



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: 818 8094 0388
Passcode: 406215

or Via Computer:
<https://dwa-org.zoom.us/j/81880940388?pwd=cFU5VXJDZ1hYdmpOYjJxZmJkZDhpdz09>
Meeting ID: 818 8094 0388

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: 818 8094 0388
código de acceso: 406215

o a través de la computadora:
<https://dwa-org.zoom.us/j/81880940388?pwd=cFU5VXJDZ1hYdmpOYjJxZmJkZDhpdz09>
ID de reunión: 818 8094 0388

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 7, 2023 Regular Board Meeting
- B. Receive and File Minutes of the March 16, 2023 State Water Contractor's Meeting
- C. Receive and File Minutes of the March 17, 2023 Finance Committee Meeting
- D. Approve Minutes of the March 21, 2023 Regular Board Meeting
- E. Receive and File Minutes of the March 30, 2023 Executive Committee Meeting
- F. Receive and File – February Water Use Reduction Figures

6. ACTION ITEM:

- A. Request Board Authorization to Move from Level 2 to Level 1 of Ordinance No. 72 (Water Shortage Contingency Plan) Upon State Water Board Action **METZGER**
- B. Request Authorization for Board Attendance at Upcoming ACWA Region Events **KRAUSE**

7. DISCUSSION ITEMS:

- A. Cost of Service Study for Potable, Recycled & Wastewater Rates Workshop **SAENZ/NBS**

8. SECRETARY-TREASURER'S REPORT (FEBRUARY 2023)

MCKENNA

9. GENERAL MANAGER'S REPORT

KRAUSE

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

11. DIRECTORS COMMENTS/REQUESTS

12. 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
- D. CONFERENCE WITH LEGAL COUNSEL – ANTICIPATED LITIGATION
Pursuant to Government Code Section 54956.9 (d) (2) and (e) (1)
One Case

13. RECONVENE INTO OPEN SESSION – REPORT FROM CLOSED SESSION

14. 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 OF THE REGULAR MEETING
OF THE
DESERT WATER AGENCY
BOARD OF DIRECTORS**

5-A

March 7, 2023

DWA Board: Paul Ortega, President)
 Jeff Bowman, Vice President)
 Gerald McKenna, Secretary-Treasurer)
 Kristin Bloomer, Director)
 Steve Grasha, Director)

DWA Staff: Mark Krause, General Manager)
 Steve Johnson, Assistant General Manager)
 Esther Saenz, Finance Director)
 Sylvia Baca, Asst. Secretary of the Board)
 Kris Hopping, Human Resources Director)

Consultants: Michael T. Riddell, Best Best & Krieger)
 Ashley Metzger, Regional Government Svcs.)

President Ortega opened the meeting at 8:00 a.m. and asked Vice President Bowman to lead in the Pledge of Allegiance. **Pledge of Allegiance**

President Ortega called upon Assistant Secretary of the Board Baca to conduct the roll call: **Roll Call**

Present: Grasha, Bloomer, McKenna, Bowman, Ortega

**Public Comment on
Items Not Listed on
the Agenda**

President Ortega opened the meeting for public comment for items not listed on the Agenda.

President Ortega opened the meeting for public comment for items listed on the Agenda. **Public Comment on
Items Listed on the
Agenda**

There was no one from the public wishing to address the Board for items listed on the Agenda.

President Ortega called for approval of the Consent Calendar. He noted that Consent Calendar Items 5-A through 5-E are expected to be routine and to be acted upon by the Board of Directors at one time without discussion. If any Board member requests that an item be removed from the consent calendar, it will be removed so that it may be presented separately.

**Approval of the
Consent Calendar**

- A. Approve Minutes of the 02/07/23 Regular Board Mtg.
- B. Approve Minutes of the 02/21/23 Regular Board Mtg.

- A. Approve Minutes of the February 1, 2023 Regular Board Meeting
- B. Approve Minutes of the February 21, 2023 Regular Board Meeting
- C. Receive and File Minutes of the February 16, 2023 State Water Contractor's Meeting
- D. Receive and File Minutes of the March 2, 2023 Executive Committee Meeting
- E. Receive and File January Water Use Reduction Figures

**Consent Calendar
(Cont.)**

- C. Receive & File Minutes of the 02/16/23 SWC Mtg.
- D. Receive & File Minutes of the 03/02/23 Executive Comm. Mtg.
- E. Receive & File January Water Use Reduction Figures

Director Grasha requested Item 5-E be pulled for separate discussion.

Senior Advisor Metzger presented the staff report for the January 2023 Water Use Reduction Figures.

Director Grasha moved for approval of Consent Calendar Items 5A through 5E. After a second by Secretary-Treasurer McKenna, the motion carried by the following roll call vote:

AYES: Grasha, Bloomer, McKenna, Bowman, Ortega
 NOES: None
 ABSENT: None
 ABSTAIN: None

Assistant General Manager Johnson presented the staff report. He stated that the Luba's are appealing their January 2023 water bill due to their tenant not paying the outstanding water bill. He stated that staff has followed Agency billing policies regarding delinquent status and has informed the appellants about the Governor's COVID-19 restrictions for water turns for non-payment. It was noted that staff removed five late fees, offered payment plans and provided information on programs for eligible low-income customers. Also noted was that Ordinance No. 70 indicates that property owners are responsible for all charges. Staff recommends that the Board of Directors deny this appeal. Staff also recommends that the customer enroll in a payment plan up to 12 months with the Agency for the past due amount of \$1,498.77.

Action Items:
 Request Board
 Decision on Customer
 Appeal-David & Luba
 Silver

Mrs. Silver stated that she was not notified of the outstanding water bill.

In response to Director Grasha, Finance Director Saenz stated in March 2022 the Silvers did qualify and received a COVID-19 credit from Riverside County for \$65.85.

After a brief discussion, Director Grasha made a motion to approve staff's recommendation and deny the appeal for David and Luba Silver. After a second by Director Bloomer, the motion carried by the following roll call vote:

AYES: Grasha, Bloomer, McKenna
 NOES: Bowman
 ABSENT: None
 ABSTAIN: Ortega

Action Items:
 (Cont.)

Request Board
 Decision on Customer
 Appeal-David & Luba
 Silver

Finance Director Saenz presented the staff report. She stated that Mr. Elliott is disputing the Agency's calculations for determining customer eligibility for relief payments provided by the California Water and Wastewater Arrearage Payment Program (CWWAPP) administered by the California Water Resources Control Board (CWRCB). She noted that Mr. Elliott had provided FAQ's for the wastewater portion of the CWWAPP program as evidence of his claim; however, the customer is not a wastewater customer of the Agency.

Request Board
 Decision on Customer
 Appeal – Todd Elliott

Continuing with her report, Mrs. Saenz explained that the Agency utilized the water program guidelines amended on January 19, 2022. She noted that staff has: 1). Waived \$125 in late fees; 2). Provided opportunity to enroll in a payment plan to avoid disconnection of service and future late fees; 3). Provided information on the Low Income Household Water Assistance Program (LIHWAP) and Help2Others. Staff recommends that the Board of Directors grant the appeal in the revised amount of \$137.36.

Director Grasha made a motion to approve staff's recommendation and grant the appeal in the amount of \$137.36. After a second by Director Bloomer, the motion carried by the following roll call vote:

AYES: Grasha, Bloomer, McKenna, Bowman, Ortega
 NOES: None
 ABSENT: None
 ABSTAIN: None

Senior Advisor Metzger presented the staff report. She noted that last month the Board approved a policy to compensate Board members for attending public events. At the same meeting, the Board approved a verbally amended list of events. Staff has updated the list and is attached for consideration and adoption. Staff recommends that the Board of Director approve the list of public events eligible for Board compensation.

Request Approval of
 Public Events Eligible
 for Board
 Compensation

Director Grasha made a motion to approve staff's recommendation and approve the list of public events eligible for Board compensation. After a second by Director Bloomer, the motion carried by the following roll call vote:

Action Items:
(Cont.)

Request Approval of
Public Events Eligible
for Board
Compensation

AYES: Grasha, Bloomer, McKenna, Bowman, Ortega
NOES: None
ABSENT: None
ABSTAIN: None

Senior Advisor Metzger stated that with less than a third of the fiscal year 2022-2023 remaining, the current budget for this program is exhausted. The \$1 million augmentation equates to 333,333 square feet converted and 56 acre-feet per year estimated savings. Staff recommends that the Board of Directors authorize the augmentation of the FY 2022-2023 grass removal budget in the amount of \$1 million, using funds from Agency reserves.

Request Authorization
for Grass Removal FY
2022-2023 Budget
Augmentation

Director Grasha made a motion to approve staff's recommendation authorizing the augment of FY 2022-2023 grass removal budget in the amount of \$1 million using Agency reserve funds. After a second by Director Bloomer, the motion carried by the following roll call vote:

AYES: Grasha, Bloomer, McKenna, Bowman, Ortega
NOES: None
ABSENT: None
ABSTAIN: None

Senior Advisor Metzger presented the staff report. She stated that in order to guide legislative and regulatory affairs work in calendar year 2023, staff and consultants developed a policy platform and on March 1, the Legislative Committee reviewed and modified the platform. Staff recommends that the Board of Directors approve a Legislative and Regulatory Policy Platform.

Request Approval of
2023 Legislative &
Regulatory Policy
Platform

Director Grasha made a motion to approve staff's recommendation to approve a Legislative and Regulatory Platform. After a second by Vice President Bowman, the motion carried by the following roll call vote:

AYES: Grasha, Bloomer, McKenna, Bowman, Ortega
NOES: None
ABSENT: None
ABSTAIN: None

Director Bloomer, Director Grasha, Secretary-Treasurer McKenna and President Ortega reported their attendance at the Urban Water Institute Conference held on February 22 – 24 in Palm Springs.

Discussion Items:
Director's Report on Attendance at Urban Water Inst. Conf.

Director Grasha reported his attendance at the California Special District's Association Leadership Academy in La Quinta.

Director's Report on Attendance at Calif. Special District's Assoc.

Director Bloomer and Secretary-Treasurer McKenna noted their attendance at the Association of California Water Agency D.C. conference.

Director's Report on Attendance at ACWA DC Conference

Finance Director Saenz provided highlights of the January 2023 Secretary-Treasurer's report.

Secretary-Treasurer's Report (January 2023)

General Manager Krause provided an update on Agency operations for the past several weeks.

General Manager's Report

Director Grasha stated he looks forward with building relationships amongst the Board members and with other local agencies.

Directors Comments/Requests

Secretary-Treasurer McKenna noted he looks forward to a working relationship with the City of Desert Hot Springs and Mission Springs Water District.

Vice President Bowman thanked staff for their work on the Board room upgrades.

President Ortega concurred with building a better relationship with the City of Desert Hot Springs and Mission Springs Water District.

In response to President Ortega, Legal Counsel Riddell stated a joint meeting with Mission Springs Water District is possible, following Brown Act guidelines.

At 10:08 a.m., President Ortega convened into Closed Session for the purpose of Conference with Legal Counsel, (A) Existing Litigation, pursuant to Government Code Section 54956.9 (d) (1), Agua Caliente Band of Cahuilla Indians vs. Coachella Valley Water District, et al (Two Cases); (B) Existing Litigation, pursuant to Government Code Section 54956.9 (d) (1), Mission Springs Water District vs. Desert Water Agency; et al; (C) Existing Litigation, pursuant to Government Code Section 54956.9 (d) (1), AT&T vs. County of Riverside; (D) Anticipated Litigation, pursuant to Government Code Section 54956.9 (d) (2) Two Cases; (E) Conference with Legal Counsel, pursuant to Government Code Section 54957 (a) Cybersecurity Threat; and (F) Public Employee Performance, pursuant to Government Code Section 54957 Title: General Manager

Closed Session:

A. Existing Litigation – ACBCI vs. CVWD, et al. (2 Cases)
B. Existing Litigation – MSWD vs. DWA Agency et al
C. Existing Litigation - AT&T vs. County of Riverside
D. Anticipated Litigation – Two Cases
E. Conference with Legal Counsel - Cybersecurity Threat
F. Public Employee Performance Evaluation - General Manager

At 12:30 p.m., President Ortega reconvened the meeting into open session and announced there was no reportable action taken.

Reconvene – No
Reportable Action

President Ortega announced that the Board conducted a performance evaluation on General Manager Krause.

F. Public Employee
Performance
Evaluation – General
Manager

Director Grasha then made a motion to approve a 4.5% merit increase and continue the \$2,000 annual vehicle allowance, effective for the current pay period. After a second by Director Bloomer, the motion carried by the following roll call vote:

AYES: Grasha, Bloomer, McKenna, Bowman, Ortega
NOES: None
ABSENT: None
ABSTAIN: None

General Manager Krause expressed appreciation to the Board of Directors.

In the absence of any further business, President Ortega adjourned the meeting at 12:32 p.m.

Adjournment

Sylvia Baca
Assistant Secretary of the Board

STATE WATER CONTRACTORS MEETING

March 16, 2023

I. SCIENCE OBJECTIVES UPDATE AND DISCUSSION

- (a) This is the start of the 5th year of an overall science program for the SWC
- (b) Objectives:
 - ESA, CESA, Water Quality Control Plan, environmental compliance
 - Funding for Collaborative Science and Adaptive Management Team
 - Structured decision making for Delta Smelt
 - Work toward common definition of “salmon recovery”
 - Study how invasive weeds affect habitat restoration projects
 - Continue investing in study of winter run salmon life cycle model

II. SWP WATER SUPPLY

- (a) Outlook for remainder of March:
 - Above average chance of additional precipitation
 - Below average temperatures forecasted
 - Likely addition to existing snowpack (already at record high)
- (b) Statewide reservoir storage looking very good
 - Shasta still below historical average, but expected to get to average or better
 - Oroville encroached into flood control space, increasing releases immediately
 - San Luis Reservoir storage at 1 MAF
 - Expecting Article 21 releases from San Luis the following week
- (c) Exports south of the Delta at maximum
- (d) SWC allocation was subsequently increased to 75% of Table A Amounts

III. GENERAL MANAGER’S REPORT

- (a) SWC will be thinking about suggested revisions to existing water conservation regulations adopted by State Water Resources Control Board in view of improvements in State’s water supply

Minutes
Finance Committee Meeting
March 17, 2023

Directors Present: Gerald McKenna, Kristin Bloomer

Staff Present: Mark Krause, Steve Johnson, Esther Saenz

Call to Order

1. Public Comments - None

2. Discussion Items

A. Review Agency Reserve Policy

The Committee reviewed the Agency's Reserve Policy:

- Distinction of funding sources for each reserve fund established by the policy.
- Methodology used for calculating each reserve fund minimum and maximum targets.
- The Agency's use of reserves to smooth both potable water rates and tax rates.
- Justification for the high reserve balances funded by the State Water Project tax due to the volatility of the annual Department of Water Resources Statement of Charges.
- Methodology for the drastic underfunding of the Reserve for Replacements as the Agency has historically funded capital projects as they occur at a steady, planned pace rather than build up large reserves and fund Capital Projects out of reserves. However, this does not allow for response in a major catastrophe and an inter-fund loan from the General Fund would be required.
- How the Agency reviews the reserve funding levels annually.

B. Agency Financial Structure

The committee discussed the Agency's Financial Structure in relation to the sources of revenues:

- The use of the Operating, General and Wastewater funds separately in order to not commingle funds and use revenues for the purpose for which they are collected.
- How Agency revenues relate to reserves.
- Single year versus multi-year budgeting.
- The use of reserves to smooth both the Water and Property Tax Rates.
- The relation between the water rate, RAC rate and tax rate revenues.

Adjourn

**MINUTES OF THE REGULAR MEETING
OF THE
DESERT WATER AGENCY
BOARD OF DIRECTORS**

5-D

March 21, 2023

DWA Board:	Paul Ortega, President)
	Jeff Bowman, Vice President)
	Gerald McKenna, Secretary-Treasurer)
	Kristin Bloomer, Director)
	Steve Grasha, Director)
 DWA Staff:	 Mark Krause, General Manager)
	Steve Johnson, Assistant General Manager)
	Esther Saenz, Finance Director – (Virtually))
	Sylvia Baca, Asst. Secretary of the Board)
	Kris Hopping, Human Resources Director)
	Jamie Hoffman, Senior Admin. Asst.)
 Consultants:	 Michael T. Riddell, Best Best & Krieger)
	Ashley Metzger, Regional Government Svcs.)
	(Virtually))
	Alice Bou, NBS)

President Ortega opened the meeting at 8:00 a.m. and led the Pledge of Allegiance. **Pledge of Allegiance**

President Ortega called upon Assistant Secretary of the Board Baca to conduct the roll call: **Roll Call**

Present: Grasha, Bloomer, McKenna, Bowman, Ortega

President Ortega opened the meeting for public comment for items not listed on the Agenda. **Public Comment on Items Not Listed on the Agenda**

There was no one from the public wishing to address the Board for items not listed on the Agenda.

President Ortega opened the meeting for public comment for items listed on the Agenda. **Public Comment on Items Listed on the Agenda**

There was no one from the public wishing to address the Board for items listed on the Agenda.

President Ortega called for approval of the Consent Calendar. He noted that Consent Calendar Items 5-A through 5-D are expected to be routine and to be acted upon by the Board of Directors at one time without discussion. If any Board member requests that an item be removed from the consent calendar, it will be removed so that it may be presented separately.

- 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

Approval of the Consent Calendar

- A. Approve Minutes of the 03/09/23 Finance Comm. Mtg.
- B. Receive & File Minutes of the 03/16/23 Exec. Comm. Mtg.
- C. Receive & File – Feb. 2023 Outreach and Conservation Activities & Events
- D. Request Approval of Contract Amendment for GM and Updated Salary and Classification Chart Dated 03/03/23

Director Grasha moved for approval of Consent Calendar Items 5A through 5D. After a second by Director Bloomer, the motion carried by the following roll call vote:

AYES: Grasha, Bloomer, McKenna, Bowman, Ortega
 NOES: None
 ABSENT: None
 ABSTAIN: None

Lobbyist Bob Reeb gave a brief overview of the sixteen proposed bills for consideration, which are tied to DWA's recently adopted Legislative and Regulatory Policy Platform. Mr. Reeb presented his report and provided an overview of bill position recommendations. Staff recommends the Board of Directors review and adopt positions on the bills as presented.

Action Items:
 Request Adoption of Bill Position Recommendations

Director Bloomer moved for adoption of Bill Position Recommendations. After a second from Vice President Bowman the motion carried by the following roll call vote:

AYES: Grasha, Bloomer, McKenna, Bowman, Ortega
 NOES: None
 ABSENT: None
 ABSTAIN: None

Operations and Engineering Manager David Tate presented the staff report. Mr. Tate stated that the project will be divided into two phases and that phase 2 will be installed at a later date. With authorization to call for bids being granted today, the bid opening would tentatively be held on May 4, 2023 with the contract award scheduled for the May 16th Board meeting. He anticipates construction to begin in Fall 2023, with completion expected in Spring 2024. Staff recommends Board authorization to Call for Bids for Phase 1 of the 30" Avenida Caballeros Pipeline Replacement Project (Ramon Road to Tahquitz Canyon Way).

Request Authorization to Call for Bids on Constructing Phase 1 of 30" Avenida Caballeros Pipeline Replacement (Ramon Rd to Tahquitz Canyon Way)

Director Grasha made a motion to Authorize the Call for Bids on Constructing Phase 1 of the 30" Avenida Caballeros pipeline replacement (Ramon Rd to Tahquitz Canyon Way). After a second from Director Bloomer the motion carried by the following roll call vote.

AYES: Grasha, Bloomer, McKenna, Bowman, Ortega
 NOES: None
 ABSENT: None
 ABSTAIN: None

Action Items:
 (Cont.)

Request Authorization to Call for Bids on Constructing Phase 1 of 30" Avenida Caballeros pipeline replacement (Ramon Rd to Tahquitz Canyon Way)

Finance Director Saenz and NBS Consultant Alice Bou gave a presentation on the Draft Cost of Service Study for Potable, Recycled & Wastewater Rates.

Discussion Item:
 Presentation of Draft Cost of Service Study for Potable, Recycled & Wastewater Rates

Secretary-Treasurer McKenna stated he submitted a memo detailing his concerns regarding this draft study.

The Board concurred that there is a need for more discussion on this item and expressed a desire for at least one workshop before a decision is made.

General Manager Krause provided an update on Agency operations for the past several weeks.

General Manager's Report

Director Grasha noted his attendance at the March 9th Desert Valley Builders Association luncheon and the March 14th Coachella Valley Water District Board meeting.

Directors Reports on Mtgs/Events Attended on Behalf of the Agency

Secretary-Treasurer McKenna noted his attendance virtually for both the Desert Hot Springs City Council meeting and the Mission Springs Water District Board study session and Board meeting.

Vice President Bowman noted his attendance in meeting with Assemblyman Greg Wallis on March 17th and Congressmen Ken Calvert on March 20th.

Director Grasha requested that a Board Member be appointed to attend the Sites meetings. He stated the importance due to the Agency's financial commitment.

Directors Comments/Requests

Director Bloomer thanked Agency staff for use of the water dispenser at the Chalk Art Festival on March 18th.

At 10:05 a.m., President Ortega convened into Closed Session for the purpose of Conference with Legal Counsel, (A) Existing Litigation, pursuant to Government Code Section 54956.9 (d) (1), Agua Caliente Band of Cahuilla Indians vs. Coachella Valley Water District, et al (Two Cases); (B) Existing Litigation, pursuant to Government Code Section 54956.9 (d) (1), Mission Springs Water District vs. Desert Water Agency; et al; and (C) Existing Litigation, Pursuant to Government Code Section 54956.9 (d) (1), AT&T vs. County of Riverside.

Closed Session:

- A. Existing Litigation – ACBCI vs. CVWD, et al. (2 Cases)
- B. Existing Litigation – MSWD vs. DWA Agency et al
- C. Existing Litigation - AT&T vs. County of Riverside

At 11:24 a.m., President Ortega reconvened the meeting into open session and announced there was no reportable action taken.

Reconvene – No Reportable Action

In the absence of any further business, President Ortega adjourned the meeting at 11:25 a.m.

Adjournment

Sylvia Baca
Assistant Secretary of the Board

Minutes
Executive Committee Meeting
March 30, 2023

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

Call to Order

1. Public Comments - None
2. Discussion Items

- A. Review agenda for April 4, 2023 Board meeting
The proposed agenda for the April 4, 2023 meeting was reviewed.
- B. Rate Study Meeting Schedule
Finance Director Saenz informed the Committee that due to the light agenda the workshop on the Cost of Service Study for Potable, Recycled and Wastewater will be held during the April 4 Board meeting.
- C. 2023 Board Conference Schedule Update
Staff informed the Committee about the GMDA Summer Conference to be held July 10 – 13 in Santa Fe, New Mexico. The Committee approved the addition of the conference. Once staff receives the conference agenda, they will request approval of travel dates at a future committee meeting.

Vice Chair Bowman requested authorization for Board attendance at the upcoming ACWA Region events. Staff will add this request for authorization to the April 4 Board agenda.

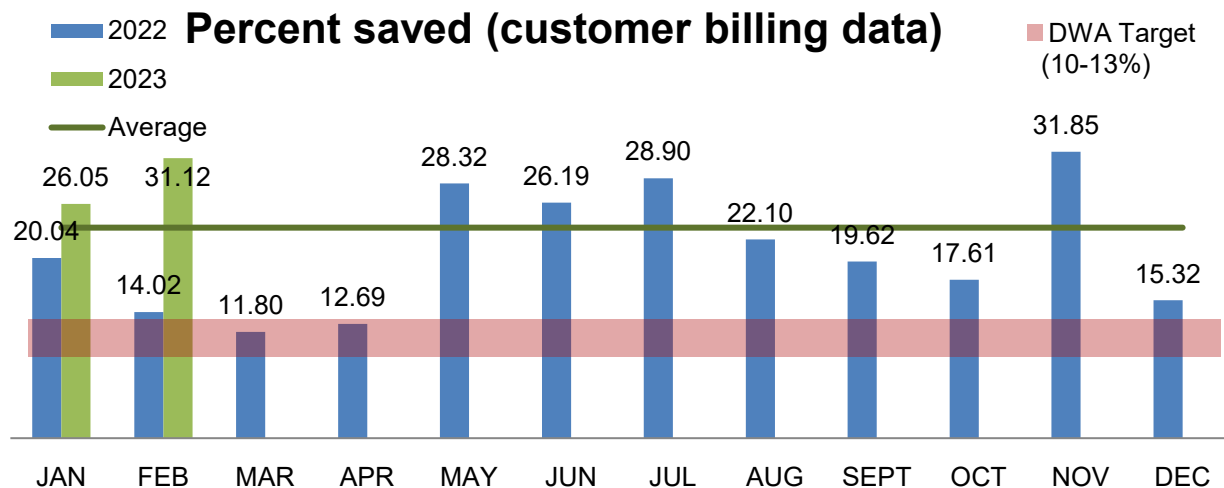
Adjourn

STAFF REPORT TO DESERT WATER AGENCY BOARD OF DIRECTORS

APRIL 04, 2023

RE: FEBRUARY 2023 WATER USE REDUCTION FIGURES

Desert Water Agency customers reduced water consumption per meter by 31.12% during February 2023 compared to the same month in 2013 – the baseline year the State Water Resources Control Board (State Water Board) used to measure statewide conservation achievements during the last drought.



Over the past 12 months, consumption per meter is trending 23.4% lower compared to 2013. DWA is asking its customers to voluntarily save 10-13% compared to 2013 to help achieve long-term sustainability.

In 2022, the State Water Board required water suppliers to implement Level 2 of their Water Shortage Contingency Plans to reduce water use by up to 20% with the Governor specifically requesting 15%. On March 24, Governor removed the 15% request and the Level 2 requirement. We expect the State Water Board to update its regulation soon. Water production (water from well and stream sources) was down 12.2% in February 2023 compared to February 2020 (the State's baseline). DWA is encouraging and incentivizing conservation for long-term sustainability.

February 2023 conservation per meter percentage	31.12%
February 2023 consumption per meter	25.76 HCF
February 2013 consumption per meter	37.40 HCF
February 2023 gross consumption conservation percentage	25.41%
February 2023 metered potable consumption	1418.46 AF
February 2013 metered potable consumption	1901.69 AF
The percentage of the Total Monthly Potable Water Production going to residential use only for the reporting month	60.87%
Population (projected based on number of active residential meters and inclusive of seasonal residents)	74,090
Estimated R-GPCD	162.51
Number of public complaints of water waste or violation of conservation rules received during the reporting month.	40
Number of contacts with customers for actual/alleged water waste or for a violation of conservation rules.	17
Number of field visits for water waste follow up.	8
Number of citations for violation of conservation rules.	12

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

APRIL 4, 2023

**RE: REQUEST BOARD AUTHORIZATION TO MOVE FROM LEVEL 2
TO LEVEL 1 OF ORDINANCE NO. 72 (WATER
SHORTAGE CONTINGENCY PLAN) UPON STATE WATER
BOARD ACTION**

On March 24 after an extremely wet three-week period, Governor Gavin Newsom announced that he was easing drought emergency restrictions with an [updated Executive Order](#).

No longer in place:

- Governor's directive for water agencies to be at Level 2 of their Water Shortage Contingency Plan.
- Governor's call on Californians to cut water use by 15%

Across the Coachella Valley, Level 2 includes prohibitions on potable water use including the use of sprinklers during daylight hours and restaurants serving water to guests, unless they request it.

Still prohibited:

- Businesses and HOAs watering nonfunctional turf with potable water
- Watering so much that it runs onto the sidewalk, driveway or other non-landscape areas
- Washing down driveways, sidewalks, concrete or other hard surfaces
- Watering during and 48 hours after significant rain
- Washing vehicles without an automatic shutoff nozzle

TIMELINE:

July 2021: Governor Newsom requested the 15 percent reduction in water use for all Californians

October 2021: Governor Newsom issued a statewide drought emergency

March 2022: the Governor called on the State Water Board to require all water agencies to move to Level 2 of their Water Shortage Contingency Plans regardless local shortage conditions

May 2022: the State Water Board adopted regulations to enact the Governor's direction

June 2022: the DWA Board of Directors adopted Level 2 of its Water Shortage Contingency Plan to comply with State Water Board regulations

March 2023: The Governor eases drought emergency orders

If the Board elects to reenter Level 1, the Agency will publish a notice in the newspaper, as required and will reach out to customers with bill messaging, social media, website updates and media interviews.

Fiscal Impact:

None

Legal Review:

Legal Counsel has reviewed this staff report.

Recommendation:

Staff recommends that the Board of Directors authorize the Agency to move out of Level 2 into Level 1 of Ordinance No. 72 upon the State Water Board removal of the requirement for water agencies to implement all Level 2 actions.

Attachments:

Attachment #1 – Ordinance No. 72

ORDINANCE NO. 72

**AN ORDINANCE OF DESERT WATER AGENCY
ESTABLISHING A WATER SHORTAGE CONTINGENCY
PLAN INCLUDING REGULATIONS RESTRICTING THE
USE OF WATER DURING THREATENED OR EXISTING
WATER SHORTAGE CONDITIONS**

WHEREAS, Desert Water Agency (hereinafter “Agency”) is a public agency organized under the Desert Water Agency Law, California Water Code Appendix Section 100-1 et seq., to provide water service among other purposes to water users within the boundaries of the Agency; and

WHEREAS, the Agency is authorized by Water Code Appendix Section 100-15 (13) to restrict the use of Agency water during an emergency caused by a drought, or other threatened or existing water shortage, and during such periods to prohibit the waste or the use of Agency water for any purpose other than household uses or such other restricted uses as may be determined by the Agency to be necessary; and

WHEREAS, the Agency is further authorized by Water Code Sections 375-377 to adopt water conservation programs; and

WHEREAS, after the historic 2012-2016 drought, the California Legislature enacted several laws in 2018 to advance long-term water use efficiency as a way to demonstrate conservation as a way of life; and

WHEREAS, urban water suppliers are required to prepare, adopt and submit to the California Department of Water Resources a Water Shortage Contingency Plan and conduct a Drought Risk Assessment every five years; and

WHEREAS, the Agency wishes to adopt a Water Shortage Contingency Plan that meets requirements set forth in the regulations adopted by the Department of Water Resources and State Water Resources Control Board in implementation of long-term water-use efficiency, and which will provide a framework for managing supplies in shortage conditions; and

WHEREAS, the Agency finds and determines that the adoption of the Water Shortage Contingency Plan set forth herein is necessary to (1) comply with State mandates, (2) protect the health, safety and welfare of the inhabitants of the Agency, (3) assure the maximum beneficial use of the water supplies within the Agency, and (4) ensure that there will be sufficient water supplies to meet the basic needs of human consumption, sanitation and fire protection;

NOW, THEREFORE, BE IT ORDAINED by the Board of Directors of Desert Water Agency as follows:

Section 1: DEFINITIONS.

- 1.1 “Agency” means Desert Water Agency.
- 1.2 “Board” means the Board of Directors of Desert Water Agency.
- 1.3 “General Manager” means the General Manager of Desert Water Agency.
- 1.4 “Measurable rainfall” means rainfall of 1/10 inch or more during any 24-hour period.
- 1.5 “Waste” means any unreasonable or non-beneficial use of water, or any unreasonable method of use of water, including, but not limited to, the specific uses prohibited and restricted by this Ordinance as hereinafter set forth.
- 1.6 “Water user” means any person, firm, partnership, association, corporation or political entity using water obtained from the water system of Desert Water Agency.
- 1.7 “Water” means water supplied by Desert Water Agency.

Section 2: NOTICED PUBLIC HEARING PRIOR TO MANDATORY CONSERVATION, LEVELS 2 THROUGH 6.

Except when an emergency is caused by the breakage or failure of Agency infrastructure or by a malevolent act, a noticed public hearing shall be conducted prior to the adoption of Level 2, 3, 4, 5 or 6 of the Water Shortage Contingency Plan as set forth in Sections 3.2, 3.3, 3.4 and 3.5 below. Notice of the time and place of hearing shall be published at least seven days prior to the date of hearing in a newspaper printed, published, and circulated within the area in which the water supply is distributed, or if there is no such newspaper, in any newspaper printed, published and circulated in the County of Riverside.

Section 3: WATER CONSERVATION PLAN LEVELS.

3.1 Level No. 1: Normal Conditions

Level 1 shall apply whenever normal conditions are in effect. Normal conditions shall be in effect when the Agency is able to meet all the water demands of its customers in the immediate future, and when the State Water Resources Control Board or other regulatory body has not imposed restrictions on the use of water within the Agency. During normal conditions, all water users must continue to use water wisely. The waste or unreasonable use of water is prohibited.

(1) Water flows onto adjacent property, non-irrigated areas, private and public walkways, roadways, parking lots, or parking structures is prohibited.

(2) Using any water in a fountain or other decorative water feature is prohibited, unless the water recirculates.

(3) Applying water to driveways, sidewalks, concrete or asphalt is prohibited unless to address immediate health and safety needs. Reasonable pressure washer or water broom use is permitted.

(4) Spray irrigation of outdoor landscapes during and within 48 hours after rainfall of 0.10 inches is prohibited.

(5) Using a hose to wash a vehicle, windows, or solar panels is prohibited unless an automatic shut-off nozzle or pressure washer is used.

(6) Broken sprinklers shall be repaired within five business days of notification by the Agency, and leaks shall be repaired as soon as practical.

(7) Hotels will provide guests the option of choosing not to have towels and linens laundered daily.

(8) Draining and refilling of private swimming pools is discouraged, unless necessary for health and safety or repairs.

(9) The Agency will discourage overseeding.

(10) The Agency will provide rebates for landscape efficiency.

(11) The Agency will provide rebates on indoor water use efficiency.

(12) The Agency will offer water use surveys/audits.

3.2 Level 2: Alert

When the State Water Resources Control Board or other regulatory body has imposed restrictions on the use of water within the Agency that warrant the restrictions set forth herein, or in the event of a threatened or existing water supply shortage that could prevent the Agency from meeting the water demands of its water users, the Board shall conduct a public hearing to consider declaring a Level 2 Alert, during which water users shall have the opportunity to present their

protests and respective needs to the Board. Upon such declaration the following restrictions shall take effect immediately, in addition to those specified in Section 3.1:

- (1) Outdoor water use is prohibited during daylight hours for spray irrigation except for leak checks or with an Agency-approved conservation alternative plan.
- (2) Restaurants and other eating establishments shall not provide drinking water to patrons, except upon request.
- (3) The Agency will discourage overseeding.
- (4) The Agency will expand its public information campaign.
- (5) The Agency will increase water waste patrols.
- (6) The Agency will reduce hydrant and dead-end line flushing.

3.3 Level 3: Warning

When the State Water Resources Control Board or other regulatory body has imposed restrictions on the use of water within the Agency that warrant the restrictions set forth herein, or in the event that a water shortage condition in fact will prevent the Agency from meeting the demands of its water users, following a public hearing as set forth in Section 3.2, during which water users shall have the opportunity to present protests and their respective needs to the Board, the Board may declare that a Level 3 Warning condition exists. Upon such declaration, the following water conservation measures shall apply in addition to those set forth in Sections 3.1 and 3.2:

- (1) Outdoor water use is allowed only three days a week for spray irrigation (Monday, Wednesday and Friday).
- (2) Drip or subterranean irrigation is allowed seven days a week, during non-daylight hours.
- (3) Commercial nurseries are to use water only on alternate days during non-daylight hours for outside operations.
- (4) Decorative ponds, non-irrigation system golf course water hazards, fountains, and other waterscape features are not to be filled or replenished.
- (5) No filling of swimming pools or landscaping ponds unless necessary for health and safety or leak repair.
- (6) Commercial car washes must use recycled water or a recirculating water systems.
- (7) Spray irrigation of medians and parkways is prohibited.
- (8) The Agency will encourage counties, cities, Homeowners Associations (HOAs) and other entities to suspend code enforcement and fines for brown turfgrass areas.
- (9) The Agency will strengthen customer billing messages with the use of comparisons.
- (10) The Agency will implement water use audits targeted to key customers to ensure compliance with directives.
- (11) The Agency will expand rebate programs.

3.4 Level 4: Critical

When the State Water Resources Control Board or other regulatory body has imposed restrictions on the use of water within the Agency that warrant the restrictions set forth herein, or in the event that a water shortage condition requires a significant reduction in water use, following a public hearing as set forth in Section 3.2, during which water users shall have the opportunity to present protests and their respective needs to the Board, the Board may declare that a Level 4 Emergency condition exists. Upon such declaration, the following water conservation measures shall apply in addition to those set forth in Sections 3.1, 3.2 and 3.3:

- (1) Turfgrass landscapes may not be watered except with subterranean irrigation or recycled water.
- (2) No new turfgrass landscaping shall be installed.

- (3) The Agency shall consider implementing its drought rate surcharge.
- (4) The agency will expand its public information campaign.

3.5 Level No. 5: Urgent

When the State Water Resources Control Board or other regulatory body has imposed restrictions on the use of water within the Agency that warrant the restrictions set forth herein, or in the event that a water shortage condition requires a significant reduction in water use, following a public hearing as set forth in Section 3.2, during which water users shall have the opportunity to present protests and their respective needs to the Board, the Board may declare that a Level 5 Emergency condition exists. Upon such declaration, the following water conservation measures shall apply in addition to those set forth in Sections 3.1, 3.2, 3.3 and 3.4:

- (1) Watering turfgrass is prohibited.
- (2) The use of misting systems is prohibited.
- (3) Turfgrass at parks and school grounds may water with recycled water or not at all.
- (4) Golf course greens and tees may be watered no more than two times per week during non-daylight hours with recycled water or not at all.
- (5) Trees, desert plants and shrubs may be watered only with drip, subterranean or non-adjustable bubbler irrigation systems during non-daylight hours.
- (6) Outdoor water use for grading or development is prohibited.
- (7) The Agency will impose a moratorium or net zero demand on new connections.
- (8) The Agency will not issue new construction meters, and service through construction meters will not be available.

3.6 Level No. 6 – Emergency Rationing

When the State Water Resources Control Board or other regulatory body has imposed restrictions on the use of water within the Agency that warrant the restrictions set forth herein, or in the event that a water shortage condition requires a significant reduction in water use, following a public hearing as set forth in Section 3.2, during which water users shall have the opportunity to present protests and their respective needs to the Board, the Board may declare that a Level 6 Emergency condition exists. Upon such declaration, the following water conservation measures shall apply in addition to those set forth in Sections 3.1, 3.2, 3.3, 3.4 and 3.5:

- (1) The Agency will implement mandatory rationing.
- (2) Outdoor water use is prohibited.
- (3) Restaurants must use disposable cups, plates, and utensils.
- (4) Commercial nurseries shall discontinue all watering and irrigation.
- (5) Watering of livestock is permitted as necessary.

In addition, as set forth in Water Code Sections 350 et seq., the Board may consider adoption of a resolution or ordinance that allocates water deliveries among the Agency's water users, and that imposes penalties for consumption in excess of the allocated amounts. The resolution or ordinance may also, or instead, impose a limit on new water service connections. Violation of the provisions of such resolution or ordinance shall be deemed a violation of this Ordinance, and shall be subject to the enforcement provisions set forth herein.

Section 4: MODIFICATION OF WATER CONSERVATION MEASURES.

The specific requirements of each mandatory conservation Level identified in this Ordinance shall be effective upon adoption by the Board following a public hearing; provided that the Board may modify or amend such requirements at the time of adoption upon a showing of the need for such modification or amendment.

Section 5: IMPLEMENTATION AND TERMINATION OF MANDATORY COMPLIANCE LEVELS.

The General Manager of the Agency shall monitor the supply and demand for water on a regular basis to determine the level of conservation required by the implementation or termination of the Water Shortage Contingency Plan Levels set forth in this Ordinance, and shall notify the Board of the necessity for the implementation or termination

of each Level. Each declaration of the Board implementing a Water Shortage Contingency Plan Level shall be published at least once in a newspaper of general circulation, and shall remain in effect until the Board otherwise declares, as provided herein.

Section 6: EXCEPTIONS.

The General Manager of the Agency is hereby authorized to allow exceptions from the application of any provision of this Ordinance, due to exceptional circumstances, if the General Manager determines that the application of a provision would either: (a) cause an unnecessary and undue hardship to the water user or to the public; or (b) jeopardize the health, sanitation, fire protection or safety of the water user or of the public. Such exceptions may be granted only upon application therefor. Upon granting any such exception, the General Manager may impose any conditions the General Manager determines to be appropriate in the circumstance.

Section 7: CRIMINAL PROCEEDINGS FOR VIOLATION.

The Board hereby determines that, pursuant to Water Code Section 377, it shall be a misdemeanor for any water user to use or apply water contrary to or in violation of any mandatory restriction or requirement established by this Ordinance and, upon conviction thereof, that water user shall be punished by imprisonment in the County jail for not more than 30 days or by a fine of not more than \$1,000, or by both such fine and imprisonment.

Section 8: CIVIL PENALTIES AND ENFORCEMENT.

In addition to criminal penalties, violators of the mandatory provisions of this Ordinance shall be subject to civil penalties and enforcement action by the Agency staff, as follows:

8.1 First Violation.

For a first violation, the Agency staff may serve a written complaint to impose civil penalties to the water user or account holder who is violating the provisions of this Ordinance or violating the water use restrictions imposed by the State Water Resources Control Board. Upon receipt of the complaint for civil penalty, the water user or account holder shall have seven days to request, in writing, a hearing. If no hearing is requested or at the hearing it is determined that the water user or account holder has committed a violation, a civil penalty of \$50 for a first violation at a single family residence and \$100 for a first violation at a multi-family residential, commercial or institutional establishment may be levied.

8.2 Second Violation.

For a second violation of this Ordinance or water use restrictions imposed by the State Water Resources Control Board within any 12-month period, the Agency staff may serve a written complaint to impose civil penalties on the water user or account holder with written notice thereof, and the water user or account holder shall have the same period of time set forth in Section 8.1 to request a hearing. For a second violation within any 12-month period the civil penalty shall be \$100 at a single family residence and \$200 at a multi-family residential, commercial or institutional establishment.

8.3 Third Violation.

For a third violation of this Ordinance and for each subsequent violation within any 12-month period, the water user or account holder shall be subject to civil penalties and shall have the same opportunity to request a hearing in the manner set forth in Section 8.1. For a third and each subsequent violation within any 12-month period, the civil penalty shall be \$250 at a single family residence and \$500 at a multi-family residential, commercial or institutional establishment.

8.4 Collection of Civil Penalties.

Civil penalties may be billed to the violating water user by separate invoice, or may be added to the water user's invoice for water service as a separately itemized charge as determined by Agency staff. Civil penalties that are not paid may become a lien on the affected property in a manner provided by law to secure payment for water service. In addition, the Agency staff shall be authorized to discontinue water service for any violation of this Ordinance and for failure to pay a civil penalty within the period of time provided by the Agency staff for payment of invoices for water service. In the

event that service is terminated, such service shall remain terminated for a period of at least 48 hours, unless such period is extended by action of the Board of Directors. A charge shall be imposed for reconnection and restoration of service in the amount normally charged by the Agency for restoration of service. Such restoration of service shall not be made until the General Manager has determined that the water user has provided adequate assurances that future violations of this Ordinance by such water user will not occur.

8.5 Service of Complaint.

The complaint for civil penalties may be served personally, by mail or by affixing a copy of the complaint to the front entry of the property. The complaint shall contain, in addition to the facts of the violation, a statement of the possible civil penalties for the violation and a statement informing the water user of his or her right to a hearing.

8.6 Hearing and Appeal.

Within seven days of receipt of a complaint for civil penalties, the water user may request a hearing to present evidence that a violation did not occur. Within seven days after receipt of a written request for a hearing, the Executive Committee of the Board will schedule a hearing for the water user to present evidence that a violation did not occur. The hearing shall take place no sooner than 30 days after the complaint has been issued to the violator, unless requested at an earlier date by the violator. The decision of the Executive Committee following the hearing shall be final.

Section 9: CUMULATIVE REMEDIES.

The remedies for violations set forth in this Ordinance shall be cumulative to any other remedies available to the Agency according to law.

Section 10: SEVERABILITY.

If any section, subsection, sentence, clause or phrase of this Ordinance is for any reason held to be unconstitutional or invalid, such determination shall not affect the validity of the remaining provisions of this Ordinance.

Section 11: PUBLICATION.

The Secretary of the Board of Directors of the Agency shall attest to the adoption of this Ordinance and shall cause the same to be published in a newspaper of general circulation which is printed, published and circulated in the Agency within ten days after its adoption.

Section 12: EFFECTIVE DATE.

This Ordinance shall take effect immediately upon adoption and shall supersede the provisions of Ordinance No. 65.

ADOPTED this 15th day of June, 2021.


Kristin Bloomer, President

ATTEST:


Joseph K. Stuart, Secretary-Treasurer

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

APRIL 4, 2023

**RE: REQUEST AUTHORIZATION FOR BOARD ATTENDANCE
AT UPCOMING ACWA REGION EVENTS**

Attached for the Board's consideration is a copy of the list of upcoming ACWA Region Events.

At its March 30th meeting, the Executive Committee requested these events be approved for any Board Member wishing to attend.

Fiscal Impact:

None. The budget includes Board meetings and conferences. Finance Director Saenz has reviewed this report.

Recommendation:

Staff recommends that the Board approve and authorize those Board Members who are interested in attending any of the upcoming ACWA Region Events listed on the attached list.

Attachments:

Attachment#1 – ACWA Upcoming Region Events Schedule

**All are welcome and encouraged to attend any ACWA Region Event!
Learn more and register at acwa.com/events**

June 1

Region 2

Maxwell

Sites Reservoir Tour

June 29

Region 10

Oceanside

Program and Pure Water Oceanside Tour

August 10 - 11

Region 1

North Bay

Program and tour to be announced.

August 24

Region 8

Carson

Program and Edward C. Little Water Recycling Facility Tour

September 21 - 22

Region 5

Bay Area

Program and tour to be announced.

October 4

Region 4

San Joaquin County

Banks Pumping Plant and Jones Pumping Plant Tour

October 12 - 13

Region 6 & 7

Fresno

San Joaquin Valley Water Forum and Tour

Questions? Contact a Regional Affairs Representatives or call (916) 441-4545

Regions 1, 3 & 5: Jennifer Rotz jenniferr@acwa.com

Regions 2, 6, & 7: Michael Cervantes michaelc@acwa.com

Region 4: Ana Javaid anaj@acwa.com

Regions 8, 9, & 10: Sarah Hodge sarahh@acwa.com

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

APRIL 4, 2023

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

During the Board Meeting on March 21, 2023, the Board requested a workshop be held to review the Cost of Service Study for Potable, Recycled & Wastewater Rates in more detail.

Gregg Clumpner and Alice Bou of NBS are in attendance and to present additional detail on the Draft Cost of Service Study for Potable, Recycled & Wastewater Rates and answer any questions the Board may have.

Next Steps:

- 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

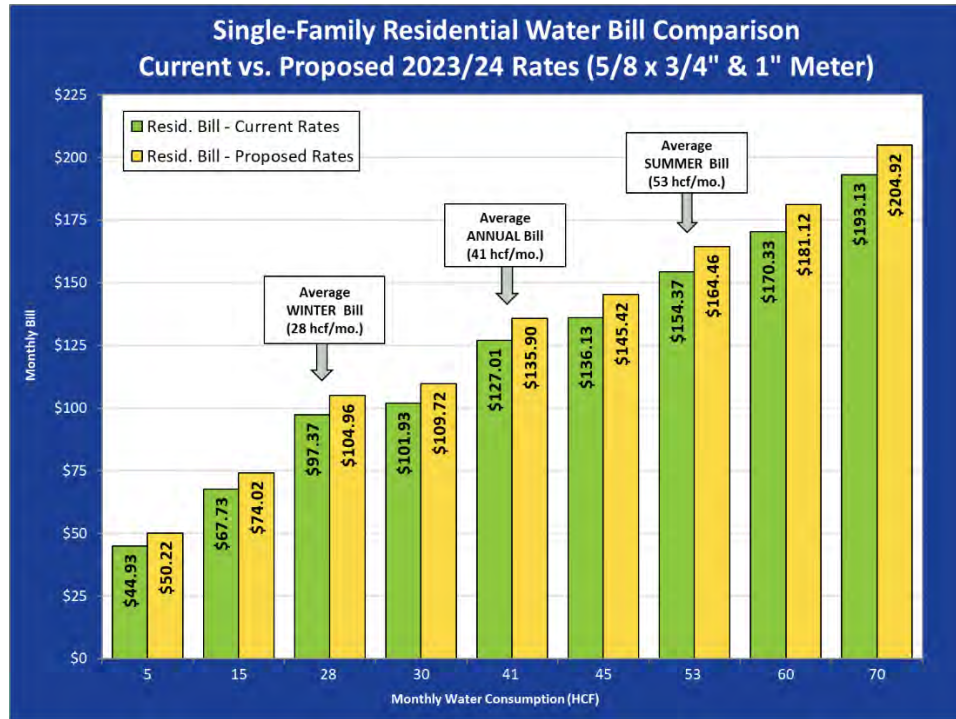
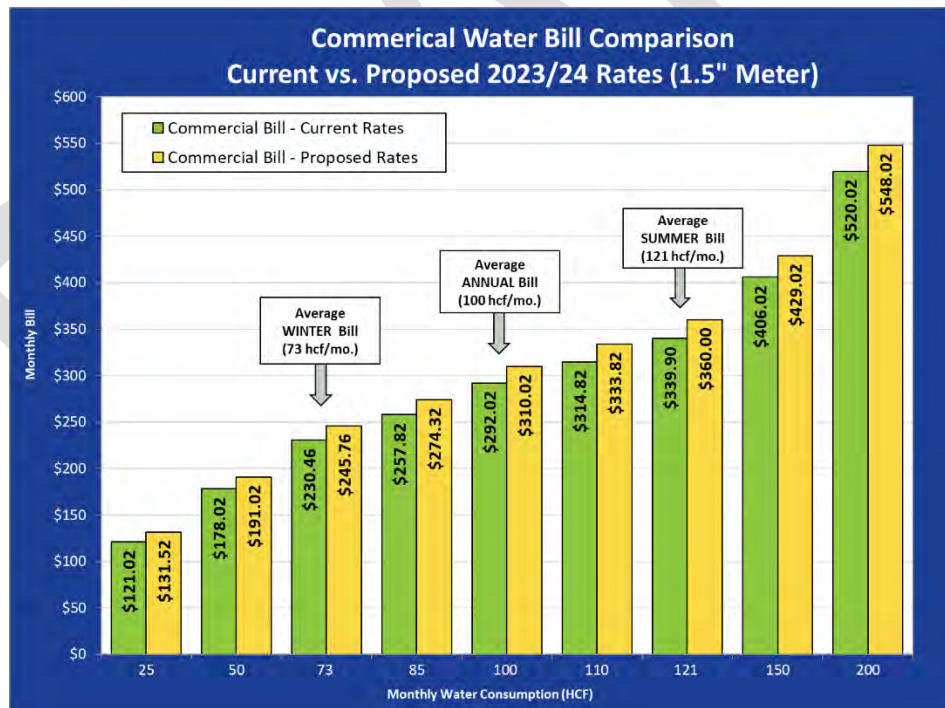


Figure 17. Monthly Water Bill Comparison for Commercial Customers



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			Commodity-Related Costs				
Fund	Division	Expense Name	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.

The Current rate is already \$0.60.

July 1, 2023. (we can increase this without the Prop218 since the rate will be lower than what was previously set)

These rates should be effective as follows:

1. Current Rate \$0.60 (as of 7/1/2022)
2. Effective 7/1/23 \$0.65
3. Effective 7/1/24 \$0.70
4. Effective 7/1/25 \$0.75
5. Effective 7/1/26 \$0.80
6. Effective 7/1/27 \$0.85

The footnotes do not match what is said on page 22.
The above revised detail matches what is indicated the increase plan is on page 22.

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

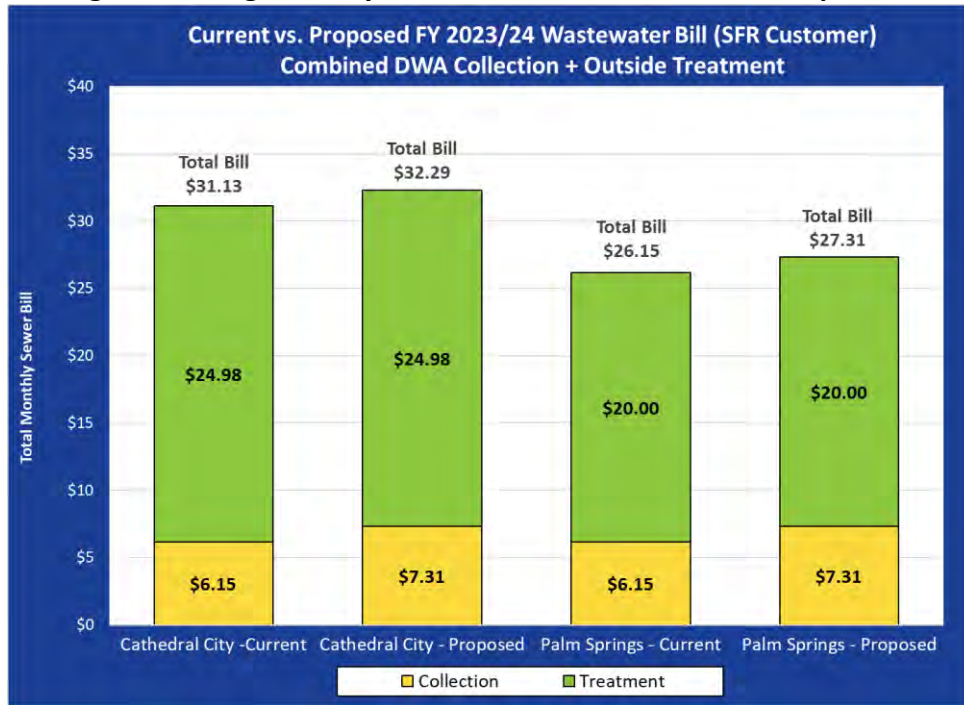
Figure 31. Proposed Wastewater Rates for FY 2023/24

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	19,944,400	20,493,536
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	\$ 21,889,650	\$ 22,838,186
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	\$ 74,956,618	\$ 78,677,515
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	\$ 71,667,515	\$ 76,212,234
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

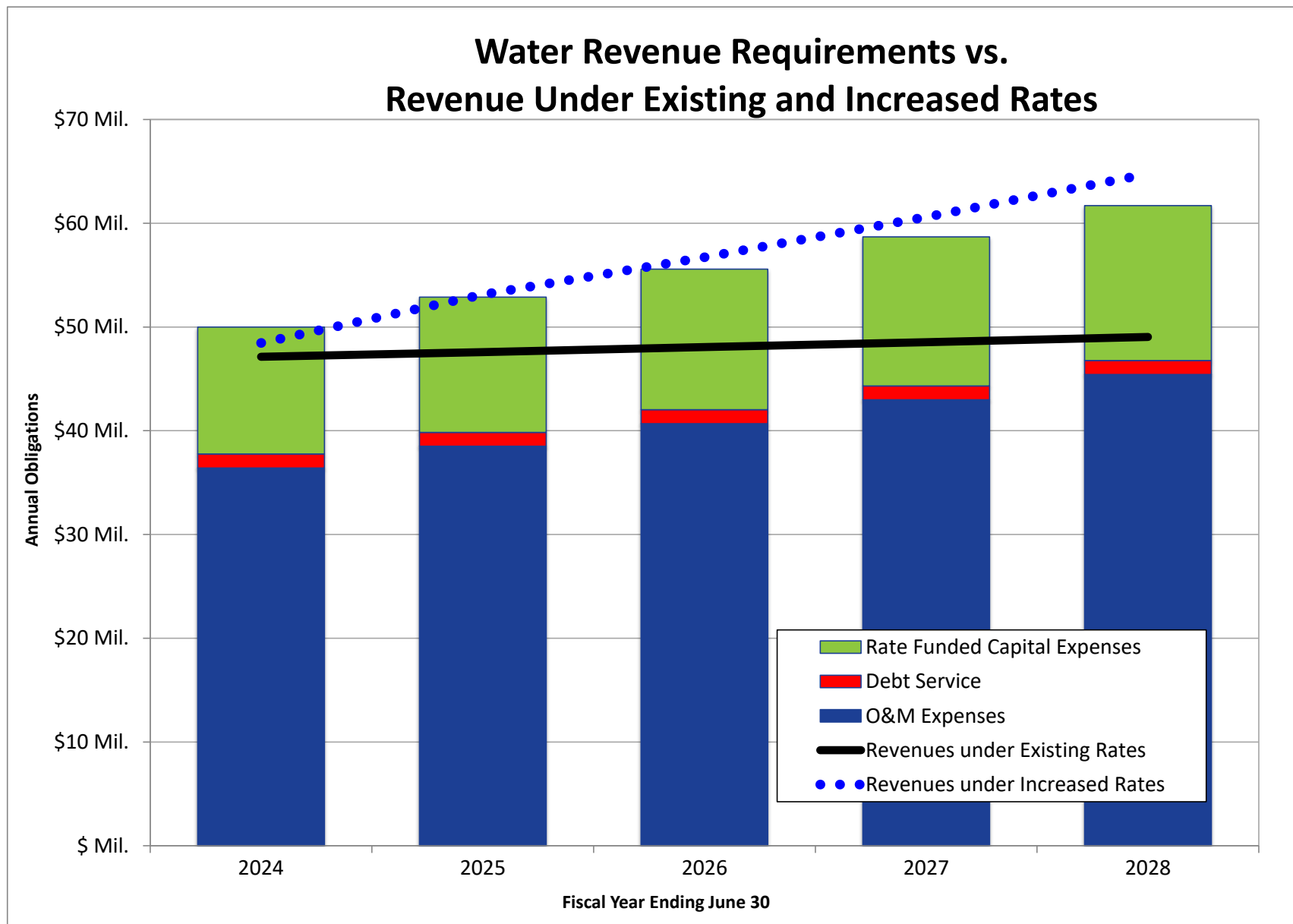


CHART 2

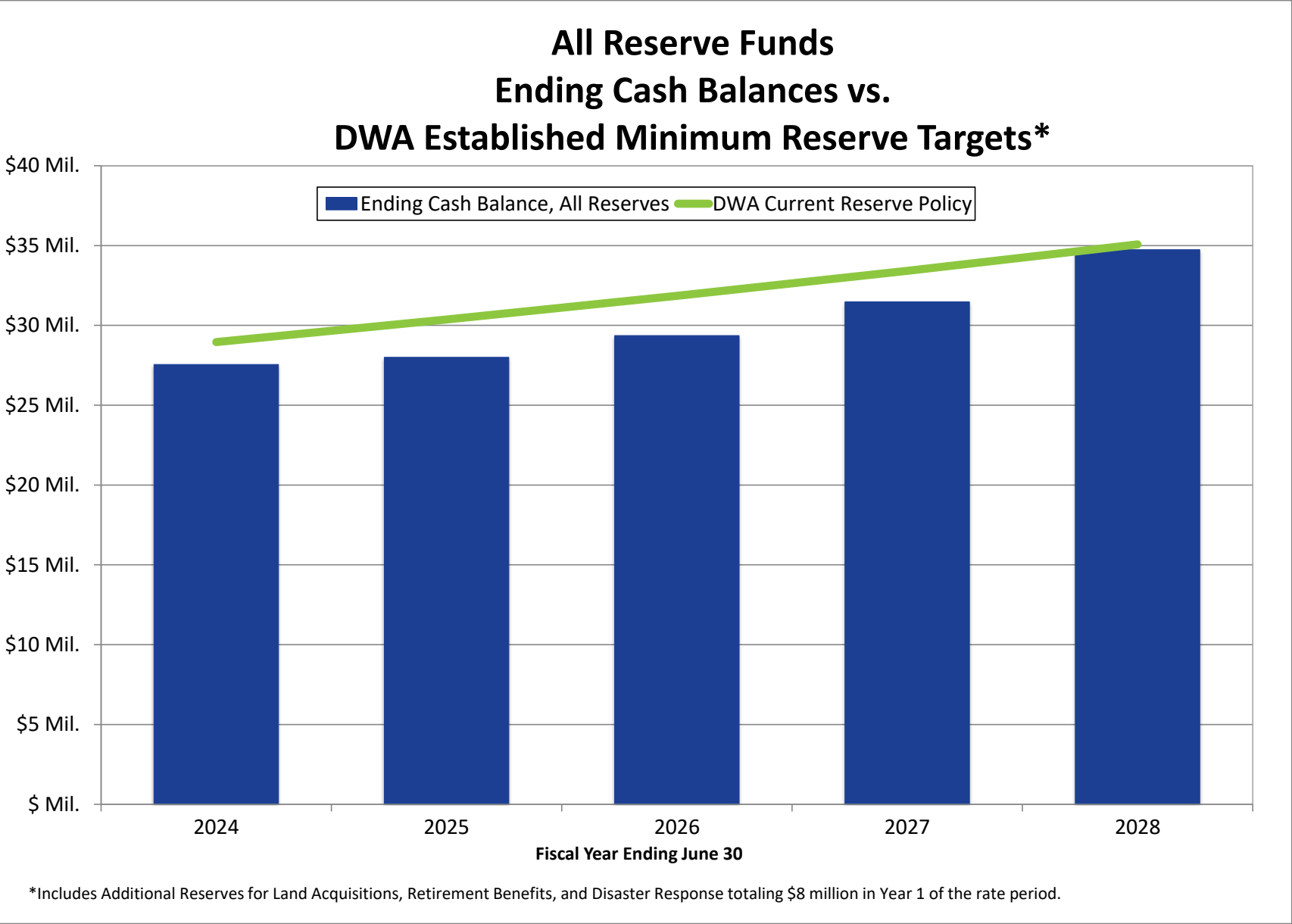


CHART 3

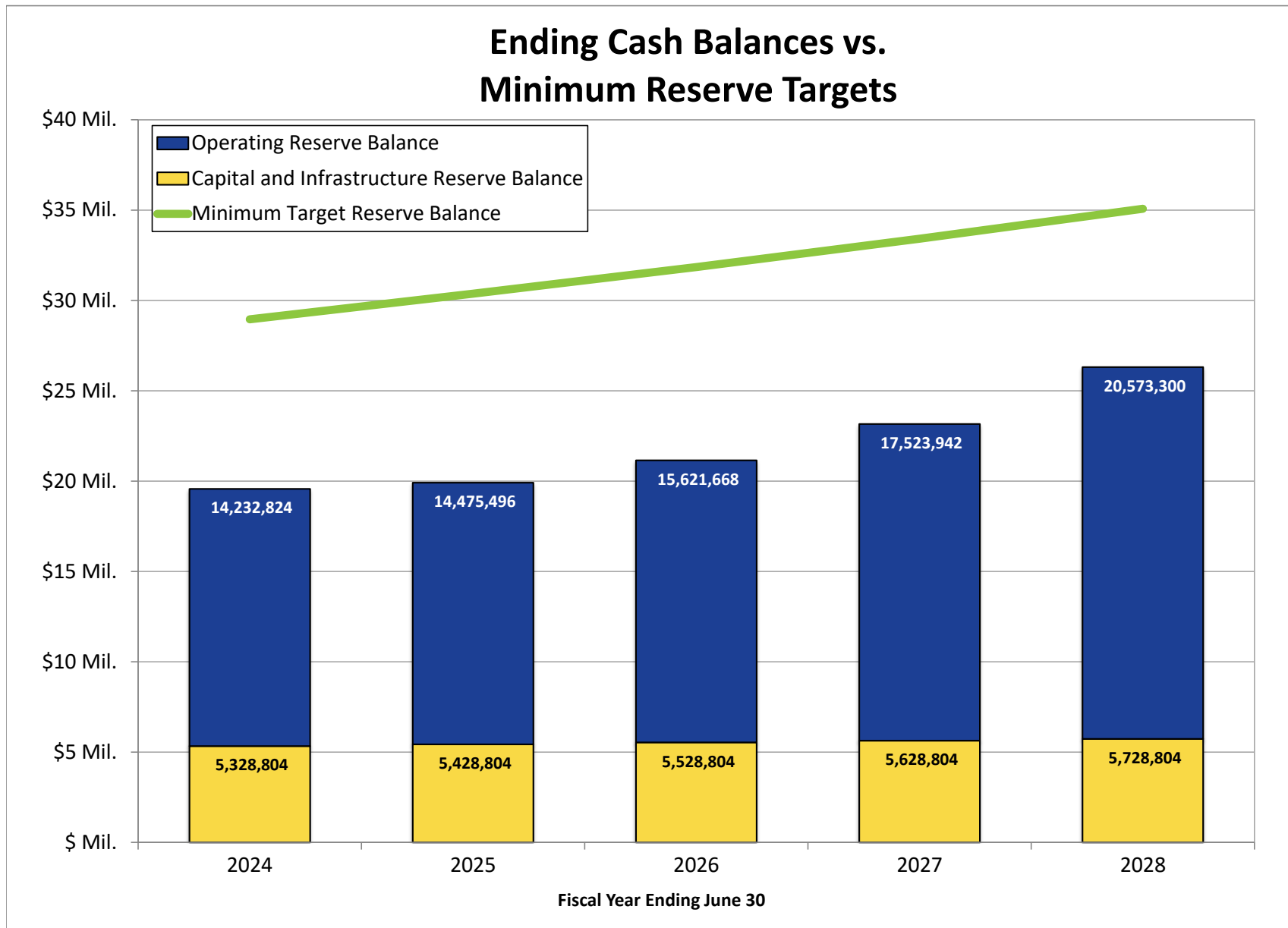


CHART 4

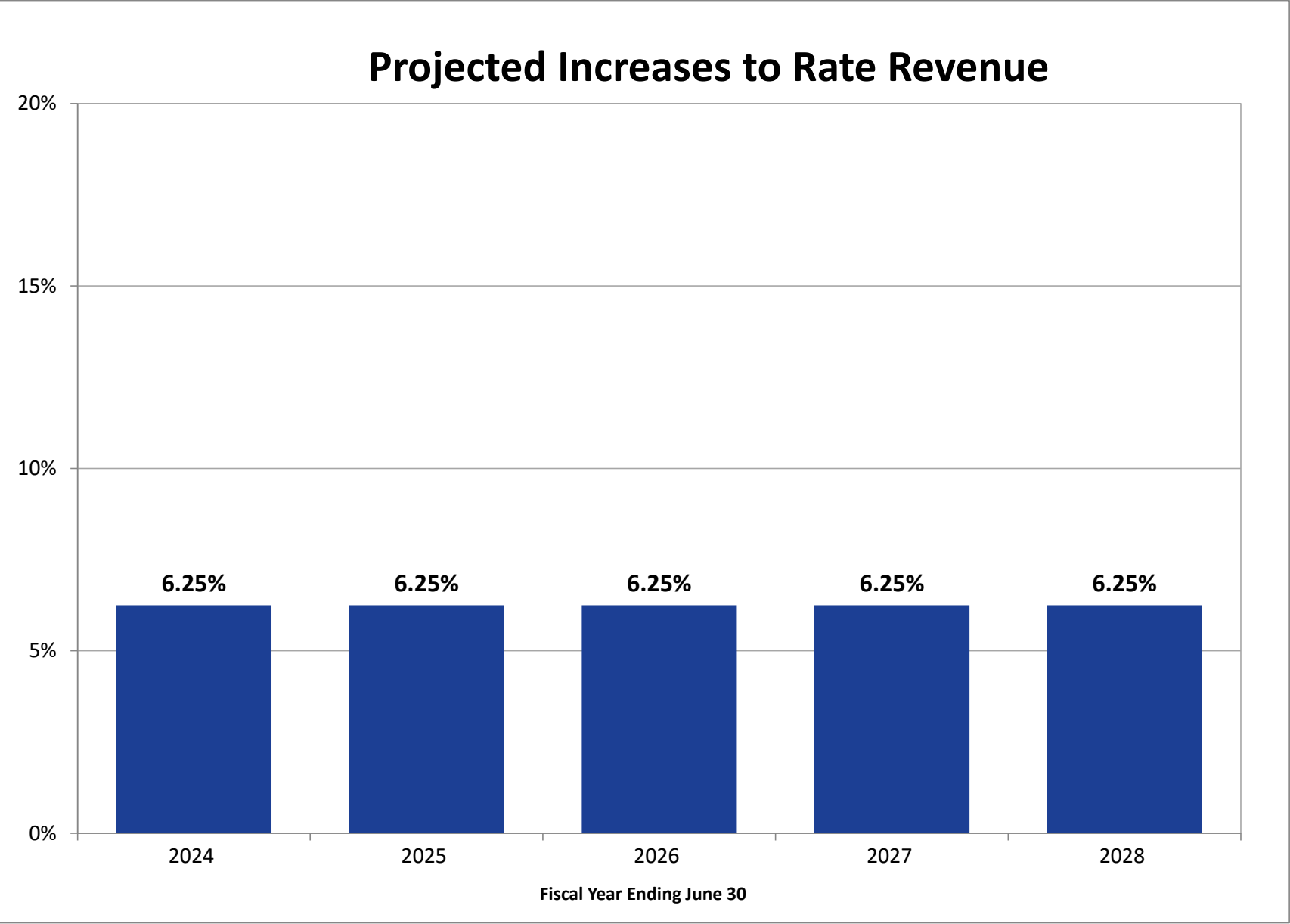


CHART 5

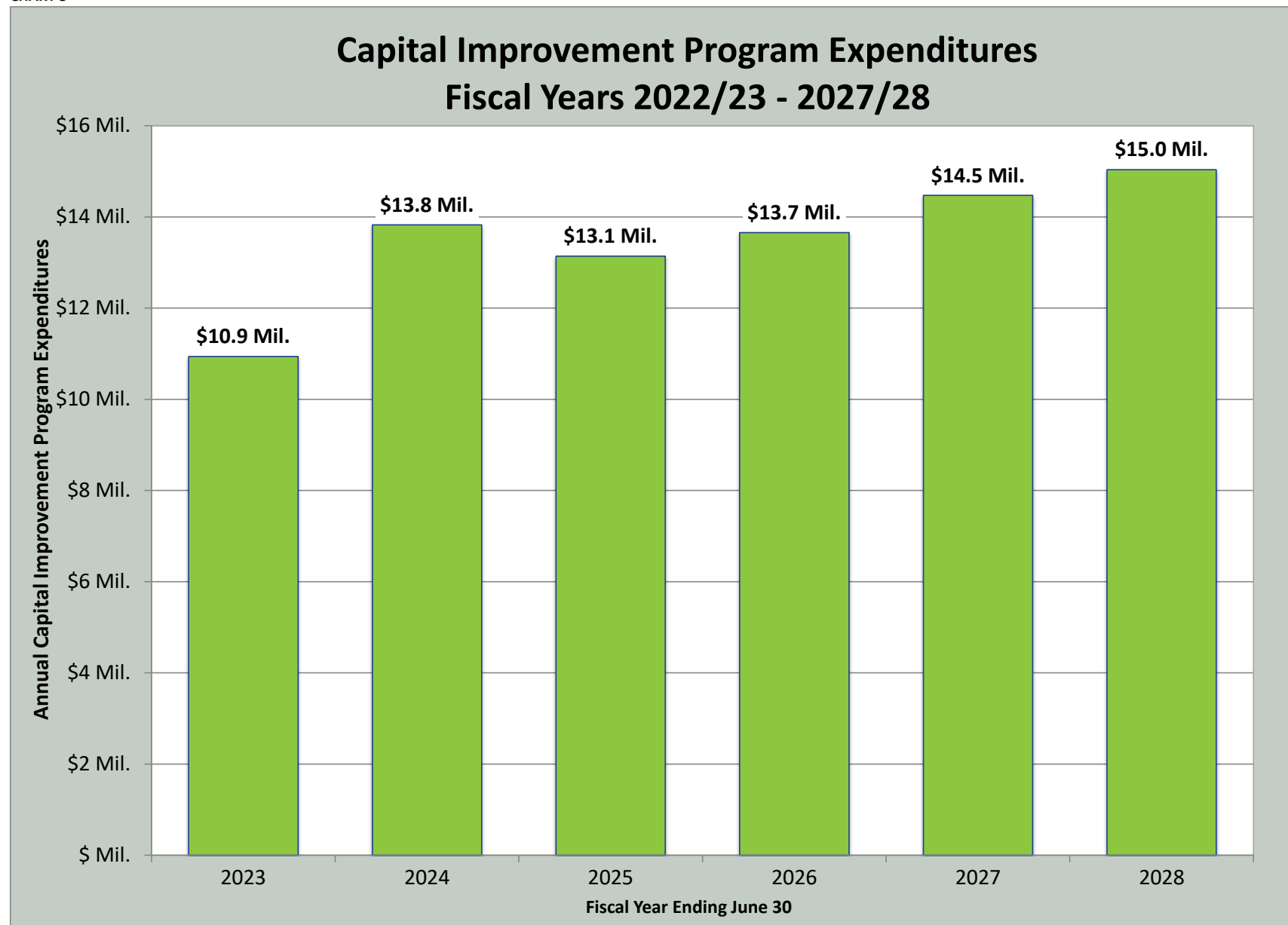


TABLE 3 : REVENUE FORECAST¹

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		

TABLE 6 : 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
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

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%

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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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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

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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
Hydraulic Capacity Factor ²	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.) 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

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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.

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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.

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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.

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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.

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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.

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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

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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

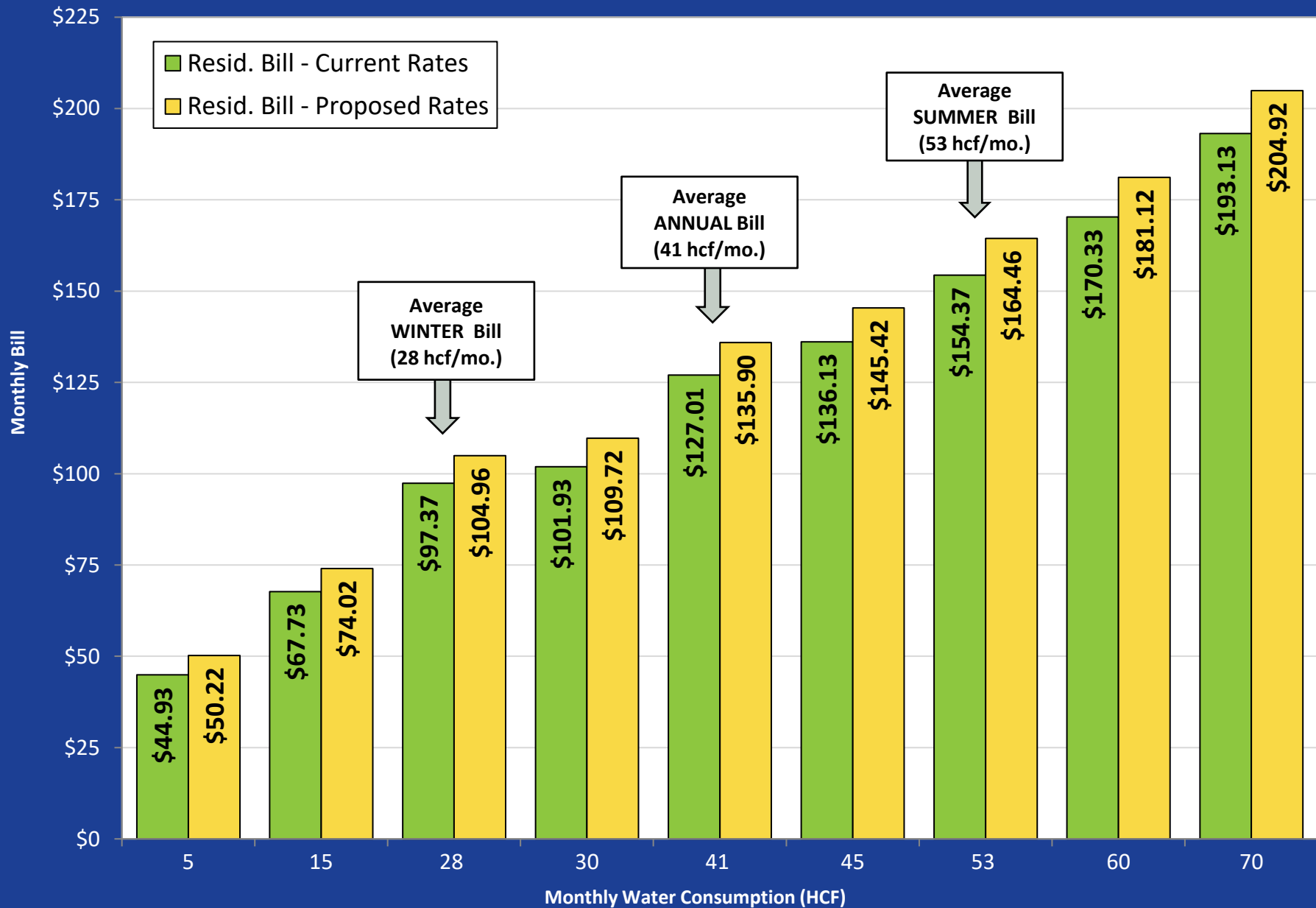
TABLE 67 : CURRENT VS. PROPOSED RECYCLED WATER RATES

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)



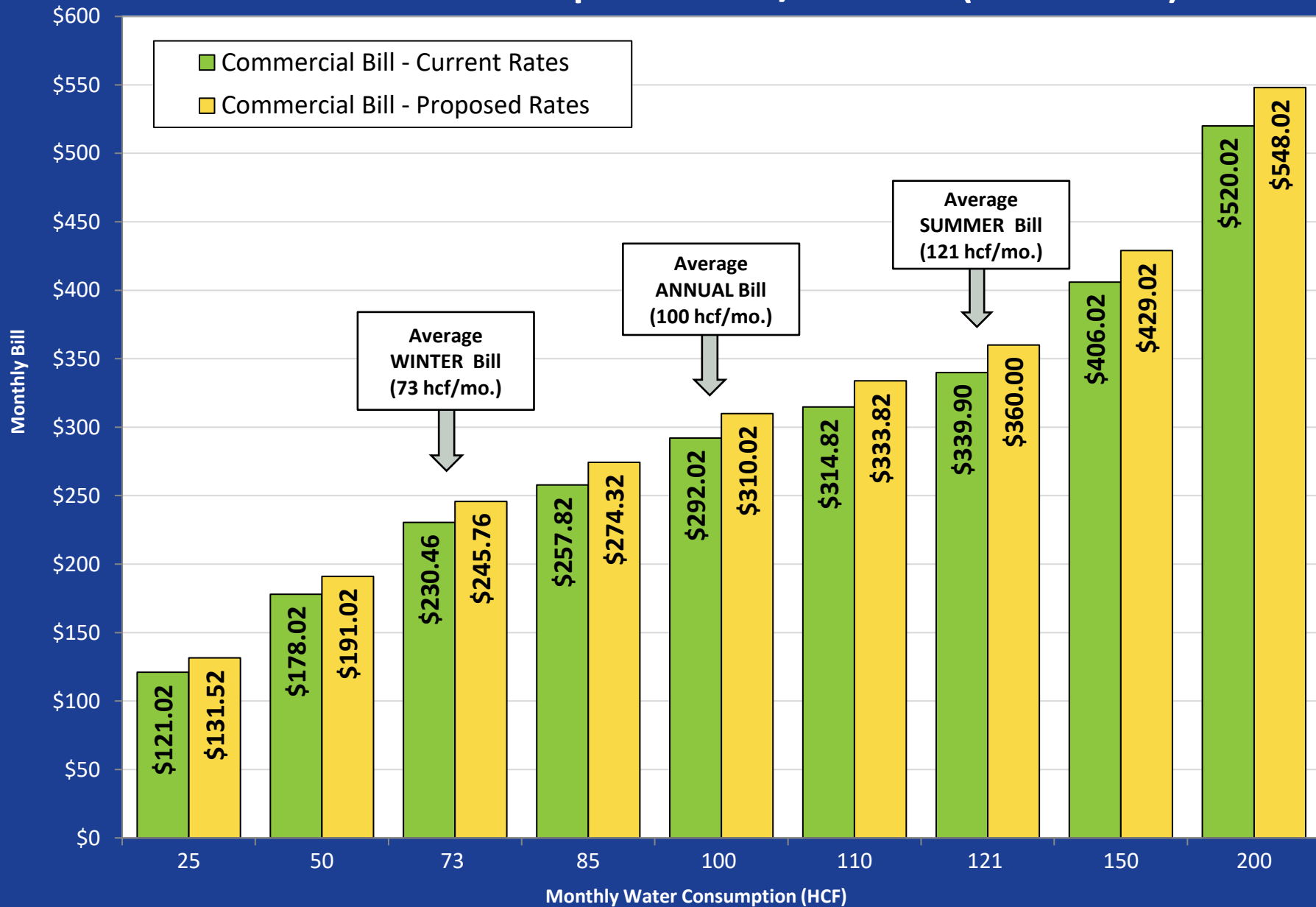
Average Single-Family Residential Customer Five-Year Bill Projection

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



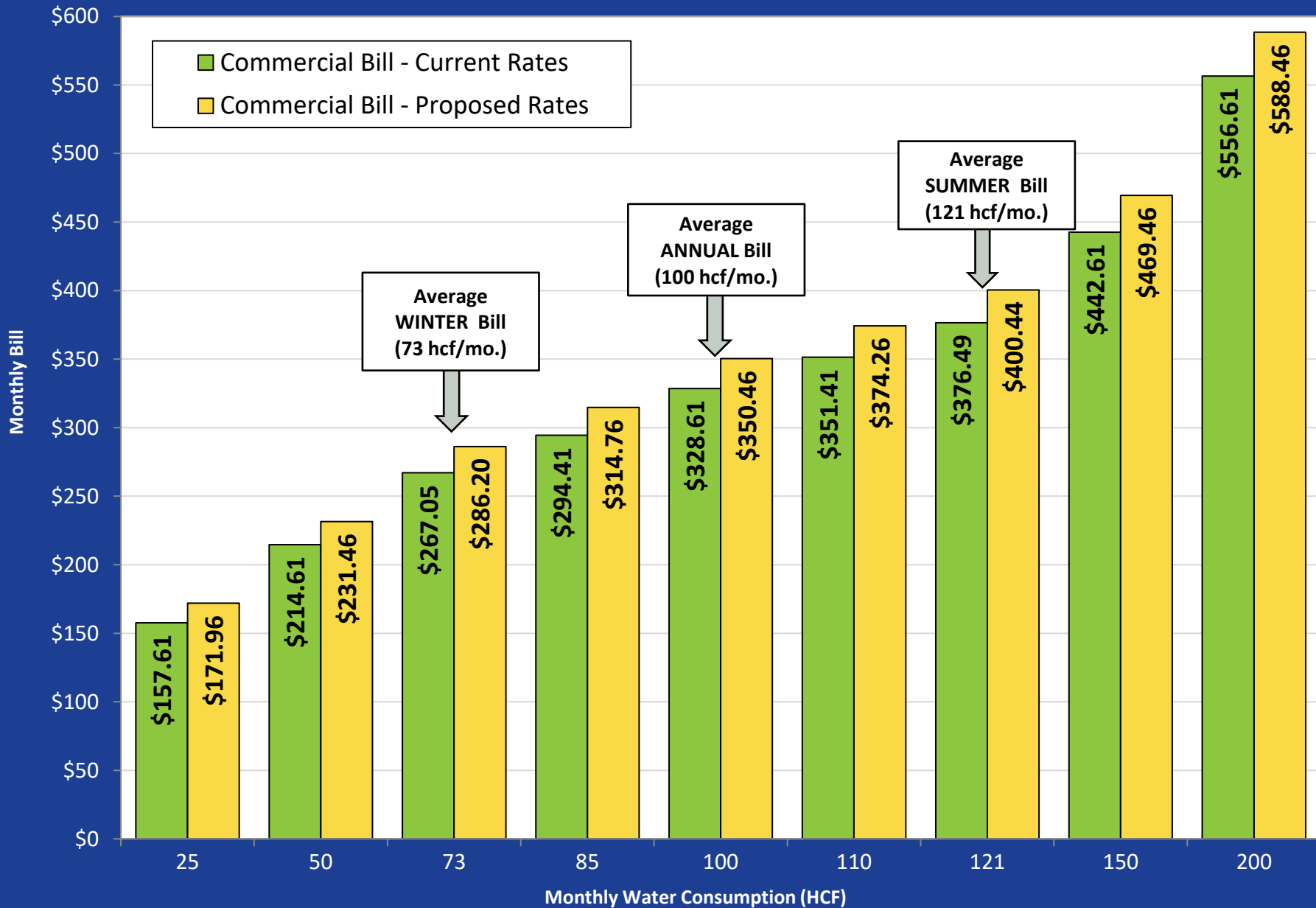
Commerical Water Bill Comparison

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



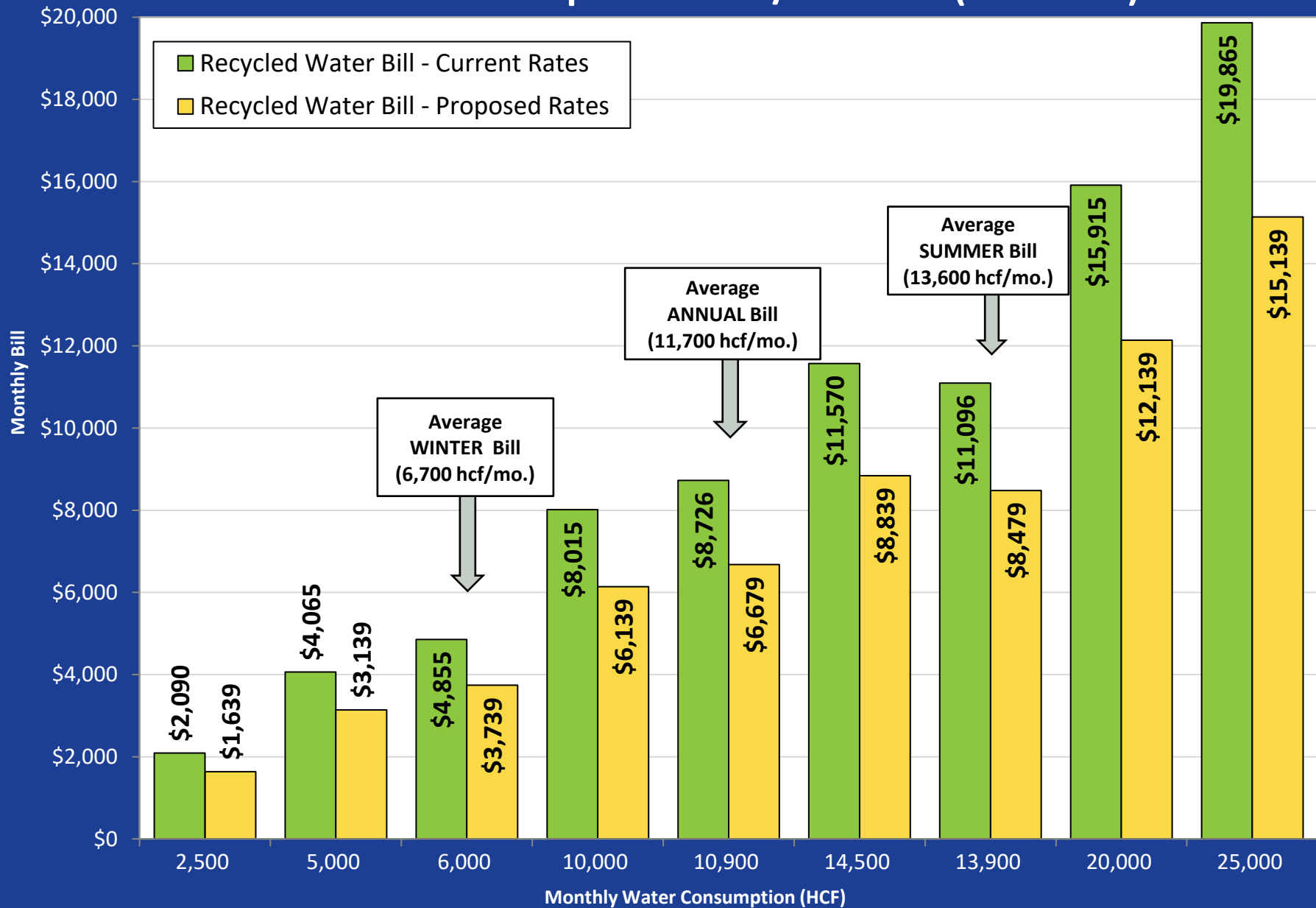
Commercial Water Bill Comparison

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

DRAFT

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

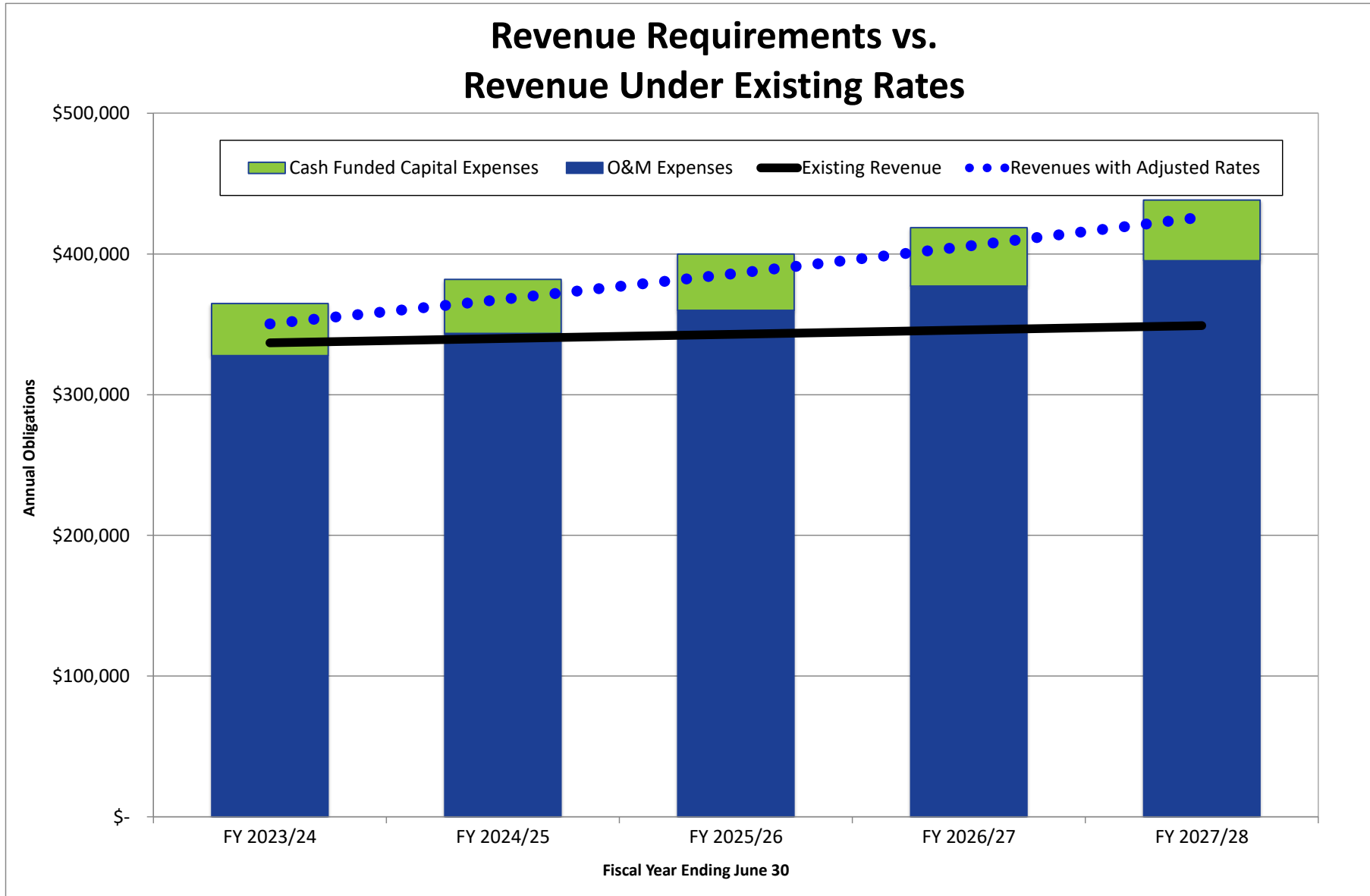


CHART 2

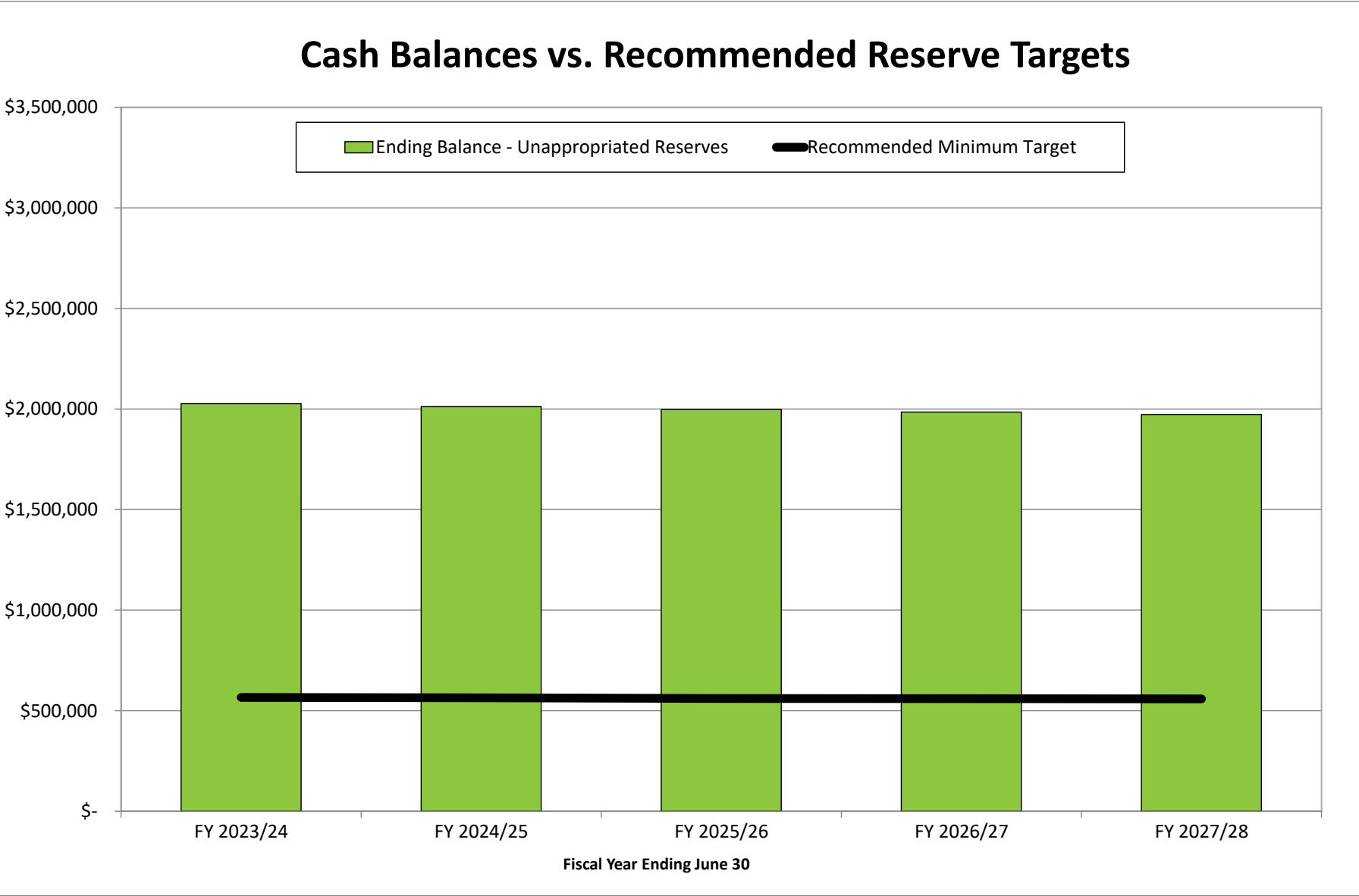


CHART 3

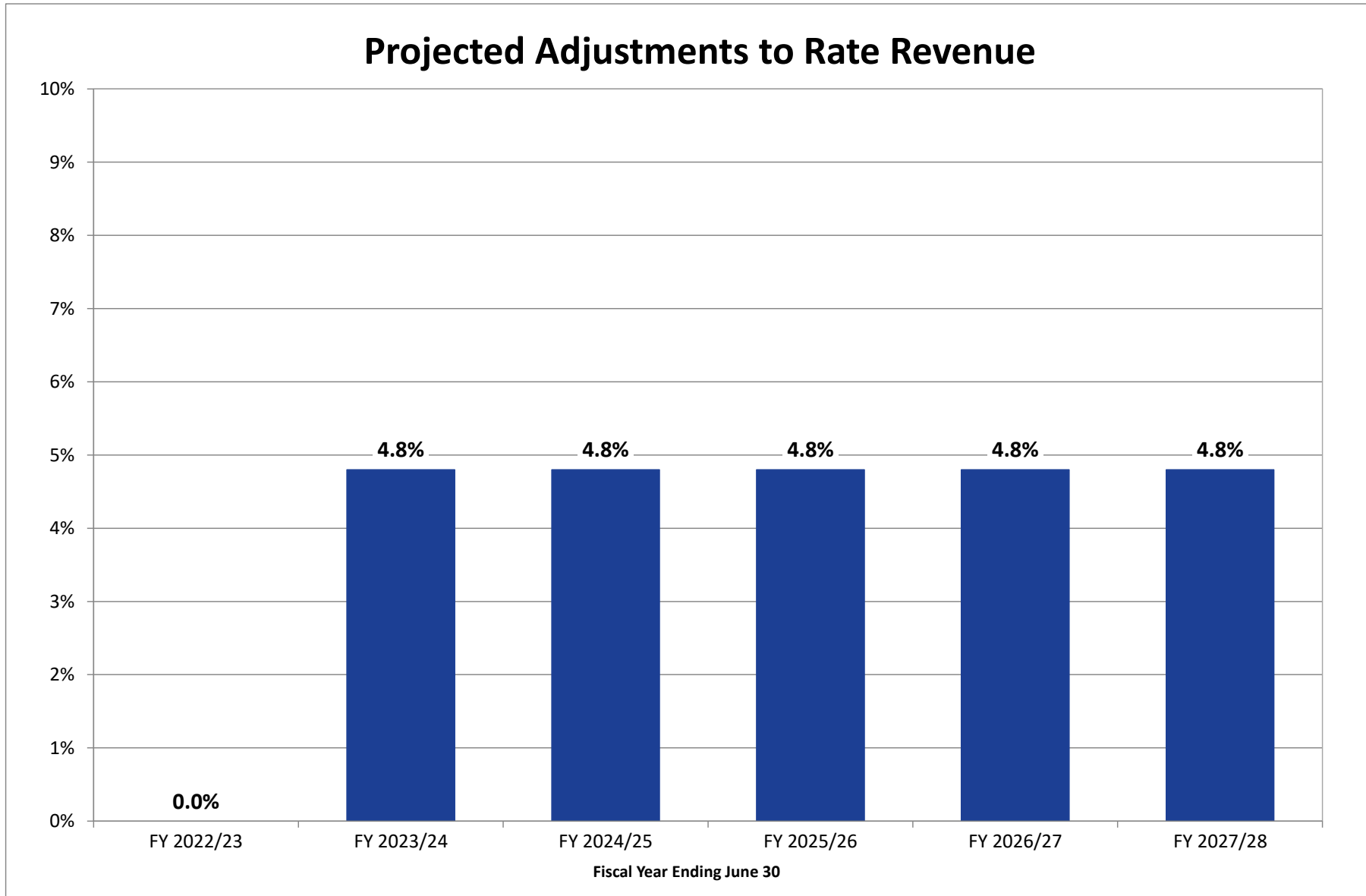
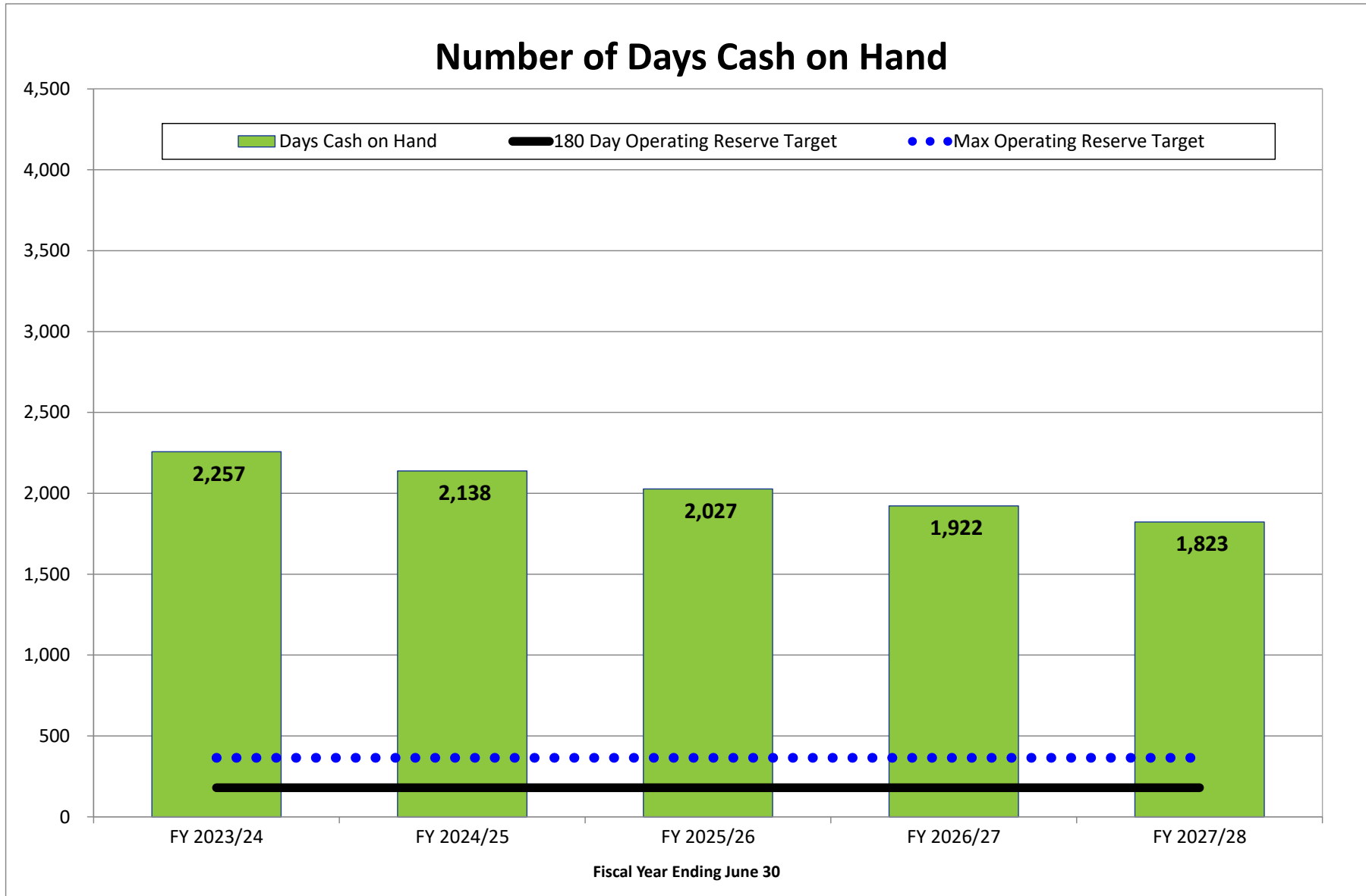


CHART 4



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>

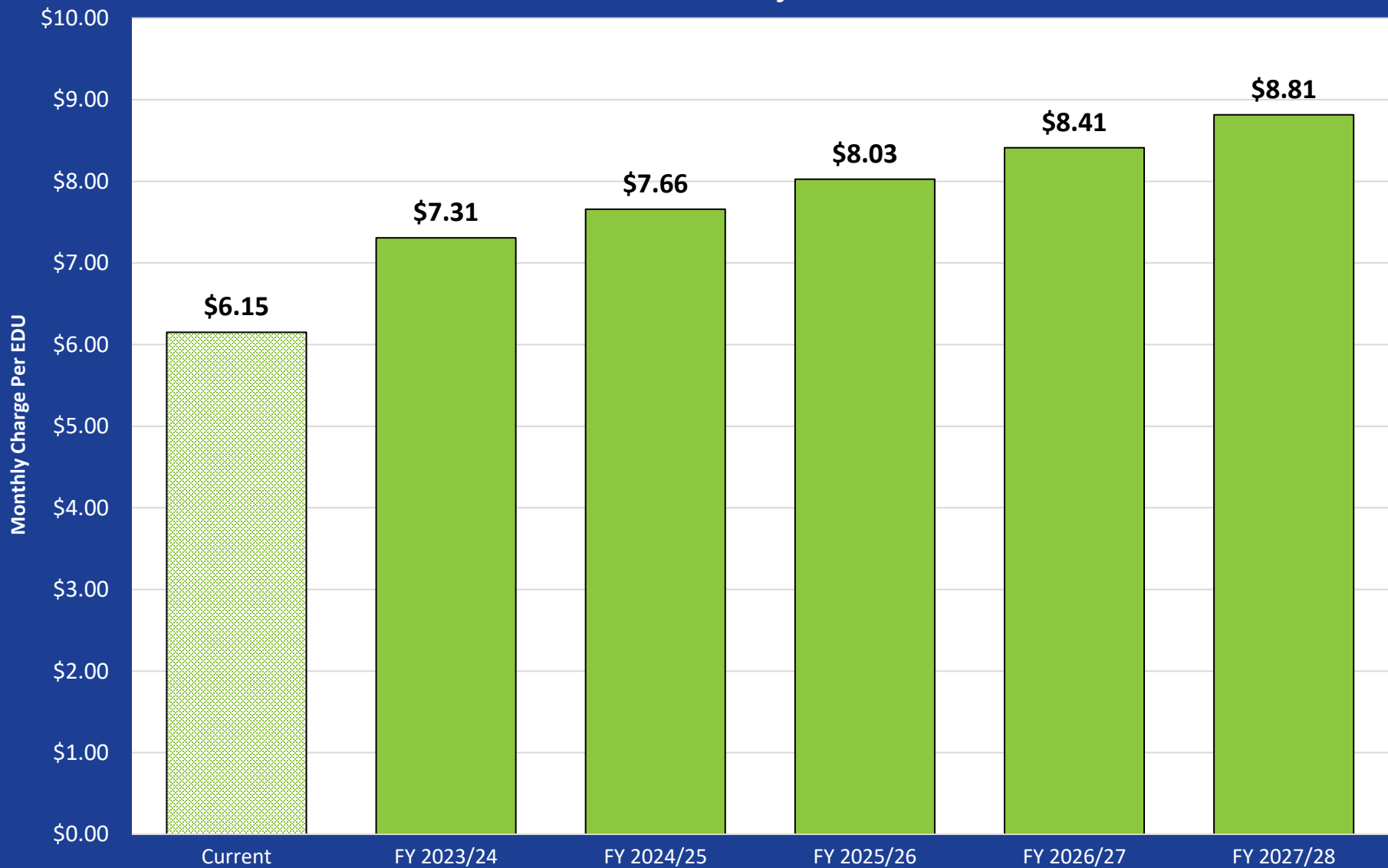
**DESERT WATER AGENCY
WASTEWATER RATE STUDY
Sewer Rate Development**

TABLE 23 : PROPOSED RATES

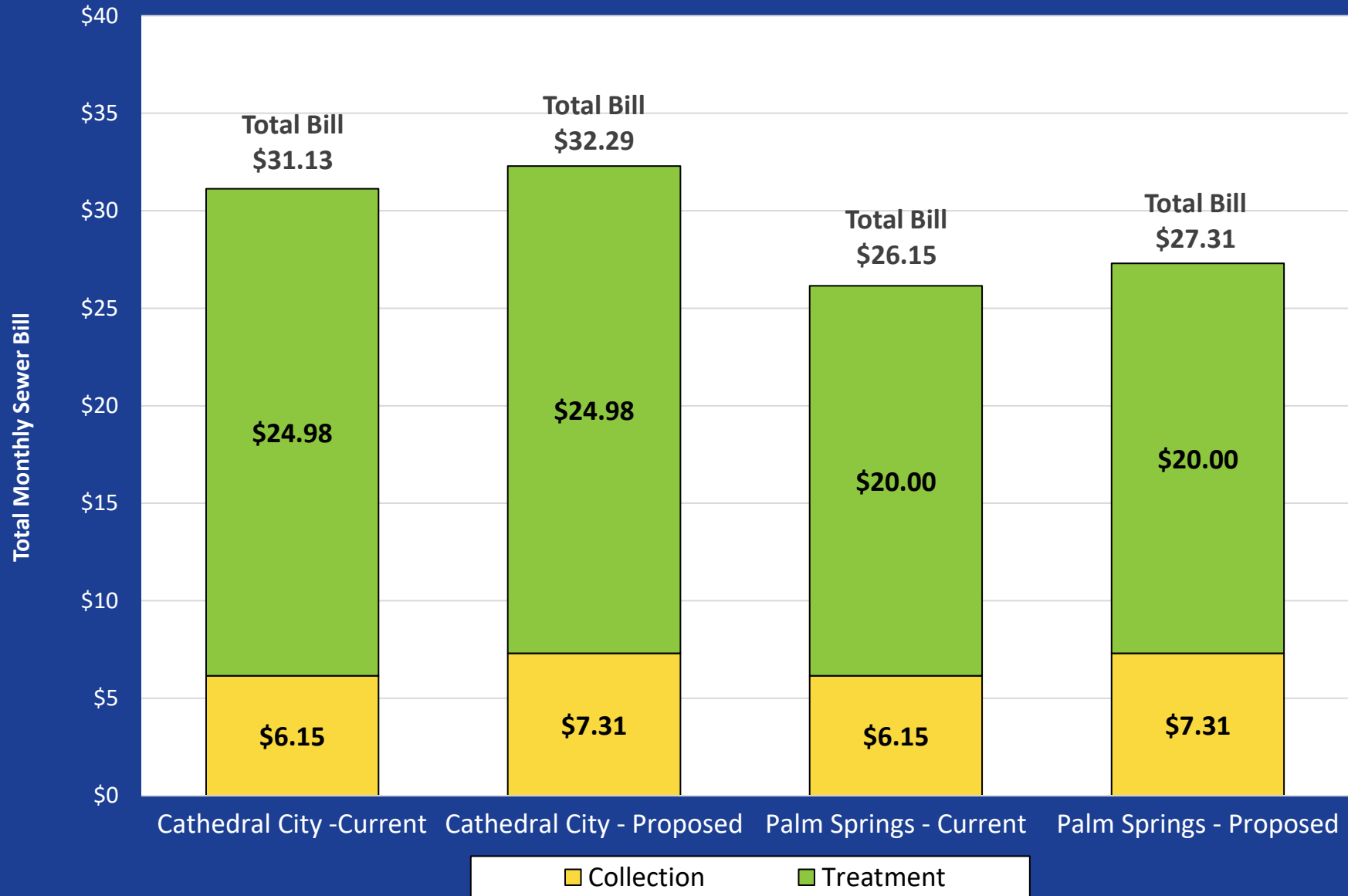
Wastewater Rate Schedule ¹							
Customer Types	EDU Scale	CVWD Treatment - Cathedral City			City Treatment - Palm Oasis / Dream Homes Only		
		CVWD Charges per EDU	DWA Charges per EDU	Total Charges	City of Palm Springs Charges (per EDU)	DWA Charges (per EDU)	Total Charges
Single Family/Condo	1 EDU = 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



DESERT WATER AGENCY
STATEMENT OF CASH RECEIPTS AND EXPENDITURES

OPERATING ACCOUNT

FEBRUARY 2023

INVESTED
RESERVE FUNDS
\$52,914,774.61

BALANCE	FEBRUARY 1, 2023	(\$97,516.12)	
WATER SALES		\$2,380,146.00	
RECLAMATION SALES		49,816.58	
WASTEWATER RECEIPTS		56,489.76	
POWER SALES		0.00	
METERS, SERVICES, ETC.		246,179.00	
REIMBURSEMENT – GENERAL FUND		0.00	
REIMBURSEMENT – WASTEWATER FUND		0.00	
ACCOUNTS RECEIVABLE – OTHER		8,299.15	
CUSTOMER DEPOSITS – SURETY		8,904.00	
CUSTOMER DEPOSITS – CONST.		217,400.00	
LEASE REVENUE		66,012.58	
INTEREST RECEIVED ON INV. FDS.		36,425.00	
FRONT FOOTAGE FEES		0.00	
BOND SERVICE & RESERVE FUND INT		0.00	
MISCELLANEOUS		<u>12,715.08</u>	
TOTAL RECEIPTS		\$3,082,387.15	
PAYMENTS			
PAYROLL CHECKS		\$454,988.16	
PAYROLL TAXES		215,031.19	
ELECTRONIC TRANSFERS		172,710.47	
CHECKS UNDER \$10,000.00		416,569.37	
CHECKS OVER \$10,000.00 – SCH. #1		1,246,983.10	
CANCELLED CHECKS AND FEES		<u>26,409.49</u>	
TOTAL PAYMENTS		<u>\$2,532,691.78</u>	
NET INCOME		\$549,695.37	
BOND SERVICE ACCOUNT			
MONTHLY WATER SALES		\$0.00	
EXCESS RETURNED BY B/A		<u>\$0.00</u>	
BOND SERVICE FUND			\$0.00
INVESTED RESERVE FUNDS			
FUNDS MATURED		\$333,000.00	
FUNDS INVESTED – SCH. #3		<u>1,600,000.00</u>	
NET TRANSFER			(\$1,267,000.00)
BALANCE	FEBRUARY 28, 2023	(\$814,820.75)	\$54,181,774.61

DESERT WATER AGENCY
Operating Fund
Schedule #1 - Checks Over \$10,000



February 2023

Check #	Name	Description	Amount
133421	Cardmember Service	Credit Card Purchases	\$ 32,061.54
133468	Core & Main LP	Water service supplies	\$ 13,485.08
133470	Dudek	Fema Project #147524	\$ 19,090.00
133477	I 10 Auto Body	Vehicle Maintenance	\$ 18,083.58
133481	Lync Consulting LLC	DWA 2.0 Program Manager	\$ 26,299.57
133487	Pompa Tree Services	Landscape maintenance	\$ 74,250.00
133500	Tyler Technologies	Tyler Software (W/O #20-178-M--73)	\$ 12,572.79
133553	Beck Oil Inc	Fuel purchase	\$ 10,727.87
133554	Best Best & Krieger LLP	Legal fees	\$ 40,207.02
133567	CPC Systems Inc	Water service supplies	\$ 132,622.40
133575	Down to Earth Landscaping	Landscape maintenance	\$ 41,816.35
133579	Engineering Solutions Ser Inc	Grant Writing Services	\$ 16,517.50
133597	Krieger & Stewart Inc	Engineering	\$ 27,549.45
133598	Launa Amanda Stewart	DWA 2.0 Program & Change Management Services	\$ 17,729.66
133619	Quadient, Inc	Water service supplies	\$ 13,146.57
133623	Red Hawk Services Inc	Perimeter Fencing	\$ 23,534.79
133625	Regional Government Services	Consultaing Services -January 2023	\$ 18,761.20
133627	Singer Lewak LLP	IT Governance	\$ 45,932.16
133630	Southern California Edison	Power	\$ 220,687.53
133635	Tesco Controls Inc	Water service supplies	\$ 32,500.00
133636	Thatcher Company of California	Water service supplies	\$ 46,292.28
133637	Thompson Reuters- West	Water service supplies	\$ 11,117.76
133649	Western Audio Visual Security	Large Conference Room Virtual Project	\$ 71,081.50
133653	Z&L Paving	Paving	\$ 25,518.50
133655	Realty Trust	Grass removal rebate	\$ 10,125.00
133659	Summerset Springs HOA	Grass removal rebate	\$ 62,637.00
133662	Mesquite Canyon Estates	Grass removal rebate	\$ 75,582.00
133668	David Doyle	Grass removal rebate	\$ 14,972.00
133677	Hsuan Lu	Grass removal rebate	\$ 14,727.00

DESERT WATER AGENCY
Operating Fund
Schedule #1 - Checks Over \$10,000
DESERT WATER



February 2023

133682	Palm Springs Villas 1	Grass removal rebate	\$ 77,355.00
Total			\$ 1,246,983.10

Monthly Investment Portfolio Report

As of 02/28/2023

AGG- Operating Fund (213426)

Dated: 03/23/2023

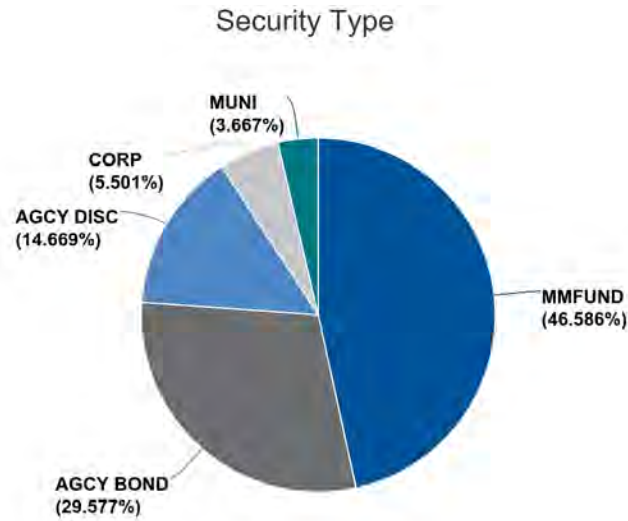


Chart calculated by: PAR Value

MMFUND

Description, Broker	Settle Date	Next Call Date	Effective Maturity	Final Maturity	PAR Value	Original Cost	Market Value	Yield to Maturity
LAIF Money Market Fund LAIF - OP	---	---	02/28/2023	02/28/2023	25,405,993.50	25,405,993.50	25,405,993.50	---
LAIF Money Market Fund LAIF - OP	---	---	02/28/2023	02/28/2023	25,405,993.50	25,405,993.50	25,405,993.50	---

AGCY BOND

Description, Broker	Settle Date	Next Call Date	Effective Maturity	Final Maturity	PAR Value	Original Cost	Market Value	Yield to Maturity
FEDERAL FARM CREDIT BANKS FUNDING CORP UnionBanc OP	04/29/2021	04/28/2023	04/28/2025	04/28/2025	1,000,000.00	999,500.00	909,488.00	5.074%
FEDERAL HOME LOAN BANKS UnionBanc OP	06/28/2021	03/30/2023	09/30/2024	09/30/2024	1,000,000.00	1,000,000.00	929,062.00	5.105%
FEDERAL HOME LOAN BANKS UnionBanc OP	09/30/2021	03/30/2023	09/30/2026	09/30/2026	1,000,000.00	1,000,000.00	880,308.00	4.682%
FEDERAL HOME LOAN BANKS UnionBanc OP	09/24/2021	---	09/13/2024	09/13/2024	1,130,000.00	1,125,513.90	1,052,660.54	5.045%
FEDERAL HOME LOAN BANKS UnionBanc OP	04/29/2022	04/29/2024	04/29/2027	04/29/2027	2,000,000.00	2,000,000.00	1,887,588.00	4.565%
FEDERAL HOME LOAN BANKS UnionBanc OP	05/24/2022	05/24/2024	05/24/2027	05/24/2027	2,000,000.00	2,000,000.00	1,900,288.00	4.607%
FEDERAL HOME LOAN BANKS UnionBanc OP	05/23/2022	05/23/2023	05/23/2025	05/23/2025	2,000,000.00	2,000,000.00	1,927,702.00	5.027%
FEDERAL HOME LOAN MORTGAGE CORP UnionBanc OP	08/20/2020	08/20/2023	08/20/2025	08/20/2025	1,000,000.00	1,000,000.00	900,692.00	4.932%
FEDERAL HOME LOAN MORTGAGE CORP UnionBanc OP	05/26/2022	05/26/2023	08/26/2024	08/26/2024	2,000,000.00	2,000,000.00	1,938,870.00	5.202%

Monthly Investment Portfolio Report

As of 02/28/2023

AGG- Operating Fund (213426)

Dated: 03/23/2023

Description, Broker	Settle Date	Next Call Date	Effective Maturity	Final Maturity	PAR Value	Original Cost	Market Value	Yield to Maturity
FEDERAL NATIONAL MORTGAGE ASSOCIATION UnionBanc OP	06/30/2020	03/30/2023	06/30/2025	06/30/2025	1,000,000.00	1,000,000.00	907,575.00	4.964%
FEDERAL NATIONAL MORTGAGE ASSOCIATION UnionBanc OP	08/12/2020	05/12/2023	08/12/2025	08/12/2025	1,000,000.00	1,000,000.00	899,685.00	4.949%
FEDERAL NATIONAL MORTGAGE ASSOCIATION UnionBanc OP	12/16/2020	06/14/2023	06/14/2024	06/14/2024	1,000,000.00	1,000,500.00	939,892.00	5.238%
--- UnionBanc OP	---	---	10/03/2025	10/03/2025	16,130,000.00	16,125,513.90	15,073,810.54	4.926%

AGCY DISC

Description, Broker	Settle Date	Next Call Date	Effective Maturity	Final Maturity	PAR Value	Original Cost	Market Value	Yield to Maturity
FEDERAL HOME LOAN BANKS UnionBanc OP	12/15/2022	---	03/17/2023	03/17/2023	2,000,000.00	1,978,124.44	1,995,946.00	4.361%
FEDERAL HOME LOAN BANKS UnionBanc OP	12/15/2022	---	04/13/2023	04/13/2023	2,000,000.00	1,971,043.33	1,988,836.00	4.657%
FEDERAL HOME LOAN BANKS UnionBanc OP	12/15/2022	---	06/12/2023	06/12/2023	2,000,000.00	1,955,548.33	1,972,204.00	4.946%
FEDERAL HOME LOAN BANKS UnionBanc OP	12/15/2022	---	05/16/2023	05/16/2023	2,000,000.00	1,962,591.11	1,979,750.00	4.849%
FEDERAL HOME LOAN BANKS UnionBanc OP	12/15/2022	---	04/29/2023	04/29/2023	8,000,000.00	7,867,307.21	7,936,736.00	4.702%

CORP

Description, Broker	Settle Date	Next Call Date	Effective Maturity	Final Maturity	PAR Value	Original Cost	Market Value	Yield to Maturity
AMAZON.COM INC UnionBanc OP	05/16/2022	03/13/2027	04/13/2027	04/13/2027	2,000,000.00	1,987,040.00	1,888,878.00	4.800%
JPMORGAN CHASE BANK, NATIONAL ASSOCIATION UnionBanc OP	06/22/2021	---	12/23/2024	12/23/2024	1,000,000.00	1,000,000.00	904,940.00	6.013%
--- UnionBanc OP	---	---	07/17/2026	07/17/2026	3,000,000.00	2,987,040.00	2,793,818.00	5.190%

MUNI

Description, Broker	Settle Date	Next Call Date	Effective Maturity	Final Maturity	PAR Value	Original Cost	Market Value	Yield to Maturity
UNIVERSITY CALIF REVS UnionBanc OP	05/16/2022	03/15/2027	05/15/2027	05/15/2027	2,000,000.00	1,795,920.00	1,737,460.00	4.793%
UNIVERSITY CALIF REVS UnionBanc OP	05/16/2022	03/15/2027	05/15/2027	05/15/2027	2,000,000.00	1,795,920.00	1,737,460.00	4.793%

Summary

Description, Broker	Settle Date	Next Call Date	Effective Maturity	Final Maturity	PAR Value	Original Cost	Market Value	Yield to Maturity
---	---	---	03/26/2024	03/26/2024	54,535,993.50	54,181,774.61	52,947,818.04	4.880%

* Grouped by: Security Type. * Groups Sorted by: Ending Market Value + Accrued. * Filtered By: Description ≠ "Receivable". * Weighted by: Ending Market Value + Accrued.

DESERT WATER AGENCY
STATEMENT OF CASH RECEIPTS AND EXPENDITURES

GENERAL ACCOUNT

FEBRUARY 2023

INVESTED
RESERVE FUNDS
\$221,555,205.99

BALANCE	FEBRUARY 1, 2023	(\$4,695.39)	
* TAXES - RIVERSIDE COUNTY		294,923.58	
* INTEREST EARNED - INV. FUNDS		170,840.88	
GROUNDWATER REPLEN. ASSESSMENT		413,394.91	
REIMBURSEMENT - OPERATING FUND		0.00	
REIMBURSEMENT - CVWD MGMT AGRMT		47,436.20	
STATE WATER PROJECT REFUNDS		0.00	
REIMB - CVWD - WHITEWATER HYDRO		0.00	
POWER SALES - WHITEWATER		0.00	
MISCELLANEOUS		350.00	
TOTAL RECEIPTS		\$926,945.57	
PAYMENTS			
CHECKS UNDER \$10,000.00		1,925.00	
CHECKS OVER \$10,000.00 - SCH. #1		921,759.00	
CANCELLED CHECKS AND FEES		0.00	
TOTAL PAYMENTS		<u>\$923,684.00</u>	
NET INCOME		\$3,261.57	
INVESTED RESERVE FUNDS			
FUNDS MATURED		11,566,499.71	
FUNDS INVESTED – SCH. #2		<u>12,397,760.00</u>	
NET TRANSFER		(\$831,260.29)	\$831,260.29
BALANCE	FEBRUARY 28, 2023	(\$823,303.33)	\$222,386,466.28
* INCLUSIVE TO DATE		TAXES	INTEREST
RECEIPTS IN FISCAL YEAR		\$24,775,405.00	\$1,559,967.05
RECEIPTS IN CALENDAR YEAR		\$16,432,804.99	\$381,829.24

DESERT WATER AGENCY

General Fund

Schedule #1 - Checks Over \$10,000

DESERT WATER



February 2023

Check #	Name	Description	Amount
9737	State of California Department of Water Resources	State Water Project - November 2022 variable	\$ 15,858.00
9739	State of California Department of Water Resources	State Water Project-Transportation Charge	\$ 905,901.00
Total			\$ 921,759.00

Monthly Investment Portfolio Report

As of 02/28/2023

AGG- General Fund (213428)

Dated: 03/23/2023

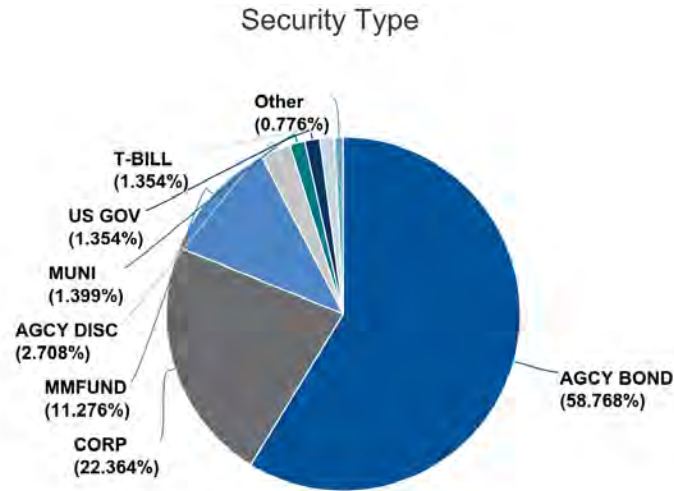


Chart calculated by: PAR Value

AGCY BOND

Description, Broker	Settle Date	Next Call Date	Effective Maturity	Final Maturity	PAR Value	Original Cost	Market Value	Yield to Maturity
FEDERAL AGRICULTURAL MORTGAGE CORP Alamo Capital	09/14/2022	---	04/21/2025	04/21/2025	1,000,000.00	977,400.00	955,069.00	4.852%
FEDERAL AGRICULTURAL MORTGAGE CORP Piper Sandler	02/23/2022	08/23/2023	02/23/2027	02/23/2027	3,000,000.00	3,000,000.00	2,722,110.00	4.674%
FEDERAL FARM CREDIT BANKS FUNDING CORP Alamo Capital	08/04/2020	03/15/2023	08/04/2025	08/04/2025	3,000,000.00	3,000,005.00	2,708,589.00	4.956%
FEDERAL FARM CREDIT BANKS FUNDING CORP Alamo Capital	10/15/2020	03/15/2023	10/15/2024	10/15/2024	3,000,000.00	2,995,500.00	2,782,245.00	5.095%
FEDERAL FARM CREDIT BANKS FUNDING CORP Alamo Capital	01/05/2021	03/15/2023	04/05/2024	04/05/2024	3,000,000.00	3,000,000.00	2,841,225.00	5.273%
FEDERAL FARM CREDIT BANKS FUNDING CORP Alamo Capital	02/12/2021	03/15/2023	11/12/2024	11/12/2024	3,000,000.00	3,000,000.00	2,769,126.00	5.067%
FEDERAL FARM CREDIT BANKS FUNDING CORP UnionBanc GF	12/22/2020	03/15/2023	12/22/2025	12/22/2025	3,000,000.00	3,000,000.00	2,662,227.00	4.790%
FEDERAL FARM CREDIT BANKS FUNDING CORP Piper Sandler	10/15/2020	03/15/2023	10/15/2024	10/15/2024	3,000,000.00	3,000,000.00	2,783,625.00	5.095%
FEDERAL FARM CREDIT BANKS FUNDING CORP Piper Sandler	12/28/2020	03/15/2023	12/21/2023	12/21/2023	3,000,000.00	3,000,000.00	2,880,459.00	5.276%
FEDERAL FARM CREDIT BANKS FUNDING CORP Piper Sandler	11/05/2021	03/15/2023	10/20/2026	10/20/2026	3,000,000.00	2,988,000.00	2,648,583.00	4.673%
FEDERAL FARM CREDIT BANKS FUNDING CORP Piper Sandler	02/16/2022	---	02/16/2027	02/16/2027	3,000,000.00	2,999,286.00	2,723,079.00	4.359%
FEDERAL FARM CREDIT BANKS FUNDING CORP Stifel	10/16/2020	03/15/2023	03/28/2024	03/28/2024	3,000,000.00	3,000,000.00	2,845,056.00	5.267%
FEDERAL HOME LOAN BANKS Alamo Capital	04/09/2021	05/18/2023	11/18/2024	11/18/2024	3,000,000.00	2,989,263.00	2,767,146.00	5.063%
FEDERAL HOME LOAN BANKS Alamo Capital	09/30/2021	03/30/2023	09/30/2026	09/30/2026	3,000,000.00	3,000,000.00	2,638,992.00	4.681%

Monthly Investment Portfolio Report

As of 02/28/2023

AGG- General Fund (213428)

Dated: 03/23/2023

Description, Broker	Settle Date	Next Call Date	Effective Maturity	Final Maturity	PAR Value	Original Cost	Market Value	Yield to Maturity
FEDERAL HOME LOAN BANKS Alamo Capital	12/30/2021	---	12/30/2024	12/30/2024	3,000,000.00	3,000,005.00	2,822,382.00	4.905%
FEDERAL HOME LOAN BANKS Alamo Capital	09/13/2022	---	06/14/2024	06/14/2024	1,190,000.00	1,182,431.60	1,159,446.75	5.198%
FEDERAL HOME LOAN BANKS UnionBanc GF	12/30/2020	03/15/2023	12/30/2025	12/30/2025	3,000,000.00	3,000,000.00	2,664,156.00	4.784%
FEDERAL HOME LOAN BANKS UnionBanc GF	06/28/2021	03/30/2023	09/30/2024	09/30/2024	3,000,000.00	3,000,000.00	2,787,186.00	5.105%
FEDERAL HOME LOAN BANKS UnionBanc GF	09/30/2021	03/30/2023	09/30/2026	09/30/2026	3,000,000.00	3,000,000.00	2,640,924.00	4.682%
FEDERAL HOME LOAN BANKS UnionBanc GF	04/29/2022	04/29/2024	04/29/2027	04/29/2027	3,000,000.00	3,000,000.00	2,831,382.00	4.565%
FEDERAL HOME LOAN BANKS UnionBanc GF	06/23/2022	03/15/2023	06/23/2026	06/23/2026	3,000,000.00	3,000,000.00	2,910,762.00	5.195%
FEDERAL HOME LOAN BANKS UnionBanc GF	02/28/2023	02/28/2025	02/28/2028	02/28/2028	3,000,000.00	2,999,250.00	2,959,740.00	5.309%
FEDERAL HOME LOAN BANKS Piper Sandler	01/28/2021	03/15/2023	03/28/2024	03/28/2024	3,000,000.00	3,000,000.00	2,844,129.00	5.267%
FEDERAL HOME LOAN BANKS Piper Sandler	02/26/2021	05/26/2023	11/26/2024	11/26/2024	3,000,000.00	3,000,000.00	2,764,482.00	5.059%
FEDERAL HOME LOAN BANKS Piper Sandler	02/17/2021	05/17/2023	02/17/2026	02/17/2026	3,000,000.00	3,000,000.00	2,656,173.00	4.813%
FEDERAL HOME LOAN BANKS Piper Sandler	04/22/2021	04/29/2023	04/29/2024	04/29/2024	3,000,000.00	3,000,000.00	2,836,095.00	5.252%
FEDERAL HOME LOAN BANKS Piper Sandler	09/30/2021	03/30/2023	09/30/2026	09/30/2026	3,000,000.00	3,000,000.00	2,638,992.00	4.681%
FEDERAL HOME LOAN BANKS Piper Sandler	09/30/2021	03/30/2023	09/30/2026	09/30/2026	3,000,000.00	3,000,000.00	2,641,887.00	4.682%
FEDERAL HOME LOAN BANKS Piper Sandler	04/25/2022	07/25/2023	07/25/2025	07/25/2025	3,000,000.00	3,000,000.00	2,895,699.00	5.073%
FEDERAL HOME LOAN BANKS Stifel	02/25/2021	05/25/2023	11/25/2024	11/25/2024	3,000,000.00	3,000,000.00	2,767,272.00	5.060%
FEDERAL HOME LOAN BANKS Stifel	03/30/2021	03/30/2023	09/30/2024	09/30/2024	2,000,000.00	2,000,000.00	1,860,272.00	5.145%
FEDERAL HOME LOAN BANKS Stifel	06/28/2021	03/28/2023	02/28/2024	02/28/2024	3,000,000.00	3,000,000.00	2,855,118.00	5.271%
FEDERAL HOME LOAN MORTGAGE CORP Alamo Capital	09/30/2020	03/30/2023	09/30/2025	09/30/2025	3,000,000.00	3,000,000.00	2,675,193.00	4.904%
FEDERAL HOME LOAN MORTGAGE CORP Alamo Capital	05/12/2022	05/12/2023	11/12/2024	11/12/2024	3,000,000.00	3,000,000.00	2,898,780.00	5.088%
FEDERAL HOME LOAN MORTGAGE CORP UnionBanc GF	08/20/2020	08/20/2023	08/20/2025	08/20/2025	3,000,000.00	3,000,000.00	2,702,076.00	4.932%
FEDERAL HOME LOAN MORTGAGE CORP Piper Sandler	06/25/2020	06/25/2023	06/25/2025	06/25/2025	3,000,000.00	3,000,000.00	2,720,817.00	4.988%
FEDERAL HOME LOAN MORTGAGE CORP Piper Sandler	08/26/2020	05/26/2023	08/26/2024	08/26/2024	3,000,000.00	3,000,000.00	2,799,789.00	5.199%
FEDERAL HOME LOAN MORTGAGE CORP Stifel	10/28/2020	04/28/2023	10/28/2024	10/28/2024	3,000,000.00	3,000,000.00	2,778,441.00	5.087%
FEDERAL HOME LOAN MORTGAGE CORP Stifel	11/30/2020	---	05/30/2024	05/30/2024	3,000,000.00	3,000,000.00	2,826,087.00	5.188%
FEDERAL HOME LOAN MORTGAGE CORP Stifel	05/26/2022	05/26/2023	05/26/2027	05/26/2027	3,000,000.00	3,000,000.00	2,904,351.00	5.287%
FEDERAL NATIONAL MORTGAGE ASSOCIATION Alamo Capital	08/25/2020	---	08/25/2025	08/25/2025	3,000,000.00	2,985,965.00	2,698,509.00	4.696%
FEDERAL NATIONAL MORTGAGE ASSOCIATION UnionBanc GF	07/15/2020	04/15/2023	07/15/2025	07/15/2025	3,000,000.00	3,000,000.00	2,718,966.00	4.950%
FEDERAL NATIONAL MORTGAGE ASSOCIATION UnionBanc GF	08/12/2020	05/12/2023	08/12/2025	08/12/2025	3,000,000.00	3,000,000.00	2,699,055.00	4.949%
FEDERAL NATIONAL MORTGAGE ASSOCIATION UnionBanc GF	12/16/2020	06/14/2023	06/14/2024	06/14/2024	3,000,000.00	3,001,500.00	2,819,676.00	5.238%
FEDERAL NATIONAL MORTGAGE ASSOCIATION Piper Sandler	12/14/2020	06/14/2023	06/14/2024	06/14/2024	3,000,000.00	3,000,000.00	2,819,676.00	5.238%

Monthly Investment Portfolio Report

As of 02/28/2023

AGG- General Fund (213428)

Dated: 03/23/2023

Description, Broker	Settle Date	Next Call Date	Effective Maturity	Final Maturity	PAR Value	Original Cost	Market Value	Yield to Maturity
---	---	---	06/29/2025	06/29/2025	130,190,000.00	130,118,605.60	120,325,044.75	5.002%

CORP

Description, Broker	Settle Date	Next Call Date	Effective Maturity	Final Maturity	PAR Value	Original Cost	Market Value	Yield to Maturity
3M CO Stifel	06/05/2020	03/15/2025	04/15/2025	04/15/2025	3,000,000.00	3,258,120.00	2,841,096.00	5.311%
APPLE INC Alamo Capital	09/16/2019	08/11/2024	09/11/2024	09/11/2024	1,000,000.00	990,552.00	952,158.00	5.076%
APPLE INC UnionBanc GF	01/27/2021	08/11/2024	09/11/2024	09/11/2024	3,000,000.00	3,150,000.00	2,856,474.00	5.076%
APPLE INC Stifel	09/24/2020	04/11/2025	05/11/2025	05/11/2025	2,000,000.00	2,055,740.00	1,845,966.00	4.853%
APPLE INC Stifel	03/26/2021	01/08/2026	02/08/2026	02/08/2026	1,000,000.00	986,200.00	887,288.00	4.854%
APPLE INC Stifel	06/21/2022	11/09/2026	02/09/2027	02/09/2027	3,000,000.00	2,953,920.00	2,858,835.00	4.669%
BANK OF NEW YORK MELLON CORP Alamo Capital	05/06/2020	03/24/2025	04/24/2025	04/24/2025	1,000,000.00	1,020,005.00	925,389.00	5.308%
BERKSHIRE HATHAWAY FINANCE CORP Stifel	02/24/2023	02/15/2027	03/15/2027	03/15/2027	3,000,000.00	2,778,750.00	2,771,694.00	4.372%
CATERPILLAR FINANCIAL SERVICES CORP Alamo Capital	12/17/2020	---	09/14/2023	09/14/2023	3,000,000.00	3,012,276.47	2,936,265.00	4.442%
CHEVRON CORP Stifel	07/08/2020	01/03/2024	03/03/2024	03/03/2024	3,000,000.00	3,239,700.00	2,930,913.00	5.257%
CITIBANK NA Stifel	06/24/2020	12/23/2023	01/23/2024	01/23/2024	3,000,000.00	3,297,000.00	2,956,614.00	5.307%
EXXON MOBIL CORP UnionBanc GF	11/22/2019	---	03/01/2023	03/01/2023	2,000,000.00	2,055,180.00	2,000,168.00	1.695%
EXXON MOBIL CORP UnionBanc GF	08/11/2022	12/01/2025	03/01/2026	03/01/2026	3,000,000.00	2,976,180.00	2,840,517.00	4.967%
EXXON MOBIL CORP Stifel	12/15/2022	12/01/2025	03/01/2026	03/01/2026	2,000,000.00	1,928,640.00	1,893,678.00	4.967%
JOHN DEERE CAPITAL CORP Alamo Capital	02/08/2021	---	01/15/2026	01/15/2026	3,000,000.00	3,000,000.00	2,655,426.00	5.033%
MICROSOFT CORP Stifel	12/20/2019	04/09/2023	05/01/2023	05/01/2023	2,000,000.00	2,034,620.00	1,990,984.00	4.935%
MICROSOFT CORP Stifel	02/10/2021	08/03/2025	11/03/2025	11/03/2025	3,000,000.00	3,337,530.00	2,874,672.00	4.803%
PROCTER & GAMBLE CO UnionBanc GF	02/24/2023	---	01/26/2028	01/26/2028	3,000,000.00	2,951,160.00	2,925,306.00	4.520%
TOYOTA MOTOR CREDIT CORP Alamo Capital	10/21/2019	---	10/07/2024	10/07/2024	1,500,000.00	1,499,994.00	1,427,275.50	5.179%
TOYOTA MOTOR CREDIT CORP Alamo Capital	07/18/2022	---	04/14/2025	04/14/2025	2,044,000.00	2,035,824.00	1,973,320.52	5.134%
WALMART INC Stifel	06/18/2020	10/15/2024	12/15/2024	12/15/2024	2,000,000.00	2,173,300.00	1,927,818.00	4.767%
---	---	---	05/15/2025	05/15/2025	49,544,000.00	50,734,691.46	47,271,857.02	4.781%

MMFUND

Description, Broker	Settle Date	Next Call Date	Effective Maturity	Final Maturity	PAR Value	Original Cost	Market Value	Yield to Maturity
LAIF Money Market Fund LAIF - GF	---	---	02/28/2023	02/28/2023	24,979,519.88	24,979,519.88	24,979,519.88	---
RBC BANK DEPOSIT PROGRAM Alamo Capital	02/13/2023	---	02/28/2023	02/28/2023	0.13	0.13	0.13	---

Monthly Investment Portfolio Report

As of 02/28/2023

AGG- General Fund (213428)

Dated: 03/23/2023

Description, Broker	Settle Date	Next Call Date	Effective Maturity	Final Maturity	PAR Value	Original Cost	Market Value	Yield to Maturity
---	---	---	02/28/2023	02/28/2023	24,979,520.01	24,979,520.01	24,979,520.01	---

AGCY DISC

Description, Broker	Settle Date	Next Call Date	Effective Maturity	Final Maturity	PAR Value	Original Cost	Market Value	Yield to Maturity
FEDERAL HOME LOAN BANKS Piper Sandler	11/17/2022	---	04/20/2023	04/20/2023	3,000,000.00	2,944,175.00	2,980,401.00	4.706%
FEDERAL HOME LOAN BANKS Piper Sandler	11/17/2022	---	05/15/2023	05/15/2023	3,000,000.00	2,934,366.67	2,970,087.00	4.837%
FEDERAL HOME LOAN BANKS Piper Sandler	11/17/2022	---	05/02/2023	05/02/2023	6,000,000.00	5,878,541.67	5,950,488.00	4.772%

T-BILL

Description, Broker	Settle Date	Next Call Date	Effective Maturity	Final Maturity	PAR Value	Original Cost	Market Value	Yield to Maturity
UNITED STATES TREASURY Piper Sandler	02/22/2023	---	08/17/2023	08/17/2023	3,000,000.00	2,929,600.00	2,931,836.67	4.992%
UNITED STATES TREASURY Piper Sandler	02/22/2023	---	08/17/2023	08/17/2023	3,000,000.00	2,929,600.00	2,931,836.67	4.992%

US GOV

Description, Broker	Settle Date	Next Call Date	Effective Maturity	Final Maturity	PAR Value	Original Cost	Market Value	Yield to Maturity
UNITED STATES TREASURY UnionBanc GF	05/27/2021	---	11/15/2023	11/15/2023	3,000,000.00	3,005,156.25	2,899,218.75	5.128%
UNITED STATES TREASURY UnionBanc GF	05/27/2021	---	11/15/2023	11/15/2023	3,000,000.00	3,005,156.25	2,899,218.75	5.128%

MUNI

Description, Broker	Settle Date	Next Call Date	Effective Maturity	Final Maturity	PAR Value	Original Cost	Market Value	Yield to Maturity
CALIFORNIA ST UNIV REV Alamo Capital	09/09/2022	---	11/01/2026	11/01/2026	1,000,000.00	909,590.00	877,230.00	4.823%
EL CAJON CALIF UnionBanc GF	02/08/2021	---	04/01/2023	04/01/2023	400,000.00	402,124.00	398,828.00	3.846%
EL CAJON CALIF UnionBanc GF	02/08/2021	---	04/01/2024	04/01/2024	300,000.00	302,583.00	285,576.00	5.525%
MONTEREY PK CALIF PENSION OBLIG UnionBanc GF	02/16/2021	---	06/01/2025	06/01/2025	400,000.00	403,156.00	362,208.00	5.385%
MONTEREY PK CALIF PENSION OBLIG UnionBanc GF	02/16/2021	---	06/01/2024	06/01/2024	550,000.00	552,255.00	517,753.50	5.512%
MONTEREY PK CALIF PENSION OBLIG UnionBanc GF	02/16/2021	---	06/01/2023	06/01/2023	450,000.00	450,643.50	444,348.00	5.287%
---	---	---	12/11/2024	12/11/2024	3,100,000.00	3,020,351.50	2,885,943.50	5.023%

CD

Description, Broker	Settle Date	Next Call Date	Effective Maturity	Final Maturity	PAR Value	Original Cost	Market Value	Yield to Maturity
Ally Bank Piper Sandler	06/02/2022	---	06/02/2026	06/02/2026	245,000.00	245,000.00	235,187.26	4.430%
Capital One Bank (USA), National Association Piper Sandler	06/08/2022	---	06/08/2027	06/08/2027	245,000.00	245,000.00	234,161.93	4.291%

Monthly Investment Portfolio Report

As of 02/28/2023

AGG- General Fund (213428)

Dated: 03/23/2023

Description, Broker	Settle Date	Next Call Date	Effective Maturity	Final Maturity	PAR Value	Original Cost	Market Value	Yield to Maturity
Capital One, National Association Piper Sandler	06/08/2022	---	06/08/2027	06/08/2027	245,000.00	245,000.00	234,161.93	4.291%
Discover Bank Piper Sandler	06/07/2022	---	06/07/2027	06/07/2027	245,000.00	245,000.00	234,158.99	4.292%
JPMorgan Chase Bank, National Association Alamo Capital	02/08/2021	04/16/2023	01/16/2026	01/16/2026	250,000.00	250,000.00	221,953.25	4.786%
Morgan Stanley Bank, N.A. Piper Sandler	06/09/2022	---	06/09/2027	06/09/2027	245,000.00	245,000.00	233,207.66	4.291%
Morgan Stanley Private Bank, National Association Piper Sandler	06/09/2022	---	06/09/2027	06/09/2027	245,000.00	245,000.00	233,207.66	4.291%
---	---	---	02/05/2027	02/05/2027	1,720,000.00	1,720,000.00	1,626,038.70	4.378%

Summary

Description, Broker	Settle Date	Next Call Date	Effective Maturity	Final Maturity	PAR Value	Original Cost	Market Value	Yield to Maturity
---	---	---	01/29/2025	01/29/2025	221,533,520.01	222,386,466.49	208,869,947.40	4.934%

* Grouped by: Security Type. * Groups Sorted by: Ending Market Value + Accrued. * Filtered By: Description ≠ "Receivable". * Weighted by: Ending Market Value + Accrued.

DESERT WATER AGENCY
STATEMENT OF CASH RECEIPTS AND EXPENDITURES

WASTEWATER ACCOUNT

FEBRUARY 2023

INVESTED
RESERVE FUNDS
\$1,565,084.01

BALANCE	FEBRUARY 1, 2023	\$1,522.67		
ACCOUNTS RECEIVABLE - OTHER		\$0.00		
CUSTOMER DEPOSITS - CONSTRUCTION		0.00		
INTEREST EARNED - INVESTED FUNDS		0.00		
WASTEWATER REVENUE		0.00		
SEWER CAPACITY CHARGES		0.00		
MISCELLANEOUS		0.00		
TOTAL RECEIPTS		\$0.00		
PAYMENTS				
CHECKS UNDER \$10,000.00		\$396.23		
CHECKS OVER \$10,000.00 - SCH. #1		0.00		
CANCELLED CHECKS AND FEES		0.00		
TOTAL PAYMENTS		<u>\$396.23</u>		
NET INCOME		(\$396.23)		
INVESTED RESERVE FUNDS				
FUNDS MATURED		\$0.00		
FUNDS INVESTED – SCH. #2		0.00		
NET TRANSFER			\$0.00	\$0.00
BALANCE	FEBRUARY 28, 2023		\$1,126.44	\$1,565,084.01

DESERT WATER AGENCY
Wastewater Fund
Schedule #1 - Checks Over \$10,000

DESERT WATER



February 2023

Check #	Name	Description	Amount
NONE			
Total			\$ -

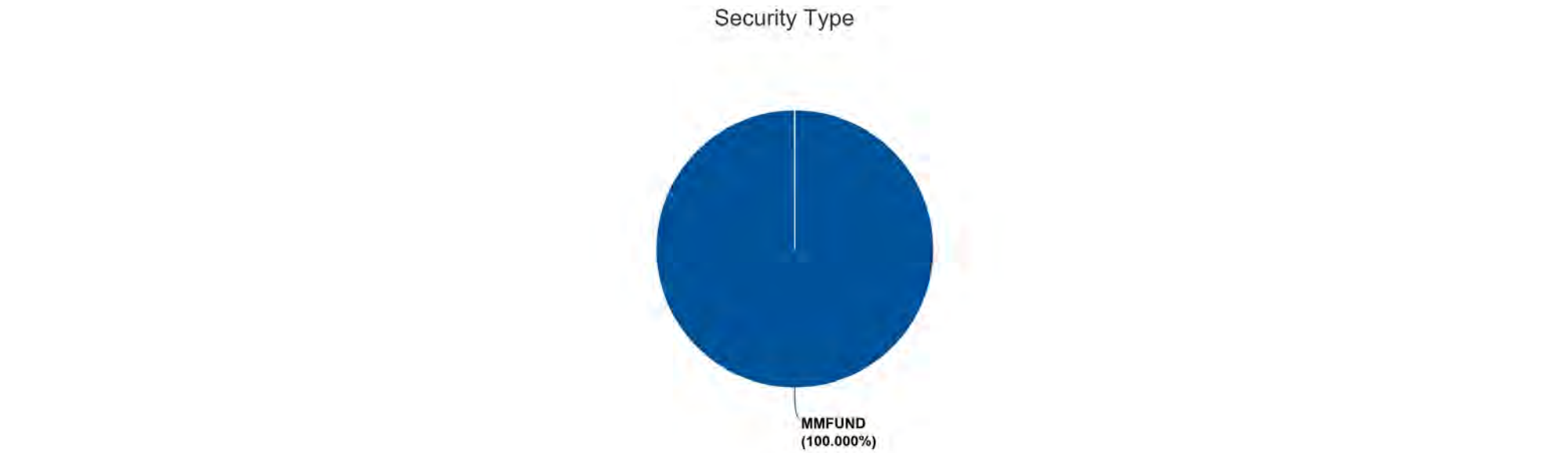


Chart calculated by: PAR Value

MMFUND

Description, Broker	Settle Date	Next Call Date	Effective Maturity	Final Maturity	PAR Value	Original Cost	Market Value	Yield to Maturity
LAIF Money Market Fund LAIF - WW	---	---	02/28/2023	02/28/2023	1,565,084.01	1,565,084.01	1,565,084.01	---
LAIF Money Market Fund LAIF - WW	---	---	02/28/2023	02/28/2023	1,565,084.01	1,565,084.01	1,565,084.01	---

* Grouped by: Security Type. * Groups Sorted by: Ending Market Value + Accrued. * Filtered By: Description ≠ "Receivable". * Weighted by: Ending Market Value + Accrued.

DESERT WATER AGENCY

Investment Portfolio Reporting Requirements

*as required by DWA Resolution 1273, Section VII
& California Government Code Section 53646*

as of

February 28, 2023

Statement of Compliance

The Desert Water Agency portfolio is in compliance with the Agency's investment policy and guidelines for investment of Agency funds as outlined in DWA Resolution 1273.

Statement of Agency's Ability to Meet Six-Month Expenditure Requirements

Desert Water Agency has the ability to meet its expenditure requirements for the next six months.

Description of Investments

Agency Bonds

Securities issued by a government-sponsored enterprise or by a federal government department other than the U.S. Treasury.

Bank Deposits

Agency funds on deposit in the General Fund, Operating Fund and Wastewater Fund active checking accounts for use in meeting the daily cash flow requirements of the Agency.

Certificate of Deposits (CD)

Interest bearing time deposit. FDIC insured up to \$250,000 per depositor, per FDIC-insured bank.

Corporate Notes

Debt securities issued by a for-profit company.

Money Market Funds

High quality, short-term debt instruments, cash and cash equivalents. Utilized for overnight holding of investment proceeds prior to reinvesting or transferring to Agency checking accounts.

Municipal Bonds

Fixed income securities issued by states, cities, counties, special districts and other governmental entities.

Treasury Notes

Fixed income securities issued by the federal government with maturities between two and ten years backed by the full faith and credit of the United States government.

Funds Managed by Contracted Parties - LAIF

The Desert Water Agency has contracted with the California Local Agency Investment Fund (LAIF) for investment of Agency funds. LAIF is a voluntary program created by Section 16429.1 et seq. of the California Government Code. LAIF is an investment alternative for California's local governments and special districts. This program offers local agencies the opportunity to participate in a major portfolio, which invests hundreds of millions of dollars, using the investment expertise of the state Treasurer's Office professional investment staff at no additional cost to the taxpayer or ratepayer. All Agency funds invested with LAIF are available for withdrawal upon demand and may not be altered, impaired or denied in any way (California Government Code Section 16429.4).

Market Value Source

Current market values are provided by Clearwater Analytics for all investment types other than LAIF. LAIF market values are recorded at PAR value.

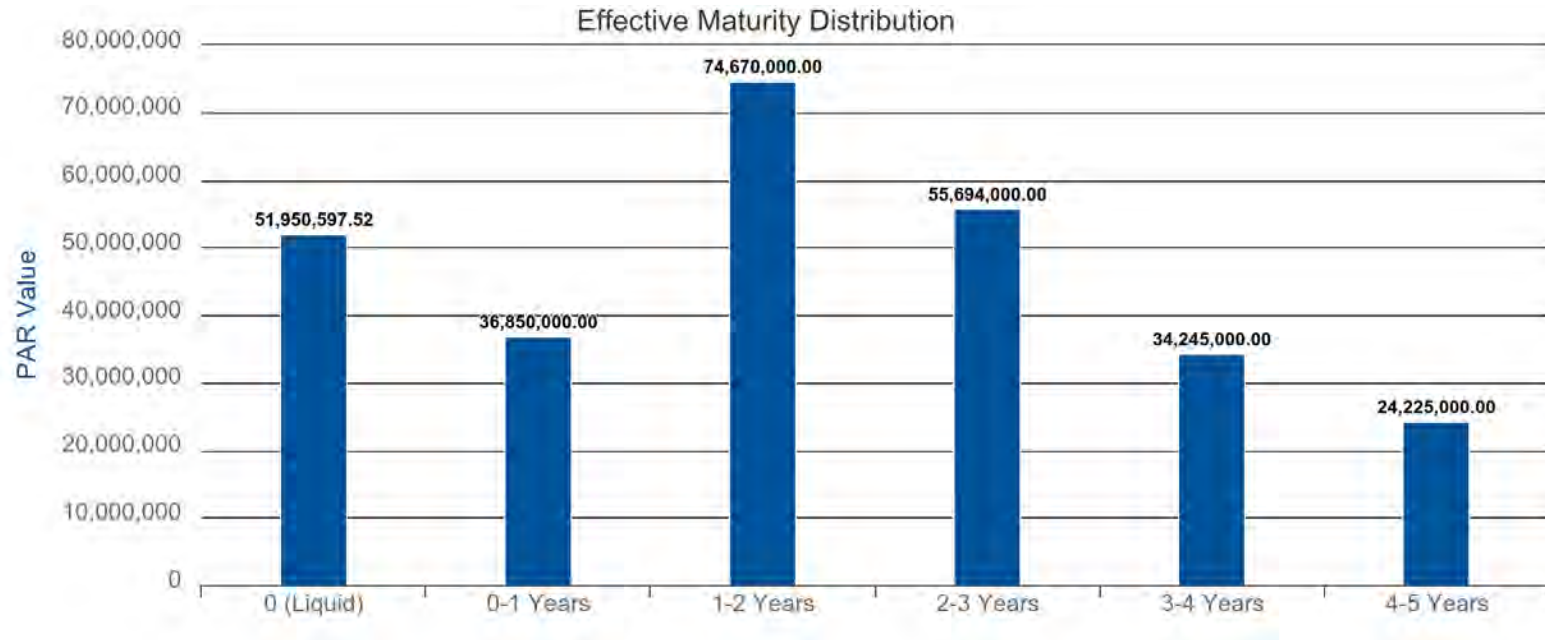
Esther Saenz
Finance Director
Desert Water Agency

Effective Maturity Distribution Summary

As of 02/28/2023

AGG-ALL (219610)

Dated: 03/23/2023



0 (Liquid)

DWA Fund	Account	Identifier	Description	Security Type	PAR Value	Ending Effective Maturity	Final Maturity
General Fund	---	---	---	MMFUND	24,979,520.01	02/28/2023	02/28/2023
Operating Fund	LAIF - OP	LAIFMMF	LAIF Money Market Fund	MMFUND	25,405,993.50	02/28/2023	02/28/2023
Wastewater Fund	LAIF - WW	LAIFMMF	LAIF Money Market Fund	MMFUND	1,565,084.01	02/28/2023	02/28/2023
---	---	---	---	MMFUND	51,950,597.52	02/28/2023	02/28/2023

0-1 Years

DWA Fund	Account	Identifier	Description	Security Type	PAR Value	Ending Effective Maturity	Final Maturity
General Fund	---	---	---	---	28,850,000.00	09/02/2023	09/02/2023
Operating Fund	UnionBanc OP	---	FEDERAL HOME LOAN BANKS	AGCY DISC	8,000,000.00	04/29/2023	04/29/2023
---	---	---	---	---	36,850,000.00	08/05/2023	08/05/2023

1-2 Years

DWA Fund	Account	Identifier	Description	Security Type	PAR Value	Ending Effective Maturity	Final Maturity
General Fund	---	---	---	---	68,540,000.00	08/19/2024	08/19/2024
Operating Fund	UnionBanc OP	---	---	---	6,130,000.00	09/11/2024	09/11/2024
---	---	---	---	---	74,670,000.00	08/21/2024	08/21/2024

Effective Maturity Distribution Summary

As of 02/28/2023

AGG-ALL (219610)

Dated: 03/23/2023

2-3 Years

DWA Fund	Account	Identifier	Description	Security Type	PAR Value	Ending Effective Maturity	Final Maturity
General Fund	---	---	---	---	49,694,000.00	09/03/2025	09/03/2025
Operating Fund	UnionBanc OP	---	---	AGCY BOND	6,000,000.00	06/22/2025	06/22/2025
---	---	---	---	---	55,694,000.00	08/26/2025	08/26/2025

3-4 Years

DWA Fund	Account	Identifier	Description	Security Type	PAR Value	Ending Effective Maturity	Final Maturity
General Fund	---	---	---	---	33,245,000.00	09/26/2026	09/26/2026
Operating Fund	UnionBanc OP	3130AP6M2	FEDERAL HOME LOAN BANKS	AGCY BOND	1,000,000.00	09/30/2026	09/30/2026
---	---	---	---	---	34,245,000.00	09/27/2026	09/27/2026

4-5 Years

DWA Fund	Account	Identifier	Description	Security Type	PAR Value	Ending Effective Maturity	Final Maturity
General Fund	---	---	---	---	16,225,000.00	08/16/2027	08/16/2027
Operating Fund	UnionBanc OP	---	---	---	8,000,000.00	05/05/2027	05/05/2027
---	---	---	---	---	24,225,000.00	07/13/2027	07/13/2027

Summary

Account	Identifier	Description	Security Type	PAR Value	Ending Effective Maturity	Final Maturity
---	---	---	---	277,634,597.52	11/23/2024	11/23/2024

* Grouped by: Effective Maturity Distribution -> DWA Fund. * Groups Sorted by: Effective Maturity Distribution -> DWA Fund. * Filtered By: Security Type not in "CASH". * Weighted by: Ending Market Value + Accrued.

DESERT WATER AGENCY
Monthly Investment Portfolio Report

Abbreviations & Definitions

Investment Type Abbreviations	
AGCY BOND	US Agency Obligation ¹
AGCY DISC	Discounted US Agency Obligation ^{1 & 8}
CORP	Medium Term Notes (Corporate Notes) ²
MMFUND	Local Agency Investment Fund (LAIF) ³ & Cash Funds in Transit ⁴
MUNI	Municipal Bonds/Local Agency Bonds ⁵
CD	Negotiable Certificates of Deposit ⁶
US GOV	U.S. Treasury notes, bills bonds or other certificates of indebtedness ⁷

Definitions	
Settle Date	The date of original purchase
Next Call Date	The next eligible date for the issuer to refund or call the bond or note
Effective Maturity	The most likely date that the bond will be called based on current market conditions
Final Maturity	The date the bond matures, DWA receives the full PAR value plus the final interest payment
PAR Value	The principal amount DWA will receive when a bond is either called or matures
Original Cost	The original cost to purchase the bond (includes premium/discount)
Market Value	The current value of the bond at current market rates
Yield to Maturity	The total anticipated return on a bond if the bond is held to maturity

NOTES:

¹ DWA Investment Policy, Resolution 1273, Schedule 1, Item 2

² DWA Investment Policy, Resolution 1273, Schedule 1, Item 14

³ DWA Investment Policy, Resolution 1273, Schedule 1, Item 9

⁴ Cash funds in transit are a result of maturities/calls/coupon payments that are held in the Agency's money market account with the broker/custodian until transferred to the Agency's bank. DWA Investment Policy, Resolution 1273, Schedule 1, Item 15

⁵ DWA Investment Policy, Resolution 1273, Schedule 1, Item 3

⁶ DWA Investment Policy, Resolution 1273, Schedule 1, Item 10

⁷ DWA Investment Policy, Resolution 1273, Schedule 1, Item 1

⁸ US Agency Obligation that does not bear an interest rate, but purchased at a discount, held to maturity and redeemed at PAR.

DESERT WATER AGENCY - OPERATING FUND COMPARATIVE EARNINGS STATEMENT								
MONTH 22-23 FEBRUARY	/-----THIS MONTH-----/ THIS YEAR	LAST YEAR	BUDGET	/-----FISCAL YEAR TO DATE-----/ THIS YEAR	LAST YEAR	BUDGET	/--VARIANCE--/ YTD	PCT
OPERATING REVENUES								
WATER SALES	2,403,588.83	2,727,235.82	2,598,900.00	26,873,054.23	25,671,092.19	28,150,000.00	1,276,945.77-	5-
RECLAMATION SALES	34,214.19	57,670.06	38,500.00	634,635.14	830,889.11	619,900.00	14,735.14	2
POWER SALES	.00	17,776.87	9,250.00	32,741.53	52,702.28	74,000.00	41,258.47-	56-
OTHER OPER REVENUE	358,030.49	503,285.73	229,208.00	1,683,538.98	1,860,700.16	1,800,264.00	116,725.02-	6-
TOTAL OPER REVENUES	2,795,833.51	3,305,968.48	2,875,858.00	29,223,969.88	28,415,383.74	30,644,164.00	1,420,194.12-	5-
OPERATING EXPENSES								
SOURCE OF SUPPLY EXP	122,713.75	22,174.63	100,060.00	3,437,872.42	3,443,863.88	3,935,680.00	497,807.58-	13-
PUMPING EXPENSE	302,044.67	452,592.93	299,100.00	3,506,468.64	2,700,177.23	3,227,800.00	278,668.64	9
REGULATORY WATER TREAT	92,785.11	70,565.22	72,810.00	668,859.32	537,338.58	582,480.00	86,379.32	15
TRANS & DIST EXPENSE	288,354.14	202,051.17	359,770.00	2,243,136.14	1,854,554.04	2,878,160.00	635,023.86-	22-
CUSTOMER ACT EXPENSE	97,895.65	87,852.62	105,760.00	752,983.23	626,711.26	847,820.00	94,836.77-	11-
ADMIN & GEN EXPENSE	843,058.45	785,726.88	1,290,647.00	9,506,505.52	8,363,999.12	10,274,776.00	768,270.48-	7-
REGULATORY EXPENSE	4,298.83	9,227.92	35,530.00	234,924.77	188,494.40	284,240.00	49,315.23-	17-
SNOW CREEK HYDRO EXP	9,485.37	1,952.65	5,000.00	30,719.06	25,566.07	40,000.00	9,280.94-	23-
RECLAMATION PLNT EXP	63,155.55	68,512.48	114,080.00	682,681.04	548,347.94	912,640.00	229,958.96-	25-
SUB-TOTAL	1,823,791.52	1,700,656.50	2,382,757.00	21,064,150.14	18,289,052.52	22,983,596.00	1,919,445.86-	8-
OTHER OPER EXPENSES								
DEPRECIATION	514,781.54	508,985.09	553,900.00	4,173,296.83	4,128,439.59	4,431,200.00	257,903.17-	6-
SERVICES RENDERED	7,048.66	19,930.91	14,200.00	98,213.77	106,223.00	113,600.00	15,386.23-	14-
DIR & INDIR CST FOR WO	199,194.45-	193,544.64-	280,580.00-	1,930,490.58-	1,802,530.76-	2,244,640.00-	314,149.42	14-
TOTAL OPER EXPENSES	2,146,427.27	2,036,027.86	2,670,277.00	23,405,170.16	20,721,184.35	25,283,756.00	1,878,585.84-	7-
NET INCOME FROM OPERATIONS	649,406.24	1,269,940.62	205,581.00	5,818,799.72	7,694,199.39	5,360,408.00	458,391.72	9
NON-OPERATING INCOME (NET)								
RENTS	4,007.58	14,803.70	15,775.00	43,628.35	116,624.29	126,200.00	82,571.65-	65-
INTEREST REVENUES	82,437.64	11,853.87	48,600.00	619,577.18	90,154.93	388,800.00	230,777.18	59
OTHER FUNDS	3,797.79	.00	.00	7.50-	.00	.00	7.50-	0
OTHER REVENUES	420.00	420.00	.00	140,769.28	378,770.01	.00	140,769.28	0
GAINS ON RETIREMENT	.00	.00	6,310.00	.00	.00	37,860.00	37,860.00-	100-
DISCOUNTS	20.24	37.42	33.00	1,410.54	270.13	264.00	1,146.54	434
PR. YEAR EXPENSES	.00	.00	.00	7,228.01	1,229.84-	.00	7,228.01	0
OTHER EXPENSES	16,517.50-	.00	4,630.00-	16,517.50-	161.62-	37,040.00-	20,522.50	55-
LOSS ON RETIREMENTS	.00	19,054.74-	9,000.00-	189.54-	54,324.51-	72,000.00-	71,810.46	100-
TOTAL NON-OPER INCOME	74,165.75	8,060.25	57,088.00	795,898.82	558,858.26	444,084.00	351,814.82	79
TOTAL NET INCOME	723,571.99	1,278,000.87	262,669.00	6,614,698.54	8,253,057.65	5,804,492.00	810,206.54	14

GENERAL MANAGER'S REPORT April 4, 2023

Senate Bill No. 57 was Recently Gutted and Amended

The bill would require an electrical corporation, local publicly owned electric utility, gas corporation, local publicly owned gas utility, water corporation, or local agency that owns a public water system to postpone the disconnection of a customer's residential service for nonpayment of a delinquent account when the temperature will be 32 degrees fahrenheit or cooler, or 95 degrees fahrenheit or warmer, within the utility's service area during the 24 hours after that service disconnection would occur.

The bill would require each of those utilities to notify its residential ratepayers of that requirement and to create an online reporting system available through its internet website, if it has one, that enables its residential ratepayers to report when their utility service has been disconnected in violation of that requirement.

The bill would authorize the State Water Resources Control Board to enforce the requirement that a water corporation and local agency that owns a public water system postpone a disconnection of a customer's residential service. The state board may assess a penalty in an amount not to exceed one thousand dollars (\$1,000) per day for each day that a violation occurred, and for each day that a violation continues to occur.

SB 57 would impose a state-mandated local program but does not appropriate funds to reimburse public water systems for the costs to implement the program because systems have the authority to levy service charges, fees, or assessments sufficient to pay for the program or level of service mandated by this act.

Employing our Legislative and Regulatory Policy Platform I have informed our State Lobbyist, Bob Reeb that the Agency is taking an "OPPOSE" position on this legislation as it would be costly and burdensome and nearly impossible to comply with the requirement. This position is in alignment with our Legislative and Regulatory Policy Platform, Directives #1 & #3.

DWR Announces Increase in Allocations from 35% to 75%

SACRAMENTO, Calif. – The Department of Water Resources (DWR) on March 24, 2023 announced a significant boost in the forecasted State Water Project (SWP) deliveries this year due to continued winter storms in March and a massive Sierra snowpack. DWR now expects to deliver 75 percent of requested water supplies, up from 35 percent announced in February. The increase translates to an additional 1.7 million acre-feet of water for the 29 public water agencies that serve 27 million Californians. The increase adds 22,300 acre-feet to our SWP delivery this year for a grand total of 41,812.5 acre-feet.

Congressman Calvert visits Desert Water Agency

On March 20th, Congressman Calvert and two members of his staff came to meet with Desert Water Agency representatives and tour Agency facilities.

The Legislative Committee helped welcome the Congressman and discussed high-level issues ranging from the Salton Sea to Sites Reservoir. The Congressman shared his deep knowledge of water history with water issues.

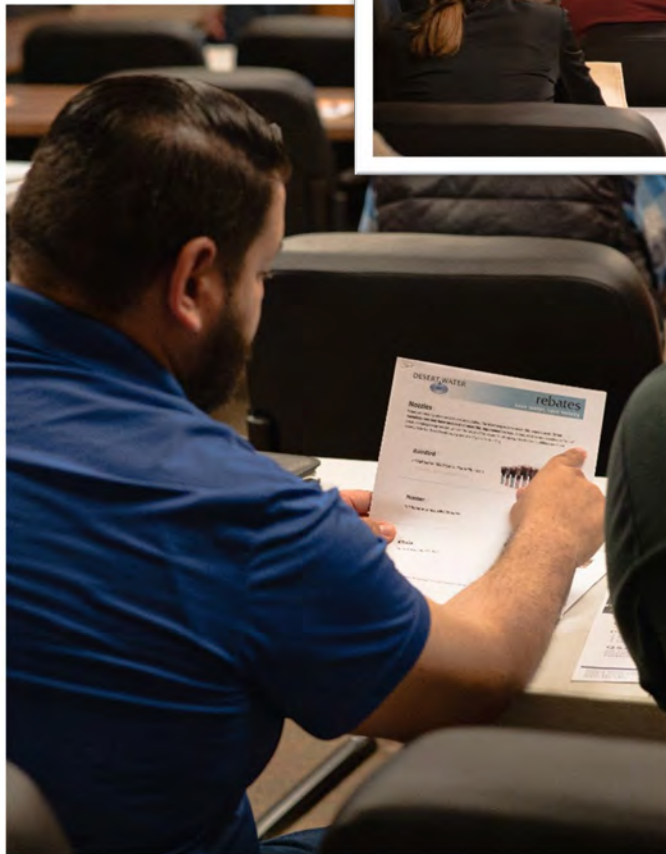
DWA's Federal Lobbyist Kris Polly of Water Strategies joined the tour and assisted the Agency in follow up to thank the Congressman's office for dedicating considerable time to meet with and tour the Agency.

The Agency looks forward to a productive relationship with its new Congressional representative for Palm Springs and some unincorporated areas in DWA's jurisdiction. DWA is actively pursuing a meeting and tour with Congressman Ruiz who continues to represent the Agency via his district's coverage of Cathedral City, Desert Hot Springs, and other unincorporated areas within DWA's boundaries.



Landscaper Workshop on Grass Removal Program – March 23

DWA held its Landscaper Workshop on Thursday, March 23rd in the Boardroom. The hour Lunch and Learn Workshop provided information to landscape contractors on changes to the grass removal incentive program with specific focus on the changes for low-income customers. Changes to the low-income program includes allowing incentive checks to go directly to the landscape contractor and an expedited check release process. DWA also presented on the sprinkler nozzle and smart controller incentive programs. The City of Palm Springs' Office of Sustainability presented on their mulch and composting programs. There were 21 landscape contractors in attendance.



DWA Works with Partners to Inform Community on Water Quality Planning Efforts

DWA is working with other local water and wastewater agencies (collectively, the Stakeholder Committee) to update the Coachella Valley Salt and Nutrient Management Plan. On Wednesday March 22nd, the CV-SNMP Stakeholder Committee hosted its first public workshop.

The 90-minute hybrid workshop welcomed approximately 40 participants including those representing Regional Water Resources Control Board, agriculture, golf, and tribes. The meeting focused on what the plan update will include, the project timeline and milestones and opportunities to provide feedback.

This workshop is the first of several planned throughout the plan update process, which the CV-SNMP Stakeholder Committee aims to complete in 2026.

DWA Surveying Community Members

The week of March 20, DWA began a survey of residents. The survey was available in English and Spanish as well as online and by phone. One version of the survey went to retail water customers and a second version of the survey went to residents within DWA's boundaries that do not receive retail water service from DWA.

DWA partnered with Probolsky Research to conduct the survey:

- to better understand awareness and approval of DWA
- to inform decisions around branding, organizational development and more
- for feedback on programs
- because public input is incredibly important

The Conservation & Public Affairs Committee discussed the survey at its meeting in February and plans to convene to review outcomes.

Probolsky Research will present the survey results to the full Board of Directors at its April 18th meeting.

ONE-PS Picnic - March 25

DWA participated in the annual ONE-PS Picnic event at Ruth Hardy Park on Saturday, March 25th. The event is organized by Organized Neighborhoods of Palm Springs (ONE-PS) and was attended by over 1,000 people. DWA had a booth at the event with an interactive game and provided water to attendees. Board President Ortega was on hand to answer questions and promote DWA programs.



Chlorine Gas Scrubber Replacement at Recycled Water Plant

At the recycled water plant, chlorine gas is used to disinfect the recycled water after tertiary treatment. If a chlorine release were to occur, the existing chlorine storage building and chlorine gas scrubber are designed to create a vacuum, sending the chlorine gas to the scrubber to be neutralized. The chlorine gas scrubber is a critical safety component for storage and handling of gaseous chlorine.

The original scrubber had been in service since the early 2000's and reached the end of its useful life. It used liquid caustic soda to neutralize the chlorine, which is considered a hazardous material and required considerable maintenance to ensure the caustic soda concentrations were within manufactures specifications. In addition, the caustic soda would react with elements in the air (carbon dioxide) during routine testing, which would diminish the treatment capability of the scrubber requiring Operations personnel to remove and replace as needed.

The 2018-2019 budget included \$400,000 for a new scrubber. After several delays due to design modifications, the new scrubber was installed last month for a total cost of \$300,588. The new scrubber uses Purafil Chlorosorb dry media that absorbs the chlorine gas. The media is stable and does not react with carbon dioxide in the air. If a release were to occur, the spent Purafil media is not considered a hazardous material and can be sent to a traditional landfill. Also, the life expectancy of the media is much longer than caustic soda and the manufacturer has examples of installations going back over 20 years where the dry media is still active and has not needed to be changed.

The new Purafil scrubber contains about 18,000 lbs. of media and is designed to capture between 2,700 - 3,200 lbs. of chlorine gas. The Purafil scrubber needs minimal maintenance, with monthly testing of the blower (that creates the vacuum). Also, the manufacturer recommends having the dry media sent to a lab periodically for testing.



Photo 1: The original Caustic Soda Liquid Scrubber.

Chlorine Gas Scrubber Replacement

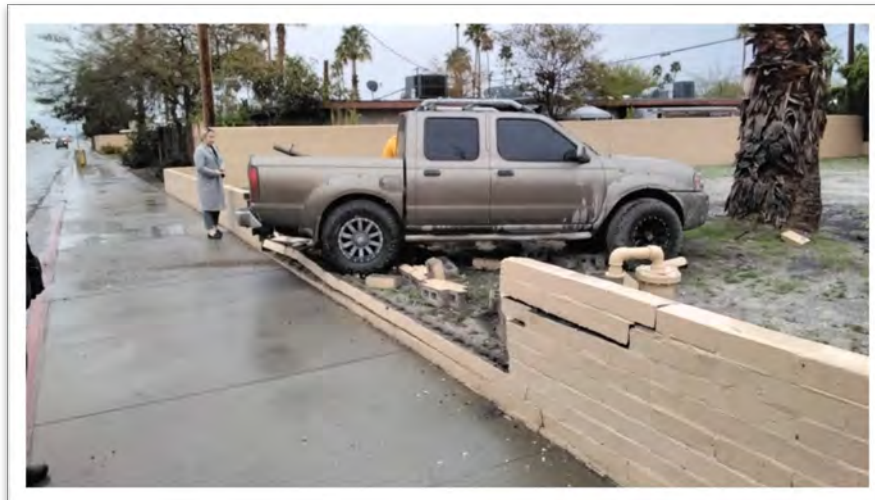
(Cont.)

Photo 2: New Purafil Dry Media Scrubber.



Well 3 – Wall Damage

On March 21st, a driver was traveling on Vista Chino and lost control of his Nissan Frontier truck and crashed through the North wall of Well site #3. Facilities & Safety staff was dispatched to the location, met with police on-site, and was able to document and photograph the details of the crash. The police report will be ready in about 10 days from the day of the crash. All the photos, proof of insurance information, and proof of driver's license have been sent to the driver's insurance company and the claim has been filed by DWA's Purchasing Agent. The insurance company is requiring 2 quotes to repair the wall. We currently have one quote from DNR Select Construction for \$11,537 and are currently waiting for the other quote.



Facility Tours - March 30

DWA held its public tours of operations facilities on Thursday, March 30th. The morning tour included 52 attendees and 51 attended the afternoon tour. Employees new to DWA also had the opportunity to join the tour and learn more about the water system. The three-hour tour included visits to:

1. Well 39 Site
2. Palisades Reservoir
3. Reclamation Facility and Lab
4. Solar Panel Field

DWA will offer tours again in the fall of 2023. DWA staff maintains an interest list from customers that submit through the online form at <https://dwa.org/connect-with-us/tour/>,

SYSTEM LEAK DATA					
(PERIOD BEGINNING MAR 14, 2023 THRU MAR 27, 2023)					
STREET NAME	NUMBER OF LEAKS	PIPE DIAMETER (INCHES)	YEAR INSTALLED	PIPE MATERIAL	PIPE CONSTRUCTION
VISTA CHINO (4-4-10-NE)	18	20	1949	STEEL	BARE/UNLINED
VISTA CHINO (4-4-11-NW)	7	20	1949	STEEL	BARE/UNLINED
CALLE ROCA, CALLE CHIA	6	4	1954	STEEL	BARE/UNLINED
VIA VAQUERO RD	5	4	1958	STEEL	BARE/UNLINED
LOUELLA RD	4	6	1955	STEEL	BARE/UNLINED
INDIAN CANYON DR	2	8	1960	A.C.	N/A
WAVERLY DR	1	10	1958	STEEL	BARE/UNLINED
ANDREAS RD	1	6	1958	STEEL	BARE/UNLINED
DAVIS WY	1	4	1957	STEEL	BARE/UNLINED
AVENIDA CABALLEROS	1	14	1953	STEEL	BARE/UNLINED
ACACIA RD W	1	6	1955	STEEL	BARE/UNLINED
CAMINO SAN SIMEON	1	4	1946	STEEL	BARE/UNLINED
MCMANUS DR	1	4	1946	STEEL	BARE/UNLINED
PATENCIO RD	1	4	1954	STEEL	BARE/UNLINED
CALLE SANTA ROSA	1	4	1953	STEEL	BARE/UNLINED
PALM CANYON DR S	1	10	1938	STEEL	BARE/UNLINED
TOTAL LEAKS IN SYSTEM:		52			

Streets highlighted in green are included as part of the
2020/2021 Replacement Pipeline Project

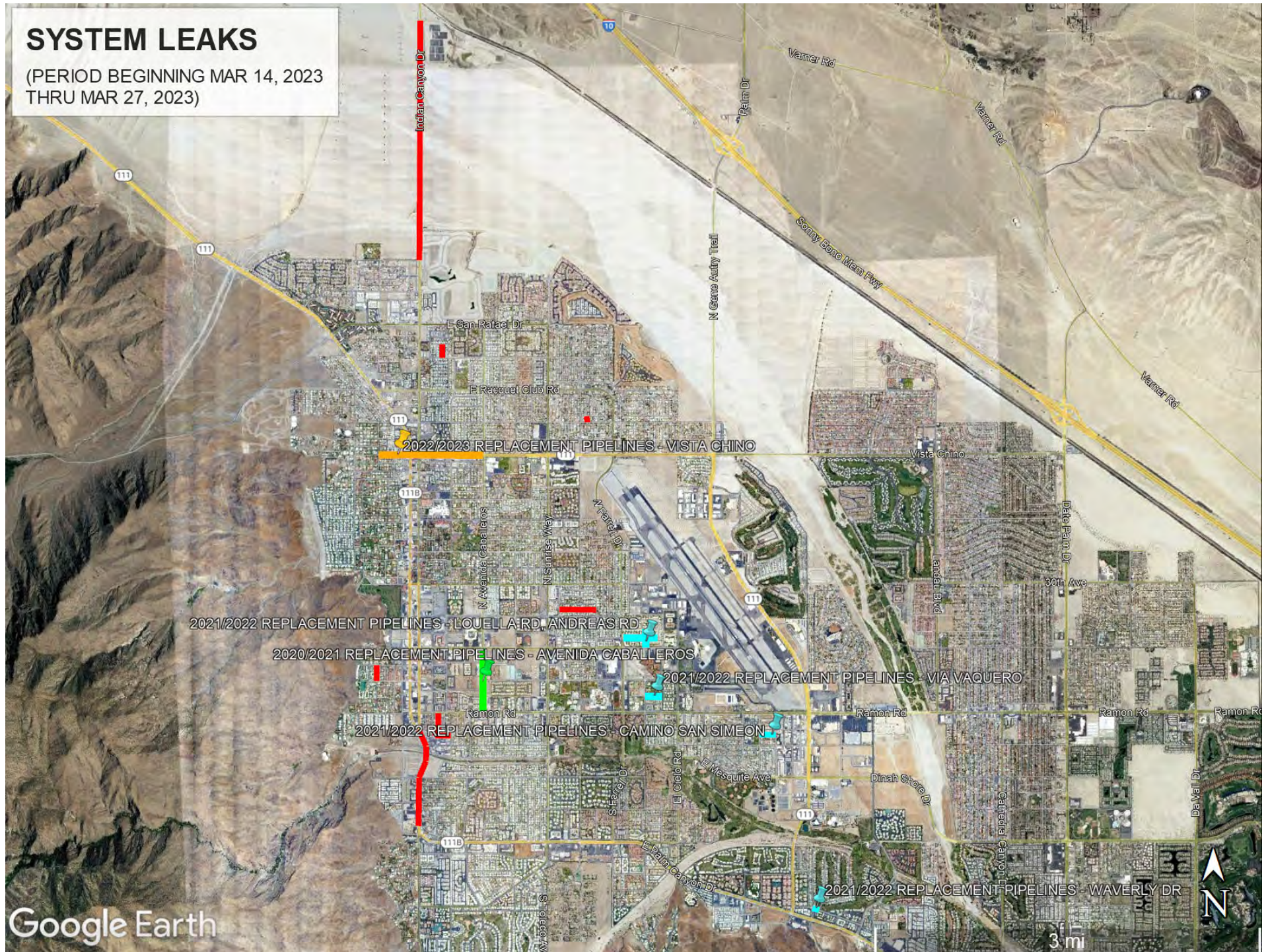
Streets highlighted in blue are being proposed as part of the
2021/2022 Replacement Pipeline Project

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 MAR 14, 2023
THRU MAR 27, 2023)



General Manager's Meetings and Activities

Meetings:

03/21/23	DWA Bi-Monthly Board Meeting	DWA
03/21/23	23/24 Budget Mtg. CIP Extraordinary Exp.	DWA
03/22/23	23/24 Budget Mtg. CIP Extraordinary Exp.	DWA
03/22/23	Tribal Mediation – Small Negotiating Team	Conf Call
03/22/23	CV-SNMP Stakeholder Kickoff Mtg.	Conf Call
03/23/23	SWC Class 8 Storage Needs Analysis	Conf Call
03/27/23	DWA Weekly Staff Meetings	DWA
03/27/23	DWA Weekly State Leg Check-in	Conf Call
03/28/23	ACWA JPIA Meeting	DWA
03/28/23	23/24 Budget Mtg. CIP Extraordinary Exp.	DWA
03/28/23	Sites Amendment Language	Conf Call
03/29/23	CV-SNMP Monthly Meeting	Conf Call
03/30/23	DWA Executive Committee Meeting	DWA
03/30/23	DWA Facilities Tour	DWA
04/03/23	Tribal Mediation – Small Negotiating Team	Conf Call
04/04/23	RGS Monthly Review	Conf Call
04/04/23	IT Department Update	DWA
04/04/23	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)
- 21) SWP 2023 Water Supply
- 22) ACBCI Water Rights Lawsuit

Activities:
(Cont.)

- 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