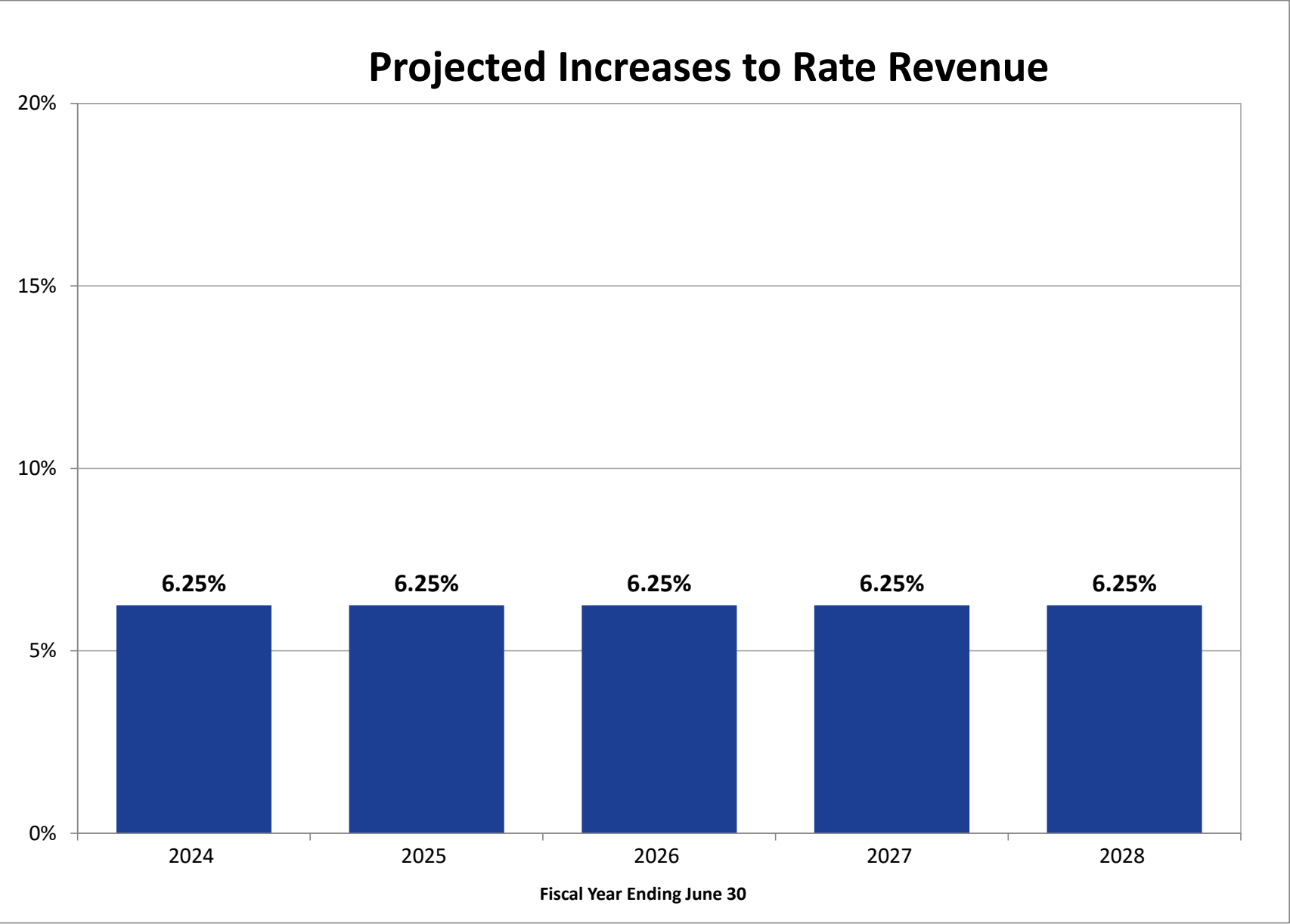


CHART 5

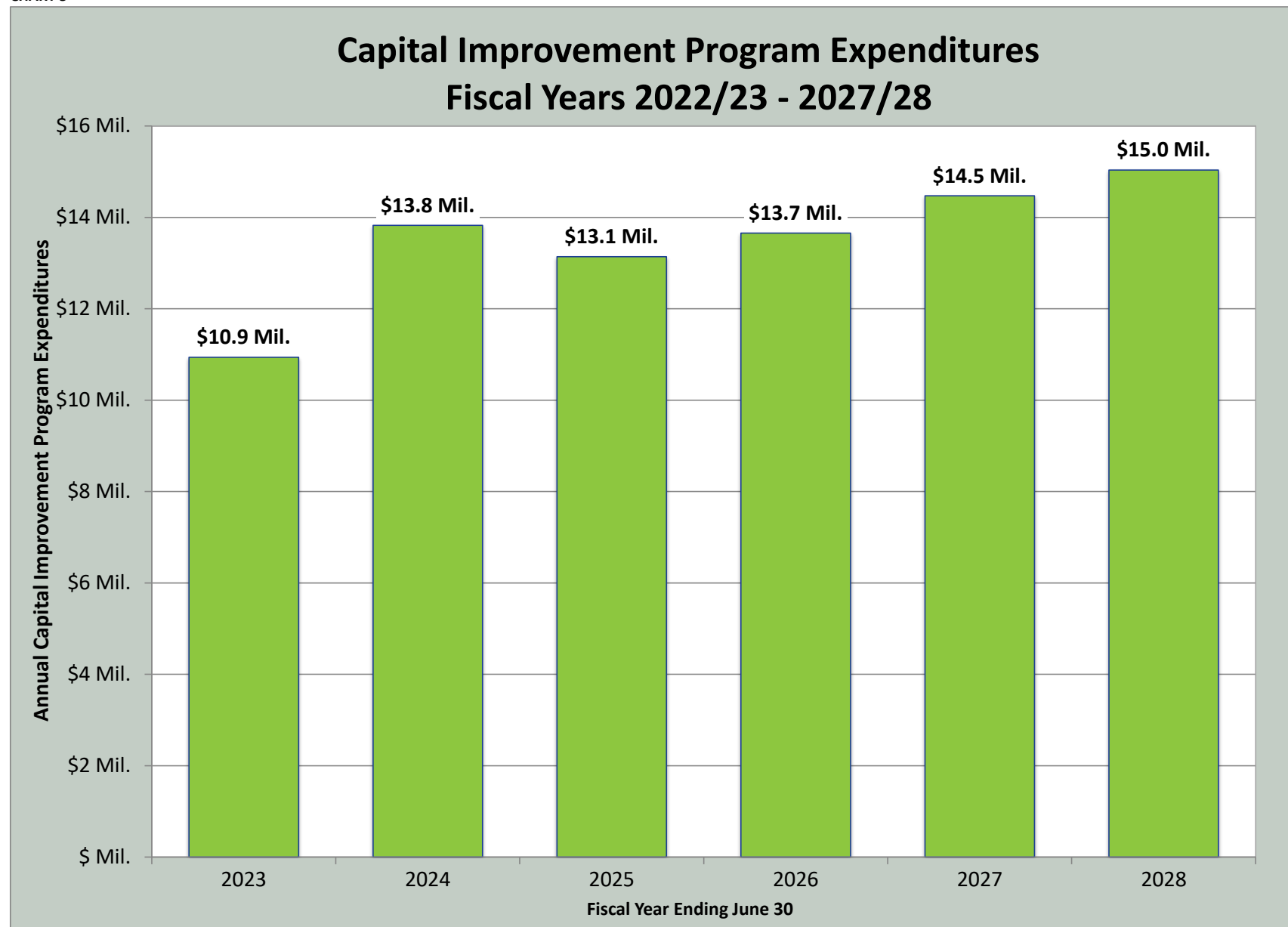


TABLE 3 : REVENUE FORECAST¹

DESCRIPTION	Basis	Actuals	Actuals	Budget	5-Year Rate Projected Period					Projected						
		FY 2020/21	FY 2021/22	FY 2022/23	FY 2023/24	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30	FY 2030/31	FY 2031/32	FY 2032/33		
Sources Of Water Funds																
Metered Sales - Gen Customers	1	\$ 27,026,298	\$ 28,738,284	\$ 41,614,000	\$ 42,053,272	\$ 42,497,180	\$ 42,941,089	\$ 43,384,998	\$ 43,828,906	\$ 44,272,815	\$ 44,716,724	\$ 45,160,632	\$ 45,604,655	\$ 46,048,677		
Metered Sales - Commercial	1	9,039,911	8,898,370	Included												
Metered Sales - Whitewater	1	303,830	320,447	Included												
Metered Sales - Public Authority	1	1,485,430	1,454,965	Included												
Other Operating Revenues																
Fire Services - Public & Private	1	386,089	412,730	410,900	415,237	419,621	424,004	428,387	432,770	437,153	441,537	445,920	450,304	454,688		
Charge for Installation of Service & Meters	See Exh 1A	190,618	205,846	189,700	497,224	497,224	497,224	497,224	497,224	497,224	497,224	497,351	497,351	497,351		
Backup Facility Charge	See Exh 1A	1,686,018	1,073,028	1,201,000	1,438,107	1,438,107	1,438,107	1,438,107	1,438,107	1,438,107	1,438,107	1,438,107	1,438,475	1,438,475		
Turn-On Charges	1	8,427	12,770	167,000	168,763	170,544	172,326	174,107	175,889	177,670	179,451	181,233	183,015	184,797		
Late Fee Charges	1	(325)	340,050	301,200	304,379	307,592	310,805	314,018	317,231	320,444	323,657	326,870	330,084	333,298		
Services Rendered - Customers	1	346,268	321,191	311,600	314,889	318,213	321,537	324,861	328,185	331,509	334,833	338,157	341,481	344,806		
Revenue - General Fund	1	111,544	115,670	108,600	109,746	110,905	112,063	113,222	114,380	115,539	116,697	117,856	119,014	120,173		
Inspection Labor-Work-Order	1	(50)	(125)	-	-	-	-	-	-	-	-	-	-	-		
Plan Check Fees	1	9,008	12,529	8,200	8,287	8,374	8,462	8,549	8,636	8,724	8,811	8,899	8,986	9,074		
Fire Flow Model Fees	1	19,000	19,140	18,900	19,100	19,301	19,503	19,704	19,906	20,108	20,309	20,511	20,712	20,914		
Design Review Fees	1	-	700	-	-	-	-	-	-	-	-	-	-	-		
Front Footage Charges	1	54,600	-	-	-	-	-	-	-	-	-	-	-	-		
Power Sales																
Snow Creek Hydro Sales	8	23,184	97,688	111,000	111,000	111,000	111,000	111,000	111,000	111,000	111,000	111,000	111,000	111,000		
Non-Operating Revenues																
Revenue From Leases	8	171,701	222,444	189,300	189,300	189,300	189,300	189,300	189,300	189,300	189,300	189,300	189,300	189,300		
Interest S/T Investments	Refer to FP	209,893	221,399	583,200	-	-	-	-	-	-	-	-	-	-		
Interest - Miscellaneous	Refer to FP	-	11,128	-	-	-	-	-	-	-	-	-	-	-		
Interest - Other Investments	Refer to FP	(68)	-	-	-	-	-	-	-	-	-	-	-	-		
Unrealized Gain/Loss Investment	8	(29,465)	(1,035,176)	-	-	-	-	-	-	-	-	-	-	-		
Gain/Loss Sale Of Investments	8	-	(710)	-	-	-	-	-	-	-	-	-	-	-		
Services Rendered - Other	8	4,060	3,920	-	-	-	-	-	-	-	-	-	-	-		
Other Income	8	63,420	(740)	-	-	-	-	-	-	-	-	-	-	-		
DWA Front Footages Charges	8	-	90,300	-	-	-	-	-	-	-	-	-	-	-		
Contributed Rev - Constr W.O.	1	723,435	541,122	315,000	318,325	321,685	325,045	328,406	331,766	335,126	338,486	341,846	345,208	348,569		
Revenue App To Prior Years	8	(14,445)	685	-	-	-	-	-	-	-	-	-	-	-		
Government Grant Funding	See Exh 2	-	-	-	-	-	-	-	-	-	-	-	-	-		
Gains On Retirements	8	129,047	18,552	63,100	63,100	63,100	63,100	63,100	63,100	63,100	63,100	63,100	63,100	63,100		
Discounts	8	371	814	400	400	400	400	400	400	400	400	400	400	400		
Reclamation Sales																
Water Reclamation Sales	1	1,182,864	1,212,480	897,000	906,469	916,037	925,606	935,174	944,743	954,311	963,880	973,449	983,020	992,591		
TOTAL: REVENUE		\$ 43,130,663	\$ 43,309,500	\$ 46,490,100	\$ 46,917,597	\$ 47,388,584	\$ 47,859,570	\$ 48,330,557	\$ 48,801,543	\$ 49,272,530	\$ 49,743,516	\$ 50,214,630	\$ 50,686,105	\$ 51,157,212		

TABLE 4 : REVENUE SUMMARY

DESCRIPTION	Actuals	Actuals	Budget	5-Year Rate Projected Period					Projected				
	FY 2020/21	FY 2021/22	FY 2022/23	FY 2023/24	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30	FY 2030/31	FY 2031/32	FY 2032/33
Operating Revenues													
Water Sales	\$ 37,855,469	\$ 39,412,065	\$ 41,614,000	\$ 42,053,272	\$ 42,497,180	\$ 42,941,089	\$ 43,384,998	\$ 43,828,906	\$ 44,272,815	\$ 44,716,724	\$ 45,160,632	\$ 45,604,655	\$ 46,048,677
Power Sales	23,184	97,688	111,000	111,000	111,000	111,000	111,000	111,000	111,000	111,000	111,000	111,000	111,000
Reclamation Water Sales	1,182,864	1,212,480	897,000	906,469	916,037	925,606	935,174	944,743	954,311	963,880	973,449	983,020	992,591
Other Operating Revenues													
Fire Protection	386,089	412,730	410,900	415,237	419,621	424,004	428,387	432,770	437,153	441,537	445,920	450,304	454,688
Charge For Installation of Service & Meter	190,618	205,846	189,700	497,224	497,224	497,224	497,224	497,224	497,224	497,224	497,351	497,351	497,351
Back-Up Facility Charge	1,686,018	1,073,028	1,201,000	1,438,107	1,438,107	1,438,107	1,438,107	1,438,107	1,438,107	1,438,107	1,438,107	1,438,475	1,438,475
Service Charges	436,927	706,255	806,900	815,418	824,025	832,632	841,240	849,847	858,455	867,062	875,670	884,279	892,889
Revenue - General Fund	111,544	115,670	108,600	109,746	110,905	112,063	113,222	114,380	115,539	116,697	117,856	119,014	120,173
Non-Operating Revenues													
Revenue From Leases	171,701	222,444	189,300	189,300	189,300	189,300	189,300	189,300	189,300	189,300	189,300	189,300	189,300
Interest Income	209,824	232,528	583,200	-	-	-	-	-	-	-	-	-	-
Gain/Loss Investments	(29,465)	(1,035,886)	-	-	-	-	-	-	-	-	-	-	-
Other Income	53,035	94,165	-	-	-	-	-	-	-	-	-	-	-
Contributed Rev - Constr W.O.	723,435	541,122	315,000	318,325	321,685	325,045	328,406	331,766	335,126	338,486	341,846	345,208	348,569
Gains On Retirements	129,047	18,552	63,100	63,100	63,100	63,100	63,100	63,100	63,100	63,100	63,100	63,100	63,100
Discounts	371	814	400	400	400	400	400	400	400	400	400	400	400
TOTAL: REVENUE	\$ 43,130,663	\$ 43,309,500	\$ 46,490,100	\$ 46,917,597	\$ 47,388,584	\$ 47,859,570	\$ 48,330,557	\$ 48,801,543	\$ 49,272,530	\$ 49,743,516	\$ 50,214,630	\$ 50,686,105	\$ 51,157,212

TABLE 5 : OPERATING EXPENSE FORECAST¹

DESCRIPTION	Basis	Actuals	Actuals	Budget	5-Year Rate Projected Period					Projected						
		FY 2020/21	FY 2021/22	FY 2022/23	FY 2023/24	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30	FY 2030/31	FY 2031/32	FY 2032/33		
WATER OPERATING FUND EXPENSES																
Source of Supply Expense																
Supervision & Engineering	3	\$ 65,082	\$ 68,897	\$ 84,000	\$ 87,360	\$ 90,854	\$ 94,489	\$ 98,268	\$ 102,199	\$ 106,287	\$ 110,538	\$ 114,960	\$ 119,558	\$ 124,341		
Operating Labor	3	53,121	54,034	57,240	59,530	61,911	64,387	66,963	69,641	72,427	75,324	78,337	81,470	84,729		
Misc. Source of Supply	2	35,424	36,817	154,080	161,476	169,227	177,350	185,862	194,784	204,133	213,932	224,200	234,962	246,240		
Maintenance - Structures & Improvements	2	38,376	91,542	234,120	245,358	257,135	269,477	282,412	295,968	310,175	325,063	340,666	357,018	374,155		
Snow Creek Cabin Expense	2	10,654	14,590	43,080	45,148	47,315	49,586	51,966	54,461	57,075	59,814	62,685	65,694	68,848		
Snow Creek - Security Expense	2	65,233	65,991	74,880	78,474	82,241	86,189	90,326	94,661	99,205	103,967	108,957	114,187	119,668		
Reservoir Security	2	5,510	-	-	-	-	-	-	-	-	-	-	-	-		
Maintenance - Coll & Impound Rsv	2	-	23	-	-	-	-	-	-	-	-	-	-	-		
Maintenance of Roads	2	6,833	29,804	324,120	339,678	355,982	373,069	390,977	409,744	429,411	450,023	471,624	494,262	517,987		
Maintenance of Intakes	2	238,737	61,445	306,360	321,065	336,476	352,627	369,553	387,292	405,882	425,364	445,782	467,179	489,604		
Maintenance of Wells	2	8,056	1,095	12,840	13,456	14,102	14,779	15,489	16,232	17,011	17,828	18,683	19,580	20,520		
Ground Water Replenishment	See Exh 1B	5,765,675	5,914,733	5,506,800	6,648,313	7,301,000	7,972,840	8,694,515	9,477,431	9,926,519	10,077,279	10,216,833	10,298,874	10,380,703		
Total - Source Of Supply Expense		\$ 6,292,702	\$ 6,338,971	\$ 6,797,520	\$ 7,999,857	\$ 8,716,244	\$ 9,454,794	\$ 10,246,331	\$ 11,102,412	\$ 11,628,124	\$ 11,859,132	\$ 12,082,728	\$ 12,252,786	\$ 12,426,795		
Pumping Expense																
Supervision & Engineering	3	\$ 114,387	\$ 111,912	\$ 139,200	\$ 144,768	\$ 150,559	\$ 156,581	\$ 162,844	\$ 169,358	\$ 176,132	\$ 183,178	\$ 190,505	\$ 198,125	\$ 206,050		
Pumping Labor & Expenses	3	164,849	172,630	193,200	200,928	208,965	217,324	226,017	235,057	244,460	254,238	264,408	274,984	285,983		
Misc. Pumping Expenses	2	131,900	117,002	131,760	138,084	144,713	151,659	158,938	166,567	174,563	182,942	191,723	200,926	210,570		
Maintenance - Structures & Improvements	2	110,789	219,311	322,800	338,294	354,533	371,550	389,384	408,075	427,663	448,190	469,703	492,249	515,877		
Maintenance - Pumping Equipment	2	233,366	331,416	441,840	463,048	485,275	508,568	532,979	558,562	585,373	613,471	642,918	673,778	706,119		
Power Purchased	6	3,006,554	3,430,142	3,531,000	3,728,736	3,937,545	4,158,048	4,390,898	4,636,789	4,896,449	5,170,650	5,460,206	5,765,978	6,088,873		
Total - Pumping Expense		\$ 3,761,844	\$ 4,382,413	\$ 4,759,800	\$ 5,013,859	\$ 5,281,589	\$ 5,563,729	\$ 5,861,061	\$ 6,174,409	\$ 6,504,639	\$ 6,852,669	\$ 7,219,463	\$ 7,606,039	\$ 8,013,472		
Regulatory Water Treatment																
Supervision & Engineering	3	\$ 127,331	\$ 140,403	\$ 142,800	\$ 148,512	\$ 154,452	\$ 160,631	\$ 167,056	\$ 173,738	\$ 180,688	\$ 187,915	\$ 195,432	\$ 203,249	\$ 211,379		
Operating Labor & Expenses	3	212,928	242,270	201,480	209,539	217,921	226,638	235,703	245,131	254,936	265,134	275,739	286,769	298,240		
Misc. Water Treatment Expense	2	124,164	123,144	138,000	144,624	151,566	158,841	166,465	174,456	182,830	191,606	200,803	210,441	220,542		
Chemicals & Filter Materials	2	158,672	276,786	280,560	294,027	308,140	322,931	338,432	354,676	371,701	389,542	408,240	427,836	448,372		
Maintenance - Structures & Improvements	2	11,697	6,309	14,880	15,594	16,343	17,127	17,949	18,811	19,714	20,660	21,652	22,691	23,780		
Maintenance Water Treatment Equip	2	86,144	80,511	96,000	100,608	105,437	110,498	115,802	121,361	127,186	133,291	139,689	146,394	153,421		
Total - Regulatory Water Treatment		\$ 720,936	\$ 869,423	\$ 873,720	\$ 912,904	\$ 953,859	\$ 996,666	\$ 1,041,407	\$ 1,088,173	\$ 1,137,054	\$ 1,188,148	\$ 1,241,555	\$ 1,297,380	\$ 1,355,734		
Trans. And Dist. Expense																
Supervision & Engineering	3	\$ 538,245	\$ 571,279	\$ 704,400	\$ 732,576	\$ 761,879	\$ 792,354	\$ 824,048	\$ 857,010	\$ 891,291	\$ 926,942	\$ 964,020	\$ 1,002,581	\$ 1,042,684		
Storage Facilities Expense	2	117,740	119,595	144,000	150,912	158,156	165,747	173,703	182,041	190,779	199,936	209,533	219,591	230,131		
Trans & Dist Line Expense	2	65,817	101,123	93,000	97,464	102,142	107,045	112,183	117,568	123,211	129,125	135,323	141,819	148,626		
Hand Tools & Equipment	2	36,780	50,828	67,200	70,426	73,806	77,349	81,061	84,952	89,030	93,304	97,782	102,476	107,395		
Meter Expense	2	31,332	100,120	127,560	133,683	140,100	146,824	153,872	161,258	168,998	177,110	185,611	194,521	203,858		
Meter Test Charges	2	-	-	-	-	-	-	-	-	-	-	-	-	-		
Customer Connection Expense	2	88,929	123,819	150,240	157,452	165,009	172,930	181,230	189,929	199,046	208,600	218,613	229,106	240,103		
Cross Connection Expense	2	118,986	137,683	193,080	202,348	212,061	222,239	232,907	244,086	255,803	268,081	280,949	294,435	308,567		
Misc. Supplies & Expense	2	55,633	105,009	53,760	56,340	59,045	61,879	64,849	67,962	71,224	74,643	78,226	81,981	85,916		
Maintenance - Structures & Improvements	2	1,611	2,756	4,080	4,276	4,481	4,696	4,922	5,158	5,405	5,665	5,937	6,222	6,520		
Maintenance of Reservoirs & Tanks	2	315,744	184,967	107,640	112,807	118,221	123,896	129,843	136,076	142,607	149,452	156,626	164,144	172,023		
Maintenance - Transmission & Distr. Mains	2	818,152	912,722	1,598,040	1,674,746	1,755,134	1,839,380	1,927,670	2,020,199	2,117,168	2,218,792	2,325,294	2,436,908	2,553,880		
Maintenance - Whitewater Mutual WC	2	36,636	33,835	322,080	337,540	353,742	370,721	388,516	407,165	426,709	447,191	468,656	491,151	514,727		
Maintenance of Fire Services	2	47,575	44,422	110,040	115,322	120,857	126,659	132,738	139,110	145,787	152,785	160,118	167,804	175,859		
Maintenance of Services	2	256,692	245,821	275,040	288,242	302,078	316,577	331,773	347,698	364,388	381,878	400,208	419,418	439,550		
Maintenance of Meters	2	82,542	89,930	189,960	199,078	208,634	218,648	229,143	240,142	251,669	263,749	276,409	289,677	303,581		
Meter Repair Parts	2	6,702	5,616	2,040	2,138	2,241	2,348	2,461	2,579	2,703	2,832	2,968	3,111	3,260		
Maintenance of Fire Hydrants	2	119,058	110,427	175,080	183,484	192,291	201,521	211,194	221,331	231,955	243,089	254,757	266,986	279,801		
Total - Trans. And Dist. Expense		\$ 2,738,176	\$ 2,939,952	\$ 4,317,240	\$ 4,518,832	\$ 4,729,876	\$ 4,950,815	\$ 5,182,115	\$ 5,424,264	\$ 5,677,773	\$ 5,943,175	\$ 6,221,032	\$ 6,511,930	\$ 6,816,482		
Subtotal: Water Operating Fund Expenses		\$ 13,513,658	\$ 14,530,758	\$ 16,748,280	\$ 18,445,453	\$ 19,681,568	\$ 20,966,003	\$ 22,330,915	\$ 23,789,258	\$ 24,947,590	\$ 25,843,124	\$ 26,764,778	\$ 27,668,134	\$ 28,612,482		

DESERT WATER AGENCY
WATER & RECYCLED WATER RATE STUDY
Operating Revenue and Expenses - Potable & Recycled Water

Exhibit 1

TABLE 6 : OPERATING EXPENSE FORECAST, cont.¹

DESCRIPTION	Basis	Actuals		Budget	5-Year Rate Projected Period					Projected				
		FY 2020/21	FY 2021/22		FY 2023/24	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30	FY 2030/31	FY 2031/32	FY 2032/33
Customer Acct. Expense														
Supervision & Engineering	3	\$ 171,854	\$ 156,893	\$ 213,600	\$ 222,144	\$ 231,030	\$ 240,271	\$ 249,882	\$ 259,877	\$ 270,272	\$ 281,083	\$ 292,326	\$ 304,019	\$ 316,180
Meter Reading Expense	2	135,576	140,592	153,600	160,973	168,699	176,797	185,283	194,177	203,497	213,265	223,502	234,230	245,473
Customer Records & Collection Expense	2	591,665	576,176	661,920	693,692	726,989	761,885	798,455	836,781	876,947	919,040	963,154	1,009,385	1,057,836
Customer Records Postage	2	98,405	95,933	148,800	155,942	163,428	171,272	179,493	188,109	197,138	206,601	216,518	226,910	237,802
Cust Records - Print & Stationery	2	24,826	30,572	36,000	37,728	39,539	41,437	43,426	45,510	47,695	49,984	52,383	54,898	57,533
Customer Records - Shortages/Overages	2	11	48	-	-	-	-	-	-	-	-	-	-	-
IBM Paper	2	-	2,530	3,480	3,647	3,822	4,006	4,198	4,399	4,610	4,832	5,064	5,307	5,562
Uncollectible Accounts	1	50,068	(11,237)	55,200	55,783	56,365	56,948	57,531	58,113	58,696	59,279	59,862	60,444	61,027
Total - Customer Acct. Expense		\$ 1,072,404	\$ 991,507	\$ 1,272,600	\$ 1,329,909	\$ 1,389,873	\$ 1,452,615	\$ 1,518,268	\$ 1,586,967	\$ 1,658,856	\$ 1,734,084	\$ 1,812,809	\$ 1,895,194	\$ 1,981,413
General And Administrative Expenses														
Administration & General Salaries	3	\$ 846,893	\$ 938,836	\$ 1,138,800	\$ 1,184,352	\$ 1,231,726	\$ 1,280,995	\$ 1,332,235	\$ 1,385,524	\$ 1,440,945	\$ 1,498,583	\$ 1,558,526	\$ 1,620,867	\$ 1,685,702
Office Supplies & Expenses	2	124,390	92,197	116,520	122,113	127,974	134,117	140,555	147,301	154,372	161,782	169,547	177,686	186,214
Office Expense - Power	2	26,801	36,801	34,800	36,470	38,221	40,056	41,978	43,993	46,105	48,318	50,637	53,068	55,615
Office-Telephone & Answer Svc	2	78,227	47,397	66,600	69,797	73,147	76,658	80,338	84,194	88,235	92,471	96,909	101,561	106,436
Office - Stationery & Forms	2	360	1,433	3,000	3,144	3,295	3,453	3,619	3,793	3,975	4,165	4,365	4,575	4,794
Office Supplies - Xerox	2	1,073	1,285	1,800	1,886	1,977	2,072	2,171	2,276	2,385	2,499	2,619	2,745	2,877
Office Supplies - Photo / Camera	2	-	749	960	1,006	1,054	1,105	1,158	1,214	1,272	1,333	1,397	1,464	1,534
Convention Expense & Seminars	2	2,300	13,138	61,440	64,389	67,480	70,719	74,113	77,671	81,399	85,306	89,401	93,692	98,189
Dues / Memberships / Subscriptions	2	35,442	49,999	50,400	52,819	55,355	58,012	60,796	63,714	66,773	69,978	73,337	76,857	80,546
Office Expense - Heating	2	4,406	4,706	5,400	5,659	5,931	6,216	6,514	6,827	7,154	7,498	7,857	8,235	8,630
Postage/Mailing Machine	2	3,074	3,662	6,000	6,288	6,590	6,906	7,238	7,585	7,949	8,331	8,731	9,150	9,589
Legal Services	2	116,514	55,129	109,200	114,442	119,935	125,692	131,725	138,048	144,674	151,618	158,896	166,523	174,516
Engineering	2	155,084	53,007	84,000	88,032	92,258	96,686	101,327	106,191	111,288	116,629	122,228	128,095	134,243
Auditing	2	39,293	34,526	36,000	37,728	39,539	41,437	43,426	45,510	47,695	49,984	52,383	54,898	57,533
Travel & Seminar Expense	2	-	555	-	-	-	-	-	-	-	-	-	-	-
Consultants	2	132,795	138,795	248,040	259,946	272,423	285,500	299,204	313,565	328,617	344,390	360,921	378,245	396,401
Appraisals	2	-	-	10,080	10,564	11,071	11,602	12,159	12,743	13,355	13,996	14,667	15,371	16,109
Insurance	2	158,639	225,900	321,600	337,037	353,215	370,169	387,937	406,558	426,073	446,524	467,957	490,419	513,959
Damages Hit & Run	2	23,440	10,369	15,000	15,720	16,475	17,265	18,094	18,963	19,873	20,827	21,826	22,874	23,972
Jury Duty	2	3,634	8,521	9,000	9,432	9,885	10,359	10,856	11,378	11,924	12,496	13,096	13,724	14,383
Safety Meeting - Labor Only	2	15,861	34,977	24,120	25,278	26,491	27,763	29,095	30,492	31,955	33,489	35,097	36,781	38,547
Workers Compensation Injuries & Medical	2	23,139	18,372	27,000	28,296	29,654	31,078	32,569	34,133	35,771	37,488	39,287	41,173	43,150
Worker Compensation Insurance	2	262,364	228,125	280,800	294,278	308,404	323,207	338,721	354,980	372,019	389,876	408,590	428,202	448,756
Safety Equipment & Supplies	2	183,562	180,541	111,480	116,831	122,439	128,316	134,475	140,930	147,695	154,784	162,214	170,000	178,160
Pension	3	2,610,442	612,355	2,939,400	3,056,976	3,179,255	3,306,425	3,438,682	3,576,230	3,719,279	3,868,050	4,022,772	4,183,683	4,351,030
Other Employee Benefits	3	168,856	196,365	200,400	208,416	216,753	225,423	234,440	243,817	253,570	263,713	274,261	285,232	296,641
Tuition & Schooling	2	7,775	38,440	51,240	53,700	56,277	58,978	61,809	64,776	67,885	71,144	74,559	78,138	81,888
Subtotal - General And Administrative Expenses		\$ 5,024,365	\$ 3,026,180	\$ 5,953,080	\$ 6,204,599	\$ 6,466,822	\$ 6,740,207	\$ 7,025,235	\$ 7,322,403	\$ 7,632,234	\$ 7,955,271	\$ 8,292,081	\$ 8,643,256	\$ 9,009,414
Subtotal: Water Operating Fund Expenses		\$ 6,096,768	\$ 4,017,687	\$ 7,225,680	\$ 7,534,508	\$ 7,856,695	\$ 8,192,823	\$ 8,543,503	\$ 8,909,370	\$ 9,291,090	\$ 9,689,355	\$ 10,104,890	\$ 10,538,451	\$ 10,990,827

TABLE 7 : OPERATING EXPENSE FORECAST, cont.¹

DESCRIPTION	Basis	Actuals	Actuals	Budget	5-Year Rate Projected Period					Projected				
		FY 2020/21	FY 2021/22	FY 2022/23	FY 2023/24	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30	FY 2030/31	FY 2031/32	FY 2032/33
General And Administrative Expenses, Cont.														
License Renewal / DMV & Misc.	2	\$ 22,914	\$ 3,871	\$ 16,920	\$ 17,732	\$ 18,583	\$ 19,475	\$ 20,410	\$ 21,390	\$ 22,417	\$ 23,493	\$ 24,620	\$ 25,802	\$ 27,040
Life Insurance	2	15,562	14,644	18,600	19,493	20,428	21,409	22,437	23,514	24,642	25,825	27,065	28,364	29,725
Blue Cross Insurance	2	1,380,112	(745,188)	1,608,000	1,685,184	1,766,073	1,850,844	1,939,685	2,032,790	2,130,364	2,232,621	2,339,787	2,452,097	2,569,797
Disability Insurance	2	18,527	18,907	21,600	22,637	23,723	24,862	26,055	27,306	28,617	29,990	31,430	32,939	34,520
Vision Insurance	2	17,127	(6,390)	22,800	23,894	25,041	26,243	27,503	28,823	30,207	31,657	33,176	34,769	36,437
Dental Insurance	2	71,531	(320)	80,400	84,259	88,304	92,542	96,984	101,639	106,518	111,631	116,989	122,605	128,490
Attendance Bonus Plan	2	347,887	468,734	360,000	377,280	395,389	414,368	434,258	455,102	476,947	499,841	523,833	548,977	575,328
On-Call Pay	3	385	-	-	-	-	-	-	-	-	-	-	-	-
OASDI Taxes	3	574,079	597,861	628,800	653,952	680,110	707,314	735,607	765,031	795,633	827,458	860,556	894,978	930,778
CA Unemployment Insurance	3	14,848	-	18,000	18,720	19,469	20,248	21,057	21,900	22,776	23,687	24,634	25,620	26,644
Vacation Pay	3	571,384	572,176	600,000	624,000	648,960	674,918	701,915	729,992	759,191	789,559	821,141	853,987	888,147
Holiday Pay	3	341,897	371,429	434,400	451,776	469,847	488,641	508,187	528,514	549,655	571,641	594,506	618,287	643,018
Floating Holiday Pay	3	66,802	71,796	73,200	76,128	79,173	82,340	85,634	89,059	92,621	96,326	100,179	104,186	108,354
Operations Center - Security	2	5,015	24	12,000	12,576	13,180	13,812	14,475	15,170	15,898	16,661	17,461	18,299	19,178
Maintenance - Operations Center	2	196,496	216,142	264,240	276,924	290,216	304,146	318,745	334,045	350,079	366,883	384,493	402,949	422,291
Building Maintenance - Alarm/Land/Plant	2	83,296	75,228	73,680	77,217	80,923	84,807	88,878	93,144	97,615	102,301	107,211	112,357	117,750
Solar Facility Maintenance	2	7,105	6,208	6,960	7,294	7,644	8,011	8,396	8,799	9,221	9,664	10,127	10,614	11,123
Hardware / Software / PCs / Printers	2	123,658	486,255	361,320	378,663	396,839	415,887	435,850	456,771	478,696	501,673	525,754	550,990	577,437
Data Processing - Programmer	2	396,400	1,909,437	1,123,080	1,176,988	1,233,483	1,292,690	1,354,740	1,419,767	1,487,916	1,559,336	1,634,184	1,712,625	1,794,831
Data Processing - Ribbons & Misc	2	13,885	5,421	15,000	15,720	16,475	17,265	18,094	18,963	19,873	20,827	21,826	22,874	23,972
Maintenance Office Equipment - Xerox & Post	2	63,942	70,879	67,920	71,180	74,597	78,177	81,930	85,863	89,984	94,303	98,830	103,574	108,545
Maintenance Office Equipment - Misc/Repair	2	17,329	12,522	17,880	18,738	19,638	20,580	21,568	22,603	23,688	24,825	26,017	27,266	28,575
Maintenance Office Equipment - Type & Add	2	49	-	-	-	-	-	-	-	-	-	-	-	-
Maintenance I/S Equipment - Misc.	2	68,953	29,628	50,040	52,442	54,959	57,597	60,362	63,259	66,296	69,478	72,813	76,308	79,971
Maintenance Data Equipment	2	2,378	-	5,040	5,282	5,535	5,801	6,080	6,371	6,677	6,998	7,334	7,686	8,055
Maintenance I/S Equipment - Print/POC	2	2,377	1,575	12,600	13,205	13,839	14,503	15,199	15,929	16,693	17,494	18,334	19,214	20,136
Maintenance - Telemetry Equipment	2	29,667	38,252	43,440	45,525	47,710	50,000	52,400	54,916	57,552	60,314	63,209	66,243	69,423
Maintenance - Communication Equip	2	8,963	19,413	38,040	39,866	41,779	43,785	45,887	48,089	50,397	52,816	55,352	58,009	60,793
Engineering & Supervision	2	208,270	214,934	262,800	275,414	288,634	302,489	317,008	332,225	348,171	364,884	382,398	400,753	419,989
Storeroom Expense	2	82,316	95,690	100,080	104,884	109,918	115,194	120,724	126,518	132,591	138,956	145,626	152,616	159,941
Transportation Expense	5	320,287	463,054	769,680	792,770	816,554	841,050	866,282	892,270	919,038	946,609	975,008	1,004,258	1,034,386
Tools & Work Equipment	2	137,496	137,711	130,080	136,324	142,867	149,725	156,912	164,444	172,337	180,609	189,278	198,364	207,885
Backhoe	2	3,272	(1,643)	10,080	10,564	11,071	11,602	12,159	12,743	13,355	13,996	14,667	15,371	16,109
Directors Fees	2	50,862	54,955	48,000	50,304	52,719	55,249	57,901	60,680	63,593	66,645	69,844	73,197	76,710
Public Information	2	130,735	202,782	247,440	259,317	271,764	284,809	298,480	312,807	327,822	343,557	360,048	377,330	395,442
Water Conservation	2	72,786	61,191	251,280	263,341	275,982	289,229	303,112	317,661	332,909	348,889	365,635	383,186	401,579
Water Conservation - Turf Buyback Program	2	153,523	192,648	859,680	900,945	944,190	989,511	1,037,008	1,086,784	1,138,950	1,193,619	1,250,913	1,310,957	1,373,883
Subtotal - General And Administrative Expenses		\$ 5,622,114	\$ 5,659,825	\$ 8,653,080	\$ 9,040,538	\$ 9,445,618	\$ 9,869,129	\$ 10,311,921	\$ 10,774,881	\$ 11,258,938	\$ 11,765,065	\$ 12,294,280	\$ 12,847,647	\$ 13,426,281
Other Operating Expenses														
Services Rendered - Customers	8	144,268	159,669	170,400	170,400	170,400	170,400	170,400	170,400	170,400	170,400	170,400	170,400	170,400
Direct Costs Applied To Work-Orders	8	530,969	457,586	568,080	568,080	568,080	568,080	568,080	568,080	568,080	568,080	568,080	568,080	568,080
Indirect Costs Adm & Gen	8	(1,648,516)	(1,356,590)	(2,274,960)	(2,274,960)	(2,274,960)	(2,274,960)	(2,274,960)	(2,274,960)	(2,274,960)	(2,274,960)	(2,274,960)	(2,274,960)	(2,274,960)
Total - Other Operating Expenses		\$ (973,279)	\$ (739,335)	\$ (1,536,480)	\$ (1,536,480)	\$ (1,536,480)	\$ (1,536,480)	\$ (1,536,480)	\$ (1,536,480)	\$ (1,536,480)	\$ (1,536,480)	\$ (1,536,480)	\$ (1,536,480)	\$ (1,536,480)
Subtotal: Water Operating Fund Expenses		\$ 4,648,834	\$ 4,920,490	\$ 7,116,600	\$ 7,504,058	\$ 7,909,138	\$ 8,332,649	\$ 8,775,441	\$ 9,238,401	\$ 9,722,458	\$ 10,228,585	\$ 10,757,800	\$ 11,311,167	\$ 11,889,801
Subtotal: Water Operating Fund Expenses		\$ 24,259,261	\$ 23,468,935	\$ 31,090,560	\$ 33,484,020	\$ 35,447,400	\$ 37,491,475	\$ 39,649,858	\$ 41,937,028	\$ 43,961,138	\$ 45,761,064	\$ 47,627,467	\$ 49,517,752	\$ 51,493,111

TABLE 8 : OPERATING EXPENSE FORECAST, cont.¹

DESCRIPTION	Basis	Actuals	Actuals	Budget	5-Year Rate Projected Period					Projected						
		FY 2020/21	FY 2021/22	FY 2022/23	FY 2023/24	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30	FY 2030/31	FY 2031/32	FY 2032/33		
Regulatory Expenses																
Certification/Training/Schooling	2	\$ 75,296	\$ 98,198	\$ 146,640	\$ 153,679	\$ 161,055	\$ 168,786	\$ 176,888	\$ 185,378	\$ 194,276	\$ 203,602	\$ 213,375	\$ 223,617	\$ 234,350		
Water Treatment	2	-	-	-	-	-	-	-	-	-	-	-	-	-		
Health Dept / Health Services	2	19,491	17,605	19,080	19,996	20,956	21,962	23,016	24,120	25,278	26,492	27,763	29,096	30,492		
State - Permits / Regulatory	2	153,764	166,647	165,120	173,046	181,352	190,057	199,180	208,740	218,760	229,260	240,265	251,797	263,884		
Federal - Permits / Regulatory	2	14,859	2,506	32,400	33,955	35,585	37,293	39,083	40,959	42,925	44,986	47,145	49,408	51,779		
Reclamation - Permits/Regulatory	2	5,155	5,469	5,040	5,282	5,535	5,801	6,080	6,371	6,677	6,998	7,334	7,686	8,055		
AQMD Compliance	2	2,152	2,017	3,000	3,144	3,295	3,453	3,619	3,793	3,975	4,165	4,365	4,575	4,794		
RMOP / OSHA / Miscellaneous	2	41,504	68,650	55,080	57,724	60,495	63,398	66,441	69,631	72,973	76,476	80,146	83,993	88,025		
Legal - Compliance / Regulatory	2	50	-	-	-	-	-	-	-	-	-	-	-	-		
Total - Regulatory Expenses		\$ 312,270	\$ 361,092	\$ 426,360	\$ 446,825	\$ 468,273	\$ 490,750	\$ 514,306	\$ 538,993	\$ 564,864	\$ 591,978	\$ 620,393	\$ 650,172	\$ 681,380		
Non Operating Expense																
Other Interest - Miscellaneous	2	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		
OPEB Interest	3	996,782	742,561	780,000	811,200	843,648	877,394	912,490	948,989	986,949	1,026,427	1,067,484	1,110,183	1,154,591		
Prior Year Expenses	2	(77,697)	(7,435)	-	-	-	-	-	-	-	-	-	-	-		
Customer Assistance Program (Non-Rate)	2	30,000	-	35,520	37,225	39,012	40,884	42,847	44,903	47,059	49,318	51,685	54,166	56,766		
Grant Expenses	2	27,341	206,267	20,040	21,002	22,010	23,066	24,174	25,334	26,550	27,824	29,160	30,560	32,027		
Losses On Retirements	3	149,380	167,752	108,000	112,320	116,813	121,485	126,345	131,399	136,654	142,121	147,805	153,718	159,866		
Subtotal - Non Operating Expense		\$ 1,125,806	\$ 1,109,144	\$ 943,560	\$ 981,747	\$ 1,021,483	\$ 1,062,830	\$ 1,105,855	\$ 1,150,625	\$ 1,197,212	\$ 1,245,689	\$ 1,296,134	\$ 1,348,626	\$ 1,403,249		
Snow Creek Hydro Expenses																
Snow Creek Hydro Expenses	2	\$ 24,211	\$ 61,289	\$ 51,600	\$ 54,077	\$ 56,672	\$ 59,393	\$ 62,244	\$ 65,231	\$ 68,362	\$ 71,644	\$ 75,083	\$ 78,687	\$ 82,464		
Snow Creek Power Purchased	2	9,597	8,372	8,400	8,803	9,226	9,669	10,133	10,619	11,129	11,663	12,223	12,809	13,424		
Subtotal - Snow Creek Hydro Expenses		\$ 33,809	\$ 69,661	\$ 60,000	\$ 62,880	\$ 65,898	\$ 69,061	\$ 72,376	\$ 75,850	\$ 79,491	\$ 83,307	\$ 87,305	\$ 91,496	\$ 95,888		
Subtotal: Water Operating Fund Expenses		\$ 1,471,885	\$ 1,539,897	\$ 1,429,920	\$ 1,491,452	\$ 1,555,654	\$ 1,622,641	\$ 1,692,537	\$ 1,765,468	\$ 1,841,568	\$ 1,920,974	\$ 2,003,832	\$ 2,090,294	\$ 2,180,517		
Total: Water Operating Fund Expenses		\$ 25,731,145	\$ 25,008,832	\$ 32,520,480	\$ 34,975,472	\$ 37,003,054	\$ 39,114,116	\$ 41,342,395	\$ 43,702,496	\$ 45,802,705	\$ 47,682,038	\$ 49,631,300	\$ 51,608,046	\$ 53,673,628		

TABLE 9 : OPERATING EXPENSE FORECAST, cont.¹

DESCRIPTION	Basis	Actuals	Actuals	Budget	5-Year Rate Projected Period					Projected						
		FY 2020/21	FY 2021/22	FY 2022/23	FY 2023/24	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30	FY 2030/31	FY 2031/32	FY 2032/33		
Reclamation Plant Expenses																
Pumping Expense																
Operating Labor	3	\$ 63,062	\$ 75,202	\$ 73,680	\$ 76,627	\$ 79,692	\$ 82,880	\$ 86,195	\$ 89,643	\$ 93,229	\$ 96,958	\$ 100,836	\$ 104,870	\$ 109,064		
Maintenance of Pumps & Equipment	2	127,898	209,016	91,560	95,955	100,561	105,388	110,446	115,748	121,304	127,126	133,228	139,623	146,325		
Maintenance of Structures	2	1,026	1,082	5,640	5,911	6,194	6,492	6,803	7,130	7,472	7,831	8,207	8,601	9,013		
Power Purchased	4	100,918	151,223	165,000	171,600	178,464	185,603	193,027	200,748	208,778	217,129	225,814	234,846	244,240		
Misc. Tools & Supplies	2	-	123	1,200	1,258	1,318	1,381	1,448	1,517	1,590	1,666	1,746	1,830	1,918		
Subtotal - Pumping Expense		\$ 292,905	\$ 436,646	\$ 337,080	\$ 351,350	\$ 366,229	\$ 381,743	\$ 397,919	\$ 414,785	\$ 432,372	\$ 450,710	\$ 469,831	\$ 489,770	\$ 510,561		
Treatment Expense																
Operating Labor	3	\$ 29,683	\$ 37,225	\$ 35,040	\$ 36,442	\$ 37,899	\$ 39,415	\$ 40,992	\$ 42,632	\$ 44,337	\$ 46,110	\$ 47,955	\$ 49,873	\$ 51,868		
Maintenance of Filters	2	28,546	213,659	31,560	33,075	34,662	36,326	38,070	39,897	41,812	43,819	45,923	48,127	50,437		
Maintenance of Water Treatment Equipment	2	30,712	37,487	112,440	117,837	123,493	129,421	135,633	142,144	148,966	156,117	163,610	171,464	179,694		
Maintenance of Structures	2	5,271	4,547	14,280	14,965	15,684	16,437	17,226	18,052	18,919	19,827	20,779	21,776	22,821		
Chemicals	2	237,623	251,663	250,080	262,084	274,664	287,848	301,664	316,144	331,319	347,223	363,889	381,356	399,661		
Laboratory Samples & Supplies	2	67,408	66,868	75,000	78,600	82,373	86,327	90,470	94,813	99,364	104,133	109,132	114,370	119,860		
Maintenance of Laboratory Equipment	2	4,750	68	2,040	2,138	2,241	2,348	2,461	2,579	2,703	2,832	2,968	3,111	3,260		
Misc. Tools & Supplies	2	92	11	9,600	10,061	10,544	11,050	11,580	12,136	12,719	13,329	13,969	14,639	15,342		
Subtotal - Treatment Expense		\$ 404,085	\$ 611,529	\$ 530,040	\$ 555,202	\$ 581,560	\$ 609,171	\$ 638,096	\$ 668,397	\$ 700,139	\$ 733,391	\$ 768,225	\$ 804,716	\$ 842,943		
Transmission & Distribution Expense																
Operating Labor	3	\$ 740	\$ 148	\$ 960	\$ 998	\$ 1,038	\$ 1,080	\$ 1,123	\$ 1,168	\$ 1,215	\$ 1,263	\$ 1,314	\$ 1,366	\$ 1,421		
Maintenance of Tanks	2	18,178	7,710	18,960	19,870	20,824	21,823	22,871	23,969	25,119	26,325	27,589	28,913	30,301		
Maintenance of Trans & Distr Mains	2	622	2,356	136,440	142,989	149,853	157,046	164,584	172,484	180,763	189,440	198,533	208,062	218,049		
Maintenance of Services	2	13,060	10,134	20,640	21,631	22,669	23,757	24,897	26,093	27,345	28,658	30,033	31,475	32,985		
Maintenance of Meters & Equipment	2	9,892	4,601	34,200	35,842	37,562	39,365	41,254	43,235	45,310	47,485	49,764	52,153	54,656		
Misc. Tools & Supplies	2	95	234	1,680	1,761	1,845	1,934	2,027	2,124	2,226	2,333	2,445	2,562	2,685		
Subtotal - Transmission & Distribution Expense		\$ 42,588	\$ 25,184	\$ 212,880	\$ 223,091	\$ 233,791	\$ 245,005	\$ 256,756	\$ 269,071	\$ 281,978	\$ 295,503	\$ 309,677	\$ 324,531	\$ 340,097		
General And Administrative																
Supervision & Engineering	3	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		
Power/Utilities	6	-	1,881	2,400	2,534	2,676	2,826	2,984	3,152	3,328	3,514	3,711	3,919	4,139		
Office Supplies & Expenses	2	-	-	-	-	-	-	-	-	-	-	-	-	-		
Insurance	2	16,918	18,509	24,000	25,152	26,359	27,625	28,951	30,340	31,796	33,323	34,922	36,598	38,355		
Safety Equipment & Supplies	2	10,341	4,756	10,080	10,564	11,071	11,602	12,159	12,743	13,355	13,996	14,667	15,371	16,109		
Engineering & Consultants	2	6,884	-	115,080	120,604	126,393	132,460	138,818	145,481	152,464	159,782	167,452	175,490	183,913		
Maint of Structures - Operations Building	2	284	1,866	7,680	8,049	8,435	8,840	9,264	9,709	10,175	10,663	11,175	11,712	12,274		
Maint of Landscape & Improvements	2	111,736	103,219	110,040	115,322	120,857	126,659	132,738	139,110	145,787	152,785	160,118	167,804	175,859		
Maint of Telemetry & Monitor	2	97	-	9,600	10,061	10,544	11,050	11,580	12,136	12,719	13,329	13,969	14,639	15,342		
Permits / Regulatory	2	-	-	10,080	10,564	11,071	11,602	12,159	12,743	13,355	13,996	14,667	15,371	16,109		
Subtotal - General And Administrative		\$ 146,259	\$ 130,230	\$ 288,960	\$ 302,849	\$ 317,406	\$ 332,663	\$ 348,654	\$ 365,413	\$ 382,978	\$ 401,388	\$ 420,682	\$ 440,905	\$ 462,099		
Total: Water Reclamation Expenses		\$ 885,837	\$ 1,203,590	\$ 1,368,960	\$ 1,432,492	\$ 1,498,986	\$ 1,568,582	\$ 1,641,425	\$ 1,717,667	\$ 1,797,466	\$ 1,880,991	\$ 1,968,415	\$ 2,059,921	\$ 2,155,701		
GRAND TOTAL: OPERATING EXPENSES		\$ 26,616,982	\$ 26,212,422	\$ 33,889,440	\$ 36,407,964	\$ 38,502,040	\$ 40,682,699	\$ 42,983,820	\$ 45,420,163	\$ 47,600,172	\$ 49,563,029	\$ 51,599,715	\$ 53,667,968	\$ 55,829,329		

TABLE 10 : DEPRECIATION EXPENSE FORECAST (Excluded from the analysis)²

DESCRIPTION	Basis	Actuals	Actuals	Budget	5-Year Rate Projected Period					Projected				
		FY 2020/21	FY 2021/22	FY 2022/23	FY 2023/24	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30	FY 2030/31	FY 2031/32	FY 2032/33
OTHER OPERATING EXPENSES														
Depreciation	2	\$ 5,822,134	\$ 5,776,729	\$ 6,252,000	\$ 6,552,096	\$ 6,866,597	\$ 7,196,193	\$ 7,541,611	\$ 7,903,608	\$ 8,282,981	\$ 8,680,564	\$ 9,097,231	\$ 9,533,898	\$ 9,991,525
Depreciation - Tools & Work Equipment	2	450,680	441,717	394,800	413,750	433,610	454,424	476,236	499,095	523,052	548,158	574,470	602,045	630,943
TOTAL: ANNUAL DEPRECIATION EXPENSE		\$ 6,272,814	\$ 6,218,445	\$ 6,646,800	\$ 6,965,846	\$ 7,300,207	\$ 7,650,617	\$ 8,017,847	\$ 8,402,703	\$ 8,806,033	\$ 9,228,723	\$ 9,671,701	\$ 10,135,943	\$ 10,622,468

TABLE 11 : FORECASTING ASSUMPTIONS

INFLATION FACTORS ³	Basis	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Customer Growth ⁴	1	0.00%	1.08%	1.07%	1.06%	1.04%	1.03%	1.02%	1.01%	1.00%	0.99%	0.98%	0.97%	0.96%
General Cost Inflation ⁵	2	0.00%	4.80%	4.80%	4.80%	4.80%	4.80%	4.80%	4.80%	4.80%	4.80%	4.80%	4.80%	4.80%
Labor Cost Inflation ⁶	3	0.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%
Energy Cost Inflation ⁷	4	0.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%
Transportation ⁸	5	0.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Utilities ⁹	6	0.00%	5.60%	5.60%	5.60%	5.60%	5.60%	5.60%	5.60%	5.60%	5.60%	5.60%	5.60%	5.60%
Construction Cost Inflation ¹⁰	7	0.00%	3.91%	3.91%	3.91%	3.91%	3.91%	3.91%	3.91%	3.91%	3.91%	3.91%	3.91%	3.91%
No Escalation	8	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

1. Revenue and expenses are actuals for FY 2020/21 and FY 2021/22, budget for FY 2022/23, and all other years are escalated based on the forecasting assumptions in Table 11. Source files: [2] 2021-06 - OP Revenue.PDF, [12d] 2021-06 - OP Expense.pdf, 2022-06- OP Revenue & Expense.PDF, 2022-2023 BUDGETREV.xlsx, & 2022-2023 BUDGETEXP - Augmented 8-2-2022.xlsx.
2. The following revenues and expenses have been excluded from this analysis since they do not represent actual cash expenses.
3. Expenses are inflated each year by the following annual inflation factor categories.
4. Customer growth rate is based on Table 6.3 in the 2020 Coachella Valley Regional Urban Water Manage Plan and is estimated at 223 new connections per year. Source files: [13b] Urban Water Management Plan.pdf, page 136 & [9]_Water_Bills_2021.xlsx.
5. General cost inflation is based on the 5-year average annual change in the Consumer Price Index for all Urban Consumers in the Riverside-San Bernardino-Ontario, CA, CA area.
6. Labor cost inflation is based on the 5-year average annual change in the Quarterly Census of Employment and Wages for Riverside County, CA.
7. Energy cost inflation is based on the 5-year average annual change in the Consumer Price Index for all Urban Consumers. Source: <https://data.bls.gov>.
8. Transportation cost inflation is based on the 5-year average annual change in the Consumer Price Index for All Urban Consumers (US City Average). Source: <https://data.bls.gov>.
9. Utilities cost inflation is based on the 5-year average annual change in the Consumer Price Index - Average Price Data for Fuels and related products and power. This factor is used for utility costs other than electricity.
10. Construction cost Inflation is the 5-year average change in the Construction Cost Index for 2017-2022 (3.91%). Source: Engineering News Record website (<http://enr.construction.com>).

DESERT WATER AGENCY
WATER & RECYCLED WATER RATE STUDY
Estimate of Future Revenues from Various Increased Capacity Charges

Exhibit 1.A

TABLE 12 : FORECASTING ASSUMPTIONS

Economic Variables ¹	FY 2020/21	FY 2021/22	FY 2023/24	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30	FY 2030/31	FY 2031/32	FY 2032/33
Water Customer Growth	0.00%	1.08%	1.07%	1.06%	1.04%	1.03%	1.02%	1.01%	1.00%	0.99%	0.98%	0.97%
Recycled Water Customer Growth	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

1. Economic Variables are the same throughout the Exhibit 1 Series.

TABLE 13 : FORECASTING ASSUMPTIONS

Estimated Number of Customers In Each Utility ¹	FY 2020/21	FY 2021/22	FY 2023/24	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30	FY 2030/31	FY 2031/32	FY 2032/33
Water	21,597	21829.8918	22,063	22,296	22,529	22,761	22,994	23,227	23,460	23,693	23,926	24,159
Recycled Water	10	10	10	10	10	10	10	10	10	10	10	10

1. Number of customers is as of June 30, 2021.

TABLE 14 : REVENUE ESTIMATES

Water Utility Revenue Estimates ¹	FY 2020/21	FY 2021/22	FY 2023/24	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30	FY 2030/31	FY 2031/32	FY 2032/33
Increase in Number of Customers over previous year	0	233	233	233	233	233	233	233	233	233	233	233
Water System Backup Facility Charge ²	6,175	6,175	6,175	6,175	6,175	6,175	6,175	6,175	6,175	6,175	6,175	6,175
Estimated Annual Backup Facility Charges	-	1,438,107	1,438,107	1,438,107	1,438,107	1,438,107	1,438,107	1,438,107	1,438,107	1,438,107	1,438,475	1,438,475
Supplemental Imported Water Capacity Charges ³	2,250	2,250	2,250	2,250	2,250	2,250	2,250	2,250	2,250	2,250	2,250	2,250
Est. Annual Supplemental Imported Water Capacity Charges	-	524,006	524,006	524,006	524,006	524,006	524,006	524,006	524,006	524,006	524,141	524,141
Meter Installation Charge ⁴	335	335	335	335	335	335	335	335	335	335	335	335
Service Connection Charge ⁴	1,800	1,800	1,800	1,800	1,800	1,800	1,800	1,800	1,800	1,800	1,800	1,800
Estimated Revenue for Installation of Service & Meters	-	497,224	497,224	497,224	497,224	497,224	497,224	497,224	497,224	497,224	497,351	497,351
Total: Increased Capacity Charges	\$ -	\$ 2,459,337	\$ 2,459,337	\$ 2,459,337	\$ 2,459,337	\$ 2,459,337	\$ 2,459,337	\$ 2,459,337	\$ 2,459,337	\$ 2,459,337	\$ 2,459,966	\$ 2,459,966

1. Annual charges shown in this table are linked to Exhibit 1 (O&M). Source: <https://dwa.org/customer-service/development/developer-rates-charges>.

2. Charge for a 1-inch meter in the Base Zone.

3. Charge for a Residential property with a 1-inch meter. Money goes to the General Fund and then will be used for water CIP as needed, meaning it will not be counted as revenue or reserves in the Water Financial Plan.

4. Charge for a 1-inch meter.

TABLE 15 : SUMMARY OF REVENUE ESTIMATES

Summary of All Increased Capacity Charges	FY 2020/21	FY 2021/22	FY 2023/24	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30	FY 2030/31	FY 2031/32	FY 2032/33
Backup Facility Charges	\$ -	\$ 1,438,107	\$ 1,438,107	\$ 1,438,107	\$ 1,438,107	\$ 1,438,107	\$ 1,438,107	\$ 1,438,107	\$ 1,438,107	\$ 1,438,107	\$ 1,438,475	\$ 1,438,475
Supplemental Imported Water Capacity Charges	-	524,006	524,006	524,006	524,006	524,006	524,006	524,006	524,006	524,006	524,141	524,141
Charge for Installation of Service & Meters	-	497,224	497,224	497,224	497,224	497,224	497,224	497,224	497,224	497,224	497,351	497,351
Total: Increased Capacity Charges	\$ -	\$ 2,459,337	\$ 2,459,337	\$ 2,459,337	\$ 2,459,337	\$ 2,459,337	\$ 2,459,337	\$ 2,459,337	\$ 2,459,337	\$ 2,459,337	\$ 2,459,966	\$ 2,459,966

DESERT WATER AGENCY
WATER & RECYCLED WATER RATE STUDY
Estimate of Future Revenues from Various Increased Capacity Charges

Exhibit 1.A

For informational purposes (from Esther 10-15-21):

DESERT WATER AGENCY				
Back-up Facility Charge Summary				
Revenues & Expenditures				
Water Service				
A Backup Facility Charge is levied on a premises for the purpose of providing water service connection capacity in the Agency's overall water supply. (DWA Ordinance 70 Section 1-1.4)				
The purpose of the Backup Facility Charge is to raise a portion of the funds required by the Agency to develop new water production and storage facilities. (DWA Ordinance 70 Section 7-1.3)				
Revenue	Back-up Facility Revenue received in a fiscal year in accordance with DWA Ordinance 70 Section 1-1.4 inclusive of any interest on cumulative excess revenues in accordance with DWA Resolution 1230 Section 5.			
Expenditures	Capital expenditures funded by Desert Water, put into service in a given fiscal year. These capital expenditures are recorded in proportion to the increased capacity they provide to DWA's water system.			
Year	Revenue	Expenditures	Cumulative Balance*	
1988-1989	\$ 308,255.92	\$ -	\$ 308,255.92	
1989-1990	\$ 259,874.94	\$ 401,979.26	\$ 166,151.60	
1990-1991	\$ 157,005.00	\$ 397,885.22	\$ (74,728.62)	
1991-1992	\$ 167,250.00	\$ 2,040,172.06	\$ (1,947,650.68)	
1992-1993	\$ 44,285.00	\$ 406,160.00	\$ (2,309,525.68)	
1993-1994	\$ 52,300.00	\$ 1,000,209.54	\$ (3,257,435.22)	
1994-1995	\$ 76,590.00	\$ 2,139,954.41	\$ (5,320,799.63)	
1995-1996	\$ 104,680.00	\$ 2,107,535.08	\$ (7,323,654.71)	
1996-1997	\$ 81,660.00	\$ 614,238.17	\$ (7,856,232.88)	
1997-1998	\$ 98,410.00	\$ -	\$ (7,757,822.88)	
1998-1999	\$ 158,840.00	\$ 2,513,445.91	\$ (10,112,428.79)	
1999-2000	\$ 263,778.00	\$ 961,408.67	\$ (10,810,059.46)	
2000-2001	\$ 267,580.00	\$ 455,155.73	\$ (10,997,635.19)	
2001-2002	\$ 172,850.00	\$ 802,284.36	\$ (11,627,069.54)	
2002-2003	\$ 334,440.00	\$ 4,291,367.90	\$ (15,583,997.44)	
2003-2004	\$ 1,277,190.00	\$ 841,011.61	\$ (15,147,819.05)	
2004-2005	\$ 3,393,467.00	\$ 1,370,488.06	\$ (13,124,840.11)	
2005-2006	\$ 1,287,940.00	\$ -	\$ (11,836,900.11)	
2006-2007	\$ 2,218,549.00	\$ 3,408,196.30	\$ (13,026,547.41)	
2007-2008	\$ 603,536.00	\$ 735,649.81	\$ (13,158,661.22)	
2008-2009	\$ 181,840.00	\$ 2,409,194.71	\$ (15,386,015.92)	
2009-2010	\$ 90,820.00	\$ -	\$ (15,295,195.92)	
2010-2011	\$ 138,080.00	\$ 57,858.00	\$ (15,214,973.92)	
2011-2012	\$ 396,420.00	\$ 884,623.00	\$ (15,703,176.92)	
2012-2013	\$ 481,060.00	\$ 222,131.66	\$ (15,444,248.58)	
2013-2014	\$ 657,460.00	\$ 81,411.00	\$ (14,868,199.58)	
2014-2015	\$ 680,110.00	\$ 2,713,074.69	\$ (16,901,164.28)	
2015-2016	\$ 574,675.00	\$ 1,688,799.26	\$ (18,015,288.54)	
2016-2017	\$ 939,845.00	\$ 285,968.36	\$ (17,361,411.90)	
2017-2018	\$ 841,190.00	\$ 1,137,230.45	\$ (17,657,452.35)	
2018-2019	\$ 954,159.00	\$ 1,237,336.28	\$ (17,940,629.63)	
2019-2020	\$ 1,186,060.00	\$ 3,778,694.83	\$ (20,533,264.45)	
Total	\$ 18,450,199.86	\$ 38,983,464.31	\$ (20,533,264.45)	
Sum Check	\$ -	\$ -	\$ -	
*A negative cumulative balance represents Agency capital expenditures in excess of Backup Facility Charges levied/collected.				

DESERT WATER AGENCY				
Back-up Facility Charge Summary				
Revenues & Expenditures				
Reclaimed Water Service				
A Backup Facility Charge for recycled water service shall be imposed for all existing water service connections for which increased capacity is requested and larger meters are installed. (DWA Resolution 1168 Section 2)				
The purpose of the Backup Facility Charge is to raise a portion of the funds required by the Agency to develop recycled water supplies and construct storage and distribution facilities. (DWA Ordinance 67 Section 6-1.3)				
Revenue	Back-up Facility Revenue received in a fiscal year in accordance with DWA Ordinance 67 Section 6-1.3 inclusive of any interest on cumulative excess revenues in accordance with DWA Resolution 1168 Section 3.			
Expenditures	Capital expenditures funded by Desert Water, put into service in a given fiscal year. These capital expenditures are recorded in proportion to the increased capacity they provide to DWA's water system.			
Year	Revenue	Expenditures	Cumulative Balance*	
1988-1989	\$ -	\$ 8,496,895.00	\$ (8,496,895.00)	
1989-1990	\$ 96,193.00	\$ 28,934.00	\$ (8,429,636.00)	
1990-1991	\$ -	\$ -	\$ (8,429,636.00)	
1991-1992	\$ -	\$ 37,793.00	\$ (8,467,429.00)	
1992-1993	\$ -	\$ -	\$ (8,467,429.00)	
1993-1994	\$ -	\$ 19,190.00	\$ (8,486,619.00)	
1994-1995	\$ -	\$ 21,123.00	\$ (8,507,742.00)	
1995-1996	\$ -	\$ 3,545,644.00	\$ (12,053,386.00)	
1996-1997	\$ -	\$ 49,258.00	\$ (12,102,644.00)	
1997-1998	\$ -	\$ 33,313.00	\$ (12,135,957.00)	
1998-1999	\$ -	\$ 177,863.00	\$ (12,313,820.00)	
1999-2000	\$ -	\$ 28,864.00	\$ (12,342,684.00)	
2000-2001	\$ -	\$ 1,207,954.00	\$ (13,550,638.00)	
2001-2002	\$ -	\$ 339,383.00	\$ (13,890,021.00)	
2002-2003	\$ -	\$ 38,056.00	\$ (13,928,077.00)	
2003-2004	\$ -	\$ 522,373.00	\$ (14,450,450.00)	
2004-2005	\$ -	\$ 50,211.00	\$ (14,500,661.00)	
2005-2006	\$ -	\$ 25,173.00	\$ (14,525,834.00)	
2006-2007	\$ -	\$ 4,198,092.00	\$ (18,723,926.00)	
2007-2008	\$ -	\$ 1,935,892.00	\$ (20,659,818.00)	
2008-2009	\$ -	\$ 180,517.00	\$ (20,840,335.00)	
2009-2010	\$ -	\$ 45,005.00	\$ (20,885,340.00)	
2010-2011	\$ -	\$ 55,067.00	\$ (20,940,407.00)	
2011-2012	\$ -	\$ 4,973,063.00	\$ (25,913,470.00)	
2012-2013	\$ -	\$ -	\$ (25,913,470.00)	
2013-2014	\$ -	\$ 739,724.00	\$ (26,653,194.00)	
2014-2015	\$ -	\$ 99,660.00	\$ (26,752,854.00)	
2015-2016	\$ -	\$ 2,555,400.00	\$ (29,308,254.00)	
2016-2017	\$ -	\$ 26,248.00	\$ (29,334,502.00)	
2017-2018	\$ -	\$ 45,207.00	\$ (29,379,709.00)	
2018-2019	\$ -	\$ -	\$ (29,379,709.00)	
2019-2020	\$ -	\$ -	\$ (29,379,709.00)	
Total	\$ 96,193.00	\$ 29,475,902.00	\$ (29,379,709.00)	
Sum Check	\$ -	\$ -	\$ -	
*A negative cumulative balance represents Agency capital expenditures in excess of Backup Facility Charges levied/collected.				

DESERT WATER AGENCY
WATER & RECYCLED WATER RATE STUDY
Groundwater Replenishment Assessment

Exhibit 1.B

2	
Financial Plan Alternatives	
1	Alternative 1
2	Alternative 2

TABLE 16 : ASSESSMENT RATE FORECAST - Alternative 2 Source file: [12e] costs - 2021-2022 Engineer's Report (RAC Costs).pdf Table 6, page 89.

Projected Effective Replenishment Assessment Rates	FY 2020/21	FY 2021/22	FY 2022/23	FY 2023/24	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30	FY 2030/31	FY 2031/32	FY 2032/33
Anticipated Groundwater Replenishment Assessment Rate ¹	\$175.00	\$175.00	\$175.00	\$195.00	\$215.00	\$235.00	\$255.00	\$275.00	\$285.00	\$285.00	\$285.00	\$285.00	\$285.00
Estimated Assessable Production (in Acre Feet) ²	40,830	44,830	46,272	45,954	45,771	45,729	45,957	46,452	46,946	47,659	48,319	48,707	49,094
Estimated Total Assessment	\$ 7,145,250	\$ 7,845,250	\$ 8,097,600	\$ 8,961,030	\$ 9,840,765	\$ 10,746,315	\$ 11,719,035	\$ 12,774,300	\$ 13,379,610	\$ 13,582,815	\$ 13,770,915	\$ 13,881,495	\$ 13,991,790

1. Replenishment assessment rate for FY 2020/21 and 2021/22 are per the DWA website and FY 2022/23 and beyond are per the Krieger & Stewart May 2021 Groundwater Replenishment & Assessment Program Report (Table 6, page 89).
2. Per the Krieger & Stewart May 2021 Groundwater Replenishment & Assessment Program Report (Table 6, page 89).

TABLE 17 : ASSESSMENT BY SUBBASIN

Alternative 2			
Assessment by Subbasin ¹	\$-Amount	Amount of Water (AF)	%-Allocation
Whitewater River Subbasin	\$ 6,167,000	35,240	79%
Mission Creek Subbasin	1,678,250	9,590	21%
Total Assessment	\$ 7,845,250	44,830	100%

1. Per the Krieger & Stewart May 2021 Groundwater Replenishment & Assessment Program Report (Table 2, page 85).

TABLE 18 : WHITEWATER RIVER PRODUCTION

Alternative 2			
Whitewater River Subbasin Assessable Production ¹	Amount of Water (AF)	Replenishment Assessment	% of Production & Assessment
Desert Water Agency Assessable Production (AF)	33,260	\$ 6,485,700	94%
All Other Producers (AF)	1,980	386,100	6%
Total Whitewater River Subbasin Assessable Production	35,240	\$ 6,871,800	100%

1. Per the Krieger & Stewart May 2021 Groundwater Replenishment & Assessment Program Report (Table 2, page 85).

From Esther (email of 10-21-21):

The Krieger & Stewart May 2021 Groundwater Replenishment & Assessment Program Report (Table 2, page 85) projected the Groundwater Replenishment Assessment will increase by over 50% from '21/22 to '22/23 (from \$175 to \$268). Should we use this estimate, or do you have a different assumption you'd prefer to use?

Our goal is to increase our replenishment assessment by \$20 each year until we 'break even' with the current Table A charges. See Table 7 (Pg 90) of the Groundwater Replenishment & Assessment Report, Column "Table A Allocation \$/AF". Future rates, based off of Table 7 will be as follows:

Year	Table A \$/AF	RAC \$/AF
21/22	\$ 248.00	\$ 175.00
22/23	\$ 268.00	\$ 175.00
23/24	\$ 275.00	\$ 195.00
24/25	\$ 278.00	\$ 215.00
25/26	\$ 283.00	\$ 235.00
26/27	\$ 283.00	\$ 255.00
27/28	\$ 284.00	\$ 275.00
28/29	\$ 285.00	\$ 285.00
29/30	\$ 285.00	\$ 285.00
30/31	\$ 285.00	\$ 285.00
31/32	\$ 285.00	\$ 285.00
32/33	\$ 285.00	\$ 285.00
33/34	\$ 286.00	\$ 286.00
34/35	\$ 295.00	\$ 295.00
35/36	\$ 295.00	\$ 295.00
36/37	\$ 295.00	\$ 295.00

DESERT WATER AGENCY
WATER & RECYCLED WATER RATE STUDY
Groundwater Replenishment Assessment

Exhibit 1.B

2	
Financial Plan Alternatives	
1	Alternative 1
2	Alternative 2

TABLE 19 : CALCULATION OF REPLENISHMENT ASSESSMENTS

Calculation of Replenishment Assessment Amounts	FY 2020/21	FY 2021/22	FY 2022/23	FY 2023/24	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30	FY 2030/31	FY 2031/32	FY 2032/33
<i>Assessment Levied by Desert Water Agency (Revenue to DWA):</i>													
Estimated Assessable Groundwater Production (AF) ¹	40,830	44,830	46,272	45,954	45,771	45,729	45,957	46,452	46,946	47,659	48,319	48,707	49,094
Assessment Rate (per AF)	\$175.00	\$175.00	\$175.00	\$195.00	\$215.00	\$235.00	\$255.00	\$275.00	\$285.00	\$285.00	\$285.00	\$285.00	\$285.00
Revenue from Assessment	\$ 7,145,250	\$ 7,845,250	\$ 8,097,600	\$ 8,961,030	\$ 9,840,765	\$ 10,746,315	\$ 11,719,035	\$ 12,774,300	\$ 13,379,610	\$ 13,582,815	\$ 13,770,915	\$ 13,881,495	\$13,991,790
<i>Replenishment Assessment due from Desert Water Agency (Expense to DWA):</i>													
Estimated Assessable Groundwater Production (AF) ²	33,260	33,260	34,330	34,094	33,958	33,927	34,096	34,463	34,830	35,359	35,849	36,136	36,424
Assessment Rate (per AF)	\$175.00	\$175.00	\$175.00	\$195.00	\$215.00	\$235.00	\$255.00	\$275.00	\$285.00	\$285.00	\$285.00	\$285.00	\$285.00
Expense from Assessment	\$ 5,820,500	\$ 5,820,500	\$ 6,007,722	\$ 6,648,313	\$ 7,301,000	\$ 7,972,840	\$ 8,694,515	\$ 9,477,431	\$ 9,926,519	\$ 10,077,279	\$ 10,216,833	\$ 10,298,874	\$10,380,703

1. Per the Krieger & Stewart May 2021 Groundwater Replenishment & Assessment Program Report (Table 6, page 89).

2. Per the Krieger and Stewart report for FY 2020/21 and FY 2021/22. For all future years, it is assumed to be 79% of the total assessable water (35,240/44,830 = 79%). Source: Krieger & Stewart May 2021 Groundwater Replenishment & Assessment Program Report (Table 2, page 85).

TABLE 20 : CAPITAL FUNDING SUMMARY

CAPITAL FUNDING FORECAST	Actuals	Actuals	Budget	5-Year Rate Projected Period					Projected				
Funding Sources:	FY 2020/21	FY 2021/22	FY 2022/23	FY 2023/24	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30	FY 2030/31	FY 2031/32	FY 2032/33
Grants - USBR for AMI ¹	\$ -	\$ 375,000	\$ 375,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Grants - Sentinel Mitigation for water conservation programs ¹	-	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000
Government Grant Funding ²	-	-	-	1,489,000	-	-	-	-	-	-	-	-	-
Use of Capacity Fee Reserves	-	-	-	-	-	-	-	-	-	-	-	-	-
SRF Loan Funding	-	-	-	-	-	-	-	-	-	-	-	-	-
Use of New Revenue Bond Proceeds	-	-	-	-	-	-	-	-	-	-	-	-	-
Use of Capital Rehabilitation and Replacement Reserve	-	-	-	-	-	-	-	-	-	-	-	-	-
Rate Revenue	10,567,231	11,329,351	10,460,946	12,234,410	13,040,394	13,554,183	14,370,585	14,936,385	16,274,221	17,563,374	18,827,665	13,944,400	14,493,536
Total Sources of Capital Funds	\$ 10,567,231	\$ 11,804,351	\$ 10,935,946	\$ 13,823,410	\$ 13,140,394	\$ 13,654,183	\$ 14,470,585	\$ 15,036,385	\$ 16,374,221	\$ 17,663,374	\$ 18,927,665	\$ 14,044,400	\$ 14,593,536
Uses of Capital Funds:													
Total Project Costs	\$ 10,567,231	\$ 11,804,351	\$ 10,935,946	\$ 13,823,410	\$ 13,140,394	\$ 13,654,183	\$ 14,470,585	\$ 15,036,385	\$ 16,374,221	\$ 17,663,374	\$ 18,927,665	\$ 14,044,400	\$ 14,593,536
Capital Funding Surplus (Deficiency)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

1. The Agency has the following active grants (no checks received to date):

- \$290,000 - Prop 1 Round 1 from the Department of Water Resources for grass removal
- \$75,000 - USBR SWEP 2019 from the US Bureau of Reclamation (USBR) for grass removal
- \$100,000 per year - Sentinel Mitigation for water conservation programs. Should occur every year.
- \$750,000 - USBR for AMI. Matching grant and is awarded. Split over '21/22 and '22/23

2. This is for FEMA and other Grant Awards that are one time in nature.

5-Year Rate Projected Period							
FY 2023/24	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28	Total	Avg. Annual	
New CIP	\$ 13,823,410	\$ 13,140,394	\$ 13,654,183	\$ 14,470,585	\$ 15,036,385	\$ 70,124,957	\$ 14,024,991
Old CIP	\$ 10,749,974	\$ 11,018,873	\$ 10,070,106	\$ 11,826,240	\$ 12,288,646	\$ 55,953,840	\$ 11,190,768
Difference	\$ 3,073,436	\$ 2,121,521	\$ 3,584,077	\$ 2,644,345	\$ 2,747,739	\$ 14,171,118	

CAPITAL IMPROVEMENT PROGRAM

TABLE 21 : CAPITAL IMPROVEMENT PROGRAM COSTS (in Current-Year Dollars)^{1,2}

CAPITAL IMPROVEMENT PROJECTS	FY 2020/21	FY 2021/22	FY 2022/23	FY 2023/24	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30	FY 2030/31	FY 2031/32	FY 2032/33
CAPITAL PROJECTS BY SYSTEM COMPONENT													
Water Treatment Facilities													
Chino West Filtration Plant	\$ 450,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Well Pumping Facilities													
Palm Springs Base Zone Well 45 Pumping Plant Construction	-	1,600,000	-	-	-	-	-	-	-	-	-	-	-
Palm Springs Chino Zone System Well 42 Pumping Plant Rehabilitation	-	-	750,000	-	-	-	-	-	-	-	-	-	-
Palm Springs Base Zone Well 44 Pumping Plant Construction	-	-	-	-	-	-	-	-	-	-	-	160,000	160,000
Palm Oasis Zone Well Pumping Plant Drilling and Construction	-	-	-	-	-	-	-	-	-	-	-	-	-
Booster Pumping Facilities													
Upgrade Terrace Booster (Booster 6)	-	-	-	130,000	-	-	-	-	-	-	-	-	-
Upgrade Vista Miller Booster (Booster 7)	-	-	-	130,000	-	-	-	-	-	-	-	-	-
Convert RW Booster to Potable Water Booster (East Zone to South Zone)	-	-	-	750,000	-	-	-	-	-	-	-	-	-
Upgrade Palm Oasis Booster (Booster 13)	-	-	-	-	-	-	-	-	-	-	-	20,000	20,000
Storage Facilities													
Construct Desert Palisade No. 2 Steel Reservoir 0.5 MG	-	-	-	-	-	-	216,000	216,000	216,000	216,000	216,000	-	-
Construct Palm Oasis No. 3 Steel Reservoir 2.0 MG	-	-	-	-	-	-	-	-	-	-	-	287,000	287,000
Pipelines (to include replacement pipeline projects)													
Replacement Pipeline Project	-	4,100,000	-	-	-	-	-	-	-	-	-	-	-
Replacement Pipeline Project	2,550,000	-	-	-	-	-	-	-	-	-	-	-	-
36" Avenida Caballeros Pipeline (Ramon Road to Baristo Way)	1,845,000	-	-	-	-	-	-	-	-	-	-	-	-
Indian Canyon Way (Andreas to Tahquitz Canyon Way)	200,000	-	-	-	-	-	-	-	-	-	-	-	-
Replacement Pipeline Project	-	-	5,000,000	-	-	-	-	-	-	-	-	-	-
30" Avenida Caballeros (Tahquitz Canyon Way to Baristo Way)	-	-	1,650,000	-	-	-	-	-	-	-	-	-	-
16" Amado Road (Palm Canyon Drive to Calle Encillia)	-	-	-	-	-	-	-	-	81,000	81,000	81,000	81,000	81,000
16" Tahquitz Canyon Way (Indian Canyon Drive to Calle Encillia)	-	-	-	-	-	-	-	-	54,000	54,000	54,000	54,000	54,000
12" Racquet Club Drive (Via Miraleste to Avenida Caballeros)	-	-	-	-	-	-	-	-	79,200	79,200	79,200	79,200	79,200
12" Via Miraleste (Via Escuela to Racquet Club Drive)	-	-	-	-	-	-	-	-	85,800	85,800	85,800	85,800	85,800
12" Via Miraleste (Vista Chino to Louise Drive)	-	-	-	-	-	-	-	-	-	-	-	-	-
12" Tahquitz Canyon Way North Side (Avenida Caballeros to Sunrise Way)	-	-	-	-	-	-	-	-	151,800	151,800	151,800	151,800	151,800
12" Vista Drive (Grandview to Vista Miller Site)	-	-	-	-	-	-	-	-	79,200	79,200	79,200	79,200	79,200
Replacement Pipeline Project	-	-	-	-	-	-	-	-	-	-	-	-	-
12" Tahquitz Canyon Way South Side (Museum Drive to Farrell Drive)	-	-	-	-	-	-	-	-	-	442,200	442,200	442,200	442,200
Replacement Pipeline Project	-	-	-	-	-	-	-	-	-	-	-	-	-
12" Tachevah Drive (Indian Canyon to Via Miraleste)	-	-	-	-	-	-	-	-	-	-	85,800	85,800	85,800
12" Tachevah Drive (Sunrise Way to Farrell Drive)	-	-	-	-	-	-	-	-	-	-	151,800	151,800	151,800
12" Alejo Road (Calle Encillia to Avenida Caballeros)	-	-	-	-	-	-	-	-	-	-	138,600	138,600	138,600
12" Arenas Road (Cahuilla Road to South Palm Canyon)	-	-	-	-	-	-	-	-	-	-	-	-	-
Replacement Pipeline Project - Winter	-	-	-	4,250,000	4,250,000	4,250,000	4,250,000	4,250,000	4,250,000	4,250,000	4,250,000	4,700,000	4,700,000
Replacement Pipeline Project - Summer	-	-	-	4,250,000	4,250,000	4,250,000	4,250,000	4,250,000	4,250,000	4,250,000	4,250,000	4,250,000	-
Subtotal: Capital Improvement Projects (in Current-Year Dollars)	\$ 5,045,000	\$ 5,700,000	\$ 7,400,000	\$ 9,510,000	\$ 8,500,000	\$ 8,500,000	\$ 8,716,000	\$ 8,716,000	\$ 9,247,000	\$ 9,689,200	\$ 10,065,400	\$ 6,516,400	\$ 6,516,400

TABLE 22 : CAPITAL IMPROVEMENT PROGRAM COSTS (in Current-Year Dollars)²

CAPITAL IMPROVEMENT PROJECTS	FY 2020/21	FY 2021/22	FY 2022/23	FY 2023/24	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30	FY 2030/31	FY 2031/32	FY 2032/33
ROUTINE PROJECTS (NOT INCLUDED IN GENERAL PLAN CIP)													
Pipelines	\$ 200,000	\$ 200,000	\$ 200,000	\$ 200,000	\$ 200,000	\$ 200,000	\$ 200,000	\$ 200,000	\$ 200,000	\$ 200,000	\$ 200,000	\$ 200,000	\$ 200,000
Wells	243,200	-	134,000	134,000	134,000	134,000	134,000	134,000	134,000	134,000	134,000	134,000	134,000
Reservoirs	-	193,800	-	-	-	-	-	-	-	-	-	-	-
Reclamation Plant	201,700	-	33,000	33,000	33,000	33,000	33,000	33,000	33,000	33,000	33,000	33,000	33,000
Transportation Equipment	383,300	234,000	154,000	154,000	154,000	154,000	154,000	154,000	154,000	154,000	154,000	154,000	154,000
Meters	773,000	735,400	406,000	406,000	406,000	406,000	406,000	406,000	406,000	406,000	406,000	406,000	406,000
Services	1,655,000	1,691,000	900,000	900,000	900,000	900,000	900,000	900,000	900,000	900,000	900,000	900,000	900,000
Miscellaneous	1,668,400	2,178,500	520,300	520,300	520,300	520,300	520,300	520,300	520,300	520,300	520,300	520,300	520,300
Subtotal: Routine Projects (in Current-Year Dollars)	\$ 5,124,600	\$ 5,232,700	\$ 2,347,300	\$ 2,347,300	\$ 2,347,300	\$ 2,347,300	\$ 2,347,300	\$ 2,347,300	\$ 2,347,300	\$ 2,347,300	\$ 2,347,300	\$ 2,347,300	\$ 2,347,300
Total: Capital Improvement Projects (in Current-Year Dollars)	\$ 10,169,600	\$ 10,932,700	\$ 9,747,300	\$ 11,857,300	\$ 10,847,300	\$ 10,847,300	\$ 11,063,300	\$ 11,063,300	\$ 11,594,300	\$ 12,036,500	\$ 12,412,700	\$ 8,863,700	\$ 8,863,700

TABLE 23 : CAPITAL IMPROVEMENT PROGRAM COSTS (in Future-Year Dollars)³

CAPITAL IMPROVEMENT PROJECTS	FY 2020/21	FY 2021/22	FY 2022/23	FY 2023/24	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30	FY 2030/31	FY 2031/32	FY 2032/33
CAPITAL PROJECTS BY SYSTEM COMPONENT													
Water Treatment Facilities													
Chino West Filtration Plant	\$ 467,595	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Well Pumping Facilities													
Palm Springs Base Zone Well 45 Pumping Plant Construction	-	1,727,566	-	-	-	-	-	-	-	-	-	-	-
Palm Springs Chino Zone System Well 42 Pumping Plant Rehabilitation	-	-	841,460	-	-	-	-	-	-	-	-	-	-
Palm Springs Base Zone Well 44 Pumping Plant Construction	-	-	-	-	-	-	-	-	-	-	-	253,518	263,430
Palm Oasis Zone Well Pumping Plant Drilling and Construction	-	-	-	-	-	-	-	-	-	-	-	-	-
Booster Pumping Facilities													
Upgrade Terrace Booster (Booster 6)	-	-	-	151,556	-	-	-	-	-	-	-	-	-
Upgrade Vista Miller Booster (Booster 7)	-	-	-	151,556	-	-	-	-	-	-	-	-	-
Convert RW Booster to Potable Water Booster (East Zone to South Zone)	-	-	-	874,361	-	-	-	-	-	-	-	-	-
Upgrade Palm Oasis Booster (Booster 13)	-	-	-	-	-	-	-	-	-	-	-	31,690	32,929
Storage Facilities													
Construct Desert Palisade No. 2 Steel Reservoir 0.5 MG	-	-	-	-	-	-	282,524	293,571	305,049	316,977	329,370	-	-
Construct Palm Oasis No. 3 Steel Reservoir 2.0 MG	-	-	-	-	-	-	-	-	-	-	-	454,747	472,528
Pipelines (to include replacement pipeline projects)													
Replacement Pipeline Project	-	4,426,888	-	-	-	-	-	-	-	-	-	-	-
Replacement Pipeline Project	2,649,705	-	-	-	-	-	-	-	-	-	-	-	-
36" Avenida Caballeros Pipeline (Ramon Road to Baristo Way)	1,917,140	-	-	-	-	-	-	-	-	-	-	-	-
Indian Canyon Way (Andreas to Tahquitz Canyon Way)	207,820	-	-	-	-	-	-	-	-	-	-	-	-
Replacement Pipeline Project	-	-	5,609,731	-	-	-	-	-	-	-	-	-	-
30" Avenida Caballeros (Tahquitz Canyon Way to Baristo Way)	-	-	1,851,211	-	-	-	-	-	-	-	-	-	-
16" Amado Road (Palm Canyon Drive to Calle Encillia)	-	-	-	-	-	-	-	-	114,393	118,866	123,514	128,343	133,362
16" Tahquitz Canyon Way (Indian Canyon Drive to Calle Encillia)	-	-	-	-	-	-	-	-	76,262	79,244	82,343	85,562	88,908
12" Racquet Club Drive (Via Miraleste to Avenida Caballeros)	-	-	-	-	-	-	-	-	111,851	116,225	120,769	125,491	130,398
12" Via Miraleste (Via Escuela to Racquet Club Drive)	-	-	-	-	-	-	-	-	121,172	125,910	130,833	135,949	141,264
12" Via Miraleste (Vista Chino to Louise Drive)	-	-	-	-	-	-	-	-	-	-	-	-	-
12" Tahquitz Canyon Way North Side (Avenida Caballeros to Sunrise Way)	-	-	-	-	-	-	-	-	214,382	222,764	231,474	240,525	249,929
12" Vista Drive (Grandview to Vista Miller Site)	-	-	-	-	-	-	-	-	111,851	116,225	120,769	125,491	130,398
Replacement Pipeline Project	-	-	-	-	-	-	-	-	-	-	-	-	-
12" Tahquitz Canyon Way South Side (Museum Drive to Farrell Drive)	-	-	-	-	-	-	-	-	-	648,922	674,294	700,659	728,055
Replacement Pipeline Project	-	-	-	-	-	-	-	-	-	-	-	-	-
12" Tachevah Drive (Indian Canyon to Via Miraleste)	-	-	-	-	-	-	-	-	-	-	130,833	135,949	141,264
12" Tachevah Drive (Sunrise Way to Farrell Drive)	-	-	-	-	-	-	-	-	-	-	231,474	240,525	249,929
12" Alejo Road (Calle Encillia to Avenida Caballeros)	-	-	-	-	-	-	-	-	-	-	211,346	219,610	228,196
12" Arenas Road (Cahuilla Road to South Palm Canyon)	-	-	-	-	-	-	-	-	-	-	-	-	-
Replacement Pipeline Project - Winter	-	-	-	4,954,711	5,148,440	5,349,744	5,558,919	5,776,273	6,002,125	6,236,808	6,480,667	7,447,080	7,738,260
Replacement Pipeline Project - Summer	-	-	-	4,954,711	5,148,440	5,349,744	5,558,919	5,776,273	6,002,125	6,236,808	6,480,667	-	-
Subtotal: Capital Improvement Projects (in Future-Year Dollars)	\$ 5,242,260	\$ 6,154,454	\$ 8,302,402	\$ 11,086,894	\$ 10,296,880	\$ 10,699,488	\$ 11,400,362	\$ 11,846,116	\$ 13,059,212	\$ 14,218,748	\$ 15,348,355	\$ 10,325,138	\$ 10,728,851

TABLE 24 : CAPITAL IMPROVEMENT PROGRAM COSTS (in Future-Year Dollars)³

CAPITAL IMPROVEMENT PROJECTS	FY 2020/21	FY 2021/22	FY 2022/23	FY 2023/24	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30	FY 2030/31	FY 2031/32	FY 2032/33
ROUTINE PROJECTS (NOT INCLUDED IN GENERAL PLAN CIP)													
Pipelines	\$ 207,820	\$ 215,946	\$ 224,389	\$ 233,163	\$ 242,280	\$ 251,753	\$ 261,596	\$ 271,825	\$ 282,453	\$ 293,497	\$ 304,973	\$ 316,897	\$ 329,288
Wells	252,709	-	150,341	156,219	162,327	168,674	175,269	182,122	189,243	196,643	204,332	212,321	220,623
Reservoirs	-	209,251	-	-	-	-	-	-	-	-	-	-	-
Reclamation Plant	209,586	-	37,024	38,472	39,976	41,539	43,163	44,851	46,605	48,427	50,320	52,288	54,332
Transportation Equipment	398,287	252,657	172,780	179,535	186,555	193,850	201,429	209,305	217,489	225,993	234,829	244,011	253,552
Meters	803,224	794,033	455,510	473,321	491,827	511,058	531,040	551,804	573,379	595,799	619,094	643,301	668,454
Services	1,719,711	1,825,821	1,009,752	1,049,233	1,090,258	1,132,887	1,177,183	1,223,211	1,271,038	1,320,736	1,372,377	1,426,037	1,481,795
Miscellaneous	1,733,634	2,352,189	583,749	606,573	630,290	654,935	680,542	707,152	734,801	763,532	793,386	824,408	856,642
Subtotal: Routine Projects (in Future-Year Dollars)	\$ 5,324,972	\$ 5,649,897	\$ 2,633,544	\$ 2,736,516	\$ 2,843,514	\$ 2,954,695	\$ 3,070,224	\$ 3,190,269	\$ 3,315,009	\$ 3,444,626	\$ 3,579,311	\$ 3,719,262	\$ 3,864,685
Total: Capital Improvement Projects (in Future-Year Dollars)	\$ 10,567,231	\$ 11,804,351	\$ 10,935,946	\$ 13,823,410	\$ 13,140,394	\$ 13,654,183	\$ 14,470,585	\$ 15,036,385	\$ 16,374,221	\$ 17,663,374	\$ 18,927,665	\$ 14,044,400	\$ 14,593,536

TABLE 25 : FORECASTING ASSUMPTIONS

Economic Variables	FY 2020/21	FY 2021/22	FY 2022/23	FY 2023/24	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30	FY 2030/31	FY 2031/32	FY 2032/33
Annual Construction Cost Inflation, Per Engineering News Record ⁴	3.91%	3.91%	3.91%	3.91%	3.91%	3.91%	3.91%	3.91%	3.91%	3.91%	3.91%	3.91%	3.91%
Cumulative Construction Cost Multiplier from FY 2020/21	1.04	1.08	1.12	1.17	1.21	1.26	1.31	1.36	1.41	1.47	1.52	1.58	1.65

1. Capital project costs were provided by DWA staff. Source files: *Capital Improvement Summary Budget Years 2020-2023 through 2050-2051.xlsx* & *DWA_Rate Study_Draft Report_03-06-2023 - General Plan CIP_DT.pdf*.

2. Routine project costs provided by Agency staff and estimated at \$2.3M annually. Source file: *Projected reoccurring Misc Capital Budget.xlsx*.

3. Future project costs are inflated by 3.91% per year. Source: Engineering News Record website (<http://enr.construction.com>).

4. For reference purposes, the annual Construction Cost Inflation percentage is the 5-year average change in the Construction Cost Index from 2017 to 2022 (3.91%). Source: Engineering News Record website (<http://enr.construction.com>).

TABLE 26 : EXISTING DEBT OBLIGATIONS

EXISTING DEBT OBLIGATIONS	Actuals	Actuals	Budget	5-Year Rate Projected Period					Projected				
Annual Repayment Schedules:	FY 2020/21	FY 2021/22	FY 2022/23	FY 2023/24	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30	FY 2030/31	FY 2031/32	FY 2032/33
REVNEUE BONDS													
<u>Water Revenue Refunding Bonds, Series 2016, - \$19,720,000¹</u>													
Principal Payment ²	\$ 720,000	\$ 745,000	\$ 780,000	\$ 800,000	\$ 830,000	\$ 865,000	\$ 895,000	\$ 945,000	\$ 990,000	\$ 1,030,000	\$ 1,070,000	\$ 1,115,000	\$ 1,160,000
Interest Payment ²	622,750	593,950	564,150	544,650	512,650	479,450	444,850	400,100	352,850	313,250	272,050	229,250	184,650
Subtotal: Annual Debt Service	\$ 1,342,750	\$ 1,338,950	\$ 1,344,150	\$ 1,344,650	\$ 1,342,650	\$ 1,344,450	\$ 1,339,850	\$ 1,345,100	\$ 1,342,850	\$ 1,343,250	\$ 1,342,050	\$ 1,344,250	\$ 1,344,650
Coverage Requirement (\$-Amnt above annual payment) ³	\$ 1,544,163	\$ 1,606,740	\$ 1,612,980	\$ 1,613,580	\$ 1,611,180	\$ 1,613,340	\$ 1,607,820	\$ 1,614,120	\$ 1,611,420	\$ 1,611,900	\$ 1,610,460	\$ 1,613,100	\$ 1,613,580
Reserve Requirement (total fund balance) ⁴	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

1. Revenue bonds issued to refund the outstanding 2007 COPs and pay the issuance cost of the bonds. Source file: [7b] 2016 Bond Preliminary Official Statement.pdf .

2. Debt repayment schedule provided by Agency staff. Source file: [6] 2016 Bond Payment Schedule.pdf .

3. The Agency must have net revenues that are at least equal to 1.15 times the annual debt service payment. Source file: [7b] 2016 Bond Preliminary Official Statement.pdf , page 11.

4. Per the Preliminary Official Statement, the Agency is not required to fund a debt service reserve.

TABLE 27 : EXISTING ANNUAL DEBT OBLIGATIONS TO BE SATISFIED BY WATER RATES

Existing Annual Debt Service	\$ 1,342,750	\$ 1,338,950	\$ 1,344,150	\$ 1,344,650	\$ 1,342,650	\$ 1,344,450	\$ 1,339,850	\$ 1,345,100	\$ 1,342,850	\$ 1,343,250	\$ 1,342,050	\$ 1,344,250	\$ 1,344,650
Existing Annual Coverage Requirement	\$ 1,544,163	\$ 1,606,740	\$ 1,612,980	\$ 1,613,580	\$ 1,611,180	\$ 1,613,340	\$ 1,607,820	\$ 1,614,120	\$ 1,611,420	\$ 1,611,900	\$ 1,610,460	\$ 1,613,100	\$ 1,613,580
Existing Debt Reserve Target	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

DESERT WATER AGENCY
WATER & RECYCLED WATER RATE STUDY
Projected Water Rates Under Existing Rate Schedule

Exhibit 4

TABLE 28 : CURRENT WATER RATE SCHEDULE

Water Rate Schedule ¹	Current Rates
Fixed Monthly Service Charge (Standard Meters)	
5/8 x 3/4 inch	\$33.53
1 inch	\$33.53
1 1/2 inch	\$64.02
2 inch	\$100.61
3 inch	\$198.18
4 inch	\$307.94
6 inch	\$612.85
8 inch	\$978.73
10 inch	\$2,564.22
12 inch	\$3,235.01
Private Fire Protection Monthly Service Charges	
2 inch	\$7.99
4 inch	\$30.15
6 inch	\$64.99
8 inch	\$111.46
10 inch	\$173.41
12 inch	\$208.26
Volumetric (Unit) Rate (\$/hcf)²	
Uniform Rate	\$2.28
Drought Response Charge	
10%	\$0.16
20%	\$0.37
30%	\$0.63
40%	\$0.98
50%	\$1.46
60%	\$2.20
Zone Pumping Charges (\$/hcf)³	
Base	\$0.00
A	\$0.28
B	\$0.31
C	\$0.64
D	\$2.85
Recycled Water Monthly Service Charges	
2 inch	\$15.00
3 inch	\$26.97
4 inch	\$40.43
6 inch	\$77.83
8 inch	\$122.71
10 inch	\$317.19
12 inch	\$399.47
Recycled Water Volumetric Rate (\$/hcf)²	
Uniform Rate	\$0.60

1. The rates are per Resolution No. 1264 and effective January 1, 2022. Source file: *01264 Establishing Rates Fees Charges for Domestic Water.pdf*.
2. HCF = Hundred Cubic Feet or 748 gallons.
3. A zone pumping charge is added to the volumetric rate for higher elevations areas. This charge is per unit (hcf).

DESERT WATER AGENCY
WATER & RECYCLED WATER RATE STUDY
Cost-of-Service Analysis

TABLE 29 : CLASSIFICATION OF EXPENSES FOR COST OF SERVICE ANALYSIS

Classification of Expenses											
Budget Categories	Total Revenue Requirements	Commodity	Recycled Water	Capacity	Customer	Fire Protection	Basis of Classification				
	FY 2023/24	(COM)	(RW)	(CAP)	(CA)	(FP)	(COM)	(RW)	(CAP)	(CA)	(FP)
Water Operating Fund Expenses											
Source of Supply Expense											
Supervision & Engineering	\$ 87,360	\$ 87,360	\$ -	\$ -	\$ -	\$ -	100.0%	0.0%	0.0%	0.0%	0.0%
Operating Labor	59,530	59,530	-	-	-	-	100.0%	0.0%	0.0%	0.0%	0.0%
Misc. Source of Supply	161,476	161,476	-	-	-	-	100.0%	0.0%	0.0%	0.0%	0.0%
Maintenance - Structures & Improvements	245,358	245,358	-	-	-	-	100.0%	0.0%	0.0%	0.0%	0.0%
Snow Creek Cabin Expense	45,148	45,148	-	-	-	-	100.0%	0.0%	0.0%	0.0%	0.0%
Snow Creek - Security Expense	78,474	78,474	-	-	-	-	100.0%	0.0%	0.0%	0.0%	0.0%
Reservoir Security	-	-	-	-	-	-	100.0%	0.0%	0.0%	0.0%	0.0%
Maintenance - Coll & Impound Rsv	-	-	-	-	-	-	100.0%	0.0%	0.0%	0.0%	0.0%
Maintenance of Roads	339,678	339,678	-	-	-	-	100.0%	0.0%	0.0%	0.0%	0.0%
Maintenance of Intakes	321,065	321,065	-	-	-	-	100.0%	0.0%	0.0%	0.0%	0.0%
Maintenance of Wells	13,456	13,456	-	-	-	-	100.0%	0.0%	0.0%	0.0%	0.0%
Ground Water Replenishment	6,648,313	6,648,313	-	-	-	-	100.0%	0.0%	0.0%	0.0%	0.0%
Total - Source Of Supply Expense	\$ 7,999,857	\$ 7,999,857	\$ -	\$ -	\$ -	\$ -	100.0%	0.0%	0.0%	0.0%	0.0%
Pumping Expense											
Supervision & Engineering	\$ 144,768	\$ 50,669	\$ 1,211	\$ 88,679	\$ -	\$ 4,208	35.0%	0.8%	61.3%	0.0%	2.9%
Pumping Labor & Expenses	200,928	70,325	1,681	123,081	-	5,841	35.0%	0.8%	61.3%	0.0%	2.9%
Misc. Pumping Expenses	138,084	48,330	1,155	84,585	-	4,014	35.0%	0.8%	61.3%	0.0%	2.9%
Maintenance - Structures & Improvements	338,294	118,403	2,831	207,227	-	9,834	35.0%	0.8%	61.3%	0.0%	2.9%
Maintenance - Pumping Equipment	463,048	162,067	3,874	283,646	-	13,461	35.0%	0.8%	61.3%	0.0%	2.9%
Power Purchased	3,728,736	3,728,736	-	-	-	-	100.0%	0.0%	0.0%	0.0%	0.0%
Total - Pumping Expense	\$ 5,013,859	\$ 4,178,529	\$ 10,753	\$ 787,219	\$ -	\$ 37,359	83.3%	0.2%	15.7%	0.0%	0.7%
Regulatory Water Treatment											
Supervision & Engineering	\$ 148,512	\$ 84,790	\$ -	\$ 59,405	\$ -	\$ 4,317	57.1%	0.0%	40.0%	0.0%	2.9%
Operating Labor & Expenses	209,539	119,632	-	83,816	-	6,091	57.1%	0.0%	40.0%	0.0%	2.9%
Misc. Water Treatment Expense	144,624	140,420	-	-	-	4,204	97.1%	0.0%	0.0%	0.0%	2.9%
Chemicals & Filter Materials	294,027	294,027	-	-	-	-	100.0%	0.0%	0.0%	0.0%	0.0%
Maintenance - Structures & Improvements	15,594	8,903	-	6,238	-	453	57.1%	0.0%	40.0%	0.0%	2.9%
Maintenance Water Treatment Equip	100,608	57,440	-	40,243	-	2,925	57.1%	0.0%	40.0%	0.0%	2.9%
Total - Regulatory Water Treatment	\$ 912,904	\$ 705,212	\$ -	\$ 189,701	\$ -	\$ 17,991	77.2%	0.0%	20.8%	0.0%	2.0%
Trans. And Dist. Expense											
Supervision & Engineering	\$ 732,576	\$ 366,288	\$ 6,130	\$ 332,733	\$ 6,130	\$ 21,296	50.0%	0.8%	45.4%	0.8%	2.9%
Storage Facilities Expense	150,912	75,456	1,263	68,544	1,263	4,387	50.0%	0.8%	45.4%	0.8%	2.9%
Trans & Dist Line Expense	97,464	48,732	815	44,268	815	2,833	50.0%	0.8%	45.4%	0.8%	2.9%
Hand Tools & Equipment	70,426	35,213	589	31,987	589	2,047	50.0%	0.8%	45.4%	0.8%	2.9%
Meter Expense	133,683	66,841	1,119	60,718	1,119	3,886	50.0%	0.8%	45.4%	0.8%	2.9%
Meter Test Charges	-	-	-	-	-	-	50.0%	0.8%	45.4%	0.8%	2.9%
Customer Connection Expense	157,452	78,726	1,317	71,514	1,317	4,577	50.0%	0.8%	45.4%	0.8%	2.9%
Cross Connection Expense	202,348	101,174	1,693	91,906	1,693	5,882	50.0%	0.8%	45.4%	0.8%	2.9%
Misc. Supplies & Expense	56,340	28,170	471	25,590	471	1,638	50.0%	0.8%	45.4%	0.8%	2.9%
Maintenance - Structures & Improvements	4,276	2,138	36	1,942	36	124	50.0%	0.8%	45.4%	0.8%	2.9%
Maintenance of Reservoirs & Tanks	112,807	56,403	944	51,236	944	3,279	50.0%	0.8%	45.4%	0.8%	2.9%
Maintenance - Transmission & Distr. Mains	1,674,746	837,373	14,013	760,662	14,013	48,685	50.0%	0.8%	45.4%	0.8%	2.9%
Maintenance - Whitewater Mutual WC	337,540	168,770	2,824	153,309	2,824	9,812	50.0%	0.8%	45.4%	0.8%	2.9%
Maintenance of Fire Services	115,322	57,661	965	52,379	965	3,352	50.0%	0.8%	45.4%	0.8%	2.9%
Maintenance of Services	288,242	144,121	2,412	130,918	2,412	8,379	50.0%	0.8%	45.4%	0.8%	2.9%
Maintenance of Meters	199,078	99,539	1,666	90,420	1,666	5,787	50.0%	0.8%	45.4%	0.8%	2.9%
Meter Repair Parts	2,138	1,069	18	971	18	62	50.0%	0.8%	45.4%	0.8%	2.9%
Maintenance of Fire Hydrants	183,484	91,742	1,535	83,338	1,535	5,334	50.0%	0.8%	45.4%	0.8%	2.9%
Total - Trans. And Dist. Expense	\$ 4,518,832	\$ 2,259,416	\$ 37,810	\$ 2,052,434	\$ 37,810	\$ 131,362	50.0%	0.8%	45.4%	0.8%	2.9%
Subtotal: Water Operating Fund Expenses	\$ 18,445,453	\$ 15,143,015	\$ 48,563	\$ 3,029,354	\$ 37,810	\$ 186,712	82.1%	0.3%	16.4%	0.2%	1.0%

DESERT WATER AGENCY
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TABLE 30 : CLASSIFICATION OF EXPENSES FOR COST OF SERVICE ANALYSIS, cont.

Classification of Expenses											
Budget Categories	Total Revenue Requirements	Commodity	Recycled Water	Capacity	Customer	Fire Protection	Basis of Classification				
	FY 2023/24	(COM)	(RW)	(CAP)	(CA)	(FP)	(COM)	(RW)	(CAP)	(CA)	(FP)
Water Operating Fund Expenses											
Customer Acct. Expense											
Supervision & Engineering	\$ 222,144	\$ -	\$ -	\$ -	\$ 222,144	\$ -	0.0%	0.0%	0.0%	100.0%	0.0%
Meter Reading Expense	160,973	-	-	-	160,973	-	0.0%	0.0%	0.0%	100.0%	0.0%
Customer Records & Collection Expense	693,692	-	-	-	693,692	-	0.0%	0.0%	0.0%	100.0%	0.0%
Customer Records Postage	155,942	-	-	-	155,942	-	0.0%	0.0%	0.0%	100.0%	0.0%
Cust Records - Print & Stationery	37,728	-	-	-	37,728	-	0.0%	0.0%	0.0%	100.0%	0.0%
Customer Records - Shortages/Overages	-	-	-	-	-	-	0.0%	0.0%	0.0%	100.0%	0.0%
IBM Adj Entries-Water Cons	-	-	-	-	-	-	0.0%	0.0%	0.0%	100.0%	0.0%
IBM Paper	3,647	-	-	-	3,647	-	0.0%	0.0%	0.0%	100.0%	0.0%
Uncollectible Accounts	55,783	-	-	-	55,783	-	0.0%	0.0%	0.0%	100.0%	0.0%
Total - Customer Acct. Expense	\$ 1,329,909	\$ -	\$ -	\$ -	\$ 1,329,909	\$ -	0.0%	0.0%	0.0%	100.0%	0.0%
General And Administrative Expenses											
Administration & General Salaries	\$ 1,184,352	\$ 414,523	\$ 9,910	\$ 666,272	\$ 59,218	\$ 34,429	35.0%	0.8%	56.3%	5.0%	2.9%
Office Supplies & Expenses	122,113	42,740	1,022	68,696	6,106	3,550	35.0%	0.8%	56.3%	5.0%	2.9%
Office Expense - Power	36,470	12,765	305	20,517	1,824	1,060	35.0%	0.8%	56.3%	5.0%	2.9%
Office-Telephone & Answer Svc	69,797	24,429	584	39,265	3,490	2,029	35.0%	0.8%	56.3%	5.0%	2.9%
Office - Stationery & Forms	3,144	1,100	26	1,769	157	91	35.0%	0.8%	56.3%	5.0%	2.9%
Office Supplies - Xerox	1,886	660	16	1,061	94	55	35.0%	0.8%	56.3%	5.0%	2.9%
Office Supplies - Photo / Camera	1,006	352	8	566	50	29	35.0%	0.8%	56.3%	5.0%	2.9%
Convention Expense & Seminars	64,389	22,536	539	36,223	3,219	1,872	35.0%	0.8%	56.3%	5.0%	2.9%
Dues / Memberships / Subscriptions	52,819	18,487	442	29,714	2,641	1,535	35.0%	0.8%	56.3%	5.0%	2.9%
Office Expense - Heating	5,659	1,981	47	3,184	283	165	35.0%	0.8%	56.3%	5.0%	2.9%
Postage/Mailing Machine	6,288	2,201	53	3,537	314	183	35.0%	0.8%	56.3%	5.0%	2.9%
Legal Services	114,442	40,055	958	64,381	5,722	3,327	35.0%	0.8%	56.3%	5.0%	2.9%
Engineering	88,032	30,811	737	49,524	4,402	2,559	35.0%	0.8%	56.3%	5.0%	2.9%
Auditing	37,728	13,205	316	21,224	1,886	1,097	35.0%	0.8%	56.3%	5.0%	2.9%
Travel & Seminar Expense	-	-	-	-	-	-	35.0%	0.8%	56.3%	5.0%	2.9%
Consultants	259,946	90,981	2,175	146,236	12,997	7,557	35.0%	0.8%	56.3%	5.0%	2.9%
Appraisals	10,564	3,697	88	5,943	528	307	35.0%	0.8%	56.3%	5.0%	2.9%
Insurance	337,037	117,963	2,820	189,604	16,852	9,798	35.0%	0.8%	56.3%	5.0%	2.9%
Damages Hit & Run	15,720	5,502	132	8,843	786	457	35.0%	0.8%	56.3%	5.0%	2.9%
Jury Duty	9,432	3,301	79	5,306	472	274	35.0%	0.8%	56.3%	5.0%	2.9%
Safety Meeting - Labor Only	25,278	8,847	212	14,220	1,264	735	35.0%	0.8%	56.3%	5.0%	2.9%
Workers Compensation Injuries & Medical	28,296	9,904	237	15,918	1,415	823	35.0%	0.8%	56.3%	5.0%	2.9%
Worker Compensation Insurance	294,278	102,997	2,462	165,550	14,714	8,555	35.0%	0.8%	56.3%	5.0%	2.9%
Safety Equipment & Supplies	116,831	40,891	978	65,725	5,842	3,396	35.0%	0.8%	56.3%	5.0%	2.9%
Pension	3,056,976	1,069,942	25,578	1,719,741	152,849	88,866	35.0%	0.8%	56.3%	5.0%	2.9%
OPEB Expense	-	-	-	-	-	-	35.0%	0.8%	56.3%	5.0%	2.9%
Other Employee Benefits	208,416	72,946	1,744	117,247	10,421	6,059	35.0%	0.8%	56.3%	5.0%	2.9%
Tuition & Schooling	53,700	18,795	449	30,209	2,685	1,561	35.0%	0.8%	56.3%	5.0%	2.9%
Subtotal - General And Administrative Expenses	\$ 6,204,599	\$ 2,171,610	\$ 51,915	\$ 3,490,477	\$ 310,230	\$ 180,368	35.0%	0.8%	56.3%	5.0%	2.9%

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TABLE 31 : CLASSIFICATION OF EXPENSES FOR COST OF SERVICE ANALYSIS, cont.

Classification of Expenses											
Budget Categories	Total Revenue Requirements	Commodity	Recycled Water	Capacity	Customer	Fire Protection	Basis of Classification				
	FY 2023/24	(COM)	(RW)	(CAP)	(CA)	(FP)	(COM)	(RW)	(CAP)	(CA)	(FP)
Water Operating Fund Expenses											
General And Administrative Expenses, Cont.											
License Renewal / DMV & Misc.	\$ 17,732	\$ 6,206	\$ 148	\$ 9,975	\$ 887	\$ 515	35.0%	0.8%	56.3%	5.0%	2.9%
Life Insurance	19,493	6,822	163	10,966	975	567	35.0%	0.8%	56.3%	5.0%	2.9%
Blue Cross Insurance	1,685,184	589,814	14,100	948,022	84,259	48,988	35.0%	0.8%	56.3%	5.0%	2.9%
Disability Insurance	22,637	7,923	189	12,735	1,132	658	35.0%	0.8%	56.3%	5.0%	2.9%
Vision Insurance	23,894	8,363	200	13,442	1,195	695	35.0%	0.8%	56.3%	5.0%	2.9%
Dental Insurance	84,259	29,491	705	47,401	4,213	2,449	35.0%	0.8%	56.3%	5.0%	2.9%
Attendance Bonus Plan	377,280	132,048	3,157	212,244	18,864	10,968	35.0%	0.8%	56.3%	5.0%	2.9%
On-Call Pay	-	-	-	-	-	-	35.0%	0.8%	56.3%	5.0%	2.9%
OASDI Taxes	653,952	228,883	5,472	367,889	32,698	19,010	35.0%	0.8%	56.3%	5.0%	2.9%
CA Unemployment Insurance	18,720	6,552	157	10,531	936	544	35.0%	0.8%	56.3%	5.0%	2.9%
Vacation Pay	624,000	218,400	5,221	351,039	31,200	18,140	35.0%	0.8%	56.3%	5.0%	2.9%
Holiday Pay	451,776	158,122	3,780	254,152	22,589	13,133	35.0%	0.8%	56.3%	5.0%	2.9%
Floating Holiday Pay	76,128	26,645	637	42,827	3,806	2,213	35.0%	0.8%	56.3%	5.0%	2.9%
Operations Center - Security	12,576	4,402	105	7,075	629	366	35.0%	0.8%	56.3%	5.0%	2.9%
Maintenance - Operations Center	276,924	96,923	2,317	155,787	13,846	8,050	35.0%	0.8%	56.3%	5.0%	2.9%
Building Maintenance - Alarm/Land/Plant	77,217	27,026	646	43,439	3,861	2,245	35.0%	0.8%	56.3%	5.0%	2.9%
Solar Facility Maintenance	7,294	2,553	61	4,103	365	212	35.0%	0.8%	56.3%	5.0%	2.9%
Hardware / Software / PCs / Printers	378,663	132,532	3,168	213,022	18,933	11,008	35.0%	0.8%	56.3%	5.0%	2.9%
Data Processing - Programmer	1,176,988	411,946	9,848	662,130	58,849	34,215	35.0%	0.8%	56.3%	5.0%	2.9%
Data Processing - Ribbons & Misc	15,720	5,502	132	8,843	786	457	35.0%	0.8%	56.3%	5.0%	2.9%
Maintenance Office Equipment - Xerox & Post	71,180	24,913	596	40,043	3,559	2,069	35.0%	0.8%	56.3%	5.0%	2.9%
Maintenance Office Equipment - Misc/Repair	18,738	6,558	157	10,541	937	545	35.0%	0.8%	56.3%	5.0%	2.9%
Maintenance Office Equipment - Type & Add	-	-	-	-	-	-	35.0%	0.8%	56.3%	5.0%	2.9%
Maintenance I/S Equipment - Misc.	52,442	18,355	439	29,502	2,622	1,524	35.0%	0.8%	56.3%	5.0%	2.9%
Maintenance Data Equipment	5,282	1,849	44	2,971	264	154	35.0%	0.8%	56.3%	5.0%	2.9%
Maintenance I/S Equipment - Print/POC	13,205	4,622	110	7,429	660	384	35.0%	0.8%	56.3%	5.0%	2.9%
Maintenance - Telemetry Equipment	45,525	15,934	381	25,611	2,276	1,323	35.0%	0.8%	56.3%	5.0%	2.9%
Maintenance - Communication Equip	39,866	13,953	334	22,427	1,993	1,159	35.0%	0.8%	56.3%	5.0%	2.9%
Engineering & Supervision	275,414	96,395	2,304	154,938	13,771	8,006	35.0%	0.8%	56.3%	5.0%	2.9%
Storeroom Expense	104,884	36,709	878	59,004	5,244	3,049	35.0%	0.8%	56.3%	5.0%	2.9%
Transportation Expense	792,770	277,470	6,633	445,983	39,639	23,046	35.0%	0.8%	56.3%	5.0%	2.9%
Tools & Work Equipment	136,324	47,713	1,141	76,691	6,816	3,963	35.0%	0.8%	56.3%	5.0%	2.9%
Backhoe	10,564	3,697	88	5,943	528	307	35.0%	0.8%	56.3%	5.0%	2.9%
Payroll - Clearing	-	-	-	-	-	-	35.0%	0.8%	56.3%	5.0%	2.9%
Directors Fees	50,304	17,606	421	28,299	2,515	1,462	35.0%	0.8%	56.3%	5.0%	2.9%
Public Information	259,317	90,761	2,170	145,882	12,966	7,538	35.0%	0.8%	56.3%	5.0%	2.9%
Water Conservation	263,341	263,341	2,203	(2,203)	-	-	100.0%	0.8%	-0.8%	0.0%	0.0%
Water Conservation - Turf Buyback Program	900,945	900,945	7,538	(7,538)	-	-	100.0%	0.8%	-0.8%	0.0%	0.0%
Subtotal - General And Administrative Expenses	\$ 9,040,538	\$ 3,920,974	\$ 75,644	\$ 4,421,145	\$ 393,813	\$ 228,963	43.4%	0.8%	48.9%	4.4%	2.5%
Other Operating Expenses											
Services Rendered - Customers	\$ 170,400	\$ -	\$ -	\$ -	\$ 170,400	\$ -	0.0%	0.0%	0.0%	100.0%	0.0%
Direct Costs Applied To Work-Orders	568,080	198,828	4,753	319,581	28,404	16,514	35.0%	0.8%	56.3%	5.0%	2.9%
Indirect Costs Adm & Gen	(2,274,960)	(796,236)	(19,035)	(1,279,808)	(113,748)	(66,133)	35.0%	0.8%	56.3%	5.0%	2.9%
Total - Other Operating Expenses	\$ (1,536,480)	\$ (597,408)	\$ (14,282)	\$ (960,227)	\$ 85,056	\$ (49,619)	38.9%	0.9%	62.5%	-5.5%	3.2%
Subtotal: Water Operating Fund Expenses	\$ 7,504,058	\$ 3,323,566	\$ 61,362	\$ 3,460,918	\$ 478,869	\$ 179,344	44.3%	0.8%	46.1%	6.4%	2.4%
Subtotal: Water Operating Fund Expenses	\$ 33,484,020	\$ 20,638,191	\$ 161,840	\$ 9,980,748	\$ 2,156,818	\$ 546,423	61.6%	0.5%	29.8%	6.4%	1.6%

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TABLE 32 : CLASSIFICATION OF EXPENSES FOR COST OF SERVICE ANALYSIS, cont.

Classification of Expenses											
Budget Categories	Total Revenue Requirements	Commodity	Recycled Water	Capacity	Customer	Fire Protection	Basis of Classification				
	FY 2023/24	(COM)	(RW)	(CAP)	(CA)	(FP)	(COM)	(RW)	(CAP)	(CA)	(FP)
Water Operating Fund Expenses											
Regulatory Expenses											
Certification/Training/Schooling	\$ 153,679	\$ 101,822	\$ 1,286	\$ 46,104	\$ -	\$ 4,467	66.3%	0.8%	30.0%	0.0%	2.9%
Water Treatment	-	-	-	-	-	-	66.3%	0.8%	30.0%	0.0%	2.9%
Health Dept / Health Services	19,996	13,249	167	5,999	-	581	66.3%	0.8%	30.0%	0.0%	2.9%
State - Permits / Regulatory	173,046	114,654	1,448	51,914	-	5,030	66.3%	0.8%	30.0%	0.0%	2.9%
Federal - Permits / Regulatory	33,955	22,497	284	10,187	-	987	66.3%	0.8%	30.0%	0.0%	2.9%
Reclamation - Permits/Regulatory	5,282	3,500	44	1,585	-	154	66.3%	0.8%	30.0%	0.0%	2.9%
AQMD Compliance	3,144	2,083	26	943	-	91	66.3%	0.8%	30.0%	0.0%	2.9%
RMOP / OSHA / Miscellaneous	57,724	38,246	483	17,317	-	1,678	66.3%	0.8%	30.0%	0.0%	2.9%
Legal - Compliance / Regulatory	-	-	-	-	-	-	66.3%	0.8%	30.0%	0.0%	2.9%
Total - Regulatory Expenses	\$ 446,825	\$ 296,050	\$ 3,739	\$ 134,048	\$ -	\$ 12,989	66.3%	0.8%	30.0%	0.0%	2.9%
Non Operating Expense											
Other Interest - Miscellaneous	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	30.0%	0.8%	61.3%	5.0%	2.9%
OPEB Interest	811,200	243,360	6,787	496,911	40,560	23,582	30.0%	0.8%	61.3%	5.0%	2.9%
Prior Year Expenses	-	-	-	-	-	-	30.0%	0.8%	61.3%	5.0%	2.9%
Depreciation Year Depreciation Expense	-	-	-	-	-	-	30.0%	0.8%	61.3%	5.0%	2.9%
Services To Others	-	-	-	-	-	-	30.0%	0.8%	61.3%	5.0%	2.9%
Customer Assistance Program (Non-Rate)	37,225	11,167	311	22,803	1,861	1,082	30.0%	0.8%	61.3%	5.0%	2.9%
Grant Expenses	21,002	-	-	-	21,002	-	0.0%	0.0%	0.0%	100.0%	0.0%
Losses On Retirements	112,320	33,696	940	68,803	5,616	3,265	30.0%	0.8%	61.3%	5.0%	2.9%
Subtotal - Non Operating Expense	\$ 981,747	\$ 288,223	\$ 8,039	\$ 588,517	\$ 69,039	\$ 27,929	29.4%	0.8%	59.9%	7.0%	2.8%
Snow Creek Hydro Expenses											
Snow Creek Hydro Expenses	\$ 54,077	\$ 16,223	\$ -	\$ 37,854	\$ -	\$ -	30.0%	0.0%	70.0%	0.0%	0.0%
Snow Creek Power Purchased	8,803	2,641	-	6,162	-	-	30.0%	0.0%	70.0%	0.0%	0.0%
Subtotal - Snow Creek Hydro Expenses	\$ 62,880	\$ 18,864	\$ -	\$ 44,016	\$ -	\$ -	30.0%	0.0%	70.0%	0.0%	0.0%
Subtotal: Water Operating Fund Expenses	\$ 1,491,452	\$ 603,137	\$ 11,777	\$ 766,580	\$ 69,039	\$ 40,918	40.4%	0.8%	51.4%	4.6%	2.7%
Total: Water Operating Fund Expenses	\$ 34,975,472	\$ 21,241,328	\$ 173,617	\$ 10,747,329	\$ 2,225,857	\$ 587,341	60.7%	0.5%	30.7%	6.4%	1.7%

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TABLE 33 : CLASSIFICATION OF EXPENSES FOR COST OF SERVICE ANALYSIS, cont.

Classification of Expenses											
Budget Categories	Total Revenue Requirements	Commodity	Recycled Water	Capacity	Customer	Fire Protection	Basis of Classification				
	FY 2023/24	(COM)	(RW)	(CAP)	(CA)	(FP)	(COM)	(RW)	(CAP)	(CA)	(FP)
Reclamation Plant Expenses											
Pumping Expense											
Operating Labor	\$ 76,627	\$ -	\$ 76,627	\$ -	\$ -	\$ -	0.0%	100.0%	0.0%	0.0%	0.0%
Maintenance of Pumps & Equipment	95,955	-	95,955	-	-	-	0.0%	100.0%	0.0%	0.0%	0.0%
Maintenance of Structures	5,911	-	5,911	-	-	-	0.0%	100.0%	0.0%	0.0%	0.0%
Power Purchased	171,600	-	171,600	-	-	-	0.0%	100.0%	0.0%	0.0%	0.0%
Misc. Tools & Supplies	1,258	-	1,258	-	-	-	0.0%	100.0%	0.0%	0.0%	0.0%
Subtotal - Pumping Expense	\$ 351,350	\$ -	\$ 351,350	\$ -	\$ -	\$ -	0.0%	100.0%	0.0%	0.0%	0.0%
Treatment Expense											
Operating Labor	\$ 36,442	\$ -	\$ 36,442	\$ -	\$ -	\$ -	0.0%	100.0%	0.0%	0.0%	0.0%
Maintenance of Filters	33,075	-	33,075	-	-	-	0.0%	100.0%	0.0%	0.0%	0.0%
Maintenance of Water Treatment Equipment	117,837	-	117,837	-	-	-	0.0%	100.0%	0.0%	0.0%	0.0%
Maintenance of Structures	14,965	-	14,965	-	-	-	0.0%	100.0%	0.0%	0.0%	0.0%
Chemicals	262,084	-	262,084	-	-	-	0.0%	100.0%	0.0%	0.0%	0.0%
Laboratory Samples & Supplies	78,600	-	78,600	-	-	-	0.0%	100.0%	0.0%	0.0%	0.0%
Maintenance of Laboratory Equipment	2,138	-	2,138	-	-	-	0.0%	100.0%	0.0%	0.0%	0.0%
Misc. Tools & Supplies	10,061	-	10,061	-	-	-	0.0%	100.0%	0.0%	0.0%	0.0%
Subtotal - Treatment Expense	\$ 555,202	\$ -	\$ 555,202	\$ -	\$ -	\$ -	0.0%	100.0%	0.0%	0.0%	0.0%
Transmission & Distribution Expense											
Operating Labor	\$ 998	\$ -	\$ 998	\$ -	\$ -	\$ -	0.0%	100.0%	0.0%	0.0%	0.0%
Maintenance of Tanks	19,870	-	19,870	-	-	-	0.0%	100.0%	0.0%	0.0%	0.0%
Maintenance of Trans & Distr Mains	142,989	-	142,989	-	-	-	0.0%	100.0%	0.0%	0.0%	0.0%
Maintenance of Services	21,631	-	21,631	-	-	-	0.0%	100.0%	0.0%	0.0%	0.0%
Maintenance of Meters & Equipment	35,842	-	35,842	-	-	-	0.0%	100.0%	0.0%	0.0%	0.0%
Misc. Tools & Supplies	1,761	-	1,761	-	-	-	0.0%	100.0%	0.0%	0.0%	0.0%
Subtotal - Transmission & Distribution Expense	\$ 223,091	\$ -	\$ 223,091	\$ -	\$ -	\$ -	0.0%	100.0%	0.0%	0.0%	0.0%
General And Administrative											
Supervision & Engineering	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	0.0%	100.0%	0.0%	0.0%	0.0%
Power/Utilities	2,534	-	2,534	-	-	-	0.0%	100.0%	0.0%	0.0%	0.0%
Office Supplies & Expenses	-	-	-	-	-	-	0.0%	100.0%	0.0%	0.0%	0.0%
Insurance	25,152	-	25,152	-	-	-	0.0%	100.0%	0.0%	0.0%	0.0%
Safety Equipment & Supplies	10,564	-	10,564	-	-	-	0.0%	100.0%	0.0%	0.0%	0.0%
Engineering & Consultants	120,604	-	120,604	-	-	-	0.0%	100.0%	0.0%	0.0%	0.0%
Maint of Structures - Operations Building	8,049	-	8,049	-	-	-	0.0%	100.0%	0.0%	0.0%	0.0%
Maint of Landscape & Improvements	115,322	-	115,322	-	-	-	0.0%	100.0%	0.0%	0.0%	0.0%
Maint of Telemetry & Monitor	10,061	-	10,061	-	-	-	0.0%	100.0%	0.0%	0.0%	0.0%
Permits / Regulatory	10,564	-	10,564	-	-	-	0.0%	100.0%	0.0%	0.0%	0.0%
Subtotal - General And Administrative	\$ 302,849	\$ -	\$ 302,849	\$ -	\$ -	\$ -	0.0%	100.0%	0.0%	0.0%	0.0%
Total: Water Reclamation Expenses	\$ 1,432,492	\$ -	\$ 1,432,492	\$ -	\$ -	\$ -	0.0%	100.0%	0.0%	0.0%	0.0%
GRAND TOTAL: OPERATING EXPENSES	\$ 36,407,964	\$ 21,241,328	\$ 1,606,109	\$ 10,747,329	\$ 2,225,857	\$ 587,341	58.3%	4.4%	29.5%	6.1%	1.6%

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TABLE 34 : CLASSIFICATION OF EXPENSES FOR COST OF SERVICE ANALYSIS, cont.

Classification of Expenses											
Budget Categories	Total Revenue Requirements	Commodity	Recycled Water	Capacity	Customer	Fire Protection	Basis of Classification				
	FY 2023/24	(COM)	(RW)	(CAP)	(CA)	(FP)	(COM)	(RW)	(CAP)	(CA)	(FP)
Debt Service Payments											
Outstanding Debt	\$ 1,344,650	\$ 1,344,650	\$ -	\$ -	\$ -	\$ -	100.0%	0.0%	0.0%	0.0%	0.0%
Total Debt Service Payments	\$ 1,344,650	\$ 1,344,650	\$ -	\$ -	\$ -	\$ -	100.0%	0.0%	0.0%	0.0%	0.0%
Capital Expenditures											
Rate Funded Capital Expenses	\$ 12,234,410	\$ -		\$ 12,234,410	\$ -	\$ -	0.0%	0.0%	100.0%	0.0%	0.0%
TOTAL REVENUE REQUIREMENTS	\$ 49,987,024	\$ 22,585,978	\$ 1,606,109	\$ 22,981,739	\$ 2,225,857	\$ 587,341	45.2%	3.2%	46.0%	4.5%	1.2%
Less: Non-Rate Revenues											
Power Sales	\$ (111,000)	\$ (50,154)	\$ -	\$ (54,599)	\$ (4,943)	\$ (1,304)	45.2%	0.0%	49.2%	4.5%	1.2%
Fire Protection	(415,237)	(187,620)	-	(204,249)	(18,490)	(4,879)	45.2%	0.0%	49.2%	4.5%	1.2%
Charge For Installation of Service & Meter	(497,224)	(224,664)	-	(244,577)	(22,141)	(5,842)	45.2%	0.0%	49.2%	4.5%	1.2%
Back-Up Facility Charge	(1,438,107)	-	-	(1,438,107)	-	-	0.0%	0.0%	100.0%	0.0%	0.0%
Service Charges	(815,418)	(368,436)	-	(401,091)	(36,309)	(9,581)	45.2%	0.0%	49.2%	4.5%	1.2%
Revenue - General Fund	(109,746)	(49,587)	-	(53,983)	(4,887)	(1,290)	45.2%	0.0%	49.2%	4.5%	1.2%
Revenue From Leases	(189,300)	(85,533)	-	(93,114)	(8,429)	(2,224)	45.2%	0.0%	49.2%	4.5%	1.2%
Interest Income	(213,180)	(96,323)	-	(104,860)	(9,493)	(2,505)	45.2%	0.0%	49.2%	4.5%	1.2%
Gain/Loss Investments	-	-	-	-	-	-	45.2%	0.0%	49.2%	4.5%	1.2%
Other Income	-	-	-	-	-	-	45.2%	0.0%	49.2%	4.5%	1.2%
Contributed Rev - Constr W.O.	(318,325)	(143,831)	-	(156,579)	(14,175)	(3,740)	45.2%	0.0%	49.2%	4.5%	1.2%
Gains On Retirements	(63,100)	(28,511)	-	(31,038)	(2,810)	(741)	45.2%	0.0%	49.2%	4.5%	1.2%
Discounts	(400)	(181)	-	(197)	(18)	(5)	45.2%	0.0%	49.2%	4.5%	1.2%
NET REVENUE REQUIREMENTS	\$ 45,815,986	\$ 21,351,139	\$ 1,606,109	\$ 20,199,345	\$ 2,104,163	\$ 555,230					
Allocation of Revenue Requirements	100.0%	46.6%	3.5%	44.1%	4.6%	1.2%					

TABLE 35 : ADJUSTMENT TO CLASSIFICATION OF EXPENSES FOR COSA

Classification of Expenses						
Adjustment for Current Rate Level:	Total	(COM)	(RW)	(CAP)	(CA)	(FP)
Projected Rate Revenue at Current Rates	\$ 42,579,509					
Test Year (FY 2023/24) Projected Rate Adjustment	6.3%					
Additional Revenue from Rate Increases	\$2,661,219					
Adjusted Net Revenue Req'ts	\$ 45,240,728	\$ 21,083,058	\$ 1,585,943	\$ 19,945,726	\$ 2,077,743	\$ 548,258
<i>Percent of Revenue</i>	<i>100%</i>	<i>46.6%</i>	<i>3.5%</i>	<i>44.1%</i>	<i>4.6%</i>	<i>1.2%</i>

TABLE 36 : RATE ALTERNATIVES BASED ON COSA

Alternative #1 - Current Rate Design (30% Fixed / 70% Variable)	Total Rate Revenue Requirements FY 2023/24	Variable Costs	Fixed Costs		
		Commodity Related Costs	Capacity Related Costs	Customer Related Costs	Fire Protection Related Costs
Rate-Design Adjustments to Fixed/Variable %	100.0%	70.0%	26.0%	3.0%	1.0%
Rate-Design Adjustments to Fixed/Variable (\$)	\$ 43,654,785	\$30,558,350	\$11,350,244	\$1,309,644	\$436,548
Variable (Volumetric Rates)	70%				
Fixed Charges	30%				

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TABLE 37 : DEVELOPMENT OF THE COMMODITY ALLOCATION FACTOR FISCAL YEAR FY 2020/21

Development of the Volumetric/Variable Allocation Factor ¹															Estimated FY 2015/16 Volume Adjusted for Conservation	Percent of Total Volume from 2016 (for comparison)
Customer Class	FY 2018/19	FY 2019/20	FY 2020/21	3-Year Average	% Adjustment for Conservation ²	Est. FY'18/19 Volume Adjusted for Conservation	Est. FY'19/20 Volume Adjusted for Conservation	Est. FY'20/21 Volume Adjusted for Conservation	3-yr Avg. Volume Adjusted for Conservation	FY 2018/19 % of Total Volume	FY 2019/20 % of Total Volume	FY 2020/21 % of Total Volume	3-yr Avg. % of Total Volume			
Potable Water																
Residential	7,056,019	7,153,240	7,834,756	7,348,005	5.0%	6,703,218	6,795,578	7,443,018	6,980,605	56.8%	57.8%	57.9%	57.5%	5,801,532	44.0%	
Multi-Family	264,289	261,779	269,302	269,302	5.0%	251,075	248,690	267,746	255,837	2.1%	2.1%	2.1%	2.1%	241,981	1.8%	
Condo	452,879	443,669	483,124	459,891	5.0%	430,235	421,486	458,968	436,896	3.6%	3.6%	3.6%	3.6%	423,764	3.2%	
Commercial	2,576,791	2,438,961	2,599,571	2,538,441	5.0%	2,447,951	2,317,013	2,469,592	2,411,519	20.7%	19.7%	19.2%	19.9%	3,275,825	24.8%	
Irrigation/Condo	1,385,718	1,432,364	1,587,227	1,468,436	5.0%	1,316,432	1,360,746	1,507,866	1,395,015	11.1%	11.6%	11.7%	11.5%	1,109,106	8.4%	
Fire Private	3,801	1,697	2,486	2,661	5.0%	3,611	1,612	2,362	2,528	0.0%	0.0%	0.0%	0.0%	1,223	0.0%	
Fire Public	-	1	2	1	5.0%	-	1	2	1	0.0%	0.0%	0.0%	0.0%	-	0.0%	
Public Authority	592,089	570,586	625,458	596,044	5.0%	562,485	542,057	594,185	566,242	4.8%	4.6%	4.6%	4.7%	469,401	3.6%	
Potable Water Total	12,331,586	12,302,297	13,414,462	12,682,782		11,715,007	11,687,182	12,743,739	12,048,643	99.2%	99.3%	99.2%	99.2%	11,322,832	85.8%	
Other Water																
Recycled Water ³	1,299,012	1,369,739	1,309,726	1,326,159	5.0%	1,234,061	1,301,252	1,244,239	1,259,851	n/a	n/a	n/a	n/a	1,722,221	13.1%	
Whitewater	n/a	n/a	n/a	n/a	5.0%	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	-	0.0%	
Commercial Mains	100,819	83,668	105,939	96,809	5.0%	95,778	79,485	100,642	91,968	0.8%	0.7%	0.8%	0.8%	150,759	1.1%	
Total	13,731,417	13,755,704	14,830,127	14,105,749		13,044,846	13,067,919	14,088,620	13,400,462	100.0%	100.0%	100.0%	100.0%	13,195,812	100%	

1. Consumption data is based on the Desert Water Agency's billing data.
2. Conservation factor applied to consumption based on discussions with Agency staff.
3. Recycled water data for FY 2018/19 through FY 2020/21 was updated to exclude the two (2) accounts that switched to groundwater as well as adjust the water consumption for Escena Golf Club and Palms Partners Capital LLC.

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

TABLE 38 : DEVELOPMENT OF THE CAPACITY ALLOCATION FACTORS

Development of the PEAK CAPACITY (MAX MONTH) Allocation Factors					
Customer Class	Average Monthly Use (ccf) ¹	Peak Monthly Use (ccf) ²	Peak Monthly Factor	Max Month Capacity Factor	Max Month Capacity Factor from 2016 (for comparison)
Potable Water					
Residential	652,896	861,098	1.32	57.6%	50.3%
Multi-Family	23,487	28,801	1.23	1.9%	2.0%
Condo	40,260	47,217	1.17	3.2%	3.6%
Commercial	216,631	270,361	1.25	18.1%	27.6%
Irrigation/Condo	132,269	190,597	1.44	12.7%	10.0%
Fire Private	207	293	1.41	0.0%	0.0%
Fire Public	0	1	6.00	0.0%	n/a
Public Authority	52,122	74,692	1.43	5.0%	4.1%
Potable Water Total	1,117,872	1,473,060	1.32	98.5%	
Other Water					
Recycled Water ³	109,144	151,346	1.39	n/a	14.6%
Whitewater	575	1,188	2.07	0.1%	0.0%
Commercial Mains	8,828	21,540	2.44	1.4%	2.4%
Total	1,236,418	1,647,134	1.33	100.0%	100.0%

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

1. Average monthly use is calculated by dividing the FY 2020/21 consumption (see Figure 4) by 12 months.
2. Based on DWA's average monthly use.
3. Recycled water data for FY 2018/19 through FY 2020/21 was updated to exclude the two (2) accounts that switched to groundwater as well as adjust the water consumption for Escena Golf Club and Palms Partners Capital LLC.

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TABLE 39 : DEVELOPMENT OF THE CUSTOMER ALLOCATION FACTORS

Development of the Customer Allocation Factor				
Customer Class	No. of Meters FY 2020/21 ¹	Percent of Total	Meters from 2016 Study	2016 Percent of Total
Potable Water				
Residential	15,981	67.6%	14,739	64.9%
Multi-Family	310	1.3%	310	1.4%
Condo	3,901	16.5%	3,834	16.9%
Commercial	2,172	9.2%	2,595	11.4%
Irrigation/Condo	378	1.6%	377	1.7%
Fire Private	568	2.4%	516	2.3%
Fire Public	1	0.0%	n/a	n/a
Public Authority	270	1.1%	263	1.2%
Potable Water Total	23,581	99.7%	22,634	99.7%
Other Water				
Recycled Water	10	n/a	12	n/a
Whitewater	4	0.0%	0	0.0%
Commercial Mains	71	0.3%	71	0.3%
Total	23,666	100.0%	22,717	100.0%

1. From Desert Water Agency's billing data for June 2021.

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

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TABLE 40 : ALLOCATION OF WATER REVENUE REQUIREMENTS

Classification Components	Not Being Considered					
	ALTERNATIVE 1 (30% Fixed / 70% Variable) Cost-of-Service Net Revenue Requirements (FY 2023/24)		ALTERNATIVE 2 (50% Fixed / 50% Variable) Cost-of-Service Net Revenue Requirements (FY 2023/24)		ALTERNATIVE 3 (40% Fixed / 60% Variable) Cost-of-Service Net Revenue Requirements (FY 2023/24)	
Commodity-Related Costs ¹	\$ 30,558,350	70.0%	\$ 21,349,219	48.0%	\$ 27,024,341	61.0%
Capacity-Related Costs	11,350,244	26.0%	20,517,749	46.0%	15,322,830	35.0%
Customer-Related Costs	1,309,644	3.0%	2,182,739	5.0%	1,615,227	4.0%
Fire Protection-Related Costs	436,548	1.0%	436,548	1.0%	436,548	1.0%
Net Revenue Requirement	\$ 43,654,785	100.0%	\$ 44,486,255	100.0%	\$ 44,398,946	101.0%

1. Includes under-charged recycled water revenue.

Unadjusted Net Rev. Req'ts.
70.0% total variable
30.0% total fixed
100.0%

TABLE 41 : METER EQUIVALENCY FACTORS USED IN FIXED CHARGE CALCULATION

Meter Size	Standard Meters		Fire Service Meters	
	Meter Capacity (gpm) ¹	Equivalency to 1-inch ²	Capacity (gpm) ¹	Equivalency to 1-inch ²
	<u>Displacement</u>		<u>Displacement</u>	
5/8 x 3/4 inch	20	1.00	20	1.00
1 inch	50	1.00	50	1.00
1.5 inch	100	2.00	100	2.00
2 inch	160	3.20	160	3.20
	<u>Compound Type Class I</u>		<u>Fire Service Type I & II³</u>	
3 inch	350	7.00	350	7.00
4 inch	630	12.60	630	12.60
6 inch	1,300	26.00	1,400	28.00
	<u>Turbine Class II</u>			
8 inch	2,400	48.00	2,400	48.00
10 inch	3,800	76.00	3,800	76.00
12 inch	5,000	100.00	5,000	100.00

1. Per AWWA, M1, Table 6-1.

2. Per DWA Staff, base meter is 1-inch; therefore, the meter equivalency is set to 1.0 for 5/8 x 3/4 and 1-inch meters.

3. Capacity factors are for Fire Service Type I and II meters from AWWA, M6, Table 5-3.

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TABLE 42 : ALLOCATION OF NET REVENUE REQUIREMENTS

Alternative #1 - Current Rate Design (30% Fixed / 70% Variable)						
Customer Classes	Classification Components				Cost of Service Net Rev. Req'ts.	% of COS Net Revenue Req'ts.
	Commodity- Related Costs	Capacity- Related Costs	Customer- Related Costs	Fire Protection- Related Costs		
Potable Water						
Residential	\$ 17,707,849	\$ 6,534,130	\$ 884,740	\$ -	\$ 25,126,718	57.6%
Multi-Family	637,001	218,546	17,162	-	872,709	2.0%
Condo	1,091,940	358,289	215,967	-	1,666,197	3.8%
Commercial	5,875,462	2,051,536	120,246	-	8,047,244	18.4%
Irrigation/Condo	3,587,396	1,446,276	20,927	-	5,054,599	11.6%
Fire Private	5,619	2,223	31,446	435,799	475,087	1.1%
Fire Public	5	8	55	748	816	0.0%
Public Authority	1,413,639	566,773	14,948	-	1,995,360	4.6%
Potable Water Total	30,318,910	11,177,781	1,305,491	436,548	43,238,730	99.0%
Other Water						
Whitewater	n/a	9,015	221	-	9,236	0.0%
Commercial Mains	239,440	163,448	3,931	-	406,819	0.9%
Total Net Revenue Requirement	\$ 30,558,350	\$ 11,350,244	\$ 1,309,644	\$ 436,548	\$ 43,654,785	100.0%

TABLE 43 : CALCULATION OF MONTHLY FIXED METER SERVICE CHARGES

Alternative #1 - Current Rate Design (30% Fixed / 70% Variable)											
Number of Meters by Class and Size ¹	FY 2023/24										Total
	5/8 x 3/4 inch	1 inch	1.5 inch	2 inch	3 inch	4 inch	6 inch	8 inch	10 inch	12 inch	
Potable Water											
Residential	8,640	6,470	594	270	7	0	0	0	0	0	15,981
Multi-Family	1	29	186	94	0	0	0	0	0	0	310
Condo	3,342	235	256	68	0	0	0	0	0	0	3,901
Commercial	590	589	517	470	3	1	2	0	0	0	2,172
Irrigation/Condo	12	60	98	208	0	0	0	0	0	0	378
Public Authority	40	61	82	85	1	0	1	0	0	0	270
Potable Water Total	12,625	7,444	1,733	1,195	11	1	3	0	0	0	23,012
Other Water											
Whitewater	0	0	0	3	1	0	0	0	0	0	4
Commercial Mains	0	0	0	0	70	0	1	0	0	0	71
Total Meters/Accounts	12,625	7,444	1,733	1,198	82	1	4	0	0	0	23,087
Hydraulic Capacity Factor ²	1.00	1.00	2.00	3.20	7.00	12.60	26.00	48.00	76.00	100.00	
Total Equivalent Meters	12,625	7,444	3,466	3,834	574	13	104	0	0	0	28,059
Monthly Fixed Service Charges											
Customer Costs (\$/Acct/month) ³	\$4.61	\$4.61	\$4.61	\$4.61	\$4.61	\$4.61	\$4.61	\$4.61	\$4.61	\$4.61	
Capacity Costs (\$/Acct/month) ⁴	\$33.70	\$33.70	\$67.41	\$107.85	\$235.92	\$424.65	\$876.27	\$1,617.72	\$2,561.40	\$3,370.26	
Total Monthly Meter Charge	\$38.32	\$38.32	\$72.02	\$112.46	\$240.53	\$429.27	\$880.88	\$1,622.34	\$2,566.01	\$3,374.87	
Annual Fixed Costs Allocated to Monthly Meter Charges											
Customer Costs	\$ 1,278,143										
Capacity Costs	11,348,013										
Total Fixed Meter Costs	\$ 12,626,156										
Annual Revenue from Monthly Meter Charges											
Customer Charges	\$ 698,945	\$ 412,115	\$ 95,942	\$ 66,324	\$ 4,540	\$ 55	\$ 221	\$ -	\$ -	\$ -	\$1,278,143
Capacity Charges	5,105,943	3,010,585	1,401,758	1,550,427	232,143	5,096	42,061	-	-	-	11,348,013
Total Revenue from Mo. Meter Charges	\$ 5,804,888	\$ 3,422,700	\$ 1,497,701	\$ 1,616,751	\$ 236,683	\$ 5,151	\$ 42,282	\$ -	\$ -	\$ -	12,626,156

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TABLE 44 : CALCULATION OF MONTHLY FIXED METER SERVICE CHARGES

Alternative #1 - Current Rate Design (30% Fixed / 70% Variable)

Number of Meters by Class and Size ¹	FY 2023/24										Total
	5/8 x 3/4 inch	1 inch	1.5 inch	2 inch	3 inch	4 inch	6 inch	8 inch	10 inch	12 inch	
Fire Private	0	0	0	2	0	237	177	135	14	3	568
Fire Public	0	0	0	0	0	0	0	1	0	0	1
Total Meters/Accounts	0	0	0	2	0	237	177	136	14	3	569
Hydraulic Capacity Factor ²	1.00	1.00	2.00	3.20	7.00	12.60	28.00	48.00	76.00	100.00	
Total Equivalent Meters	0	0	0	6	0	2,986	4,956	6,528	1,064	300	15,841
Monthly Fixed Service Charges											
Customer Costs (\$/Acct/month) ³	\$4.61	\$4.61	\$4.61	\$4.61	\$4.61	\$4.61	\$4.61	\$4.61	\$4.61	\$4.61	
Capacity Costs (\$/Acct/month) ⁴	\$2.31	\$2.31	\$4.62	\$7.39	\$16.16	\$29.08	\$64.63	\$110.80	\$175.43	\$230.83	
Total Monthly Meter Charge	\$6.92	\$6.92	\$9.23	\$12.00	\$20.77	\$33.70	\$69.25	\$115.41	\$180.04	\$235.44	
Annual Fixed Costs Allocated to Monthly Meter Charges											
Customer Costs	\$ 31,501										
Capacity & Fire Protection Costs	438,779										
Total Fixed Meter Costs	\$ 470,280										
Annual Revenue from Monthly Meter Charges											
Customer Charges	\$ -	\$ -	\$ -	\$ 111	\$ -	\$ 13,121	\$ 9,799	\$ 7,529	\$ 775	\$ 166	\$ 31,501
Capacity Charges	-	-	-	177	-	82,717	137,279	180,823	29,472	8,310	438,779
Total Revenue from Mo. Meter Charges	\$ -	\$ -	\$ -	\$ 288	\$ -	\$ 95,837	\$ 147,078	\$ 188,352	\$ 30,247	\$ 8,476	\$ 470,280

1. Number of meters by class and size are based on June 2021 customer data. Excludes recycled water. Source file: *Summary Tables_FS v9.xlsx*.

2. Source: AWWA Manual M1, *Principles of Water Rates, Fees, and Charges*, Table VI.2-5. Assumes Displacement Meters for 5/8 x 3/4 to 2-inch meters, Compound Meters for 3 to 6-inch and Turbine Class II Meters for 8 to 10-inch meters.

3. Customer costs are allocated to each customer by dividing the total customer costs by the total number of customers.

4. Capacity costs are allocated by meter size and the hydraulic capacity of the meter.

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TABLE 45 : PROPOSED VOLUMETRIC CHARGES FOR FY 2023/24

Alternative #1 - Current Rate Design (30% Fixed / 70% Variable)

Customer Classes	FY 2020/21 Number of Meters ¹	FY 2020/21 Water Consumption (ccf/yr) ²	Total Target Rev. Req't from Vol. Charges	% of Total Rate Revenue	Uniform Commodity Rates (\$/ccf)	Proposed Rate Structure
Potable Water						
Residential	15,981	7,443,018	\$ 17,707,849	40.6%	\$2.38	Uniform
Multi-Family	310	267,746	637,001	1.5%	\$2.38	Uniform
Condo	3,901	458,968	1,091,940	2.5%	\$2.38	Uniform
Commercial	2,172	2,469,592	5,875,462	13.5%	\$2.38	Uniform
Irrigation/Condo	378	1,507,866	3,587,396	8.2%	\$2.38	Uniform
Fire Private	568	2,362	5,619	0.0%	\$2.38	Uniform
Fire Public	1	2	5	0.0%	\$2.38	Uniform
Public Authority	270	594,185	1,413,639	3.2%	\$2.38	Uniform
Potable Water Total	23,581	12,743,739	\$ 30,318,910	69.5%		
Other Water						
Whitewater	4	n/a	n/a	n/a	n/a	Uniform
Commercial Mains	71	100,642	239,440	0.5%	\$2.38	Uniform
Total	75	100,642	239,440	70%		

1. Number of meters is based on DWA's billing data.

2. Projected FY 2020/21 consumption based on actual usage and a 5% adjustment for conservation. See Table 37.

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 RECYCLED WATER RATE STUDY
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TABLE 46 : ALLOCATION OF WATER REVENUE REQUIREMENTS

Classification Components	PROPOSED ALTERNATIVE Cost-of-Service Net Revenue Requirements (FY 2023/24)	
	\$ - Allocated ¹	% - Allocated ²
Commodity Related Costs	\$ 1,578,013	99.5%
Capacity-Related Costs	7,930	0.5%
Customer-Related Costs	-	0.0%
Net Revenue Requirement	\$ 1,585,943	100%

1. Based on functionalization allocations. See *Functionalization & Classification* tab.

2. Reflects percentage allocation from the 2016 Rate Study.

TABLE 47 : PROPOSED VOLUMETRIC CHARGES FOR FY 2023/24 (RECYCLED WATER)

Alternative #1 - Current Rate Design (30% Fixed / 70% Variable)					
Rate Structure Type	Number of Meters ¹	Water Consumption (hcf/yr.) ²	Target Rev. Req't from Vol. Charges ³	Uniform Commodity Rates (\$/hcf)	Proposed Rate Structure
Uniform Commodity Rate (\$/hcf)	10	1,244,239	\$ 746,544	\$0.60	Uniform

1. Meter counts, consumption rates, and customer class from source file: *Summary Tables_FS v9.xlsx*.

2. Projected FY 2020/21 consumption based on actual usage and a 5% adjustment for conservation. See Table 37.

3. Target revenue adjusted based on DWA's recently adopted uniform commodity rate of \$0.60 per hcf.

\$ 831,470 Needs to be made up by potable water rates

NBS Proposed Adjustment	Year 1	Year 2	Year 3	Year 4	Year 5
Projected Net Revenue Req't.	\$ 1,578,013	\$ 1,676,639	\$ 1,781,429	\$ 1,892,768	\$ 2,011,066
DWA Requested RW Commodity Rate	\$0.60	\$0.65	\$0.70	\$0.75	\$0.80
Target Revenue	\$ 746,544	\$ 808,756	\$ 870,968	\$ 933,180	\$ 995,392
Annual Shortfall	\$ (831,470)	\$ (867,884)	\$ (910,462)	\$ (959,589)	\$ (1,015,675)
Adjustment to Potable Water Rates	-\$0.027	-\$0.025	-\$0.025	-\$0.025	-\$0.025

DESERT WATER AGENCY
 RECYCLED WATER RATE STUDY
 Recycled Water Cost-of-Service Analysis & Rate Design

TABLE 48 : CALCULATION OF MONTHLY FIXED METER SERVICE CHARGES FOR FY 2023/24

Number of Meters by Class and Size ¹	FY 2023/24										Total
	5/8 x 3/4 inch	1 inch	1.5 inch	2 inch	3 inch	4 inch	6 inch	8 inch	10 inch	12 inch	
Recycled Water	5	0	0	0	0	1	4	0	0	0	10
Total Meters/Accounts	5	0	0	0	0	1	4	0	0	0	10
<i>Hydraulic Capacity Factor</i> ²	<i>1.00</i>	<i>1.00</i>	<i>2.00</i>	<i>3.20</i>	<i>6.40</i>	<i>10.00</i>	<i>20.00</i>	<i>32.00</i>	<i>84.00</i>	<i>106.00</i>	
Total Equivalent Meters	5	0	0	0	0	10	80	0	0	0	95
Monthly Fixed Service Charges											
Customer Costs (\$/Acct/mo.) ³	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
Capacity Costs (\$/Acct/mo.) ⁴	6.96	6.96	13.91	22.26	44.52	69.56	139.12	222.59	584.29	737.32	
Total Monthly Meter Charge	\$6.96	\$6.96	\$13.91	\$22.26	\$44.52	\$69.56	\$139.12	\$222.59	\$584.29	\$737.32	
Annual Fixed Costs Allocated to Monthly Meter Charges											
Customer Costs	\$ -										
Capacity Costs	7,930										
Total Fixed Meter Costs	\$ 7,930										
Annual Revenue from Monthly Meter Charges											
Customer Charges	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Capacity Charges	417	-	-	-	-	835	6,678	-	-	-	7,930
Total Revenue from Mo. Meter Charges	\$ 417	\$ -	\$ -	\$ -	\$ -	\$ 835	\$ 6,678	\$ -	\$ -	\$ -	\$ 7,930

1. Number of meters by size and class are from the DWA utility billing system. Source file: *Summary Tables_FS v9.xlsx*.
2. Source: AWWA Manual M1, *Principles of Water Rates, Fees, and Charges*, Table VI.2-5. Assumes Displacement Meters for 3/4 to 2-inch meters, Compound Meters for 3 to 6-inch and Turbine Class II Meters for 8 to 10-inch.
3. Customer costs are allocated to each customer by dividing the total customer costs by the total number of customers.
4. Capacity costs are allocated by meter size and the hydraulic capacity of the meter.

TABLE 49 : METER EQUIVALENCY FACTORS USED IN FIXED CHARGE CALCULATION

Meter Size	Standard Meters		
	Meter Capacity (gpm) ¹	Equivalency to 1-inch	DWA Current Equivalency Factors
<u>Displacement Meters</u>			
5/8 x 3/4 inch	30	1.00	1.00
1 inch	50	1.00	1.00
1.5 inch	100	2.00	1.55
2 inch	160	3.20	2.22
<u>Compound Class I Meters</u>			
3 inch	320	6.40	3.98
4 inch	500	10.00	5.97
6 inch	1,000	20.00	11.50
8 inch	1,600	32.00	18.13
<u>Turbine Class II Meters</u>			
10 inch	4,200	84.00	46.85
12 inch	5,300	106.00	59.01

1. Per AWWA M-1, Table B-1.

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TABLE 50 : ASSUMPTIONS USED IN DROUGHT RATE ANALYSIS

2020/21 Consumption Assumptions				
Shortage Level ¹	Percent Shortage Range ²	Potable Water Consumption (AF/yr.)	Potable Water Consumption (hcf/yr.)	Difference to Baseline (hcf)
1	Less than 10% Conservation ³	29,256	12,743,739	0
2	Up to 20% Conservation	26,330	11,469,365	(1,274,374)
3	Up to 30% Conservation	23,404	10,194,991	(2,548,748)
4	Up to 40% Conservation	20,479	8,920,617	(3,823,122)
5	Up to 50% Conservation	17,553	7,646,243	(5,097,496)
6	Greater than 50% Conservation	14,628	6,371,869	(6,371,869)

1. DWA Water Shortage Contingency Plan Shortage Level.
2. Drought levels based on the Agency's Water Shortage Contingency Plan. Source file: *DWA_WSCP 2020 FINAL.pdf*.
3. This represents the baseline consumption for FY 2020/21 consumption (excludes recycled water).
Conservation percentage for each drought stage is relative to the baseline consumption.

Note: For the rate period (FY 2023/24 - FY 2027/28), water consumption is assumed to be the same each year to be consistent with how volumetric rates were calculated even though there are new connections each year. The rate each year at the "5% Conservation" level is the same as the proposed volumetric rate.

TABLE 51 : DROUGHT RATES

Expenses Directly Effected By Consumption Changes							
Fund	Division	Expense Name	Commodity-Related Costs				
			2023/24	2024/25	2025/26	2026/27	2027/28
Operating Fund	Pumping	Power Purchases	\$ 3,728,736	\$ 3,877,885	\$ 4,033,001	\$ 4,194,321	\$ 4,362,094
Operating Fund	Water Treatment	Chemicals & Filtering Material	294,027	308,140	322,931	338,432	354,676
Total:			\$ 4,022,763	\$ 4,186,026	\$ 4,355,932	\$ 4,532,752	\$ 4,716,770

DESERT WATER AGENCY
WATER & RECYCLED WATER RATE STUDY
Water Cost-of-Service Analysis & Rate Design

TABLE 52 : CALCULATION OF DROUGHT RATES FOR FY 2023/24

Alternative #1 - Current Rate Design (30% Fixed / 70% Variable)						
Conservation Goal	Water Consumption (hcf/yr.)	Baseline Rev. Req't from Vol. Charges	Cost Reduction Due to Conservation ¹	Target Rev. Req't from Vol. Charges	Drought Response Charge (\$/hcf)	Uniform Commodity Rates (\$/hcf)
< 10%	12,743,739	\$ 30,318,910	\$ -	\$ 30,318,910	\$0.00	\$2.38
Up to 20%	11,469,365	30,318,910	(402,276)	29,916,634	\$0.23	\$2.61
Up to 30%	10,194,991	30,318,910	(804,553)	29,514,358	\$0.52	\$2.89
Up to 40%	8,920,617	30,318,910	(1,206,829)	29,112,081	\$0.88	\$3.26
Up to 50%	7,646,243	30,318,910	(2,011,381)	28,307,529	\$1.32	\$3.70
> 50%	6,371,869	30,318,910	(2,413,658)	27,905,252	\$2.00	\$4.38

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

TABLE 53 : CALCULATION OF DROUGHT RATES FOR FY 2024/25

Alternative #1 - Current Rate Design (30% Fixed / 70% Variable)						
Conservation Goal	Water Consumption (hcf/yr.)	Baseline Rev. Req't from Vol. Charges	Cost Reduction Due to Conservation ¹	Target Rev. Req't from Vol. Charges	Drought Response Charge (\$/hcf)	Uniform Commodity Rates (\$/hcf)
< 10%	12,743,739	\$ 31,668,510	\$ -	\$ 31,668,510	\$0.00	\$2.53
Up to 20%	11,469,365	31,668,510	(418,603)	31,249,907	\$0.19	\$2.72
Up to 30%	10,194,991	31,668,510	(837,205)	30,831,305	\$0.49	\$3.02
Up to 40%	8,920,617	31,668,510	(1,255,808)	30,412,702	\$0.88	\$3.41
Up to 50%	7,646,243	31,668,510	(1,674,410)	29,994,100	\$1.39	\$3.92
> 50%	6,371,869	31,668,510	(2,093,013)	29,575,497	\$2.11	\$4.64

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

TABLE 54 : CALCULATION OF DROUGHT RATES FOR FY 2025/26

Alternative #1 - Current Rate Design (30% Fixed / 70% Variable)						
Conservation Goal	Water Consumption (hcf/yr.)	Baseline Rev. Req't from Vol. Charges	Cost Reduction Due to Conservation ¹	Target Rev. Req't from Vol. Charges	Drought Response Charge (\$/hcf)	Uniform Commodity Rates (\$/hcf)
< 10%	12,743,739	\$ 34,002,102	\$ -	\$ 34,002,102	\$0.00	\$2.69
Up to 20%	11,469,365	34,002,102	(435,593)	33,566,509	\$0.24	\$2.93
Up to 30%	10,194,991	34,002,102	(871,186)	33,130,916	\$0.56	\$3.25
Up to 40%	8,920,617	34,002,102	(1,306,780)	32,695,322	\$0.98	\$3.67
Up to 50%	7,646,243	34,002,102	(1,742,373)	32,259,729	\$1.53	\$4.22
> 50%	6,371,869	34,002,102	(2,177,966)	31,824,136	\$2.30	\$4.99

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

DESERT WATER AGENCY
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Water Cost-of-Service Analysis & Rate Design

TABLE 55 : CALCULATION OF DROUGHT RATES FOR FY 2026/27

Alternative #1 - Current Rate Design (30% Fixed / 70% Variable)						
Conservation Goal	Water Consumption (hcf/yr.)	Baseline Rev. Req't from Vol. Charges	Cost Reduction Due to Conservation ¹	Target Rev. Req't from Vol. Charges	Drought Response Charge (\$/hcf)	Uniform Commodity Rates (\$/hcf)
< 10%	12,743,739	\$ 36,503,742	\$ -	\$ 36,503,742	\$0.00	\$2.86
Up to 20%	11,469,365	36,503,742	(453,275)	36,050,466	\$0.28	\$3.14
Up to 30%	10,194,991	36,503,742	(906,550)	35,597,191	\$0.63	\$3.49
Up to 40%	8,920,617	36,503,742	(1,359,826)	35,143,916	\$1.08	\$3.94
Up to 50%	7,646,243	36,503,742	(1,813,101)	34,690,641	\$1.68	\$4.54
> 50%	6,371,869	36,503,742	(2,266,376)	34,237,365	\$2.51	\$5.37

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

TABLE 56 : CALCULATION OF DROUGHT RATES FOR FY 2027/28

Alternative #1 - Current Rate Design (30% Fixed / 70% Variable)						
Conservation Goal	Water Consumption (hcf/yr.)	Baseline Rev. Req't from Vol. Charges	Cost Reduction Due to Conservation ¹	Target Rev. Req't from Vol. Charges	Drought Response Charge (\$/hcf)	Uniform Commodity Rates (\$/hcf)
< 10%	12,743,739	\$ 39,185,319	\$ -	\$ 39,185,319	\$0.00	\$3.04
Up to 20%	11,469,365	39,185,319	(471,677)	38,713,642	\$0.34	\$3.38
Up to 30%	10,194,991	39,185,319	(943,354)	38,241,965	\$0.71	\$3.75
Up to 40%	8,920,617	39,185,319	(1,415,031)	37,770,288	\$1.19	\$4.23
Up to 50%	7,646,243	39,185,319	(1,886,708)	37,298,611	\$1.84	\$4.88
> 50%	6,371,869	39,185,319	(2,358,385)	36,826,934	\$2.74	\$5.78

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

DESERT WATER AGENCY
WATER & RECYCLED WATER RATE STUDY
Water Revenue Stabilization Rates

TABLE 57 : ALLOCATION OF WATER COST REQUIREMENTS

Classification Components	Adjusted Net Revenue Requirements (FY 2023/24)	
Commodity-Related Costs	\$ 30,558,350	70.0%
Capacity-Related Costs (Fixed)	11,350,244	26.0%
Customer-Related Costs	1,309,644	3.0%
Fire Protection-Related Costs	436,548	1.0%
Subtotal Revenue Requirement	\$ 43,654,785	100.0%
Zonal-Related Costs	\$ -	0.0%
Net Total Revenue Requirement	\$ 43,654,785	100%

TABLE 58 : AVERAGE MONTHLY CONSUMPTION AT VARIOUS LEVELS OF CONSERVATION

Customer Class	Water Consumption ¹ (hcf/yr.)	Average Annual Consumption at Various Conservation Levels				
		10%	15%	20%	25%	30%
Potable Water						
Residential	7,443,018	6,698,716	6,326,565	5,954,415	5,582,264	5,210,113
Multi-Family	267,746	240,971	227,584	214,197	200,810	187,422
Condo	458,968	413,071	390,123	367,174	344,226	321,277
Commercial	2,469,592	2,222,633	2,099,154	1,975,674	1,852,194	1,728,715
Irrigation/Condo	1,507,866	1,357,079	1,281,686	1,206,293	1,130,899	1,055,506
Fire Private	2,362	2,126	2,007	1,889	1,771	1,653
Fire Public	2	2	2	2	1	1
Public Authority	594,185	534,767	505,057	475,348	445,639	415,930
Total	12,743,739	11,469,365	10,832,178	10,194,991	9,557,804	8,920,617
Other Water						
Commercial Mains	100,642	90,578	85,546	80,514	75,482	70,449
Total	12,844,381	11,559,943	10,917,724	10,275,505	9,633,286	8,991,067

1. FY 2020/21 Volume Adjusted for Conservation from Table 37 - Development of the Commodity Allocation Factor.

DESERT WATER AGENCY
WATER & RECYCLED WATER RATE STUDY
Water Revenue Stabilization Rates

TABLE 59 : ALLOCATION OF NET REVENUE REQUIREMENTS

Customer Class	Cost Classification Components				Cost of Service Net Revenue Req'ts	% of COS Net Revenue Req'ts
	Commodity	Capacity	Customer	Fire Protection		
Potable Water						
Residential	\$ 17,707,849	\$ 6,534,130	\$ 884,740	\$ -	\$ 25,126,718	57.6%
Multi-Family	637,001	218,546	17,162	-	872,709	2.0%
Condo	1,091,940	358,289	215,967	-	1,666,197	3.8%
Commercial	5,875,462	2,051,536	120,246	-	8,047,244	18.4%
Irrigation/Condo	3,587,396	1,446,276	20,927	-	5,054,599	11.6%
Fire Private	5,619	2,223	31,446	435,799	475,087	1.1%
Fire Public	5	8	55	748	816	0.0%
Public Authority	1,413,639	566,773	14,948	-	1,995,360	4.6%
Total	30,318,910	11,177,781	1,305,491	436,548	43,238,730	99.1%
Other Water						
Commercial Mains	239,440	163,448	3,931	-	406,819	0.9%
Total Net Revenue Requirement	\$ 30,558,350	\$ 11,341,230	\$ 1,309,422	\$ 436,548	\$ 43,645,549	100.0%

1. Net revenue has been excluded since this is non-potable surface water in the Whitewater Irrigation system that has rates set by agreement with each customer.

TABLE 60 : PROPOSED REVENUE STABILIZATION VOLUMETRIC CHARGES FOR FY 2023/24

Customer Class	Total Target Rev. Req't from Vol. Charges	10%	15%	20%	25%	30%
Potable Water	\$ 30,318,910	\$2.64	\$2.80	\$2.97	\$3.17	\$3.40
Other Water ¹	239,440					
Total Net Revenue Requirement	\$ 30,558,350					

1. Other Water customers include Commercial Mains only.

TABLE 61 : PROPOSED RATE STABILIZATION VOLUMETRIC CHARGES FOR FY 2022/23

Revenue Stabilization Rate Component	Reduction in Volumetric Rate Revenue					
	0%	10%	15%	20%	25%	30%
Variable Revenue After Reductions ¹	\$ 30,558,350	\$ 30,558,350	\$ 30,558,350	\$ 30,558,350	\$ 30,558,350	\$ 30,558,350
Total Consumption ²	12,844,381	11,559,943	10,917,724	10,275,505	9,633,286	8,991,067
Revenue Stabilization Rate		\$2.64	\$2.80	\$2.97	\$3.17	\$3.40

1. Variable revenue less commodity-related cost reductions (from drought rate calculations).

2. Consumption at each volumetric level.

DESERT WATER AGENCY
WATER & RECYCLED WATER RATE STUDY
Water Revenue Stabilization Rates

TABLE 62 : PROPOSED REVENUE STABILIZATION VOLUMETRIC CHARGES THROUGH FY 2027/28

Revenue Stabilization Rates*					
Consumption Level	FY 2023/24	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28
10% Revenue Stabilization Rate	\$2.64	\$2.81	\$2.98	\$3.17	\$3.37
15% Revenue Stabilization Rate	\$2.80	\$2.97	\$3.16	\$3.36	\$3.57
20% Revenue Stabilization Rate	\$2.97	\$3.16	\$3.36	\$3.57	\$3.79
25% Revenue Stabilization Rate	\$3.17	\$3.37	\$3.58	\$3.80	\$4.04
30% Revenue Stabilization Rate	\$3.40	\$3.61	\$3.84	\$4.08	\$4.33

* Revenue Stabilization Rates would be implemented if current revenue from water sales are below the percentages indicated.

DESERT WATER AGENCY
WATER & RECYCLED WATER RATE STUDY
Water Cost-of-Service Analysis & Rate Design

TABLE 63 : CURRENT VS. PROPOSED WATER RATES

Alternative #1 - Current Rate Design (30% Fixed / 70% Variable)

Water Rate Schedule	Current Rates	Proposed Rates				
		FY 2023/24	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28
Projected Increase in Rate Revenue per Financial Plan:		6.25%	6.25%	6.25%	6.25%	6.25%
Fixed Monthly Service Charge						
Meter Size - Standard Meters:						
5/8 x 3/4 inch	\$33.53	\$38.32	\$40.72	\$43.27	\$45.97	\$48.84
1 inch	\$33.53	\$38.32	\$40.72	\$43.27	\$45.97	\$48.84
1.5 inch	\$64.02	\$72.02	\$76.52	\$81.30	\$86.38	\$91.78
2 inch	\$100.61	\$112.46	\$119.49	\$126.96	\$134.90	\$143.33
3 inch	\$198.18	\$240.53	\$255.56	\$271.53	\$288.50	\$306.53
4 inch	\$307.94	\$429.27	\$456.10	\$484.61	\$514.90	\$547.08
6 inch	\$612.85	\$880.88	\$935.94	\$994.44	\$1,056.59	\$1,122.63
8 inch	\$978.73	\$1,622.34	\$1,723.74	\$1,831.47	\$1,945.94	\$2,067.56
10 inch	\$2,564.22	\$2,566.01	\$2,726.39	\$2,896.79	\$3,077.84	\$3,270.21
12 inch	\$3,235.01	\$3,374.87	\$3,585.80	\$3,809.91	\$4,048.03	\$4,301.03
Monthly Fixed Service Charge - Fire Service Meters:						
2 inch	--	\$12.00	\$12.75	\$13.55	\$14.40	\$15.30
3 inch	--	\$20.77	\$22.07	\$23.45	\$24.92	\$26.48
4 inch	\$30.15	\$33.70	\$35.81	\$38.05	\$40.43	\$42.96
6 inch	\$64.99	\$69.25	\$73.58	\$78.18	\$83.07	\$88.26
8 inch	\$111.46	\$115.41	\$122.62	\$130.28	\$138.42	\$147.07
10 inch	\$173.41	\$180.04	\$191.29	\$203.25	\$215.95	\$229.45
12 inch	\$208.26	\$235.44	\$250.16	\$265.80	\$282.41	\$300.06
Commodity Charges for All Water Consumed						
Uniform Rate for All Customers	\$2.28	\$2.38	\$2.53	\$2.69	\$2.86	\$3.04

DESERT WATER AGENCY
WATER & RECYCLED WATER RATE STUDY
Water Cost-of-Service Analysis & Rate Design

TABLE 64 : RATES AND DROUGHT RESPONSE CHARGE FOR EACH DROUGHT STAGE

<i>Proposed Drought Rates</i>										
Drought Rate Schedule ¹	FY 2023/24		FY 2024/25		FY 2025/26		FY 2026/27		FY 2027/28	
Uniform Rate for All Customers	\$2.38		\$2.53		\$2.69		\$2.86		\$3.04	
Water Consumption Baseline (hcf/yr) ²	12,743,739 hcf		12,743,739 hcf		12,743,739 hcf		12,743,739 hcf		12,743,739 hcf	
Conservation Target	Drought Response Charge ³	Drought Rate ⁴	Drought Response Charge ³	Drought Rate ⁴	Drought Response Charge ³	Drought Rate ⁴	Drought Response Charge ³	Drought Rate ⁴	Drought Response Charge ³	Drought Rate ⁴
Less than 10% Conservation	\$0.00	\$2.38	\$0.00	\$2.53	\$0.00	\$2.69	\$0.00	\$2.86	\$0.00	\$3.04
Up to 20% Conservation	\$0.23	\$2.61	\$0.19	\$2.72	\$0.24	\$2.93	\$0.28	\$3.14	\$0.34	\$3.38
Up to 30% Conservation	\$0.52	\$2.89	\$0.49	\$3.02	\$0.56	\$3.25	\$0.63	\$3.49	\$0.71	\$3.75
Up to 40% Conservation	\$0.88	\$3.26	\$0.88	\$3.41	\$0.98	\$3.67	\$1.08	\$3.94	\$1.19	\$4.23
Up to 50% Conservation	\$1.32	\$3.70	\$1.39	\$3.92	\$1.53	\$4.22	\$1.68	\$4.54	\$1.84	\$4.88
Greater than 50% Conservation	\$2.00	\$4.38	\$2.11	\$4.64	\$2.30	\$4.99	\$2.51	\$5.37	\$2.74	\$5.78

1. ACTIVATION - The Drought Response Charge will NOT be added on water bills unless approved by the Desert Water Agency Board. If the response charge is activated, it will remain in effect as necessary and will be reviewed by the Agency Board a minimum of every six (6) months for a determination of necessity until the response charge is deactivated.
2. Baseline water consumption is based on water usage for FY 2020/21 less 5% for conservation, the same assumption used in the proposed volumetric rates.
3. Drought Response Charge is added to the Uniform Rate on a per unit basis to cover the cost of water service during times of State Agency mandated conservation and/or extreme water supply shortage, resulting in water consumption below the established baseline.
4. The Drought Rate equals the Volumetric Rate plus Volumetric Response Charge. This does not include pumping charges which will apply where applicable.

DESERT WATER AGENCY
WATER & RECYCLED WATER RATE STUDY
Water Cost-of-Service Analysis & Rate Design

TABLE 65 : CURRENT VS. PROPOSED DROUGHT RATES

Alternative #1 - Current Rate Design (30% Fixed / 70% Variable)

Drought Rate Schedule	Current Rates	FY 2023/24	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28
Up to 20% Conservation	\$2.65	\$2.61	\$2.72	\$2.93	\$3.14	\$3.38
Up to 30% Conservation	\$2.91	\$2.89	\$3.02	\$3.25	\$3.49	\$3.75
Up to 40% Conservation	\$3.26	\$3.26	\$3.41	\$3.67	\$3.94	\$4.23
Up to 50% Conservation	\$3.74	\$3.70	\$3.92	\$4.22	\$4.54	\$4.88
Greater than 50% Conservation	\$4.48	\$4.38	\$4.64	\$4.99	\$5.37	\$5.78

TABLE 66 : PROPOSED REVENUE STABILIZATION RATES

Alternative #1 - (30% Fixed / 70% Variable)

Revenue Stabilization Rate Schedule*	Current Rates	FY 2023/24	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28
10% Revenue Stabilization Rate	N.A.	\$2.64	\$2.81	\$2.98	\$3.17	\$3.37
15% Revenue Stabilization Rate	N.A.	\$2.80	\$2.97	\$3.16	\$3.36	\$3.57
20% Revenue Stabilization Rate	N.A.	\$2.97	\$3.16	\$3.36	\$3.57	\$3.79
25% Revenue Stabilization Rate	N.A.	\$3.17	\$3.37	\$3.58	\$3.80	\$4.04
30% Revenue Stabilization Rate	N.A.	\$3.40	\$3.61	\$3.84	\$4.08	\$4.33

* Revenue Stabilization Rates would be implemented if current revenue from water sales are below the percentages indicated.

DESERT WATER AGENCY
WATER & RECYCLED WATER RATE STUDY
Recycled Water Cost-of-Service Analysis & Rate Design

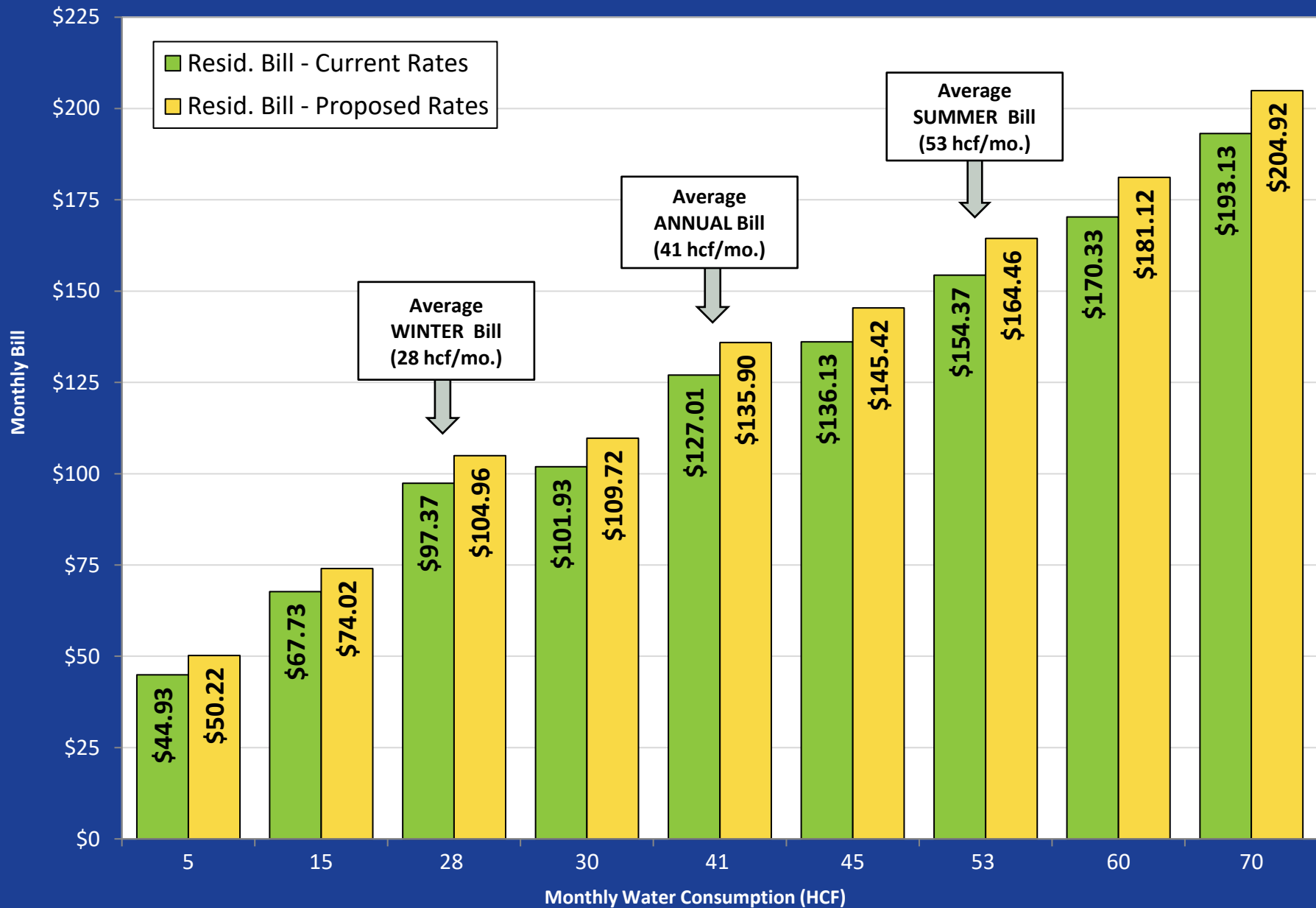
TABLE 67 : CURRENT VS. PROPOSED RECYCLED WATER RATES

Recycled Water Rate Schedule	Current Rates ¹	Proposed Rates ²				
		FY 2023/24	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28
Projected Increase in Rate Revenue per Financial Plan:		6.25%	6.25%	6.25%	6.25%	6.25%
Fixed Monthly Service Charge						
Fixed Monthly Service Charge:						
5/8 x 3/4 inch	--	\$6.96	\$7.40	\$7.86	\$8.35	\$8.87
1 inch	--	\$6.96	\$7.40	\$7.86	\$8.35	\$8.87
1.5 inch	--	\$13.91	\$14.78	\$15.70	\$16.68	\$17.72
2 inch	\$15.00	\$22.26	\$23.65	\$25.13	\$26.70	\$28.37
3 inch	\$21.00	\$44.52	\$47.30	\$50.26	\$53.40	\$56.74
4 inch	\$45.00	\$69.56	\$73.91	\$78.53	\$83.44	\$88.66
6 inch	\$115.00	\$139.12	\$147.82	\$157.06	\$166.88	\$177.31
8 inch	\$205.00	\$222.59	\$236.50	\$251.28	\$266.99	\$283.68
10 inch	\$225.00	\$584.29	\$620.81	\$659.61	\$700.84	\$744.64
12 inch	\$225.00	\$737.32	\$783.40	\$832.36	\$884.38	\$939.65
Commodity Charges for All Water Consumed						
Uniform Rate for All Customers ³	\$0.79	\$0.60	\$0.65	\$0.70	\$0.75	\$0.80

1. Current recycled water fixed charges set by Resolution No. 978 and does not include the \$35 flow control valve charge for meters 8" or larger.
2. Initial adjustment to rates would be effective January 1, 2024.
3. Uniform commodity rates are effective as of July 1, 2022.

Single-Family Residential Water Bill Comparison

Current vs. Proposed 2023/24 Rates (5/8 x 3/4" & 1" Meter)



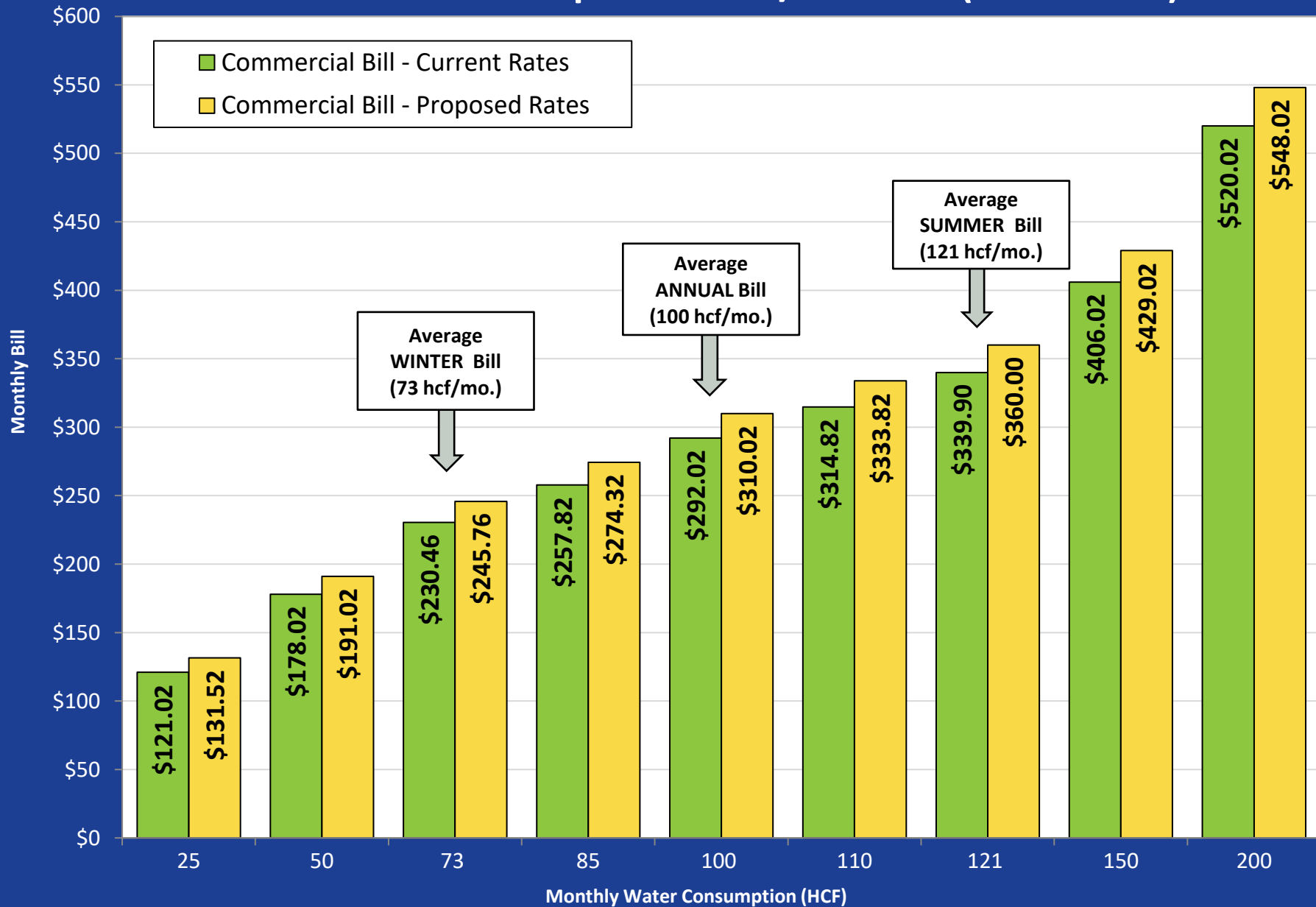
Average Single-Family Residential Customer Five-Year Bill Projection

Assumes 41 HCF Consumption and 5/8 x 3/4" Meter



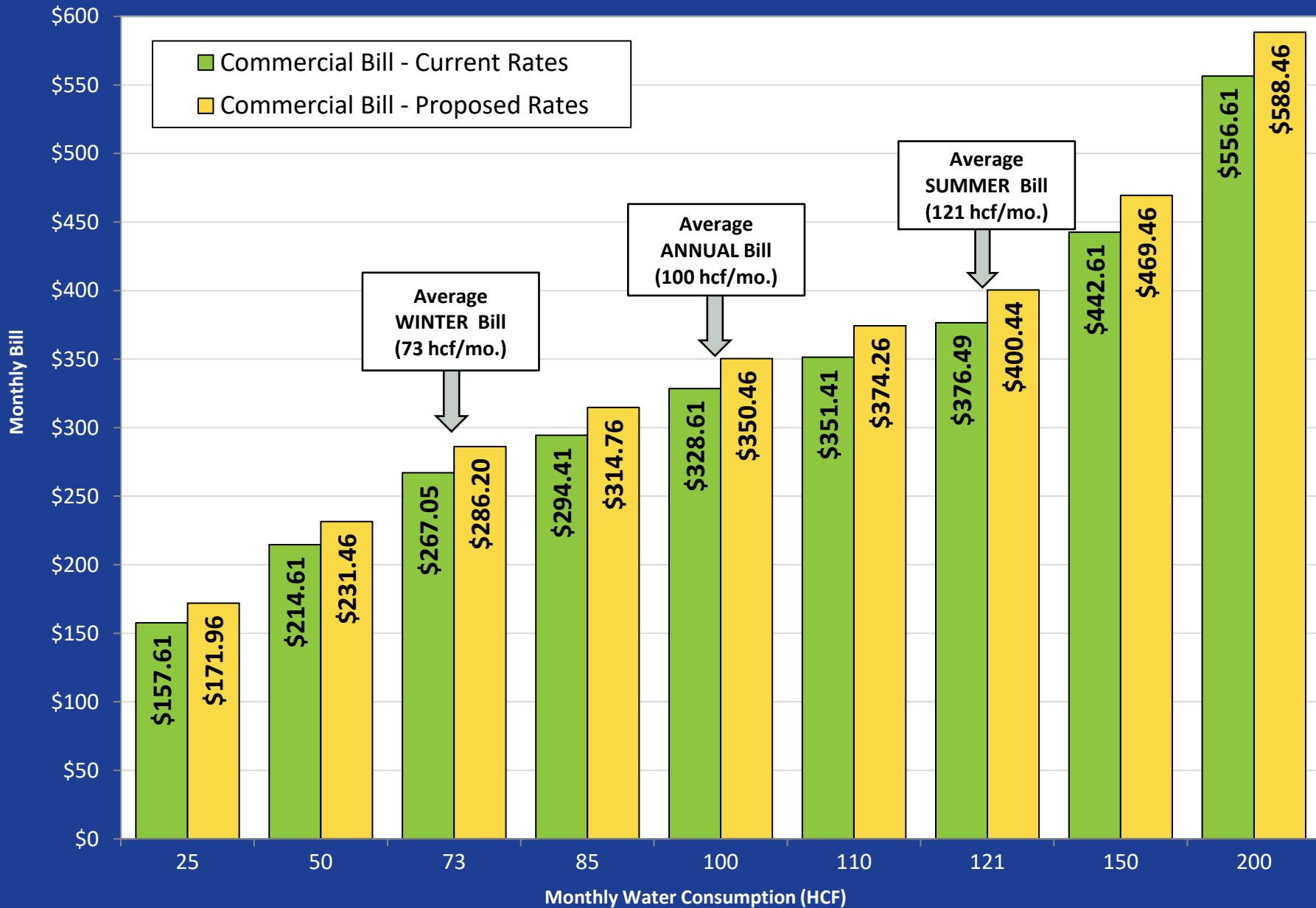
Commerical Water Bill Comparison

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



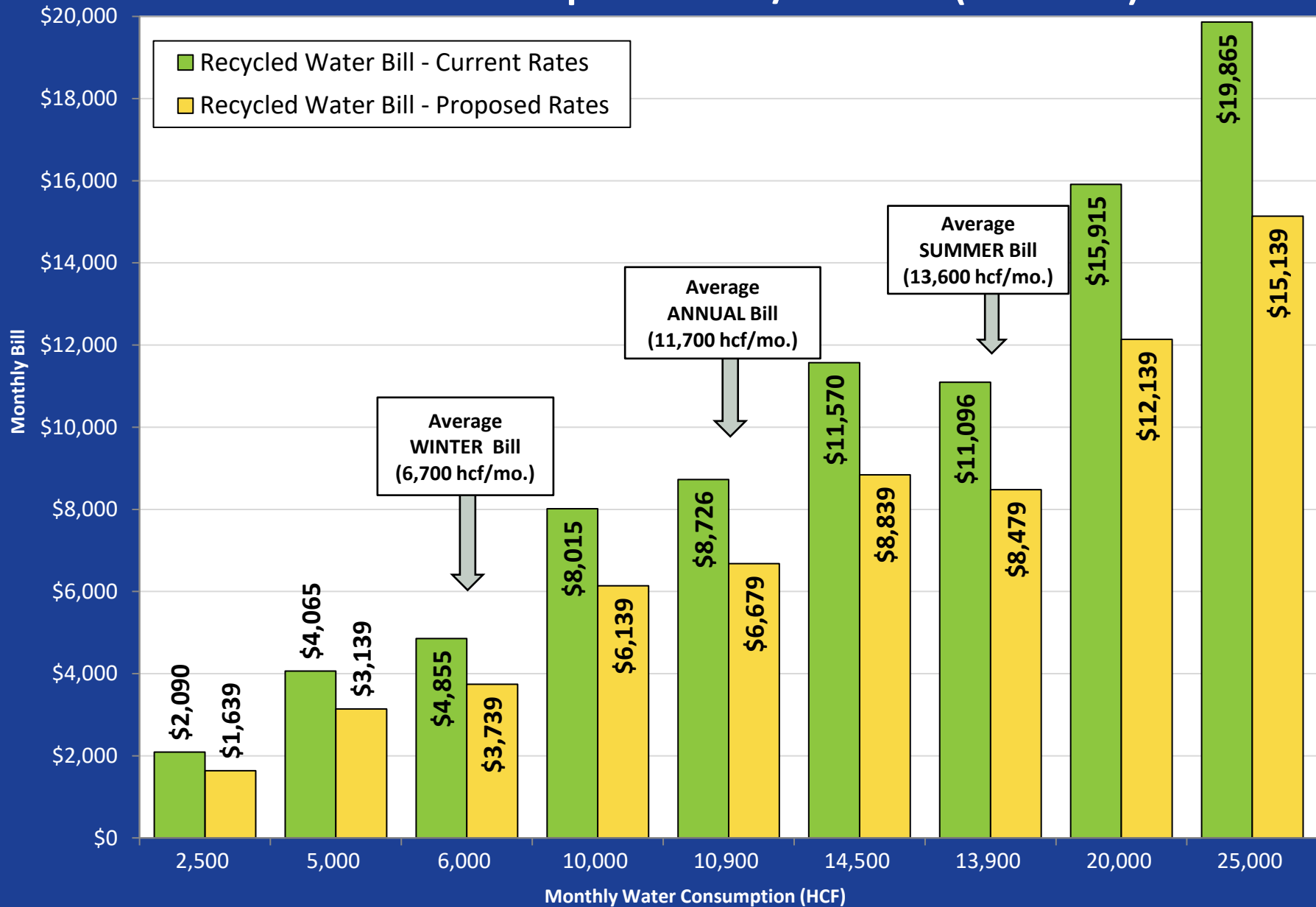
Commercial Water Bill Comparison

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



Recycled Water Bill Comparison

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



Appendix C - Detailed Wastewater Rate Study Tables & Figures

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DESERT WATER AGENCY
WASTEWATER RATE STUDY
Financial Plan and Reserve Projections

Financial Plan & Reserve Summary

TABLE 1 : FINANCIAL PLAN AND SUMMARY OF REVENUE REQUIREMENTS

RATE REVENUE REQUIREMENTS SUMMARY ¹	Actuals	Actuals	Budget	5-Year Rate Adoption Period					Projected				
	FY 2020/21	FY 2021/22	FY 2022/23	FY 2023/24	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30	FY 2030/31	FY 2031/32	FY 2032/33
Sources of Sewer Funds													
<u>Wastewater Rate Revenue:</u>													
Wastewater Rate Revenue Under Current Rates	\$ 1,156,899	\$ 1,150,064	\$ 1,215,600	\$ 1,228,432	\$ 1,241,263	\$ 1,254,095	\$ 1,266,927	\$ 1,279,759	\$ 1,292,590	\$ 1,305,422	\$ 1,318,257	\$ 1,331,092	\$ 1,343,927
Pass Through Payment to Other Agencies	\$ (872,325)	\$ (860,473)	\$ (938,400)	\$ (948,306)	\$ (958,211)	\$ (968,117)	\$ (978,022)	\$ (987,928)	\$ (997,834)	\$ (1,007,739)	\$ (1,017,648)	\$ (1,027,556)	\$ (1,037,464)
Subtotal: Rate Revenue (DWA portion)	\$ 284,574	\$ 289,591	\$ 277,200	\$ 280,126	\$ 283,052	\$ 285,978	\$ 288,904	\$ 291,830	\$ 294,757	\$ 297,683	\$ 300,609	\$ 303,536	\$ 306,463
<u>Other Operating Revenue:</u>													
Charges and Fees	\$ 37,233	\$ 1,949	\$ 27,480	\$ 27,770	\$ 28,060	\$ 28,350	\$ 28,640	\$ 28,930	\$ 29,220	\$ 29,511	\$ 29,801	\$ 30,091	\$ 30,381
Customer w/o Inspect Labor	1,820	-	2,400	2,425	2,451	2,476	2,501	2,527	2,552	2,577	2,603	2,628	2,653
Contributed Revenue	138,485	169,050	-	-	-	-	-	-	-	-	-	-	-
Subtotal: Other Operating Revenue	\$ 177,538	\$ 170,999	\$ 29,880	\$ 30,195	\$ 30,511	\$ 30,826	\$ 31,142	\$ 31,457	\$ 31,772	\$ 32,088	\$ 32,403	\$ 32,719	\$ 33,034
<u>Non-Operating Revenue</u>													
Interest - Investments	\$ 9,050	\$ 25,465	\$ 10,800	\$ 26,531	\$ 26,342	\$ 26,156	\$ 25,977	\$ 25,807	\$ 25,649	\$ 25,514	\$ 25,409	\$ 25,338	\$ 25,307
Unrealized Gain/Loss Invst	138	(22,052)	-	-	-	-	-	-	-	-	-	-	-
Prior Year Revenues	404	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: Non-Operating Rate Revenue	\$ 9,591	\$ 3,413	\$ 10,800	\$ 26,531	\$ 26,342	\$ 26,156	\$ 25,977	\$ 25,807	\$ 25,649	\$ 25,514	\$ 25,409	\$ 25,338	\$ 25,307
Revenue from Rate Increases	-	-	-	13,446	27,825	43,189	59,593	77,094	96,498	117,213	139,314	162,881	187,997
Total: Sources of Wastewater Funds	\$ 471,703	\$ 464,003	\$ 317,880	\$ 350,298	\$ 367,730	\$ 386,150	\$ 405,616	\$ 426,188	\$ 448,675	\$ 472,498	\$ 497,736	\$ 524,474	\$ 552,801
Uses of Wastewater Funds:													
<u>Operating Expenses:</u>													
Maintenance	\$ 137,992	\$ 121,021	\$ 260,400	\$ 272,899	\$ 285,998	\$ 299,726	\$ 314,113	\$ 329,191	\$ 344,992	\$ 361,551	\$ 378,906	\$ 397,093	\$ 416,154
General & Admin Expense	55,771	141,848	51,600	54,026	56,570	59,236	62,030	64,960	68,031	71,251	74,627	78,167	81,878
Non-Operating Expense	(124)	803	850	891	934	978	1,025	1,075	1,126	1,180	1,237	1,296	1,358
Subtotal: Operating Expenses	\$ 193,640	\$ 263,672	\$ 312,850	\$ 327,816	\$ 343,502	\$ 359,940	\$ 377,169	\$ 395,225	\$ 414,149	\$ 433,983	\$ 454,770	\$ 476,556	\$ 499,390
<u>Other Expenditures:</u>													
Existing Debt Service	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
New Debt Service	-	-	-	-	-	-	-	-	-	-	-	-	-
Rate-Funded Capital Expenses	15,000	51,955	35,631	37,024	38,472	39,976	41,539	43,163	44,851	46,605	48,427	50,320	52,288
Subtotal: Other Expenditures	\$ 15,000	\$ 51,955	\$ 35,631	\$ 37,024	\$ 38,472	\$ 39,976	\$ 41,539	\$ 43,163	\$ 44,851	\$ 46,605	\$ 48,427	\$ 50,320	\$ 52,288
Total: Uses of Wastewater Funds	\$ 208,640	\$ 315,627	\$ 348,481	\$ 364,841	\$ 381,974	\$ 399,916	\$ 418,708	\$ 438,388	\$ 459,000	\$ 480,587	\$ 503,197	\$ 526,876	\$ 551,678
Annual Surplus/(Deficit)	\$ 263,063	\$ 148,376	\$ (30,601)	\$ (14,542)	\$ (14,244)	\$ (13,766)	\$ (13,092)	\$ (12,200)	\$ (10,325)	\$ (8,090)	\$ (5,461)	\$ (2,403)	\$ 1,123
Net Revenue Req't. (Total Uses less Non-Rate Rev.)	\$ 21,511	\$ 141,215	\$ 307,801	\$ 308,115	\$ 325,121	\$ 342,934	\$ 361,589	\$ 381,124	\$ 401,579	\$ 422,985	\$ 445,384	\$ 468,819	\$ 493,336
Total Rate Revenue After Rate Increases	\$ 284,574	\$ 289,591	\$ 277,200	\$ 293,572	\$ 310,877	\$ 329,167	\$ 348,497	\$ 368,924	\$ 391,254	\$ 414,895	\$ 439,923	\$ 466,417	\$ 494,460
Projected Annual Rate Revenue Adjustment	0.00%	0.00%	0.00%	4.80%	4.80%	4.80%	4.80%	4.80%	5.00%	5.00%	5.00%	5.00%	5.00%
Cumulative Increases	0.00%	0.00%	0.00%	4.80%	9.63%	15.10%	20.63%	26.42%	32.74%	39.38%	46.34%	53.66%	61.34%
Debt Coverage Ratio after Rate Increases	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

1. Revenue and expenses are actuals for FY 2020/21 and FY 2021/22, budget for FY 2022/23, and all other years are escalated based on the forecasting assumptions in Table 8. Source files: [2] 2021-06 - WW Revenue.PDF, [12d] 2021-06 - WW Expense.pdf, 2022-2023 BUDGETREV.xlsx, 2022-2023 BUDGETEXP - Augmented 8-2-2022.xlsx, & 2022-06- WF Revenue & Expense.PDF.

3	<-- Select Financial Plan Scenario Here												
Financial Plan Alternatives	FY 2020/21	FY 2021/22	FY 2022/23	FY 2023/24	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30	FY 2030/31	FY 2031/32	FY 2032/33
1	Alternative 1 - 1% Annual Rate Increases	0.00%	0.00%	0.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%
2	Alternative 2 - 3% Annual Rate Increases	0.00%	0.00%	0.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
3	Alternative 3 - General Inflation Rate of 4.8%	0.00%	0.00%	0.00%	4.80%	4.80%	4.80%	4.80%	5.00%	5.00%	5.00%	5.00%	5.00%
4	Alternative 4 - No Rate Increases	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	5.00%	5.00%	5.00%	5.00%	5.00%

DESERT WATER AGENCY
WASTEWATER RATE STUDY
Financial Plan and Reserve Projections

Financial Plan & Reserve Summary

TABLE 2 : RESERVE FUND SUMMARY

SUMMARY OF CASH ACTIVITY ¹	Actuals	Actuals	Budget	5-Year Rate Adoption Period					Projected				
	FY 2020/21	FY 2021/22	FY 2022/23	FY 2023/24	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30	FY 2030/31	FY 2031/32	FY 2032/33
Unrestricted Reserves:													
Total Beginning Cash¹	\$ 1,836,523	\$ 1,958,863	\$ 2,071,419										
Unappropriated Reserve Fund (O&M / Capital Reserve Fund)²													
Beginning Reserve Balance	\$ 1,836,523	\$ 1,958,863	\$ 2,071,419	\$ 2,040,818	\$ 2,026,276	\$ 2,012,032	\$ 1,998,266	\$ 1,985,174	\$ 1,972,974	\$ 1,962,649	\$ 1,954,559	\$ 1,949,098	\$ 1,946,696
Plus: Net Cash Flow (After Rate Increases)	263,063	148,376	(30,601)	(14,542)	(14,244)	(13,766)	(13,092)	(12,200)	(10,325)	(8,090)	(5,461)	(2,403)	1,123
Plus: Transfer of Debt Reserve Surplus	-	-	-	-	-	-	-	-	-	-	-	-	-
Less: Transfer Out to Reserves for Replacements	-	-	-	-	-	-	-	-	-	-	-	-	-
Ending Operating Reserve Balance	\$ 2,099,587	\$ 2,107,239	\$ 2,040,818	\$ 2,026,276	\$ 2,012,032	\$ 1,998,266	\$ 1,985,174	\$ 1,972,974	\$ 1,962,649	\$ 1,954,559	\$ 1,949,098	\$ 1,946,696	\$ 1,947,819
<i>Target Ending Balance (6-months of O&M + 3% of net assets)</i>	<i>\$ 533,820</i>	<i>\$ 557,836</i>	<i>\$ 570,425</i>	<i>\$ 565,908</i>	<i>\$ 563,751</i>	<i>\$ 560,970</i>	<i>\$ 559,584</i>	<i>\$ 558,613</i>	<i>\$ 558,075</i>	<i>\$ 558,991</i>	<i>\$ 560,385</i>	<i>\$ 563,278</i>	<i>\$ 566,695</i>
Capital Reserve Fund													
Beginning Reserve Balance	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Plus: Grant Proceeds	-	-	-	-	-	-	-	-	-	-	-	-	-
Plus: Transfer of Operating Reserve Surplus	-	-	-	-	-	-	-	-	-	-	-	-	-
Less: Use of Reserves for Replacements	-	-	-	-	-	-	-	-	-	-	-	-	-
Ending Capital Expenditure Reserve Balance	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<i>Target Ending Balance</i>	<i>\$ -</i>	<i>\$ -</i>	<i>\$ -</i>	<i>\$ -</i>	<i>\$ -</i>	<i>\$ -</i>	<i>\$ -</i>	<i>\$ -</i>	<i>\$ -</i>	<i>\$ -</i>	<i>\$ -</i>	<i>\$ -</i>	<i>\$ -</i>
Ending Balance	\$ 2,099,587	\$ 2,107,239	\$ 2,040,818	\$ 2,026,276	\$ 2,012,032	\$ 1,998,266	\$ 1,985,174	\$ 1,972,974	\$ 1,962,649	\$ 1,954,559	\$ 1,949,098	\$ 1,946,696	\$ 1,947,819
Minimum Target Ending Balance	\$ 533,820	\$ 557,836	\$ 570,425	\$ 565,908	\$ 563,751	\$ 560,970	\$ 559,584	\$ 558,613	\$ 558,075	\$ 558,991	\$ 560,385	\$ 563,278	\$ 566,695
Ending Surplus (Deficit) Compared to Targets	\$ 1,565,767	\$ 1,549,403	\$ 1,470,393	\$ 1,460,367	\$ 1,448,281	\$ 1,437,295	\$ 1,425,589	\$ 1,414,361	\$ 1,404,574	\$ 1,395,568	\$ 1,388,713	\$ 1,383,418	\$ 1,381,124
Days Cash on Hand	3,958	2,918	2,382	2,257	2,138	2,027	1,922	1,823	1,730	1,644	1,565	1,491	1,424
Annual Interest Earnings Rate⁴	1.30%	1.30%	1.30%	1.30%	1.30%	1.30%	1.30%	1.30%	1.30%	1.30%	1.30%	1.30%	1.30%

1. Beginning cash balances provided by the Agency. Source File: 2020-06 - WW Trial Balance.PDF and [5] 2021-06 - WW Trial Balance.PDF .

2. The Agency only maintains an Unappropriated Reserve Fund rather than separate operating and capital reserves.

3. The target ending balance for this reserve is set to 6 months, or 180 days, of annual operating expenditures plus 3% of net capital assets.

4. Historical interest earning rates are per the average annual yields for funds invested in LAIF (2018-2022). The source is the California State Treasurer's website: <https://www.treasurer.ca.gov/pmia-laif/historical/annual.asp> .

CHART 1

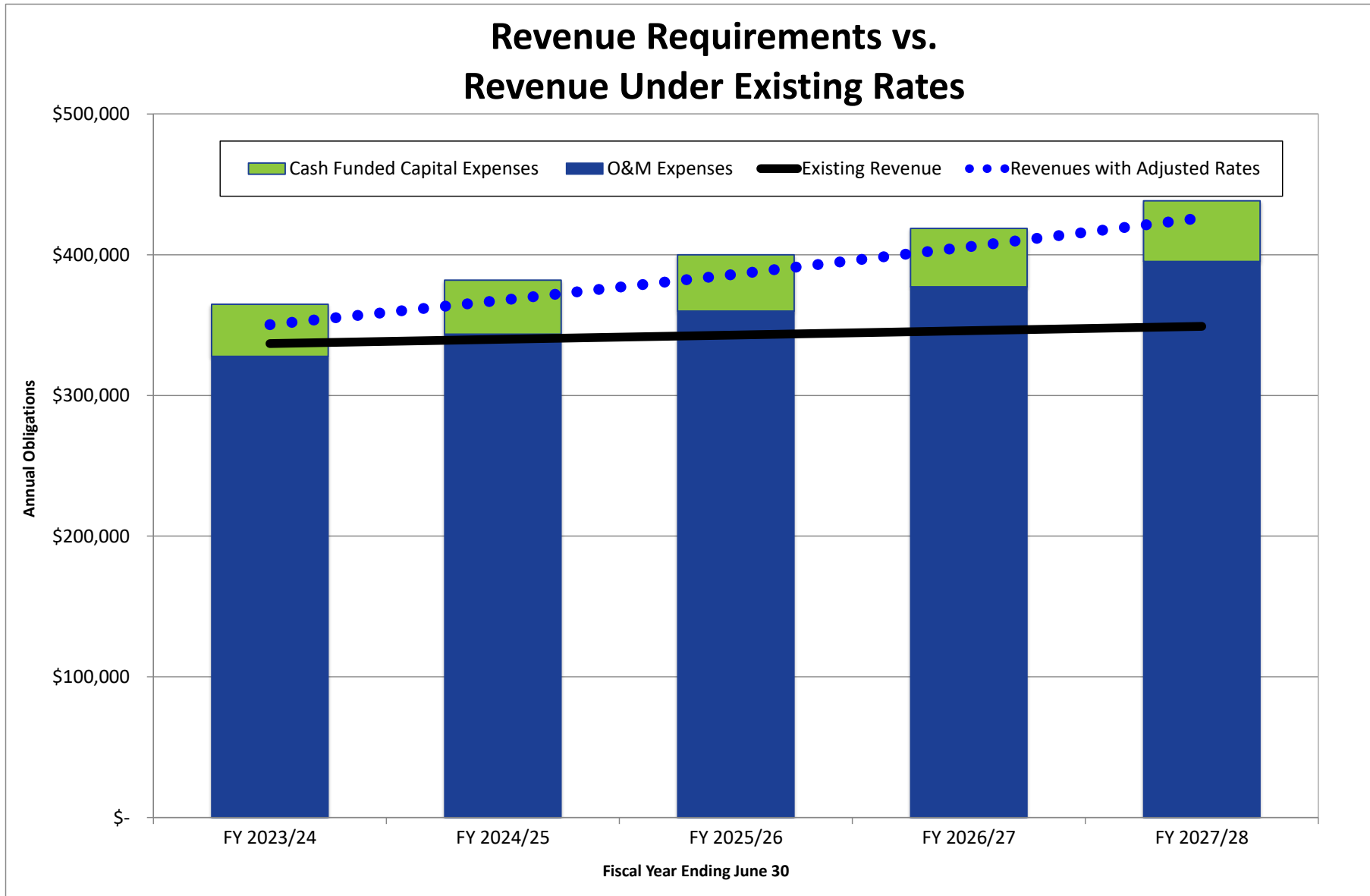


CHART 2

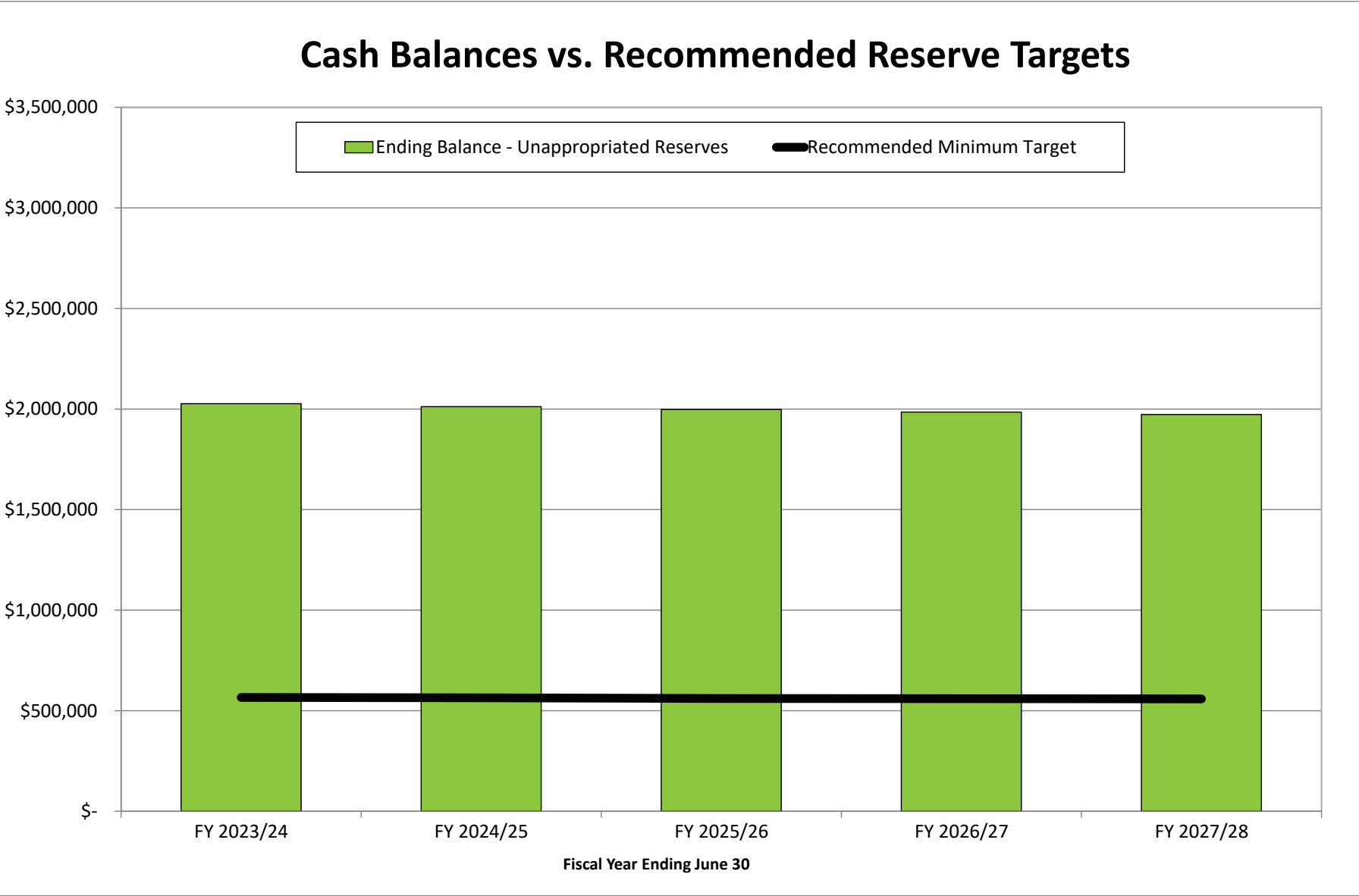


CHART 3

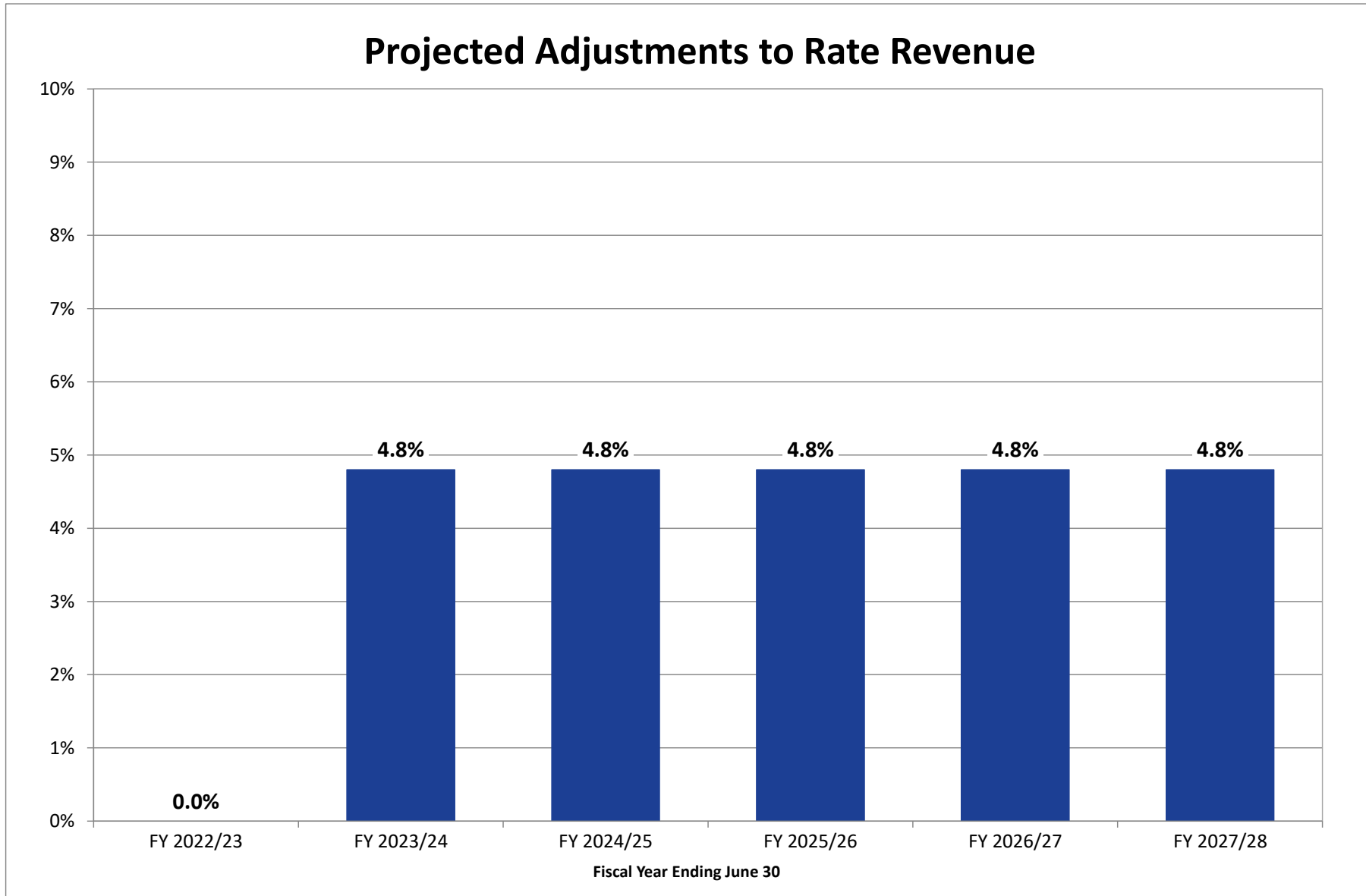
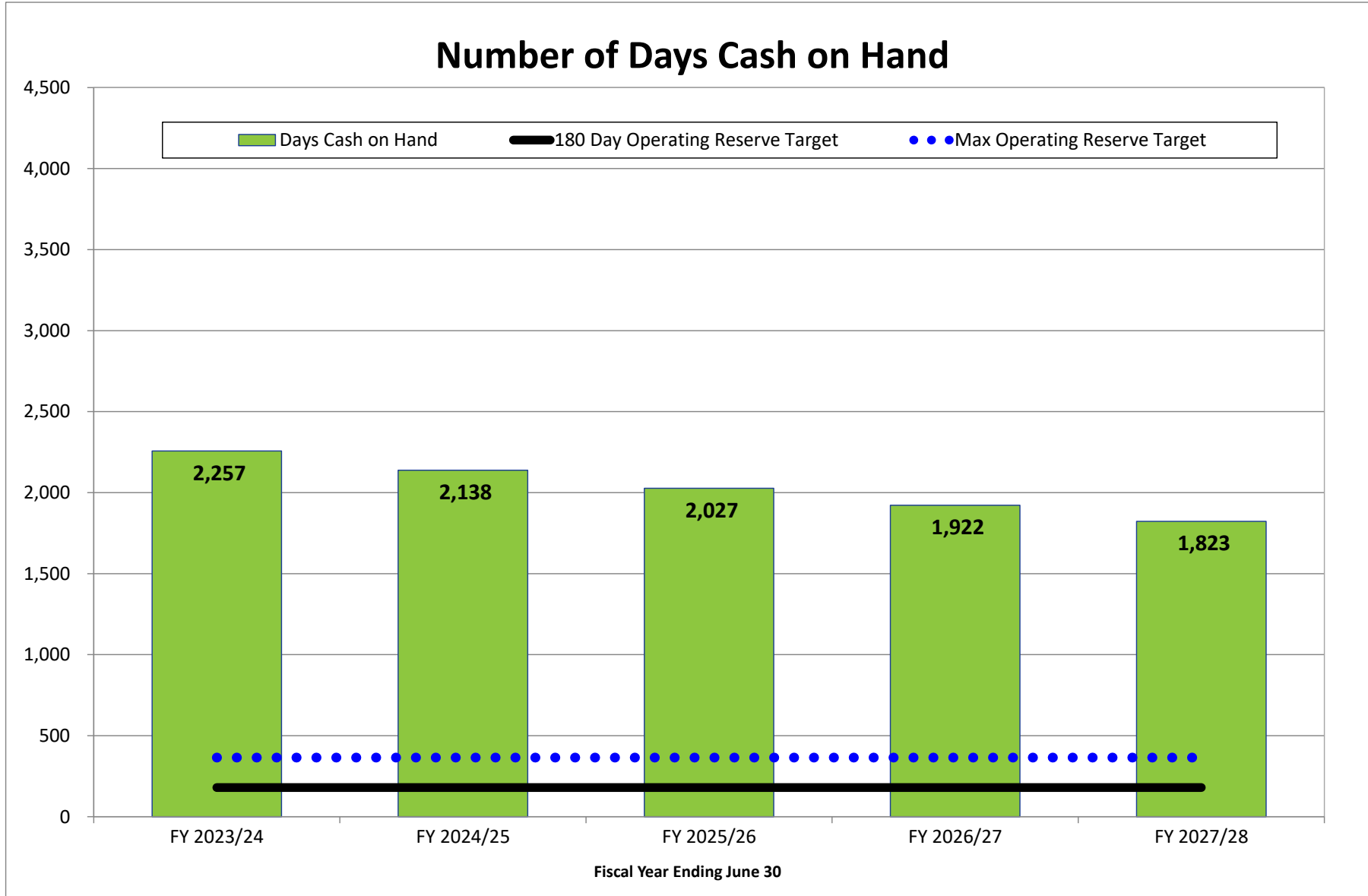


CHART 4



DESERT WATER AGENCY
WASTEWATER RATE STUDY
Operating Revenue and Expenses

Exhibit 1

TABLE 3 : REVENUE FORECAST¹

Code	DESCRIPTION	Basis	Actuals	Actuals	Budget	5-Year Rate Projected Period					Projected				
			FY 2020/21	FY 2021/22	FY 2022/23	FY 2023/24	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30	FY 2030/31	FY 2031/32	FY 2032/33
Sources of Wastewater Funds															
41110	Wastewater Sales - Rate #1 (CCC)	1	\$ 526,604	\$ 532,707	\$ 574,800	\$ 580,868	\$ 586,935	\$ 593,003	\$ 599,070	\$ 605,138	\$ 611,205	\$ 617,273	\$ 623,342	\$ 629,411	\$ 635,480
41140	Wastewater Sales - Rate #2 (CCC)	1	451,648	453,213	480,000	485,067	490,134	495,200	500,267	505,334	510,401	515,468	520,536	525,604	530,672
41200	Wastewater Sales - Dream Homes (CPS)	1	178,648	164,145	160,800	162,497	164,195	165,892	167,590	169,287	170,984	172,682	174,379	176,077	177,775
Other Operating Revenues															
42310	Service Charges	1	-	-	-	-	-	-	-	-	-	-	-	-	-
42315	Capacity Charges - CAT City	1	35,963	1,249	26,400	26,679	26,957	27,236	27,515	27,793	28,072	28,351	28,629	28,908	29,187
42330	Revenue from Services Rendered	1	150	-	-	-	-	-	-	-	-	-	-	-	-
42335	Plan Check Fee	1	1,120	700	1,080	1,091	1,103	1,114	1,126	1,137	1,148	1,160	1,171	1,183	1,194
42350	Customer w/o Inspect Labor	1	1,820	-	2,400	2,425	2,451	2,476	2,501	2,527	2,552	2,577	2,603	2,628	2,653
42965	Contributed Revenue	1	138,485	169,050	-	-	-	-	-	-	-	-	-	-	-
Non-Operating Revenues															
49210	Interest - Investments	See FP	9,050	6,633	10,800	-	-	-	-	-	-	-	-	-	-
49550	Unrealized Gain/Loss Invst	8	138	(22,052)	-	-	-	-	-	-	-	-	-	-	-
49570	Prior Year Revenues	8	404	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL: SEWER REVENUE			\$ 1,344,028	\$ 1,305,644	\$ 1,256,280	\$ 1,258,627	\$ 1,271,774	\$ 1,284,921	\$ 1,298,068	\$ 1,311,216	\$ 1,324,363	\$ 1,337,510	\$ 1,350,660	\$ 1,363,811	\$ 1,376,961

TABLE 4 : SUMMARY OF REVENUES

Description	Basis	Actuals	Actuals	Budget	5-Year Rate Projected Period					Projected				
		FY 2020/21	FY 2021/22	FY 2022/23	FY 2023/24	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30	FY 2030/31	FY 2031/32	FY 2032/33
RATE REVENUE														
Sewer Rate Revenue		\$ 1,156,899	\$ 1,150,064	\$ 1,215,600	\$ 1,228,432	\$ 1,241,263	\$ 1,254,095	\$ 1,266,927	\$ 1,279,759	\$ 1,292,590	\$ 1,305,422	\$ 1,318,257	\$ 1,331,092	\$ 1,343,927
OTHER REVENUE:														
Other Fees		187,129	155,580	40,680	30,195	30,511	30,826	31,142	31,457	31,772	32,088	32,403	32,719	33,034
GRAND TOTAL: SEWER REVENUE		\$ 1,344,028	\$ 1,305,644	\$ 1,256,280	\$ 1,258,627	\$ 1,271,774	\$ 1,284,921	\$ 1,298,068	\$ 1,311,216	\$ 1,324,363	\$ 1,337,510	\$ 1,350,660	\$ 1,363,811	\$ 1,376,961

DESERT WATER AGENCY
WASTEWATER RATE STUDY
Operating Revenue and Expenses

Exhibit 1

TABLE 5 : OPERATING EXPENSE FORECAST¹

Code	DESCRIPTION	Basis	Actuals	Actuals ²	Budget	5-Year Rate Projected Period					Projected				
			FY 2020/21	FY 2021/22	FY 2022/23	FY 2023/24	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30	FY 2030/31	FY 2031/32	FY 2032/33
SEWER OPERATING FUND EXPENSES															
Maintenance															
50220	Maintenance of Pumps	2	\$ 35,758	\$ 8,994	\$ 2,400	\$ 2,515	\$ 2,636	\$ 2,762	\$ 2,895	\$ 3,034	\$ 3,180	\$ 3,332	\$ 3,492	\$ 3,660	\$ 3,836
50230	Maintenance of Mains - Cathedral City	2	21,479	26,427	100,800	105,638	110,709	116,023	121,592	127,429	133,545	139,955	146,673	153,714	161,092
50235	Maintenance of Mains - Dream Homes	2	-	14,148	16,800	17,606	18,452	19,337	20,265	21,238	22,258	23,326	24,446	25,619	26,849
50237	Maintenance of Mains - Cove @ PS	2	-	-	-	-	-	-	-	-	-	-	-	-	-
50240	Maintenance of Lift Stations	2	79,257	70,166	138,000	144,624	151,566	158,841	166,465	174,456	182,830	191,606	200,803	210,441	220,542
50250	Maintenance of Laterals - Cathedral City	2	1,499	162	1,200	1,258	1,318	1,381	1,448	1,517	1,590	1,666	1,746	1,830	1,918
50255	Maintenance of Laterals - Dream Homes	2	-	1,124	1,200	1,258	1,318	1,381	1,448	1,517	1,590	1,666	1,746	1,830	1,918
50257	Maintenance of Laterals - Cove @ PS	2	-	-	-	-	-	-	-	-	-	-	-	-	-
50260	Chemicals & Lab	2	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal - Maintenance			\$ 137,992	\$ 121,021	\$ 260,400	\$ 272,899	\$ 285,998	\$ 299,726	\$ 314,113	\$ 329,191	\$ 344,992	\$ 361,551	\$ 378,906	\$ 397,093	\$ 416,154
CVWD Fees & CPS Fees															
51110	CVWD Rate #1	1	\$ 401,847	\$ 405,267	\$ 446,400	\$ 451,112	\$ 455,824	\$ 460,536	\$ 465,249	\$ 469,961	\$ 474,673	\$ 479,385	\$ 484,098	\$ 488,812	\$ 493,525
51140	CVWD Rate #4	1	344,108	344,495	379,200	383,203	387,206	391,208	395,211	399,214	403,217	407,219	411,223	415,227	419,231
51200	CPS Rate - Dream Homes	1	126,370	110,711	112,800	113,991	115,181	116,372	117,563	118,754	119,944	121,135	122,326	123,517	124,708
51250	CPS Rate - Cove @ PS	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal - CVWD Fees & CPS Fees			\$ 872,325	\$ 860,473	\$ 938,400	\$ 948,306	\$ 958,211	\$ 968,117	\$ 978,022	\$ 987,928	\$ 997,834	\$ 1,007,739	\$ 1,017,648	\$ 1,027,556	\$ 1,037,464
General & Admin Expense															
56100	Administrative Salaries	3	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
56101	Administrative Management	3	-	-	-	-	-	-	-	-	-	-	-	-	-
56200	Office Supplies	2	415	448	1,200	1,258	1,318	1,381	1,448	1,517	1,590	1,666	1,746	1,830	1,918
56206	Convention / Seminars	2	-	-	-	-	-	-	-	-	-	-	-	-	-
56207	Membership / Subscription	2	-	-	-	-	-	-	-	-	-	-	-	-	-
56210	Legal	2	28,429	15,418	6,000	6,288	6,590	6,906	7,238	7,585	7,949	8,331	8,731	9,150	9,589
56220	Engineering	2	1,581	1,511	3,600	3,773	3,954	4,144	4,343	4,551	4,769	4,998	5,238	5,490	5,753
56230	Auditing	2	2,634	1,684	2,400	2,515	2,636	2,762	2,895	3,034	3,180	3,332	3,492	3,660	3,836
56240	Travel / Expenses	2	-	-	-	-	-	-	-	-	-	-	-	-	-
56270	Utilities	6	6,977	11,323	10,800	11,405	12,043	12,718	13,430	14,182	14,976	15,815	16,701	17,636	18,624
56300	Insurance	2	9,852	11,874	13,200	13,834	14,498	15,193	15,923	16,687	17,488	18,327	19,207	20,129	21,095
56421	Tuition & Schooling	2	-	-	-	-	-	-	-	-	-	-	-	-	-
56718	Programming	2	1,530	786	2,400	2,515	2,636	2,762	2,895	3,034	3,180	3,332	3,492	3,660	3,836
56730	Communications Equipment	2	-	-	-	-	-	-	-	-	-	-	-	-	-
56740	Miscellaneous Storeroom	2	-	-	-	-	-	-	-	-	-	-	-	-	-
56750	Transportation Equipment	5	2,853	4,656	6,000	6,180	6,365	6,556	6,753	6,956	7,164	7,379	7,601	7,829	8,063
56755	Gasoline	4	1,269	3,174	3,600	3,744	3,894	4,050	4,211	4,380	4,555	4,737	4,927	5,124	5,329
56760	Tools / Work Equip / Power Equipment	2	-	-	1,200	1,258	1,318	1,381	1,448	1,517	1,590	1,666	1,746	1,830	1,918
56761	Hand Tools	2	-	-	1,200	1,258	1,318	1,381	1,448	1,517	1,590	1,666	1,746	1,830	1,918
56860	Wastewater Management	2	232	-	-	-	-	-	-	-	-	-	-	-	-
56900	Regulatory Expense	2	-	90,974	-	-	-	-	-	-	-	-	-	-	-
Subtotal - General & Admin Expense			\$ 55,771	\$ 141,848	\$ 51,600	\$ 54,026	\$ 56,570	\$ 59,236	\$ 62,030	\$ 64,960	\$ 68,031	\$ 71,251	\$ 74,627	\$ 78,167	\$ 81,878
Sub-Total: Sewer Operating Expenses			\$ 1,066,088	\$ 1,123,342	\$ 1,250,400	\$ 1,275,231	\$ 1,300,779	\$ 1,327,079	\$ 1,354,166	\$ 1,382,079	\$ 1,410,857	\$ 1,440,542	\$ 1,471,180	\$ 1,502,815	\$ 1,535,495

TABLE 6 : OPERATING EXPENSE FORECAST¹

Code	DESCRIPTION	Basis	Actuals	Actuals	Budget	5-Year Rate Projected Period					Projected				
			FY 2020/21	FY 2021/22	FY 2022/23	FY 2023/24	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30	FY 2030/31	FY 2031/32	FY 2032/33
SEWER OPERATING FUND EXPENSES, cont.															
Non-Operating Expense															
58100	Prior Year Expenses	8	\$ (922)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
58800	Sewer Assessment - Dream Homes	2	799	803	850	891	934	978	1,025	1,075	1,126	1,180	1,237	1,296	
Sub-Total: Sewer Operating Expenses			\$ (124)	\$ 803	\$ 850	\$ 891	\$ 934	\$ 978	\$ 1,025	\$ 1,075	\$ 1,126	\$ 1,180	\$ 1,237	\$ 1,296	
GRAND TOTAL: SEWER OPERATING EXPENSES			\$ 1,065,965	\$ 1,124,145	\$ 1,251,250	\$ 1,276,122	\$ 1,301,713	\$ 1,328,057	\$ 1,355,191	\$ 1,383,153	\$ 1,411,983	\$ 1,441,722	\$ 1,472,417	\$ 1,504,112	

TABLE 7 : DEPRECIATION EXPENSE FORECAST (Excluded from the analysis)²

Code	DESCRIPTION	Basis	Actuals	Actuals	Budget	5-Year Rate Projected Period					Projected				
			FY 2020/21	FY 2021/22	FY 2022/23	FY 2023/24	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30	FY 2030/31	FY 2031/32	FY 2032/33
Other Operating Expense															
57100	Depreciation	2	\$ 567,427	\$ 570,970	\$ 572,400	\$ 599,875	\$ 628,669	\$ 658,845	\$ 690,470	\$ 723,612	\$ 758,346	\$ 794,746	\$ 832,894	\$ 872,873	\$ 914,771
Total: Annual Depreciation Expense			\$ 567,427	\$ 570,970	\$ 572,400	\$ 599,875	\$ 628,669	\$ 658,845	\$ 690,470	\$ 723,612	\$ 758,346	\$ 794,746	\$ 832,894	\$ 872,873	\$ 914,771

TABLE 8 : FORECASTING ASSUMPTIONS³

INFLATION FACTORS	Basis	FY 2020/21	FY 2021/22	FY 2022/23	FY 2023/24	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30	FY 2030/31	FY 2031/32	FY 2032/33
Customer Growth ⁴	1	0.00%	0.00%	0.00%	1.06%	1.04%	1.03%	1.02%	1.01%	1.00%	0.99%	0.98%	0.97%	0.96%
General Cost Inflation ⁵	2	0.00%	0.00%	0.00%	4.80%	4.80%	4.80%	4.80%	4.80%	4.80%	4.80%	4.80%	4.80%	4.80%
Labor Cost Inflation ⁶	3	0.00%	0.00%	0.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%
Energy Cost Inflation ⁷	4	0.00%	0.00%	0.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%
Transportation ⁸	5	0.00%	0.00%	0.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Utilities ⁹	6	0.00%	0.00%	0.00%	5.60%	5.60%	5.60%	5.60%	5.60%	5.60%	5.60%	5.60%	5.60%	5.60%
Construction Cost Inflation ¹⁰	7	0.00%	0.00%	0.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
No Escalation	8	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

1. Revenue and expenses are actuals for FY 2020/21 and FY 2021/22, budget for FY 2022/23, and all other years are escalated based on the forecasting assumptions in Table 8. Source files: [2] 2021-06 - WW Revenue.PDF, [12d] 2021-06 - WW Expense.pdf , 2022-2023 BUDGETREV.xlsx , 2022-2023 BUDGETEXP - Augmented 8-2-2022.xlsx , & 2022-06- WF Revenue & Expense.PDF .

2. The following expense has been excluded from the analysis since it does not represent an actual cash expense.

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

4. Customer growth rate is based on Table 6.3 in the 2020 Coachella Valley Regional Urban Water Manage Plan and is estimated at 223 new connections per year. Source files: [13b] Urban Water Management Plan.pdf , page 136 & [9]_Water_Bills_2021.xlsx .

5. General cost inflation is based on the 5-year average annual change in the Consumer Price Index for all Urban Consumers in the Riverside-San Bernardino-Ontario, CA, CA area.

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

7. Energy cost inflation is based on the 5-year average annual change in the Consumer Price Index for all Urban Consumers. Source: <https://data.bls.gov> .

8. Transportation cost inflation is based on the 5-year average annual change in the Consumer Price Index for All Urban Consumers (US City Average). Source: <https://data.bls.gov> .

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

10. Construction cost Inflation is the 5-year average change in the Construction Cost Index for 2017-2022 (3.91%). Source: Engineering News Record website (<http://enr.construction.com>) .

DESERT WATER AGENCY
WASTEWATER RATE STUDY
Capital Improvement Plan Expenditures

Exhibit 2

TABLE 9 : CAPITAL FUNDING SUMMARY

CAPITAL FUNDING FORECAST	Actuals ¹	Actuals	Budget	5-Year Rate Adoption Period					Projected				
Funding Sources:	FY 2020/21	FY 2021/22	FY 2022/23	FY 2023/24	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30	FY 2030/31	FY 2031/32	FY 2032/33
Grants	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Use of Capacity Reserve Fund	-	-	-	-	-	-	-	-	-	-	-	-	-
Use of SRF Loan Proceeds	-	-	-	-	-	-	-	-	-	-	-	-	-
Use of New Revenue Bond Proceeds	-	-	-	-	-	-	-	-	-	-	-	-	-
Use of Capital Expenditure Reserve Fund	-	-	-	-	-	-	-	-	-	-	-	-	-
Rate Revenue	15,000	51,955	35,631	37,024	38,472	39,976	41,539	43,163	44,851	46,605	48,427	50,320	52,288
Total Sources of Capital Funds	\$ 15,000	\$ 51,955	\$ 35,631	\$ 37,024	\$ 38,472	\$ 39,976	\$ 41,539	\$ 43,163	\$ 44,851	\$ 46,605	\$ 48,427	\$ 50,320	\$ 52,288
Uses of Capital Funds:													
Total Project Costs (Includes Exp. Related Projects)	\$ 15,000	\$ 51,955	\$ 35,631	\$ 37,024	\$ 38,472	\$ 39,976	\$ 41,539	\$ 43,163	\$ 44,851	\$ 46,605	\$ 48,427	\$ 50,320	\$ 52,288
Total Planned CIP for Rate Period (FY 2023/24 through FY 2027/28)										\$ 200,175			

CAPITAL IMPROVEMENT PROGRAM

TABLE 10 : CAPITAL IMPROVEMENT PROGRAM COSTS (in Current-Year Dollars)¹

CAPITAL IMPROVEMENT PROJECTS	FY 2020/21	FY 2021/22	FY 2022/23	FY 2023/24	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30	FY 2030/31	FY 2031/32	FY 2032/33
ROUTINE PROJECTS													
Miscellaneous													
Contingency - Other	\$ 15,000	\$ 15,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Cathedral Canyon Lift Station Generator - Augment	-	35,000	-	-	-	-	-	-	-	-	-	-	-
Future Projects²	-	-	33,000	33,000	33,000	33,000	33,000	33,000	33,000	33,000	33,000	33,000	33,000
Total: CIP Program Costs (Current-Year Dollars)	\$ 15,000	\$ 50,000	\$ 33,000	\$ 33,000	\$ 33,000	\$ 33,000	\$ 33,000	\$ 33,000	\$ 33,000	\$ 33,000	\$ 33,000	\$ 33,000	\$ 33,000

TABLE 11 : CAPITAL IMPROVEMENT PROGRAM COSTS (in Future-Year Dollars)^{3,4}

CAPITAL IMPROVEMENT PROJECTS	FY 2020/21	FY 2021/22	FY 2022/23	FY 2023/24	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30	FY 2030/31	FY 2031/32	FY 2032/33
ROUTINE PROJECTS													
Miscellaneous													
Contingency - Other	\$ 15,000	\$ 15,587	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Cathedral Canyon Lift Station Generator - Augment	-	36,369	-	-	-	-	-	-	-	-	-	-	-
Future Projects²	-	-	35,631	37,024	38,472	39,976	41,539	43,163	44,851	46,605	48,427	50,320	52,288
Total: CIP Program Costs (Future-Year Dollars)	\$ 15,000	\$ 51,955	\$ 35,631	\$ 37,024	\$ 38,472	\$ 39,976	\$ 41,539	\$ 43,163	\$ 44,851	\$ 46,605	\$ 48,427	\$ 50,320	\$ 52,288

TABLE 12 : FORECASTING ASSUMPTIONS

Economic Variables	FY 2020/21	FY 2021/22	FY 2022/23	FY 2023/24	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30	FY 2030/31	FY 2031/32	FY 2032/33
Annual Construction Cost Inflation, Per Engineering News Record ³	0.00%	3.91%	3.91%	3.91%	3.91%	3.91%	3.91%	3.91%	3.91%	3.91%	3.91%	3.91%	3.91%
Cumulative Construction Cost Multiplier from FY 2020/21	1.00	1.04	1.08	1.12	1.17	1.21	1.26	1.31	1.36	1.41	1.47	1.52	1.58

1. Capital project costs were provided by DWA staff. Source file: 20-21 & 21-22 Misc CIP not included in General Plan CIP.xlsx.

2. Future project costs beyond FY 2021/22 were calculated based on the average of the 2 years provided.

3. Future project costs are inflated by 3.91% per year. Source: Engineering News Record website (<http://enr.construction.com>).

4. For reference purposes, the annual Construction Cost Inflation percentage is the 5-year average change in the Construction Cost Index from 2017 to 2022 (3.91%). Source: Engineering News Record website (<http://enr.construction.com>).

TABLE 13 : EXISTING DEBT OBLIGATIONS

CURRENT DISTRICT DEBT OBLIGATIONS	Actuals	Budget	Budget	5-Year Rate Adoption Period					Projected				
Annual Repayment Schedules:	FY 2020/21	FY 2021/22	FY 2022/23	FY 2023/24	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30	FY 2030/31	FY 2031/32	FY 2032/33
SRF Loan/Revenue Bond													
Principal Payment	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Interest Payment	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: Annual Debt Service	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Coverage Requirement (\$-Amnt above annual payment)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Reserve Requirement	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

TABLE 14 : EXISTING ANNUAL DEBT OBLIGATIONS TO BE SATISFIED BY SEWER RATES

Existing Annual Debt Service	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Existing Annual Coverage Requirement	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Existing Debt Reserve Target	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

DESERT WATER AGENCY
WASTEWATER RATE STUDY
Projected Wastewater Rates Under Existing Rate Schedule

Exhibit 4

TABLE 15 : CURRENT WASTEWATER RATE SCHEDULE

Wastewater Rate Schedule ¹							
Customer Types	EDU Scale	CVWD Treatment - Cathedral City			City Treatment - Palm Oasis / Dream Homes Only		
		CVWD Charges per EDU ²	DWA Charges per EDU	Total Charges	City of Palm Springs Charges (per EDU)	DWA Charges (per EDU)	Total Charges
Single Family/Condo	1 EDU = 1 Unit	\$24.98	\$6.15	\$31.13	\$20.00	\$6.15	\$26.15
Mobile Home Park	1 EDU = 1 Space	\$24.98	\$6.15	\$31.13	\$20.00 + \$1.98/FU	\$6.15	\$28.13
Apartments	1 EDU = 1 Unit	\$24.98	\$6.15	\$31.13	\$20.00	\$6.15	\$26.15
Hotel/Motel	1/2 EDU = 1 Room	\$24.98	\$6.15	\$31.13	N/A	N/A	N/A
RV Park	1/2 EDU = 1 Space	\$24.98	\$6.15	\$31.13	N/A	N/A	N/A
Comm./Ind./ Inst.	V & F	\$24.98	\$6.15	\$31.13	\$1.98/FU (Min. \$20.00)	\$6.15	\$26.15 Min.
Schools and Colleges	Per Student & EDU	\$24.98	\$6.15	\$31.13	\$1.98/FU (Min. \$20.00)	\$6.15	\$26.15 Min.
All Other Schools	Per Student & EDU	\$24.98	\$6.15	\$31.13	N/A	N/A	N/A

1. These rates are effective as of January 1, 2022 and were provided by District staff. Source file: 01265 Establishing Rates Fees Charges for Sewer.pdf.

2. CVWD charges will increase to \$24.98 effective July 1, 2022.

**DESERT WATER AGENCY
WASTEWATER RATE STUDY
Cost of Service Analysis**

TABLE 16 : VOLUME ALLOCATION FACTOR

Development of the Volume Allocation Factor			
Customer Class	FY 2020/21 Annual Water Consumption (hcf) ¹	FY 2020/21 Volume (MGD)	Percent of Volume
Residential	467,196	0.96	74.7%
Condo	12,834	0.03	2.1%
Commercial	143,565	0.29	23.0%
Public Authority	1,887	0.00	0.3%
Total	625,482	1.28	100%

1. Consumption data provided by DWA staff. Source file: *Summary Tables_WW_FS.xlsx*.

TABLE 17 : CUSTOMER ALLOCATION FACTOR

Development of the Customer Allocation Factor				
Customer Class	Number of Accounts ¹	Percent of Total Accounts	Number of Equivalent Dwelling Units (EDUs) ²	Percent of Total Billing Units
Residential	1,724	76.9%	1,759	52.5%
Condo	299	13.3%	299	8.9%
Commercial	215	9.6%	1,214	36.3%
Public Authority	5	0.2%	76	2.3%
Total	2,243	100.0%	3,348	100.0%

1. Number of accounts and EDUs provided by DWA staff. Source file: *Summary Tables_WW_FS.xlsx*.

2. Per DWA's customer billing data; current EDU assignments per account.

TABLE 18 : REVENUE ALLOCATION FACTOR

Total Revenue by Customer Class		
Customer Class	Total Revenue FY 2020/21 ¹	% of Total Revenue
Residential	\$ 593,818	52.5%
Condo	101,816	9.0%
Commercial	416,804	36.8%
Public Authority	19,694	1.7%
Total	\$ 1,132,132	100.0%

1. Revenue data is based on the Desert Water Agency's billing data.

DESERT WATER AGENCY
WASTEWATER RATE STUDY
Cost of Service Analysis

TABLE 19 : ALLOCATION OF FY 2023/24 REVENUE REQUIREMENTS BY CUSTOMER CLASS

Customer Class	FY 2023/24 Total Revenue Requirement ^{1,2}	% of Total Revenue Requirement
Residential	\$ 154,249	52.5%
Condo	26,220	8.9%
Commercial	106,426	36.3%
Public Authority	6,678	2.3%
Total	\$ 293,572	100%

1. Revenue requirement for each customer class is determined by multiplying the total revenue requirement by the customer allocation factor (Percent of Total Billing Units) for each customer class.
2. Total revenue requirement is for DWA's collection system only; treatment is addressed separately.

TABLE 20 : DEVELOPMENT OF PROPOSED SEWER RATES FOR FY 2023/24

Customer Class	No. of EDUs	Total Revenue Requirement	Monthly Fixed Charge Per EDU
Residential	1,759	\$ 154,249	\$7.31
Condo	299	26,220	\$7.31
Commercial	1,214	106,426	\$7.31
Public Authority	76	6,678	\$7.31
Total	3,348	\$ 293,572	\$7.31

Customer Class	No. of EDUs	Total Revenue Requirement	Monthly Fixed Charge Per EDU
Total 2017	3,242	\$ 208,553	\$5.36
Current Rate		\$ 296,799	\$6.15
Total 2023	3,348	\$ 293,572	\$7.31

TABLE 21 : PROPOSED FIVE-YEAR RATE SCHEDULE

Wastewater Rate Schedule	Current Rates	Proposed Rates				
		FY 2023/24	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28
Projected Increase in Rate Revenue per Financial Plan:		4.80%	4.80%	4.80%	4.80%	4.80%
Fixed Monthly Service Charge Per EDU	\$6.15	\$7.31	\$7.66	\$8.03	\$8.41	\$8.81

TABLE 22 : REVENUE CHECK

Customer Class	No. of EDUs	FY 2023/24	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28
Residential	1,759	\$ 154,249	\$ 161,653	\$ 169,412	\$ 177,544	\$ 186,066
Condo	299	26,220	27,478	28,797	30,179	31,628
Commercial	1,214	106,426	111,534	116,888	122,498	128,378
Public Authority	76	6,678	6,998	7,334	7,686	8,055
Total	3,348	\$ 293,572	\$ 307,664	\$ 322,431	\$ 337,908	\$ 354,128
<i>Annual Revenue Requirement from Financial Plan</i>		<i>\$ 293,572</i>	<i>\$ 310,877</i>	<i>\$ 329,167</i>	<i>\$ 348,497</i>	<i>\$ 368,924</i>

**DESERT WATER AGENCY
WASTEWATER RATE STUDY
Sewer Rate Development**

TABLE 23 : PROPOSED RATES

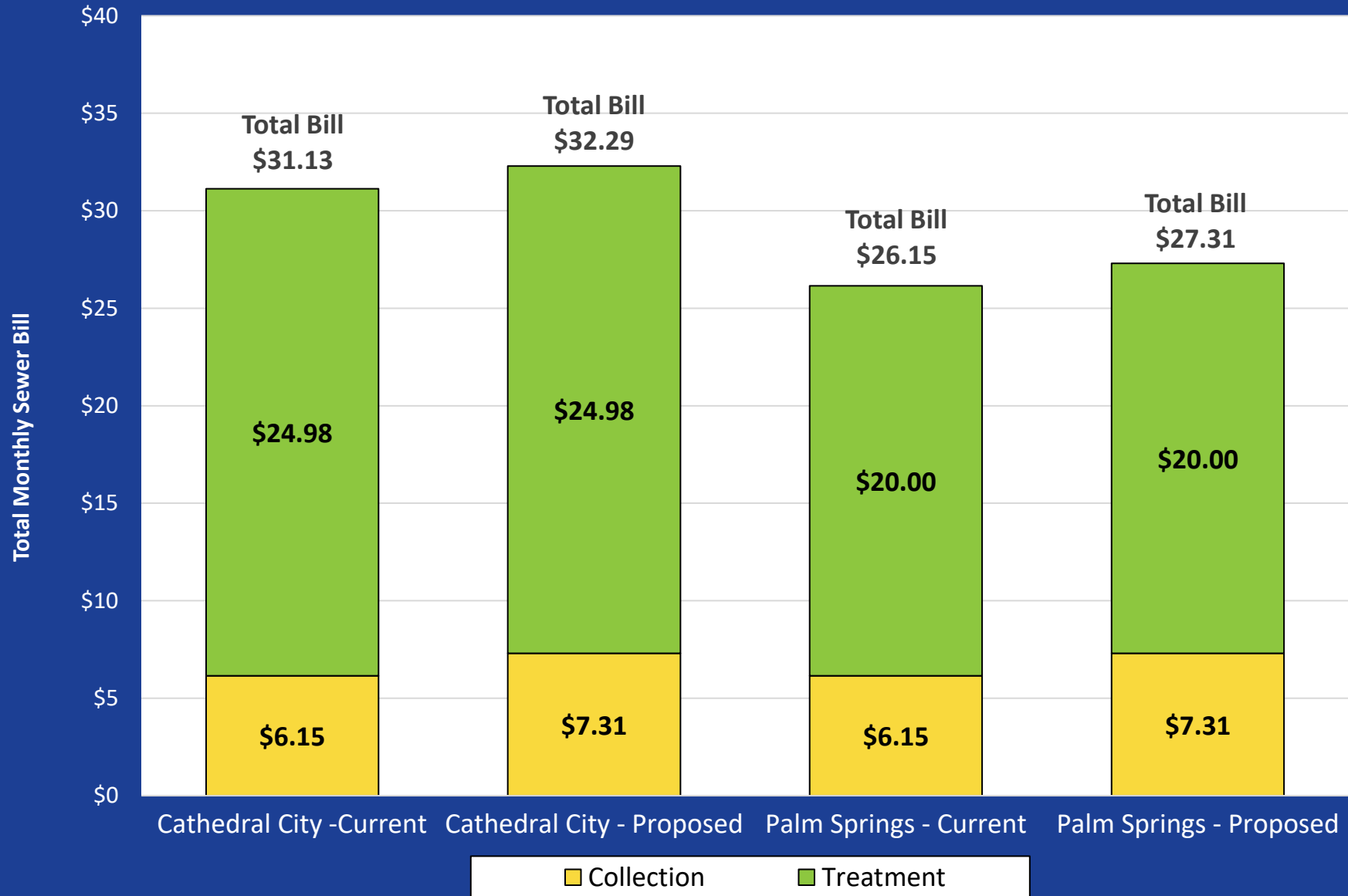
Wastewater Rate Schedule ¹							
Customer Types	EDU Scale	CVWD Treatment - Cathedral City			City Treatment - Palm Oasis / Dream Homes Only		
		CVWD Charges per EDU	DWA Charges per EDU	Total Charges	City of Palm Springs Charges (per EDU)	DWA Charges (per EDU)	Total Charges
Single Family/Condo	1 EDU = 1 Unit	\$24.98	\$7.31	\$32.29	\$20.00	\$7.31	\$27.31
Mobile Home Park	1 EDU = 1 Space	\$24.98	\$7.31	\$32.29	\$20.00 + \$1.98/FU	\$7.31	\$29.29
Apartments	1 EDU = 1 Unit	\$24.98	\$7.31	\$32.29	\$20.00	\$7.31	\$27.31
Hotel/Motel	1/2 EDU = 1 Room	\$24.98	\$7.31	\$32.29	N/A	N/A	N/A
RV Park	1/2 EDU = 1 Space	\$24.98	\$7.31	\$32.29	N/A	N/A	N/A
Comm./Ind./ Inst.	V & F	\$24.98	\$7.31	\$32.29	\$1.98/FU (Min. \$20.00)	\$7.31	\$27.31 Min.
Schools and Colleges	Per Student & EDU	\$24.98	\$7.31	\$32.29	\$1.98/FU (Min. \$20.00)	\$7.31	\$27.31 Min.
All Other Schools	Per Student & EDU	\$24.98	\$7.31	\$32.29	N/A	N/A	N/A

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

Current vs. Proposed Wastewater Charge Per EDU Desert Water Agency Collection System Five-Year Projection



Current vs. Proposed FY 2023/24 Wastewater Bill (SFR Customer) Combined DWA Collection + Outside Treatment



GENERAL MANAGER'S REPORT

March 21, 2023

LIHWAP Program Updates

The Lower Income Household Water Assistance Program (LIHWAP) helps low-income households pay the cost of water and sewer services. The program began offering payment assistance up to \$2,000 in the Fall of 2021 to lower income households with delinquent water accounts.

Riverside County has led the state in the number of households served and amount of money distributed through the LIHWAP. Due to this success Riverside County has been awarded an additional \$4 million in LIHWAP funds to serve even more residents. Along with these additional funds, the following eligibility requirements have also been expanded:

- Starting March 13th LIHWAP assistance can be used to assist customers who don't have arrearages. Based on household size and income these customers can receive between \$200-\$371.
- Starting March 14th, the total amount of LIHWAP that can pay past due bills will increase from \$2,000 up to amount to \$15,000.
- The new state funded LIHWAP 2.0 contract will begin in October 2023. Under this contract previous customers may be able to re-apply.

DWA will be performing additional outreach to its customers to make them aware of the updated LIHWAP guidelines.

SWP Delivery and Whitewater Hydro Generation Update

On March 13, 2023 MWD began delivering approximately 34,910 AF of water to the Coachella valley basins. The first 15,000 AF of delivery is not SWP water but instead is water for CVWD as part of their 1989 IID Approval Agreement and will be delivered to the Whitewater basin. Of the remaining 19,910 AF, approximately 95% will be delivered to Whitewater (18,820 AF) with 5% delivered to Mission Creek (1,090 AF). The delivery is scheduled to end the first week of May.

As part of the delivery, water will be diverted through the Whitewater Hydro Plant beginning the week of March 27.

BLM Approves Whitewater River Groundwater Replenishment Facility Right-of-Way Grant

On March 16, 2023, the Bureau of Land Management (BLM) issued the Record of Decision for the Whitewater River Groundwater Replenishment Facility Project. The official notice for this decision has been published in the Federal Register.

The BLM approved a 30-year right-of-way grant for continued operation of the existing groundwater replenishment facility which is partially located on BLM-managed public lands. The grant enables the delivery and recharge of up to 511,000 acre-feet of water annually which is representative of the facility capacity.

The Record of Decision is available for a 30-day appeal period which ends on April 17, 2023.

Human Resource's Meetings and Activities

Meetings:

02/21/2023	DWA Board Meeting	Virtual Meeting
02/22/2023	Paycom Implementation Meeting	Virtual Meeting
02/27/2023	DWA Staff Meeting	DWA Offices
03/06/2023	DWA Staff Meeting	DWA Offices
03/07/2023	DWA Board Meeting	DWA Offices
03/13/2023	DWA Staff Meeting	Virtual Meeting
03/20/2023	Operations/Engineering Staff Meeting	DWA Offices

Activities:

02/21/2023	ACWA Webinar: Risk Transfer	Virtual Meeting
02/22/2023	Webinar: The Future of Recognition	DWA Offices
02/22/2023	Paycom Weekly Call	Virtual Meeting
02/23/2023	Mock Board Meeting	DWA Offices
02/23/2023	Webinar: HR's Role in Organizational Ethics	Virtual Meeting
02/24/2023	Paycom Webinar: February Spotlight	Virtual Meeting
02/28/2023	DOT Testing	DWA Offices
03/02/2023	DWA Safety Meetings	DWA Offices
03/07/2023	Webinar: How could a recession change talent management?	Virtual Meeting
03/14/2023	Webinar: AbsencePro Employer Orientation	Virtual Meeting
03/14/2023	ACWA JPIA Webinar: Injury Illness Prevention Program (IIPP)	Virtual Meeting
03/15/2023	Paycom Weekly Call	Virtual Meeting

SYSTEM LEAK DATA					
(PERIOD BEGINNING FEB 28, 2023 THRU MAR 13, 2023)					
STREET NAME	NUMBER OF LEAKS	PIPE DIAMETER (INCHES)	YEAR INSTALLED	PIPE MATERIAL	PIPE CONSTRUCTION
VENTURA RD	9	6	1958	STEEL	BARE/UNLINED
SAN JACINTO DR	3	3	1948	STEEL	BARE/UNLINED
AVENIDA CABALLEROS	2	14	1953	STEEL	BARE/UNLINED
INDIAN CANYON DR	2	6	1951	STEEL	BARE/UNLINED
BELLAMY RD	1	4	1957	STEEL	BARE/UNLINED
VIA NEGOCIO	1	4	1955	STEEL	BARE/UNLINED
LOUELLA RD	1	6	1955	STEEL	BARE/UNLINED
VIA VAQUERO RD	1	4	1958	STEEL	BARE/UNLINED
TAHQUITZ CYN WY	1	8	1946	STEEL	BARE/UNLINED
RIVERSIDE DR S	1	4	1948	STEEL	BARE/UNLINED
SUNRISE WY	1	8	1948	STEEL	BARE/UNLINED
CAMINO REAL	1	12	1953	STEEL	BARE/UNLINED
SUNNY DUNES RD	1	10	1952	STEEL	BARE/UNLINED
SUNNY DUNES RD	1	6	1946	STEEL	BARE/UNLINED
TOTAL LEAKS IN SYSTEM:		26			

Streets highlighted in green are included as part of the

2020/2021 Replacement Pipeline Project

Streets highlighted in blue are being proposed as part of the

2021/2022 Replacement Pipeline Project

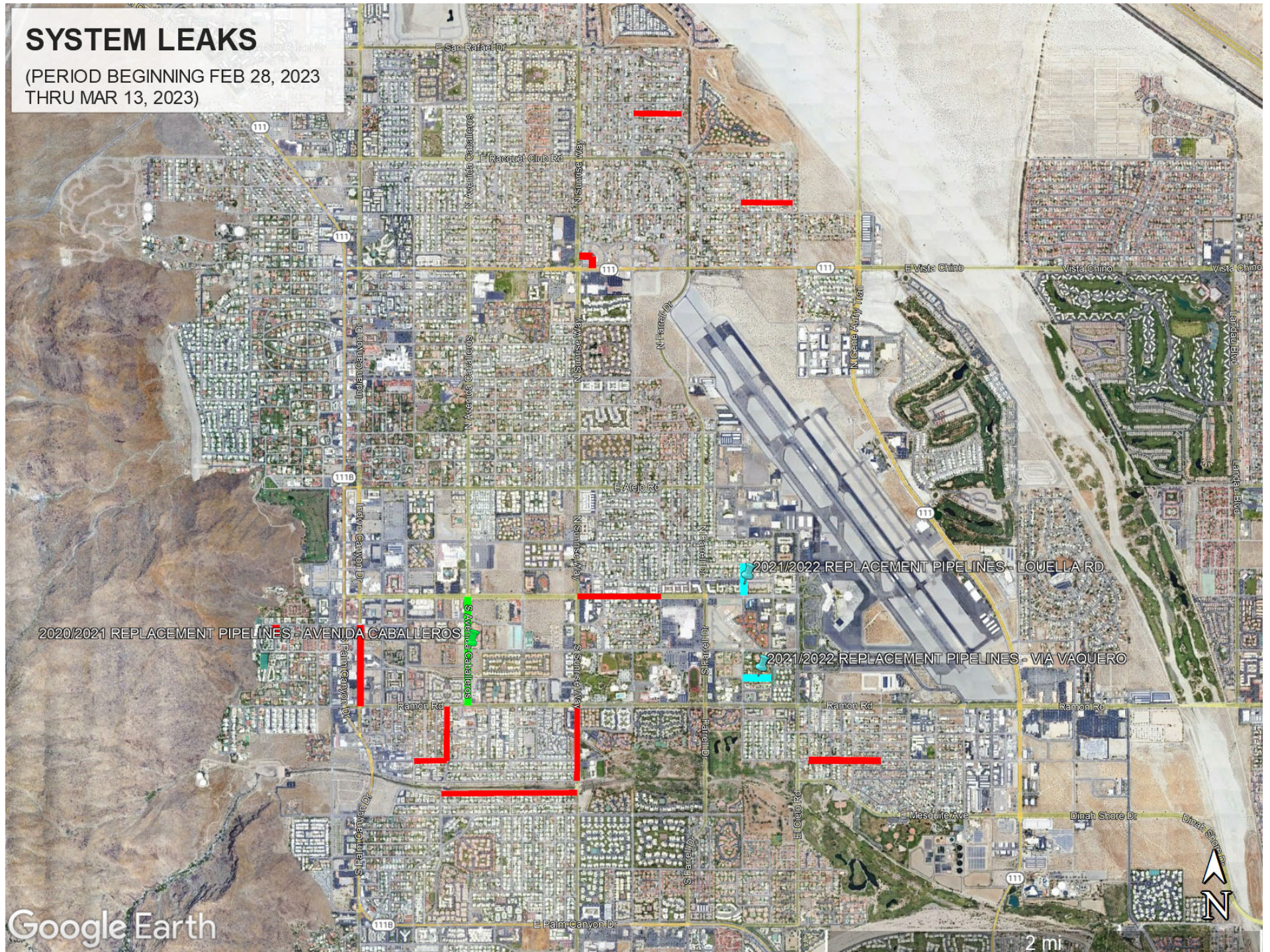
Streets highlighted in salmon are being proposed as part of the

2022/2023 Replacement Pipeline Project

SYSTEM INFORMATION:	
OLDEST PIPE IN THE SYSTEM (YEAR OF INSTALLATION):	1935
AVERAGE YEAR OF INSTALLATION OF UNLINED STEEL PIPE (SYSTEMWIDE):	1952
AVERAGE AGE OF UNLINED STEEL PIPE (SYSTEMWIDE):	66 YEARS
AVERAGE AGE OF PIPELINE AT THE TIME OF REPLACEMENT:	68 YEARS
TOTAL LENGTH OF PIPE IN SYSTEM OLDER THAN 70 YEARS (LINEAR FEET):	117,721
TOTAL LENGTH OF UNLINED PIPE SYSTEMWIDE (LINEAR FEET):	297,672
*AVERAGE LENGTH OF PIPE REPLACED ANNUALLY (LINEAR FEET):	15,000
PROJECTED TIME FRAME FOR 100% REPLACEMENT OF UNLINED STEEL PIPE:	16 YEARS
PROJECTED TIME FRAME FOR 100% REPLACEMENT OF PIPE OLDER THAN 70 YEARS:	9 YEARS
YEAR AGENCY TRANSITIONED TO CEMENT LINED STEEL PIPE:	1960
<p>*PLEASE NOTE THIS FIGURE REPRESENTS THE AVERAGE LINEAR FOOTAGE OF PIPELINE REPLACED ANNUALLY GIVEN AN AVERAGE ANNUAL BUDGET OF \$3 MILLION.</p>	

SYSTEM LEAKS

(PERIOD BEGINNING FEB 28, 2023
THRU MAR 13, 2023)



General Manager's Meetings and Activities

Meetings:

03/07/23	DWA Bi-Monthly Board Meeting	DWA
03/07/23	SWC Legislative Check-In	Conf Call
03/09/23	SWC 2023 SWP Annual Maintenance Schedule Mtg	Conf Call
03/09/23	SWC WSIP Coordination	Conf Call
03/09/23	DWA Finance Committee Meeting	DWA
03/10/23	Sites Reservoir Authority and Reservoir Committee Meeting	Conf Call
03/13/23	DWA Weekly Staff Meetings	DWA
03/13/23	DWA Weekly State Leg Check-in	Conf Call
03/14/23	Mission Creek Quarterly GM Meeting	Conf Call
03/15/23	SWC DCP Coordination Meeting	Conf Call
03/15/23	SWC Update Meeting	Conf Call
03/15/23	SWC Monthly Meeting	Conf Call
03/16/23	DWA Executive Committee Meeting	Conf Call
03/16/23	SWC Monthly Board Meeting	Conf Call
03/16/23	SGMA Tribal Workshop	Conf Call
03/17/23	Sites Joint Reservoir Committee & Authority Board Meeting	Conf Call
03/17/23	Meeting with Assemblyman Wallis	P.D.
03/20/23	DWA Weekly Staff Meetings	DWA
03/20/23	DWA/CVWD/MWD Coordination Meeting	Conf Call
03/20/23	Meeting with Congressman Calvert	DWA
03/21/23	DWA Bi-Monthly Board Meeting	DWA

Activities:

- 1) DWA Rate Study
- 2) DWA Surface Water Rights
- 3) Water Supply Planning – DWA Area of Benefit
- 4) Sites Reservoir Finance
- 5) DCP Financing
- 6) Lake Perris Seepage Recovery Project Financing
- 7) Recycled Water Supply - Strategic Planning
- 8) AQMD Rule 1196
- 9) DWA Digital Transformation Project
- 10) DWA Organizational Restructuring
- 11) DWA Tax Rate Analysis
- 12) Palm Springs Aerial Tramway Water Supply 2023
- 13) SWP Contract Extension Amendment
- 14) DWA Remote Meter Reading Fixed Network
- 15) State and Federal Contractors Water Authority and Delta Specific Project Committee (Standing)
- 16) Whitewater River Surface Water Recharge
- 17) Replacement Pipelines 2021-2022
- 18) DC Project – Finance JPA Committee (Standing)
- 19) DWA/CVWD/MWD Operations Coordination/Article 21/Pool A/Pool B/Yuba Water (Standing)
- 20) DWA/CVWD/MWD Exchange Agreement Coordination Committee (Standing)

Activities:

(Cont.)

- 21) SWP 2023 Water Supply
- 22) ACBCI Water Rights Lawsuit
- 23) Whitewater Hydro Operations Coordination with Recharge Basin O&M
- 24) Whitewater Spreading Basins – BLM Permits
- 25) Delta Conveyance Project Cost Allocation
- 26) MCSB Delivery Updates
- 27) Well 6 Meaders Cleaners RWQB Meetings
- 28) SWP East Branch Enlargement Cost Allocation
- 29) RWQCB Update to the SNMP