



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

*Pursuant to the Governor's Executive Order N-29-20, there will be no public location for attending in person. Members of the public who wish to participate may do so by calling in at:*

Toll Free: (866) 899-4679  
Access Code: 169-972-605

or Via Computer:  
<https://www.gotomeeting.com/meeting/join-meeting>  
9-digit Meeting ID: 169972605

*Members of the public who wish to comment on any item within the jurisdiction of the Agency or any item on the agenda should submit comments by emailing [sbaca@dwa.org](mailto:sbaca@dwa.org) before 5:00 p.m. June 14. Comments will become part of the Board meeting record. Board members and staff will be participating in this meeting via teleconference.*

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

1. CALL TO ORDER/PLEDGE OF ALLEGIANCE BLOOMER
2. ROLL CALL BACA
3. APPROVAL OF MINUTES - June 1, 2021 BLOOMER
4. GENERAL MANAGER'S REPORT KRAUSE
5. COMMITTEE REPORTS –
  - A. Human Resources – June 2, 2021 BLOOMER
  - B. Finance – June 3, 2021 STUART
  - C. Executive – June 10, 2021 BLOOMER
6. PUBLIC COMMENT: Members of the public may comment on any item not listed on the agenda, but within the jurisdiction of the Agency. In addition, members of the public may speak on any item listed on the agenda as that item comes up for consideration. 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.
7. SECRETARY-TREASURER'S REPORT – May 2021 STUART
8. ACTION ITEMS
  - PUBLIC HEARING: Items No. 8-A thru 8-C**
  - 2021/2022 Groundwater Replenishment Assessments**
    - A. West Whitewater River Subbasin KRAUSE
      - 1). Request Adoption of Resolution No. 1256 Making Findings in Fact Pursuant to Section 15.4 of DWA Law for the West Whitewater River Subbasin Replenishment Assessment
      - 2). Request Adoption of Resolution No. 1257 Levying a Replenishment Assessment FY 2021/2022
    - B. Mission Creek Subbasin KRAUSE
      - 1). Request Adoption of Resolution No. 1258 Making Findings in Fact Pursuant to Section 15.4 of DWA Law for the Mission Creek Subbasin Replenishment Assessment
      - 2). Request Adoption of Resolution No. 1259 Levying a Replenishment Assessment for 2021/2022
    - C. Request Adoption of 2020 Urban Water Management Plan and Water Shortage Contingency Plan Resolution No. 1260 and Ordinance No. 72 METZGER
  - End of Public Hearing Items**
  - D. Request Approval of Inclusion of Draft Rules & Regulations for Recycled Water Facilities to the Updated Title 22 Engineering Report for Recycled Water Facilities JOHNSON
  - E. Request Adoption of Resolution No. 1261 Establishing Rates, Fees & Charges for Sewer Service SAENZ
  - F. Request Adoption of Resolution No. 1262 Revising the Agency Reserve Policy SAENZ
  - G. Request Adoption of Fiscal Year 2021/2022 Operating, General & Wastewater Budgets SAENZ

- H. Request Approval for Extension of COVID-19 Financial Relief to Customers, Reinstatement of Late Fees & Authorization to Offer Extended Repayment Plans up to 48 Months SAENZ
- I. Request Approval of 2021-2024 Memorandum of Understanding Between Desert Water Agency & the Desert Water Agency Employees' Association for Employee Salaries & Benefits HOPPING
- J. Request Approval of July 2021 Cost-of-Living Salary Increase for DWA Employees & Contract Amendment for General Manager HOPPING

**9. DISCUSSION ITEMS**

- A. State Water Contractor's Meetings – May 20, 2021 RIDDELL

**10. DIRECTORS COMMENTS/REQUESTS**

**11. CLOSED SESSION**

- A. CONFERENCE WITH LEGAL COUNSEL – EXISTING LITIGATION  
Pursuant to Government Code Section 54956.9 (d) (1)  
Name of Case: Agua Caliente Band of Cahuilla Indians vs. Coachella Valley Water District, et al (Two Cases)
- B. CONFERENCE WITH LEGAL COUNSEL – EXISTING LITIGATION  
Pursuant to Government Code Section 54956.9 (d) (1)  
Name of Case: Mission Springs Water District vs. Desert Water Agency
- C. CONFERENCE WITH LEGAL COUNSEL – EXISTING LITIGATION  
Pursuant to Government Code Section 54956.9 (d) (1)  
Bonnie Kessner, et al vs. Desert Water Agency, et al
- D. CONFERENCE WITH LEGAL COUNSEL – EXISTING LITIGATION  
Pursuant to Government Code Section 54956.9 (d) (1)  
Name of Case: AT&T vs. County of Riverside
- E. CONFERENCE WITH LEGAL COUNSEL – PENDING ADMINISTRATIVE PROCEEDING  
Pursuant to Government Code Section 54956.9 (d) (1)  
Regional Water Quality Control Board Claim No. 7018 0680 0000 1010 7377
- F. CONFERENCE WITH REAL PROPERTY NEGOTIATORS  
Pursuant to Government Code Section 54956.8  
Property: APN No. 522-070-027  
Agency Negotiators: Mark S. Krause, General Manager and Steve Johnson, Asst. General Manager  
Negotiating Parties: Desert Water Agency and Mountain View Power Partners and Gabrych Family L.P.  
Under Negotiation: Permanent Pipeline and Access Easement and Encroachment Permit  
Subject: Price and terms of possible easement purchase and Grant of Permanent Encroachment Permit

**12. RECONVENE INTO OPEN SESSION – REPORT FROM CLOSED SESSION**

**13. ADJOURN**

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



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

**3**

**June 1, 2021**

DWA Board via Kristin Bloomer, President )  
Teleconference: James Cioffi, Vice President )  
Joseph K. Stuart, Secretary-Treasurer )  
Patricia G. Oygar, Director )  
Paul Ortega, Director )

DWA Staff via Mark S. Krause, General Manager )  
Teleconference: Steve Johnson, Assistant General Manager )  
Esther Saenz, Finance Director )  
Sylvia Baca, Asst. Secretary of the Board )  
Kris Hopping, Human Resources Director )  
Ashley Metzger, Outreach & Conserv. Mgr. )  
Kim McCance, Senior Administrative Asst. )

Consultants via Michael T. Riddell, Best Best & Krieger )  
Teleconference:

Public via Randy Duncan, Mission Springs Water District )  
Teleconference: David Freedman, Palm Springs Sustainability Comm. )

19154. President Bloomer opened the meeting at 8:00 a.m. and asked everyone to join her in the Pledge of Allegiance. **Pledge of Allegiance**

19155. President Bloomer called upon Assistant Secretary of the Board Baca to conduct the roll call: **Roll Call**

Present: Ortega, Oygar, Stuart, Cioffi, Bloomer

19156. President Bloomer called for approval of the May 18, 2021 Regular Board Meeting Minutes. **Approval of 05/18/21  
Regular Board Mtg.  
Minutes**

Director Ortega moved for approval. After a second by Vice President Cioffi, the minutes were approved by the following roll call vote:

**Approval of 05/18/21  
Regular Board Mtg.  
Minutes  
(Cont.)**

AYES: Ortega, Oygard, Stuart, Cioffi, Bloomer  
NOES: None  
ABSENT: None  
ABSTAIN: None

19157. President Bloomer called upon General Manager Krause to provide an update on Agency operations.

**General Manager's  
Report**

Mr. Krause provided an update on Agency operations and noted his meetings and activities for the past several weeks.

In response to Director Oygard, Mr. Krause noted the Agency is closed to the public and waiting for the governor's update on June 15.

19158. President Bloomer noted the minutes for the May 13, 2021 Finance Committee meeting were provided in the Board's packet.

**Committee Reports  
Finance 05/13/21**

19159. President Bloomer noted the minutes for the May 27, 2021 Executive Committee meeting were provided in the Board's packet.

Executive 05/27/21

19160. President Bloomer opened the meeting for public comment.

**Public Comment**

There being no one from the public wishing to address the Board, President Bloomer closed the public comment period.

19161. President Bloomer called upon Finance Director Saenz to present Staff's request for Approval of One Additional Position Title to the Classification and Salary Chart and Approval of Updated Classification Chart June 2021.

**Items for Action:**  
Request Approval of  
One Additional  
Position Title to the  
Classification & Salary  
Chart and Approval of  
Updated Classification  
Chart June 2021

Mrs. Saenz reported that the Agency has a need to add a new classification to the current position classification and salary chart for an Accountant position. This will allow the Finance Director to reorganize staff duties in the Accounting department and assign advanced-level duties to staff more efficiently. She noted that there is no impact to the approved 2020-2021 budget. In the proposed 2021-2022 budget staff is recommending the addition of an Account Clerk III position to better distribute task assignments in the department. Staff recommends the Board of Directors approve the new Accountant position title addition to the classification and salary listing chart and approve the June 2021 DWA classification and salary listing chart which includes the additional Accounting position title.

Director Oygar moved to approve staff's recommendation. After a second by Director Ortega, the motion carried by the following roll call vote:

AYES: Ortega, Oygar, Stuart, Cioffi, Bloomer  
 NOES: None  
 ABSENT: None  
 ABSTAIN: None

**Items for Action:**

(Cont.)

Request Approval of One Additional Position Title to the Classification & Salary Chart and Approval of Updated Classification Chart June 2021

In response to Director Ortega, Mrs. Saenz noted that currently the Accounting department is staffed by seven. The Accountant position will be assisting the Accounting Supervisor.

19162. President Bloomer called upon Finance Director Saenz to present Staff's recommendation for Board authorization for Access and Closure of Union Bank Safety Deposit Box.

Request Board Authorization for Access & Closure of Union Bank Safety Deposit Box

Mrs. Saenz reported that in April of 2021, Agency staff discovered the existence of a safety deposit box in the name of Desert Water at the Palm Springs branch of Union Bank, located at 500 South Indian Canyon Drive. The Safety Deposit Box was opened in 1992 by Jack Oberle and Dan Ainsworth, likely in conjunction with the opening of the Agency's checking accounts with Union Bank, formerly the Bank of California at the time of opening, which were closed in November 2018 when the Agency moved its checking accounts to First Bank. She noted that since Jack Oberle and Dan Ainsworth are no longer employees of the Agency, and are the authorized individuals for the safety deposit box, the Board must make a motion to authorize current Agency staff to access and close the box. Staff recommends authorization for General Manager, Mark Krause, and Finance Director, Esther Saenz to access and close Box #518 at the Union Bank Palm Springs branch.

Director Ortega moved to approve staff's recommendation. After a second by Vice President Cioffi, the motion carried by the following roll call vote:

AYES: Ortega, Oygar, Stuart, Cioffi, Bloomer  
 NOES: None  
 ABSENT: None  
 ABSTAIN: None

In response to Director Ortega, Mrs. Saenz stated that the Agency has not been paying for the safety deposit box and does not have a need for one.

19163. President Bloomer noted that Board packets included Outreach & Conservation reports for May 2021.

**Discussion Items:**  
Outreach &  
Conservation –  
May 2021  
Activities & Events

Mrs. Metzger noted that the results are in for the Mayor's Challenge and DWA came in towards the middle noting it was not known that it was a year round challenge. She also noted that the Urban Water Management Plan and Water Shortage Contingency Plan public review drafts are available on the DWA website and CVRWMG.org/uwmp.

19164. President Bloomer called upon Finance Director Saenz to present the Draft Fiscal Year 2021/2022 Operating, General and Wastewater Budgets.

Draft 2021/2022  
Operating, General and  
Wastewater Budgets

Mrs. Saenz noted that copies of the 2021/2022 draft budgets along with the highlights were provided to the Board and the Finance Committee has met and reviewed the draft budget. She provided an overview of the Operatings, General and Wastewater budgets.

In response to Director Ortega, Mrs. Saenz reported that the COLA increase comes from the March 31, Riverside/San Bernardino County Consumer Price Index. Mr. Krause noted that Well No. 45 is located in the Escena Project. Mrs. Saenz noted the transportation expenses are for upgrading existing vehicles.

19165. President Bloomer called upon Director Ortega and Secretary-Treasurer Stuart to provide their report on the Virtual CSDA Special District Legislative Days Conference.

Director's Report on  
CSDA Legislative  
Days Attendance

Director Ortega, Secretary-Treasurer Stuart and President Bloomer noted their attendance at the Virtual CSDA Special District Legislative Days Conference held on May 18 and 19.

19166. At 9:10 a.m., President Bloomer convened into a Teleconference 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; (C) Existing Litigation, pursuant to Government Code Section 54956.9 (d) (1) Bonnie Kessner, et al vs. Desert Water Agency, et al; (D) Existing Litigation, Pursuant to Government Code Section 54956.9 (d) (1), AT&T vs. County of Riverside; (E) Pending Administrative Proceeding Pursuant to Government Code Section 54956.9 (d) (1) Regional Water Quality Control Board Claim No. 7018 0680 0000 1010 7377; and F) Conference with Real Property Negotiators, Pursuant to Government Code

**Closed Session:**  
A. Existing Litigation –  
ACBCI vs. CVWD, et  
al. (2 Cases)  
B. Existing Litigation –  
MSWD vs. DWA  
C. Existing Litigation-  
Bonnie Kessner, et al  
vs. Desert Water  
Agency et al  
D. Existing Litigation -  
Possible Intervention in  
Case: AT&T vs.  
County of Riverside  
E. Pending Admin.  
Proceeding, RWQCB  
Claim  
F. Conference with  
Real Property  
Negotiators, Property:  
APN No. 522-070-027

Section 54956.8, Property: APN No. 522-070-027, Agency Negotiators: Mark S. Krause, General Manager and Steve Johnson, Assistant General Manager, Negotiating Parties: Desert Water Agency and Mountain View Power Partners and Gabrych Family L.P.. Under Negotiation: Permanent Pipeline and Access Easement and Encroachment Permit, Subject: Price and terms of possible easement purchase and Grant of Permanent Encroachment Permit.

**Closed Session:**  
(Cont.)

19167. At 10:13 a.m., General Manager Krause reconvened the meeting into open session and announced there was no reportable action taken.

**Reconvene – No**  
**Reportable Action**

19168. In the absence of any further business, General Manager Krause adjourned the meeting at 10:15 a.m.

**Adjournment**

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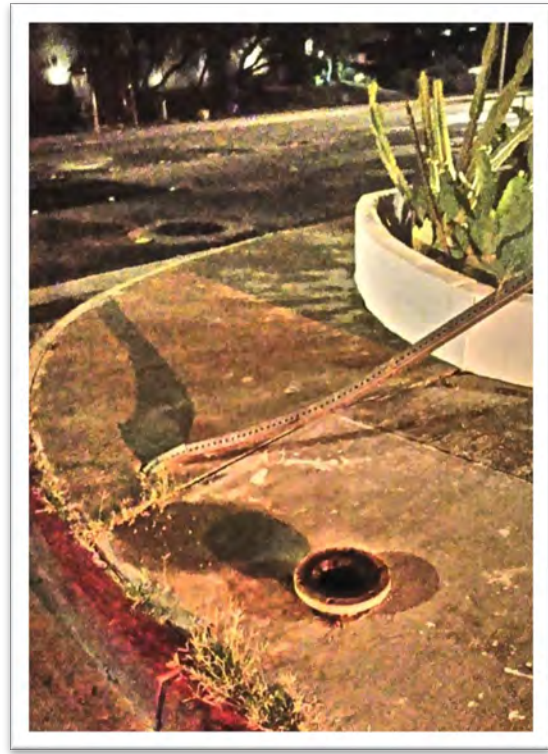
Sylvia Baca  
Assistant Secretary of the Board

## GENERAL MANAGER'S REPORT

### June 15, 2021

#### Damaged Fire Hydrant S.W. Corner of Camino Monte Vista & N. Indian Canyon Dr.

On June 6 at approximately 10:00 p.m., Construction stand-by staff responded to a report of a hit fire hydrant on the south west corner of Camino Monte Vista and N. Indian Canyon Dr. Staff replaced the fire hydrant and put it back in service. The water loss was from a fully open 6-inch fire hydrant bury for approximately 30 minutes. A police report was filed.



### Workers Compensation Experience Modification Factor

Desert Water Agency holds Worker's Compensation Insurance with ACWA JPIA. Each year ACWA/JPIA provides DWA with an Experience Modification Factor which, based on the Agency's 3-year historical claim experience, will either result in a premium or discount on the insurance rate the Agency pays. In addition to the Experience Modification Factor, the Agency receives two other discounts, Economy of Size discount (11%) and Multiple Program discount (5%). All three discount/premium factors must be combined together to determine if the Agency will pay an overall premium or discount on the Worker's Compensation rates.

For the upcoming insurance coverage period commencing on July 1, 2021, the Agency's Experience Modification Factor will be 114% which is a decrease from the prior year where the factor was 127%. The reduction in Experience Modification Factor will result in savings to the Agency of approximately \$29,000 for fiscal year 2021/2022. Overall, in 2021/2022 the Agency will receive a 3.6% discount when all three discount/premium factors are combined as compared to the 7.4% premium paid in 2020/2021.

## Revised Workplace COVID-19 Emergency

The following are excerpts from a BB&K legal update. On June 3, 2021, CAL/OSHA approved the revised Covid-19 Emergency Temporary Standards (ETS). They will take effect June 15. These revised ETS make some important distinctions between unvaccinated and vaccinated workers. These include when and where face coverings are required, what distancing is to be observed and who must be excluded from the workplace in the event of an exposure. It is possible that the ETS may be revised before re-adoption on June 15.

- Indoors, all employees will still be required to wear masks unless they are in an office alone or in a room where all people are fully vaccinated and do not have symptoms.
- Outdoors, masks are not required if employees can physically distance and are vaccinated.
- Employers will still be required to have policies in place to protect employees from people who do not wear face coverings. Members of the public do not fall under these restrictions, but must comply with State Face Covering mandates. After June 15, this likely will mean that members of the public who are vaccinated do not have to wear face coverings indoors at businesses or in public places. (But employers can decide to be more restrictive to protect employees and the method of verification is not defined.)
- Until July 31, except in situations where it is impossible due to the nature of the work or when employees are passing by others, employers are required to have employees continue to physically distance (6 feet) unless all unvaccinated employees are provided N95 masks for voluntary use.
- On July 31, employers will be required to provide N95 masks for voluntary use to all unvaccinated employees working indoors.
- Employees who are unvaccinated and riding in cars with others during working hours will need to be provided with N95 masks for voluntary use and encouraged to use them when riding in a vehicle for 15 minutes or more (this requirement starts 15 days after the ETS take effect.)
- Employees in employer vehicles together must wear face coverings, and must be three feet apart in all directions or have an unoccupied seat between them, unless all employees in the vehicle are vaccinated.

### General do's and don'ts:

- DO determine whether employees who have not yet returned to performing duties on-site (i.e. in person rather than remote work) should be directed to return and, if so, when.
- DO provide employees who are or will be working on-site with compliant face coverings (i.e. no scarves, bandanas or similar single-layer-fabric items, and N95 masks for unvaccinated employees working indoors for their voluntary use. This is one of the more onerous new requirements, and there were many public comments offered at the Cal/OSHA Standards Board meeting about how challenging it continues to be to obtain N95s.)
- DO decide whether to ask employees to provide their vaccination status information and documentation to the employer:
  - If you will ask, establish how the information will be collected and how confidentiality will be maintained.
  - If you will not ask, you will likely need to treat all employees as unvaccinated. This includes providing N95 masks for voluntary use and excluding employees from the workplace in the event of an exposure.



- DO designate properly trained staff to receive and process requests for accommodation pertaining to implementation of the ETS requirements.
- DO determine where employees working in-person on-site will be performing their work, and how to apply the revised ETS at those locations and in common areas (such as break rooms, conference rooms and meetings spaces, including those where outsiders or members of the public will be present.)
- DO update your COVID-19 Prevention Plan to address the revised ETS.
- DO communicate early and often with employees, as well as with outsiders coming into your workplace, about what the compliance requirements are and how to apply them.
- DON'T assume that outsiders (e.g. members the public, customers of your business or agency, vendors, etc.) will know or observe the ETS face covering or distancing requirements of your workplace, particularly in light of the more lenient current CDC guidance and upcoming state guidelines. Be sure to train and deploy staff who can address outsiders' compliance with whatever vaccination, face-covering and/or distancing requirements your establishment has opted to implement for people other than your employees.
- DON'T ask employees who are choosing not to be vaccinated why they are not doing so, and don't permit employees in the workplace to question or badger their coworkers who have chosen not to vaccinate.
- DON'T share vaccination status data beyond the true "need to know" group of managers and human resources employees who are implementing the new ETS.
- DON'T let disagreements fester among employees about potentially contentious issues like vaccination status or compliance with other prevention measures. Be consistent in direction and enforcement of the direction given.
- DON'T be lax about compliance with the new ETS. Employers who fail to comply face enforcement action, fines and penalties.

#### Metropolitan Water District Hires New General Manager

On June 8, the MWD Board of Directors voted to approve Adel Hagekhalil as its next General Manager. Hagekhalil replaces Jeff Kightlinger who served as MWD's GM for 15 years.

Hagekhalil is a civil and environmental engineer who most recently served as the General Manager and Executive Director of Street Services for the City of Los Angeles. He previously spent 10 years as Assistant Director of L.A.'s Bureau of Sanitation. He has served as the past President and on the Board of [National Association of Clean Water Agencies](#) (NACWA) and was a [Water Environment Federation Fellow](#). Sierra Club, other environmental justice and conservation groups and the LA Times endorsed him for the position.

General Manager Krause sent a letter of congratulations and plans to meet with Hagekhalil in the coming months to discuss the collaborative efforts of our agencies.

## Human Resource's Meetings and Activities

### Meetings:

05/18/2021	DWA Board Meeting	Virtual Meeting
05/24/2021	Weekly Staff Meeting	Virtual Meeting
05/26/2021	Inland Empire Water Authority Human Resources Consortium Meeting	Virtual Meeting
05/10/2021	Weekly Staff Meeting	Virtual Meeting
05/17/2021	Engineering/Operations Staff Meeting	Virtual Meeting
05/26/2021	SWOT Analysis Kick-Off Team Meeting	Virtual Meeting
06/01/2021	DWA Board Meeting	Virtual Meeting
06/07/2021	Weekly Staff Meeting	Virtual Meeting
06/14/2021	Weekly Staff Meeting	Virtual Meeting

### Activities:

05/18/2021	ACWA JPIA Training Session: Onboarding New Staff	Virtual Meeting
05/19/2021	DWA Webinar: Drought – Projections and Planning	Virtual Meeting
05/19/2021	Random DOT Drug Testing on Site	Virtual Meeting
05/19/2021	Meeting with Esther Saenz and ERP Consultant	Virtual Meeting
05/20/2021	BambooHR Customer Day Training	Virtual Meeting
05/20/2021	ACWA JPIA HR Training	Virtual Meeting
05/20/2021	Attended CalOSHA Meeting	Virtual Meeting
05/27/2021	Attended Training: How to Ignite Your Engagement Strategy with Goals and Recognition	Virtual Meeting
05/27/2021	DWA Safety Training Class	DWA Offices
05/27/2021	Webinar: HR's Role in Corporate Social Responsibility	Virtual Meeting
06/01/2021	ACWA JPIA Training Session: Documenting Employee Performance	Virtual Meeting
06/02/2021	Discussion with UC Riverside Extension about the Women in Leadership Executive Program	Phone Call
06/03/2021	Attended CalOSHA Meeting	Virtual Meeting
06/03/2021	Hosted Blood Drive	DWA Offices
06/09/2021	Webinar: Communicating with Employees Through BambooHR	Virtual Meeting
06/09/2021	Meeting with Esther Saenz and ERP Consultant	Virtual Meeting

SYSTEM LEAK DATA					
(PERIOD BEGINNING MAY 25, 2021 THRU JUN 7, 2021)					
STREET NAME	NUMBER OF LEAKS	PIPE DIAMETER (INCHES)	YEAR INSTALLED	PIPE MATERIAL	PIPE CONSTRUCTION
PARK VIEW DR	4	4	1955	STEEL	BARE/UNLINED
DEL LAGO RD	2	6	1957	STEEL	BARE/UNLINED
BELLAMY RD	2	4	1957	STEEL	BARE/UNLINED
S PALM CANYON DR	1	10	1938	STEEL	BARE/UNLINED
INDIAN CANYON DR	1	8	1938	STEEL	BARE/UNLINED
ALEJO RD	1	8	1958	STEEL	BARE/UNLINED
EL PLACER RD	1	6	1946	STEEL	BARE/UNLINED
CAMINO PAROCOLA	1	6	1946	STEEL	BARE/UNLINED
SUNNY DUNES RD	1	6	1946	STEEL	BARE/UNLINED
PATENCIO RD	1	6	1951	STEEL	BARE/UNLINED
RAMON RD	1	6	1955	STEEL	BARE/UNLINED
ANDREAS RD	1	6	1958	STEEL	BARE/UNLINED
SANTA ROSA DR	1	4	1936	STEEL	BARE/UNLINED
PARK DR	1	4	1946	STEEL	BARE/UNLINED
WARM SANDS PL	1	4	1946	STEEL	BARE/UNLINED
CAMINO REAL	1	4	1948	STEEL	BARE/UNLINED
SAN LUCAS RD	1	4	1948	STEEL	BARE/UNLINED
CALLE AJO	1	4	1953	STEEL	BARE/UNLINED
JOHNSON ST	1	3	1955	STEEL	BARE/UNLINED
TOTAL LEAKS IN SYSTEM:		24			

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**

Estimate for design portion of Vista Chino 20" mainline replacement is being developed

<b>SYSTEM INFORMATION:</b>	
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
<b>TOTAL LENGTH OF PIPE IN SYSTEM OLDER THAN 70 YEARS (LINEAR FEET):</b>	<b>128,186</b>
TOTAL LENGTH OF UNLINED PIPE SYSTEMWIDE (LINEAR FEET):	297,672
*AVERAGE LENGTH OF PIPE REPLACED ANNUALLY (LINEAR FEET):	14,500
PROJECTED TIME FRAME FOR 100% REPLACEMENT OF UNLINED STEEL PIPE:	21 YEARS
<b>PROJECTED TIME FRAME FOR 100% REPLACEMENT OF PIPE OLDER THAN 70 YEARS:</b>	<b>9 YEARS</b>
YEAR AGENCY TRANSITIONED TO CEMENT LINED STEEL PIPE:	1960
<p><b>*PLEASE NOTE THIS FIGURE REPRESENTS THE AVERAGE LINEAR FOOTAGE OF PIPELINE REPLACED ANNUALLY GIVEN AN AVERAGE ANNUAL BUDGET OF \$3 MILLION.</b></p>	



**SYSTEM LEAKS**  
(Period beginning May 25,  
2021 thru June 7, 2021)





## General Manager's Meetings and Activities

### Meetings:

06/01/21	DWA Bi-Monthly Board Mtg	Conf Call
06/01/21	WWRF-BLM Permit Cooperators Mtg	Conf Call
06/02/21	Agua Caliente Technical Committee	Conf Call
06/02/21	Sites Reservoir Statement of Charges Discussion	Conf Call
06/02/21	DWA Human Resources Committee Meeting	Conf Call
06/03/21	DWA Finance Committee Meeting	Conf Call
06/03/21	Sites Reservoir Statement of Charges Discussion	Conf Call
06/03/21	DWA Human Resources Meeting	Conf Call
06/03/21	SGMA GSA Indio Subbasin	Conf Call
06/04/21	SWC Update Call	Conf Call
06/04/21	SGMA Mission Creek Subbasin	Conf Call
06/07/21	Agua Caliente Small Group Mediations Meeting	Conf Call
06/07/21	DWA Wkly Staff Meetings	Conf Call
06/07/21	Agua Caliente Large Group Mediation Meeting	Conf Call
06/07/21	SGMA Indio Subbasin	Conf Call
06/08/21	Lake Perris Seepage Recovery Project Update	Conf Call
06/08/21	WWRF – BLM Permit All Team Meeting	Conf Call
06/08/21	2004 Settlement Agreement GM Meeting	Conf Call
06/08/21	SGMA Indio Model Assumptions and Drain Flow	Conf Call
06/09/21	SGMA SGP Monitoring Objective and Minimum Thresholds	Conf Call
06/09/21	DWA Human Resources Meeting	Conf Call
06/10/21	DWA Executive Committee Meeting	Conf Call
06/15/21	DWA Bi Monthly Board Mtg	Conf Call

### Activities:

- 1) SWP Contract Extension Amendment
- 2) DWA Remote Meter Reading Fixed Network
- 3) Whitewater Hydro – Automatic Re-start
- 4) State and Federal Contractors Water Authority and Delta Specific Project Committee (Standing)
- 5) Whitewater River Surface Water Recharge
- 6) Lake Oroville Spillway FEMA funding
- 7) Replacement Pipelines 2020-2021
- 8) DC Project – Finance JPA Committee (Standing)
- 9) DWA/CVWD/MWD Operations Coordination/Article 21/Pool A/Pool B/Yuba Water (Standing)
- 10) DWA/CVWD/MWD Exchange Agreement Coordination Committee (Standing)
- 11) SWP 2020 Water Supply
- 12) ACBCI Water Rights Lawsuit
- 13) Whitewater Hydro Operations Coordination with Recharge Basin O&M
- 14) SGMA Tribal Stakeholder Meetings
- 15) Whitewater Spreading Basins – BLM Permits

Activities Cont.:

- 16) Delta Conveyance Project Cost Allocation
- 17) DWA Surface Water Filtration Feasibility Snow Creek Village/Palm Oasis
- 18) MCSB Delivery Updates
- 19) Well 6 Meaders Cleaners RWQB Meetings
- 20) SWP East Branch Enlargement Cost Allocation
- 21) UWMP Population Calculation Update/Valley-Wide UWMP
- 22) RWQCB Update to the SNMP
- 23) SGMA – San Gorgonio Pass Subbasin

**Minutes**  
**Human Resources Committee Meeting**  
**June 2, 2021**

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**Directors Present:** Kristin Bloomer, James Cioffi  
**Staff Present:** Mark Krause, Steve Johnson, Esther Saenz, Kris Hopping

**1. Discussion Items**

- A. Discuss DWAEA negotiations and review proposed MOU Document  
The Committee discussed the DWAEA negotiations and reviewed the proposed MOU document.
- B. Discuss Flexible Spending Account plan pilot that will be in place for 2022  
The Committee discussed the Flexible Spending Account plan pilot that will take place for 2022.
- C. Discuss DWA Departmental Organization  
The Committee discussed possible scenarios for future departmental organization.

**Minutes  
Finance Committee Meeting  
June 3, 2021**

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**Directors Present:** Joseph Stuart, Kristin Bloomer

**Staff Present:** Mark Krause, Steve Johnson, Esther Saenz

1. Discussion Items

A. Review Proposed Payment Plan Options for COVID-19 Delinquencies

The Committee reviewed the proposed extended payment plan which would offer a maximum repayment term of 48-months with a minimum installment payment set at 25% of the account's average monthly bill in order for customers to avoid late fees and/or disconnection of service for non-payment once reinstated.

2. Adjourn



**Minutes**  
**Executive Committee Meeting**  
June 10, 2021

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**Directors Present:** Kristin Bloomer, James Cioffi

**Staff Present:** Mark Krause, Steve Johnson, Esther Saenz, Sylvia Baca

**1. Discussion Items**

A. Review Agenda for June 15, 2021 Board Meeting

The proposed agenda for the June 15, 2021 meeting was reviewed.

B. Expense Reports

The May expense reports were reviewed.

C. CSDA Southern Network Election (Seat A) Ballot

Staff provided the Committee with the ballot information for the California Special Districts Association election. The Committee reviewed the ballot and directed staff to cast their vote for the incumbent, Jo MacKenzie (Vista Irrigation District).

D. Re-opening of DWA Operations Center to the Public

Staff informed the Committee that tentative plans are to re-open the Operations Center to the public after June 15 and also dependent on the June 17 CalOSHA Board meeting.

**2. Adjourn**

DESERT WATER AGENCY  
STATEMENT OF CASH RECEIPTS AND EXPENDITURES

OPERATING ACCOUNT

MAY 2021

INVESTED  
RESERVE FUNDS  
\$36,255,360.93

BALANCE	MAY 1, 2021	\$58,115.41	
WATER SALES		\$2,883,887.06	
RECLAMATION SALES		114,005.14	
WASTEWATER RECEIPTS		80,591.85	
POWER SALES		0.00	
METERS, SERVICES, ETC.		375,898.00	
REIMBURSEMENT – GENERAL FUND		0.00	
REIMBURSEMENT – WASTEWATER FUND		0.00	
ACCOUNTS RECEIVABLE – OTHER		4,116.93	
CUSTOMER DEPOSITS – SURETY		8,865.00	
CUSTOMER DEPOSITS – CONST.		65,180.81	
LEASE REVENUE		3,796.78	
INTEREST RECEIVED ON INV. FDS.		0.00	
FRONT FOOTAGE FEES		0.00	
BOND SERVICE & RESERVE FUND INT		0.00	
MISCELLANEOUS		<u>3,889.86</u>	
TOTAL RECEIPTS		\$3,540,231.43	
PAYMENTS			
PAYROLL CHECKS		\$388,647.28	
PAYROLL TAXES		178,001.12	
ELECTRONIC TRANSFERS		144,926.48	
CHECKS UNDER \$10,000.00		252,909.52	
CHECKS OVER \$10,000.00 – SCH. #1		928,576.32	
CANCELLED CHECKS AND FEES		<u>(26,388.71)</u>	
TOTAL PAYMENTS		<u>\$1,866,672.01</u>	
NET INCOME		\$1,673,559.42	
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		\$1,059,000.00	
FUNDS INVESTED – SCH. #3		<u>2,828,000.00</u>	
NET TRANSFER		(\$1,769,000.00)	\$1,769,000.00
BALANCE	MAY 31, 2021	(\$37,325.17)	\$38,024,360.93

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

**May 2021**

Check #	Name	Description	Amount
128254	Backflow Apparatus & Valve Co.	Water service supplies	\$ 12,307.02
128278	Krieger & Stewart Inc.	Engineering	\$ 17,870.30
128301	Singer Lewak LLP	ERP Consulting (W/O # 20-178-M)	\$ 42,498.50
128317	ACWA/JPIA	Health, dental & vision insurance premiums - June 2021	\$ 223,412.78
128335	Desert Water Agency - Wastewater	Wastewater revenue billing - April 2021	\$ 88,864.40
128367	Beck Oil Inc	Fuel purchase	\$ 11,932.90
128368	Best Best & Krieger LLP	Legal fees	\$ 50,554.54
128372	Cleanexcel, Inc	Cleaning services - May 2021	\$ 14,282.00
128378	Down to Earth Landscaping	Landscape maintenance	\$ 39,860.53
128413	National Safety Services Inc.	CANCELED CHECK - TO REISSUE	\$ 15,853.33
128418	Outflow Technologies	Programming - Core backoffice project (W/O # 18-179-M)	\$ 25,445.00
128440	Southern California Edison	CANCELED CHECK - TO REISSUE	\$ 189,650.30
128442	Sulzer Electro-Mechanical	Well #33 preventive maintenance	\$ 11,800.59
128444	Thatcher Company of California	Water service supplies	\$ 23,372.88
128457	Z&L Paving	Paving	\$ 67,307.25
128459	Villa De Las Flores	Grass removal rebate	\$ 51,820.00
128464	Canyon Springs HOA	Grass removal rebate	\$ 41,744.00
<b>Total</b>			<b>\$ 928,576.32</b>

# Monthly Investment Portfolio Report

As of 05/31/2021

AGG- Operating Fund (213426)

Dated: 06/08/2021

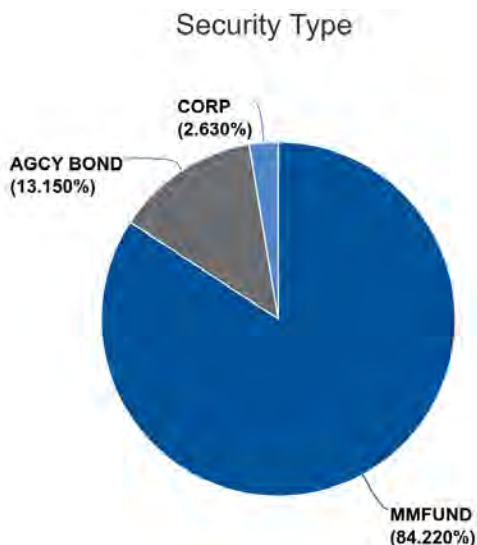


Chart calculated by: PAR Value

## 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	---	---	05/31/2021	05/31/2021	32,023,650.93	32,023,650.93	32,023,650.93	---
<b>LAIF Money Market Fund LAIF - OP</b>	<b>---</b>	<b>---</b>	<b>05/31/2021</b>	<b>05/31/2021</b>	<b>32,023,650.93</b>	<b>32,023,650.93</b>	<b>32,023,650.93</b>	<b>---</b>

## 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	999,386.00	0.626%
FEDERAL HOME LOAN MORTGAGE CORP UnionBanc OP	08/20/2020	08/20/2021	08/20/2025	08/20/2025	1,000,000.00	1,000,000.00	996,016.00	0.721%
FEDERAL NATIONAL MORTGAGE ASSOCIATION UnionBanc OP	06/30/2020	06/30/2021	06/30/2025	06/30/2025	1,000,000.00	1,000,000.00	997,938.00	0.781%
FEDERAL NATIONAL MORTGAGE ASSOCIATION UnionBanc OP	08/12/2020	08/12/2022	08/12/2025	08/12/2025	1,000,000.00	1,000,000.00	993,859.00	0.709%
FEDERAL NATIONAL MORTGAGE ASSOCIATION UnionBanc OP	12/16/2020	12/14/2021	06/14/2024	06/14/2024	1,000,000.00	1,000,500.00	999,173.00	0.402%
<b>--- UnionBanc OP</b>	<b>---</b>	<b>---</b>	<b>04/21/2025</b>	<b>04/21/2025</b>	<b>5,000,000.00</b>	<b>5,000,000.00</b>	<b>4,986,372.00</b>	<b>0.648%</b>

## CORP

Description, Broker	Settle Date	Next Call Date	Effective Maturity	Final Maturity	PAR Value	Original Cost	Market Value	Yield to Maturity
WELLS FARGO BANK NA UnionBanc OP	10/04/2019	09/09/2021	09/09/2021	09/09/2022	1,000,000.00	1,000,710.00	1,003,735.00	0.768%

# Monthly Investment Portfolio Report

As of 05/31/2021

AGG- Operating Fund (213426)

Dated: 06/08/2021

Description, Broker	Settle Date	Next Call Date	Effective Maturity	Final Maturity	PAR Value	Original Cost	Market Value	Yield to Maturity
WELLS FARGO BANK NA UnionBanc OP	10/04/2019	09/09/2021	09/09/2021	09/09/2022	1,000,000.00	1,000,710.00	1,003,735.00	0.768%

## Summary

Description, Broker	Settle Date	Next Call Date	Effective Maturity	Final Maturity	PAR Value	Original Cost	Market Value	Yield to Maturity
---	---	---	12/06/2021	12/16/2021	38,023,650.93	38,024,360.93	38,013,757.93	0.668%
---								

\* 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

MAY 2021

INVESTED  
RESERVE FUNDS  
\$168,603,136.81

BALANCE	MAY 1, 2021	\$540,043.07	
* TAXES - RIVERSIDE COUNTY		12,970,424.39	
* INTEREST EARNED - INV. FUNDS		112,005.43	
GROUNDWATER REPLEN. ASSESSMENT		341,088.02	
REIMBURSEMENT - OPERATING FUND		0.00	
REIMBURSEMENT - CVWD MGMT		2,984.85	
STATE WATER PROJECT REFUNDS		193,555.00	
REIMB - CVWD - WHITEWATER HYDRO		0.00	
POWER SALES - WHITEWATER		0.00	
MISCELLANEOUS		<u>8,595.00</u>	
TOTAL RECEIPTS		\$13,628,652.69	
PAYMENTS			
CHECKS UNDER \$10,000.00		19,118.93	
CHECKS OVER \$10,000.00 - SCH. #1		1,164,999.01	
CANCELLED CHECKS AND FEES		<u>0.00</u>	
TOTAL PAYMENTS		<u>\$1,184,117.94</u>	
NET INCOME		\$12,444,534.75	
INVESTED RESERVE FUNDS			
FUNDS MATURED		108,000.00	
FUNDS INVESTED – SCH. #2		<u>13,684,156.25</u>	
NET TRANSFER		(\$13,576,156.25)	\$13,576,156.25
BALANCE	MAY 31, 2021	(\$591,578.43)	\$182,179,293.06
* INCLUSIVE TO DATE		TAXES	INTEREST
RECEIPTS IN FISCAL YEAR		\$35,143,811.49	\$1,945,499.64
RECEIPTS IN CALENDAR YEAR		\$28,202,468.00	\$696,168.63

## DESERT WATER AGENCY

**General Fund**

Schedule #1 - Checks Over \$10,000

**May 2021**

Check #	Name	Description	Amount
9530	Ernst & Young US LLP	SWP Auditing Services rendered 08/01/20 - 03/03/2021	\$ 33,473.00
9531	Water Systems Consulting, Inc.	Regional Urban Water Management Plan	\$ 12,771.25
9532	Coachella Valley Water District	Whitewater Management Agreement Expense	\$ 120,334.00
9534	Desert Water Agency - Operating Fund	Operating Fund Reimbursement for April 2021	\$ 205,796.76
9535	State of California Department of Water Resources	State Water Project - May 2021	\$ 792,624.00
<b>Total</b>			<b>\$ 1,164,999.01</b>

# Monthly Investment Portfolio Report

As of 05/31/2021

AGG- General Fund (213428)

Dated: 06/08/2021

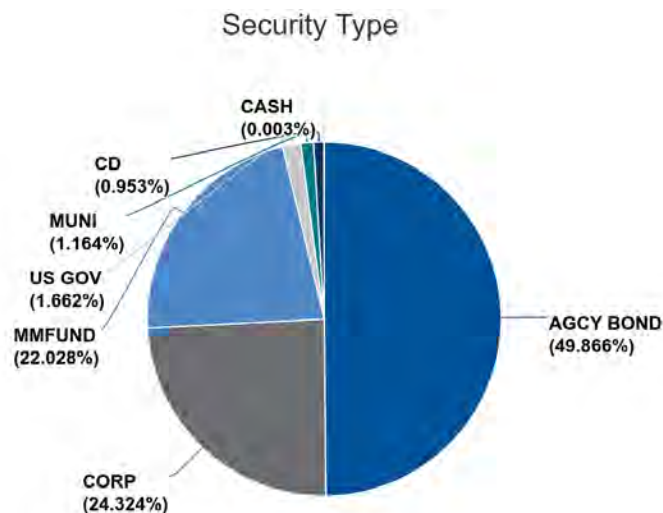


Chart calculated by: PAR Value

## AGCY BOND

Description, Broker	Settle Date	Next Call Date	Effective Maturity	Final Maturity	PAR Value	Original Cost	Market Value	Yield to Maturity
FEDERAL FARM CREDIT BANKS FUNDING CORP Alamo Capital	08/04/2020	06/12/2021	08/04/2025	08/04/2025	3,000,000.00	3,000,005.00	2,990,469.00	0.747%
FEDERAL FARM CREDIT BANKS FUNDING CORP Alamo Capital	10/15/2020	06/12/2021	10/15/2024	10/15/2024	3,000,000.00	2,995,500.00	2,992,527.00	0.475%
FEDERAL FARM CREDIT BANKS FUNDING CORP Alamo Capital	01/05/2021	06/12/2021	04/05/2024	04/05/2024	3,000,000.00	3,000,000.00	2,993,676.00	0.345%
FEDERAL FARM CREDIT BANKS FUNDING CORP Alamo Capital	02/12/2021	06/12/2021	11/12/2024	11/12/2024	3,000,000.00	3,000,000.00	2,982,870.00	0.467%
FEDERAL FARM CREDIT BANKS FUNDING CORP UnionBanc GF	12/22/2020	12/22/2022	12/22/2025	12/22/2025	3,000,000.00	3,000,000.00	2,958,504.00	0.779%
FEDERAL FARM CREDIT BANKS FUNDING CORP Piper Sandler	10/15/2020	10/15/2021	10/15/2024	10/15/2024	3,000,000.00	3,000,000.00	2,994,570.00	0.484%
FEDERAL FARM CREDIT BANKS FUNDING CORP Piper Sandler	12/28/2020	12/21/2021	12/21/2023	12/21/2023	3,000,000.00	3,000,000.00	2,993,511.00	0.295%
FEDERAL FARM CREDIT BANKS FUNDING CORP Stifel	10/16/2020	06/12/2021	03/28/2024	03/28/2024	3,000,000.00	3,000,000.00	2,995,422.00	0.354%
FEDERAL HOME LOAN BANKS Alamo Capital	04/09/2021	08/18/2021	11/18/2024	11/18/2024	3,000,000.00	2,989,263.00	2,982,492.00	0.470%
FEDERAL HOME LOAN BANKS UnionBanc GF	12/30/2020	12/30/2021	12/30/2025	12/30/2025	3,000,000.00	3,000,000.00	2,963,952.00	0.787%
FEDERAL HOME LOAN BANKS Piper Sandler	11/04/2019	11/04/2021	11/04/2021	11/04/2024	3,000,000.00	3,000,000.00	3,022,755.00	1.647%
FEDERAL HOME LOAN BANKS Piper Sandler	01/28/2021	06/28/2021	03/28/2024	03/28/2024	3,000,000.00	3,000,000.00	2,993,265.00	0.350%
FEDERAL HOME LOAN BANKS Piper Sandler	02/17/2021	08/17/2021	02/17/2026	02/17/2026	3,000,000.00	3,000,000.00	2,976,615.00	0.794%
FEDERAL HOME LOAN BANKS Piper Sandler	02/26/2021	08/26/2021	11/26/2024	11/26/2024	3,000,000.00	3,000,000.00	2,981,739.00	0.476%



# Monthly Investment Portfolio Report

As of 05/31/2021

AGG- General Fund (213428)

Dated: 06/08/2021

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	03/30/2021	09/30/2021	09/30/2021	03/30/2026	3,000,000.00	3,000,000.00	3,005,976.00	0.978%
FEDERAL HOME LOAN BANKS Piper Sandler	04/06/2021	09/30/2021	09/30/2021	09/30/2024	3,000,000.00	3,000,000.00	3,002,685.00	0.473%
FEDERAL HOME LOAN BANKS Piper Sandler	04/22/2021	10/29/2021	10/29/2021	04/29/2024	3,000,000.00	3,000,000.00	3,000,426.00	0.370%
FEDERAL HOME LOAN BANKS Stifel	02/25/2021	08/25/2021	11/25/2024	11/25/2024	3,000,000.00	3,000,000.00	2,986,926.00	0.476%
FEDERAL HOME LOAN BANKS Stifel	03/30/2021	09/30/2021	09/30/2021	09/30/2024	2,000,000.00	2,000,000.00	2,001,022.00	0.495%
FEDERAL HOME LOAN MORTGAGE CORP Alamo Capital	09/30/2020	09/30/2021	09/30/2025	09/30/2025	3,000,000.00	3,000,000.00	2,959,059.00	0.720%
FEDERAL HOME LOAN MORTGAGE CORP UnionBanc GF	08/20/2020	08/20/2021	08/20/2025	08/20/2025	3,000,000.00	3,000,000.00	2,988,048.00	0.721%
FEDERAL HOME LOAN MORTGAGE CORP Piper Sandler	06/25/2020	06/25/2021	06/25/2025	06/25/2025	3,000,000.00	3,000,000.00	2,995,299.00	0.739%
FEDERAL HOME LOAN MORTGAGE CORP Piper Sandler	08/26/2020	08/26/2021	08/26/2021	08/26/2024	3,000,000.00	3,000,000.00	3,001,815.00	0.481%
FEDERAL HOME LOAN MORTGAGE CORP Stifel	10/28/2020	10/28/2022	10/28/2024	10/28/2024	3,000,000.00	3,000,000.00	2,993,223.00	0.477%
FEDERAL HOME LOAN MORTGAGE CORP Stifel	11/30/2020	11/30/2022	05/30/2024	05/30/2024	3,000,000.00	3,000,000.00	2,999,883.00	0.361%
FEDERAL NATIONAL MORTGAGE ASSOCIATION Alamo Capital	08/25/2020	---	08/25/2025	08/25/2025	3,000,000.00	2,985,965.00	2,965,065.00	0.654%
FEDERAL NATIONAL MORTGAGE ASSOCIATION Alamo Capital	09/06/2019	---	09/06/2022	09/06/2022	1,000,000.00	996,520.00	1,015,864.00	0.118%
FEDERAL NATIONAL MORTGAGE ASSOCIATION UnionBanc GF	07/15/2020	07/15/2021	07/15/2025	07/15/2025	3,000,000.00	3,000,000.00	2,995,914.00	0.764%
FEDERAL NATIONAL MORTGAGE ASSOCIATION UnionBanc GF	08/12/2020	08/12/2022	08/12/2025	08/12/2025	3,000,000.00	3,000,000.00	2,981,577.00	0.709%
FEDERAL NATIONAL MORTGAGE ASSOCIATION UnionBanc GF	12/16/2020	12/14/2021	06/14/2024	06/14/2024	3,000,000.00	3,001,500.00	2,997,519.00	0.402%
FEDERAL NATIONAL MORTGAGE ASSOCIATION Piper Sandler	12/14/2020	12/14/2021	06/14/2024	06/14/2024	3,000,000.00	3,000,000.00	2,997,321.00	0.405%
---	---	---	05/27/2024	01/02/2025	90,000,000.00	89,968,753.00	89,709,989.00	0.586%
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## 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	03/15/2025	04/15/2025	3,000,000.00	3,258,120.00	3,209,010.00	0.822%
APPLE INC Alamo Capital	09/16/2019	08/11/2024	08/11/2024	09/11/2024	1,000,000.00	990,552.00	1,042,926.00	0.478%
APPLE INC UnionBanc GF	01/27/2021	08/11/2024	08/11/2024	09/11/2024	3,000,000.00	3,150,000.00	3,128,778.00	0.478%
APPLE INC Stifel	09/24/2020	04/11/2025	04/11/2025	05/11/2025	2,000,000.00	2,055,740.00	2,029,504.00	0.746%
APPLE INC Stifel	03/26/2021	01/08/2026	02/08/2026	02/08/2026	1,000,000.00	986,200.00	990,076.00	0.916%
BANK OF NEW YORK MELLON CORP Alamo Capital	05/06/2020	03/24/2025	03/24/2025	04/24/2025	1,000,000.00	1,020,005.00	1,027,088.00	0.891%
CATERPILLAR FINANCIAL SERVICES CORP Alamo Capital	12/17/2020	---	09/14/2023	09/14/2023	3,000,000.00	3,012,276.48	3,009,330.00	0.313%
CHEVRON CORP Stifel	07/08/2020	01/03/2024	01/03/2024	03/03/2024	3,000,000.00	3,239,700.00	3,192,186.00	0.556%
CITIBANK NA Stifel	06/24/2020	12/23/2023	12/23/2023	01/23/2024	3,000,000.00	3,297,000.00	3,251,052.00	0.472%
EXXON MOBIL CORP UnionBanc GF	03/17/2020	---	08/16/2022	08/16/2022	3,000,000.00	3,037,470.00	3,063,801.00	0.140%
EXXON MOBIL CORP UnionBanc GF	11/22/2019	01/01/2023	01/01/2023	03/01/2023	2,000,000.00	2,055,180.00	2,077,614.00	0.496%

# Monthly Investment Portfolio Report

As of 05/31/2021

AGG- General Fund (213428)

Dated: 06/08/2021

Description, Broker	Settle Date	Next Call Date	Effective Maturity	Final Maturity	PAR Value	Original Cost	Market Value	Yield to Maturity
JOHN DEERE CAPITAL CORP Alamo Capital	04/03/2020	---	09/08/2022	09/08/2022	1,000,000.00	1,003,535.00	1,024,756.00	0.196%
JOHN DEERE CAPITAL CORP Alamo Capital	02/08/2021	---	01/15/2026	01/15/2026	3,000,000.00	3,000,000.00	2,974,776.00	0.886%
MICROSOFT CORP Stifel	12/20/2019	02/01/2023	02/01/2023	05/01/2023	2,000,000.00	2,034,620.00	2,073,096.00	0.466%
MICROSOFT CORP Stifel	02/10/2021	08/03/2025	08/03/2025	11/03/2025	3,000,000.00	3,337,530.00	3,287,280.00	0.915%
TOYOTA MOTOR CREDIT CORP Alamo Capital	07/18/2019	---	09/08/2022	09/08/2022	1,000,000.00	1,000,000.00	1,024,885.00	0.186%
TOYOTA MOTOR CREDIT CORP Alamo Capital	10/21/2019	---	10/07/2024	10/07/2024	1,500,000.00	1,499,994.00	1,568,706.00	0.616%
TOYOTA MOTOR CREDIT CORP Alamo Capital	02/19/2019	---	07/13/2022	07/13/2022	1,400,000.00	1,399,076.00	1,439,744.60	0.252%
VISA INC Stifel	01/30/2020	10/14/2022	10/14/2022	12/14/2022	2,000,000.00	2,065,680.00	2,072,048.00	0.457%
WALMART INC Stifel	06/18/2020	10/15/2024	10/15/2024	12/15/2024	2,000,000.00	2,173,300.00	2,143,984.00	0.596%
WELLS FARGO BANK NA UnionBanc GF	10/04/2019	09/09/2021	09/09/2021	09/09/2022	2,000,000.00	2,001,420.00	2,007,470.00	0.768%
---	---	---	02/13/2024	04/01/2024	43,900,000.00	45,617,398.47	45,638,110.60	0.564%
---								

## 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	---	---	05/31/2021	05/31/2021	39,757,220.88	39,757,220.88	39,757,220.88	---
LAIF Money Market Fund LAIF - GF	---	---	05/31/2021	05/31/2021	39,757,220.88	39,757,220.88	39,757,220.88	---

## 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	3,003,750.00	0.199%
UNITED STATES TREASURY UnionBanc GF	05/27/2021	---	11/15/2023	11/15/2023	3,000,000.00	3,005,156.25	3,003,750.00	0.199%

## MUNI

Description, Broker	Settle Date	Next Call Date	Effective Maturity	Final Maturity	PAR Value	Original Cost	Market Value	Yield to Maturity
EL CAJON CALIF UnionBanc GF	02/08/2021	---	04/01/2024	04/01/2024	300,000.00	302,583.00	299,130.00	1.031%
EL CAJON CALIF UnionBanc GF	02/08/2021	---	04/01/2023	04/01/2023	400,000.00	402,124.00	402,364.00	0.327%
MONTEREY PK CALIF PENSION OBLIG UnionBanc GF	02/16/2021	---	06/01/2025	06/01/2025	400,000.00	403,156.00	401,160.00	0.813%
MONTEREY PK CALIF PENSION OBLIG UnionBanc GF	02/16/2021	---	06/01/2023	06/01/2023	450,000.00	450,643.50	451,228.50	0.227%
MONTEREY PK CALIF PENSION OBLIG UnionBanc GF	02/16/2021	---	06/01/2024	06/01/2024	550,000.00	552,255.00	552,387.00	0.481%
---	---	---	02/23/2024	02/23/2024	2,100,000.00	2,110,761.50	2,106,269.50	0.539%
UnionBanc GF								

# Monthly Investment Portfolio Report

As of 05/31/2021

AGG- General Fund (213428)

Dated: 06/08/2021

## 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	05/30/2019	---	05/31/2022	05/31/2022	245,000.00	245,000.00	250,823.40	0.140%
Goldman Sachs Bank USA Piper Sandler	06/05/2019	---	06/06/2022	06/06/2022	245,000.00	245,000.00	250,926.55	0.137%
JPMorgan Chase Bank, National Association Alamo Capital	02/08/2021	07/16/2021	01/16/2026	01/16/2026	250,000.00	250,000.00	248,099.50	0.767%
Morgan Stanley Bank, N.A. Piper Sandler	06/06/2019	---	06/06/2022	06/06/2022	245,000.00	245,000.00	251,052.23	0.137%
Morgan Stanley Private Bank, National Association Piper Sandler	06/06/2019	---	06/06/2022	06/06/2022	245,000.00	245,000.00	251,052.23	0.137%
Sallie Mae Bank Piper Sandler	05/29/2019	---	05/31/2022	05/31/2022	245,000.00	245,000.00	250,823.40	0.140%
Synchrony Bank Piper Sandler	06/07/2019	---	06/07/2022	06/07/2022	245,000.00	245,000.00	250,690.61	0.137%
---	---	---	12/07/2022	12/07/2022	1,720,000.00	1,720,000.00	1,753,467.95	0.226%
---								

## CASH

Description, Broker	Settle Date	Next Call Date	Effective Maturity	Final Maturity	PAR Value	Original Cost	Market Value	Yield to Maturity
Cash Stifel	---	---	05/31/2021	05/31/2021	5,400.00	5,400.00	5,400.00	---
Cash Stifel	---	---	05/31/2021	05/31/2021	5,400.00	5,400.00	5,400.00	---

## Summary

Description, Broker	Settle Date	Next Call Date	Effective Maturity	Final Maturity	PAR Value	Original Cost	Market Value	Yield to Maturity
---	---	---	08/27/2023	12/26/2023	180,482,620.88	182,184,690.10	181,974,207.93	0.566%
---								

\* 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

MAY 2021

INVESTED  
RESERVE FUNDS  
\$1,643,795.44

BALANCE	MAY 1, 2021	\$45.96		
ACCOUNTS RECEIVABLE - OTHER		\$0.00		
CUSTOMER DEPOSITS - CONSTRUCTION		0.00		
INTEREST EARNED - INVESTED FUNDS		0.00		
WASTEWATER REVENUE		88,864.40		
SEWER CAPACITY CHARGES		0.00		
MISCELLANEOUS		0.00		
TOTAL RECEIPTS		\$88,864.40		
PAYMENTS				
CHECKS UNDER \$10,000.00		\$0.00		
CHECKS OVER \$10,000.00 - SCH. #1		72,963.57		
CANCELLED CHECKS AND FEES		0.00		
TOTAL PAYMENTS		<u>\$72,963.57</u>		
NET INCOME		\$15,900.83		
INVESTED RESERVE FUNDS				
FUNDS MATURED		\$0.00		
FUNDS INVESTED – SCH. #2		0.00		
NET TRANSFER			\$0.00	\$0.00
BALANCE	MAY 31, 2021	\$15,946.79	\$1,643,795.44	

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

**May 2021**

Check #	Name	Description	Amount
3386	Coachella Valley Water District	Wastewater Revenue Billing for April 2021	\$ 62,420.67
3387	City of Palm Springs	Wastewater Revenue Billing for April 2021	\$ 10,542.90
<b>Total</b>			<b>\$ 72,963.57</b>

# Monthly Investment Portfolio Report

As of 05/31/2021

AGG- Wastewater Fund (213427)

Dated: 06/08/2021

Security Type



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	---	---	05/31/2021	05/31/2021	1,643,795.44	1,643,795.44	1,643,795.44	---
<b>LAIF Money Market Fund LAIF - WW</b>	---	---	<b>05/31/2021</b>	<b>05/31/2021</b>	<b>1,643,795.44</b>	<b>1,643,795.44</b>	<b>1,643,795.44</b>	---

\* 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 886, Section VII  
& California Government Code Section 53646*

*as of*

**May 31, 2021**

### 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 886 and updated by Resolution 1200.

### 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

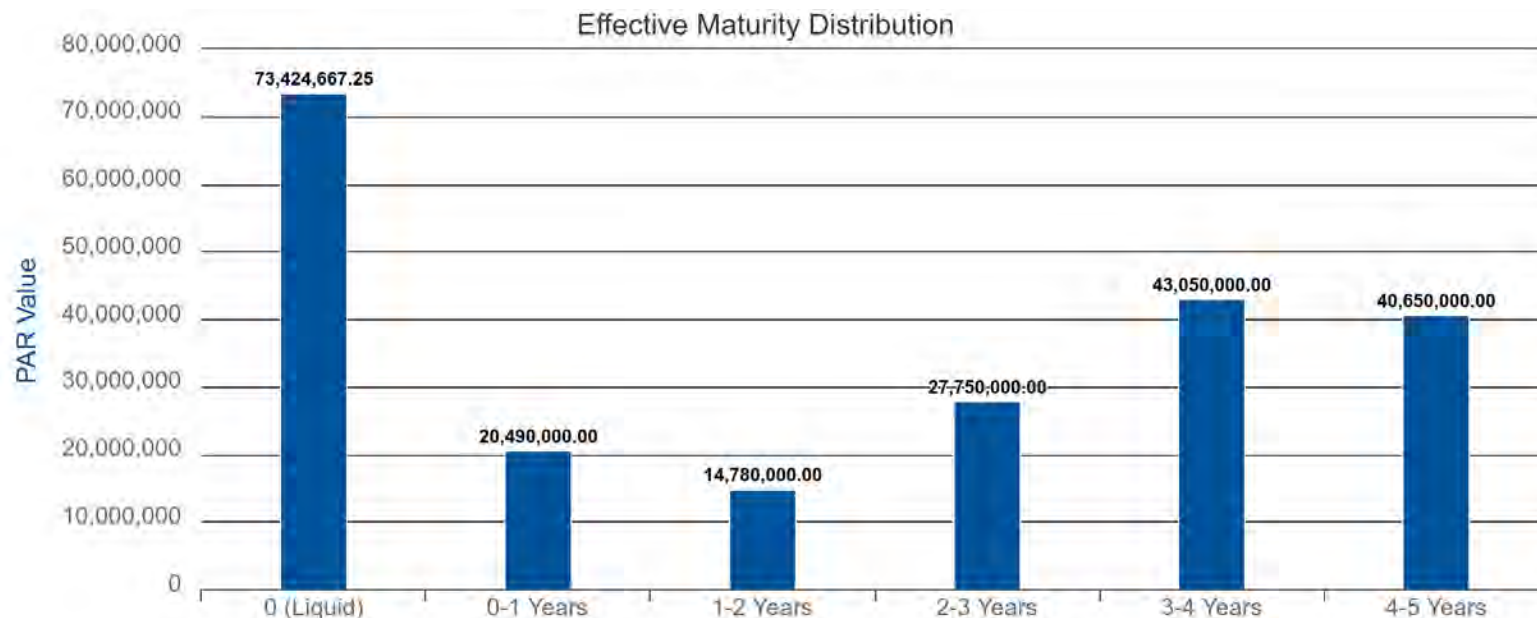


# Effective Maturity Distribution Summary

As of 05/31/2021

AGG-ALL (219610)

Dated: 06/08/2021



## 0 (Liquid)

DWA Fund	Account	Identifier	Description	Security Type	PAR Value	Ending Effective Maturity	Final Maturity
General Fund	LAIF - GF	LAIFMMF	LAIF Money Market Fund	MMFUND	39,757,220.88	05/31/2021	05/31/2021
Operating Fund	LAIF - OP	LAIFMMF	LAIF Money Market Fund	MMFUND	32,023,650.93	05/31/2021	05/31/2021
Wastewater Fund	LAIF - WW	LAIFMMF	LAIF Money Market Fund	MMFUND	1,643,795.44	05/31/2021	05/31/2021
---	---	LAIFMMF	LAIF Money Market Fund	MMFUND	73,424,667.25	05/31/2021	05/31/2021

## 0-1 Years

DWA Fund	Account	Identifier	Description	Security Type	PAR Value	Ending Effective Maturity	Final Maturity
General Fund	---	---	---	---	19,490,000.00	10/09/2021	08/22/2024
Operating Fund	UnionBanc OP	94988J6A0	WELLS FARGO BANK NA	CORP	1,000,000.00	09/09/2021	09/09/2022
---	---	---	---	---	20,490,000.00	10/07/2021	07/18/2024

## 1-2 Years

DWA Fund	Account	Identifier	Description	Security Type	PAR Value	Ending Effective Maturity	Final Maturity
General Fund	---	---	---	---	14,780,000.00	10/07/2022	11/05/2022
General Fund	---	---	---	---	14,780,000.00	10/07/2022	11/05/2022

## 2-3 Years

DWA Fund	Account	Identifier	Description	Security Type	PAR Value	Ending Effective Maturity	Final Maturity
General Fund	---	---	---	---	27,750,000.00	01/24/2024	02/04/2024

# Effective Maturity Distribution Summary

As of 05/31/2021

AGG-ALL (219610)

Dated: 06/08/2021

<i>DWA Fund</i>	<i>Account</i>	<i>Identifier</i>	<i>Description</i>	<i>Security Type</i>	<i>PAR Value</i>	<i>Ending Effective Maturity</i>	<i>Final Maturity</i>
General Fund	---	---	---	---	27,750,000.00	01/24/2024	02/04/2024

## 3-4 Years

<i>DWA Fund</i>	<i>Account</i>	<i>Identifier</i>	<i>Description</i>	<i>Security Type</i>	<i>PAR Value</i>	<i>Ending Effective Maturity</i>	<i>Final Maturity</i>
General Fund	---	---	---	---	41,050,000.00	10/24/2024	11/04/2024
Operating Fund	UnionBanc OP	---	---	AGCY BOND	2,000,000.00	11/20/2024	11/20/2024
---	---	---	---	---	43,050,000.00	10/25/2024	11/05/2024

## 4-5 Years

<i>DWA Fund</i>	<i>Account</i>	<i>Identifier</i>	<i>Description</i>	<i>Security Type</i>	<i>PAR Value</i>	<i>Ending Effective Maturity</i>	<i>Final Maturity</i>
General Fund	---	---	---	---	37,650,000.00	10/03/2025	10/11/2025
Operating Fund	UnionBanc OP	---	---	AGCY BOND	3,000,000.00	07/31/2025	07/31/2025
---	---	---	---	---	40,650,000.00	09/28/2025	10/05/2025

## Summary

<i>Account</i>	<i>Identifier</i>	<i>Description</i>	<i>Security Type</i>	<i>PAR Value</i>	<i>Ending Effective Maturity</i>	<i>Final Maturity</i>
---	---	---	---	220,144,667.25	05/05/2023	08/14/2023

\* 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	
<b>AGCY BOND</b>	Agency Bond <sup>1</sup>
<b>CORP</b>	Medium Term Notes (Corporate) <sup>2</sup>
<b>MMFUND</b>	Local Agency Investment Fund (LAIF) <sup>3</sup> & Cash Funds in Transit <sup>4</sup>
<b>MUNI</b>	Municipal Bonds <sup>5</sup>
<b>CD</b>	Negotiable Certificates of Deposit <sup>6</sup>
<b>US GOV</b>	U.S. Treasury notes, bills bonds or other certificates of indebtedness <sup>7</sup>

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

NOTES:

<sup>1</sup> DWA Investment Policy, Resolution 1200, Schedule 1, Item 2

<sup>2</sup> DWA Investment Policy, Resolution 1200, Schedule 1, Item 12

<sup>3</sup> DWA Investment Policy, Resolution 1200, Schedule 1, Item 7

<sup>4</sup> 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.

<sup>5</sup> DWA Investment Policy, Resolution 1200, Schedule 1, Item 3

<sup>6</sup> DWA Investment Policy, Resolution 1200, Schedule 1, Item 8

<sup>7</sup> DWA Investment Policy, Resolution 1200, Schedule 1, Item 1

DESERT WATER AGENCY - OPERATING FUND COMPARATIVE EARNINGS STATEMENT								
MONTH 20-21 MAY	/-----THIS MONTH-----/ THIS YEAR	LAST YEAR	BUDGET	/-----FISCAL YEAR TO DATE-----/ THIS YEAR	LAST YEAR	BUDGET	/--VARIANCE--/ YTD	PCT
OPERATING REVENUES								
WATER SALES	3,226,003.64	2,896,603.39	3,245,400.00	34,341,713.56	31,459,743.87	32,947,500.00	1,394,213.56	4
RECLAMATION SALES	118,071.12	99,569.50	156,800.00	1,067,482.08	1,365,060.01	1,311,850.00	244,367.92-	19-
POWER SALES	.00	1,958.14	2,750.00	23,184.29	38,514.44	30,250.00	7,065.71-	23-
OTHER OPER REVENUE	349,545.69	64,364.81	173,725.00	2,466,858.19	2,298,249.93	1,910,975.00	555,883.19	29
TOTAL OPER REVENUES	3,693,620.45	3,062,495.84	3,578,675.00	37,899,238.12	35,161,568.25	36,200,575.00	1,698,663.12	5
OPERATING EXPENSES								
SOURCE OF SUPPLY EXP	23,043.32	23,629.38	62,775.00	4,678,386.63	3,933,805.08	4,343,975.00	334,411.63	8
PUMPING EXPENSE	224,036.20	209,955.57	327,950.00	2,925,744.30	2,428,442.67	3,097,450.00	171,705.70-	6-
REGULATORY WATER TREAT	49,259.77	51,415.18	53,700.00	609,619.06	515,162.59	590,700.00	18,919.06	3
TRANS & DIST EXPENSE	187,293.88	264,272.63	349,000.00	2,331,172.74	2,604,052.13	3,839,000.00	1,507,827.26-	39-
CUSTOMER ACT EXPENSE	80,873.09	76,896.86	97,550.00	952,943.65	899,885.99	1,041,850.00	88,906.35-	9-
ADMIN & GEN EXPENSE	665,532.67	841,409.11	777,535.00	10,288,640.70	10,194,944.41	10,974,160.00	685,519.30-	6-
REGULATORY EXPENSE	60,694.98	10,766.40	37,750.00	262,801.91	320,792.38	415,250.00	152,448.09-	37-
SNOW CREEK HYDRO EXP	1,684.84	2,959.20	3,050.00	32,462.91	37,159.63	33,550.00	1,087.09-	3-
RECLAMATION PLNT EXP	52,975.50	49,457.27	209,375.00	756,301.67	921,405.36	2,304,625.00	1,548,323.33-	67-
SUB-TOTAL	1,345,394.25	1,530,761.60	1,918,685.00	22,838,073.57	21,855,650.24	26,640,560.00	3,802,486.43-	14-
OTHER OPER EXPENSES								
DEPRECIATION	493,056.48	509,874.91	518,550.00	5,687,424.62	5,586,440.34	5,704,050.00	16,625.38-	0
SERVICES RENDERED	11,052.22	4,524.14	13,750.00	124,849.81	115,624.27	151,250.00	26,400.19-	17-
DIR & INDIR CST FOR WO	179,114.42-	171,457.36-	204,900.00-	2,487,482.10-	2,078,385.42-	2,253,900.00-	233,582.10-	10
TOTAL OPER EXPENSES	1,670,388.53	1,873,703.29	2,246,085.00	26,162,865.90	25,479,329.43	30,241,960.00	4,079,094.10-	13-
NET INCOME FROM OPERATIONS	2,023,231.92	1,188,792.55	1,332,590.00	11,736,372.22	9,682,238.82	5,958,615.00	5,777,757.22	97
NON-OPERATING INCOME (NET)								
RENTS	14,338.37	3,779.89	3,800.00	157,363.06	168,566.11	167,300.00	9,936.94-	6-
INTEREST REVENUES	12,525.54	34,013.45	15,000.00	196,876.35	504,890.80	165,000.00	31,876.35	19
OTHER FUNDS	121.50-	11,972.56-	.00	121.50-	11,986.06-	.00	121.50-	0
OTHER REVENUES	420.00	560.00	.00	1,735.35	11,601.72	.00	1,735.35	0
GAINS ON RETIREMENT	.00	28,000.00	2,480.00	126,098.79	28,000.00	22,320.00	103,778.79	465
DISCOUNTS	49.38	.00	50.00	371.41	266.02	550.00	178.59-	32-
PR. YEAR EXPENSES	.00	.00	.00	72,438.53	292.11	.00	72,438.53	0
OTHER EXPENSES	162.83-	.00	2,500.00-	27,341.06-	20,000.00-	57,500.00-	30,158.94	52-
LOSS ON RETIREMENTS	.00	.00	4,500.00-	145,570.47-	35,591.03-	49,500.00-	96,070.47-	194
TOTAL NON-OPER INCOME	27,048.96	54,380.78	14,330.00	381,850.46	646,039.67	248,170.00	133,680.46	54
TOTAL NET INCOME	2,050,280.88	1,243,173.33	1,346,920.00	12,118,222.68	10,328,278.49	6,206,785.00	5,911,437.68	95

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

**JUNE 15, 2021**

**RE: GROUNDWATER REPLENISHMENT ASSESSMENT  
WEST WHITEWATER RIVER SUBBASIN AND MISSION CREEK  
SUBBASIN (PUBLIC HEARING)**

Following presentation of the Engineer's Report on the Groundwater Replenishment and Assessment Program for 2021/2022 during the Board's May 18, 2021 meeting, a determination was made that funds should be raised by a replenishment assessment, and the Board set the time and place for a public hearing on the matter.

As indicated in the Replenishment Reports, the proposed West Whitewater and Mission Creek Groundwater Replenishment Assessment will be set at \$175 per acre-foot.

On May 18, 2021 the Agency held a meeting on the proposed West Whitewater and Mission Creek Groundwater Replenishment Assessments.

A copy of the Notice of today's Public Hearing was sent to all pumpers on May 27, 2021 advising them of the scheduled public hearing, as well as the recommended replenishment assessment to be considered. The Notice of Public Hearing, setting the hearing date for today, was published in The Public Record on May 27, 2021.

A comparison of historic and proposed groundwater replenishment rates for Desert Water Agency (DWA) and Coachella Valley Water District (CVWD) is shown in Exhibit 8 of the Engineer's report (see attached).

Staff recommends:

1. Open the Public Hearing, receive public testimony, close public hearing; and
2. Adopt:

Resolution No. 1256 - West Whitewater River Subbasin - Making findings of fact relevant and material to levying the replenishment assessment within the West Whitewater River Subbasin.

Resolution No. 1257 - West Whitewater River Subbasin – Levying the 2021/2022 West Whitewater River Groundwater Replenishment Assessment in the amount of \$175.00 per acre-foot.

Resolution No. 1258 - Mission Creek Subbasin – Making findings of fact relevant and material to levying the replenishment assessment within the Mission Creek Subbasin.

Resolution No. 1259 - Mission Creek Subbasin – Levying the 2021/2022 Mission Creek Groundwater Replenishment Assessment in the amount of \$175.00 per acre-foot.

Attachments: 1. Resolution No's 1256 – 1259  
2. Exhibit 8  
3. Engineer's Report

**RESOLUTION NO. 1256**

**RESOLUTION OF THE BOARD OF DIRECTORS OF DESERT  
WATER AGENCY MAKING FINDINGS OF FACT RELEVANT AND  
MATERIAL TO THE LEVY OF A REPLENISHMENT ASSESSMENT  
PURSUANT TO DESERT WATER AGENCY LAW**

**WEST WHITEWATER RIVER SUBBASIN**

**WHEREAS**, this Board has called and conducted a public hearing pursuant to statute in regard to the levy of a replenishment assessment within a portion of the Desert Water Agency for the 2021-2022 fiscal year; and

**WHEREAS**, it appears to this Board that such an assessment should be levied based upon the following findings material and relevant to such levy;

**NOW, THEREFORE, BE IT RESOLVED** by the Board of Directors of Desert Water Agency that this Board finds:

1. Cumulative overdraft conditions exist within that portion of the West Whitewater River Subbasin of the Upper Coachella Valley lying within the boundaries of the Desert Water Agency; therefore, there is need for groundwater replenishment to arrest or reduce cumulative groundwater overdraft.

2. There is need to levy a replenishment assessment (charge) for fiscal year 2021-2022 upon groundwater extractions within the aforementioned portion of the West Whitewater River Subbasin or surface water diversions from streams which would naturally replenish such portion of the West Whitewater River Subbasin to defray the costs of groundwater replenishment.

3. Such groundwater replenishment assessment (charge) shall apply to all water production, both groundwater extractions and surface water diversions within the Area of Benefit, at a uniform rate in dollars per acre foot.

4. Pursuant to statute, the Area of Benefit is hereby delineated as that portion of the West Whitewater River Subbasin of the Upper Coachella Valley lying within the boundaries

of the Desert Water Agency (See Figure 2 in "***Engineer's Report on Groundwater Replenishment and Assessment Program for the West Whitewater River and Mission Creek Subbasins – Desert Water Agency 2021-2022***"), and those areas within the Agency from which diversions are made from streamflow which would replenish naturally such portion of the West Whitewater River Subbasin. The reason for delineation of this Area of Benefit is that all producers therein, benefit from the groundwater replenishment program now being carried on by the Agency.

5. Extractions of groundwater of 10 acre feet or less per year are excluded from this process, and are exempted from the levy of any replenishment assessment pursuant to Section 15.4(g) of the Desert Water Agency Law. Diversions which do not diminish streamflow in excess of 10 acre feet per year shall also be excluded.

6. This Agency plans to take its 2021-2022 Table A Water Allocation under its State Water Project Contract and to exchange such water for other imported water to be used for replenishment purposes.

7. Pursuant to Section 15.4(f) of the Desert Water Agency Law, the maximum permissible replenishment assessment rate for State Water Project water for the 2021-2022 fiscal year, based on the Agency's estimated applicable State Water Project charges of \$11,956,580 and estimated assessable production within all the West Whitewater River and Mission Creek Subbasins of 44,830 acre feet, is approximately \$267 per acre foot.

8. Pursuant to the provisions of the 2014 Water Management Agreement between the Agency and the Coachella Valley Water District, the effective replenishment assessment rate for State Water Project water for the 2021-2022 fiscal year, based on the Agency's estimated allocated State Water Project charges for its Table A Water Allocation of \$11,119,519 and estimated assessable production within the West Whitewater River and Mission Creek Subbasins of 44,830 acre feet is approximately \$248 per acre foot.



9. Pursuant to Sections 15.4(b) and 15.4(f) of the Desert Water Agency Law, the replenishment assessment in any given year may include costs of purchasing, transporting, and spreading the exchange water to be used for replenishment. The 2021-2022 replenishment assessment rate includes a credit of \$73 per acre foot for discretionary reductions for the West Whitewater River Subbasin.

10. Pursuant to the above provisions, the 2021-2022 replenishment assessment rate is \$175 per acre foot.

**ADOPTED** this 15th day of June, 2021.

---

Kristin Bloomer, President

ATTEST:

---

Joseph K. Stuart, Secretary-Treasurer

44,830 from Table 6

\$248 from Table 6

\$11,119,519 from Table 6

\$11,956,580 Page V-6

\$11,231,587 Page V-7 top of page

\$167 Page V-6

\$73 from Table 7

## RESOLUTION NO. 1257

### **RESOLUTION OF THE BOARD OF DIRECTORS OF DESERT WATER AGENCY LEVYING A WATER REPLENISHMENT ASSESSMENT FOR THE FISCAL YEAR 2021-2022 FOR THE PURPOSE OF REPLENISHING GROUNDWATER SUPPLIES WEST WHITEWATER RIVER SUBBASIN**

**WHEREAS**, Section 15.4 of the Desert Water Agency Law provides for the levy of water replenishment assessment (charge) upon the extraction of groundwater, or the diversion of surface supplies which would naturally replenish groundwater supplies; and

**WHEREAS**, the Board has followed and completed the statutory procedures required for the levy of such water replenishment assessment, including the adoption by resolution of specific findings of fact on all matters relevant and material to the purpose for which a water replenishment assessment may be levied.

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

1. The Board does hereby levy a water replenishment assessment upon all water produced during the 2021-2022 fiscal year from within the area of benefit as hereinafter determined.
2. The area of benefit is hereby determined to be that portion of the West Whitewater River Subbasin lying within the boundaries of the Desert Water Agency (See Figure 2 in "**Engineer's Report on Groundwater Replenishment and Assessment Program for the West Whitewater River and Mission Creek Subbasins - Desert Water Agency, 2021-2022**"), and those areas within the Agency from which diversions are made from streamflow which would replenish naturally such portion of the West Whitewater River Subbasin. Water production shall include both groundwater extractions and surface water diversions.

3. The water replenishment assessment in such area of benefit shall be at the rate of \$175.00 per acre foot. The water replenishment assessment shall be due and payable on a quarterly basis, and shall be paid within 30 days after the end of each quarter ending September 30, December 31, March 31, and June 30.

4. The General Manager of the Agency shall give notice of the levy of this water replenishment assessment, and shall provide the necessary forms for production statements, as required by Sections 15.4(h) and 15.4(i) of the Desert Water Agency Law.

5. Minimal production, either groundwater extractions of 10 acre feet or less per year, or streamflow diversions which do not diminish the flow in excess of 10 acre feet per year, shall be exempt from any water replenishment assessment.

**ADOPTED** this 15th day of June, 2021.

---

Kristin Bloomer, President

ATTEST:

---

Joseph K. Stuart, Secretary-Treasurer

## **RESOLUTION NO. 1258**

### **A RESOLUTION OF THE BOARD OF DIRECTORS OF DESERT WATER AGENCY MAKING FINDINGS OF FACT RELEVANT AND MATERIAL TO THE LEVY OF A REPLENISHMENT ASSESSMENT PURSUANT TO DESERT WATER AGENCY LAW**

#### **MISSION CREEK SUBBASIN**

**WHEREAS**, this Board has called and conducted a public hearing pursuant to statute in regard to the levy of a replenishment assessment within a portion of the Desert Water Agency for the 2021-2022 fiscal year; and

**WHEREAS**, it appears to this Board that such an assessment should be levied based upon the following findings material and relevant to such levy;

**NOW, THEREFORE, BE IT RESOLVED** by the Board of Directors of Desert Water Agency that this Board finds:

1. Cumulative overdraft conditions exist within that portion of the Mission Creek River Subbasin of the Upper Coachella Valley lying within the boundaries of the Desert Water Agency; therefore, there is need for groundwater replenishment to arrest or reduce cumulative groundwater overdraft.

2. There is need to levy a replenishment assessment (charge) for fiscal year 2021-2021 upon groundwater extractions within the aforementioned portion of the Mission Creek Subbasin or surface water diversions from streams which would naturally replenish such portion of the Mission Creek Subbasin to defray the costs of groundwater replenishment.

3. Such groundwater replenishment assessment (charge) shall apply to all water production, both groundwater extractions and surface water diversions within the Area of Benefit, at a uniform rate in dollars per acre-foot.

4. Pursuant to statute, the Area of Benefit is hereby delineated as that portion of the Mission Creek Subbasin of the Upper Coachella Valley lying within the boundaries

of the Desert Water Agency (See Figure 2 in "***Engineer's Report on Groundwater Replenishment and Assessment Program for the West Whitewater River and Mission Creek Subbasins – Desert Water Agency 2021-2022***"), and those areas within the Agency from which diversions are made from streamflow which would replenish naturally such portion of the Mission Creek Subbasin. The reason for delineation of this Area of Benefit is that all producers therein, benefit from the groundwater replenishment program now being carried on by the Agency.

5. Extractions of groundwater of 10 acre feet or less per year are excluded from this process, and are exempted from the levy of any replenishment assessment pursuant to Section 15.4(g) of the Desert Water Agency Law. Diversions which do not diminish streamflow in excess of 10 acre feet per year shall also be excluded.

6. This Agency plans to take its 2021-2022 Table A Water Allocation under its State Water Project Contract and to exchange such water for other imported water to be used for replenishment purposes.

7. Pursuant to Section 15.4(f) of the Desert Water Agency Law, the maximum permissible replenishment assessment rate for State Water Project water for the 2021-2022 fiscal year, based on the Agency's estimated applicable State Water Project charges of \$11,956,580 and estimated assessable production within all the West Whitewater River and Mission Creek Subbasins of 44,830 acre feet, is approximately \$267 per acre foot.

8. Pursuant to the provisions of the 2014 Water Management Agreement between the Agency and the Coachella Valley Water District, the effective replenishment assessment rate for State Water Project water for the 2021-2022 fiscal year, based on the Agency's estimated allocated State Water Project charges for its Table A Water Allocation of \$11,119,519 and estimated assessable production within the West Whitewater River and Mission Creek Subbasins of 44,830 acre feet is approximately \$248 per acre foot.

9. Pursuant to Sections 15.4(b) and 15.4(f) of the Desert Water Agency Law, the replenishment assessment in any given year may include costs of purchasing, transporting, and spreading the exchange water to be used for replenishment. The 2021-2022 replenishment assessment rate includes a credit of \$73 per acre foot for discretionary reductions for the Mission Creek Subbasin.

10. Pursuant to the above provisions, the 2021-2022 replenishment assessment rate is \$175 per acre foot.

**ADOPTED** this 15th day of June, 2021.

---

Kristin Bloomer, President

ATTEST:

---

Joseph K. Stuart, Secretary-Treasurer

## RESOLUTION NO. 1259

### **RESOLUTION OF THE BOARD OF DIRECTORS OF DESERT WATER AGENCY LEVYING A WATER REPLENISHMENT ASSESSMENT FOR THE FISCAL YEAR 2021-2022 FOR THE PURPOSE OF REPLENISHING GROUNDWATER SUPPLIES MISSION CREEK SUBBASIN**

**WHEREAS**, Section 15.4 of the Desert Water Agency Law provides for the levy of water replenishment assessment (charge) upon the extraction of groundwater, or the diversion of surface supplies which would naturally replenish groundwater supplies; and

**WHEREAS**, the Board has followed and completed the statutory procedures required for the levy of such water replenishment assessment, including the adoption by resolution of specific findings of fact on all matters relevant and material to the purpose for which a water replenishment assessment may be levied.

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

1. The Board does hereby levy a water replenishment assessment upon all water produced during the 2021-2022 fiscal year from within the area of benefit as hereinafter determined.
2. The area of benefit is hereby determined to be that portion of the Mission Creek Subbasin lying within the boundaries of the Desert Water Agency (See Figure 2 in **"Engineer's Report on Groundwater Replenishment and Assessment Program for the West Whitewater River and Mission Creek Subbasins - Desert Water Agency, 2021-2022"**), and those areas within the Agency from which diversions are made from streamflow which would replenish naturally such portion of the Mission Creek Subbasin. Water production shall include both groundwater extractions and surface water diversions.

3. The water replenishment assessment in such area of benefit shall be at the rate of \$175.00 per acre foot. The water replenishment assessment shall be due and payable on a quarterly basis, and shall be paid within 30 days after the end of each quarter ending September 30, December 31, March 31, and June 30.

4. The General Manager of the Agency shall give notice of the levy of this water replenishment assessment, and shall provide the necessary forms for production statements, as required by Sections 15.4(h) and 15.4(i) of the Desert Water Agency Law.

5. Minimal production, either groundwater extractions of 10 acre feet or less per year, or streamflow diversions which do not diminish the flow in excess of 10 acre feet per year, shall be exempt from any water replenishment assessment.

**ADOPTED** this 15th day of June, 2021.

---

Kristin Bloomer, President

ATTEST:

---

Joseph K. Stuart, Secretary-Treasurer



**EXHIBIT 8**  
**DESERT WATER AGENCY AND COACHELLA VALLEY WATER DISTRICT**  
**COMPARISON OF HISTORIC AND PROPOSED GROUNDWATER REPLENISHMENT**  
**ASSESSMENT RATE FOR THE WEST WHITEWATER RIVER AND MISSION CREEK SUBBASIN AOBs**

Year	DWA		CVWD West Whitewater		CVWD Mission Creek	
	\$/AF	% Increase	\$/AF	% Increase	\$/AF	% Increase
78/79	\$6.81	---	No Assessment	---	No Assessment	---
79/80	\$9.00	32%	No Assessment	---	No Assessment	---
80/81	\$9.50	6%	\$5.66	---	No Assessment	---
81/82	\$10.50	11%	\$7.43	31%	No Assessment	---
82/83	\$21.00	100%	\$19.82	167%	No Assessment	---
83/84	\$36.50	74%	\$33.23	68%	No Assessment	---
84/85	\$37.50	3%	\$34.24	3%	No Assessment	---
85/86	\$31.00	-17%	\$21.81	-36%	No Assessment	---
86/87	\$21.00	-32%	\$19.02	-13%	No Assessment	---
87/88	\$22.50	7%	\$19.55	3%	No Assessment	---
88/89	\$20.00	-11%	\$15.96	-18%	No Assessment	---
89/90	\$23.50	18%	\$19.66	23%	No Assessment	---
90/91	\$26.00	11%	\$23.64	20%	No Assessment	---
91/92	\$31.75	22%	\$25.66	9%	No Assessment	---
92/93	\$31.75	0%	\$28.23	10%	No Assessment	---
93/94	\$31.75	0%	\$31.05	10%	No Assessment	---
94/95	\$31.75	0%	\$34.16	10%	No Assessment	---
95/96	\$31.75	0%	\$37.58	10%	No Assessment	---
96/97	\$31.75	0%	\$37.58	0%	No Assessment	---
97/98	\$31.75	0%	\$42.09	12%	No Assessment	---
98/99	\$31.75	0%	\$47.14	12%	No Assessment	---
99/00	\$31.75	0%	\$52.80	12%	No Assessment	---
00/01	\$33.00	4%	\$59.14	12%	No Assessment	---
01/02	\$33.00	0%	\$66.24	12%	No Assessment	---
02/03	\$35.00	6%	\$72.86	10%	\$59.80	---
03/04	\$35.00	0%	\$72.86	0%	\$59.80	0%
04/05	\$45.00	29%	\$78.86	8%	\$59.80	0%
05/06	\$50.00	11%	\$78.86	0%	\$59.80	0%
06/07	\$63.00	26%	\$83.34	6%	\$65.78	10%
07/08	\$63.00	0%	\$91.67	10%	\$72.36	10%
08/09	\$72.00	14%	\$93.78	2%	\$76.60	6%
09/10	\$72.00	0%	\$102.45	9%	\$87.56	14%
10/11	\$82.00	14%	\$102.45	0%	\$89.75	3%
11/12	\$82.00	0%	\$107.57	5%	\$98.73	10%
12/13	\$92.00	12%	\$110.26	3%	\$98.73	0%
13/14	\$92.00	0%	\$110.26	0%	\$98.73	0%
14/15	\$102.00	11%	\$110.26	0%	\$98.73	0%
15/16	\$102.00	0%	\$112.00	2%	\$112.00	13%
16/17	\$102.00	0%	\$128.80	15%	\$123.20	10%
17/18	\$120.00	18%	\$143.80	12%	\$135.52	10%
18/19	\$140.00	17%	\$143.80	0%	\$135.52	0%
19/20	\$155.00	11%	\$143.80	0%	\$135.52	0%
20/21	\$165.00	6%	\$143.80	0%	\$135.52 *	0%
21/22	\$175.00 *	6%	\$165.37 *	15%	\$135.52 *	0%

\* Proposed replenishment assessment rate

2021/2022 Engineer's Report  
on following page

# DESERT WATER



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**ENGINEER'S REPORT**  
**GROUNDWATER REPLENISHMENT**  
**AND**  
**ASSESSMENT PROGRAM**  
**FOR THE**  
**WEST WHITEWATER RIVER SUBBASIN,**  
**AND MISSION CREEK SUBBASIN**  
**AREAS OF BENEFIT**  
**DESERT WATER AGENCY**  
**2021/2022**  
**MAY 2021**

Prepared by



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101-33.45  
(DFS/blt)  
(REPORTS/101-33P45RPT)

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## EXHIBITS

- Exhibit 1 Desert Water Agency Groundwater Well Hydrographs: Palm Springs Subarea of West Whitewater River Subbasin Management Area: Groundwater Replenishment Quantities at Whitewater River Replenishment Facility
- Exhibit 2 Desert Water Agency Groundwater Well Hydrographs: San Geronio Pass Subbasin of West Whitewater River Subbasin Management Area: Groundwater Replenishment Quantities at Whitewater River Replenishment Facility
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## ABBREVIATIONS

2013-2014 Multi-Year Water Pool .....	MYWP
acre feet per year .....	AF/Yr
Applicable State Water Project Charges .....	Applicable SWP Charges
Area of Benefit .....	AOB
Bay Delta Conservation Plan .....	BDC
California Department of Water Resources .....	CDWR
Coachella Valley Water District .....	CVWD
degrees Fahrenheit .....	°F
Desert Water Agency .....	DWA
Garnet Hill Subarea .....	GH
Metropolitan Water District of Southern California .....	MWD
Mission Creek/Garnet Hill Water Management Plan .....	MC/GH WMP
Mission Creek Subbasin .....	MC
Mission Springs Water District .....	MSWD
Montgomery Watson Harza .....	MWH
Off-Aqueduct Power Component of the State Water Project	
Transportation Charge .....	Off-Aqueduct Power Charge
State Water Resources Control Board .....	SWRCB
State Water Project .....	SWP
United States Geological Survey .....	USGS
Variable OMP&R Component of the	
State Water Project Transportation Charge .....	Variable Transportation Charge
West Whitewater River Subbasin .....	WWR

## DEFINITIONS

<b><u>Term</u></b>	<b><u>Definition</u></b>
Natural Inflow	Water flowing into a groundwater unit from natural sources such as surface water runoff or subsurface underflow from other groundwater units
Natural Outflow	Water flowing out of a groundwater unit by drainage or subsurface underflow into other groundwater units
Net Natural Inflow	Natural Inflow minus Natural Outflow
Production	Either extraction of groundwater from a Management Area or Area of Benefit (including its upstream tributaries), or diversion of surface water that would otherwise naturally replenish the groundwater within the Management Area or Area of Benefit (including its upstream tributaries)
Consumptive Use	Use of groundwater that does not return the water to the groundwater unit from which it was extracted, e.g. evaporation, evapotranspiration, export





<u>Term</u>	<u>Definition</u>
Non-Consumptive Return	Pumped groundwater that is returned to the groundwater unit after pumping, e.g. irrigation return, wastewater percolation, septic tank percolation
Net Production	Production minus Non-Consumptive Return
Assessable Production	Production within an Area of Benefit that does not include groundwater extracted by minimal pumpers and minimal diverters
Minimal Pumper	A groundwater pumper that extracts 10 AF of water or less in any one year
Minimal Diverter	A surface water diverter that diverts 10 AF of water or less in any one year
Gross (Groundwater) Overdraft	Total Net Production in excess of Net Natural Inflow
Net (Groundwater) Overdraft	Gross Groundwater Overdraft offset by artificial replenishment
Cumulative Gross Overdraft	Total Gross Overdraft that has accumulated since the specific year that marks estimated commencement of gross overdraft conditions
Cumulative Net Overdraft	Cumulative Gross Overdraft offset by Cumulative Artificial Replenishment
Whitewater River (Indio) Subbasin	The entire Indio Subbasin, as defined by the California Department of Water Resources, <i>Bulletin No. 108: Coachella Valley Investigation</i> (1964).
Mission Creek Subbasin or MC	The entire Mission Creek Groundwater Subbasin as defined by the California Department of Water Resources, <i>Bulletin No. 108: Coachella Valley Investigation</i> (1964) and by the United States Geological Survey in <i>Geological Survey Water-Supply Paper 2027</i> (1974)
Garnet Hill Subarea or GH	The entire Garnet Hill Subarea of the Indio Subbasin, as defined by the California Department of Water Resources, <i>Bulletin No. 108: Coachella Valley Investigation</i> (1964). Also known as the Garnet Hill Groundwater Subbasin as defined by the United States Geological Survey in <i>Geological Survey Water-Supply Paper 2027</i> (1974)



<b><u>Term</u></b>	<b><u>Definition</u></b>
Palm Springs Subarea	The entire Palm Springs Subarea of the Indio Subbasin, as defined by the California Department of Water Resources, <i>Bulletin No. 108: Coachella Valley Investigation (1964)</i> . Also known as the Whitewater River Groundwater Subbasin as defined by the United States Geological Survey in <i>Geological Survey Water-Supply Paper 2027 (1974)</i>
West Whitewater River Subbasin Management Area or WWR Management Area	The westerly portion of the Whitewater River (Indio) Subbasin, including the Palm Springs and Garnet Hill Subareas, and a portion of the San Geronimo Pass Subbasin tributary to the Whitewater River (Indio) Subbasin, as specifically defined in Chapter II
West Whitewater River Subbasin Area of Benefit or WWR AOB	The portion of the WWR Management Area that is within DWA's service area and is managed by DWA
CVWD's West Whitewater River Subbasin Area of Benefit or CVWD's WWR AOB	The portion of the WWR Management Area that is within CVWD's service area and is managed by CVWD
Mission Creek Subbasin Management Area or MC Management Area	The portion of the Mission Creek Subbasin that lies within the service areas of DWA and CVWD, as specifically defined in Chapter II
Mission Creek Subbasin Area of Benefit or MC AOB	The portion of the MC Management Area that is within DWA's service area and is managed by DWA
CVWD's Mission Creek Subbasin Area of Benefit or CVWD's MC AOB	The portion of the MC Management Area that is within CVWD's service area and is managed by CVWD

**CHAPTER I**  
**EXECUTIVE SUMMARY**



## CHAPTER I EXECUTIVE SUMMARY

Since 1973, Coachella Valley Water District (CVWD) and Desert Water Agency (DWA) have been using Colorado River water exchanged for State Water Project (SWP) water to replenish groundwater in the West Whitewater River Subbasin (WWR) and Mission Creek Subbasin (MC) Management Areas of the Coachella Valley Groundwater Basin.

Through the 2019/2020 Engineer's Reports, the portion of the Garnet Hill Subarea (GH) within DWA's service area was considered by DWA to be a separate subbasin and Management Area. However, CVWD considered the portion of the Garnet Hill Subarea within CVWD's service area to be part of the WWR Management Area. In addition, since the Sustainable Groundwater Management Act (SGMA) is administered by the California Department of Water Resources (CDWR), SGMA plans and reports are required to use the CDWR basin and subbasin definitions. CDWR does not consider the Garnet Hill Subarea to be a separate subbasin.

For these reasons, since the 2020/2021 Engineer's Report, the Garnet Hill Subarea has been referred to as such, rather than as the Garnet Hill Subbasin, it is included as a portion of the WWR Management Area, and the following terms and definitions apply:

- "Whitewater River (Indio) Subbasin" – the entire Indio Groundwater Subbasin as defined by CDWR.
- "West Whitewater River Subbasin Management Area" or "WWR Management Area" – the westerly portion of the Whitewater River (Indio) Subbasin, including the GH, as specifically defined in **Chapter II**.
- "West Whitewater River Subbasin Area of Benefit" or "WWR AOB" – the portion of the WWR Management Area that is within DWA's service area and is managed by DWA. The portion of the WWR Management Area that is within CVWD's service area and is managed by CVWD will be referred to as "CVWD's West Whitewater River Subbasin Area of Benefit" or "CVWD's WWR AOB".

Groundwater production continues to exceed natural groundwater replenishment. If groundwater replenishment with imported water (artificial replenishment) is excluded, gross groundwater overdraft (defined herein as groundwater extractions or water production in excess of natural groundwater



replenishment and/or recharge) within the WWR and MC Management Areas of the Coachella Valley Groundwater Basin (see **Figure 1**) would continue to increase at a steady rate. The five-year average gross overdraft (total net production minus net natural inflow) in the WWR Management Area is currently estimated to be about 73,000 acre feet per year (AF/Yr), while gross overdraft in the MC Management Area is currently estimated at about 6,000 AF/Yr. Supplementing natural groundwater recharge resulting from rainfall runoff with artificial replenishment using imported water supplies is therefore necessary to offset annual and cumulative gross overdraft.

Increases in cumulative gross overdraft, without artificial replenishment, will result in declining groundwater levels and increasing pump lifts, thereby increasing energy consumption for groundwater extraction. Extreme cumulative gross overdraft has the potential of causing ground surface settlement, and could also have an adverse impact upon groundwater quality and storage volume. Artificial replenishment offsets annual groundwater overdraft and the concerns associated therewith and arrests or reduces the effects of cumulative gross groundwater overdraft.

The Areas of Benefit (AOBs) for DWA's portion of the groundwater replenishment program are those portions of the WWR and MC Management Areas, including tributary subbasins (e.g. the San Gorgonio Pass Subbasin), rivers, or streams--which lie within the boundaries of DWA (**Figure 2**). The costs involved in carrying out DWA's groundwater replenishment program are essentially recovered through water replenishment assessments applied to all groundwater and surface water production within each AOB, aside from specifically exempted production.

Desert Water Agency Law defines *production* as "the extraction of groundwater by pumping or any other method within the boundaries of the agency, or the diversion within the agency of surface supplies which naturally replenish the groundwater supplies within the agency and are used therein." The following producers are specifically exempted from assessment: producers extracting groundwater from all three subbasins and upstream tributaries at rates of 10 AF/Yr or less; and producers diverting surface water without diminishing stream flow and groundwater recharge of the subbasins and upstream tributaries by 10 AF/Yr or less. Therefore, *production*, as used herein, is understood as either extraction of groundwater from a Management Area or AOB (including its upstream tributaries), or diversion of surface water that would otherwise naturally replenish the groundwater within the Management Area or AOB (including its upstream tributaries). *Assessable production*, as used herein, is understood as production that does not include water produced by minimal pumpers and minimal diverters at rates of 10 AF/Yr or less.



As a result of the implementation of the Mission Creek Groundwater Replenishment Agreement, dated April 8, 2003, between CVWD and DWA to replenish and jointly manage groundwater in the MC, the Mission Springs Water District (MSWD) filed an action in the Superior Court of California challenging the replenishment assessments levied on MSWD groundwater extractions or production. The three parties settled the dispute as documented in a Settlement Agreement and Addendum in December 2004. The Settlement Agreement stipulated that the three parties would form the Mission Creek/Garnet Hill Subbasin Management Committee to collectively discuss water management in the Whitewater River, Mission Creek, and Garnet Hill hydrologic units. The three parties also agreed to investigate whether the Garnet Hill Subarea was in fact benefitting from the artificial replenishment programs within the WWR and MC Management Areas and to prepare the MC/GH Water Management Plan (MC/GH WMP).

The MC/GH WMP determined that, although some natural replenishment to this subarea may come from Mission Creek and other streams that pass through during periods of high flood flows, the chemical character of the groundwater (and its direction of movement) indicate that the main source of natural replenishment to the subbasin comes from the Whitewater River through the permeable deposits which underlie Whitewater Hill. With respect to artificial replenishment, the MC/GH WMP determined that since artificial replenishment activities began, the Garnet Hill Subarea has benefitted from artificial replenishment in both the WWR and the MC: the former by means of infiltration from the Whitewater River channel, from subsurface flow across the Garnet Hill Fault (which does not reach the surface, and is probably only effective as a barrier to lateral groundwater movement below a depth of about 100 feet) from the WWR into the upper and central portions of the GH, and by retardation of subsurface outflow from the lower portion of the Garnet Hill Subarea during high groundwater levels resulting from recharge operations within the Whitewater River Replenishment Facility; and the latter by means of subsurface flow across the Banning Fault from the MC resulting from recharge operations at the Mission Creek Replenishment Facility, as evidenced by the groundwater contours observed on either side of the Banning Fault.

The MC/GH WMP did not specifically quantify the recharge contributions to the Garnet Hill Subarea from either the Palm Springs Subarea of the Whitewater River Subbasin or the MC, due to insufficient hydrologic data. Based on data available, it is unclear and uncertain as to the exact relative contribution from these sources to the replenishment of the Garnet Hill Subarea.

The benefits resulting from artificial groundwater infiltration from the Whitewater River channel and subsurface flow of groundwater from the MC and from the WWR is evidenced by the response observed by groundwater levels in wells within the GH. Historic groundwater levels within the Garnet Hill Subarea



and historic quantities of imported water delivered to the Whitewater River and Mission Creek Groundwater Replenishment Facilities are shown in **Exhibit 3**. The rising groundwater levels correlate with the large quantities of groundwater replenishment, particularly in those groundwater wells located in the westerly and central portions of the Garnet Hill Subarea, especially for the periods 1985 through 1987, 1995 through 2000, and 2009 through 2012.

Since the Garnet Hill Subarea benefits from CVWD's and DWA's replenishment programs in the WWR and MC Management Areas, CVWD and DWA have the authority to levy replenishment assessment charges on production within the Garnet Hill Subarea under the provisions set forth in the Settlement Agreement and Desert Water Agency Law.

Since preparation of the MC/GH WMP, both CVWD and DWA have recognized the Garnet Hill Subarea as part of the Whitewater (Indio) Subbasin, in accordance with CDWR Bulletin 118 (Update 2003).

Because groundwater production continues to exceed natural groundwater replenishment and cumulative gross overdraft persists within each subbasin, continued artificial replenishment in the WWR and MC Management Areas is necessary to either eliminate or reduce the effects of cumulative gross overdraft, and to reduce the resultant threat to the groundwater supply.

DWA has requested its maximum 2021 Table A SWP water allocation of 55,750 AF pursuant to its SWP Contract, for the purpose of groundwater replenishment. CVWD plans to do the same with its maximum 2021 Table A water allocation.

By virtue of the 2003 Exchange Agreement, The Metropolitan Water District of Southern California (MWD) temporarily transferred 11,900 AF of its annual Table A allocation to DWA and 88,100 AF of its annual Table A allocation to CVWD; however, MWD retained the option to call-back or recall the assigned annual Table A water allocations, in accordance with specific conditions, in any year. In implementing the 2003 Exchange Agreement, MWD advised CVWD and DWA that it would probably recall the 100,000 AF assigned to the two Coachella Valley agencies from 2005 through 2009. In fact, MWD did recall 100,000 AF in 2005 but has not recalled any water since then. The 2019 amendments to, and restatement of, the 2003 Exchange Agreement have eliminated the call-back provision.

According to the most recent update from CDWR (CDWR Notification 21-06 to State Water Project Contractors for 2021, dated March 23, 2021), CDWR will deliver only 5% of Table A water allocation



requests, resulting in deliveries of 9,705 AF of Table A water to MWD on behalf of the Coachella Valley agencies (2,788 AF on behalf of DWA). Of the aforesaid quantity, 9,705 AF is scheduled for delivery during 2021 and none is currently scheduled to be carried over to 2022. No Article 56 water from 2020 is scheduled for delivery in 2021. For 2021, no SWP surplus water under Pool A or Pool B of the Turn-Back Water Pool Program has been offered. It is not likely that any Article 21 water will be available in 2021. DWA and CVWD may be able to jointly obtain up to 2,043 AF of water under the Yuba River Accord. MWD is obligated to deliver 69,000 AF of non-SWP water to CVWD in 2021. Said delivery may occur as deliveries of Colorado River water to the Whitewater River Replenishment Facility, or as transfers from the Advance Delivery account, or a combination of both.

Pursuant to current Desert Water Agency Law, the maximum permissible replenishment assessment rate that can be established for fiscal year 2021/2022 is approximately \$267/AF, based on DWA's estimated Applicable Charges (Delta Water Charge, Variable Transportation Charge, and Off-Aqueduct Power Charge) of \$11,956,580 (average of estimated 2021 and 2022 Applicable Charges) and estimated 2021/2022 combined assessable production of 44,830 AF within the WWR and MC AOBs (see **Table 2**).

The effective replenishment assessment rate for Table A water is based on DWA's estimated Allocated SWP Charges for the current year (based on CDWR's projections for the assessment period) divided by the estimated assessable production for the assessment period, as set forth in **Table 6**. In the past, DWA has utilized two bases for estimating assessable production, either assessable production for the previous year, or, when statewide conservation mandates are in effect, a specified year's assessable production minus a water conservation factor. Since the 2019/2020 report, the estimated assessable production for both AOBs has been based on the assessable production for the previous year (for this report, 2020), since the statewide conservation mandate was satisfied in 2017.

Pursuant to the terms of the Water Management Agreement between DWA and CVWD, and based on DWA's estimated 2021/2022 Allocated Charges of \$11,119,519 and projected 2021 calendar year assessable production (shown in **Table 6** as estimated 2021/2022 assessable production) of 44,830 AF within the WWR and MC, the effective replenishment assessment rate component for Table A water for the 2021/2022 fiscal year is \$248/AF. **Table 7** includes DWA's historical estimated, actual effective, and estimated projected replenishment assessment rates.

During the Proposition 218 proceedings held in Fall 2016, DWA elected to adopt anticipated rate ranges for fiscal years 2017/2018 through 2021/2022, based on estimated projections of expenses and revenues at





the time of adoption. Since rates were, at the time, anticipated to increase sharply over the subsequent several years and then stabilize, the rate ranges adopted for the transitional period of fiscal years 2017/2018 through 2021/2022 were calculated to incorporate a diminishing deficit, to be recovered in subsequent years. The rate range adopted for the 2021/2022 fiscal year was \$130 to \$175. It should be noted that at the time these rate ranges were adopted, the rates were being estimated using a SWP reliability factor of 58%; and a factor of 35% was being applied to future MWD transfers to account for potential call-back by MWD. Since the 2021/2022 effective rate exceeds the maximum Proposition 218 rate of the specified range for 2021/2022, DWA will levy a rate of \$175/AF for FY 2021/2022, which is the maximum of the specified Proposition 218 range.

At that rate, DWA's replenishment assessment for the entire Replenishment Program will be about \$7,845,250, based on estimated assessable production of 44,830 AF (35,240 AF for the WWR AOB, and 9,590 AF for the MC AOB). Accordingly, DWA will bill approximately \$6,167,000 for the WWR AOB, and approximately \$1,678,250 for the MC AOB.

Due to significant increases in the Delta Water Charge beginning in 2015 that could result in large future increases in the replenishment assessment rate, DWA elected in 2016 to transfer the existing cumulative deficit in the Replenishment Assessment Account to reserve account(s), rather than continue to attempt to recover past deficits by future increases in the replenishment assessment rate. Deficits that result from the current and future assessments will be recovered by adding surcharges, as shown in the "Other Charges and Costs" column for each subbasin in **Table 7**.

In summary, gross overdraft persists in the westerly portion of the Coachella Valley Groundwater Basin even though groundwater levels have generally stabilized. Cumulative net overdraft (cumulative gross overdraft offset by artificial replenishment) is currently estimated to be approximately 375,000 AF in the WWR Management Area (since 1956) and 115,500 AF in the MC Management Area (since 1978). Thus, there is a continuing need for groundwater replenishment to maintain stable groundwater levels for sustainability. Even though DWA has requested of CDWR its full SWP Table A allocation of 55,750 AF, CDWR has approved delivery of only 5% of this allocation during the coming year, and DWA has elected to adopt a groundwater replenishment assessment rate for 2021/2022 of \$175.00/AF.

## **CHAPTER II**

### **INTRODUCTION**



## CHAPTER II INTRODUCTION

### A. THE COACHELLA VALLEY AND ITS GROUNDWATER

#### 1. The Coachella Valley

The Coachella Valley is a desert valley in Riverside County, California. It extends approximately 45 miles southeast from the San Bernardino Mountains to the northern shore of the Salton Sea. Cities of the Coachella Valley include Cathedral City, Coachella, Desert Hot Springs, Indian Wells, Indio, La Quinta, Palm Desert, Palm Springs, and Rancho Mirage, and the unincorporated communities of Thousand Palms, Thermal, Bermuda Dunes, Oasis, and Mecca. The Coachella Valley is bordered on the north by Mount San Geronimo of the San Bernardino Mountains, on the west by the San Jacinto and Santa Rosa Mountains, on the east by the Little San Bernardino Mountains, and on the south by the Salton Sea.

The Coachella Valley lies within the northwesterly portion of California's Colorado Desert, an extension of the Sonoran Desert. The San Bernardino, San Jacinto, and Santa Rosa Mountains provide an effective barrier against coastal storms, and greatly reduce the contribution of direct precipitation to replenish the Coachella Valley's groundwater basin, resulting in an arid climate. The bulk of natural groundwater replenishment comes from runoff from the adjacent mountains.

Climate in the Coachella Valley is characterized by low humidity, high summer temperatures, and mild dry winters. Average annual precipitation in the Coachella Valley varies from 4 inches on the Valley floor to more than 30 inches in the surrounding mountains. Most of the precipitation occurs during December through February (except for summer thundershowers). The low rainfall is inadequate to supply sufficient water supply for the valley, thus the need for the importation of Colorado River water. Precipitation data recorded at nine rain gauge stations in the Upper Coachella Valley by Riverside County Flood Control and Water Conservation District is included in **Appendix A.**



Prevailing winds in the area are usually gentle, but occasionally increase to velocities of 30 miles per hour or more. Midsummer temperatures commonly exceed 100 degrees Fahrenheit (°F), frequently reach 110°F, and periodically reach 120°F. The average winter temperature is approximately 60°F.

## **2. The Coachella Valley Groundwater Basin**

The Coachella Valley Groundwater Basin, as described in CDWR Bulletins 108 and 118, is bounded on the north and east by non-water-bearing crystalline rocks of the San Bernardino and Little San Bernardino Mountains and on the south and west by the crystalline rocks of the Santa Rosa and San Jacinto Mountains. At the west end of the San Gorgonio Pass, between Beaumont and Banning, the basin boundary is defined by a surface drainage divide separating the Coachella Valley Groundwater Basin from the Beaumont Groundwater Basin of the Upper Santa Ana Drainage Area.

The southern boundary is formed primarily by the watershed of the Mecca Hills and by the northwest shoreline of the Salton Sea running between the Santa Rosa Mountains and Mortmar. Between the Salton Sea and Travertine Rock, at the base of the Santa Rosa Mountains, the lower boundary coincides with the Riverside/Imperial County Line.

Southerly of the southern boundary, at Mortmar and at Travertine Rock, the subsurface materials are predominantly fine grained and low in permeability; although groundwater is present, it is not readily extractable. A zone of transition exists at these boundaries; to the north the subsurface materials are coarser and more readily yield groundwater.

Although there is interflow of groundwater throughout the groundwater basin, fault barriers, constrictions in the basin profile, and areas of low permeability limit and control movement of groundwater. Based on these factors, the groundwater basin has been divided into subbasins and subareas as described by CDWR in 1964 and the United States Geological Survey (USGS) in 1971.



### 3. Subbasins and Subareas

The San Andreas Fault drives a complex pattern of branching fault lines within the Coachella Valley which define the boundaries of the subbasins that make up the Coachella Valley Groundwater Basin (CDWR 2003). According to CDWR, there are four subbasins within the Coachella Valley Groundwater Basin: the Indio Subbasin (referred to herein as the Whitewater Subbasin), MC, San Gorgonio Pass Subbasin, and Desert Hot Springs Subbasin. USGS includes a fifth subbasin, the Garnet Hill Subbasin, which CDWR considers to be a subarea of the Indio Subbasin.

The subbasins, with their groundwater storage reservoirs, are defined without regard to water quantity or quality. They delineate areas underlain by formations which readily yield the stored water through water wells and offer natural reservoirs for the regulation of water supplies.

The boundaries between subbasins within the groundwater basin are generally defined by faults that serve as effective barriers to the lateral movement of groundwater. Minor subareas have also been delineated, based on one or more of the following geologic or hydrologic characteristics: type of water bearing formations, water quality, areas of confined groundwater, forebay areas, groundwater divides and surface drainage divides.

The following is a list of the subbasins and associated subareas, based on the CDWR and USGS designations:

- MC (Subbasin 7-21.02 per CDWR Bulletin 118, Update 2003)
- Desert Hot Springs Subbasin (Subbasin 7-21.03 per CDWR Bulletin 118, Update 2003)
  - Miracle Hill Subarea
  - Sky Valley Subarea
  - Fargo Canyon Subarea
- San Gorgonio Pass Subbasin (Subbasin 7-21.04 per CDWR Bulletin 118, Update 2003)



- Whitewater River (Indio) Subbasin (Subbasin 7-21.01 per CDWR Bulletin 118, Update 2003, referred to therein as the Indio Subbasin)
  - Palm Springs Subarea
  - Garnet Hill (considered a separate subbasin by USGS)
  - Thermal Subarea
  - Thousand Palms Subarea
  - Oasis Subarea

DWA's groundwater replenishment program encompasses portions of three of the four subbasins (Whitewater River (Indio), Mission Creek, and San Geronio Pass). DWA's replenishment program does not include the Desert Hot Springs Subbasin. **Figure 2** illustrates the subbasin boundaries per the MC/GH WMP, CDWR Bulletin 118, Update 2003, and DWA's AOBs of the groundwater replenishment program.

The boundaries (based on faults, barriers, constrictions in basin profile, and changes in permeability of water-bearing units), geology, hydrogeology, water supply, and groundwater storage of these subbasins are further described in the following sections.

a. Mission Creek Subbasin (MC)

Water-bearing materials underlying the Mission Creek upland comprise the MC. This subbasin is designated Number 7-21.02 in CDWR's Bulletin 118, Update 2003. The subbasin is bounded on the south by the Banning Fault and on the north and east by the Mission Creek Fault, both of which are branches of the San Andreas Fault. The subbasin is bordered on the west by relatively impermeable rocks of the San Bernardino Mountains. The Indio Hills are located in the easterly portion of the subbasin, and consist of the semi-water-bearing Palm Springs Formation. The area within this boundary northwesterly of the Indio Hills reflects the estimated geographic limit of effective storage within the subbasin (CDWR 1964).

Both the Mission Creek Fault and the Banning Fault are partially effective barriers to lateral groundwater movement, as evidenced by offset water levels, fault



springs, and changes in vegetation. Water level differences across the Banning Fault, between the MC and the Garnet Hill Subarea of the WWR, are on the order of 200 feet to 250 feet. Similar water level differences exist across the Mission Creek Fault between the MC and Desert Hot Springs Subbasin (MWH 2013).

This subbasin relies on the same imported SWP/Colorado River Exchange Water source for replenishment, as does the westerly portion of the Whitewater River (Indio) Subbasin. CVWD, DWA, and MSWD manage this subbasin under the terms of the 2004 Mission Creek Settlement Agreement. This agreement and the 2014 Mission Creek Water Management Agreement between CVWD and DWA specify that the available SWP water will be allocated between the MC and WWR Management Areas in proportion to the amount of water produced or diverted from each subbasin during the preceding year.

b. Desert Hot Springs Subbasin

The Desert Hot Springs Subbasin is designated Number 7-21.03 in CDWR's Bulletin 118 (2003). It is bounded on the north by the Little San Bernardino Mountains and on the southeast by the Mission Creek and San Andreas Faults. The Mission Creek Fault separates the Desert Hot Springs Subbasin from the MC, and the San Andreas Fault separates the Desert Hot Springs Subbasin from the Whitewater River Subbasin. Both faults serve as effective barriers to lateral groundwater flow. The subbasin has been divided into three subareas: Miracle Hill, Sky Valley, and Fargo Canyon (CDWR 1964).

The Desert Hot Springs Subbasin is not extensively developed, except in the Desert Hot Springs area. Relatively poor groundwater quality has limited the use of this subbasin for groundwater supply. The Miracle Hill Subarea underlies portions of the City of Desert Hot Springs and is characterized by hot mineralized groundwater, which supplies a number of spas in that area. The Fargo Canyon Subarea underlies a portion of the planning area along Dillon Road north of Interstate 10. This area is characterized by coarse alluvial fans and stream channels flowing out of Joshua Tree National Park. Based on limited groundwater data for this area, flow is generally to the southeast. Water quality is relatively poor with



salinities in the range of 700 milligrams per liter (mg/L) to over 1,000 mg/L (CDWR 1964).

c. San Gorgonio Pass Subbasin

The San Gorgonio Pass Subbasin lies entirely within the San Gorgonio Pass area, bounded by the San Bernardino Mountains on the north and the San Jacinto Mountains on the south (CDWR 2003). This subbasin is designated Number 7 21.04 in CDWR's Bulletin 118 (2003).

The San Gorgonio Pass Subbasin is hydrologically connected to the Whitewater River Subbasin on the east. Groundwater within the San Gorgonio Pass Subbasin moves from west to east and spills out into the Whitewater River Subbasin over the suballuvial bedrock constriction at the east end of the pass (CDWR 1964).

DWA's service area includes three square miles of the San Gorgonio Pass Subbasin.

d. Whitewater River (Indio) Subbasin

The Whitewater River Subbasin, as defined herein, is the same as the Indio Subbasin (Number 7 21.01) as described in CDWR Bulletin No. 118 (2003). It underlies the major portion of the Coachella Valley floor and encompasses approximately 400 square miles. Beginning approximately one mile west of the junction of State Highway 111 and Interstate 10, the Whitewater River Subbasin extends southeast approximately 70 miles to the Salton Sea.

The Subbasin is bordered on the southwest by the Santa Rosa and San Jacinto Mountains and is separated from the Mission Creek and Desert Hot Springs Subbasins to the north and east by the Banning Fault (CDWR 1964). The Garnet Hill Fault, which extends southeasterly from the north side of San Gorgonio Pass to the Indio Hills, is a partially effective barrier to lateral groundwater movement from the Garnet Hill Subarea into the Palm Springs Subarea of the Whitewater River Subbasin, with some portions in the shallower zones more permeable. The





San Andreas Fault, extending southeasterly from the junction of the Mission Creek and Banning Faults in the Indio Hills and continuing out of the basin on the east flank of the Salton Sea, is also an effective barrier to lateral groundwater movement from the northeast (CDWR 1964).

The subbasin underlies the cities of Palm Springs, Cathedral City, Rancho Mirage, Palm Desert, Indian Wells, La Quinta, Indio, and Coachella, and the unincorporated communities of Thousand Palms, Thermal, Bermuda Dunes, Oasis, and Mecca. From about Indio southeasterly to the Salton Sea, the subbasin contains increasingly thick layers of silt and clay, especially in the shallower portions of the subbasin. These silt and clay layers, which are remnants of ancient lake bed deposits, impede the percolation of water applied for irrigation and limit groundwater replenishment opportunities to the westerly fringe of the subbasin (CDWR 1964).

In 1964, CDWR estimated that the four subbasins that make up the Coachella Valley Groundwater Basin contained a total of approximately 39.2 million AF of water in the first 1,000 feet below the ground surface; much of this water originated as runoff from the adjacent mountains. Of this amount, approximately 28.8 million AF of water was stored in the overall Whitewater River Subbasin (CDWR 1964). However, the amount of water in the Whitewater River Subbasin has decreased over the years because it has developed to the point where significant groundwater production occurs (CVWD 2012). The natural supply of water to the northwestern part of the Coachella Valley is not keeping pace with the basin outflow, due mainly to large consumptive uses created by the resort-recreation economy and permanent resident population in the northwestern Whitewater River Subbasin, and large agricultural economy in the southeastern Whitewater River Subbasin. Imported SWP water allocations are exchanged for Colorado River water and utilized for replenishment in the westerly portion of the Whitewater River (Indio) Subbasin to replace consumptive uses created by the resort recreation economy and permanent resident population.

The Whitewater River (Indio) Subbasin is not currently adjudicated. From a management perspective, CVWD divides the portion of the subbasin within its



service area into two AOBs designated the West Whitewater River Subbasin AOB and the East Whitewater River Subbasin AOB. The dividing line between these two areas is an irregular line trending northeast to southwest between the Indio Hills north of the City of Indio and Point Happy in La Quinta (see paragraph e.5 below for the history of this division). The WWR Management Area is jointly managed by CVWD and DWA under the terms of the 2014 Whitewater Water Management Agreement. The East Whitewater River Subbasin AOB is managed by CVWD (CVWD 2012).

Hydrogeologically, the Whitewater River (Indio) Subbasin is divided into five subareas: Palm Springs, Garnet Hill, Thermal, Thousand Palms, and Oasis Subareas. The Palm Springs Subarea is the forebay or main area of replenishment to the subbasin, and the Thermal Subarea is the pressure or confined area within the basin. The other three subareas are peripheral areas having unconfined groundwater conditions.

#### 1) Palm Springs Subarea

The triangular area between the Garnet Hill Fault and the east slope of the San Jacinto Mountains southeast to Cathedral City is designated the Palm Springs Subarea. Groundwater is unconfined in this area. The Coachella Valley fill materials within the Palm Springs Subarea are essentially heterogeneous alluvial fan deposits with little sorting and little fine grained material content. The thickness of these water-bearing materials is not known; however, it exceeds 1,000 feet. Although no lithologic distinction is apparent from well drillers' logs, the probable thickness of recent deposits suggests that Ocotillo conglomerate underlies recent fan conglomerate in the subarea at depths ranging from 300 feet to 400 feet.

Natural replenishment to the aquifer in the Whitewater River Subbasin occurs primarily in the Palm Springs Subarea. The major natural sources include infiltration of stream runoff from the San Jacinto Mountains and the Whitewater River, and subsurface inflow from the San Geronio Pass Subbasin. Deep percolation of direct precipitation on the Palm Springs



Subarea is considered negligible as it is consumed by evapotranspiration (CDWR 1964).

2) Garnet Hill Subarea

The area between the Garnet Hill Fault and the Banning Fault, named the Garnet Hill Subarea (GH) of the Whitewater River (Indio) Subbasin by CDWR (1964), was considered a distinct subbasin by the USGS because of the partially effective Banning and Garnet Hill Faults as barriers to lateral groundwater movement. This is demonstrated by a difference of 170 feet in groundwater level elevation in a horizontal distance of 3,200 feet across the Garnet Hill Fault, as measured in the spring of 1961. However, the Garnet Hill Fault does not reach the surface, and is probably only effective as a barrier to lateral groundwater movement below a depth of about 100 feet below ground surface (MWH 2013).

The 2013 MC/GH WMP states groundwater production is low in the Garnet Hill Subarea and is not expected to increase significantly in the future due to relatively low well yields compared to those in the MC. Water levels in the western and central portions of the subbasin show a positive response to large replenishment quantities from the Whitewater River Replenishment Facility, while levels are relatively flat in the easterly portion of the subbasin. The small number of wells in the subarea limits the hydrogeologic understanding of how this subbasin operates relative to the MC and the neighboring Palm Springs Subarea of the Whitewater River Subbasin.

Although some natural replenishment to this subarea may come from Mission Creek and other streams that pass through during periods of high flood flows, the chemical character of the groundwater (and its direction of movement) indicate that the main source of natural replenishment to the subbasin comes from the Whitewater River through the permeable deposits which underlie Whitewater Hill (MWH 2013).



This subarea is considered a separate subbasin by USGS; however, it is considered part of the Whitewater River (Indio) Subbasin in CDWR's Bulletin 118 (2003) and, therefore, was not designated with a separate subbasin number therein. CVWD and (as of 2020) DWA, both consider the Garnet Hill Subarea to be a part of the WWR Management Area. There are no assessable groundwater pumpers within CVWD's portion of the Garnet Hill Subarea, and two assessable groundwater pumpers within DWA's portion of the Garnet Hill Subarea, which together produced a total of approximately 274 AF of groundwater from the subarea in 2020.

### 3) Thermal Subarea

Groundwater of the Palm Springs Subarea moves southeastward into the interbedded sands, silts, and clays underlying the central portion of the Coachella Valley. The division between the Palm Springs Subarea and the Thermal Subarea is near Cathedral City. The permeabilities parallel to the bedding of the deposits in the Thermal Subarea are several times the permeabilities perpendicular to the bedding and, therefore, movement of groundwater parallel to the bedding predominates. Confined or semi confined groundwater conditions are present in the major portion of the Thermal Subarea. Movement of groundwater under these conditions is present in the major portion of the Thermal Subarea and is caused by differences in piezometric (pressure) level or head. Unconfined or free water conditions are present in the alluvial fans at the base of the Santa Rosa Mountains, such as the fans at the mouth of Deep Canyon and in the La Quinta area.

Sand and gravel lenses underlying this subarea are discontinuous, and clay beds are not extensive. However, two aquifer zones separated by a zone of finer-grained materials were identified from well logs. The fine grained materials within the intervening horizontal plane are not tight enough or persistent enough to completely restrict the vertical interflow of water, or to warrant the use of the term "aquiclude". Therefore, the term "aquitard"



is used for this zone of less permeable material that separates the upper and lower aquifer zones in the southeastern part of the Valley.

The lower aquifer zone, composed of part of the Ocotillo conglomerate, consists of silty sands and gravels with interbeds of silt and clay. It contains the greatest quantity of stored groundwater in the Coachella Valley Groundwater Basin, but serves only that portion of the Valley easterly of Washington Street. The top of the lower aquifer zone is present at a depth ranging from 300 feet to 600 feet below the surface. The thickness of the zone is undetermined, as the deepest wells present in the Coachella Valley have not penetrated it in its entirety. The available data indicate that the zone is at least 500 feet thick and may be in excess of 1,000 feet thick.

The aquitard overlying the lower aquifer zone is generally 100 feet to 200 feet thick, although in small areas on the periphery of the Salton Sea it is more than 500 feet thick. North and west of Indio, in a curved zone approximately one mile wide, the aquitard is apparently lacking and no distinction is made between the upper and lower aquifer zones.

Capping the upper aquifer zone in the Thermal Subarea is a shallow fine grained zone in which semi-perched groundwater is present. This zone consists of recent silts, clays, and fine sands and is relatively persistent southeast of Indio. It ranges from zero to 100 feet thick and is generally an effective barrier to deep percolation. However, north and west of Indio, the zone is composed mainly of clayey sands and silts, and its effect in retarding deep percolation is limited. The low permeability of the materials southeast of Indio has contributed to irrigation drainage problems in the area. Semi-perched groundwater has been maintained by irrigation water applied to agricultural lands south of Point Happy, necessitating the construction of an extensive subsurface tile drain system (CDWR 1964).



The Thermal Subarea contains the division between CVWD's west and east AOBs of the Whitewater River (Indio) Subbasin, which is more fully described in paragraph e.5 below.

The imported Colorado River supply through the Coachella Canal is used mainly for irrigation in the easterly portion of the Whitewater River Subbasin. Annual deliveries of Colorado River water through the Coachella Canal of approximately 300,000 AF are a significant component of southeastern Coachella Valley hydrology. A smaller portion of the Coachella Canal water supply is used to offset groundwater pumping by golf courses in the westerly portion of the Whitewater River (Indio) Subbasin.

CVWD recently completed a study to evaluate the entire Coachella Valley Groundwater Basin. This led to the development and adoption of the 2010 Update to the Coachella Valley Water Management Plan. Using state-of-the-art technology, CVWD developed and calibrated a peer-reviewed, three-dimensional groundwater model (Fogg 2000) that is based on data from over 2,500 wells, and includes an extensive database of well chemistry reports, well completion reports, electric logs, and specific capacity tests. This model improved on previous groundwater models, and incorporates the latest hydrological evaluations from previous studies conducted by CDWR and USGS to gain a better understanding of the hydrogeology in this subbasin and the benefits of water management practices identified in the Coachella Valley Water Management Plan.

#### 4) Thousand Palms Subarea

The small area along the southwest flank of the Indio Hills is named the Thousand Palms Subarea. The southwest boundary of the subarea was determined by tracing the limits of distinctive groundwater chemical characteristics. The major aquifers of the Whitewater River Subbasin are characterized by calcium bicarbonate; but water in the Thousand Palms Subarea is characterized by sodium sulfate (CDWR 1964).



The differences in water quality suggest that replenishment to the Thousand Palms Subarea comes primarily from the Indio Hills and is limited in supply. The relatively sharp boundary between chemical characteristics of water derived from the Indio Hills and groundwater in the Thermal Subarea suggests there is little intermixing of the two waters.

The configuration of the water table north of the community of Thousand Palms is such that the generally uniform, southeasterly gradient in the Palm Springs Subarea diverges and steepens to the east along the base of Edom Hill. This steepened gradient suggests a barrier to the movement of groundwater: possibly a reduction in permeability of the water-bearing materials, or possibly a southeast extension of the Garnet Hill Fault. However, such an extension of the Garnet Hill Fault is unlikely. There is no surface expression of such a fault, and the gravity measurements taken during the 1964 CDWR investigation do not suggest a subsurface fault. The residual gravity profile across this area supports these observations. The sharp increase in gradient is therefore attributed to lower permeability of the materials to the east.

Most of the Thousand Palms Subarea is located within the westerly portion of the Whitewater River (Indio) Subbasin. Groundwater levels in this area show similar patterns to those of the adjacent Thermal Subarea, suggesting a hydraulic connectivity (CDWR 1964).

#### 5) Oasis Subarea

Another peripheral zone of unconfined groundwater that is different in chemical characteristics from water in the major aquifers of the Whitewater River Subbasin is found underlying the Oasis Piedmont slope. This zone, named the Oasis Subarea, extends along the base of the Santa Rosa Mountains. Water-bearing materials underlying the subarea consist of highly permeable fan deposits. Although groundwater data suggest that the boundary between the Oasis and Thermal Subareas may be a buried fault extending from Travertine Rock to the community of Oasis, the



remainder of the boundary is a lithologic change from the coarse fan deposits of the Oasis Subarea to the interbedded sands, gravel, and silts of the Thermal Subarea. Little information is available as to the thickness of the water-bearing materials, but it is estimated to be in excess of 1,000 feet. Groundwater levels in the Oasis Subarea have exhibited similar declines as elsewhere in the subbasin due to increased groundwater pumping to meet agricultural demands on the Oasis slope (CDWR 1964).

6) East/West AOB Division

The Thermal Subarea (see paragraph e.2 above) contains the division between the westerly and easterly portions of the Whitewater River Subbasin (CVWD's WWR AOB and East Whitewater River Subbasin AOB). This division constitutes the southern boundary of the management area governed by the Management Agreement between CVWD and DWA.

The boundary between these two Management Areas extends from Point Happy (a promontory of the Santa Rosa Mountains between Indian Wells and La Quinta) northeasterly, generally along Washington Street, to a point on the San Andreas Fault intersecting the northerly prolongation of Jefferson Street in Indio.

The boundary was originally defined primarily on the basis of differing groundwater levels resulting from differences in groundwater use and management northerly and southerly of the boundary. Primarily due to the application of imported water from the Coachella Canal, and an attendant reduction in groundwater pumpage, the water levels in the area southeasterly from Point Happy (the East Whitewater River Subbasin Management Area) rose until the early 1970s, while groundwater levels northwesterly from Point Happy (the WWR Management Area) were dropping due to continued development and pumping. This was stated by Tyley (USGS 1974) as follows:





"The south boundary is an imaginary line extending from Point Happy northeast to the Little San Bernardino Mountains and was chosen for the following reasons: (1) North of the boundary, water levels have been declining while south of the boundary, water levels have been rising since 1949 and (2) north of the boundary, ground water is the major source of irrigation water while south of the boundary, imported water from the Colorado River is the major source of irrigation water."

In addition, according to CDWR (1964) and as discussed above, the easterly portion of the Thermal Subarea is distinguished from area north and west of Indio within the Thermal Subarea by the presence of several relatively impervious clay layers (aquitards) lying between the ground surface and the main groundwater aquifer, creating confined and semi-confined aquifer conditions (see Figure 2). These conditions were characterized by Tyley as "artesian conditions" southerly of the south boundary.

Groundwater levels northerly of the boundary have been stable or increasing since the 1970s (per recorded measurements of USGS, DWA, and CVWD wells), except in the greater Palm Desert area, largely due to the commencement of replenishment activities at the Whitewater River Replenishment Facility in 1973. Groundwater levels in the greater Palm Desert area continue to decline, but at a reduced rate as a result of the groundwater replenishment program. Differences between the East Whitewater River Subbasin Management Area and WWR Management Area also persist in terms of management of the groundwater replenishment program and by groundwater usage (there is significantly more agricultural use in CVWD's East Whitewater River Subbasin AOB than in the WWR Management Area).

## 7) Summary

The Whitewater River (Indio) Subbasin consists of five subareas: Palm Springs, Garnet Hill, Thermal, Thousand Palms, and Oasis Subareas. The



Palm Springs Subarea is the forebay or main area of replenishment to the subbasin. The Garnet Hill Subarea lies to the North and adjacent to the Palm Springs Subarea. The Thermal Subarea includes the pressure or confined area within the basin. The Thousand Palms and Oasis Subareas are peripheral areas having unconfined groundwater conditions. From a management perspective, the Whitewater River Subbasin is divided into a westerly and easterly portion, with the dividing line extending from Point Happy in La Quinta to the northeast, terminating at the San Andreas Fault and the Indio Hills at Jefferson Street.

Potable groundwater is not readily available within the following areas in the Coachella Valley: Indio Hills, Mecca Hills, Barton Canyon, Bombay Beach, and Salton City. Water service to these areas is derived from groundwater pumped from adjacent basins.

## **B. THE GROUNDWATER REPLENISHMENT AND ASSESSMENT PROGRAM**

DWA's Groundwater Replenishment and Assessment Program was established to augment groundwater supplies and arrest or retard declining water table conditions within the Coachella Valley Groundwater Basin, specifically within the WWR and MC AOBs (see **Figure 1**).

### **1. Water Management Areas**

Pursuant to the Water Management Agreements between CVWD and DWA, the Water Management Areas encompass the Westerly Portion of the Whitewater River (Indio) Subbasin, a portion of the San Gorgonio Pass Subbasin, and the entire MC (except three square miles in the Painted Hills area and a small portion that lies within San Bernardino County) within the Coachella Valley Groundwater Basin (see **Figure 1**).

- The West Whitewater River Subbasin (WWR) Management Area

CVWD and DWA have recognized the need to manage the westerly portion of the Whitewater River (Indio) Subbasin as a complete unit rather than as individual segments underlying the individual agencies' boundaries. This management area



consists of the Palm Springs, Garnet Hill, and Thousand Palms Subareas, a portion of the San Gorgonio Pass Subbasin (tributary to the Whitewater River (Indio) Subbasin), and the westerly portion of the Thermal Subarea, which is experiencing significantly declining water levels. The management area was established to encompass the area of groundwater overdraft as evidenced by declining water level conditions, and includes areas within both CVWD and DWA boundaries. The easterly boundary of the WWR Management Area extends from Point Happy (a promontory of the Santa Rosa Mountains between Indian Wells and La Quinta) northeasterly, generally along Washington Street, to a point on the San Andreas Fault intersecting the northerly prolongation of Jefferson Street in Indio.

CVWD has long considered the portion of the Garnet Hill Subarea within its boundaries to be a part of its WWR AOB. Prior to 2020, DWA considered the portion of the Garnet Hill Subarea within its service area to be a separate management area and AOB, but now considers it to be a part of its WWR AOB.

DWA's WWR AOB is located entirely within the WWR Management Area.

- The Mission Creek Subbasin (MC) Management Area

CVWD and DWA have recognized the need to manage the MC as a complete unit rather than as individual segments underlying the individual agency's boundaries. This management area consists of the entire MC. DWA's MC AOB is located entirely within the MC Management Area.

## **2. Areas of Benefit**

The Areas of Benefit (AOBs) for DWA's replenishment program consist of the westerly portion of the Coachella Valley Groundwater Basin, including portions of the Whitewater River (Indio) Subbasin (including the Garnet Hill Subarea), MC, and tributaries thereto (such as the San Gorgonio Pass Subbasin), situated within DWA's service area boundary (see **Figure 2**). DWA has two AOBs within its replenishment program: the WWR AOB and the MC AOB.



DWA's **WWR AOB** consists of that portion of the WWR Management Area situated within DWA's service area boundary (including portions of the Garnet Hill Subarea and the San Geronio Pass Subbasin).

DWA's **MC AOB** consists of that portion of the MC Management Area situated within DWA's service area boundary.

The AOBs for CVWD's replenishment program consist of the portions of the Whitewater River Subbasin and MC within CVWD's boundary. CVWD has a total of three AOBs within its groundwater replenishment program: the CVWD MC AOB; the CVWD WWR AOB; and the East Whitewater River Subbasin AOB (see **Figure 1**).

Within DWA's WWR AOB, there are seven stream diversions on the Whitewater River and its tributaries, five by DWA (two on Chino Creek, one on Snow Creek, one on Falls Creek, and one by the former Whitewater Mutual Water Company, which was acquired by DWA in 2009), one by the Wildlands Conservancy (formerly the Whitewater Trout Farm) which is used for conservation and educational purposes, and one by CVWD at the Whitewater River Replenishment Facility; the latter three being on the Whitewater River itself. There are no stream diversions within the MC AOB. DWA's WWR AOB also includes subsurface tributary flows from the San Geronio Pass Subbasin located to the west.

While the replenishment assessments outlined on the following pages are based on and limited to water production within DWA's AOBs, available water supply, estimated water requirements, and groundwater replenishment are referenced herein to the entire WWR Management Area and MC Management Area. The WWR and MC Management Areas are replenished jointly by CVWD and DWA for water supply purposes, and the two agencies jointly manage the imported water supplies within said Management Areas.

### **3. Water Management Agreements**

The replenishment program was implemented pursuant to a joint Water Management Agreement for the WWR Management Area ("Whitewater River Subbasin Water Management Agreement", executed July 1, 1976 and amended December 15, 1992 and



July 15, 2014) between CVWD and DWA. Later, a similar program was implemented within the MC Management Area pursuant to a similar joint Water Management Agreement ("Mission Creek Subbasin Water Management Agreement", executed April 8, 2003 and amended July 15, 2014).

CVWD and DWA entered into a Settlement Agreement with MSWD in December 2004, which affirmed the water allocation procedure that had been established earlier by CVWD and DWA, and which established a Management Committee, consisting of the General Managers of CVWD, DWA, and MSWD, to review production and recharge activities. The Addendum to the Settlement Agreement states that the water available for recharge each year shall be divided between the WWR Management Area and the MC Management Area proportionate to the previous year's production from within each management area (see **Appendix B**).

Conditions of the Settlement Agreement and Addendum between DWA, CVWD, and MSWD state that DWA and CVWD have the authority to levy replenishment assessments on water produced from subbasins of the Upper (Western) Coachella Valley Groundwater Basin within DWA and CVWD's AOBs, if found that recharge activities benefit those subbasins.

The Water Management Agreements call for maximum importation of SWP Contract Table A water allocations by CVWD and DWA for replenishment of groundwater basins or subbasins within defined Water Management Areas. The Agreement also requires collection of data necessary for sound management of water resources within these same Water Management Areas.

#### **4. Groundwater Overdraft**

CDWR Bulletin 160-09 (2009 California Water Plan Update) defines "Groundwater overdraft" as:

*"...the condition of a groundwater basin in which the amount of water withdrawn by pumping exceeds the amount of water that recharges the basin"*



*over a period of years, during which the water supply conditions approximate average conditions."*

According to CDWR Bulletin 118-80 (Groundwater Basins in California, 1980):

*"Overdraft is characterized by groundwater levels that decline over a period of years and never fully recover, even in wet years. Overdraft can lead to increased extraction costs, land subsidence, water quality degradation, and environmental impacts."*

For purposes of this report, the term "gross overdraft" refers to groundwater extractions or water production in excess of natural groundwater replenishment or recharge, as an annual rate in AF/Yr, and "cumulative overdraft" refers to the cumulative gross overdraft in AF over the recorded history of an aquifer (since 1956 for WWR and since 1978 for MC). The term "net overdraft" refers herein to gross overdraft offset by artificial replenishment.

The initial Water Management Agreement was developed following numerous investigations regarding the groundwater supply within the Coachella Valley; said investigations are addressed in DWA's previous reports (*Engineer's Report on Groundwater Replenishment and Assessment Program for the Whitewater River Subbasin* for the years 1978/1979 through 1983/1984). These investigations all concluded that gross overdraft (groundwater extractions or water production in excess of natural groundwater replenishment and/or recharge) existed within the Coachella Valley Groundwater Basin and its subbasins.

## **5. Groundwater Replenishment**

### **a. Summary**

Since 1973, CVWD and DWA have been using Colorado River water exchanged for SWP water (Table A water allocations and supplemental water as available) to replenish groundwater in the Coachella Valley Groundwater Basin within the WWR Management Area (including a portion of the San Geronio Pass Subbasin and the Garnet Hill Subarea, and, since 2002, within the MC Management Area.



The two agencies are permitted by law to replenish the groundwater basins and to levy and collect water replenishment assessments from any groundwater extractor or surface water diverter (aside from exempt producers) within their jurisdictions who benefits, such as those within the Garnet Hill Subarea and San Geronio Pass Subbasin, from replenishment of groundwater.

b. History

DWA and CVWD completed construction of the Whitewater River Replenishment Facility in 1973 and the Mission Creek Replenishment Facility in 2002, and recharge activities commenced within each respective subbasin upon completion of the facilities. Annual recharge quantities are set forth in **Exhibit 6**.

From 1973 through 2020, CVWD and DWA have replenished the WWR and MC Management Areas with approximately 3,977,422 AF (3,810.378 AF to WWR Management Area and 167,044 AF to MC Management Area). Of this total, 3,719,757 AF consisted of exchange deliveries (Colorado River water exchanged for SWP water, including advance deliveries) and 995,081 AF consisted of advance deliveries converted to exchange deliveries, but excluding advance deliveries not yet converted to exchange deliveries (see **Exhibit 7**). Of the above totals, excluding non-SWP and MWD's advance deliveries, DWA is responsible for approximately 756,777 AF of the artificial replenishment to WWR and approximately 115,537 AF of the artificial replenishment to MC; a total of approximately 872,315 AF.

Between October 1984 and December 1986, MWD initially provided about 466,000 AF of advance delivered water for future exchange with CVWD and DWA that was used to replenish the WWR Management Area. This initial quantity of advanced delivered water has been augmented several times since then (with a portion on the augmented supply delivered to the Mission Creek Replenishment Facility), and the total quantity of advance delivered water is currently 1,308,481 AF. During drought conditions, MWD has periodically met exchange delivery obligations with water from its advance delivery account. By December 2020, MWD had converted approximately 995,081 AF of advance



delivered water to exchange water deliveries, leaving a balance of approximately 313,400 AF in MWD's advance delivery account (see **Exhibit 7**, included at the end of this report, for an accounting of exchange and advance deliveries).

c. Table A Water Allocations and Deliveries

SWP Table A water allocations are based primarily on hydrologic conditions and legal constraints, and vary considerably from year to year. In 2020, the final allocation was 20% of maximum Table A allocations, with no Article 56 carry-over to 2021. As of the writing of this report, Table A water deliveries in 2021 are projected to be only 5% of maximum Table A allocations. Long-term average Table A allocations are currently predicted to be approximately 58% of maximum Table A allocations.

A portion of Table A allocations for a given year are occasionally carried over into the following year under Article 56 of the SWP Contract. No Article 56 water has been carried over from 2020, and no Article 56 water is scheduled to be carried over from 2021 to 2022.

Even though CVWD and DWA have requested and will continue to request their maximum annual Table A allocations, the "Probable Table A Water Allocations" and "Probable Table A Water Deliveries" have been adjusted herein for long-term reliability for estimating purposes. In past reports, the Probable Table A Water Allocations have been assumed herein to be equal to the maximum Table A Water allocations with the MWD transfer portion reduced by a calculated factor to represent a long-term average transfer quantity with possible recalls by MWD pursuant to the original 2003 Exchange Agreement and its implementation. By 2016, MWD management had advised DWA that it would be unlikely for MWD to make any additional recalls for the foreseeable future, and the 2019 amendments to, and restatement of, the 2003 Exchange Agreement have eliminated the call-back provision. Therefore, this factor has not been applied to projected estimates since 2018. "Probable Table A Water Deliveries" are herein assumed to be 58% of the aforementioned Probable Table A Water Allocations, based on currently estimated SWP delivery capability.



From 1973 through 2003, CVWD and DWA had SWP maximum annual Table A allocations of 23,100 AF and 38,100 AF, respectively. To meet projected water demands and to alleviate cumulative gross overdraft conditions, CVWD and DWA have secured additional SWP Table A water allocations, increasing their combined maximum Table A water allocations from 61,200 AF/Yr in 2003 to 194,100 AF/Yr beginning in 2010. CVWD and DWA's current Table A allocations are described in additional detail in the following paragraphs.

1) Tulare Lake Purchase

CVWD obtained an additional 9,900 AF/Yr of Table A water allocation from Tulare Lake Basin Water Storage District, another State Water Contractor, thus increasing its annual Table A water allocation to 33,000 AF/Yr, effective January 1, 2004.

2) 2003 and 2019 Exchange Agreements

In 2003, CVWD and DWA obtained a further 100,000 AF/Yr (88,100 AF/Yr for CVWD and 11,900 AF/Yr for DWA) of Table A water allocation through a new exchange agreement (the 2003 Exchange Agreement) among CVWD, DWA, and MWD (all State Water Contractors). The 2003 Exchange Agreement, which became effective January 1, 2005, permitted MWD to call-back or recall the assigned annual Table A water allocation of 100,000 AF/Yr in 50,000 AF/Yr increments during periods of constrained, limited, or low water supply conditions; however, it gave CVWD and DWA the opportunity to secure increased quantities of surplus water in addition to increased quantities of Table A water during normal or high water supply conditions. MWD was required to notify CVWD and DWA of its intentions regarding call-back or recall of the 100,000 AF or 50,000 AF increment thereof. By 2016, MWD management had advised DWA that it would be unlikely for MWD to make any additional recalls for the foreseeable future.



The 2003 Exchange Agreement was substantially amended, restated, and consolidated in 2019 as the 2019 Exchange Agreement. The 2019 Exchange Agreement provides more certainty of water supplies for DWA and CVWD, and more operational flexibility to MWD. Key elements of the 2019 Exchange Agreement include:

- 1) Ending MWD's right to call back 100,000 AF of the Table A Quantity,
  - 2) Preserving MWD's ability to advance deliver water to the Whitewater River and Mission Creek Groundwater Replenishment Facilities when conditions allow,
  - 3) Enabling MWD to conditionally defer Colorado River water deliveries during drier periods,
  - 4) Increasing reliability of supplemental State Water Project and non-State Water Project water deliveries,
  - 5) Allowing DWA and CVWD access to Article 21 supplies when available (in proportion to Table A Quantities), and
  - 6) Allowing DWA and CVWD access to MWD's water storage accounts, and defining the cost-sharing structure.
- 3) Kern County/Tulare Lake Purchase

In 2010, CVWD and DWA negotiated transfer of an additional 16,000 AF/Yr (12,000 AF/Yr for CVWD and 4,000 AF/Yr for DWA) of Table A water allocation from Kern County Water Agency and an additional 7,000 AF/Yr (5,250 AF/Yr for CVWD and 1,750 AF/Yr for DWA) from Tulare Lake Basin Water Storage District, both State Water Contractors.



d. Supplemental Water

Any surplus water secured by CVWD and DWA is exchanged for a like quantity of Colorado River Water. Charges for surplus water are allocated between CVWD and DWA in accordance with the terms of the Water Management Agreements. DWA secures funds for its allocated charges for surplus water payments from its Reserve for Additional Water Reserve Account.

1) Turn-Back Water Pool Water

From 1996 through 2017, CVWD and DWA jointly obtained 297,841 AF of water under CDWR's Turn-Back Water Pool Program, which was exchanged for a like quantity of Colorado River Water and delivered to the Whitewater River and Mission Creek Replenishment Facilities.

Turn-Back Water Pool water was originally Table A water scheduled for delivery to other State Water Contractors, but those Contractors subsequently determined that the water was surplus to their needs. Surplus water in the Turn-Back Water Pool Program is allocated between two pools based on time: Pool A water must be secured by March 1 of each year and Pool B water must be secured between March 1 and April 1 of each year. The charge for Pool A water is higher than the charge for Pool B water.

Since fiscal year 1999/2000, requests for Turn-Back Water Pool water have exceeded water available. Quantities of Pool A and Pool B water purchased by CVWD and DWA are shown in **Exhibit 7**.

In 2020, DWA and CVWD were not allocated any SWP surplus water under the Turn-Back Water Pool Program. Based on current projections, CVWD and DWA will not receive any Turn-Back Water Pool water in 2021.



2) Flood Water

In 1997 and 1998, CVWD and DWA jointly obtained 47,286 AF of Kaweah River, Tule River, and Kings River flood flow water, which was also exchanged for a like quantity of Colorado River water delivered to the Whitewater River Replenishment Facility. Currently, the availability of flood water in 2021 is uncertain.

3) Article 21 Surplus Water

From 2000 through 2011, CVWD and DWA obtained 42,272 AF of Article 21 surplus water and, similarly, that water was also exchanged for a like quantity of Colorado River water which was delivered to the Whitewater River Replenishment Facility. No Article 21 water has been delivered to the Coachella Valley since 2011. It is unlikely that DWA and CVWD will receive Article 21 water in 2021.

4) Yuba River Accord and Other Water

In 2008, CVWD and DWA obtained 1,836 AF of water under the terms of the Yuba River Accord (then newly-ratified). In 2009 and 2012, CVWD and DWA obtained 3,482 AF and 1,188 AF, respectively, of water under the Yuba River Accord and other conservation/transfer agreements. No water was obtained in 2010 or 2011 under the Yuba River Accord. In 2014 and 2015, respectively, CVWD and DWA jointly obtained 1,213 AF and 426 AF of water under the Yuba River Accord. In 2018, CVWD and DWA jointly obtained 1,246 AF of water under the Yuba River Accord, but did not obtain any water under the Yuba River Accord in 2019 or 2020. Up to 2,043 AF of water under the Yuba River Accord may be available for purchase by DWA and CVWD in 2021. DWA and CVWD have applied for the maximum quantity of Yuba water available, but that exact quantity is yet to be determined by CDWR.



e. Past Year Water Deliveries

Total artificial replenishment (to both the Whitewater River and Mission Creek Replenishment Facilities) for 2020 was 128,255 AF, 126,487 AF was delivered to the Whitewater River Replenishment Facility and 1,768 AF was delivered to the Mission Creek Replenishment Facility (see **Exhibit 7**). Water delivered by MWD to CVWD under this agreement is only delivered to the Whitewater River Replenishment Facility, not to the Mission Creek Replenishment Facility.

f. Water Available in Current Year

The estimated quantity of water available to MWD on behalf of DWA and CVWD for exchange deliveries of Colorado River Aqueduct water for artificial replenishment in the Upper Coachella Valley during 2021, is as follows:

- Table A water: 9,705 AF (based on delivery of 5% of the maximum Table A allocation; 2,788 AF on behalf of DWA)
- Article 56 Carry-over water from 2020: None
- Estimated supplemental water:
  - 0 AF of Turn-Back Pool water
  - 0 AF of Article 21 water
  - Potentially up to 2,043 AF of Yuba water (871 AF available for DWA purchase)
  - 19,000 AF of Rosedale/Glorious Land water (CVWD)
  - 50,000 AF of Quantitative Settlement Agreement water (CVWD)

The grand total is approximately 80,748 AF (maximum). MWD will deliver a portion of the above quantities to DWA and CVWD by exchange of Colorado River water, and a portion via credit from the Advance Delivery account. During the first four months of 2021, a total of 4,532 AF of Colorado River water has already been delivered to the Whitewater River Replenishment Facility (3,231 AF apportioned to CVWD and 1,301 AF apportioned to DWA), and 0 AF of Colorado River water has been delivered to the Mission Creek Replenishment Facility.



g. Historic Effects of Artificial Replenishment on Aquifer

Prior to recharge activities in the Whitewater River Subbasin and MC, water levels were declining steadily in those subbasins. As shown in **Exhibits 1, 2, and 3**, after recharge activities commenced in 1973, and specifically after the three large recharge events listed below, groundwater levels in all three subbasins have risen substantially.

- 1985 - 1987: 655,000 AF Recharged (192,000 AF by DWA)
- 1995 - 2000: 609,000 AF Recharged (157,000 AF by DWA)
- 2009 - 2012: 775,000 AF Recharged (176,000 AF by DWA)

**Exhibit 1** includes hydrographs for a collection of groundwater wells within the Palm Springs Subarea of the WWR Management Area (see **Figure 2** for the locations of the wells) in comparison with the total annual quantities of water delivered to the Whitewater River Replenishment Facility. This comparison clearly indicates that the recharge program has benefitted wells within the subarea.

Water levels in the wells closest to the Whitewater River Replenishment Facility rose approximately 400 feet in the late 1980s and nearly 200 feet following each significant recharge event to the Whitewater River Replenishment Facility. The most significant response to groundwater recharge in the WWR Management Area is observed in the wells located closest to the Replenishment Facility. The degree of benefit observed from recharge decreases the farther the well is from the Replenishment Facility, as shown by the diminishing intensity of the colors of the hydrographs. Well locations are shown on **Figure 2**.

**Exhibit 2** includes hydrographs for MSWD's Wells 25 and 26, which are located upstream of the Whitewater River Replenishment Facility within the San Gorgonio Pass Subbasin (a tributary to the Palm Springs Subarea of the WWR Management Area). Similar to other wells in the management area, water levels in these wells were also declining prior to groundwater recharge, and water levels in these wells rose by about 80 feet each after recharge commenced in the 1980s. Water levels in these wells also rose following the other significant recharge events, such as



1995-97 and 2010-12, thus demonstrating that these wells were benefitted by groundwater replenishment activities at the Whitewater River Replenishment Facility.

**Exhibit 3** includes hydrographs from a collection of groundwater wells within the Garnet Hill Subarea of the WWR Management Area (see **Figure 2** for the locations of the wells) including one well owned by MSWD in comparison with both the replenishment quantities replenished by the Whitewater River and Mission Creek Replenishment Facilities. Groundwater levels in the Garnet Hill Subarea responded rapidly when replenishment activities commenced at the Whitewater River Replenishment Facility in the 1970s. The magnitude of the response to the groundwater recharge is inversely proportional to the distance the wells are located from the Replenishment Facility, as shown by the diminishing intensity of the colors of the hydrographs.

**Exhibit 4** includes hydrographs for a selection of groundwater wells owned and operated by MSWD and the Mission Creek Monitoring Well located at the Mission Creek Replenishment Facility (see **Figure 2** for the locations of the wells), in comparison with the total annual quantities of water delivered to the Mission Creek Replenishment Facility. The comparison clearly indicates that the recharge program has benefitted the wells within the subbasin, especially the wells near the groundwater replenishment facility. The magnitude of the response to the groundwater recharge is inversely proportional to the distance the wells are located from the Replenishment Facility, as shown by the diminishing intensity of the colors of the hydrographs.

Although artificial replenishment with imported water, augmenting natural replenishment, has met increasing average annual groundwater demands during the past 30 years, it has not, for all practical purposes, reduced or diminished cumulative gross groundwater overdraft within the Coachella Valley Groundwater Basin, which existed prior to artificial replenishment of the groundwater basin. In effect, the groundwater overdraft condition that existed prior to imported water becoming available for groundwater replenishment has not been significantly altered, but the trend has been arrested. Although current groundwater levels have



generally stabilized in the subbasins within the management areas, current cumulative gross overdraft (not yet offset by cumulative artificial replenishment) is estimated at roughly 4,109,000 AF in the WWR Management Area (since 1956) and 279,000 AF in the MC Management Area (since 1978). Cumulative net overdraft, (cumulative gross overdraft offset by artificial replenishment) is currently estimated at 374,969 AF in the WWR Management Area and 115,500 AF in the MC Management Area.

CDWR has been unable to deliver full annual Table A water allocations for over two decades, with the exception of 2006 where 100% was delivered to Contractors. Had CVWD and DWA been able to obtain and exchange their maximum Table A quantities during that time period, cumulative groundwater overdraft would be significantly less and groundwater levels would be correspondingly higher.

h. Meeting Future Water Requirements

Historic and projected water supplies and water requirements for the WWR and MC Management Areas are set forth in **Figures 3 and 4**. Projected water supplies include SWP supplies, estimated natural inflow, and estimated non-consumptive return. Historic and projected water requirements include historic and projected groundwater production, and estimated natural outflow.

The projected water supply curves shown in **Figures 3 and 4**, are based on the estimates for the natural inflow to the WWR and MC Management Areas, continuing artificial replenishment, non-consumptive return, and groundwater in storage, if necessary. Artificial replenishment is based on the 2019 SWP deliverability projections excluding all potential surplus water deliveries which may become available during any particular year.

Projected water requirements (demands) through 2035 for the WWR and MC Management Areas (also shown in **Figures 3 and 4**) are based on the water balance model utilized in the 2010 Update to the Coachella Valley Water Management Plan and the 2014 Status Report prepared by MWH (and others), and the Groundwater Flow Model for the MC/GH WMP prepared by Psomas. As shown





in the figures, the projected requirements are largely offset by probable supplies; however, the cumulative annual change in storage will remain in the negative through at least 2030 under currently projected conditions.

Based on the production relationship between the WWR Management Area and the MC Management Area, in accordance with the Mission Creek Groundwater Replenishment Agreement, about 91.5% of imported water deliveries in 2021 will be directed to the WWR Management Area and 8.5% to the MC Management Area based on 2020 production (see **Exhibit 6**). For future years, the percentage of the total production is expected to range from 87% to 81% in the WWR Management Area and 12% to 19% in the MC Management Area through 2035 due to increased production (increased demands) in the MC Management Area due to anticipated population growth (MWH 2011, MWH 2013).

i. Adequacy of Current Supplies, Water Conservation, and Future Prospects

1) State Water Project Improvements

As discussed in previous reports, the State of California is proposing a program of improvements to the SWP. The program was originally called *California WaterFix*, and is now called the *Delta Conveyance Project*.

The California WaterFix program originally involved the construction and operation of new water diversion facilities near Courtland to convey water from the Sacramento River through two tunnels to the existing state and federal pumping facilities near Tracy. In addition to other federal, state, and local approvals, California WaterFix required changes to the water rights permits for the SWP and the federal Central Valley Project to authorize the proposed new points of water diversion and redirection.

The capital cost of the full California WaterFix Project was estimated at about \$17 billion for two tunnels. However, in his first State of the State address on February 12, 2019, Governor Gavin Newsom announced that he supports only the single-tunnel alternative, known as the "Delta



Conveyance Project", or DCP, and the California WaterFix project was officially halted in May, 2019.

The planning and environmental review process for the DCP commenced on January 15, 2020 with the release of the Notice of Preparation (NOP) for the development of an Environmental Impact Report (EIR), which would evaluate several project alternatives. Scoping for the EIR has been completed. The remainder of the environmental review process is anticipated to take at least an additional two years. Cost estimates for the DCP have not yet been put forth.

Eventually, SWP water supply reliability, quality, and delivered quantities and the overall health of the Delta may improve upon implementation of the DCP; however, it is unlikely that the costs for Delta improvements will be allocated to the State Water Contractors before 2030.

## 2) California Drought

In addition to the existing restrictions on water supplies from the SWP, California recently experienced over four consecutive years of severe drought, and is again facing drought conditions.

The four-year period between fall 2011 and fall 2015 was the State's driest since record keeping began in 1895. The statewide drought emergency was declared at an end in early 2017 due to a series of winter storms producing record-level rainfall.

During the course of the drought, the state implemented a number of mandatory water conservation measures, which are discussed in detail in previous reports, along with the efforts of DWA and CVWD to comply with said measures.



At the end of the process, DWA elected to retain a 10% to 13% conservation target for its customers for the purposes of long-term sustainability.

The winter storms of 2018-2019 nearly completely ended the drought conditions in California. According to the California Drought Monitor website, as of March 2019, no parts of California were listed as being in moderate or higher drought conditions.

However, significant drought conditions have recently returned to California. As of May 18, 2021, 16% of the state is listed as being in exceptional drought, 73% of the state is listed as being in extreme drought or worse, 94% of the state is listed as being in severe drought or worse, and the entire state is listed as being in moderate drought or worse. The majority of the state, except for San Diego County, is listed as being in drought conditions.

### 3) State Water Project Long-Term Reliability Estimates

The 2013 *SWP Final Reliability Report*, dated December 2014, estimated the long-term reliability of SWP supplies at 58% of maximum Table A Amounts, projected through the year 2033.

In July of 2015, CDWR issued the 2015 SWP Deliverability Capability Report. Beginning with said Report, CDWR stopped making long-term future reliability projections, and instead evaluated the SWP's delivery capability ("deliverability") based on existing and historical conditions. Said report estimated the median deliverability of SWP supplies at approximately 64%, and long-term deliverability (82 year average value) at 62% of maximum Table A Amounts 50% of the time over the historic long-term (based on a computer model simulation of hydrologic conditions from 1922-2003). CDWR explicitly stated in the 2015 Report that said report's estimates were based on existing and historical conditions and were not intended as future projections. For this reason, and also



because the 2015 Report did not consider the very low water supply allocations that occurred during the drought years of 2013, 2014, and 2015, the long-term SWP reliability figure of 58% was cited in the 2015/2016, 2016/2017, and 2017/2018 Engineer's Reports rather than the 62% long-term deliverability figure presented in CDWR's 2015 Delivery Capability Report.

In March of 2018, CDWR issued its final 2017 Delivery Capability Report, which included an evaluation of deliveries through calendar year 2016. The 2017 Report continues to use the same 82-year hydrologic record used for the 2015 Report (1922 through 2003) for its computer model simulations of potential hydrologic conditions (runoff and precipitation patterns) for long-term average delivery, and deliveries during typical wet years and typical dry years. However, the analysis accounted for land use, upstream flow regulations, and sea levels characteristic of 2017, and CDWR judged this 82-year period to be sufficient to provide a reasonable range of potential hydrologic conditions from wet years to critically dry years. The 2017 Report estimated the long-term average deliverability at 62% of maximum Table A Amounts, the same figure as presented in the 2015 Report. Because the 2017 Report incorporated recent drought-related data pertaining to low allocations in the years 2013 through 2015, the 62% long-term average deliverability figure set forth in said report was used in the 2018/2019 and 2019/2020 Engineer's Reports.

In August of 2020, CDWR issued its final 2019 Delivery Capability Report, which includes an evaluation of deliveries through calendar year 2018. The 2019 Report continues to use the same 82-year hydrologic record used for the 2015 and 2017 Reports (1922 through 2003) for its computer model simulations. However, following the pattern of the 2017 Report, the analysis accounts for land use, upstream flow regulations, and sea levels characteristic of 2019. The 2019 Report estimates the long-term average deliverability at 58% of maximum Table A Amounts, essentially returning to the figure presented in the 2013 Report. The 58% long-term



average deliverability figure set forth in the 2019 report is used in this Engineer's Report.

#### 4) Conclusion

In conclusion, the Coachella Valley Groundwater Basin (and its subbasins) is in an overdraft condition and will most likely remain so, even with the importation and exchange of available SWP water, until a higher proportion of the maximum SWP Table A allocations becomes available. With maximum Table A allocations, recharge in the WWR and MC Management Areas would offset the current annual overdraft, although overdraft in future years is virtually unpredictable, due to the difficulty of projecting long-term growth and reliability of SWP supplies.

### 6. Replenishment Assessment

For the WWR Management Area, DWA began its groundwater assessment program in fiscal year 1978/1979 and CVWD began its groundwater assessment program in fiscal year 1980/1981. For the MC Management Area, the two agencies initiated their groundwater assessment programs simultaneously in fiscal year 2003/2004. The two agencies are not required to implement the assessment procedure jointly or identically; however, they have each continuously levied an annual assessment on water produced within their respective jurisdictions since inception of their groundwater assessment programs.

Since the 2013 MC/GH WMP demonstrates that the Garnet Hill Subarea benefits from the groundwater replenishment activities in the two adjacent subbasins, pursuant to the 2004 Settlement Agreement between CVWD, DWA, and MSWD; DWA and CVWD have the authority establish a groundwater assessment program for the Garnet Hill Subarea. DWA's replenishment assessment program was initiated in this subarea in fiscal year 2015/2016. Currently, there is no assessable production in the Garnet Hill Subarea within CVWD's WWR AOB.



Desert Water Agency Law requires the filing of an engineer's report regarding the Replenishment Program before DWA can levy and collect groundwater replenishment assessments. The report must address the condition of groundwater supplies, the need for groundwater replenishment, the AOBs, water production within said AOBs, and replenishment assessments to be levied upon said water production. It must also contain recommendations regarding the replenishment program. This report has been prepared in accordance with these requirements.

**CHAPTER III**  
**WHITEWATER RIVER SUBBASIN**  
**PRODUCTION AND REPLENISHMENT**



## **CHAPTER III**

### **WEST WHITEWATER RIVER SUBBASIN MANAGEMENT AREA PRODUCTION AND REPLENISHMENT**

#### **A. MANAGEMENT AREA**

The WWR Management Area consists of two hydrologic subareas, the Palm Springs Subarea and the Garnet Hill Subarea. The Garnet Hill Subarea is separated from the Palm Springs Subarea by the Garnet Hill Fault, which is a reasonably effective barrier to horizontal groundwater movement, but only below about 100 feet below ground surface.

The Mission Creek/Garnet Hill Management Committee engaged MWH to prepare the MC/GH WMP, which was completed in January 2013. According to the MC/GH WMP, while the Garnet Hill Subarea receives no direct artificial replenishment, it benefits from the artificial replenishment activities in both the MC and Whitewater River Subbasin. It benefits from the replenishment activities in the MC via some subsurface flows across the Banning Fault, and from the replenishment activities in the westerly portion of the Whitewater River (Indio) Subbasin via: (a) infiltration from the Whitewater River channel, which carries imported water from the Colorado River Aqueduct to the replenishment facilities within the Whitewater River Subbasin, and (b) from subsurface flow across the Garnet Hill Fault at the northwesterly end of the Garnet Hill Subarea during major recharge events that significantly raise the groundwater level in the vicinity of the Whitewater River Replenishment Facility. Exact quantities of replenishment benefit from the MC and Whitewater River Subbasin to the Garnet Hill Subarea cannot be ascertained at this time with currently available hydrologic data.

From 2005 through 2018, the Garnet Hill Subarea within DWA's service area was treated as a separate Management Area and AOB. In 2019, the Garnet Hill Subbasin Management Area was consolidated into the WWR Management Area to conform to the subbasin delineations adopted by the CDWR. The information presented in this report reflects this change.

#### **B. GROUNDWATER PRODUCTION**

Annual water production (groundwater extractions plus surface water diversions) within the WWR Management Area averaged about 93,000 AF from 1965 through 1967, and then increased to approximately 187,000 AF in 1990. It then decreased to approximately 174,000 AF in 1991,





coincident with the initiation of significant deliveries of recycled water by CVWD and DWA to irrigation users within the Management Area (which had the effect of temporarily reversing the trend toward steadily increasing production of groundwater therein).

Due to development, production increased sharply to about 187,000 AF in 1997 and to about 208,000 AF in 1999. It then averaged about 211,000 AF during the three-year period 2000 through 2002 and remained relatively stable through 2007, probably as a result of water conservation and increased use of recycled water, and (within CVWD's AOB) conversion of agricultural land to residential development, which leveled off in 2000. Production has decreased following 2007 due to water conservation programs implemented by both agencies and also partly to poor economic conditions reducing demands.

During the past five calendar years (2016 through 2020), average annual water production within the WWR Management Area has been about 151,000 AF/Yr, approximately three-fourths of which took place within CVWD's AOB and approximately one-fourth within DWA's AOB.

Current (2020 calendar year) and historic groundwater production and surface water diversion data for the WWR Management Area is set forth in **Table 1**.

Until 2020, surface water diversions were reported as total water diverted, including water returned to the natural stream. Beginning with 2020, surface water diversions are reported as water diverted and directed into the domestic water system.

### C. NATURAL RECHARGE

Natural recharge includes precipitation, surface water runoff, and subsurface inflow. It is currently estimated that natural inflow into the WWR Management Area is approximately 52,100 AF/Yr, while natural outflow is currently estimated at approximately 18,420 AF/Yr (MWH 2011). Thus, approximately 33,600 AF (2020 natural inflow less 2020 natural outflow) of natural, or native, groundwater is currently available for water supply.



#### **D. NON-CONSUMPTIVE RETURN**

Consumptive use of water represents the use of water that is not returned to the aquifer (for example: water that is subjected to evapotranspiration by vegetation, thus releasing it into the atmosphere; water that is incorporated into biomass or manufactured products; and water that is exported). Non-consumptive return water is water that is ultimately returned to the aquifer after diversion (for example, diverted surface water returned to the stream channel), or after use (for example, irrigation water percolating beyond the root zone or treated wastewater discharged to percolation ponds or leach fields) or water used for public parks or golf course irrigation (wastewater recycled for irrigation use). Although non-consumptive return in the WWR Management Area has been estimated at approximately 40% (USGS 1974) and 35% (USGS 1992), CVWD's 2010 Update to the Coachella Valley Water Management Plan (and 2014 Status Report to that plan) incorporated groundwater modeling by MWH (now Stantec) which projected that non-consumptive return may decrease from 35% to approximately 30% through 2035 based on the effects of implementing water conservation measures, such as turf removal and more efficient irrigation practices. According to the model, the overall non-consumptive return for 2017 was projected to be approximately 33%. However, Stantec and Krieger & Stewart have recently conducted efforts to more accurately characterize non-consumptive return by quantifying water use categories; with estimates made for water percolated via agricultural and landscaping irrigation return, wastewater treatment plant and septic tank discharge, and water recycling activities within each Management Area of the Coachella Valley, and considering such factors as transfers of produced water between subbasins. This effort has resulted in a current estimate for non-consumptive use within the WWR Management Area of approximately 32% of total estimated groundwater production, which percentage is used herein.

#### **E. ARTIFICIAL REPLENISHMENT**

Total artificial replenishment (to both the WWR and MC Management Areas) for 2020 was 128,255AF. Of this quantity, 126,487 AF were delivered to the Whitewater River Replenishment Facility, and 1,768 AF were delivered to the Mission Creek Replenishment Facility (see **Exhibit 7**). DWA was responsible for delivery of approximately 48,000 AF to WWR and 1,200 AF to MC.

**F. GROUNDWATER IN STORAGE**

Average annual reported production within the WWR Management Area of 151,000 AF for the past five years (including approximately 500 AF of annual production by minimal pumpers) has been met with an average of approximately 30,700 AF of net natural recharge, an average of approximately 47,600 AF of non-consumptive return, and an average of 179,000 AF of net artificial replenishment (less evaporative losses), resulting in a net increase in groundwater in storage of about 106,400 AF/Yr over the past five years.

**G. OVERDRAFT STATUS**

Based on information contained in USGS Water Resources Investigations 77-29 and 91-4142, average gross annual groundwater overdraft within the WWR Management Area of the Coachella Valley Groundwater Basin began in the 1950s and was estimated to be 30,000 AF/Yr during the late 1960s and early 1970s. It is now estimated to be as much as three times greater. Gross groundwater overdraft within the WWR Management Area (excluding artificial replenishment) is now estimated to have averaged approximately 73,000 AF/Yr over the last five years. Since 1956, cumulative gross overdraft (net pumpage minus net natural recharge) is currently estimated at approximately 4,109,000 AF, and cumulative net overdraft (cumulative gross overdraft offset by artificial replenishment) is currently estimated to be about 375,000 AF.

**CHAPTER IV**  
**MISSION CREEK SUBBASIN**  
**PRODUCTION AND REPLENISHMENT**



## CHAPTER IV MISSION CREEK SUBBASIN MANAGEMENT AREA PRODUCTION AND REPLENISHMENT

### A. GROUNDWATER PRODUCTION

Annual water production (groundwater extractions) within the MC Management Area increased from an average of approximately 500 AF/Yr in the late 1950s and 1960s to approximately 2,300 AF/Yr in 1978. Production increased relatively steadily since then to approximately 17,400 AF/Yr in 2006, then began dropping slightly as a result of declining economic conditions to about 16,400 AF/Yr in 2007, 15,800 AF/Yr in 2008, 15,100 AF/Yr in 2009, 14,300 in 2010, 14,200 in 2011, and 13,000 in 2015. Annual groundwater production within the MC Management Area has resulted in cumulative long-term groundwater overdraft, as evidenced by the steady decline of groundwater levels within the MC prior to commencement of recharge activities.

During the past five calendar years (2016 through 2020), average annual reportable water production within the MC Management Area has been about 14,000 AF/Yr; approximately two-thirds of which took place within DWA's AOB and approximately one-third within CVWD's AOB. Current (2020 calendar year) and historic groundwater production and surface water diversion data for the MC Management Area is set forth in **Table 1**.

### B. NATURAL RECHARGE

Natural recharge includes precipitation, surface water runoff, and subsurface inflow. As discussed in past reports, it is currently estimated that natural inflow and surface recharge of the MC has averaged approximately 3,500 to 10,800 AF/Yr over the long term. Most estimates of natural outflow from the MC equal or exceed the corresponding estimates of natural inflow.

The most recent estimate for natural inflow into the MC was prepared by Psomas for the MC/GH WMP prepared by MWH in January 2013. Psomas estimated said natural inflow at approximately 9,340 AF/Yr, consisting of approximately 7,500 AF/Yr from mountain front runoff and precipitation under average conditions and approximately 1,840 AF/Yr from flows across the Mission Creek Fault from the Desert Hot Springs Subbasin. This estimate falls within the range of average natural inflow previously cited herein.



Psomas estimated natural outflow at approximately 6,000 AF/Yr, consisting of 4,000 AF/Yr of subsurface flow from the Banning Fault to the Garnet Hill Subarea, 900 AF/Yr of evapotranspiration, and 1,100 AF/Yr of flow through semi-water bearing rocks, known as the Indio Hills, at the southeastern end of the MC.

#### **C. NON-CONSUMPTIVE RETURN**

Consumptive use and non-consumptive return are discussed in **Chapter III, Section C**. Within the MC Management Area, non-consumptive return is currently estimated at approximately 31% of total estimated production, or about 4,600 AF/Yr (average for the past five years).

#### **D. ARTIFICIAL REPLENISHMENT**

Total artificial replenishment (to both the WWR and MC Management Areas) for 2020 was 128,255 AF. Of this quantity, 1,768 AF were delivered to the Mission Creek Replenishment Facility (see **Exhibit 7**). The numbers presented herein are based on DWA's reported quantity. DWA was responsible for delivery of approximately 1,200 AF to MC.

Based on the production relationship between the Whitewater River Subbasin and the MC, in accordance with the Mission Creek Groundwater Replenishment Agreement, about 91.5% of imported water deliveries in 2021 will be directed to the WWR Management Area and 8.5% to the MC Management Area, based on 2020 production (see **Exhibit 6**). For future years, the percentage of the total production is expected to range from 87% to 81% in the WWR Management Area and 12% to 19% in the MC Management Area through 2035 due to increased production (increased demands) in the MC Management Area due to anticipated population growth (MWH 2011, MWH 2013).

#### **E. GROUNDWATER IN STORAGE**

Average annual reported production within the entire MC Management Area of 14,000 AF for the past five years (including approximately 500 AF of annual production by minimal pumpers) has been met with approximately 3,550 AF of net natural recharge, approximately 4,600 AF of non-consumptive return, and 3,250 AF of net artificial replenishment (less evaporative losses), resulting in a net decrease in groundwater in storage of about 2,500 AF/Yr over the past five years.



The change in groundwater storage within DWA's MC AOB has also been estimated using changes in measured static water levels in wells within the AOB. Using the average static water levels in the wells in DWA's AOB, the average annual reduction in stored groundwater was 3,800 AF/Yr from 1955 through 2020, and 3,100 AF/Yr from 1998 through 2020 (see **Exhibit 5**).

#### **F. OVERDRAFT STATUS**

Gross groundwater overdraft within the MC (excluding artificial replenishment) is now estimated at approximately 6,000 AF/Yr during the last five years. Cumulative gross overdraft (net pumpage minus net natural recharge) since 1978 is currently estimated at approximately 279,000 AF, and cumulative net overdraft (cumulative gross overdraft offset by artificial replenishment) since 1978 is currently estimated to be about 115,500 AF.

**CHAPTER V**  
**REPLENISHMENT ASSESSMENT**





## CHAPTER V REPLENISHMENT ASSESSMENT

Desert Water Agency Law, in addition to empowering DWA to replenish groundwater basins and to levy and collect water replenishment assessments within its areas of jurisdiction, defines production and producers for groundwater replenishment purposes as follows:

Production: The extraction of groundwater by pumping or any other method within the Agency, or the diversion within the Agency of surface supplies which naturally replenish the groundwater supplies within the Agency and are used therein.

Producer: Any individual, partnership, association, group, lessee, firm, private corporation, public corporation, or public agency including, but not limited to, the DWA, that extracts or diverts water as defined above.

Producers that extract or divert 10 AF of water or less in any one year are considered minimal pumpers or minimal diverters, and their production is exempt from assessment.

Desert Water Agency Law also states that assessments may be levied upon all water production within an AOB, provided assessment rates are uniform throughout. Pursuant to Desert Water Agency Law, the amount of any replenishment assessment cannot exceed the sum of certain SWP charges, specifically, the Delta Water Charge, the Variable OMP&R Component of the SWP Transportation Charge (Variable Transportation Charge), and the Off-Aqueduct Power Component of the SWP Transportation Charge (Off-Aqueduct Power Charge), pursuant to the Contract between DWA and the State of California. The aforesaid charges are set forth in each year's CDWR *Bulletin on the State Water Project* (CDWR Series 132, Appendix B, Tables B-16B, B-18, and B-21).

Prior to 2002, groundwater replenishment with Colorado River Water (exchanged for SWP water) had been limited to recharge of the WWR Management Area. In 2002, DWA and CVWD commenced recharge activities in the MC Management Area, in addition to continuing their ongoing activities in the WWR Management Area. The AOBs for Groundwater Replenishment and Assessment herein consist of those portions of the WWR Management Area (including a portion of the San Geronio Pass Subbasin and tributaries thereto) and the MC Management Area, situated within DWA's service area boundary (**Figure 2**).



The groundwater replenishment assessment and replenishment assessment rate for 2021/2022 is based on the following:

1. All groundwater production within DWA and MSWD, with certain exceptions, is metered, and all assessable surface water diversions within DWA are metered or measured. There are no surface water diversions within the MC AOB.
2. The Delta Water Charge, the Variable Transportation Charge, and the Off-Aqueduct Power Charge, as set forth in Appendix B of the most recent CDWR Bulletin Series 132 and hereafter referred to as Applicable SWP Charges.
3. The proportionate share of the Applicable SWP Charges allocable to CVWD and DWA in accordance with the Water Management Agreements between CVWD and DWA (Water Management Agreement for the Whitewater River Subbasin executed July 1, 1976 and amended December 15, 1992, and the Water Management Agreement for the Mission Creek Subbasin executed April 8, 2003; both amended July 15, 2014), hereafter referred to as Allocated SWP Charges. (The applicable charges are essentially apportioned between CVWD and DWA in accordance with relative water production within those portions of each entity lying within the applicable Water Management Areas, either the Whitewater River Subbasin (including the Garnet Hill Subarea and a portion of the San Geronio Pass Subbasin) or the MC.
4. Certain charges or costs other than those derived pursuant to items 1, 2, and 3 above. Such additional charges may be offset from time to time by discretionary reductions.

The replenishment assessment rate comprises two components: (1) the Allocated SWP Charges attributable to the estimated annual Table A allocation, and (2) certain other charges or costs related to groundwater recharge, such as those for reimbursement of past surplus water charges for which assessments had not been levied.

The replenishment assessment rate, when applied to estimated assessable production (all production, excluding that which is exempt, within the AOB), results in a replenishment assessment which must not exceed the maximum permitted by Desert Water Agency Law (the Applicable SWP Charges). Due to the interdependent nature of the imported water supply for the WWR Management Area (including the Garnet Hill Subarea and a portion of the San Geronio Pass Subbasin), and the MC Management Area, the



Allocated SWP Charges component of the replenishment assessment rate is uniform throughout the WWR AOB and MC AOB; however, due to the independent and separate nature of various other aspects of the groundwater replenishment program within the WWR AOB (including the Garnet Hill Subarea and a portion of the San Geronio Pass Subbasins), and MC AOB, the other charges and costs component need not be uniform; they are specific to each AOB.

#### **A. ACTUAL 2020 WATER PRODUCTION AND ESTIMATED 2021/2022 ASSESSABLE WATER PRODUCTION**

Estimated assessable production within DWA's WWR AOB (including a portion of the Garnet Hill Subarea and the San Geronio Pass Subbasin), and MC AOB consist of groundwater extractions from the groundwater subbasins and diversions from streams (Snow, Falls, and Chino Creeks) in the tributary watersheds. Estimated assessable groundwater production is based on metered water production. DWA staff read and record metered water production quantities with the exception of the wells owned by MSWD and the Indigo Power Plant, which are reported to DWA.

The effective replenishment assessment rate for Table A water is based on DWA's estimated Allocated SWP Charges for the current year (based on CDWR's projections for the assessment period) divided by the estimated assessable production for the assessment period, as set forth in **Table 6**. DWA has utilized two bases for estimating assessable production, either assessable production for the previous year, or, when statewide conservation mandates are in effect, a specified year's assessable production minus a water conservation factor. Since the 2019/2020 report, the estimated assessable production for both AOBs has been based on the assessable production for the previous year (for this report, 2020), since the statewide conservation mandate was satisfied in 2017.

Estimated assessable water production is set forth in **Table 2**.

In 2020, actual reported production within CVWD's AOB within the WWR Management Area was about 3.3 times that within DWA's AOB, 117,825 AF versus 35,240 AF, whereas actual production within DWA's AOB within the MC Management Area was about 2.1 times that within CVWD's AOB, 9,589 AF versus 4,655 AF. DWA's 2020 actual production accounts for approximately 26.8% of the 167,310 AF combined total of water produced within the Management Areas that year.



## **B. WATER REPLENISHMENT ASSESSMENT RATES**

The water replenishment assessment rates consist of two components, one being attributable to SWP annual Table A water allocations, and the other being attributable to other charges or costs necessary for groundwater replenishment. Each component is discussed below.

### **1. Component Attributable to SWP Table A Water Allocation Charges**

In accordance with the current 2014 Water Management Agreement, CVWD and DWA combine their SWP Table A water allocations, exchange them for Colorado River water, and replenish the WWR and MC Management Areas with exchanged Colorado River water. CVWD and DWA each assume the full burden for portions of their respective Fixed State Water Project Charges (Capital Cost Component and Minimum Operating Component of Transportation Charge); however, the two agencies share their Applicable SWP Charges (Delta Water, Variable Transportation, and Off-Aqueduct Power Charges) on the basis of relative production.

Although DWA could base its replenishment assessment rate on its Applicable SWP Charges, it only needs to recover its share (based on relative production) of the combined Applicable SWP Charges for both CVWD and DWA (i.e. its Allocated SWP Charges). CVWD makes up the difference in accordance with the Water Management Agreement.

The Applicable SWP Charges for CVWD and DWA for Table A water are set forth in **Tables 3 and 4**, respectively. Unit Charges for Delta Water, Variable Transportation, and Off-Aqueduct Power Charges are based on estimates presented in Appendix B of CDWR Bulletin 132-19.

Since CDWR has been unable to deliver maximum Table A allocations for 20 of the past 21 years, the amounts of the Applicable SWP Charges for 2021/2022 and future years are computed based on a long-term SWP reliability factor applied to the maximum SWP allocations. From 2013 through 2017, a factor of 58% was applied. A factor of 62% was applied in 2019 and 2020. A factor of 58% is being applied in 2021 and 2022.



Since the 2003 Exchange Agreement allowed MWD to call-back or recall the 100,000 AF of Table A allocation it transferred to CVWD and DWA, the amounts of the Applicable SWP Charges from 2004/2005 through 2017/2018 have been computed with the MWD transfer portion being further reduced by another long-term reliability factor to account for possible future recalls pursuant to the 2003 Exchange Agreement (typically 35%). However, the 2019 amendments to, and restatement of, the 2003 Exchange Agreement have eliminated the call-back provision. Therefore, commencing with the 2018/2019 report, it is assumed that MWD will not recall any of its transfer portion. This change has the effect of increasing the estimated delivery of SWP water for future years, including the 2021/2022 fiscal year, thus raising the replenishment assessment rate necessary to cover anticipated importation costs.

The derivations of the Applicable SWP Charges are set forth in **Tables 3 and 4**. The "Maximum Table A Water Allocation" shown in **Tables 3 and 4** is the currently existing Table A Water Allocation per CDWR Bulletin 132-19, Appendix B, Table B-4 (contractual quantities based on requests for same by CVWD and DWA) with no reliability factors being applied. The "Probable Table A Water Allocation" is the currently existing Table A Water Allocation. The MWD reliability factor was formerly applied to the Probable Table A Allocation column to reflect the long-term average with probable recalls by MWD, pursuant to the remaining years of the 2003 Exchange Agreement and its implementation. The "Probable Table A Water Delivery" is based on 58% reliability of the probable Table A Water allocation.

Applicable SWP Charges proportioned in accordance with the Water Management Agreement, more particularly in accordance with relative production within CVWD and DWA, yield Allocated SWP Charges. Over the past five years, 2016 through 2020, DWA has been responsible for approximately 22.46% of the water produced within the WWR Management Area, and 68.72% of water produced from the MC Management Area.

In the past, Allocated SWP Charges have been apportioned to CVWD and DWA based on production from the WWR Management Area. Since 2003/2004, Allocated SWP Charges have been apportioned to CVWD and DWA based on production from the combined WWR and MC Management Areas. In 2020, DWA was responsible for approximately 26.8% of the combined water production within the Management Areas. On the assumption that



DWA's relative production for 2021 and thereafter will be about the same as for 2020, DWA's share of the combined Applicable SWP Charges (i.e. Allocated Charges) for the next 15 years will be as set forth in **Table 5**.

**Table 5** shows that DWA's estimated Allocated Charges (its share of combined Applicable Charges for Table A water) are anticipated to decrease by about 3% between 2020 and 2021, increase by about 18% between 2021 and 2022 and increase by about 6% between 2022 and 2023. DWA's estimated Allocated Charges will change as estimates presented in future annual editions of CDWR Bulletin 132 change.

**Table 5** also shows that DWA's estimated 2021 Allocated Charges are about 93% of DWA's estimated Applicable Charges. Since water replenishment assessments must be used for groundwater replenishment purposes only, implementation of the maximum permissible replenishment assessment rate based on DWA's Applicable Charges would result in the collection of excess funds that would have to be applied to replenishment charges during subsequent years.

Rather than collect excess funds one year and apply the excess funds to replenishment charges in subsequent years, DWA attempts to establish from year to year the replenishment assessment rate that will result in collection of essentially the funds necessary to meet its annual groundwater replenishment charges. DWA therefore bases the Table A portion of its replenishment assessment on estimated Allocated Charges, rather than estimated Applicable Charges.

Pursuant to current Desert Water Agency Law, the maximum permissible replenishment assessment rate that can be established for fiscal year 2021/2022 is approximately \$267/AF, based on DWA's estimated Applicable Charges (Delta Water Charge, Variable Transportation Charge, and Off-Aqueduct Power Charge) of \$11,956,580 (average of estimated 2021 and 2022 Applicable Charges) and estimated 2021/2022 combined assessable production of 44,830 AF within the WWR and MC AOBs.

The effective replenishment rate is based on DWA's estimated Allocated SWP Charges for the current year, as computed using CDWR's projected Applicable SWP Charges, divided



by the estimated assessable production for the assessment period (based on the assessable production for the previous calendar year), as set for in **Table 6**.

Pursuant to the terms of the Water Management Agreement between DWA and CVWD, and based on DWA's estimated 2021/2022 Allocated Charges of \$11,119,519 and estimated 2021 calendar year assessable production (shown in **Table 6** as estimated 2021/2022 assessable production) of 44,830 AF within the WWR and MC, the effective replenishment assessment rate component for Table A water for the 2021/2022 fiscal year is \$248/AF. **Table 7** includes DWA's historical estimated, actual effective, and estimated projected replenishment assessment rates.

**Tables 3 through 7** include future projections through 2035. These projections are based on a number of assumptions regarding factors that can be highly variable and difficult to predict, such as development, conservation, and, as mentioned, SWP reliability and cost factors. Actual values in the future may be substantially different than as shown in these tables.

## 2. **Component Attributable to Other Charges and Costs Necessary for Groundwater Replenishment**

Charges and costs necessary for groundwater replenishment could include the costs for reimbursement for past SWP Table A water allocations and surplus water allocations for which insufficient assessments had been levied, acquisition or purchases of water from sources other than the SWP, the cost of importing and recharging water from sources other than the SWP, and the cost of treatment and distribution of reclaimed water.

Currently, other charges and costs are being limited to past SWP water payments for which assessments have not been levied. Due to increases in SWP costs, DWA elected last year to transfer the deficit resulting from past payments for which assessments have not been levied to reserve account(s).

Since 1996, CVWD and DWA have obtained surplus SWP water, when available, to supplement deliveries of Table A water (see **Chapter II, Section B.5.d**). DWA currently pays charges for surplus water with funds from its Unscheduled State Water Project





Deliveries Reserve Account, rather than from funds raised directly through replenishment assessment levies.

### 3. Proposition 218 Proceedings

DWA held Proposition 218 proceedings in the winter of 2016, including a public hearing on December 15, 2016. During the public hearing, DWA received comments and tallied protests regarding the proposed replenishment assessment rate ranges for the following five years, as shown in the table below.

Fiscal Year	Anticipated Adoption Date	Rate Range (\$/AF)
2017/2018	July 1, 2017	\$110.00 to \$130.00
2018/2019	July 1, 2018	\$120.00 to \$140.00
2019/2020	July 1, 2019	\$125.00 to \$155.00
2020/2021	July 1, 2020	\$130.00 to \$165.00
<b>2021/2022</b>	<b>July 1, 2021</b>	<b>\$130.00 to \$175.00</b>

Protests were received from less than 50% of the affected parcels.

On December 4, 2017, the California Supreme Court held, in the case of *City of San Buenaventura v. United Water Conservation District*, that groundwater pumping charges are not property-related charges subject to Proposition 218. However, current regulations developed to codify the SGMA still state that a Groundwater Sustainability Agency that adopts a groundwater sustainability plan may impose fees to fund the costs of groundwater management, but such fees "shall be adopted" in accordance with Proposition 218. If the SGMA regulations are amended to remove this requirement, future Proposition 218 proceedings for DWA's groundwater replenishment assessment may not be necessary.

Since 2021/2022 is the final year covered by the 2016 Proposition 218 proceedings, another set of Proposition 218 proceedings will be required for the ensuing years. The next Proposition 218 Proceedings are tentatively scheduled for late 2022. Therefore, the replenishment assessment rate for 2022/23 will remain the same as the 2021/22 rate, recommended herein as \$175.00. In accordance with direction from the DWA Board of Directors at their public meeting on May 4, 2021, the rate will be increased by an increment





of \$20 annually through the end of the State Water Contract in 2035. The following table sets forth recommended replenishment assessment rates for five fiscal years following the proposed Proposition 218 Proceedings in 2022, based on the \$20 annual increment.

Fiscal Year	Anticipated Adoption Date	Recommended Rate (\$/AF)
2023/2024	July 1, 2023	\$195.00
2024/2025	July 1, 2024	\$215.00
2025/2026	July 1, 2025	\$235.00
2026/2027	July 1, 2026	\$255.00
2027/2028	July 1, 2027	\$275.00

#### 4. Proposed 2021/2022 Replenishment Assessment Rates

As shown in **Table 6**, the estimated effective Table A Assessment Rate is \$248/AF, and the elimination of the separate MWD reliability factor (MWD reliability factor effectively set to 100%, but still subject to the 58% SWP reliability factor). However, this rate exceeds the maximum rate of \$175/AF established in the Proposition 218 proceedings for 2021/2022. Therefore, as shown in **Table 7**, the recommended replenishment assessment rates proposed for 2021/2022 are:

- **\$175.00/AF** for the WWR AOB
- **\$175.00/AF** for the MC AOB

Historic replenishment assessment rates for both DWA and CVWD within the Whitewater River Subbasin are included in **Exhibit 8**.

#### C. ESTIMATED WATER REPLENISHMENT ASSESSMENTS FOR 2021/2022

The maximum replenishment assessment that can be levied by DWA for combined estimated production of 44,830 AF (see **Table 2**) within the WWR and MC AOBs based on a replenishment assessment rate of \$175.00/AF is approximately \$7,845,250 (\$6,167,000 in the WWR AOB and \$1,678,250 in the MC AOB).



DWA will continue to be the major producer within the WWR AOB, with assessable production of approximately 33,260 AF; twelve other producers will be responsible for the remaining 1,980 AF of estimated assessable production. DWA will also be the major assessee with an estimated replenishment assessment of \$5,820,500. The twelve other producers will be responsible for the remaining \$346,500. DWA will therefore be responsible for approximately 94.4% of both the estimated assessable water production and the estimated replenishment assessment for the WWR AOB; the other nine producers will be responsible for the remaining 5.6%.

MSWD will be the major producer within the MC AOB, with assessable production of approximately 7,830 AF; four other producers will be responsible for the remaining 1,760 AF of estimated assessable production. MSWD will also be the major assessee with an estimated replenishment assessment of \$1,370,250. The four other producers will be responsible for the remaining \$308,000. MSWD will be responsible for approximately 81.7% of both the estimated assessable water production and the estimated replenishment assessment in the MC AOB; the other four producers will be responsible for the remaining 18.3%.

**CHAPTER VI**  
**BIBLIOGRAPHY**



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## FIGURES



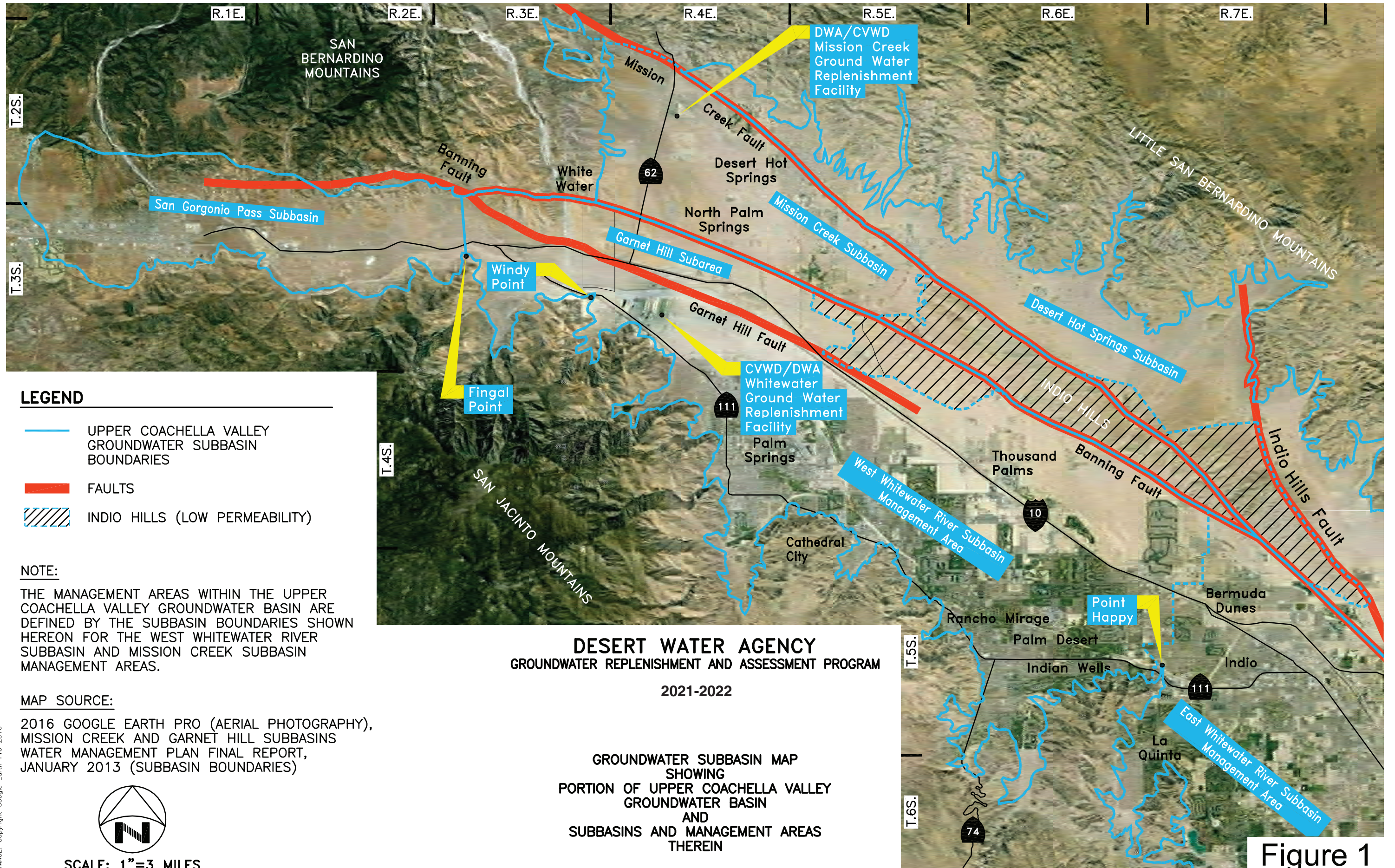
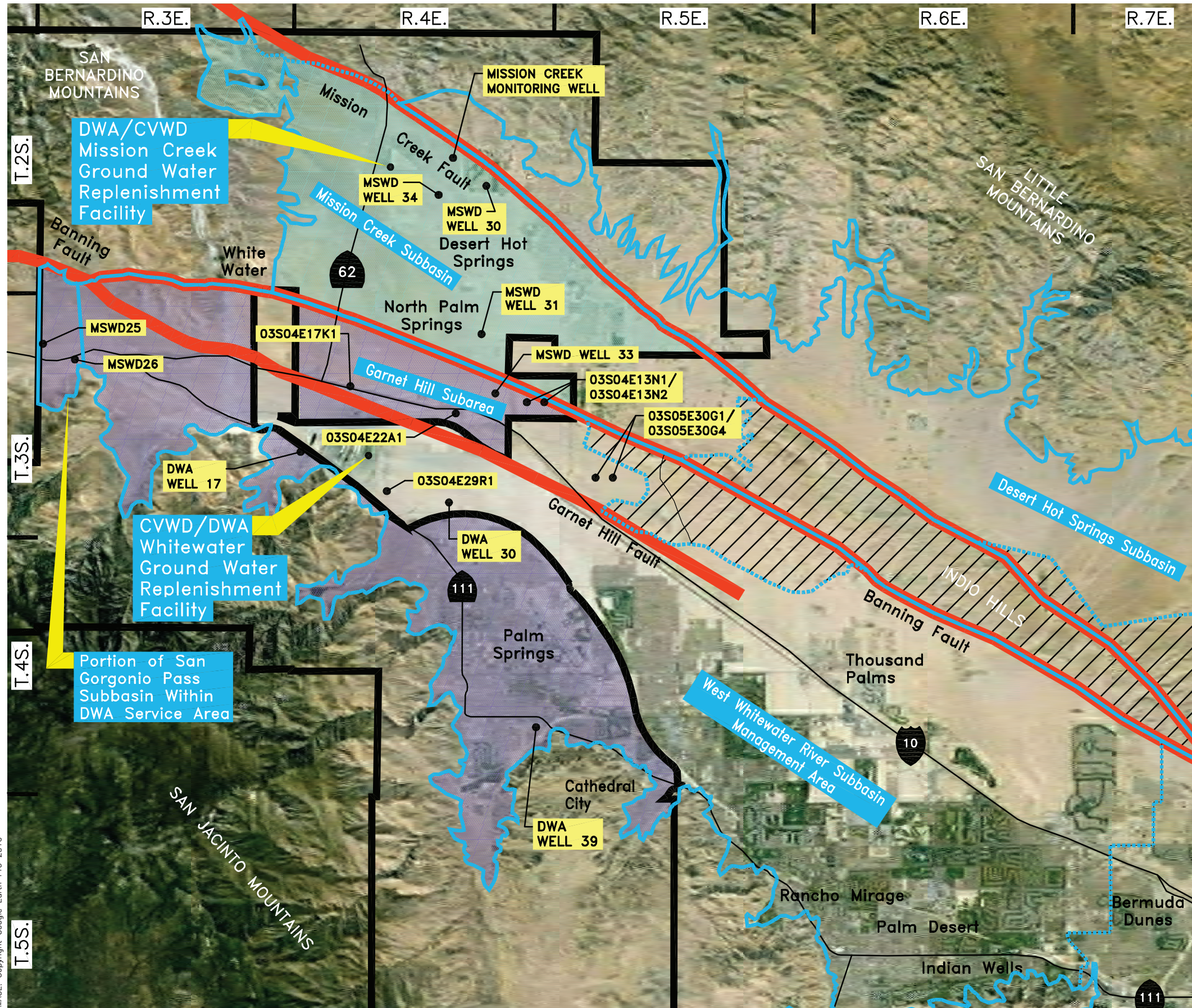


Figure 1



\\101\33p44\Drawings\Figures\101-33p44\_f2.dwg

IMAGE: Copyright Google Earth Pro 2016



**DESERT WATER AGENCY**  
GROUNDWATER REPLENISHMENT AND ASSESSMENT PROGRAM  
2021-2022

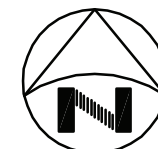
GROUNDWATER SUBBASIN MAP  
SHOWING  
GROUNDWATER RECHARGE AREAS OF BENEFIT  
(EITHER DIRECT OR INDIRECT)  
AND  
SELECTED GROUNDWATER WELLS

**LEGEND**

- DWA BOUNDARY
- UPPER COACHELLA VALLEY GROUNDWATER SUBBASIN BOUNDARIES
- FAULTS
- UPPER COACHELLA VALLEY GROUNDWATER SUBBASIN AREAS OF BENEFIT WITHIN DWA
- DWA WHITEWATER RIVER SUBBASIN AREA OF BENEFIT
- DWA MISSION CREEK SUBBASIN AREA OF BENEFIT
- INDIO HILLS (LOW PERMEABILITY)
- GROUNDWATER WELL

**MAP SOURCE:**

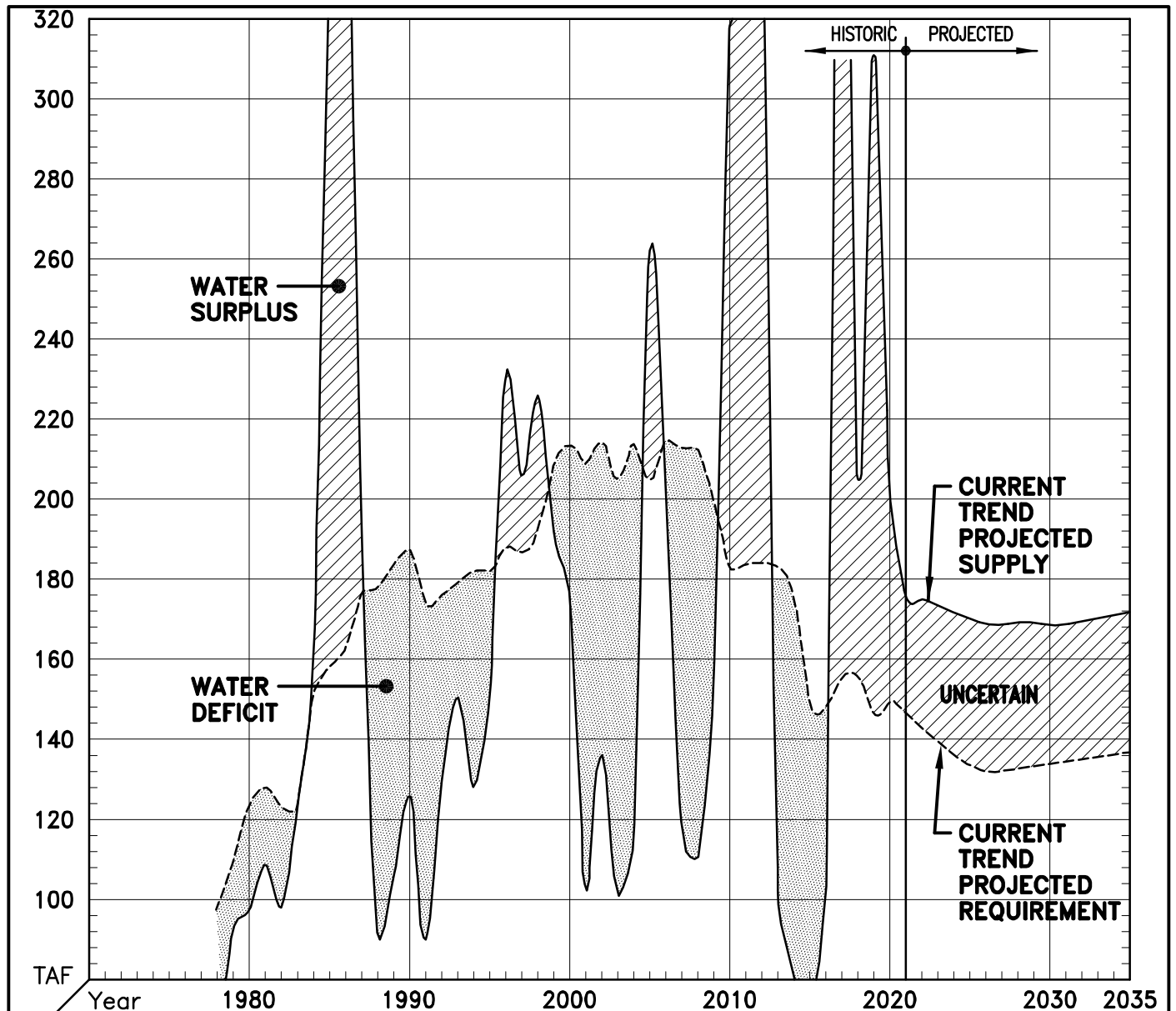
2016 GOOGLE EARTH PRO (AERIAL PHOTOGRAPHY),  
MISSION CREEK AND GARNET HILL SUBBASINS  
WATER MANAGEMENT PLAN FINAL REPORT,  
JANUARY 2013 (SUBBASIN/SUBAREA BOUNDARIES)



SCALE: 1"=2.5 MILES

**Figure 2**





YEARS	1980	1990	2000	2010	2020	2030	2035
NET INFLOW (ACRE FEET)	98,000	125,800	174,500	317,100	205,639	168,509	171,583
NONCONSUMPTIVE RETURN	43,200	65,700	74,500	64,300	48,000	43,000	44,000
NET ARTIFICIAL RECHARGE	25,800	31,100	71,000	223,800	124,000	89,800	89,000
NET NATURAL INFLOW	29,000	29,000	29,000	29,000	33,639	35,709	38,583

**NOTES:**

1. PROJECTED WATER REQUIREMENTS ARE BASED ON THE PROJECTIONS SET FORTH IN THE 2010 UPDATE TO THE COACHELLA VALLEY WATER MANAGEMENT PLAN, AND THE 2014 STATUS UPDATE (CVWD & MWH).
2. PROJECTED ARTIFICIAL RECHARGE IS BASED ON PROBABLE DELIVERIES ESTIMATED USING 62% RELIABILITY OF STATE WATER PROJECT WATER BASED ON 2013 STATE WATER PROJECT RELIABILITY REPORT AND 100% LONG-TERM AVERAGE OF MWD TRANSFERS PURSUANT TO THE 2003 EXCHANGE AGREEMENT AND ITS IMPLEMENTATION.
3. WATER SUPPLY IS BASED ON NON-CONSUMPTIVE RETURN, NATURAL INFLOW AND PROBABLE DELIVERIES DESCRIBED ABOVE.

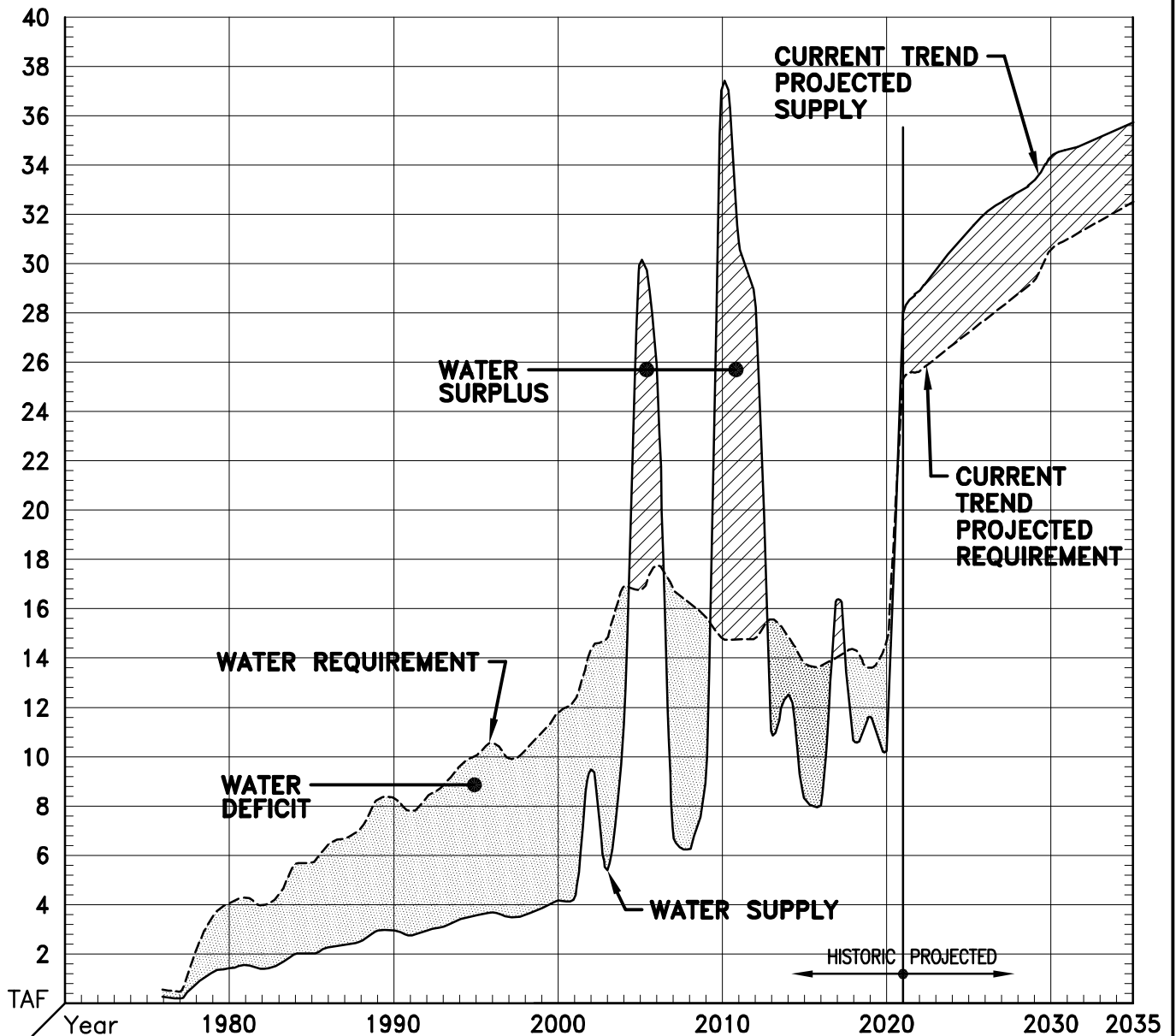
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**DESERT WATER AGENCY**  
**HISTORIC AND PROJECTED**  
**WATER REQUIREMENTS AND WATER SUPPLIES FOR**  
**THE WEST WHITEWATER RIVER SUBBASIN MANAGEMENT AREA**

**FIGURE**

**3**

SCALE: N/A DATE: 03/30/21 DRAWN BY: SPK CHECKED BY: DFS W.O.: 101-33.45



YEARS	1980	1990	2000	2010	2020	2030	2035
NET INFLOW (ACRE FEET)	1,400	2,900	4,100	37,700	10,300	34,400	35,700
NONCONSUMPTIVE RETURN	1,400	2,900	4,100	5,200	4,600	9,500	10,100
NET ARTIFICIAL RECHARGE	0	0	0	32,500	1,700	20,600	21,300
NET NATURAL INFLOW	—	—	—	—	4,000	4,300	4,300

**NOTES:**

1. PROJECTED WATER REQUIREMENTS ARE BASED ON PROJECTIONS PER THE 2013 MISSION CREEK/GARNET HILL SUBBASIN WATER MANAGEMENT PLAN BY MWH.
2. PROJECTED ARTIFICIAL RECHARGE IS BASED ON PROBABLE DELIVERIES ESTIMATED USING 62% RELIABILITY OF STATE WATER PROJECT WATER BASED ON 2013 STATE WATER PROJECT RELIABILITY REPORT AND 100% LONG-TERM AVERAGE OF MWD TRANSFERS PURSUANT TO THE 2003 EXCHANGE AGREEMENT AND ITS IMPLEMENTATION.
3. WATER SUPPLY IS BASED ON NON-CONSUMPTIVE RETURN, NATURAL INFLOW AND PROBABLE DELIVERIES DESCRIBED ABOVE.

## TABLES

TABLE 1  
DESERT WATER AGENCY  
HISTORIC REPORTED WATER PRODUCTION FOR REPLENISHMENT ASSESSMENT FOR  
DESERT WATER AGENCY AND COACHELLA VALLEY WATER DISTRICT  
WEST WHITEWATER RIVER SUBBASIN (WWR) AND MISSION CREEK SUBBASIN (MC) MANAGEMENT AREAS

Year	CVWD Production		DWA Production				Combined CVWD & DWA Production					WWR		Combined WWR, MC		MC			
	GWE		GWE		SWD	Total	Total	Production Percentages			Production Percentages		Production Percentages						
	WWR	MC	WWR	MC	WWR	WWR	Comb	GWE	WWR	Total	MC	Comb	CVWD	DWA	CVWD	DWA	CVWD	DWA	
	AF	AF	AF	AF	AF	AF	AF	AF	AF	AF	AF								
1973										84,008	*	542	*						
1974										84,008	*	542	*						
1975										84,008	*	542	*						
1976	69,700		25,100		7,400	32,500	32,500	94,800	7,400	102,200	542	*	102,742	68.20%	31.80%				
1977	67,696		25,660		7,562	33,222	33,222	93,356	7,562	100,918	542	*	101,460	67.08%	32.92%				
1978	61,172		28,100		8,530	36,630	36,630	89,272	8,530	97,802	2,253	*	100,055	62.55%	37.45%				
1979	72,733		29,393		7,801	37,194	37,194	102,126	7,801	109,927	3,565	*	113,492	66.16%	33.84%				
1980	84,142		32,092		7,303	39,395	39,395	116,234	7,303	123,537	4,021	*	127,558	68.11%	31.89%				
1981	86,973		33,660		7,822	41,482	41,482	120,633	7,822	128,455	4,299	*	132,754	67.71%	32.29%				
1982	83,050		33,382		6,512	39,894	39,894	116,432	6,512	122,944	3,932	*	126,876	67.55%	32.45%				
1983	84,770		33,279		6,467	39,746	39,746	118,049	6,467	124,516	4,421	*	128,937	68.08%	31.92%				
1984	104,477		38,121		7,603	45,724	45,724	142,598	7,603	150,201	5,655	*	155,856	69.56%	30.44%				
1985	111,635		39,732		7,143	46,875	46,875	151,367	7,143	158,510	5,707	*	164,217	70.43%	29.57%				
1986	115,185		40,965		6,704	47,669	47,669	156,150	6,704	162,854	6,437	*	169,291	70.73%	29.27%				
1987	125,229		44,800		5,644	50,444	50,444	170,029	5,644	175,673	6,717	*	182,390	71.29%	28.71%				
1988	125,122		47,593		5,246	52,839	52,839	172,715	5,246	177,961	7,136	*	185,097	70.31%	29.69%				
1989	129,957		47,125		5,936	53,061	53,061	177,082	5,936	183,018	8,296	*	191,314	71.01%	28.99%				
1990	136,869		45,396		5,213	50,609	50,609	182,265	5,213	187,478	8,302	*	195,780	73.01%	26.99%				
1991	126,360		42,729		4,917	47,646	47,646	169,089	4,917	174,006	7,778	*	181,784	72.62%	27.38%				
1992	128,390		42,493		4,712	47,205	47,205	170,883	4,712	175,595	8,375	*	183,970	73.12%	26.88%				
1993	131,314		41,188		6,363	47,551	47,551	172,502	6,363	178,865	8,861	*	187,726	73.42%	26.58%				
1994	134,223		42,115		5,831	47,946	47,946	176,338	5,831	182,169	9,676	*	191,845	73.68%	26.32%				
1995	134,580		41,728		5,809	47,537	47,537	176,308	5,809	182,117	10,102	*	192,219	73.90%	26.10%				
1996	137,410		45,342		5,865	51,207	51,207	182,752	5,865	188,617	10,562	*	199,179	72.85%	27.15%				
1997	137,406		43,658		5,626	49,284	49,284	181,064	5,626	186,690	9,899	*	196,589	73.60%	26.40%				
1998	142,620		41,385		7,545	48,930	48,930	184,005	7,545	191,550	10,291	*	201,841	74.46%	25.54%				
1999	157,148		44,350		6,941	51,291	51,291	201,498	6,941	208,439	10,974	*	219,413	75.39%	24.61%				
2000	161,834		44,458		6,297	50,755	50,755	206,292	6,297	212,589	11,838	*	224,427	76.13%	23.87%				
2001	159,767		44,112		4,928	49,040	49,040	203,879	4,928	208,807	12,350	*	221,157	76.51%	23.49%				
2002	163,185	4,371	46,004	9,597	4,221	50,225	59,822	209,189	4,221	213,410	13,968		227,378	76.47%	23.53%	73.69%	26.31%	31.29%	68.71%
2003	156,185	4,425	43,463	10,073	4,627	48,090	58,163	199,648	4,627	204,275	14,498		218,773	76.46%	23.54%	73.41%	26.59%	30.52%	69.48%
2004	159,849	4,628	48,093	11,920	4,758	52,851	64,771	207,942	4,758	212,700	16,548		229,248	75.15%	24.85%	71.75%	28.25%	27.97%	72.03%
2005	153,462	4,247	46,080	12,080	4,799	50,879	62,959	199,542	4,799	204,341	16,327		220,668	75.10%	24.90%	71.47%	28.53%	26.01%	73.99%
2006	160,239	4,757	48,967	12,608	4,644	53,611	66,219	209,206	4,644	213,850	17,365		231,215	74.93%	25.07%	71.36%	28.64%	27.39%	72.61%
2007	157,487	4,547	50,553	11,862	3,490	54,043	65,905	208,040	3,490	211,530	16,409		227,939	74.45%	25.55%	71.09%	28.91%	27.71%	72.29%
2008	161,695	4,543	45,735	11,232	3,593	49,328	60,560	207,430	3,593	211,023	15,775		226,798	76.62%	23.38%	73.30%	26.70%	28.80%	71.20%
2009	155,793	4,813	42,270	10,295	1,443	43,713	54,008	198,063	1,443	199,506	15,108		214,614	78.09%	21.91%	74.83%	25.17%	31.86%	68.14%
2010	141,481	4,484	39,640	9,820	1,582	41,222	51,042	181,121	1,582	182,703	14,304		197,007	77.44%	22.56%	74.09%	25.91%	31.35%	68.65%
2011	141,028	4,653	40,568	9,607	1,724	42,292	51,899	181,596	1,724	183,320	14,260		197,580	76.93%	23.07%	73.73%	26.27%	32.63%	67.37%
2012	141,379	4,582	39,684	9,634	2,222	41,906	51,540	181,063	2,222	183,285	14,216		197,501	77.14%	22.86%	73.90%	26.10%	32.23%	67.77%
2013	143,108	4,415	37,932	10,341	1,802	39,734	50,075	181,040	1,802	182,842	14,756		197,598	78.27%	21.73%	74.66%	25.34%	29.92%	67.34%
2014	136,027	4,154	36,611	9,937	1,787	38,398	48,335	172,638	1,787	174,425	14,091		188,516	77.99%	22.01%	74.36%	25.64%	29.48%	70.52%
2015	115,558	4,090	30,666	8,927	1,539	32,205	41,132	146,224	1,539	147,763	13,017		160,780	78.20%	21.80%	74.42%	25.58%	31.42%	68.58%
2016	115,659	4,175	30,705	9,044	2,031	32,736	41,780	146,364	2,031	148,395	13,219		161,614	77.94%	22.06%	74.15%	25.85%	31.58%	68.42%
2017	120,383	4,281	33,164	9,250	1,996	35,160	44,410	153,547	1,996	155,543	13,531		169,074	77.40%	22.60%	73.73%	26.27%	31.64%	68.36%
2018	119,250	4,175	34,038	9,695	1,260 **	35,298	44,993	153,288	1,260	154,548	13,870		168,418	77.16%	22.84%	73.28%	26.72%	30.10%	69.90%
2019	113,907	3,993	29,779	9,142	1,916	31,695	40,837	143,686	1,916	145,602	13,135		158,737	78.23%	21.77%	74.27%	25.73%	30.40%	69.60%
2020	117,825	4,655	33,786	9,589	1,454	35,240	44,829	151,611	1,454	153,065	14,244		167,310	76.98%	23.02%	73.21%	26.79%	32.68%	67.32%

\* Estimated

\*\* Corrected

NOTES:

Cumulative CVWD and DWA West Whitewater River Subbasin Management Area production 2016 through 2020: 757,153 AF  
Cumulative CVWD and DWA Mission Creek Subbasin Management Area production 2016 through 2020: 67,999 AF  
Average annual CVWD and DWA West Whitewater River Subbasin Management Area production 2016 through 2020 (rounded): 151,430 AF  
Average annual CVWD and DWA Mission Creek Subbasin Management Area production 2016 through 2020 (rounded): 13,600 AF  
Average annual DWA West Whitewater River Subbasin Area of Benefit production 2016 through 2020 (rounded): 34,030 AF  
Average annual DWA Mission Creek Subbasin Area of Benefit production 2016 through 2020(rounded): 9,340 AF  
Average DWA West Whitewater River Subbasin Area of Benefit production percentage 2016 through 2020: 22.46%  
Average DWA Mission Creek Subbasin Area of Benefit production percentage 2016 through 2020: 68.72%

ABBREVIATIONS:

GWE = Groundwater Extracti  
SWD = Surface Water Diversions  
COMB = Combined



**TABLE 2**  
**DESERT WATER AGENCY**  
**GROUNDWATER REPLENISHMENT AND ASSESSMENT PROGRAM**  
**ESTIMATED WEST WHITEWATER RIVER SUBBASIN AND MISSION CREEK SUBBASIN AREAS OF BENEFIT**  
**WATER PRODUCTION AND ESTIMATED WATER REPLENISHMENT ASSESSMENTS**  
**2021/2022**

**ESTIMATED COMBINED AREA OF BENEFIT**  
**ASSESSABLE WATER PRODUCTION AND WATER REPLENISHMENT ASSESSMENTS**

Area of Benefit	Estimated Assessable Water Production	Water Replenishment Assessment Rate	Water Replenishment Assessment	
	AF	\$/AF	\$	Percent
West Whitewater River Subbasin AOB	35,240	\$175.00	\$6,167,000	79%
Mission Creek Subbasin AOB	9,590	\$175.00	\$1,678,250	21%
Combined AOBs	44,830		\$7,845,250	100%

**ESTIMATED WEST WHITEWATER RIVER SUBBASIN AND MISSION CREEK SUBBASIN AREAS OF BENEFIT**  
**WATER PRODUCTION AND WATER REPLENISHMENT ASSESSMENTS**

WATER PRODUCTION AND WATER REPLENISHMENT ASSESSMENTS						
Producer	2020 Water Production (1)			Estimated 2021/2022 Assessable Water Production AF <sup>(2)</sup>	Estimated Water Replenishment Assessment @ \$175/AF	
	Groundwater Extraction AF	Surface Water Diversion AF	Combined Water Production AF		\$	Percent
<b>West Whitewater River Subbasin AOB</b>						
Desert Water Agency (Chino, Falls, Snow Creeks)	31,811.54	691.56	32,503.10	32,500	\$5,687,500	92.22%
Desert Water Agency (Whitewater)	0.00	762.38	762.38	760	\$133,000	2.16%
John Beylik	11.07	0.00	11.07	10	\$1,750	0.03%
Caltrans Rest Stop	24.05	0.00	24.05	20	\$3,500	0.06%
Canyon Country Club	459.63	0.00	459.63	460	\$80,500	1.31%
Desert Oasis Golf Management - Welk Resort	107.17	0.00	107.17	110	\$19,250	0.31%
Los Compadres	54.98	0.00	54.98	50	\$8,750	0.14%
Mission Springs Water District (Wells 25 & 25A and 26 & 26A)	165.40	0.00	165.40	170	\$29,750	0.48%
Seven Lakes Country Club	50.42	0.00	50.42	50	\$8,750	0.14%
Escena	317.70	0.00	317.70	320	\$56,000	0.91%
Palm Springs Village	497.59	0.00	497.59	500	\$87,500	1.42%
Palm Springs West	0.00	0.00	0.00	0	\$0	0.00%
Mission Springs Water District (Well 33)	270.01	0.00	270.01	270	\$47,250	0.77%
Indigo Power Plant	16.38	0.00	16.38	20	\$3,500	0.06%
<b>Subtotal</b>	<b>33,785.94</b>	<b>1,453.94</b>	<b>35,239.88</b>	<b>35,240</b>	<b>\$6,167,000</b>	<b>100.00%</b>
<b>Mission Creek Subbasin AOB</b>						
Mission Springs Water District	7,833.35	0.00	7,833.35	7,830	\$1,370,250	81.65%
Hidden Springs Country Club	302.18	0.00	302.18	300	\$52,500	3.13%
Mission Lakes Country Club	758.19	0.00	758.19	760	\$133,000	7.92%
Sands RV Resort	359.97	0.00	359.97	360	\$63,000	3.75%
CPV-Sentinel	335.69	0.00	335.69	340	\$59,500	3.55%
<b>Subtotal</b>	<b>9,589.38</b>	<b>0.00</b>	<b>9,589.38</b>	<b>9,590</b>	<b>\$1,678,250</b>	<b>100.00%</b>
<b>Total</b>	<b>43,375.32</b>	<b>1,453.94</b>	<b>44,829.26</b>	<b>44,830</b>	<b>\$7,845,250</b>	

<sup>(1)</sup> 2020 Metered water production, except for Exempt Production and Estimated Production.

<sup>(2)</sup> Based on 2018 production, all rounded to nearest 10 AF.

**TABLE 3**  
**COACHELLA VALLEY WATER DISTRICT**  
**APPLICABLE STATE WATER PROJECT CHARGES<sup>(1)</sup>**

Year	Maximum Table A Water Allocation AF	Probable Table A Water Delivery <sup>(2)</sup> AF	Delta Water Charge		Variable Transportation Charge		Off-Aqueduct Power Charge		CVWD Applicable Table A Charges	
			Amount <sup>(3)</sup> \$	Unit \$/AF	Amount <sup>(4)</sup> \$	Unit \$/AF	Amount <sup>(5)</sup> \$	Unit \$/AF	Amount \$	Unit <sup>(6)</sup> \$/AF
2018	138,350	80,243	9,472,825	68.47	13,769,699	171.60	48,948	0.61	23,291,472	290.26
2019	138,350	80,243	9,694,185	70.07	12,636,668	157.48	170,115	2.12	22,500,967	280.41
2020	138,350	80,243	11,289,360	81.60	16,401,669	204.40	154,067	1.92	27,845,096	347.01
2021	138,350	80,243	11,835,843	85.55	14,977,356	186.65	214,249	2.67	27,027,447	336.82
2022	138,350	80,243	17,363,313	125.50	14,700,518	183.20	8,024	0.10	32,071,855	399.68
2023	138,350	80,243	17,380,108	125.62	16,570,982	206.51	8,024	0.10	33,959,114	423.20
2024	138,350	80,243	17,350,021	125.41	15,976,381	199.10	8,024	0.10	33,334,427	415.42
2025	138,350	80,243	17,744,469	128.26	16,629,559	207.24	8,024	0.10	34,382,052	428.47
2026	138,350	80,243	18,188,793	131.47	15,969,962	199.02	8,024	0.10	34,166,779	425.79
2027	138,350	80,243	18,265,277	132.02	16,284,514	202.94	8,024	0.10	34,557,816	430.66
2028	138,350	80,243	19,184,093	138.66	16,461,049	205.14	8,024	0.10	35,653,166	444.31
2029	138,350	80,243	19,095,080	138.02	16,500,368	205.63	8,024	0.10	35,603,473	443.70
2030	138,350	80,243	19,465,428	140.70	16,051,007	200.03	8,024	0.10	35,524,460	442.71
2031	138,350	80,243	19,856,863	143.53	17,744,937	221.14	8,024	0.10	37,609,824	468.70
2032	138,350	80,243	20,376,265	147.28	15,332,030	191.07	8,024	0.10	35,716,319	445.10
2033	138,350	80,243	20,412,122	147.54	17,415,138	217.03	8,024	0.10	37,835,284	471.51
2034	138,350	80,243	21,612,596	156.22	15,871,263	197.79	8,024	0.10	37,491,884	467.23
2035	138,350	80,243	21,218,360	153.37	19,528,739	243.37	8,024	0.10	40,755,123	507.90

**Notes:**

(1) As set forth in CDWR Bulletin 132-20, Appendix B (Appendix B).

(2) Probable Table A water delivery is based on 0.58 reliability of CVWD allocation augmented by TLBWSD, KCWA, and MWD transfers

(3) Amount is based on maximum Table A water allocation and Delta Water Charge per Table B-20 (A & B) of Appendix B. From 2018 through 2035, amount is based on State Water Contractors estimates.

(4) Amount is based on probable Table A water delivery and applicable Variable Transportation Unit Charge per Table B-17 of Appendix B.

(5) Amount is based on probable Table A water delivery and Off-Aqueduct Power Unit Charge derived by dividing data in Table B-16B by data in Table B-5B of Appendix B.

(6) Amount of applicable Table A charges divided by probable Table A water delivery.



**TABLE 4**  
**DESERT WATER AGENCY**  
**APPLICABLE STATE WATER PROJECT CHARGES<sup>(1)</sup>**

Year	Maximum Table A Water Allocation AF	Probable Table A Water Delivery <sup>(2)</sup> AF	Delta Water Charge		Variable Transportation Charge		Off-Aqueduct Power Charge		DWA Applicable Table A Charges	
			Amount <sup>(3)</sup> \$	Unit \$/AF	Amount <sup>(4)</sup> \$	Unit \$/AF	Amount <sup>(5)</sup> \$	Unit \$/AF	Amount \$	Unit <sup>(6)</sup> \$/AF
2018	55,750	32,335	3,817,203	68.47	5,548,686	171.60	47,532	1.47	9,413,421	291.12
2019	55,750	32,335	3,906,403	70.07	5,092,116	157.48	148,094	4.58	9,146,613	282.87
2020	55,750	32,335	4,549,200	81.60	6,609,274	204.40	158,118	4.89	11,316,592	349.98
2021	55,750	32,335	4,769,413	85.55	6,035,328	186.65	184,633	5.71	10,989,373	339.86
2022	55,750	32,335	6,996,781	125.50	5,923,772	183.20	3,234	0.10	12,923,787	399.68
2023	55,750	32,335	7,003,549	125.62	6,677,501	206.51	3,234	0.10	13,684,283	423.20
2024	55,750	32,335	6,991,425	125.41	6,437,899	199.10	3,234	0.10	13,432,557	415.42
2025	55,750	32,335	7,150,373	128.26	6,701,105	207.24	3,234	0.10	13,854,712	428.47
2026	55,750	32,335	7,329,420	131.47	6,435,312	199.02	3,234	0.10	13,767,965	425.79
2027	55,750	32,335	7,360,240	132.02	6,562,065	202.94	3,234	0.10	13,925,538	430.66
2028	55,750	32,335	7,730,489	138.66	6,633,202	205.14	3,234	0.10	14,366,924	444.31
2029	55,750	32,335	7,694,620	138.02	6,649,046	205.63	3,234	0.10	14,346,900	443.70
2030	55,750	32,335	7,843,857	140.70	6,467,970	200.03	3,234	0.10	14,315,061	442.71
2031	55,750	32,335	8,001,591	143.53	7,150,562	221.14	3,234	0.10	15,155,386	468.70
2032	55,750	32,335	8,210,891	147.28	6,178,248	191.07	3,234	0.10	14,392,373	445.10
2033	55,750	32,335	8,225,340	147.54	7,017,665	217.03	3,234	0.10	15,246,239	471.51
2034	55,750	32,335	8,709,087	156.22	6,395,540	197.79	3,234	0.10	15,107,861	467.23
2035	55,750	32,335	8,550,225	153.37	7,869,369	243.37	3,234	0.10	16,422,827	507.90

**Notes:**

- (1) As set forth in CDWR Bulletin 132-20, Appendix B (Appendix B).
- (2) Probable Table A water delivery is based on 0.58 reliability of DWA allocation augmented by TLBWSD, KCWA, and MWD transfers
- (3) Amount is based on maximum Table A water allocation and Delta Water Charge per Table B-20 (A & B) of Appendix B. From 2018 through 2035, amount is based on State Water Contractors estimates.
- (4) Amount is based on probable Table A water delivery and applicable Variable Transportation Unit Charge per Table B-17 of Appendix B.
- (5) Amount is based on probable Table A water delivery and Off-Aqueduct Power Unit Charge derived by dividing data in Table B-16B by data in Table B-5B of Appendix B.
- (6) Amount of applicable Table A charges divided by probable Table A water delivery.

**TABLE 5**  
**DESERT WATER AGENCY**  
**ESTIMATED ALLOCATED STATE WATER PROJECT CHARGES FOR TABLE A WATER**  
**(PROPORTIONED APPLICABLE CHARGES)<sup>(1)</sup>**

Year	CVWD Applicable Table A Charges <sup>(2)</sup>	DWA Applicable Table A Charges <sup>(3)</sup>	Combined Applicable Table A Charges	CVWD Allocated Table A Charges	DWA Allocated Table A Charges	DWA Incremental Increase/(Decrease)	
	\$	\$	\$	\$	\$	\$	%
2018	23,291,472	9,413,421	32,704,892	23,943,252	8,761,641	(283,254)	(3)
2019	22,500,967	9,146,613	31,647,580	23,169,193	8,478,387	2,013,029	24
2020	27,845,096	11,316,592	39,161,688	28,670,272	10,491,416	(306,710)	(3)
2021	27,027,447	10,989,373	38,016,820	27,832,114	10,184,706	1,869,626	18
2022	32,071,855	12,923,787	44,995,642	32,941,309	12,054,332	709,334	6
2023	33,959,114	13,684,283	47,643,397	34,879,731	12,763,666	(234,791)	(2)
2024	33,334,427	13,432,557	46,766,984	34,238,109	12,528,875	393,754	3
2025	34,382,052	13,854,712	48,236,764	35,314,135	12,922,629	(80,911)	(1)
2026	34,166,779	13,767,965	47,934,744	35,093,026	12,841,718	146,973	1
2027	34,557,816	13,925,538	48,483,354	35,494,663	12,988,691	411,691	3
2028	35,653,166	14,366,924	50,020,090	36,619,708	13,400,382	(18,677)	0
2029	35,603,473	14,346,900	49,950,373	36,568,668	13,381,705	(29,697)	0
2030	35,524,460	14,315,061	49,839,521	36,487,513	13,352,008	783,792	6
2031	37,609,824	15,155,386	52,765,211	38,629,411	14,135,800	(711,681)	(5)
2032	35,716,319	14,392,373	50,108,692	36,684,573	13,424,119	796,421	6
2033	37,835,284	15,246,239	53,081,523	38,860,983	14,220,540	(129,068)	(1)
2034	37,491,884	15,107,861	52,599,744	38,508,273	14,091,472	1,226,501	9
2035	40,755,123	16,422,827	57,177,950	41,859,978	15,317,973		

**Notes:**

- (1) Proportioned in accordance with 2020 Water Management Area production percentages; CVWD is responsible for 73.21% and DWA is responsible for 26.79% of total combined production for the Whitewater River and Mission Creek Subbasins (see **Table 1**).
- (2) From Table 3.
- (3) From Table 4.

**TABLE 6**  
**DESERT WATER AGENCY**  
**PROJECTED EFFECTIVE REPLENISHMENT ASSESSMENT RATES**  
**PURSUANT TO WATER MANAGEMENT AGREEMENTS BETWEEN**  
**COACHELLA VALLEY WATER DISTRICT AND DESERT WATER AGENCY**

Year	DWA Allocated Table A Charges <sup>(1)</sup> \$	Estimated Assessable Production <sup>(2)</sup> AF	Estimated Effective Table A Assessment Rate <sup>(3)</sup> Fiscal Year \$/AF	Table A Assessment Rate \$/AF
2019/2020 <sup>(4)</sup>	9,484,902	45,360	209.10	209.00
2020/2021 <sup>(4)</sup>	10,338,061	40,830	253.20	253.00
2021/2022 <sup>(4)</sup>	11,119,519	44,830	248.04	248.00
2022/2023 <sup>(4)</sup>	12,408,999	46,272	268.18	268.00
2023/2024 <sup>(4)</sup>	12,646,271	45,954	275.19	275.00
2024/2025 <sup>(4)</sup>	12,725,752	45,771	278.03	278.00
2025/2026 <sup>(4)</sup>	12,955,660	45,729	283.31	283.00
2026/2027 <sup>(4)</sup>	12,915,205	45,957	281.03	281.00
2027/2028 <sup>(4)</sup>	13,194,537	46,452	284.05	284.00
2028/2029 <sup>(4)</sup>	13,391,044	46,946	285.24	285.00
2029/2030 <sup>(4)</sup>	13,366,857	47,659	280.47	280.00
2030/2031 <sup>(4)</sup>	13,743,904	48,319	284.44	284.00
2031/2032 <sup>(4)</sup>	13,779,960	48,707	282.92	283.00
2032/2033 <sup>(4)</sup>	13,822,330	49,094	281.55	282.00
2033/2034 <sup>(4)</sup>	14,156,006	49,480	286.10	286.00
2034/2035 <sup>(4)</sup>	14,704,723	49,865	294.89	295.00

**Notes:**

- (1) From **Table 5**.
- (2) Projections based on model runs for Coachella Valley 2010 Water Management Plan and 2014 Water Management Plan Status Update, minus 13% water conservation factor.
- (3) Necessary to pay DWA's estimated (projected) Allocated Table A Charges.
- (4) Projected

TABLE 7  
DESERT WATER AGENCY  
WEST WHITEWATER RIVER SUBBASIN, MISSION CREEK SUBBASIN, AND GARNET HILL SUBBASIN AREAS OF BENEFIT  
HISTORIC AND PROPOSED REPLENISHMENT ASSESSMENT RATES

Fiscal Year	Assessment Rate								Assessments													Payments Made	Surplus (Deficit)	
	Table A Allocation <sup>(1)</sup> \$/AF	WWR		MC		GH		Estimated <sup>(4)</sup>			Levied <sup>(6)</sup>			Billed <sup>(6)</sup>			Delinquent <sup>(7)</sup>			Revenue	Table A \$	Annual \$	Cumulative <sup>(8)</sup> \$	
		Other Charges or Costs <sup>(2)</sup> \$/AF	Total <sup>(3)</sup> \$/AF	Other Charges or Costs <sup>(2)</sup> \$/AF	Total <sup>(3)</sup> \$/AF	Other Charges or Costs <sup>(2)</sup> \$/AF	Total <sup>(3)</sup> \$/AF	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$							
78/79	6.81	0.00	6.81					226,245			199,004			199,004			199,004	0		199,004	267,193	(68,189)	(68,189)	
79/80	9.00	0.00	9.00					282,405			309,225			309,225			309,225	0		309,225	267,125	42,100	(26,089)	
80/81	9.50	0.00	9.50					317,482			355,925			355,925			355,925	0		355,925	347,491	8,434	(17,655)	
81/82	10.50	0.00	10.50					378,838			406,160			406,160			406,160	0		406,160	414,086	(7,926)	(25,581)	
82/83	21.00	0.00	21.00					800,499			770,871			770,871			770,871	0		770,871	891,544	(120,673)	(146,254)	
83/84	36.50	0.00	36.50					1,331,374			1,452,317			1,452,317			1,452,317	0		1,452,317	492,329	959,988	813,734	
84/85	37.50	0.00	37.50					1,375,762			1,577,125			1,577,125			1,577,125	0		1,577,125	381,713	1,195,412	2,009,146	
85/86	31.00	0.00	31.00					1,309,750			1,363,239			1,363,239			1,363,239	0		1,363,239	637,841	725,398	2,734,544	
86/87	21.00	0.00	21.00					911,673			912,583			912,583			912,583	0		912,583	876,544	36,039	2,770,583	
87/88	22.50	0.00	22.50					994,749			1,099,130			1,099,130			1,099,130	0		1,099,130	934,920	164,210	2,934,793	
88/89	20.00	0.00	20.00					970,000			965,811			965,811			965,811	0		965,811	748,195	217,616	3,152,409	
89/90	23.50	0.00	23.50					1,175,002			1,105,446			1,105,446			1,105,446	0		1,105,446	888,979	216,467	3,368,876	
90/91	26.00	0.00	26.00					1,313,000			1,207,593			1,207,593			1,207,593	0		1,207,593	784,369	423,224	3,792,100	
91/92	31.75	0.00	31.75					1,524,000			1,408,108			1,408,108			1,408,108	0		1,408,108	439,549	968,559	4,760,659	
92/93	31.75	0.00	31.75					1,412,875			1,389,641			1,389,641			1,389,641	0		1,389,641	902,273	487,368	5,248,027	
93/94	31.75	0.00	31.75					1,397,000			1,411,406			1,411,406			1,411,406	0		1,411,406	1,508,408	(97,002)	5,151,025	
94/95	31.75	0.00	31.75					1,412,875			1,384,996			1,384,996			1,384,996	0		1,384,996	2,291,661	(906,665)	4,244,360	
95/96	31.75	0.00	31.75					1,425,575			1,434,798			1,434,798			1,434,798	0		1,434,798	2,282,379	(847,581)	3,396,779	
96/97	31.75	0.00	31.75					1,409,700			1,517,690			1,517,690			1,517,690	0		1,517,690	1,153,620	364,070	3,760,849	
97/98	31.75	0.00	31.75					1,527,175			1,368,789			1,368,789			1,368,789	0		1,368,789	1,560,592	(191,803)	3,569,046	
98/99	31.75	0.00	31.75					1,463,675			1,510,078			1,510,078			1,510,078	0		1,510,078	2,663,096	(1,153,018)	2,416,028	
99/00	31.75	0.00	31.75					1,436,370			1,530,344			1,530,344			1,530,344	0		1,530,344	2,137,145	(606,801)	1,809,227	
00/01	33.00	0.00	33.00					1,576,080			1,506,011			1,506,011			1,506,011	0		1,506,011	1,993,058	(487,047)	1,322,180	
01/02	33.00	0.00	33.00					1,563,870			1,534,500			1,559,325			1,559,325	0		1,559,325	273,679	1,285,646	2,607,826	
02/03	35.00	0.00	35.00					1,627,500			1,679,300			1,636,783			1,636,783	0		1,636,783	1,226,335	410,448	3,018,274	
03/04	35.00	0.00	35.00	0.00	35.00			1,679,300	336,000		1,609,300	352,555		1,609,300	397,708			2,007,008	0	0	2,007,008	4,199,358	(2,192,350)	825,924
04/05	34.00	11.00	45.00	12.00	46.00			2,069,100	464,140		2,274,750	548,320		2,274,750	529,108			2,803,858	0	0	2,803,858	3,813,947	(1,010,089)	(184,165)
05/06	38.00	12.00	50.00	12.00	50.00			2,527,500	596,000		2,427,000	604,000		2,427,000	635,562			3,062,562	0	0	3,062,562	5,791,887	(2,729,325)	(2,913,490)
06/07	51.00	12.00	63.00	12.00	63.00			3,058,020	761,040		3,230,010	794,304		3,230,010	789,471			4,019,481	0	0	4,019,481	6,087,627	(2,068,146)	(4,981,636)
07/08	83.00	(34.00)	63.00	(34.00)	49.00			3,230,010	794,430		3,222,450	581,238		3,222,450	720,025			3,942,475	0	0	3,942,475	9,131,044	(5,188,569)	(10,170,205)
08/09	65.00	(6.00)	72.00	(6.00)	59.00			3,682,800	876,240		3,371,040	662,688		3,337,053	778,029			4,115,082	33,987	0	4,081,095	6,936,896	(2,855,801)	(13,026,006)
09/10	72.00	0.00	72.00	0.00	72.00			3,605,140	802,800		3,097,440	741,240		3,023,070	718,452			3,741,522	74,370	0	3,667,152	6,236,894	(2,569,742)	(15,595,748)
10/11	99.00	(17.00)	82.00	(17.00)	82.00			3,527,640	828,200		3,302,140	805,240		3,223,003	616,632			3,839,635	79,137	0	3,760,499	4,174,012	(413,513)	(16,009,261)
11/12	115.00	(33.00)	82.00	(33.00)	82.00			3,302,140	805,240		3,374,300	783,100		3,302,079	820,179			4,122,258	72,221	0	4,050,037	7,005,049	(2,955,012)	(18,964,273)
12/13	117.00	(25.00)	92.00	(25.00)	92.00			3,788,326	878,600		3,779,360	874,000		3,772,499	888,405			4,660,904	6,861	0	4,654,043	8,169,744	(3,515,701)	(22,479,975)
13/14	111.00	(19.00)	92.00	(19.00)	92.00			3,779,360	785,587		3,578,800	927,360		3,572,722	785,587			4,358,309	6,078	0	4,352,230	6,078,542	(1,726,312)	(24,206,286)
14/15	106.00	(4.00)	102.00	(4.00)	102.00			3,684,919	756,041		3,826,020	987,360		3,684,919	561,213			4,246,132	66	0	4,246,066	3,798,705	447,361	(23,758,925)
15/16	112.00	(10.00)	102.00	(10.00)	102.00	(10.00)	102.00	3,846,970	989,318	24,480	3,150,780	875,160	34,680	3,150,780	875,160			4,025,940	656	0	4,025,284	7,304,465	(3,279,181)	(27,038,107)
16/17	144.00	(42.00)	102.00	(42.00)	102.00	(42.00)	102.00	3,443,112	892,273	31,235	3,211,980	873,120	30,600	3,577,041	748,643									

## **EXHIBITS**

EXHIBIT 1  
DESERT WATER AGENCY  
GROUNDWATER WELL HYDROGRAPHS  
PALM SPRINGS SUBAREA OF WEST WHITEWATER RIVER SUBBASIN MANAGEMENT AREA  
GROUNDWATER REPLENISHMENT QUANTITIES AT WHITEWATER RIVER REPLENISHMENT FACILITY

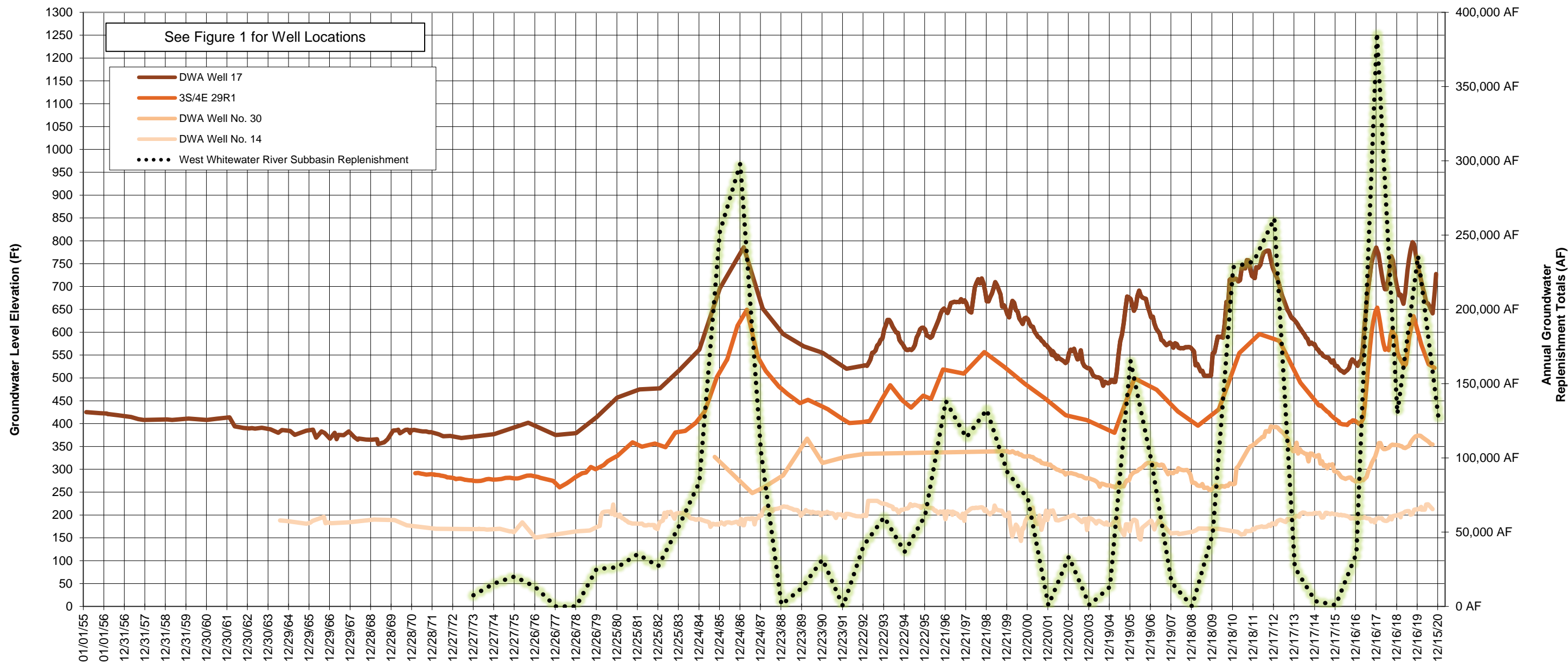
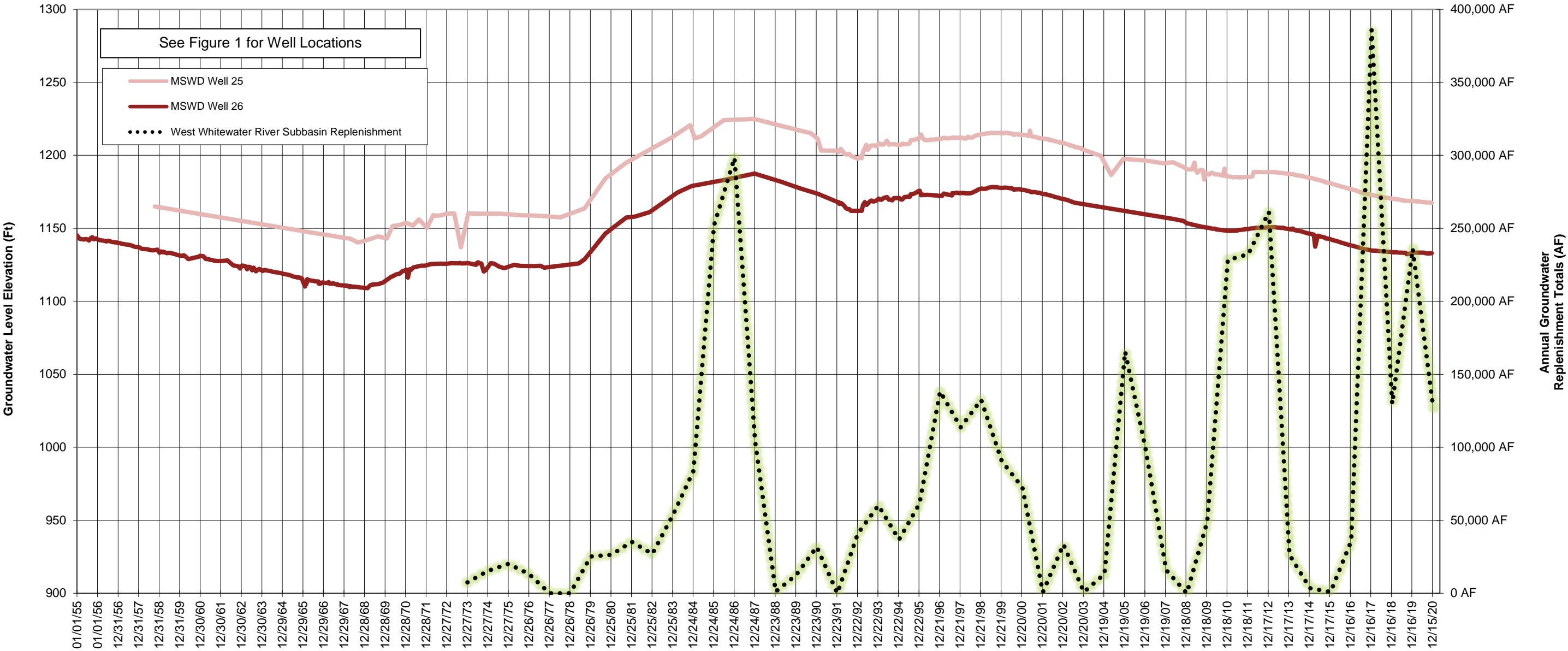


EXHIBIT 2  
DESERT WATER AGENCY  
GROUNDWATER WELL HYDROGRAPHS  
SAN GORGONIO PASS SUBBASIN PORTION OF WEST WHITEWATER RIVER SUBBASIN MANAGEMENT AREA  
GROUNDWATER REPLENISHMENT QUANTITIES AT WHITEWATER RIVER REPLENISHMENT FACILITY





**EXHIBIT 3**  
**DESERT WATER AGENCY**  
**GROUNDWATER WELL HYDROGRAPHS**  
**GARNET HILL SUBAREA OF WEST WHITEWATER RIVER SUBBASIN MANAGEMENT AREA**  
**GROUNDWATER REPLENISHMENT QUANTITIES AT WHITEWATER RIVER AND MISSION CREEK REPLENISHMENT FACILITIES**

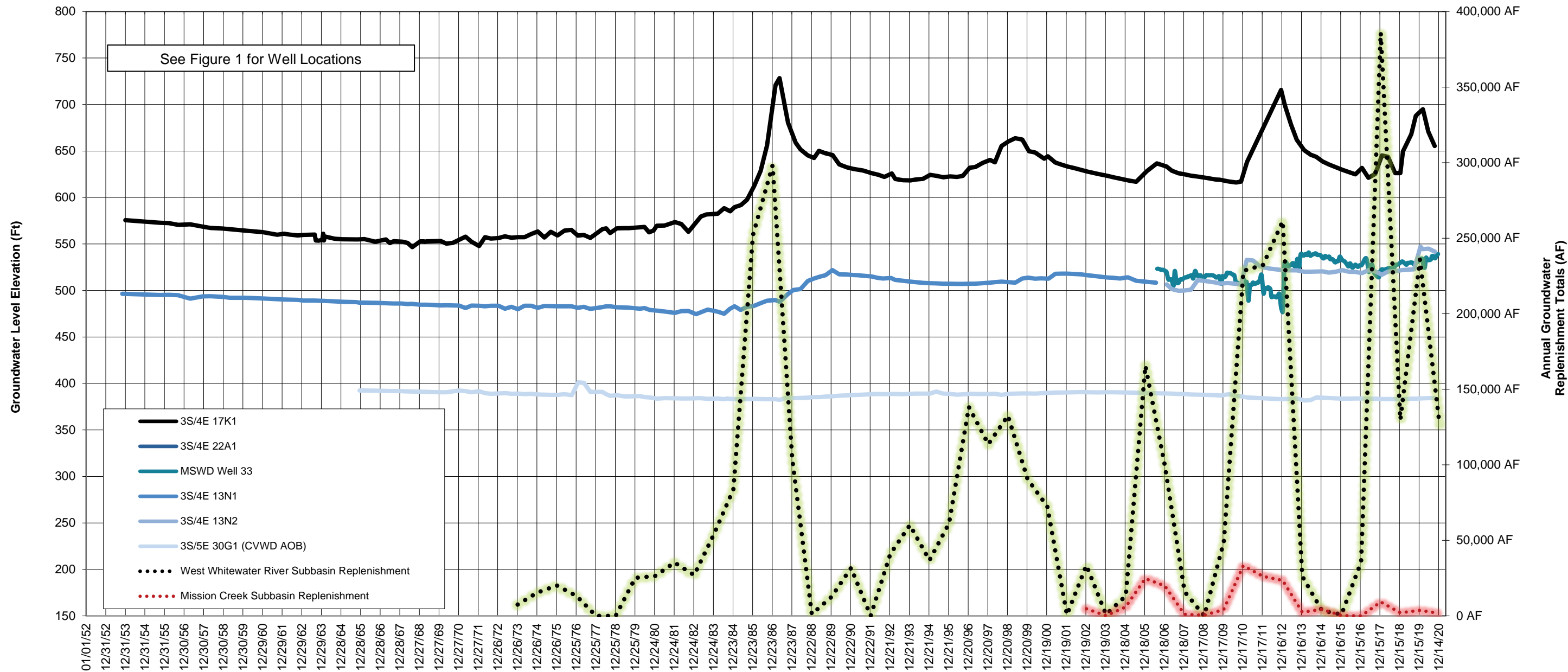
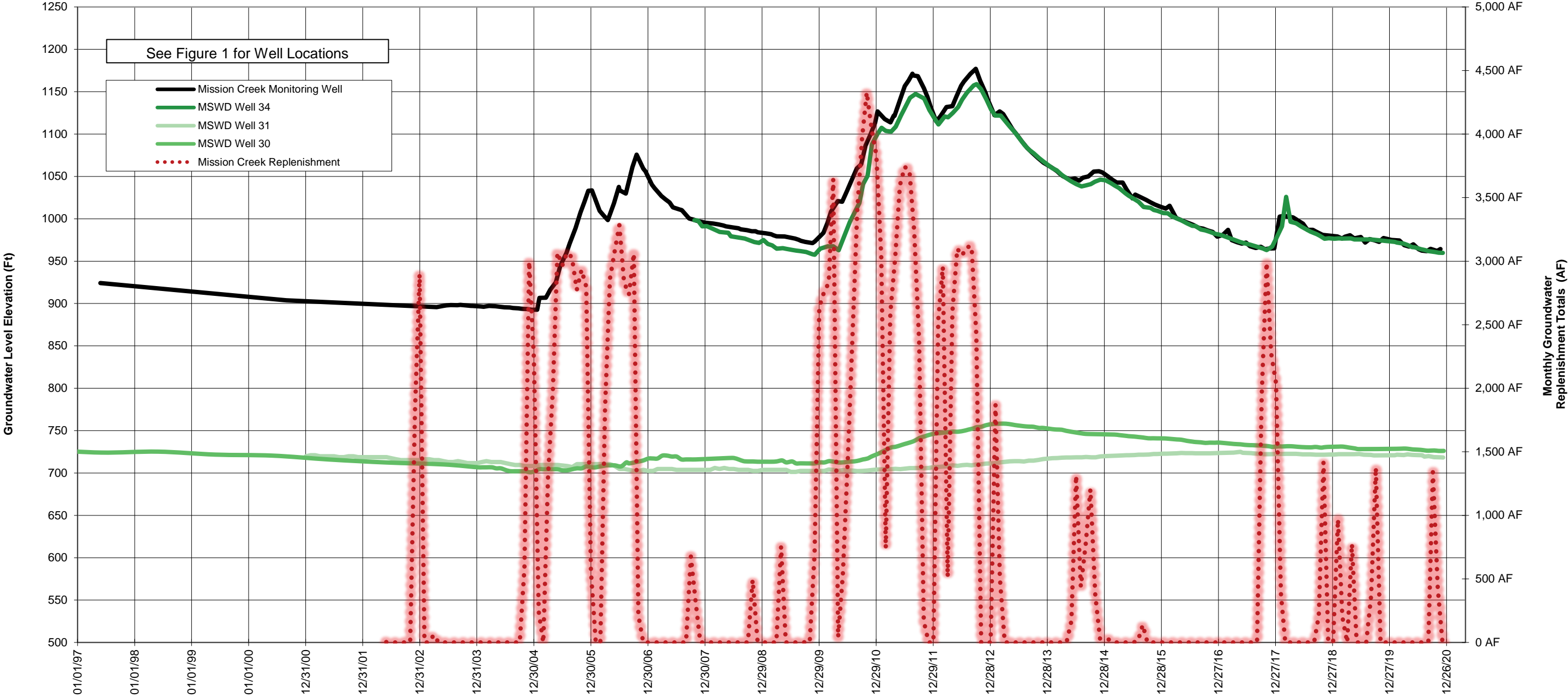




EXHIBIT 4  
DESERT WATER AGENCY  
GROUNDWATER WELL HYDROGRAPHS  
MISSION CREEK SUBBASIN MANAGEMENT AREA  
GROUNDWATER REPLENISHMENT QUANTITIES AT MISSION CREEK REPLENISHMENT FACILITY



**EXHIBIT 5**  
**DESERT WATER AGENCY**  
**MISSION CREEK SUBBASIN AREA OF BENEFIT<sup>(1)</sup>**  
**HISTORIC VOLUME OF GROUNDWATER IN STORAGE<sup>(2)</sup>**

Time Period	Pre-1955	1955 - 1978	1979 - 1997	1998 - 2020	1955 - 2020
Number of Years		24	19	22	<b>64</b>
Water Level Decline, FT <sup>(3)</sup>		20	30	19	<b>69</b>
Period Reduction in Storage, AF		71,200	106,800	67,640	<b>245,640</b>
Annual Reduction in Storage, AF/Yr		3,000	5,600	3,100	<b>3,800</b>
Change in Storage		0.047	0.074	0.051	<b>0.162</b>
Remaining Storage, AF	1,511,800	1,440,600	1,333,800	1,266,160	<b>1,266,160</b>

(1) Northwest three-quarters of subbasin: GTC (1979) & SLADE (2000)

(2) Storage loss of 3,560 AF/FT of water level decline: GTC (1979) & SLADE (2000)

(3) Mission Springs Water District data



**EXHIBIT 6**  
**DESERT WATER AGENCY**  
**COMPARISON OF WATER PRODUCTION AND GROUNDWATER REPLENISHMENT**  
**WEST WHITEWATER RIVER SUBBASIN (WWR) AND MISSION CREEK SUBBASIN (MC) MANAGEMENT AREAS**

Year	Production <sup>(1)</sup>							
	WWR AF		MC AF		Total AF		Ratio of Recharge	
	Annual	Cumulative	Annual	Cumulative	Annual	Cumulative	WWR/Total	MC/Total
2002	213,410	213,410	13,968	13,968	227,378	227,378	93.9%	6.1%
2003	204,275	417,685	14,498	28,466	218,773	446,151	93.4%	6.6%
2004	212,700	630,385	16,548	45,014	229,248	675,399	92.8%	7.2%
2005	204,341	834,726	16,327	61,341	220,668	896,067	92.6%	7.4%
2006	213,850	1,048,576	17,365	78,706	231,215	1,127,282	92.5%	7.5%
2007	211,530	1,260,106	16,409	95,115	227,939	1,355,221	92.8%	7.2%
2008	211,023	1,471,129	15,775	110,890	226,798	1,582,019	93.0%	7.0%
2009	199,506	1,670,635	15,108	125,998	214,614	1,796,633	93.0%	7.0%
2010	182,703	1,853,338	14,304	140,302	197,007	1,993,640	92.7%	7.3%
2011	183,320	2,036,658	14,260	154,562	197,580	2,191,220	92.8%	7.2%
2012	183,285	2,219,943	14,216	168,778	197,501	2,388,721	92.8%	7.2%
2013	182,842	2,402,785	14,756	183,534	197,598	2,586,319	92.5%	7.5%
2014	174,425	2,577,210	14,091	197,625	188,516	2,774,835	92.5%	7.5%
2015	147,763	2,724,973	13,017	210,642	160,780	2,935,615	91.9%	8.1%
2016	148,395	2,873,368	13,219	223,861	161,614	3,097,229	91.8%	8.2%
2017	155,543	3,028,911	13,531	237,392	169,074	3,266,303	92.0%	8.0%
2018	154,548	3,183,459	13,870	251,262	168,418	3,434,721	91.8%	8.2%
2019	145,602	3,329,061	13,135	264,397	158,737	3,593,458	91.7%	8.3%
2020	153,065	3,336,524	14,244	265,506	167,310	3,602,031	91.5%	8.5%

Year	Replenishment (Total)							
	WWR AF		MC AF		Total AF		Ratio of Recharge	
	Annual	Cumulative	Annual	Cumulative	Annual	Cumulative	WWR/Total	MC/Total
2002	33,435	33,435	4,733	4,733	38,168	38,168	14.2%	14.2%
2003	902	34,337	59	4,792	961	39,129	14.0%	6.5%
2004	13,224	47,561	5,564	10,356	18,788	57,917	70.4%	29.6%
2005	165,554	213,115	24,723	35,079	190,277	248,194	87.0%	13.0%
2006	98,959	312,074	19,901	54,980	118,860	367,054	83.3%	16.7%
2007	16,009	328,083	1,011	55,991	17,020	384,074	94.1%	5.9%
2008	8,008	336,091	503	56,494	8,511	392,585	94.1%	5.9%
2009	57,024	393,115	4,090	60,584	61,114	453,699	93.3%	6.7%
2010	228,330	621,445	33,210	93,794	261,540	715,239	87.3%	12.7%
2011	232,214	853,659	26,238	120,032	258,452	973,691	89.8%	10.2%
2012	257,267	1,110,926	23,406	143,438	280,673	1,254,364	91.7%	8.3%
2013	26,620	1,137,546	2,379	145,817	28,999	1,283,363	91.8%	8.2%
2014	3,549	1,141,095	4,325	150,142	7,874	1,291,237	45.1%	54.9%
2015	865	1,141,960	171	150,313	1,036	1,292,273	83.5%	16.5%
2016	35,699	1,177,659	0	150,313	35,699	1,327,972	100.0%	0.0%
2017	385,994	1,563,653	9,248	159,561	395,242	1,723,214	97.7%	2.3%
2018	129,725	1,693,378	2,027	161,588	131,752	1,854,966	98.5%	1.5%
2019	235,968	1,929,346	3,688	165,276	239,656	2,094,622	98.5%	1.5%
2020	126,487	1,819,865	1,768 #	163,356	128,255	1,983,221	98.6%	1.4%

Year	Recharge (SWP Exchange Only) <sup>(2)</sup>							
	WWR AF		MC AF		Total AF		Ratio of Recharge	
	Annual	Cumulative	Annual	Cumulative	Annual	Cumulative	WWR/Total	MC/Total
2002	33,435	33,435	4,733	4,733	38,168	38,168	14.2%	14.2%
2003	902	34,337	59	4,792	961	39,129	14.0%	6.5%
2004	13,224	47,561	5,564	10,356	18,788	57,917	70.4%	29.6%
2005	165,554	213,115	24,723	35,079	190,277	248,194	87.0%	13.0%
2006	98,959	312,074	19,901	54,980	118,860	367,054	83.3%	16.7%
2007	9	312,083	1,011	55,991	1,020	368,074	0.9%	99.1%
2008	0	312,083	0	55,991	0	368,074	n/a	n/a
2009	46,032	358,115	3,336	59,327	49,368	417,442	93.2%	6.8%
2010	209,937	568,052	31,467	90,794	241,404	658,846	87.0%	13.0%
2011	127,214	695,266	20,888	111,682	148,102	806,948	85.9%	14.1%
2012	253,267	948,533	23,406	135,088	276,673	1,083,621	91.5%	8.5%
2013	24,112	972,645	2,379	137,467	26,491	1,110,112	91.0%	9.0%
2014	0	972,645	4,325	141,792	4,325	1,114,437	0.0%	100.0%
2015	0	972,645	171	141,963	171	1,114,608	0.0%	100.0%
2016	699	973,344	0	141,963	699	1,115,307	100.0%	0.0%
2017	350,994	1,324,338	9,248	151,211	360,242	1,475,549	97.4%	2.6%
2018	129,725	1,454,063	2,027	153,238	131,752	1,607,301	98.5%	1.5%
2019	235,968	1,690,031	3,688	156,926	239,656	1,846,957	98.5%	1.5%
2020	126,487	1,580,550	1,768 #	155,006	128,255	1,735,556	98.6%	1.4%

**Notes:**

(1) Production in both DWA and CVWD service areas.

(2) This table excludes all non-SWP supplemental water deliveries such as those made for CPV Sentinel.

# Provisional

EXHIBIT 7  
DESERT WATER AGENCY  
SUMMARY OF DELIVERIES TO METROPOLITAN WATER DISTRICT (MWD)  
AND TO GROUNDWATER REPLENISHMENT FACILITIES (AF)<sup>(1)</sup>

BEFORE EXCHANGE AGREEMENT (JULY 1973 - JUNE 1984)

Year	Delivery to MWD													Delivery to DWA/CVWD Recharge Facilities											MWD Delivery Surplus/(Deficit) Prior to Exchange and Delivery Agreement							
	SWP Contract Water											Non-SWP Contract Water																				
	SWP Surplus Water											CVWD					DWA		From SWP Exchange Account				From Other Accounts									
	Table A DWA/CVWD Combined Allocation	Table A Allocation Delivered to MWD	% Delivery to MWD	Carry-Over From Previous Year	Pool A	Pool B	Multi-Year Pool	Article 21	Flood	Yuba	Other	Total	SWP Total	DMB Pacific	Glorious Land Rosedale	Colorado River Credit	Needles	MWD QSA	CPV- Sentinel	Total	WRRF <sup>(2)</sup>	MCRF <sup>(3)</sup>	Total	WRRF <sup>(2)</sup>			MCRF <sup>(3)</sup>	Total	Total WRRF	Total MCRF	Grand Total	
1973 (Jul-Dec)	14,800	14,800	100%										14,800							14,800	7,475		7,475				7,475			7,475	(7,325)	(7,325)
1974	16,400	16,400	100%										16,400							16,400	15,396		15,396				15,396			15,396	(1,004)	(8,329)
1975	18,000	18,000	100%										18,000							18,000	20,126		20,126				20,126			20,126	2,126	(6,203)
1976	19,600	19,600	100%										19,600							19,600	13,206		13,206				13,206			13,206	(6,394)	(12,597)
1977	21,421	0	0%										0							0	0		0				0			0	0	(12,597)
1978	23,242	25,384	109%										25,384							25,384	0		0				0			0	(25,384)	(37,981)
1979	25,063	25,063	100%										25,063							25,063	25,192		25,192				25,192			25,192	129	(37,852)
1980	27,884	27,884	100%										27,884							27,884	26,341		26,341				26,341			26,341	(1,543)	(39,395)
1981	31,105	31,105	100%										31,105							31,105	35,251		35,251				35,251			35,251	4,146	(35,249)
1982	34,326	34,326	100%										34,326							34,326	27,020		27,020				27,020			27,020	(7,306)	(42,555)
1983	37,547	37,547	100%										37,547							37,547	53,732		53,732				53,732			53,732	16,185	(26,370)
1984 (Jan-Jun) <sup>(4)</sup>	N/A	25,849	N/A										25,849							25,849	50,912		50,912				50,912			50,912	25,063	(1,307)
1984 Total	40,768	40,768	100%										40,768							40,768	83,708		83,708				83,708			83,708		

WITH EXCHANGE AGREEMENT (JULY 1984 - 2016)

Year	Delivery to MWD												Delivery to DWA/CVWD Replenishment Facilities												MWD Exchange and Advance Deliveries										
	SWP Contract Water											Non-SWP Contract Water																							
	SWP Surplus Water											CVWD					DWA	From SWP Exchange Account				From Other Accounts					Advance Deliveries Converted to Exchange Deliveries	Advance Delivery Account <sup>(5)</sup> Credit/(Debit)							
	Table A DWA/CVWD Combined Allocation	Table A Allocation Delivered to MWD	% Delivery to MWD	Carry-Over	Pool A	Pool B	Multi-Year Pool	Article 21	Flood	Yuba	Other	Total	SWP Total	DMB Pacific	Glorious Land Rosedale	Colorado River Credit	Needles	MWD QSA	CPV- Sentinel	Total	WRRF <sup>(2)</sup>	MCRF <sup>(3)</sup>	Total	WRRF <sup>(2)</sup>	MCRF <sup>(3)</sup>	Total		Total WRRF	Total MCRF	Grand Total	Exchange Deliveries	Advance Deliveries	Annual	Balance	
1984 (Jul-Dec) <sup>(5)</sup>	N/A	14,919	N/A										14,919							14,919	32,796		32,796				32,796			32,796	32,796	16,570	16,570 <sup>(6)</sup>	16,570	
1985	43,989	43,989	100%										43,989							43,989	251,994		251,994				251,994			251,994	251,994	208,005	208,005	224,575	
1986	47,210	47,210	100%										47,210				10,000 <sup>(7)</sup>			57,210	288,201		288,201	10,000 <sup>(7)</sup>		10,000	298,201	298,201	288,201	240,991		240,991	465,566		
1987	50,931	50,931	100%										50,931							50,931	104,334		104,334				104,334			104,334	104,334	53,403	53,403	518,969	
1988	54,652	54,652	100%										54,652							54,652	1,096		1,096				1,096			1,096		53,556	(53,556)	465,413	
1989	58,373	58,373	100%										58,373							58,373	12,478		12,478				12,478			12,478		45,895	(45,895)	419,518	
1990	61,200	61,200	100%										61,200							61,200	31,721		31,721				31,721			31,721		29,479	(29,479)	390,039	
1991	61,200	18,360	30%										18,360							18,360	14		14				14			14		18,346	(18,346)	371,693	
1992	61,200	27,624	45%										27,624							27,624	40,870		40,870				40,870			40,870		13,246	13,246	384,939	
1993	61,200	61,200	100%										61,200							61,200	60,153		60,153				60,153			60,153		1,047	(1,047)	383,892	
1994	61,200	37,359	61%										37,359							37,359	36,763		36,763				36,763			36,763		596	(596)	383,296	
1995	61,200	61,200	100%										61,200							61,200	61,318		61,318				61,318			61,318		118	118	383,414	
1996	61,200	61,200	100%			103,641						103,641	164,841							164,841	138,266		138,266				138,266			138,266		26,575	(26,575)	356,839	
1997	61,200	61,200	100%			50,000			27,130			77,130	138,330							138,330	113,677		113,677				113,677			113,677		24,653	(24,653)	332,186	
1998	61,200	61,200	100%			75,000			20,156			95,156	156,356							156,356	132,455		132,455				132,455			132,455		23,901	(23,901)	308,285	
1999	61,200	61,200	100%			47,380						47,380	108,580							108,580	90,601		90,601				90,601			90,601		17,979	(17,979)	290,306	
2000	61,200	55,080	90%			9,837		35,640			1 <sup>(8)</sup>	45,478	100,558							100,558	72,450		72,450				72,450			72,450		28,108	(28,108)	262,198	
2001	61,200	23,868	39%			242						242	24,110							24,110	707		707				707			707		23,403	(23,403)	238,795	
2002	61,200	42,840	70%		436	819		300				1,555	44,395							44,395	33,435	4,733	38,168				33,435	4,733	38,168		6,227	(6,227)	232,568		
2003	61,200	55,080	90%	(17,867)	457	58		532			2 <sup>(8)</sup>	1,049	38,262							38,262	902	59	961				902	59	961		37,301	(37,301)	195,267		
2004	61,200	18,597	30%	17,867		191						191	36,655							36,655	13,224	5,564	18,788				13,224	5,564	18,788		17,867	(17,867)	177,400		
2005	171,100	60,152	35%	27,618	585	3,253						3,838	91,608							91,608	165,554	24,723	190,277				165,554	24,723	190,277		98,669	98,669	276,069		
2006	171,100	171,100	100%									0	171,100							171,100	98,959	19,901	118,860				98,959	19,901	118,860		118,860		52,240	(52,240)	223,829
2007	171,100	102,660	60%		802							802	103,462			16,000 <sup>(9)</sup> *				119,453	9	1,011	1,020	16,000			16,000	16,009	1,011	17,020	1,020	102,442	(102,442)	121,387	
2008	171,100	59,885	35%		151					1,833		1,984	61,869		3,000	8,008 <sup>(9)</sup> *			8,350 *	81,218	0	0	0	8,008	503 <sup>(13)</sup>	8,511	8,008	503	8,511	0	64,869	(64,869)	56,518		
2009	171,100	57,710	34%		35	58				2,982	500 <sup>(10)</sup>	3,575	61,285		3,000 *	7,992 <sup>(9)</sup> *				72,268	46,032	3,336	49,368	10,992	754 <sup>(13)</sup>	11,746	57,024	4,090	61,114	49,368	11,917	(11,917)	44,601		
2010	194,100	97,050	50%	10,730	66	536						602	108,382	8,393 *				10,000 *		126,775	209,937	31,467	241,404	18,393	1,743 <sup>(13)</sup>	20,136	228,330	33,210	261,540	241,404	133,022	133,022	177,623		
2011	194,100	124,156	64%		836	1,666					5,800 <sup>(14)</sup>	8,302	132,458					105,000 *		237,458	127,214	20,888	148,102	105,000	5,350 <sup>(13)</sup>	110,350	232,214	26,238	258,452	148,102	25,644 <sup>(7)</sup>	25,644	203,267		
2012	194,100	126,166	65%	31,124	431				967			1,398	158,688			4,000 *				162,688	253,267	23,406	276,673	4,000		4,000	257,267	23,406	280,673	276,673	117,985	117,985	321,252		
2013	194,100	67,936	35%		230				2,664			2,894	70,830			16,500		2,508 *		89,838	24,112	2,379	26,491	2,508		2,508	26,620	2,379	28,999	26,491	60,839	(60,839)	260,413		
2014	194,100	9,706	5%						1,213			1,213	10,919			5,000		3,549 ****		19,468	0	4,325	4,325	3,549		3,549	3,549	4,325	7,874	4,325	11,610	(11,610)	248,803		
2015	194,100	38,820	20%				67		426			493	39,313			9,500		865 *		49,678	0	171	171	865		865	865	171	1,036	171	48,642	(48,642)	200,161		
2016	194,100	74,249	38%				566					566	74,815			16,500			64,135	155,450	699	0	699	35,000 **		35,000	35,699	0	35,699	699	119,751	(119,751)	80,410		
2017	194,100	66,805	34%	25,435	1131						16,776 <sup>(11)</sup>	17,907	110,147			5,397			150,544	350,994	9,248	365,242	35,000 **		35,000	385,994	9,248	395,242	360,242	244,698	244,698	325,108			
2018	194,100	67,936	35%	97,050						1,246		1,246	166,232			20,603		35,000 ***		221,835	129,725	2,027	131,752		0	129,725 ##	2,027	131,752 ##	131,752		90,083	(90,083)	235,025		
2019	194,100	48,526	25%									0	48,526			35,000 ***		83,526		83,526	235,968 #	3,688 #	239,656		0	235,968 ##	3,688 #	239,656 ##	239,656	156,130		156,130	391,155		
2020	194,100	38,820	20%	97,050						1,140		1,140	137,010			19,000		50,000 ***		206,010	126,487	1,768	128,255		0	128,255		1,768	128,255		77,755	(77,755)	313,400		
Totals <sup>(12)</sup> :	4,473,911	2,464,917	---	289,007	5,160	292,681	633	36,472	47,286	12,471	23,079	417,782	3,171,706	8,393	102,500	32,000	10,000	341,057	8,350	3,673,979	2,717,889	158,694	3,719,757	249,315	8,350	257,665	3,810,378	167,044	3,977,422	3,719,757	1,308,481	995,081	---		

**EXHIBIT 8**  
**DESERT WATER AGENCY AND COACHELLA VALLEY WATER DISTRICT**  
**COMPARISON OF HISTORIC AND PROPOSED GROUNDWATER REPLENISHMENT**  
**ASSESSMENT RATE FOR THE WEST WHITEWATER RIVER AND MISSION CREEK SUBBASIN AOBs**

Year	DWA		CVWD West Whitewater		CVWD Mission Creek	
	\$/AF	% Increase	\$/AF	% Increase	\$/AF	% Increase
78/79	\$6.81	---	No Assessment	---	No Assessment	---
79/80	\$9.00	32%	No Assessment	---	No Assessment	---
80/81	\$9.50	6%	\$5.66	---	No Assessment	---
81/82	\$10.50	11%	\$7.43	31%	No Assessment	---
82/83	\$21.00	100%	\$19.82	167%	No Assessment	---
83/84	\$36.50	74%	\$33.23	68%	No Assessment	---
84/85	\$37.50	3%	\$34.24	3%	No Assessment	---
85/86	\$31.00	-17%	\$21.81	-36%	No Assessment	---
86/87	\$21.00	-32%	\$19.02	-13%	No Assessment	---
87/88	\$22.50	7%	\$19.55	3%	No Assessment	---
88/89	\$20.00	-11%	\$15.96	-18%	No Assessment	---
89/90	\$23.50	18%	\$19.66	23%	No Assessment	---
90/91	\$26.00	11%	\$23.64	20%	No Assessment	---
91/92	\$31.75	22%	\$25.66	9%	No Assessment	---
92/93	\$31.75	0%	\$28.23	10%	No Assessment	---
93/94	\$31.75	0%	\$31.05	10%	No Assessment	---
94/95	\$31.75	0%	\$34.16	10%	No Assessment	---
95/96	\$31.75	0%	\$37.58	10%	No Assessment	---
96/97	\$31.75	0%	\$37.58	0%	No Assessment	---
97/98	\$31.75	0%	\$42.09	12%	No Assessment	---
98/99	\$31.75	0%	\$47.14	12%	No Assessment	---
99/00	\$31.75	0%	\$52.80	12%	No Assessment	---
00/01	\$33.00	4%	\$59.14	12%	No Assessment	---
01/02	\$33.00	0%	\$66.24	12%	No Assessment	---
02/03	\$35.00	6%	\$72.86	10%	\$59.80	---
03/04	\$35.00	0%	\$72.86	0%	\$59.80	0%
04/05	\$45.00	29%	\$78.86	8%	\$59.80	0%
05/06	\$50.00	11%	\$78.86	0%	\$59.80	0%
06/07	\$63.00	26%	\$83.34	6%	\$65.78	10%
07/08	\$63.00	0%	\$91.67	10%	\$72.36	10%
08/09	\$72.00	14%	\$93.78	2%	\$76.60	6%
09/10	\$72.00	0%	\$102.45	9%	\$87.56	14%
10/11	\$82.00	14%	\$102.45	0%	\$89.75	3%
11/12	\$82.00	0%	\$107.57	5%	\$98.73	10%
12/13	\$92.00	12%	\$110.26	3%	\$98.73	0%
13/14	\$92.00	0%	\$110.26	0%	\$98.73	0%
14/15	\$102.00	11%	\$110.26	0%	\$98.73	0%
15/16	\$102.00	0%	\$112.00	2%	\$112.00	13%
16/17	\$102.00	0%	\$128.80	15%	\$123.20	10%
17/18	\$120.00	18%	\$143.80	12%	\$135.52	10%
18/19	\$140.00	17%	\$143.80	0%	\$135.52	0%
19/20	\$155.00	11%	\$143.80	0%	\$135.52	0%
20/21	\$165.00	6%	\$143.80	0%	\$135.52 *	0%
21/22	\$175.00 *	6%	\$165.37 *	15%	\$135.52 *	0%

\* Proposed replenishment assessment rate



## **APPENDIX A**

APPENDIX A  
COACHELLA VALLEY  
MONTHLY AND ANNUAL RECORDED PRECIPITATION DATA  
(INCHES)  
2020

STATION NAME	WHITEWATER NORTH	SNOW CREEK	TACHEVAH DAM	TRAM VALLEY	CATHEDRAL CITY	THOUSAND PALMS	PALM SPRINGS SUNRISE	DESERT HOT SPRINGS	EDOM HILL	OASIS	MECCA LANDFILL III	THERMAL AIRPORT
LOCATION	WWR	WWR	WWR	WWR	WWR	WWR	WWR	MC	MC	EWR	EWR	EWR
STATION NUMBER	233	207	216	224	34	222	442	57	436	431	432	443
LATITUDE	33°59'23.06"	33°53'32.64"	33°49'51.26"	33°50'11.56"	33°46'51.49"	33°49'1.66"	33°48'35.94"	33°58'2.85"	33°53'7.52"	33°26'21.64"	33°34'20.19"	33°37'53.90"
LONGITUDE	116°39'21.39"	116°41'41.06"	116°33'31.53"	116°36'49.72"	116°27'29.69"	116°23'46.30"	116°31'37.94"	116°29'39.93"	116°26'18.48"	116° 4'44.83"	116° 0'15.33"	116° 9'50.81"
ELEVATION (FT ABOVE MSL)	2220	1658	570	2675	283	230	397	1223	1038	-108	13	-122
JANUARY	0.00	0.09	0.02	0.05	0.02	0.03	0.03	0.01	0.02	0.00	0.00	0.00
FEBRUARY	0.03	0.09	0.00	0.09	0.00	0.02	0.00	0.00	0.00	0.02	0.00	0.00
MARCH	3.29	6.53	3.70	5.05	2.08	1.50	2.69	1.83	1.77	2.31	2.05	2.82
APRIL	1.42	3.15	1.12	2.46	0.83	0.98	0.99	1.19	1.19	0.82	0.78	0.74
MAY	0.00	0.09	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
JUNE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
JULY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AUGUST	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SEPTEMBER	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00
OCTOBER	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00
NOVEMBER	0.92	0.65	0.00	0.22	0.02	0.00	0.06	0.02	0.00	0.00	0.01	0.00
DECEMBER	1.17	1.52	0.00	0.54	0.19	0.11	0.26	0.20	0.12	0.00	0.00	0.05
TOTAL	6.83	12.12	4.84	8.41	3.15	2.64	4.03	3.25	3.10	3.16	2.85	3.61
AVERAGE: WWR	6.00											
AVERAGE: MC								3.18				
AVERAGE: WWR+MC	5.37											
AVERAGE: EWR										3.21		
AVERAGE: ALL	4.83											

## **APPENDIX B**



## **ADDENDUM TO SETTLEMENT AGREEMENT MANAGEMENT AREA DELIVERIES**

The Settlement Agreement between Coachella Valley Water District (CVWD), Desert Water Agency (DWA) and Mission Springs Water District (MSWD) dated December 7, 2004 shall be supplemented by the following Addendum, and thus shall be deemed a part thereof:

The Mission Creek Groundwater Replenishment Agreement provides for the delivery to the Mission Creek Subbasin, for groundwater replenishment, of a proportionate share of the imported water delivered to CVWD and DWA for replenishment of the Upper Coachella Valley Groundwater Basin. To ensure that the Mission Creek Subbasin receives its proportionate share of that water, as set forth in the Mission Creek Replenishment Agreement, and to provide for the monitoring thereof, the following procedures shall be applied:

Each year CVWD and DWA shall calculate the combined total quantity of water produced during the previous year from the Whitewater River Management Area and the Mission Creek Management Area, and from sources tributary to those Management Areas, and shall determine from that the percentages of the total production from those Management Areas and their sources.

Water supplies available to CVWD and DWA each year, through their respective State Water Project Contracts, for the replenishment of those Management Areas will be allocated and delivered to the Management Areas for groundwater replenishment in the same percentages, subject to delivery capability and operational constraints in any particular year.

In the event that additional subbasins benefit from recharge programs within CVWD and DWA boundaries, the respective production and recharge delivery percentages from those management areas in those subbasins shall be included in the above described calculations, allocations, and deliveries.


Production and recharge quantities shall be reviewed by the parties to the Management Committee (MSWD, CVWD and DWA) through the Management Committee process. CVWD and DWA will endeavor to accomplish annual proportionate management area deliveries; however, when constrained by operating limitations, they may over deliver or under deliver water to the management areas from year to year as necessary to obtain as much imported water as may be available. Cumulative water deliveries between or among management areas shall be balanced as and when determined by the Management Committee, but no later than 20 years from the date of the settlement agreement and each 20 years thereafter.


The provisions of this Addendum may be enforced by any party hereto.

IN WITNESS WHEREOF, The Parties have caused this Addendum to be executed by their duly authorized representatives on the date first above written.

**MSWD:**


Mission Springs Water District,  
a California county water district


By   
Its: President

By   
Its: Vice President

**DWA:**

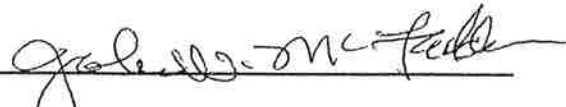
Desert Water Agency,  
a public agency of the State of California


By   
Its: President

By   
Its: Vice President

**CVWD:**

Coachella Valley Water District,  
a California county water district

By   
Its: President

By   
Its: Vice President

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

**JUNE 15, 2021**

**RE: REQUEST ADOPTION OF RESOLUTION NO. 1260 AND  
ORDINANCE NO. 72, 2020 URBAN WATER MANAGEMENT PLAN  
AND WATER SHORTAGE CONTINGENCY PLAN (PUBLIC  
HEARING)**

Desert Water Agency is required to prepare and adopt an updated Urban Water Management Plan (UWMP) every five years. The UWMPs for the 2020 reporting cycle are due to be submitted to the California Department of Water Resources (DWR) by July 1, 2021. The UWMP describes the anticipated water supplies and demands for the next 25 years. It also describes the programs that are in place to encourage efficient water use.

Six agencies in the Coachella Valley worked together to develop a Regional Urban Water Management Plan (RUWMP). The agencies include:

- Coachella Valley Water District (CVWD)
- Coachella Water Authority (CWA)
- Desert Water Agency (DWA)
- Indio Water Authority (IWA)
- Mission Springs Water District (MSWD)
- Myoma Dunes Mutual Water Company (MDMWC)

By collaborating on a RUWMP, the agencies were able to coordinate their assessment of regional water supplies. The report has two main parts. Chapters 1 through 3 are regional chapters which provide an overall introduction, descriptions of the six participating agencies, and an overview of the water supplies used in the Coachella Valley. Chapters 4 through 9 are individual agency chapters that address how participating agencies meet reporting requirements under the Urban Water Management Planning Act.

**Supply and Demand Analysis**

The supply and demand analysis for this plan was aligned with the Indio Subbasin Alternative Plan Update (currently underway) since UWMP evaluates water delivery service only.

	2020	2025	2030	2035	2040	2045
Available/ Demand (AF)	36,856	39,641	41,175	42,677	43,907	44,978

### 20% by 2020 Compliance

Each agency's chapter includes a discussion of compliance with SB X7-7, the required 20-percent reduction in per-capita water use (GPCD) by 2020. DWA and all other local agencies met compliance targets. DWA's figures:

**Baseline GPCD: 593**

**2020 Target GPCD: 474**

**2020 GPCD: 405**

**Reduction: 31.7%**

The UWMP GPCD figures are based on total water use, rather than residential GPCD, which is reported to the State Water Resources Control Board monthly.

### Seasonal Population

When DWR accepted DWA's 2015 UWMP, DWR indicated that our existing methodology on population was acceptable for the 2015 report but would have to be updated for the 2020 round.

The current methodology relies on a 62% occupancy rate and vacant housing units. Though hotel stays aren't included, the new approach allows us to better account for short-term vacation rentals and seasonal homes. DWR is currently in the planning stages of a pilot study to address areas like the Coachella Valley that have a disproportionately high seasonal population. DWR indicated it would like to have a more consistent methodology available for the future planning cycles. Staff will track this issue and provide updates to the Board.

Plan Year	2020 Population with Seasonal	2040 Population with Seasonal
2015 UWMP	91,748 with hotels 67,225 without hotels	102,166 with hotels 77,638 without hotels
2020 UWMP	71,680	87,343

A lower seasonal population figure results in a higher GPCD, which during the last drought became the central measure by which water agencies were regulated. Given the 2018 Water Use Efficiency legislation and the Governor's stated regulatory approach, GPCD should not be a key factor in water restrictions during shortages.

### Water Shortage Contingency Plan

In addition to the RUWMP, each agency has prepared a Water Shortage Contingency Plan (WSCP) to describe water shortage responses. If an extended drought or sudden event (like an earthquake) impacted an agency's ability to replenish the groundwater basin or the agency's ability to provide enough water to meet all customer needs, the WSCP may need to be implemented. DWA's WSCP defines six levels of shortage and outlines the actions that will be required of customers during each level. The six agencies aligned the actions in their plans as much as possible to maintain consistent requirements and messaging for customers throughout the Valley. These WSCPs are attachments to the RUWMP.

Since staff last presented the draft WSCP to the Board, the RUWMP agencies gathered feedback from their governing bodies and agreed on several key changes:

- Providing the ability to apply the WSCP to a specific area within a water agency
- Allowing an exception for leak checks and conservation alternative plans for daylight watering in Level 2
- Removing the prohibition on the initial fill of swimming pools
- Moving the prohibition on misting systems from a Level 3 to a Level 5
- Change prohibition on “outdoor watering” to “outdoor water use” in Level 6

The only remaining differences from agency to agency in the WSCPs relate to:

- Water budget or drought surcharge actions
- Level 4 moratoriums on new service and construction meter service

As DWA is the first Agency to formally adopt its WSCP, it is possible that other governing boards may make changes at their public hearings. DWA and the other participants have the ability to change their WSCPs with a public hearing at any time.

#### Annual Water Supply & Demand Analyses

Beginning in 2022, each agency will need to prepare an annual assessment that looks at expected demands and supplies for the coming year. DWR has yet to release the details on the submission but DWA is working with other agencies through ACWA to provide suggestions and feedback to DWR. In reviewing the draft submission document created by ACWA members, DWA does not anticipate any shortage for the initial submission. DWA anticipates submitting its first assessment to DWR by July 1, 2022.

#### Appendices & 2015 Plan Amendments

The agencies have also prepared an appendix to describe how the region is increasing the use of local water supplies and reducing reliance on supplies from the Sacramento-San Joaquin Delta. The data is provided at the regional level and covers all participating agencies. Most of the data is derived from the Indio Subbasin and Mission Creek Subbasin Alternative Plan Updates currently underway. The Sacramento-San Joaquin Delta Reform Act of 2009 requires agencies who might propose a new conveyance facility or other covered action that involves Delta water to demonstrate consistency with the Delta Plan’s policy to reduce reliance on the Delta. By adopting Appendix C to the 2020 RUWMP and Appendix L as an addendum to the 2015 Urban Water Management Plan, DWA demonstrates consistency with this policy.

Additionally, staff identified an error in two tables in the 2015 UWMP. The attached table correction will be included in the 2015 report for posterity. This would normally be done through an errata form but since the Delta Reliance Appendix was being added, staff determined making the change as an Appendix would be most appropriate. The changes don’t affect compliance.

### Ordinance No. 72

Ordinance No. 65 currently outlines the Agency's policy on shortage response. Ordinance No. 72 will supersede Ordinance No. 65 and align the Agency's policy with the 2020 DWA Water Shortage Contingency Plan described above and attached.

### Public Review & Notice

The agencies received feedback from the community in developing the RUWMP and the WSCPs during two public workshops and an online collaboration portal. Drafts for public review were posted at [www.cvrwmq.org/uwmp](http://www.cvrwmq.org/uwmp) in May and were also added to [www.dwa.org/uwmp](http://www.dwa.org/uwmp). The Public Record ran public hearing notices on June 1 and June 8.

At the time of this report, no comments were submitted to DWA on the WSCP or the RUWMP.

### Staff Recommendation:

1. Open the Public Hearing, receive public testimony, close public hearing; and
2. Adopt Resolution No. 1260 [CV UWMP](#) and [Appendices](#) (Attachment 1)
3. Adopt 2020 DWA Water Shortage Contingency Plan (Attachment 2)
4. Adopt Ordinance No. 72 Establishing a Water Shortage Contingency Plan (Attachment 3)
5. Adopt 2015 Appendix L on Delta Reliance (Attachment 4)
6. Adopt 2015 Appendix M on table corrections (Attachment 5)



## RESOLUTION NO. 1260

### RESOLUTION OF THE BOARD OF DIRECTORS OF DESERT WATER AGENCY ADOPTING THE 2020 URBAN WATER MANAGEMENT PLAN

**WHEREAS**, the California Legislature enacted Assembly Bill 797 (Water Code Section 10610 et seq., known as the Urban Water Management Planning Act) during the 1983-1984 Regular Session, as subsequently amended, which mandates that every supplier providing water for municipal purposes to more than 3,000 customers or supplying more than 3,000 acre feet of water annually, prepare an Urban Water Management Plan; and

**WHEREAS**, the Urban Water Management Planning Act requires each urban water supplier to update its Urban Water Management Plan at least once every five years on or before December 31, in years ending five and zero; and

**WHEREAS**, legislation referred to as the Water Conservation Act of 2009 or “SBX7-7” (Water Code, Part 2.55, Section 10608 et seq.), enacted by the California Legislature during the 2009 Extraordinary Session, extended the time by which urban retail water suppliers must adopt their 2015 Urban Water Management Plans until July 1, 2016, and, among other things, established requirements for urban retail water suppliers to prepare interim and urban water use targets for achieving increased water use efficiency by the years 2015 and 2020, in accordance with the goal of SBX7-7 to reduce statewide per capita water use 20 percent by the year 2020; and

**WHEREAS**, the Desert Water agency (Agency) is an urban retail water supplier for purposes of the Urban Water Management Planning Act and SBX7-7; and

**WHEREAS**, in accordance with the Urban Water Management Planning Act and SBX7-7, the Agency adopted its current Urban Water Management Plan (Plan) in 2016 and must update the Plan no later than July 1, 2021; and

**WHEREAS**, in accordance with applicable law, including Water Code Sections 10608.26 and 10642, and Government Code Section 6066, a properly noticed public hearing regarding said updated the Plan was conducted by the Board of Directors on June 15, 2021, and the proposed updated Plan was posted on the Agency’s website two (2) weeks before the hearing; and

**WHEREAS**, pursuant to said public hearing on the Agency’s proposed updated Plan, the Agency, among other things, encouraged the active involvement of diverse social, cultural, and economic elements of the population within the Agency’s service area with regard to the preparation of the Plan, allowed community input regarding the Agency’s implementation plan for complying with SBX7-7, considered the economic impacts of the Agency’s implementation plan for complying with SBX7-7, and adopted Method 1 under Water Code Section 10608.20(b) for determining its water use targets; and

**WHEREAS**, the California Department of Water Resources issued a Guidebook to Assist Urban Water Suppliers to Prepare an Urban Water Management Plan (the “DWR Guidebook”) and Methodologies for Calculating Baseline and Compliance Urban Per Capita Water Use (the “DWR Methodologies”) to provide guidance to urban retail water suppliers for purposes of preparing Urban Water Management Plans, and the Agency utilized the DWR Guidebook and the DWR Methodologies in preparing its updated Plan; and

**WHEREAS**, in accordance with Water Code Section 10620(e), the Agency has prepared its updated Plan with its own staff, with the assistance of consulting professionals, and in cooperation with other governmental agencies, and has utilized industry standards and the expertise of industry professionals in preparing its updated Plan; and

**WHEREAS**, the Agency’s Board of Directors has reviewed and considered the purposes and requirements of the Urban Water Management Planning Act and SBX7-7, the contents of the updated Plan, and the documentation contained in the administrative record in support of the updated Plan, and has determined that the factual analyses and conclusions set forth in the updated Plan are supported by substantial evidence.

**NOW, THEREFORE**, be it resolved by the Board of Directors of Desert Water Agency as follows:

1. The Agency hereby adopts Target Method 1 under Water Code Section 10608.20(b) for determining its water use targets, and the updated Urban Water Management Plan is hereby adopted and ordered filed with the Secretary of the Board.
2. The General Manager is hereby authorized and directed to include a copy of this Resolution in the Agency’s updated Urban Water Management Plan and, in accordance with Water Code Section 10644(a), to file the updated Urban Water Management Plan with the California Department of Water Resources, the California State Library, and any city or county within which the Agency provides water supplies within thirty (30) days after this date.
3. The General Manager is hereby authorized and directed, in accordance with Water Code Section 10645, to make the updated Urban Water Management Plan available for public review not later than thirty (30) days after filing a copy thereof with the California Department of Water Resources.
4. The General Manager is hereby authorized and directed, in accordance with Water Code Section 10635(b), to provide that portion of the updated Urban Water Management Plan prepared pursuant to Water Code Section 10635(a) to any city or county within which the Agency provides water supplies not later than sixty (60) days after filing a copy thereof with the California Department of Water Resources.
5. The General Manager is hereby authorized and directed to implement the components of the updated Urban Water Management Plan in accordance with the Urban Water Management Planning Act and SBX7-7 including, but not limited to, the Agency’s Water Conservation Programs and its water shortage contingency analysis.

6. The General Manager is hereby authorized and directed to recommend to the Board of Directors additional steps necessary or appropriate to effectively carry out the implementation of the updated Urban Water Management Plan.

**ADOPTED** this 15th day of June 2021.

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Kristin Bloomer, President

**ATTEST:**

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Joseph K. Stuart, Secretary-Treasurer

# Water Shortage Contingency Plan



**Desert Water Agency**

**DRAFT**

**June 2021**

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Appendix A. Legal Authority

Appendix B. Resolution of Adoption

## Introduction

This document represents the Water Shortage Contingency Plan (WSCP) adopted by the Desert Water Agency (DWA). The document follows the structure recommended in guidance documents prepared by the California Department of Water Resources (DWR).

DWA is one of six agencies in the Coachella Valley participating in the development of a 2020 Regional Urban Water Management Plan (RUWMP). Each agency is adopting the RUWMP to meet its reporting requirements under the Urban Water Management Planning Act. Each agency is also adopting its own WSCP. The agencies have sought to align their shortage levels and shortage response actions to the extent possible, with the intent of reducing confusion for neighboring customers during a shortage. However, each agency will adopt its own WSCP with slight variations (e.g. penalty processes and amounts) for flexibility in the event that future changes are necessary.

As individual agencies make updates or enhancements to their WSCP, each will be able to make modifications and re-adopt an amended WSCP without triggering a requirement for the other participating agencies to take similar steps. The update process is described in later sections of this WSCP.

### 1.0 Water Supply Reliability Analysis

This section provides a summary of the supply reliability analysis presented in the RUWMP and highlights key issues that could create a shortage condition.

The supplies of the agencies in the Coachella Valley generally have a high degree of reliability. The RUWMP participating agencies meet most of their urban demands with groundwater produced from the Indio (also known as Whitewater River) and Mission Creek Subbasins of the Coachella Valley Groundwater Basin. The groundwater basin is large enough to provide storage that allows continued production during dry periods. Because production exceeds the recharge provided by precipitation and return flows, the agencies use imported water to recharge the groundwater basin. These sources of imported water for recharge include:

- Colorado River water that Coachella Valley Water District (CVWD) receives through the Coachella Canal.
- State Water Project (SWP) water that CVWD and DWA have rights to receive. Because the SWP infrastructure does not extend into the Coachella Valley, CVWD and DWA have an exchange agreement with the Metropolitan Water District of Southern California (MWD). The agreement allows MWD to deliver water from its Colorado River Aqueduct (CRA) to the Coachella Valley to recharge the local aquifer. In return, MWD receives SWP water through the SWP infrastructure based on the annual allocations to CVWD and DWA.

Drought conditions are not expected to affect CVWD's Colorado River water supply due to the District's high priority allocation. Colorado River water is not a direct source of urban water supply; it is used for groundwater replenishment and non-potable uses. If a reduction in Colorado River water supply occurred, CVWD would initially reduce deliveries to groundwater replenishment projects. Subsequent reductions in delivery would be applied to users following the priorities in CVWD's Canal Water Shortage Contingency Plan. These priorities are defined in CVWD's Canal Water Shortage Contingency Plan, which is Chapter 3.10, Article XII of CVWD's administrative code.

Drought conditions in the Sierra Nevada would have an effect on the SWP water allocation; thus reducing the SWP Exchange water received by CVWD and DWA. This water is used for replenishment of the groundwater basin and is not a direct source of urban water supply. Consequently, water use restrictions due to drought involving the SWP water supply would likely be implemented only as a result of a prolonged drought.

During dry periods when less imported water is available, groundwater production will exceed the amount of recharge, and the volume in storage will be reduced. However, these reductions can be reversed in years when additional imported water is available. The Coachella Valley Groundwater Basin is a large basin which provides a buffer during dry periods, thus allowing the agencies to develop long-term plans and programs to manage regional water supplies.

The reliability analysis for DWA is presented in Section 7 of DWA's chapter of the RUWMP. Although that analysis demonstrates that the region's urban water supply is reliable, there are potential issues that could create a shortage condition. These include:

- An extended drought more severe than historic events, possibly impacted by climate change.
- A natural disaster or a malevolent act that leads to prolonged disruption of imported water delivery from the Colorado River or the SWP.
- A natural disaster or malevolent act that affects DWA's distribution system.
- Reductions in imported water supply due to environmental restrictions related to endangered species or habitat protection.
- Identification of a currently unregulated contaminant that has widespread effects on the region's groundwater supply.
- Regulatory mandates to reduce water use.

Water shortage contingency planning provides a way to plan for these risks and anticipate actions that can be implemented to manage the impacts. This plan describes how DWA intends to respond to such shortage events. We have aligned our responses to those of other RUWMP participating agencies to the extent possible.

## 2.0 Annual Water Supply and Demand Assessment Procedures

DWA will be required to prepare an Annual Water Supply and Demand Assessment (Annual Assessment) and submit it to DWR each year, beginning July 1, 2022. The Annual Assessment is intended to meet requirements of Water Code Section 10632.1 and present an assessment of the likelihood of a water shortage occurring during the next 12 months. This section of the WSCP outlines the procedures that DWA will use to prepare the Annual Assessment. The procedures defined in this section will allow DWA to follow a consistent annual procedure for making the determination of whether to activate the WSCP.

### 2.1 Decision Making Process

DWR requires a defined decision-making process for performing the Annual Assessment. The process and anticipated timeline are presented in Table 1.

**Table 1. Annual Assessment Decision-Making Process**

<b>Anticipated Timeline of Each Year</b>	<b>Activities</b>
February	DWA staff will review available data related to anticipated supplies and demands.
March	The six agencies participating in the Coachella Valley RUWMP will review the data and determine whether a consistent region-wide determination on water supply reliability can be made. If needed, individual agencies may elect to activate their WSCP at different shortage levels than other participating agencies.
April	DWA staff will make a determination whether to recommend implementation of shortage response actions.
May	If shortage response actions are to be implemented, DWA management will present the recommendation to the governing board for consideration.  If the governing board decides to implement the WSCP, it will provide public notice of a hearing to consider changes in the implementation of the shortage response actions.
June	DWA staff will prepare the Annual Assessment and submit it to DWR by July 1 <sup>st</sup> .

## **2.2 Data and Methodologies**

This section describes the data and methodologies that will be used to evaluate water system reliability for the coming year, while considering that the year to follow could be dry.

### **2.2.1 Evaluation Criteria**

DWA will rely on locally applicable criteria for each Annual Assessment. This includes findings of the annual reports prepared for the Indio Subbasin and the Mission Creek Subbasin for compliance with the Sustainable Groundwater Management Act. The annual Engineer's Report on Water Supply and Replenishment Assessment will also be incorporated along with both applicable reports and data.

### **2.2.2 Water Supply**

DWA's anticipated supplies will be quantified for the near-term future, and descriptive text will be used to note any anticipated reductions in supply.

### **2.2.3 Unconstrained Customer Demand**

DWA will prepare an estimate of unconstrained demand (as the term is used in Water Code Section 10632(a)(2)(B)(i)). The estimated demand will be calculated using the demand projection approach described in Section 4 of each agency's chapter of the RUWMP, in combination with updated data for connections, climate, changes in land use, and recent water usage history.

### **2.2.4 Planned Water Use for Current Year Considering Dry Subsequent Year**

DWA will describe the anticipated use of water supplies for the coming year, with the anticipation that the following year will be dry. The supplies will be characterized in a manner consistent with the RUWMP, in combination with updated data for climate and recent observations.

### **2.2.5 Infrastructure Considerations**

DWA will describe any potential infrastructure constraints on the ability to deliver adequate supplies to meet expected customer demands in the coming year. DWA will verify that its system of wells, pipelines, pump stations, storage tanks and related infrastructure have adequate capacity to deliver the anticipated demands. DWA will describe any anticipated capital projects that are intended to address constraints in production, treatment, or distribution.

### **2.2.6 Other Factors**

DWA will describe any specific locally applicable factors that could influence or disrupt supplies. DWA will also describe unique local considerations that are considered as part of the Annual Assessment.

## **3.0 Six Standard Water Shortage Levels**

The RUWMP participating agencies have elected to use the six standard shortage levels included in guidance documents prepared by DWR. The six standard water shortage levels correspond to progressively increasing estimated shortage conditions (up to 10-, 20-, 30-, 40-, 50- percent, and greater than 50-percent shortage compared to the normal reliability condition). These levels are identified in Table 2.



**Table 2. Water Shortage Contingency Plan Levels**

Shortage Level	Percent Shortage Range	Description	Shortage Response Actions
1	Less than 10%	Normal water supplies	Mandatory prohibitions defined by the state, ongoing rebate programs
2	Up to 20%	Slightly limited water supplies	Outdoor water use restrictions on time of day, increased water waste patrols
3	Up to 30%	Moderately limited water supplies	Outdoor water use restrictions on days per week, restrictions on filling swimming pools
4	Up to 40%	Limited water supplies	Limits on new landscaping, expanded public information campaign
5	Up to 50%	Significantly limited water supplies	Limits on watering of parks or school grounds
6	Greater than 50%	Severe shortage or catastrophic incident	No potable water use for outdoor purposes

Each level in Table 2 represents an anticipated reduction in the supplies that would normally be available to DWA. These supply reductions could be the result of a variety of potential causes including natural forces, system component failure or interruption, regulatory actions, contamination, or any combination of factors. DWA may need to activate shortage levels across its entire service area or within certain areas that are impacted by an event.

The levels involve voluntary and mandatory conservation measures and restrictions, depending on the causes, severity, and anticipated duration of the water supply shortage. The locally appropriate shortage response actions that would be taken at each level to address the resulting gap between supplies and demands are described in the following section.

## 4.0 Shortage Response Actions

This section describes the shortage response actions that would be taken by DWA at each shortage level. These actions have been grouped into categories including:

- Supply Augmentation Actions
- Demand Reduction Actions and Mandatory Use Restrictions
- Operational Changes

### 4.1 Supply Augmentation

For long-range planning, DWA continues to evaluate opportunities for transfers, exchanges, and other purchases of imported water to increase supply reliability. CVWD and DWA collaborate to replenish the groundwater aquifer with imported water, creating a stored supply that can be used for emergencies or longer-term shortages. CVWD and DWA are also making investments in increasing supply reliability from the SWP through the Delta Conveyance Facility and in securing new supplies like Sites Reservoir. Additionally, the RUWMP participating agencies continue to implement water conservation measures and increase use of recycled water usage to reduce groundwater demand. These programs are described in Chapter 3 of the RUWMP.

In its WSCP, DWA has the option of identifying short-term supply augmentation actions that would be taken during a shortage. These actions are intended to be separate from the long-range planning efforts to sustainably manage the groundwater basin. The short-term supply augmentation measures that could be implemented are presented in Table 3.

**Table 3. Supply Augmentation Actions**

<b>Shortage Level</b>	<b>Supply Augmentation Methods and Other Actions by Water Supplier</b>	<b>Expected Relative Impact</b>	<b>Additional Explanation or Reference</b>
1 - 6	Exchanges	Medium	Emergency connections with neighboring agencies could be activated or constructed to help exchange water with adjoining systems.
5	New recycled water	Medium	In areas where recycled water supply is available, customers could be mandated to use recycled water and cease use of potable water.
6	Other actions	Medium	Additional non-potable water sources such as new shallow groundwater wells or expanded use of non-potable water sources.

#### 4.2 Demand Reduction Actions and Mandatory Use Restrictions

The RUWMP participating agencies have aligned their demand reduction actions to the greatest extent possible, while allowing each agency flexibility needed to address unique characteristics. The agencies conducted public workshops to gather input on actions that could be taken during a water shortage. The input from stakeholders was used to select and prioritize actions that reflected the values of the community. Key elements of the input included:

- The importance of recognizing the conservation efforts that many customers have already made and not imposing requirements for all customers to meet the same percentage reduction in water use.
- The importance of involving Homeowner Associations (HOAs) to help implement and communicate response actions to individuals.
- A balanced program should include incentives (such as expanded rebates for turfgrass removal) as well as penalties (such as drought rates).
- A range of approaches is needed to communicate with customers and end users, including social media, web sites, bill inserts, presentations, and virtual tours, ideally in multiple languages.

The demand reduction actions that could be implemented at each shortage level are shown in Table 4. During a shortage, DWA may implement some or all of the actions as needed, depending on actual conditions.

**Table 4. Demand Reduction Actions**

Shortage Level	ID	Demand Reduction Actions	Expected Relative Impact	Penalty or Enforcement
1	1.1	Water flows onto adjacent property, non-irrigated areas, private and public walkways, roadways, parking lots, or parking structures is prohibited.	Low	Yes
	1.2	Using any water in a fountain or other decorative water feature is prohibited, unless the water recirculates.	Low	Yes
	1.3	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.	Low	Yes
	1.4	Spray irrigation of outdoor landscapes during and within 48 hours after rainfall of 0.10 inches is prohibited.	Low	Yes
	1.5	Using a hose to wash a vehicle, windows, or solar panels is prohibited unless an automatic shut-off nozzle or pressure washer is used.	Low	Yes
	1.6	Broken sprinklers shall be repaired within five business days of notification by agency, and leaks shall be repaired as soon as practical.	Low	Yes
	1.7	Hotels will provide guests the option of choosing not to have towels and linens laundered daily.	Low	Yes
	1.8	Draining and refilling of private swimming pools is discouraged, unless necessary for health and safety or repairs.	Low	No
	1.9	The Agency will discourage overseeding.	Low	No
	1.10	The Agency will provide rebates for landscape efficiency.	High	No
	1.11	The Agency will provide rebates for indoor water use efficiency.	Medium	No
	1.12	The Agency shall offer water use surveys/audits.	Medium	No
2	2.1	Outdoor water use is prohibited during daylight hours for spray irrigation except for leak checks or with an agency approved conservation alternative plan.	Medium	Yes
	2.2	Restaurants and other eating establishments shall not provide drinking water to patrons, except upon request.	Low	Yes
	2.3	The Agency will actively discourage overseeding.	Medium	No
	2.4	Agency shall expand public information campaign.	Medium	No
	2.5	Agency shall increase water waste patrols.	Medium	Yes
	2.6	Agency shall reduce hydrant and dead-end line flushing.	Low	No
3	3.1	Outdoor water use is allowed only three days a week for spray irrigation (Monday, Wednesday, and Friday).	High	Yes
	3.2	Drip or subterranean irrigation is allowed seven days per week, during non-daylight hours.	Medium	Yes
	3.3	Commercial nurseries are to use water only on alternate days during non-daylight hours for outside operations.	Low	Yes

# Water Shortage Contingency Plan

Shortage Level	ID	Demand Reduction Actions	Expected Relative Impact	Penalty or Enforcement
	3.4	Decorative ponds, non-irrigation system golf course water hazards, fountains, and other waterscape features are not to be filled or replenished.	Low	Yes
	3.5	No filling of swimming pools or landscaping ponds unless necessary for health and safety or leak repair.	Low	Yes
	3.6	Commercial car washes must use recycled water or recirculating water systems.	Medium	Yes
	3.7	Spray irrigation of medians and parkways is prohibited.	Medium	Yes
	3.8	The Agency will encourage counties, cities, Homeowners Associations (HOAs) and other enforcement agencies to suspend code enforcement and fines for brown turfgrass areas.	Low	No
	3.9	The Agency will strengthen customer billing messages with use comparisons.	Medium	No
	3.10	The Agency will implement water use audits targeted to key customers to ensure compliance with directives.	Medium	No
	3.11	The Agency will expand rebate programs.	Medium	No
4	4.1	Turfgrass landscapes may not be watered except where subterranean or non-potable water systems are used.	High	Yes
	4.2	No new turf landscaping shall be installed.	N/A	Yes
	4.3	The Agency shall consider implementing its drought rate surcharge.	High	Yes
	4.4	The Agency will expand public information campaign.	Medium	No
5	5.1	Watering turfgrass is prohibited.	High	Yes
	5.2	The use of misting systems is prohibited.	Medium	Yes
	5.3	Turfgrass at parks and school grounds may water with recycled water or not at all.	Medium	Yes
	5.4	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.	Medium	Yes
	5.5	Trees, desert plants and shrubs may be watered only with drip, subterranean or non-adjustable bubbler irrigation systems during non-daylight hours.	High	Yes
	5.6	Outdoor water use for grading or development is prohibited.	High	Yes
	5.7	The Agency will impose moratorium or net zero demand on new connections.	N/A	Yes
	5.8	The Agency will not issue new construction meters, and water service through construction meters will not be available.	N/A	Yes
6	6.1	The Agency will implement mandatory rationing.	High	Yes
	6.2	Outdoor water use is prohibited.	High	Yes
	6.3	Restaurants must use disposable cups, plates, and utensils.	High	Yes
	6.4	Commercial nurseries shall discontinue all use of potable water for watering and irrigation.	Low	Yes
	6.5	Watering of livestock is permitted as necessary.	N/A	No

### 4.3 Operational Changes

DWA has identified potential operational changes that could be made to help address a short-term gap between demands and available supplies. These include improved monitoring and analysis of customer water usage, reductions in flushing of hydrants and dead-end lines, and use of emergency connections with neighboring water agencies. Some of the potential actions are included in Table 4. DWA may also expedite planned system improvement projects that include reduction in water loss (e.g., replacement of water mains that are experiencing higher rates of leaks and breaks).

### 4.4 Additional Mandatory Restrictions

DWA has identified a series of restrictions that could be implemented at different shortage levels. These restrictions are included in the demand reduction actions in Table 4.

### 4.5 Emergency Response Plan

The Water Code requires that an agency's WSCP address catastrophic water shortages and plans to address them. This information can be addressed in the agency's Emergency Response Plan (ERP). DWA's ERP contains sensitive information related to potential vulnerabilities or impacts of natural disasters or malevolent acts. Therefore, these documents are not typically made publicly available. DWA's plan outlines specific disaster-related procedures to guide staff in responding efficiently to catastrophic interruptions of water supply.

DWA collaborates on planning efforts, including emergency response, through the Coachella Valley Regional Water Management Group (CVRWMG). In addition, CVWD, DWA, IWA, and MSWD are members of the California Water/Wastewater Agency Response Network (CalWARN), which supports and promotes emergency preparedness. More information about CalWARN is available at their web site at [www.calwarn.org](http://www.calwarn.org).

The region's imported water supplies from the Colorado River and the SWP could be disrupted by an earthquake. Because the agencies use local groundwater to meet urban demands, the agencies could continue to meet short term urban demands with groundwater production. The agencies have installed backup generators at key water production facilities to allow continued operation during a power outage.

DWR has plans in place to make emergency repairs to the SWP, and MWD has plans in place to make emergency repairs to the CRA. CVWD has plans to make emergency repairs to the Coachella Canal. CVWD staff receives regular Incident Command System (ICS) training through the Federal Emergency Management Agency (FEMA), and drills are conducted routinely. CVWD remotely monitors the status of most key facilities at CVWD headquarters, which enables it to detect areas affected by disasters. RUWMP participating agencies also participate in ICS training and regularly monitor key water facilities remotely.

If imported water supplies were disrupted for an extended period, it would reduce the water supply available for replenishment of the groundwater basin. DWA would implement levels of this WSCP as needed if pumping needed to be decreased while imported water supplies were interrupted.

### 4.6 Seismic Risk Assessment and Mitigation Plan

Water Code Section 10632.5 requires the RUWMP participating agencies to assess seismic risk to water supplies as part of their WSCP. The code also requires a mitigation plan for managing seismic risks. In lieu of conducting their own seismic risk assessment, which can be a lengthy process, suppliers can comply with the Water Code requirement by submitting the relevant local hazard mitigation plan or multi-hazard mitigation plan.

The Riverside County Local Hazard Mitigation Plan (LHMP) was updated in 2018. The Riverside County LHMP is available on the Riverside County web site at <https://rivcoemd.org/LHMP>. The Riverside County

LHMP includes an assessment of the region's vulnerability to a broad range of hazards, including earthquakes. It also describes mitigation strategies and actions to reduce the impacts of a seismic event. The RUWMP participating agencies continue to include seismic risk assessment in their planning process for system improvements.

## **5.0 Communication Protocols**

Timely and effective communication is a key element of WSCP implementation. DWA will need to inform customers, the general public, and other government entities of WSCP actions taken during a water shortage (either one determined by the Annual Assessment, an emergency, catastrophic, or other event). An overview of planned communication approaches is provided in Table 5. These protocols have been aligned between the RUWMP participating agencies where possible, but some are tailored to the needs of DWA's service area. DWA will adjust its communication strategy as needed to address issues that are impacting the entire service area or limited areas.

Table 5. Communication Plan Outline

At all times	Level 1  Up to 10% Voluntary Conservation	Level 2  Up to 20% Mandatory Conservation	Levels 3 and 4  Up to 30% or 40% Mandatory Conservation	Levels 5 and 6  Up to 50% or Over 50% Mandatory Conservation
Standard outreach efforts in effect (media relations, social media, website)	Update message platform to reflect conditions, DWA’s response, and needed actions from public	Update campaign and messages to generate immediate actions/behaviors by public, include information on enforcement actions	Update campaign and messages to raise awareness for more severe water-saving actions/behaviors by public, highlight need for reduced outdoor water use	Update campaign and messages to reflect extreme or emergency condition and likely need to focus water use on health/safety needs
Promote ongoing Water Use Efficiency (WUE) programs and tools and partnerships designed to achieve long-term water management goals	Announce status change to key stakeholders and general public (e.g., News release, social media, etc.)	Announce status change to key stakeholders and general public (e.g., News release, social media, etc.)	Announce status change to key stakeholders and general public (e.g., News release, social media, etc.)	Announce emergency status to key stakeholders and general public (e.g., News release, social media, etc.)
Standard coordination with MWD and regional partners	Include increased conservation messages on website and in standard outreach efforts; provide regular condition updates to stakeholders/media	Supplement Level 1 activities with additional tactics as needed; provide regular condition updates to stakeholders/media	Supplement Level 2 outreach with additional tactics as needed; provide regular updates to stakeholders/media on conditions	Supplement Level 3-4 outreach with additional tactics as needed; provide regular condition updates to stakeholders/media on conditions
Board reports on public communication and water-use efficiency outreach activities at least annually	Enhance promotion of ongoing WUE programs/tools; deploy targeted advertising	Conduct issue briefings with elected officials, other key civic and business leaders	Conduct specialized outreach to HOAs and local organizations	Suspend promotion of long-term WUE programs/tools to focus on imminent needs
	Initiate regular Board reports on campaign efforts	Increase promotion of ongoing WUE programs/tools	Promote available water assistance resources for vulnerable populations; specialized outreach to impacted industries	Continue enhanced coordination with neighbor agencies and local/state/federal policy makers as needed (e.g. daily or weekly briefings or email updates, etc.)

## 6.0 Compliance and Enforcement

This section describes how DWA will ensure compliance with and enforce provisions of the WSCP. The RUWMP participating agencies have worked together to align their policies where possible, but each agency implements its compliance and enforcement actions within its service area.

### 6.1 Penalties

The penalties that could be imposed for non-compliance are summarized in Table 6.

**Table 6. Enforcement Actions**

Water Shortage Level	First Violation	Second Violation (within 12 months)	Third Violation (within 12 months)	Subsequent Violations	Additional Information
All	<p>Single-family residence: \$50 civil penalty</p> <p>All others: \$100 civil penalty</p> <p>First penalties may be removed through participation in an incentive program at staff discretion.</p>	<p>Single-family residence: \$100 civil penalty</p> <p>All others: \$200 civil penalty</p>	<p>Single-family residence: \$250 civil penalty</p> <p>All others: \$500 civil penalty</p>	<p>Single-family residence: \$250 civil penalty</p> <p>All others: \$500 civil penalty</p>	<p>DWA staff is authorized to discontinue water service for water waste violations.</p> <p>DWA could pursue criminal charges for violation.</p> <p>Severe or persistent violations may be considered a misdemeanor. Conviction of a violation of could result in imprisonment in the County jail for up to 30 days, a fine of up to \$1000, or both such fine and imprisonment.</p>

### 6.2 Appeals and Exemption Process

This section describes the appeals and exemption processes. Where feasible, specific exemptions can be identified and defined. Where not feasible, the process to appeal or obtain an exemption should be detailed.

Any water user violating the regulations and restrictions on water use may receive a written notice for the violation. The water user shall have seven days from receipt of the notice to submit a written request for a hearing. If no hearing is requested, or at the hearing it is determined that the water user has committed a violation, a civil penalty may be levied.

The government codes and ordinances that are used to implement these policies and processes are discussed in Section 7.

## 7.0 Legal Authorities

This section describes the legal authorities that DWA relies upon to implement the shortage response actions and the associated enforcement actions.

DWA's Ordinance No. 65 establishes its Water Conservation Plan and was adopted March 1, 2016.



## Water Shortage Contingency Plan

DWA is in the process of updating the ordinance to reflect the contents of this WSCP.

A copy of the legal authority is included in Appendix A.

In accordance with Water Code Chapter 3 (commencing with Section 350) of Division 1 general provisions regarding water shortage emergencies, DWA shall declare a water shortage emergency in the event of a catastrophic interruption in supply.

DWA shall coordinate with any city or county within which it provides water supply services for the possible proclamation of a local emergency under California Government Code, California Emergency Services Act (Article 2, Section 8558). Including a list of and contacts for all cities or counties for which the RUWMP participating agencies provide service in the WSCP, along with developed coordination protocols, can facilitate compliance with this section of the Water Code in the event of a local emergency as defined in subpart (c) of Government Code Section 8558.

These cities and counties are summarized in Table 7.

**Table 7. City and County Coordination on Proclamation of Emergencies**

City or County	Contact	CVWD	CWA	DWA	IWA	MDMWC	MSWD
Imperial County	Office of Emergency Services	X					
Riverside County	Emergency Management Department	X	X	X	X	X	X
City of La Quinta	Emergency Management Division	X			X	X	
City of Indio	Emergency Services Coordinator	X	X		X		
City of Coachella	Emergency Services Coordinator	X	X		X		
City of Palm Desert	Emergency Services Coordinator	X					
City of Cathedral City	Emergency Manager	X		X			
City of Indian Wells	Emergency Services Coordinator	X					
City of Rancho Mirage	Emergency Services Coordinator	X					
City of Palm Springs	Emergency Management Coordinator			X			X
City of Desert Hot Springs	Emergency Services Coordinator			X			X

## 8.0 Financial Consequences of WSCP

This section describes the anticipated financial consequences to DWA of implementing the WSCP. The description includes potential reductions in revenue due to lower water sales and increased expenses associated with implementing the shortage response actions.

Potential financial impacts of implementing the WSCP could include:

- Reduced revenue from reduced water use
- Increased staff costs for tracking, reporting, patrolling, and enforcing restrictions
- Economic impacts associated with water-dependent businesses in the service area

Potential mitigation measures include:

- Triggering of drought rate structures or surcharges
- Using financial reserves
- Reducing operation and maintenance expenses (expenses related to source of supply and pumping will fall due to reduced water production)
- Deferring capital improvement projects
- Reducing future projected operation and maintenance expenses
- Increasing fixed readiness-to-serve charge
- Increasing commodity charge and water adjustment rates to cover revenue shortfalls
- Seeking alternative source of funding, such as state or federal grants or loans
- Other financial management mechanisms

DWA will monitor financial conditions during a water shortage and take appropriate actions as needed. DWA maintains financial reserves that can be used to continue operations during a period of reduced water sales. DWA has the ability to increase water rates or implement a surcharge to increase revenues from water sales.

## 9.0 Monitoring and Reporting

This section describes how DWA will monitor and report on implementation of the WSCP. DWA will gather data on key water use metrics and use the data to evaluate the effectiveness of response actions in achieving their intended water use reduction purposes. DWA will also gather data on customer compliance to evaluate the effectiveness of enforcement actions. DWA will gather and report data at frequencies adequate to meet reporting requirements established by the State Water Resources Control Board and other government agencies. The specific reporting requirements are expected to continue to change over the next five years.

DWA will monitor water use by customers using billing systems and operational control systems to monitor production and consumption. Each customer is metered, and billing records will be compiled and used to observe trends in water consumption. Each groundwater well and water connection point is also metered, and production records will be used to observe trends in water production. Levels in reservoirs can be monitored using the operational control systems to help identify potential high usage or leaks. DWA staff may also perform field visits and record observations to monitor water use and identify potential issues for follow-up.

The consumption records will be aggregated by customer class to evaluate response actions and identify potential additional measures.

## 10.0 WSCP Refinement Procedures

DWA will monitor the implementation of this plan to evaluate its effectiveness as an adaptive management tool. The monitoring and reporting program described in Section 9 will provide information

on the effectiveness of the shortage response actions during any shortage levels that may be invoked. If DWA determines that the shortage response actions are not effective in producing the desired results, DWA will initiate a process to refine the WSCP. DWA will consider the addition of new shortage response actions, or changing the levels when shortage response actions are implemented. Suggestions for refinements will be collected from DWA staff, customers, industry experts, and the general public. The RUWMP participating agencies will share data and suggestions for refinement to identify opportunities to increase the effectiveness of the WSCP while maintaining alignment with other agencies in the region when possible.

### **11.0 Special Water Feature Distinction**

The RUWMP participating agencies have distinguished swimming pools and spas as recreational water features, while non-pool and non-spa water features are considered decorative water features. This distinction is used in the shortage response actions because decorative water features have the potential to use recycled water, while most pools and spas (recreational water features) use potable water for health and safety considerations. However, this distinction does not apply to the hot mineral spring pools and spas throughout the Desert Hot Springs area; while they are recreational, they also do not rely on potable water.

### **12.0 Plan Adoption, Submittal, and Availability**

DWA adopted this WSCP with the 2020 RUWMP. The RUWMP and WSCP were made available for public review during May and June of 2021. A public hearing was held on June 15, 2021 to allow public input on the draft RUWMP and the WSCP.

DWA's governing board adopted the RUWMP and the WSCP at a meeting on June 15, 2021. The resolution of adoption is included as Appendix B.

This WSCP was submitted to DWR through the WUEData portal before the deadline of July 1, 2021. This WSCP was made available to the public on DWA's web site. Notice was provided to cities and counties in the service area that the WSCP was available on DWA's web site.

If DWA identifies the need to amend this WSCP, it will follow the same procedures for notification to cities, counties and the public as used for the RUWMP and for initial adoption of the WSCP. The draft amended WSCP will be made available for public review, and DWA's governing board will hold a public hearing to receive comments on the draft amended WSCP. Once DWA's governing board adopts the amended WSCP, the amended plan will be submitted to DWR and the California State Library, and it will be made available to the public and the cities and counties in the service area through placement on DWA's web site.

## **Appendix A. Legal Authority**

## **Appendix B. Resolution of Adoption**

**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.

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Kristin Bloomer, President

ATTEST:

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Joseph K. Stuart, Secretary-Treasurer



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## Appendix C: Demonstration of Reduced Delta Reliance

(Appendix L to 2015 UWMP)

## Coachella Valley Regional Urban Water Management Plan

### Quantifying Regional Self-Reliance and Reduced Reliance on Water Supplies from the Delta Watershed

June 2021

## 1 Background

Under the Sacramento-San Joaquin Delta Reform Act of 2009, state and local public agencies proposing a covered action in the Delta, prior to initiating the implementation of that action, must prepare a written certification of consistency with detailed findings as to whether the covered action is consistent with applicable Delta Plan policies and submit that certification to the Delta Stewardship Council. Anyone may appeal a certification of consistency, and if the Delta Stewardship Council grants the appeal, the covered action may not be implemented until the agency proposing the covered action submits a revised certification of consistency, and either no appeal is filed, or the Delta Stewardship Council denies the subsequent appeal.

An urban water supplier that anticipates participating in or receiving water from a proposed covered action such as a multi-year water transfer, conveyance facility, or new diversion that involves transferring water through, exporting water from, or using water in the Delta should provide information in their 2015 and 2020 Urban Water Management Plans (UWMPs) that can then be used in the covered action process to demonstrate consistency with Delta Plan Policy WR P1, Reduce Reliance on the Delta Through Improved Regional Water Self-Reliance (WR P1).

WR P1 details what is needed for a covered action to demonstrate consistency with reduced reliance on the Delta and improved regional self-reliance. WR P1 subsection (a) states that:

*(a) Water shall not be exported from, transferred through, or used in the Delta if all of the following apply:*

- (1) One or more water suppliers that would receive water as a result of the export, transfer, or use have failed to adequately contribute to reduced reliance on the Delta and improved regional self-reliance consistent with all of the requirements listed in paragraph (1) of subsection (c);*
- (2) That failure has significantly caused the need for the export, transfer, or use; and*
- (3) The export, transfer, or use would have a significant adverse environmental impact in the Delta.*

WR P1 subsection (c)(1) further defines what adequately contributing to reduced reliance on the Delta means in terms of (a)(1) above.

*(c)(1) Water suppliers that have done all the following are contributing to reduced reliance on the Delta and improved regional self-reliance and are therefore consistent with this policy:*

*(A) Completed a current Urban or Agricultural Water Management Plan (Plan) which has been reviewed by the California Department of Water Resources for compliance with the applicable requirements of Water Code Division 6, Parts 2.55, 2.6, and 2.8;*

*(B) Identified, evaluated, and commenced implementation, consistent with the implementation schedule set forth in the Plan, of all programs and projects included in the Plan that are locally cost effective and technically feasible which reduce reliance on the Delta; and*

*(C) Included in the Plan, commencing in 2015, the expected outcome for measurable reduction in Delta reliance and improvement in regional self-reliance. The expected outcome for measurable reduction in Delta reliance and improvement in regional self-reliance shall be reported in the Plan as the reduction in the amount of water used, or in the percentage of water used, from the Delta watershed. For the purposes of reporting, water efficiency is considered a new source of water supply, consistent with Water Code section 1011(a).*

The analysis and documentation provided below include all the elements described in WR P1(c)(1) that need to be included in a water supplier's UWMP to support a certification of consistency for a future covered action.

The analysis presented here was developed on behalf of the six agencies participating in the 2020 Coachella Valley Regional Urban Water Management Plan (RUWMP). These six agencies include:

- Coachella Valley Water District
- Coachella Water Authority
- Desert Water Agency
- Indio Water Authority
- Mission Springs Water District
- Myoma Dunes Mutual Water Company

This analysis is based on the water used to meet demands throughout the Coachella Valley.

## **2 Methodology**

As stated in WR P1(c)(1)(C), the policy requires that, commencing in 2015, UWMPs include expected outcomes for improved regional self-reliance and measurable reduction in Delta reliance. WR P1 further states that those outcomes shall be reported in the UWMP as the reduction in the amount of water used, or in the percentage of water used, from the Delta. The expected outcomes for regional self-reliance and reduced Delta reliance were developed using the approach and guidance described in Appendix C of DWR's Urban Water Management Plan Guidebook 2020 issued in March 2020 (Guidebook Appendix C).

The methodology used to determine improved regional self-reliance and reduced Delta reliance is consistent with the approach detailed in DWR's UWMP Guidebook Appendix C, including the use of

narrative justifications for the accounting of supplies and the documentation of specific data sources. Some of the key assumptions include:

- All data were obtained from the current 2020 RUWMP, UWMPs from previous years, the Integrated Regional Water Management Plan, the Draft Indio Subbasin Alternative Plan Update, or the Draft Mission Creek Subbasin Alternative Plan Update. Demands represent average or normal water year conditions.
- All analyses were conducted at the service area level, and all data reflect the total contributions of the agencies as well as their customers.

To calculate the expected outcomes for improved regional self-reliance and reduced Delta reliance, a baseline is needed to compare against. This analysis uses a normal water year representation of 2010 as the baseline, which is consistent with the approach described in the Guidebook Appendix C.

### **3 Demonstration of Regional Self-Reliance**

#### *Demands without Water Use Efficiency*

In alignment with the Guidebook Appendix C, this analysis uses normal water year demands, rather than normal water year supplies to calculate expected outcomes in terms of the percentage of water used. Using normal water year demands serves as a proxy for the amount of supplies that would be used in a normal water year, which helps alleviate issues associated with how supply capability is presented to fulfill requirements of the UWMP Act versus how supplies might be accounted for to demonstrate consistency with WR P1.

Because WR P1 considers water use efficiency savings a source of water supply, water suppliers that do not explicitly quantify water use efficiency savings in their UWMPs can calculate their embedded water use efficiency savings based on changes in forecasted per capita water use since the baseline. As explained in the Guidebook Appendix C, water use efficiency savings must be added back to the normal year demands to represent demands without water use efficiency savings accounted for; otherwise the effect of water use efficiency savings on regional self-reliance would be overestimated. Table C-1 shows the results of this estimation. Supporting narrative and documentation for the data shown in Table C-1 are provided below.

#### Demands with Water Use Efficiency

The demands shown in Table C-1 represent the water demands for the region, compiled from the previous documents mentioned above and current projections. .

#### Population

Population was estimated using the previous UWMPs and the regional growth forecast prepared by the Southern California Association of Governments (SCAG).

#### Estimated Water Use Efficiency Since Baseline

Calculated using “Potable Demands with Water Use Efficiency” divided by “Population” and then calculating Estimated Water Use Efficiency Since Baseline by comparing with 2010 Per Capita Water Use.

#### Water Demands without Water Use Efficiency

Calculated by adding “Demands with Water Use Efficiency” to “Estimated Water Use Efficiency Since Baseline.”

#### *Supplies Contributing to Regional Self-Reliance*

For a covered action to demonstrate consistency with the Delta Plan, WR P1 subsection (c)(1)(C) states that water suppliers must report the expected outcomes for measurable improvement in regional self-reliance. Table C-3 shows expected outcomes for supplies contributing to regional self-reliance both in amount and as a percentage. The numbers shown in Table C-3 represent efforts to improve regional self-reliance for all agencies and include the total contributions of the agencies and their customers. Supporting narratives and documentation for the data shown in Table C-3 are provided below.

#### Water Use Efficiency

The water use efficiency information shown in Table C-3 is taken directly from Table C-1.

#### Water Recycling

Estimates of water recycling volumes are based on previous UWMPs and current projections.

#### Local and Regional Water Supply and Storage Programs

The local and regional water supply and storage programs data shown in Table C-3 represent estimates by the participating agencies.

#### *Conclusions*

The results shown in Table C-3 demonstrate that the agencies are measurably improving regional self-reliance. In the long-term (2045), the expected outcome for normal water year regional self-reliance is an increase of approximately 17 percentage points from the 2010 baseline. The results show that as a region, the agencies and their customers are measurably reducing reliance on the Delta and improving regional self-reliance.

## **4 Demonstration of Reduced Reliance on the Delta**

The agencies reduce reliance on the Delta through investments in non-Delta water supplies, local water supplies, and regional and local demand management measures. For reduced reliance on supplies from the Delta Watershed, the data used in this analysis represent the total regional efforts of the agencies and their customers.

#### *Calculation of Reliance on Water Supplies from the Delta Watershed*

The calculation of reliance on water supplies from the Delta watershed, shown in Table C-4, is based on the following assumptions. The agencies’ supplies from the Delta watershed include:



- CVP/SWP Contract Supplies
- Other Water Supplies from the Delta Watershed.

#### CVP/SWP Contract Supplies

The supply data shown in Table C-4 is for SWP Table A allocations to CVWD and DWA. These values are based on the combined Table A amount for CVWD and DWA (194,100 AFY) and the historical average reliability as published in the SWP Delivery Capability Report.

#### Other Water Supplies from the Delta Watershed

Because this document demonstrates reduced reliance on the Delta and could be used to help support the approval of a future project, these supplies do not include any potential future projects that could be covered actions.

#### Change in Supplies from the Delta Watershed

Calculated by adding “CVP/SWP Contract Supplies” and “Other Water Supplies from the Delta Watershed” to get total Water Supplies from the Delta Watershed and calculates changes from the 2010 baseline.

#### Percent Change in Supplies from the Delta Watershed

Divides “Water Supplies from the Delta Watershed” by “Demands without Water Use Efficiency” and calculates changes from the 2010 baseline.

#### *Conclusions*

The results shown in Table C-4 demonstrate that the agencies are measurably reducing reliance on supplies from the Delta watershed. In the long term (2045), the expected outcome for normal water year reliance on supplies from the Delta is a decrease of approximately 5 percentage points from the 2010 baseline. The results show that as a region, the agencies and their customers are measurably reducing reliance on the Delta and improving regional self-reliance.

## **5 UWMP Implementation**

In addition to the analysis and documentation described above, WR P1 subsection (c)(1)(B) requires that all programs and projects included in the UWMP that are locally cost-effective and technically feasible, which reduce reliance on the Delta, are identified, evaluated, and implemented consistent with the implementation schedule. WR P1 (c)(1)(B) states that:

*(B) Identified, evaluated, and commenced implementation, consistent with the implementation schedule set forth in the Plan, of all programs and projects included in the Plan that are locally cost effective and technically feasible which reduce reliance on the Delta[.]*

In accordance with Water Code Section 10631(f), water suppliers must already include in their UWMP a detailed description of expected future projects and programs that they may implement to increase the amount of water supply available to them in normal and single-dry water years and for a period of drought

lasting five consecutive years. The UWMP description must also identify specific projects, include a description of the increase in water supply that is expected to be available from each project, and include an estimate regarding the implementation timeline for each project or program.

The 2020 RUWMP summarizes the implementation plan and continued progress in developing a diversified water portfolio to meet the region's water needs.

## **6 2015 UWMP Appendix L**

The information contained in this appendix is also intended to be a new Appendix L attached to each agency's 2015 UWMP consistent with WR P1 subsection (c)(1)(C) (Cal. Code Regs. tit. 23, § 5003). The agencies provided notice of the availability of the draft 2020 RUWMP, 2021 WSCPs, and a new Appendix L to the 2015 UWMP and of a public hearing to consider adoption of the documents in accordance with CWC Sections 10621(b) and 10642, and Government Code Section 6066, and Chapter 17.5 (starting with Section 7290) of Division 7 of Title 1 of the Government Code. The public review drafts of the 2020 RUWMP, Appendix L to the 2015 UWMP, and the 2021 WSCPs were posted on each agency's website before the public hearings in June 2021. The notice of availability of the documents was published in local newspapers and was sent to cities and counties in each agency's service area. Copies of the notification letter sent to cities and counties are included in the 2020 RUWMP Appendix B. Thus, this Appendix C to the 2020 RUWMP, which was adopted with the 2020 RUWMP, will also be recognized and treated as Appendix L to each agency's 2015 UWMP.

Each agency held a public hearing for the draft 2020 RUWMP, draft Appendix L to the 2015 UWMP, and draft 2021 WSCP in June of 2021, at a regular Board of Directors meeting. Each agency's Board of Directors determined that the 2020 RUWMP and the 2021 WSCP accurately represent the water resources plan for the service area. In addition, each agency's Board of Directors determined that Appendix L to the 2015 UWMP (and Appendix C to the 2020 RUWMP) includes all of the elements described in Delta Plan Policy WR P1, Reduce Reliance on the Delta Through Improved Regional Water Self-Reliance (Cal. Code Regs. tit. 23, § 5003), which need to be included in a water supplier's UWMP to support a certification of consistency for a future covered action. The Board of Directors adopted the 2020 RUWMP, Appendix L to the 2015 UWMP, and the 2021 WSCP and authorized their submittal to the State of California. Copies of the resolutions are included in the 2020 RUWMP Appendix H.

Reduced Reliance Calculation - Data Template

Table C-1: Optional Calculation of Water Use Efficiency -To be completed if Water Supplier does not specifically estimate Water Use Efficiency as a supply

Water Use Efficiency Demands (Acre-Feet)	Baseline (2010)	2015	2020	2025	2030	2035	2040	2045 (Optional)
Water Demands with Water Use Efficiency Accounted For	670,396	577,233	591,136	622,594	633,243	643,736	651,535	658,561
Non-Potable Water Demands	473,083	419,852	418,469	418,722	416,275	413,828	410,616	407,405
Potable Demands with Water Use Efficiency Accounted For	197,313	157,381	172,667	203,872	216,968	229,908	240,919	251,156

Total Population	Baseline (2010)	2015	2020	2025	2030	2035	2040	2045
Population	481,800	496,853	507,951	592,237	639,654	687,782	734,493	781,710

Water Use Efficiency Since Baseline (Acre-Feet)	Baseline (2010)	2015	2020	2025	2030	2035	2040	2045 (Optional)
Per Capita Water Use (GPCD)	366	283	303	307	303	298	293	287
Change in Per Capita Water Use from Baseline (GPCD)		(83)	(62)	(58)	(63)	(67)	(73)	(79)
Estimated Water Use Efficiency Since Baseline (AF)		46,097	35,356	38,669	44,992	51,762	59,880	68,980

Table C-2: Calculation of Water Demands Without Water Use Efficiency

Total Water Demands (Acre-Feet)	Baseline (2010)	2015	2020	2025	2030	2035	2040	2045 (Optional)
Water Demands with Water Use Efficiency Accounted For	670,396	577,233	591,136	622,594	633,243	643,736	651,535	658,561
Reported Water Use Efficiency or Estimated Water Use Efficiency Since Baseline		46,097	35,356	38,669	44,992	51,762	59,880	68,980
Water Demands without Water Use Efficiency Accounted For	670,396	623,330	626,492	661,263	678,235	695,498	711,415	727,541

Table C-3: Calculation of Supplies Contributing to Regional Self-Reliance

Water Supplies Contributing to Regional Self-Reliance (Acre-Feet)	Baseline (2010)	2015	2020	2025	2030	2035	2040	2045 (Optional)
Water Use Efficiency	-	46,097	35,356	38,669	44,992	51,762	59,880	68,980
Water Recycling	14,268	13,349	13,398	17,013	23,933	25,713	27,913	30,213
Stormwater Capture and Use								
Advanced Water Technologies								
Conjunctive Use Projects								
Local and Regional Water Supply and Storage Projects	412,587	437,587	462,387	488,890	498,390	498,390	498,390	498,390
Other Programs and Projects the Contribute to Regional Self-Reliance	11,600	11,600	11,187	11,187	11,187	11,187		
Water Supplies Contributing to Regional Self-Reliance	438,455	508,633	522,035	555,759	578,502	587,052	586,183	597,583

Water Demands without Water Use Efficiency (Acre-Feet)	Baseline (2010)	2015	2020	2025	2030	2035	2040	2045 (Optional)
Water Demands without Water Use Efficiency Accounted For	670,396	623,330	626,492	661,263	678,235	695,498	711,415	727,541

Change in Regional Self Reliance (Acre-Feet)	Baseline (2010)	2015	2020	2025	2030	2035	2040	2045 (Optional)
Water Supplies Contributing to Regional Self-Reliance	438,455	508,633	522,035	555,759	578,502	587,052	586,183	597,583
Change in Water Supplies Contributing to Regional Self-Reliance		70,178	83,580	117,304	140,047	148,597	147,728	159,128

Percent Change in Regional Self Reliance (As Percent of Demand w/out WUE)	Baseline (2010)	2015	2020	2025	2030	2035	2040	2045 (Optional)
Percent of Water Supplies Contributing to Regional Self-Reliance	65.4%	81.6%	83.3%	84.0%	85.3%	84.4%	82.4%	82.1%
Change in Percent of Water Supplies Contributing to Regional Self-Reliance		16.2%	17.9%	18.6%	19.9%	19.0%	17.0%	16.7%

Table C-4: Calculation of Reliance on Water Supplies from the Delta Watershed

Water Supplies from the Delta Watershed (Acre-Feet)	Baseline (2010)	2015	2020	2025	2030	2035	2040	2045 (Optional)
CVP/SWP Contract Supplies	124,224	95,109	112,578	112,578	112,578	112,578	100,932	100,932
Delta/Delta Tributary Diversions								
Transfers and Exchanges								
Other Water Supplies from the Delta Watershed		651	651	651	651	651	651	651
Total Water Supplies from the Delta Watershed	124,224	95,760	113,229	113,229	113,229	113,229	101,583	101,583

Water Demands without Water Use Efficiency (Acre-Feet)	Baseline (2010)	2015	2020	2025	2030	2035	2040	2045 (Optional)
Water Demands without Water Use Efficiency Accounted For	670,396	623,330	626,492	661,263	678,235	695,498	711,415	727,541

Change in Supplies from the Delta Watershed (Acre-Feet)	Baseline (2010)	2015	2020	2025	2030	2035	2040	2045 (Optional)
Water Supplies from the Delta Watershed	124,224	95,760	113,229	113,229	113,229	113,229	101,583	101,583
Change in Water Supplies from the Delta Watershed		(28,464)	(10,995)	(10,995)	(10,995)	(10,995)	(22,641)	(22,641)

Percent Change in Supplies from the Delta Watershed (As a Percent of Demand w/out WUE)	Baseline (2010)	2015	2020	2025	2030	2035	2040	2045 (Optional)
Percent of Water Supplies from the Delta Watershed	18.5%	15.4%	18.1%	17.1%	16.7%	16.3%	14.3%	14.0%
Change in Percent of Water Supplies from the Delta Watershed		-3.2%	-0.5%	-1.4%	-1.8%	-2.2%	-4.3%	-4.6%

## Attachment 5

### DESERT WATER AGENCY 2015 URBAN WATER MANAGEMENT PLAN APPENDIX M REVISED TABLES IV-1 AND IV-2 JUNE 2021

In the original version of Tables IV-1 and IV-2, the system losses for years 2020-2040 were effectively "double-counted" in the potable water use totals for each of those years because the project water use for the single-family, commercial, and institutional sectors already included system losses. To correct this error, the quantities listed in the System Losses column for years 2020-2040 were subtracted from the Total Potable water use projections in the corresponding years, and the tables below have been adjusted accordingly.

TABLE IV-1 PAST, CURRENT, AND PROJECTED WATER DELIVERIES (AF/YR)							
Year	Water User Sectors	Potable Water Use <sup>(1)</sup>				Non-Potable Water Use	Total Potable <sup>(4)</sup>
		Single Family <sup>(2)</sup>	Commercial	Institutional	System Losses <sup>(3)</sup>	Recycled Water	
2010	# of accounts	18,520	2,602	295	---	8	21,417
	Deliveries	24,125	10,432	1,630	514	4,050	36,701
2015	# of accounts	19,181	2,621	271	---	9	22,073
	Deliveries	17,800	7,700	1,200	2,391	4,045	29,091
2020	# of accounts	19,347	2,730	304	---	10	22,381
	Deliveries	23,900	10,300	1,600	2,100	4,800	35,800
2025	# of accounts	20,312	2,866	319	---	11	23,497
	Deliveries	25,100	10,800	1,700	2,300	5,500	37,600
2030	# of accounts	21,008	2,965	330	---	12	24,303
	Deliveries	25,900	11,200	1,800	2,300	6,200	38,900
2035	# of accounts	21,188	2,990	333	---	12	24,511
	Deliveries	26,200	11,300	1,800	2,400	6,800	39,300
2040	# of accounts	21,543	3,040	339	---	12	24,922
	Deliveries	26,600	11,500	1,800	2,400	7,500	39,900

<sup>(1)</sup> Future projections of gross potable water demand are based on projections of DWA's total service area population (as described in **Section I.C.2** herein) and an estimated water use of 349 gallons per capita per day (gpcd), which is DWA's urban water use target (as described in **Section VIII.E** herein).

<sup>(2)</sup> Includes accounts and deliveries for lower-income households. Refer also to **Section 4.E** herein.

<sup>(3)</sup> Water losses in 2015 are based on the Water Audit Report for Calendar Year 2015, a copy of which is included in **Appendix I** herein. Projections of future system losses are based on the 1999-2015 average annual system loss of approximately 6%.

<sup>(4)</sup> Total potable water use for 2010 and 2015 is based on DWA's records. Total potable water use projected for years 2020-2045 includes only the sum of projected water use for Single-Family, Commercial, and Institutional sectors, because the projected water use by sector already accounts for system losses.

TABLE IV-2 TOTAL WATER USE (AF/YR)							
Water Use	2010	2015	2020	2025	2030	2035	2040
Total Recycled	4,050	4,045	4,800	5,500	6,200	6,800	7,500
Total Potable <sup>(1)</sup>	36,701	29,091	35,800	37,600	38,900	39,300	39,900
<b>Total</b>	<b>40,751</b>	<b>33,136</b>	<b>40,600</b>	<b>43,100</b>	<b>45,100</b>	<b>46,100</b>	<b>47,400</b>

<sup>(1)</sup> Future projections of gross potable water demand are based on projections of DWA's total service area population (as described in **Section I.C.2** herein) and an estimated water use of 349 gallons per capita per day (gpcd), which is DWA's urban water use target (as described in **Section VIII.E** herein).

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

**JUNE 15, 2021**

**RE: REQUEST BOARD APPROVAL OF THE INCLUSION OF DRAFT  
RULES AND REGULATIONS FOR RECYCLED WATER FACILITIES  
TO THE UPDATED TITLE 22 ENGINEERING REPORT FOR  
RECYCLED WATER FACILITIES**

In June 2016, the State Water Resource Control Board (SWRCB) adopted Order WQ 2016-0068-DDW. The purpose of this Order is to provide consistent regulations of all non-potable uses of recycled water statewide. Prior to this Order, general waste discharge requirements for recycled water discharge for golf course and landscape irrigation were regulated by Board Order 97-700, issued by the Regional Water Quality Control Board (RWQCB). As a result of the new 2016 Order, all recycled water user permits that were under Order 97-700 expired at the end of 2019. Enrollees covered under expired permits may continue discharging under the 97-700 Order until the applicable Regional Water Board issues a Notice of Applicability (NOA) to an Administrator per the terms of the 2016 Order.

Under Order 97-700, the RWQCB administered and enforced the permits of each recycled water customer. Under the new 2016 Order, the SWRCB, via the RWQCB, issues a permit to the Administrator. The Administrator then issues permits to its customers and enforces the regulations as specified under the Order. The Administrator is required to develop monitoring and reporting programs for each customer. Examples of monitoring and reporting programs include parameters such as recycled water flow, acreage applied, soil saturation, nuisance odors, off-site discharging, and on-site notification signage. The Administrator is required to submit the monitoring data to the RWQCB. The Administrator must also obtain enforcement authority for permits issued, in accordance with the California Water Code.

Since the Agency owns and operates the distribution facilities that provide recycled water to our customers, the RWQCB reached out to DWA in 2019 requesting that the Agency become the Administrator for our recycled water service customers. The first step in the process of becoming the Administrator is to submit an updated Title 22 Engineering Report to the State Water Board Division of Drinking Water (formerly the California Department of Health), to include Rules and Regulations for Recycled Water Facilities.

In June 2019, the Agency contracted with Krieger and Stewart to update the recycled water plant Title 22 Engineering Report and to also develop draft Rules and Regulations for Recycled Water Facilities for customers within the Agency's service area. The Title 22 Engineering Report had not been updated since the original 1988 report (also prepared by K&S), and the draft Rules and Regulations were to be created to address Administrator requirements.



Krieger and Stewart has completed the new Title 22 Engineering Report and draft Rule and Regulations for Recycled Water Facilities (Appendix D of the report). At this time, staff is requesting that the Board approve the inclusion of the Draft Rules and Regulations for Recycled Water Facilities in the updated Title 22 Engineering Report for Recycled Water Facilities. If approved, staff will then submit the Title 22 Engineering Report that includes the Draft Rules and Regulations for Recycled Water Facilities to the Division of Drinking Water for final approval.

Once the Title 22 report has been accepted by the Division of Drinking Water, the Agency will file a Notice of Intent (NOI) to the RWQCB for approval. The NOI will include the approved Title 22 Engineering Report and an Agency monitoring and reporting program. If approved, the RWQCB will issue a NOA recognizing the Agency as the Administrator for its customers at which time the Agency will begin the process of developing user permits, to include enforcement guidelines, for Board approval.

Staff recommends that the Board of Directors Approve the inclusion of the Draft Rules and Regulations for Recycled Water Facilities in the updated Title 22 Engineering Report for Recycled Water Facilities.

# DESERT WATER



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## ENGINEERING REPORT

### DESERT WATER AGENCY WATER RECYCLING FACILITIES PALM SPRINGS, CALIFORNIA

MAY 2021

Prepared by



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### APPENDICES

- Appendix A Title 22, California Code of Regulations, Section 60305
- Appendix B Waste Discharge Requirements, Order No. R7-2014-0008, with Monitoring and Reporting Program and Amendments
- Appendix C Desert Water Agency Ordinance No. 67: *Regulations Governing Recycled Water Service* (July 1, 2017)
- Appendix D Desert Water Agency Draft Rules and Regulations for Recycled Water Facilities
- Appendix E Facility Maps of Desert Water Agency Area Recycled Water Sites
- Appendix F Recycled Water Customer Contact Information



## SECTION I INTRODUCTION

This report has been prepared in accordance with *Guidelines for the Preparation of an Engineering Report for the Production, Distribution, and Use of Recycled Water* (SWRCB, March 2001). The purpose of an engineering report is to describe the manner by which a project will comply with the Water Recycling Criteria, which are contained in Title 22 of the California Code of Regulations (22CCR), Sections 60301 through 60355, inclusive.



## SECTION II DESERT WATER AGENCY RECYCLED WATER FACILITIES

### A. GENERAL

Desert Water Agency (DWA or the Agency) is a public agency that was formed in 1961 under Uncodified Act 9097, which authorizes the Agency to provide retail and wholesale water services, which include wastewater services and water reclamation; construct, maintain, and operate recreational facilities to any water reservoirs; exercise eminent domain; issue bonds; restrict water use in emergency situations such as drought; issue ordinances; generate power, and distribute imported water to offset groundwater extractions. DWA is governed by a five-member board of directors.

DWA's potable water service area is generally bounded on the north (from west to east) by the intersection of Interstate 10 and Highway 111 to Chino Canyon and the Whitewater River, on the east by the Whitewater River and the Coachella Valley Water District, on the south by the rugged Santa Rosa Mountains, and on the west by the rugged San Jacinto Mountains.

DWA owns and operates water recycling and distribution facilities to reclaim secondary effluent generated by the City of Palm Springs Wastewater Treatment Plant (CPS WTP) for reuse for golf course, park, school, and green belt irrigation. DWA's water recycling and distribution facilities include a Water Recycling Facility (WRF) and Distribution System. The WRF is located in the south half of the southwest quarter of Section 20, T4S R5E S.B.M. per **Figure 1**, attached.

The WRF was constructed in 1989 with an initial capacity of 5.0 Million Gallons per Day (MGD) with provisions to expand in 5.0 MGD increments to its ultimate capacity of 15.0 MGD. The facility was expanded in 1995 to its present capacity of 10.0 MGD. At this time, any additional expansions will be dependent upon CPS WTP flow and recycled water demands. Current average daily flow is approximately 4.1 MGD and peak high demand is approximately 8.2 MGD.

The tertiary treatment process at the facility consists of settling, coagulation/flocculation, clarification, filtration, and disinfection, in that order.

Secondary effluent discharged from the CPS WTP is diverted by gravity to the 1.9 MG and 0.5 MG Influent Equalizing Reservoirs. Secondary effluent is injected with alum and then polymer while



being pumped from the Influent Equalizing Reservoirs to the mix, flocculation, and splitter structure where flow is split equally to six Microfloc Products Trident Modules (treatment modules). Trident modules each consist of an adsorption clarifier followed by a deep bed "Mixed Media" filter. The filtered effluent is chlorinated, mixed, and then discharged to two 2.3 MG chlorine contact and recycled water storage reservoirs. Water from shallow groundwater wells is mixed with the recycled water when necessary. Thereafter, recycled water is delivered to recycled water users through recycled water transmission pipelines.

The WRF operates under the requirements of *Order No. R7-2014-0008, Waste Discharge Requirements for Desert Water Agency, Owner/Operator, Water Reclamation Facility, Palm Springs – Riverside County*, issued by the California Regional Water Quality Control Board, Colorado River Basin Region (Regional Board).

Recycled water delivered to golf courses, parks, and other landscaping customers conforms to 22CCR Section 60305 for non-restricted recreational impoundments. Specifically, the water shall be at all times adequately oxidized, coagulated, clarified, filtered and disinfected (see **Appendix A**). Recycled water delivered to dual-plumbed buildings additionally conforms to 22CCR Sections 60313-60316.

DWA signed a wastewater reclamation agreement with the City of Palm Springs, dated February 19, 1985, and a wastewater reclamation Memorandum of Understanding (MOU), dated June 12, 1985, whereby the City agreed to deliver secondary treated wastewater (clarified trickling filter effluent) to the DWA WRF for further treatment and distribution for beneficial reuse by DWA. DWA is responsible for all recycled water treatment and distribution-related activities, including construction, operation, maintenance, and repair.

## **B. RULES AND REGULATIONS**

Recycled water service is currently governed by DWA Ordinance No. 67: *Regulations Governing Recycled Water Service*, dated July 1, 2017 (**Appendix C**), which is enforceable by DWA (see **Figure 4** for a DWA Organizational Chart).



Pertinent personnel involved in the water recycling program are:

Name	Title	Responsibilities
Mark Krause	General Manager/Chief Engineer	Oversees all operations.
Steve Johnson	Assistant General Manager	Supervises Engineering and Operations Manager and approves plant operations
David Tate	Engineering and Operations Manager	Supervises Operations Supervisor and develops plant operations
Emmanuel Sarpong	Operations Supervisor	Manages operations department personnel implementing operation procedures and schedules
Jonathan Arredondo	Operation Technician Supervisor	Assists Operations Supervisor with implementing procedures

Detailed Draft Rules and Regulations for Recycled Water Facilities are set forth in **Appendix D**.

### C. PRODUCER – DISTRIBUTOR – USER

DWA is both the Producer and Distributor of the recycle water. Recycled water from the WRF is currently served to 10 Users:

- DWA Operations Center (1 service)
- DWA Water Recycling Facility (1 service)
- Demuth Park (1 service)
- Mesquite Country Club (1 service)
- Tahquitz Creek East Golf Course (1 service)
- Tahquitz Creek West Golf Course (1 service)
- Mid-Valley Parkway (1 service)
- Palm Springs High School (4 services)
- Escena Golf Club (1 service)
- Palm Springs Animal Shelter (Dual-Plumbed Building, 1 service)



## D. RAW WASTEWATER

The secondary treated wastewater from the CPS WTP is adequately oxidized wastewater (wastewater in which the organic matter has been stabilized, is non-putrescible, and contains dissolved oxygen) with an average turbidity of 8.6 (Nephelometric Turbidity Unit) NTU, a turbidity range of 3.0 to 17.6 NTU, and a 95th Percentile turbidity of 16.8 NTU. Additional water quality data are available in City reports to the Regional Board.

Effluent discharges from the CPS WTP are regulated by Order No. R7-2017-0013, issued by the Regional Board. Residential wastewater comprises approximately 66% of the wastewater contribution to the CPS WTP, with another 0.25% from one significant industrial user (Rayne Water Conditioning), and the remainder from commercial and small industrial users such as car washes, auto dealerships, vehicle maintenance facilities, and medical facilities. Order No. R7-2017-0013 does not require the City of Palm Springs to implement an Industrial Wastewater Pretreatment Program at this time. However, Order No. R7-2017-0013 includes a requirement to perform a TDS Source Control Report, which the City completed and submitted to the Regional Board in June 2018.

The Palm Springs Municipal Code, Title 15 Water and Sewers, Chapter 15.04, General Provisions, establishes regulations and procedures pertaining to the proper use and control of public sewers and the quality of industrial wastes and sewage discharged to the public sewers in the City (15.04.010; Palm Springs, 2018). Chapter 15.28, Sewer Use Regulations, contains local ordinances, and rules and regulations addressing wastewater discharges:

- *Section 020, Discharge of Polluted Waters:* Prohibits the discharge of industrial wastes or polluted waters, except where suitable treatment has been provided (15.28.020; Palm Springs, 2018).
- *Section 070, Prohibited and Regulated Wastes:* Allows the director of public works to require that dischargers implement preliminary treatment of their discharge to meet maximum discharge limits that are provided in subsection (a) of 15.28.070 (15.28.070(d)(2); Palm Springs, 2018).





## E. TREATMENT PROCESSES

Treatment processes and design criteria for the WRF are shown on attached schematic flow diagram (**Figure 2**) and **Table 1**. Process equipment (clarifiers and filters) are currently designed for 10.0 MGD capacity while piping and structures are designed to accommodate an ultimate 15.0 MGD capacity.

Secondary effluent discharged from the CPS WTP is diverted by gravity to the WRF Influent Equalizing Reservoirs No. 1 and 2 (IER #1 and IER #2) for storage and balancing to permit constant and continuous pumping to process units. Once these reservoirs are full, secondary effluent from the CPS WTP is automatically diverted to the CPS WTP Percolation Ponds by weir overflow. Secondary Effluent is normally diverted to IER #2 first, where additional settling and solids removal is achieved, along with storage. The settled secondary effluent is then diverted to IER #1 for additional storage.

Secondary effluent is pumped at a constant rate from the Influent Equalizing Reservoirs to the Mix, Flocculation and Splitter Structures (Mix/Floc Chambers) Nos. 1 and 2. Alum is injected at the pump suction and polymer is injected just prior to the Mix/Floc Chamber in which mixing and flocculation will occur utilizing a submersible variable speed mechanical mixer. Thereafter, flow is split equally by the two splitters to six Microfloc Products Trident Modules. Each Trident Module consists of one fully automated Microfloc Adsorption Clarifier and Microfloc deep bed Mixed Media Filter.

The Microfloc Adsorption Clarifier is an upflow clarifier containing coarse plastic "Adsorption Media" suitable for reducing influent turbidities from 3-50 NTU to 2-10 NTU (based on pilot studies). Clarified effluent is then filtered using Microfloc deep bed "Mixed Media".

Filtered effluent of 0.2 to 1.3 NTU turbidity is chlorinated, mixed, and discharged through diffuser piping within the Recycled Water Storage and Chlorine Contact Reservoir No. 1, and then through diffuser piping within the Recycled Water Storage and Chlorine Contact Reservoir No. 2. After contact time is achieved, recycled water is delivered to the various users through the Distribution System Pipeline by pumping. The Recycled Water Storage and Chlorine Contact Reservoirs are normally operated in series, but each can be independently removed from the system for maintenance.



The WRF turns on and off automatically depending upon the level in the effluent reservoirs. When reservoirs are full and the WRF shuts down, the secondary effluent from CPS WTP continues to fill the Influent Equalizing Reservoir. An automatic valve closes once the reservoir is full and the secondary effluent is automatically diverted to the CPS WTP percolation ponds via a weir overflow structure.

The WRF continuously monitors the treatment modules influent turbidity and filter effluent turbidity, just upstream of the Chlorine Contact Reservoirs. Chlorine residual is monitored after chlorine injection and also in each of the Chlorine Contact Reservoirs. The chemical dosage of alum is automatically adjusted based on filter effluent turbidity. The WRF is equipped with alarm set points and automatic controls for plant shutdown due to high filter effluent turbidity or low filter effluent chlorine residual. Alarms are telemetered to DWA's Operation Center for 24-hour emergency service. DWA also has the ability to continuously monitor the turbidity of secondary effluent being diverted into the influent equalization reservoir and to take composite samples for analyses.

There are standby pumps for influent, backwash, surface wash, and effluent pumping and standby chemical feed pumps for alum and polymer. Standby chlorine cylinders are equipped with automatic switchover devices. In addition, a standby chlorinator is available.

Six Trident modules have a combined capacity of 10.0 MGD. If any modules are out of service, the flow through the plant can be adjusted to match the capacity of the remaining modules in service.

Chemicals currently used, with dosages and points of application:

- Alum is currently fed using one or two (as determined by flow), each of which pumps at a rate of approximately 960 ml/min. Alum is applied at the influent pump suction.
- Polymer is currently fed with one pump at a maximum rate of approximately 60 ml/min into the 24" splitter structure inlet pipe
- Chlorine gas is currently fed by two injectors. The automatic side adjusts based on total chlorine residual. The manual side is currently set at 200 pounds/day. Both are fed into the anti-siphon chamber.



Alum is stored in HDPE tanks and totes on an outdoor concrete pad with secondary containment. Polymer stored in 50-gallon drums inside the chemical feed pump room.

Chlorine gas is stored in one-ton chlorine containers within the chlorine building, which is provided with automatic louvers and emergency scrubbers.

Between December 2018 and August 2019, influent turbidities ranged from 4.54 NTU to 17.57 NTU, with an average of 8.56 NTU. Effluent turbidities have ranged from 0.17 NTU to 0.79 NTU, with an average of 0.59 NTU.

Operation and Maintenance (O&M) Manuals are available in the Operations Building. O&M Manuals include manufacturer's manuals for each item of equipment and a plant manual assembled by Krieger & Stewart.

## **F. PLANT RELIABILITY FEATURES**

Secondary effluent from the CPS WTP is diverted to the WRF Influent Equalizing Storage Reservoir by gravity. If the WRF shuts down for any reason, secondary effluent continues to fill the reservoir. Once the reservoir is full, the flow is automatically diverted to the CPS WTP Percolation Ponds by weir overflow. The WRF, being fully automated, is automatically shut down if there is indication that discharge requirements are not being achieved or during a power outage.

Secondary effluent must first be pumped to the Mix/Floc Structure. Thereafter, flow through the WRF is by gravity. Power outage will cause a total plant shutdown, but no standby power has been provided since plant shutdown will not create unsatisfactory treatment or wastewater spills.

WRF influent turbidity, filter effluent turbidity, and chlorine residual are monitored continuously. The WRF is equipped with alarm set points and automatic controls for plant shutdown due to high filter effluent turbidity or low filter effluent chlorine residual. Chemical dosage of alum is automatically adjusted based on effluent turbidity.

All equipment has been designed with redundancy. Standby pumps are provided for influent, backwash, surface wash, and effluent pumping; standby chemical feed pumps are provided for



alum and polymer. Standby chlorine cylinders with automatic switchover and standby chlorinator are provided.

If a clarifier and filter (total six) are out of service, the flow through the plant will be reduced accordingly.

The WRF is manned approximately five hours each weekday; but operational conditions are continuously monitored. All alarm conditions, including Equalizing and Recycled Water Reservoir levels, are telemetered to the Agency Operations Center which has 24-hour emergency service. System failure alarms are transmitted via Clear SCADA to the Agency Operations Center, then relayed to standby personnel and supervisors.

## G. SUPPLEMENTAL WATER SUPPLY

When recycled water is not available in sufficient quantities, water can be supplied from two supplemental sources:

- Chlorinated groundwater from two shallow groundwater recovery (SGR) wells (1,200 gallons per minute (gpm) capacity each) located just easterly of the WRF is conveyed to the Recycled Water Storage and Chlorine Contact Reservoirs via a 12" diameter pipeline with an air gap at each connection point. Up to 3.4 MGD of supplemental supply is available from these wells.
- Water from DWA's domestic water system conveyed via an 8" pipeline connected to the 12" SGR pipeline with an 8" Reduced Pressure Backflow Prevention Device. A minimum of 3 MGD of supplemental supply is available from the domestic water system.

## H. MONITORING AND REPORTING

Monitoring and reporting is performed in accordance with the "Monitoring and Reporting Program No. 2014-0008" as appended to *Order No. R7-2014-0008* as issued by the Regional Board, and amended by the issuance of *Order No. WQ 2019-0036 EXEC* and *Order No. WQ 2019-0037 EXEC* (see **Appendix B**).



Grab samples for chlorine residual and coliform analyses are taken at points indicated on the attached schematic.

All continuous monitoring equipment, including the effluent turbidimeter, is calibrated per manufacturer's recommendations (every three months calibrate with laboratory standard and every week check zero). All calibrations and maintenance follow manufacturer's recommendations and use manufacturer's parts.

All sample analyses are performed by Babcock Laboratories of Riverside, CA, a certified analytical laboratory approved by the State Water Resources Control Board, Division of Drinking Water (DDW).

Annual volumetric reporting includes reporting of monthly data for:

- Monthly volume of wastewater produced (backwash, etc.)
- Monthly effluent recycled water discharged, including treatment level (tertiary) and discharge type (distribution to recycled water customers)
- Monthly volume of recycled water used by each customer
- Annual volume of recycled water use by category of reuse (landscape irrigation)

With the issuance of *Order No. WQ 2019-0036 EXEC*, priority pollutant monitoring is no longer required.

## I. CONTINGENCY PLAN

Inadequately treated effluent will be diverted to the Influent Equalizing Reservoir to undergo a second treatment. Conditions which would require an immediate diversion to take place are as follows:

1. Filter effluent turbidity exceeding 5.0 NTU.
2. Low filter effluent chlorine residual.



Diversion of effluent can be avoided in most cases by the shut-down of the influent flow to the filters (see schematic diagram). Effluent turbidity and chlorine residual are monitored at the discharge of the filters. Controls are provided which will automatically shut down the influent pumps if a high turbidity or low residual are detected. A power failure will additionally shut down the influent pumps. Shutdown of the influent pumps stops flow through the filter and subsequent discharge of filtered effluent to the Recycled Water Reservoirs. Service to customers will be maintained by activation of supplemental supplies as described in **Section G** herein.

Secondary effluent from the CPS WTP flows to one or both of the WRF Influent Equalizing Reservoirs until full. Thereafter, the secondary effluent will automatically be diverted to the CPS WTP Percolation Pond No. 1 by weir overflow. Thus, shutoff of pumps will not create flooding or a spill.

If inadequately treated secondary effluent is received from the CPS WTP, the affected Influent Equalizing Reservoir(s) will be isolated and drained to the waste pit. The secondary effluent will then be pumped back to the CPS WTP's headworks.

Alarms for high filter effluent turbidity and low chlorine residual are provided at the WRF and are telemetered to the Agency's Operations Center which has 24-hour emergency service.

If inadequately treated water is discharged into the onsite storage reservoirs, the water will be pumped out through the drain pipe sump pump to the onsite wastepit. The water is then pumped back to the City headworks.

If inadequately treated effluent is discharged through the Distribution System, the recycled water users, Regional Board, DDW, and Riverside County Health Department will be notified by telephone and in writing as soon as possible.

## J. TRANSMISSION AND DISTRIBUTION SYSTEM

The location of the WRF and Distribution System is shown on **Figure 3**. All potable water lines and recycled water lines within the recycled water service area are owned and operated by DWA. All sewer lines within the current recycled water service area (City of Palm Springs) are owned and operated by the City of Palm Springs. Sewer lines within potential expansion areas in Cathedral City are owned and operated by either the Coachella Valley Water District (east and north of the



Whitewater River Wash) or DWA (west and south of the Whitewater River Wash). The design, operation, and maintenance of the Distribution System will comply with the following documents:

- *Guidelines for the Distribution of Non-Potable Water, California Nevada Section AWWA*
- *Criteria for the Separation of Water Mains and Sanitary Sewers (DDW)*
- *Guidelines for Use of Reclaimed Water (DDW)*
- *Regulations Relating to Cross-Connections (Title 17, Chapter 5, Subchapter 1)*
- *Manual of Cross-Connection Control/Procedures and Practices (DDW)*

Compliance with these documents is described in detail in the attached draft of Desert Water Agency Rules and Regulations for Reclaimed Water Facilities (**Appendix D**).

## K. USE AREAS

The locations of the use areas are shown on **Figure 3**. Facility maps showing site boundaries, recycled water connections, storage and distribution facilities, public access areas, public access barriers, potable water facilities, onsite and nearby wells, location and type of signage, and cross-connection control methods for each individual use area are included in **Appendix E**.

All of the use areas utilize reclaimed water for turf and landscape spray irrigation. The direction of drainage is generally southeasterly and drainage is ultimately received by the Palm Canyon Wash and Whitewater River. Spray irrigation is typically conducted between the hours of 6:00 p.m. and 6:00 a.m. The groundwater underlying the proposed use areas is approximately 200 to 300 feet deep. The groundwater is of good quality, with an average TDS of approximately 370 mg/L, and is utilized by the Agency for municipal water supply. The soil underlying the proposed use areas is, in general, moderately dense to dense, poorly graded to well graded sands.

In cases where reclaimed water is to be stored on site at a proposed use area in a pond or impoundment, recreational use of the impoundment(s) is prohibited. Overflow of the impoundment(s) should occur very rarely and only under flood conditions.



The party(ies) responsible for the distribution and use of the recycled water at each site are listed in **Appendix F**.





**Table 1**  
**Water Reclamation Facilities**  
**Treatment Plant Design Criteria**

Process/Item	Criteria
<b>Plant Capacity</b>	
Phase I	5.0 MGD
Phase II (Current)	10.0 MGD
Phase III	15.0 MGD
<b>Influent Equalizing Reservoirs</b>	
Number	2
Type	No. 1: Welded Steel with Open Roof and Shade Balls No. 2: Rectangular Concrete with Metal Cover and Solids Collection
Dimensions	No. 1: 130 feet diameter No. 2: 33 x 135 feet
Depth	No. 1: 19 feet No. 2: 21.5 to 27 feet
Capacity	No. 1: 1.9 MG No. 2: 0.5 MG
<b>Influent Pumps</b>	
Number	3 duty (one with VFD control), 1 standby
Type	Vertical Turbine
Horsepower (each)	15 hp
Capacity (each)	1.67 MGD (1,158 gpm)
<b>Mix/Floc Structure</b>	
Number	2
Mixing Detention Time	5 minutes
Mechanical Mixer Type	Variable Speed
Flow Splitter: 3-way weir	Equal flow to each trident module
<b>Microfloc Products Trident Modules</b>	
Clarifier	
Type	Adsorption Clarifier
Number	6
Surface Area (each)	140 sf
Design Loading Rate	8.3 gpm/sf
Maximum Loading Rate	10.0 gpm/sf



**Table 1**  
**Water Reclamation Facilities**  
**Treatment Plant Design Criteria**

Process/Item	Criteria
<b>Microfloc Products Trident Modules (continued)</b>	
Filter	
Number	6
Surface Area	280 sf
Media Depth	30 inches
Media Type	Multimedia
Design Loading Rate	4.1 gpm/sf
Maximum Loading Rate	5.0 gpm/sf
Backwash Rate	15 to 25 gpm/sf
<b>Backwash Pumps</b>	
Number	1 duty, 1 standby
Type	Vertical Turbine
Capacity (each)	5,040 gpm
Horsepower (each)	100 hp
<b>Backwash Holding Tank</b>	
Volume	156,000 gallons
<b>Reclaimed Water Storage and Chlorine Contact Reservoirs</b>	
Number	2
Type	Welded Steel with Roof
Diameter	190 feet
Minimum Depth	3 feet
Maximum Depth	13.0 feet
Capacity	2.3 MG
Contact time at minimum depth and 5.0 MGD	183 minutes each, total 366 minutes total
Contact time at minimum depth and maximum discharge 10.0 MGD	90 minutes each, 180 minutes total
<b>Reclaimed Water Pumps</b>	
Number	3 duty (one with VFD control), 1 standby
Type	Vertical Turbine
Capacity (each)	3 at 3,200 gpm, 1 at 350 gpm
Horsepower (each)	3 at 100 hp, 1 at 15 hp



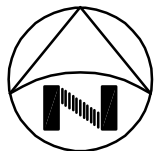
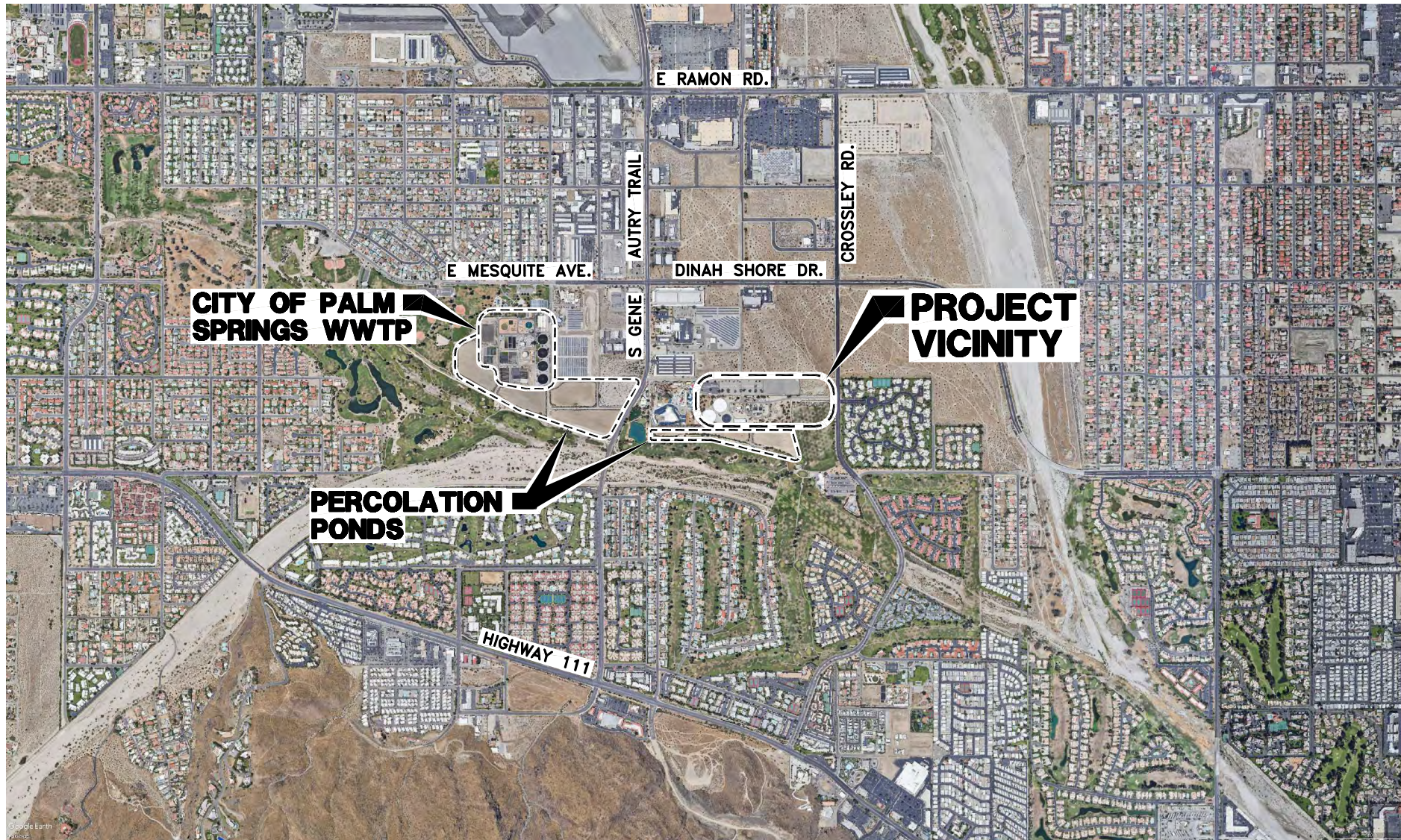
**Table 1**  
**Water Reclamation Facilities**  
**Treatment Plant Design Criteria**


Process/Item	Criteria
<b>Disinfection</b>	
Method	Chlorination
Minimum Contact Time (Min. Depth, Max. Discharge, Both Reservoirs in Service)	180 minutes
Chlorinators:	
Residual Paced	1
Manual	1 as standby
Capacity	2,000 ppd
Residual Analyzer	Pace chlorinator and low residual alarm and plant shutdown.
<b>Chemical Feed</b>	
Alum:	
Type	Liquid
Control	Auto paced by effluent turbidity
Alum Pumps:	
Number	1 duty, 1 standby
Type	Diaphragm, variable speed
Polymer:	
Type	Liquid Emulsion
Feed System	Manual – Auto mixing type
<b>Turbidity Monitoring</b>	
Influent (secondary effluent)	Indicate and record, high level alarm
Filter Effluent	Indicate and record, pace alum pump, high level alarm, and plant shutdown
<b>Backwash Recycle System (Not Currently in Use)</b>	
Treatment Type	Clarification
Equipment	
Type	Adsorption Clarifier
Number	1
Capacity	350 gpm
Surface Area	35 sf
Design Loading Rate	10 gpm/sf

## FIGURES



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SCALE: 1"=2000'

DATE: 10/08/19

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**DESERT WATER AGENCY**

WATER RECLAMATION FACILITIES:  
TITLE 22 ENGINEERING REPORT UPDATE

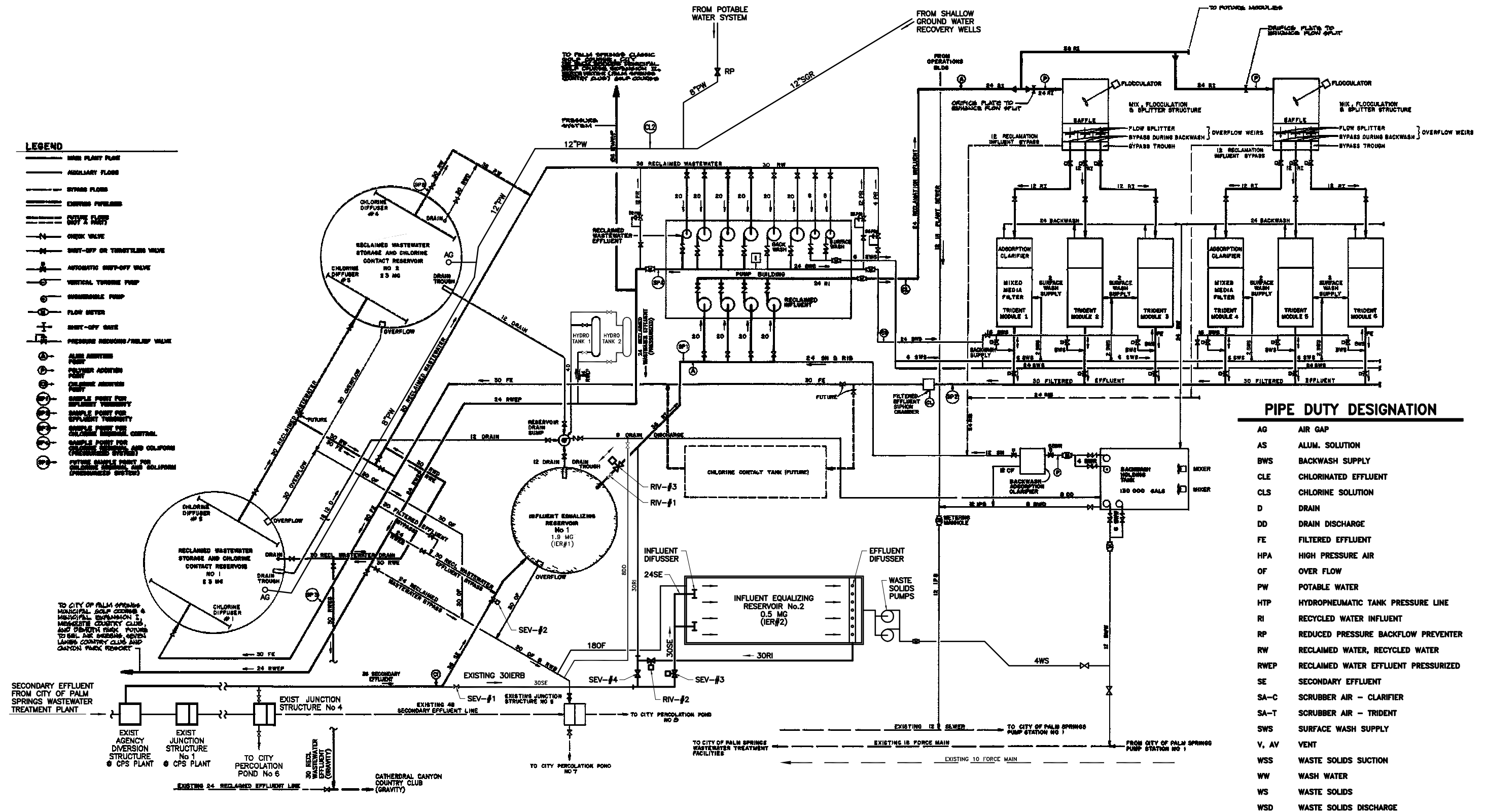
**VICINITY MAP**

FIGURE

**1**

OF 4





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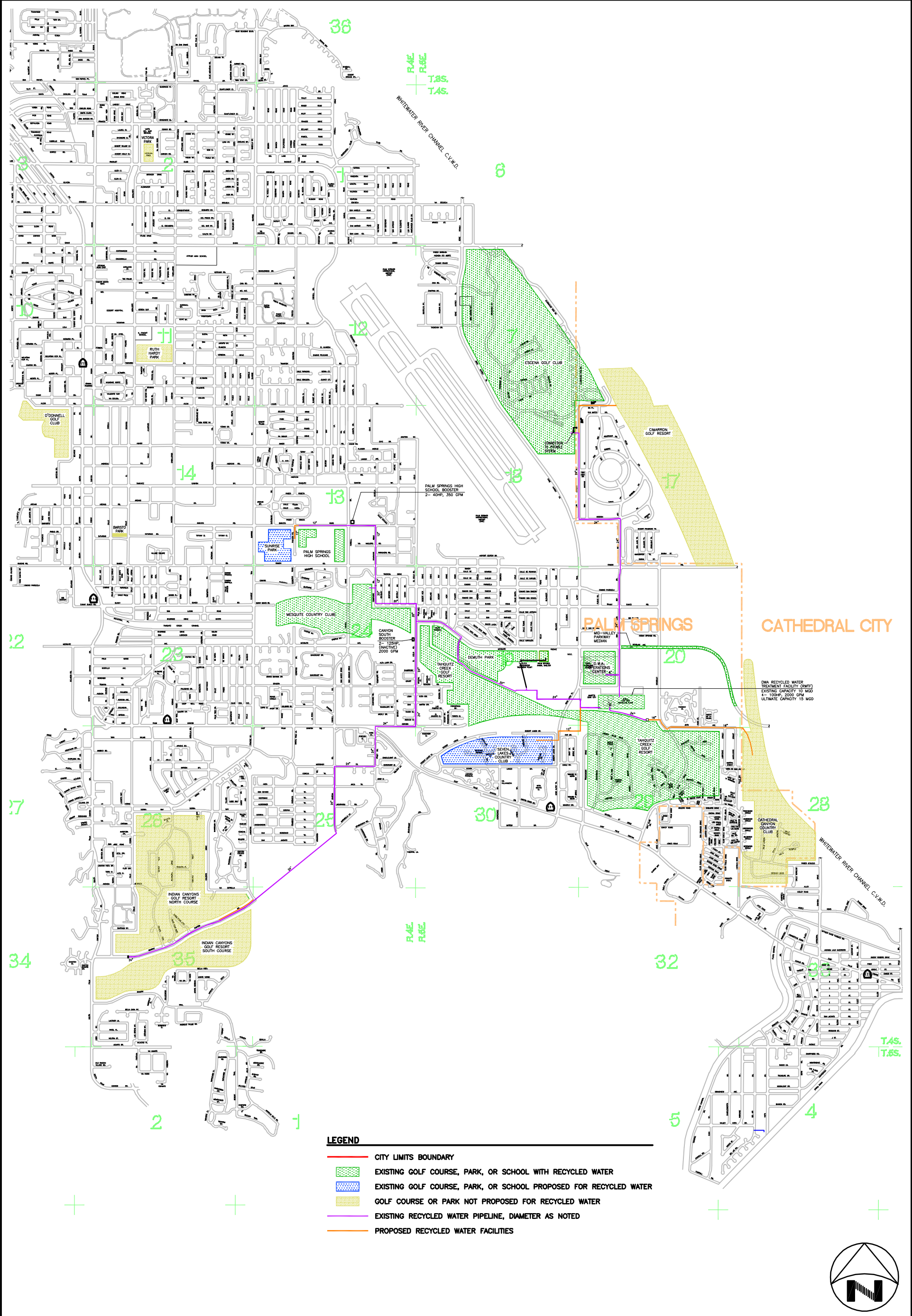
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**DESERT WATER AGENCY**  
WATER RECLAMATION FACILITIES: TITLE 22 ENGINEERING REPORT UPDATE  
**PROCESS FLOW SCHEMATIC**

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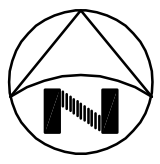
**FIGURE**  
**2**  
OF 4

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LEGEND

- CITY LIMITS BOUNDARY
- EXISTING GOLF COURSE, PARK, OR SCHOOL WITH RECYCLED WATER
- EXISTING GOLF COURSE, PARK, OR SCHOOL PROPOSED FOR RECYCLED WATER
- GOLF COURSE OR PARK NOT PROPOSED FOR RECYCLED WATER
- EXISTING RECYCLED WATER PIPELINE, DIAMETER AS NOTED
- PROPOSED RECYCLED WATER FACILITIES



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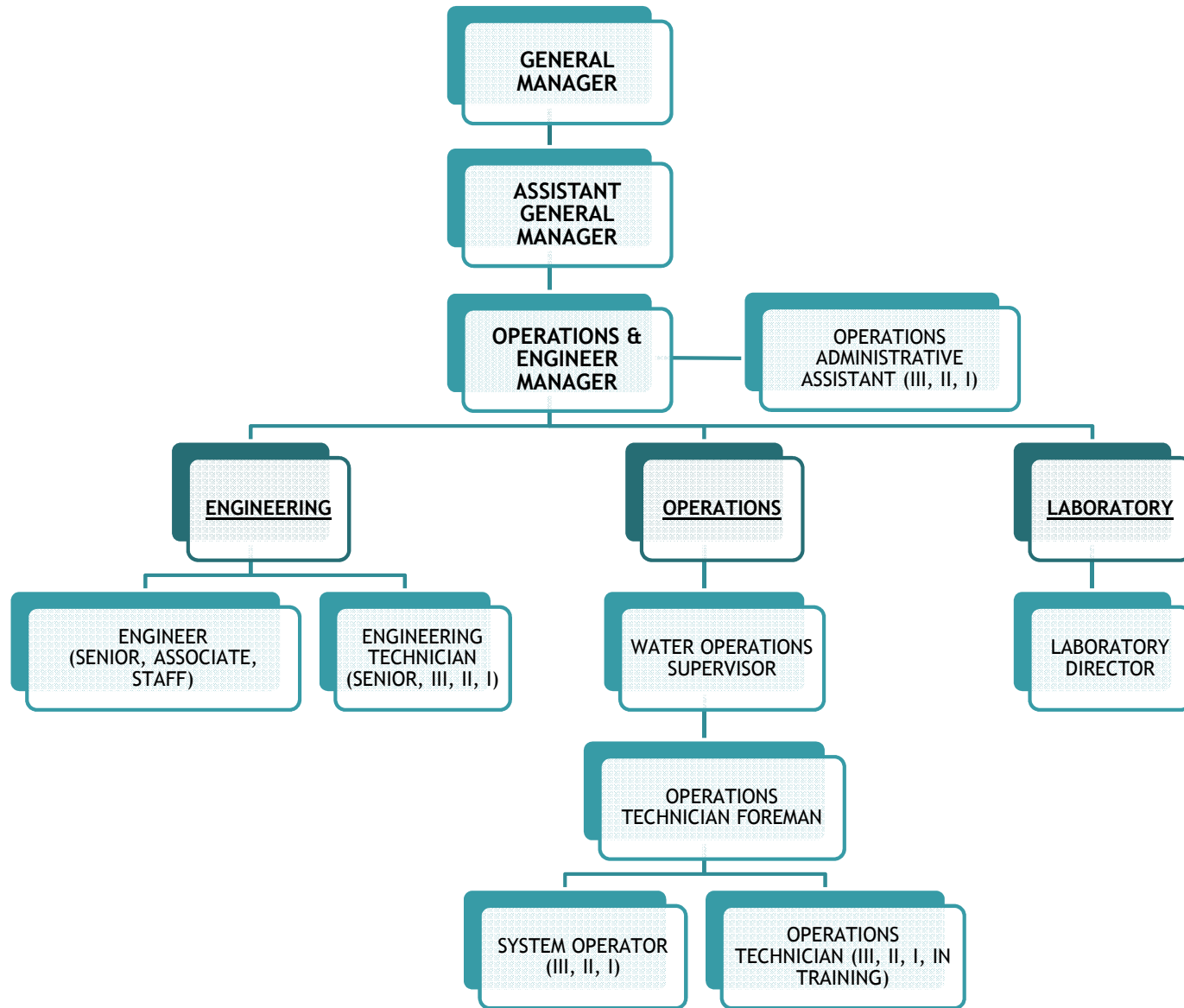
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**DESERT WATER AGENCY**  
WATER RECLAMATION FACILITIES: TITLE 22 ENGINEERING REPORT UPDATE  
**RECYCLED WATER DISTRIBUTION SYSTEM**  
AND USE AREAS

FIGURE  
**3**  
OF 4



**FIGURE 4**  
**1 OF 2**





	<b><u>POSITION TITLE</u></b>	<b><u>EMPLOYEE NAME</u></b>
<b>MANAGEMENT</b>	GENERAL MANAGER	MARK KRAUSE
	ASSISTANT GENERAL MANAGER	STEVE JOHNSON
<b>ENGINEERING AND OPERATIONS</b>	OPERATIONS & ENGINEERING MANAGER	DAVID TATE
	OPERATIONS ADMINISTRATIVE ASSISTANT III	LAURA JAEGER-SEITZ
	OPERATIONS ADMINISTRATIVE ASSISTANT II	VACANT
	OPERATIONS ADMINISTRATIVE ASSISTANT I	VACANT
<b>LABORATORY</b>	LABORATORY DIRECTOR	PAUL MONROY
<b>OPERATIONS</b>	WATER OPERATIONS SUPERVISOR	EMMANUEL SARPONG
	OPERATIONS TECHNICIAN FOREMAN	JONATHAN ARREDONDO
	SYSTEM OPERATOR III	MARK CROCKER
	SYSTEM OPERATOR III	SCOTT VINCE
	SYSTEM OPERATOR II	VACANT
	SYSTEM OPERATOR I	VACANT
	OPERATIONS TECHNICIAN III	JOHNNY TOPLIFF
	OPERATIONS TECHNICIAN II	KYLE MONSON
	OPERATIONS TECHNICIAN II	JOSE BARAJAS
	OPERATIONS TECHNICIAN II	JOSH HALTMAN
	OPERATIONS TECHNICIAN II	JEFF PEASE
	OPERATIONS TECHNICIAN II	WARREN PENNINGTON
	OPERATIONS TECHNICIAN I	VACANT
	OPERATOR IN TRAINING	MATTHEW PITTELLI
<b>ENGINEERING</b>	SENIOR ENGINEER	RYAN MOLHOEK
	ASSOCIATE ENGINEER	VACANT
	STAFF ENGINEER	SARAH RAPOLLA
	STAFF ENGINEER	MAYA LOPEZ
	STAFF ENGINEER	GERARDO MALDONADO
	SENIOR ENGINEERING TECHNICIAN	HEATHER MARCKS
	ENGINEERING TECHNICIAN III	VACANT
	ENGINEERING TECHNICIAN II	VACANT
	ENGINEERING TECHNICIAN I	JOSE GOVEA

**FIGURE 4  
2 OF 2**

**APPENDIX A**  
**TITLE 22**  
**CALIFORNIA CODE OF REGULATIONS**  
**SECTION 60305**

[Home](#) [Table of Contents](#)**§ 60305. Use of Recycled Water For Impoundments.**

22 CA ADC § 60305

BARCLAYS OFFICIAL CALIFORNIA CODE OF REGULATIONS

Barclays Official California Code of Regulations [Currentness](#)

Title 22. Social Security

Division 4. Environmental Health

Chapter 3. Water Recycling Criteria

Article 3. Uses of Recycled Water

22 CCR § 60305

**§ 60305. Use of Recycled Water For Impoundments.**

(a) Except as provided in subsection (b), recycled water used as a source of water supply for nonrestricted recreational impoundments shall be disinfected tertiary recycled water that has been subjected to conventional treatment.

(b) Disinfected tertiary recycled water that has not received conventional treatment may be used for nonrestricted recreational impoundments provided the recycled water is monitored for the presence of pathogenic organisms in accordance with the following:

(1) During the first 12 months of operation and use the recycled water shall be sampled and analyzed monthly for Giardia, enteric viruses, and Cryptosporidium. Following the first 12 months of use, the recycled water shall be sampled and analyzed quarterly for Giardia, enteric viruses, and Cryptosporidium. The ongoing monitoring may be discontinued after the first two years of operation with the approval of the department. This monitoring shall be in addition to the monitoring set forth in section 60321.

(2) The samples shall be taken at a point following disinfection and prior to the point where the recycled water enters the use impoundment. The samples shall be analyzed by an approved laboratory and the results submitted quarterly to the regulatory agency.

(c) The total coliform bacteria concentrations in recycled water used for nonrestricted recreational impoundments, measured at a point between the disinfection process and the point of entry to the use impoundment, shall comply with the criteria specified in section 60301.230 (b) for disinfected tertiary recycled water.

(d) Recycled water used as a source of supply for restricted recreational impoundments and for any publicly accessible impoundments at fish hatcheries shall be at least disinfected secondary-2.2 recycled water.

(e) Recycled water used as a source of supply for landscape impoundments that do not utilize decorative fountains shall be at least disinfected secondary-23 recycled water.

Note: Authority cited: Section 13521, Water Code. Reference: Sections 13520 and 13521, Water Code.

**HISTORY**

1. Repealer and new section filed 11-2-2000; operative 12-2-2000 (Register 2000, No. 44).

This database is current through 9/13/19 Register 2019, No. 37

22 CCR § 60305, 22 CA ADC § 60305

**END OF DOCUMENT**

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**APPENDIX B**  
**WASTE DISCHARGE REQUIREMENTS, ORDER NO. R7-2014-0008**  
**WITH MONITORING AND REPORTING PROGRAM**  
**AND AMENDMENTS**

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
COLORADO RIVER BASIN REGION**

BOARD ORDER R7-2014-0008

**WASTE DISCHARGE REQUIREMENTS  
FOR  
DESERT WATER AGENCY, OWNER/OPERATOR  
WATER RECLAMATION FACILITY  
Palm Springs – Riverside County**

The California Regional Water Quality Control Board, Colorado River Basin Region (Colorado River Basin Water Board) finds that:

1. Desert Water Agency (DWA, or Discharger), 1200 Gene Autry Trail South, P.O. Box 1710, Palm Springs, CA 92263, owns and operates a Water Reclamation Facility (WRF or Facility) located at 1550 Gene Autry Trail, Palm Springs, CA. DWA submitted a Report of Waste Discharge (ROWD), dated July 25, 2013, to update Waste Discharge Requirements for the Facility. The Discharger owns the treatment and distribution system and provides tertiary treatment to secondary effluent received from the Palm Springs Wastewater Treatment Plant (Palms Springs WWTP), which is regulated separately. DWA currently distributes tertiary recycled water to twelve customers (users).
2. The WRF is located in the South 1/2 of the Southwest 1/4 of Section 20, Township 4 South, Range 5 East, San Bernardino Base and Meridian, as indicated on the Location and Vicinity Map (Attachment "A"), incorporated herein and made part of this Board Order by reference.
3. The WRF has a design capacity of 10.0 million gallons per day (MGD), with an average daily flow of approximately 3.7 MGD (June 2008 - May 2013).
4. The discharge has been regulated under WDRs prescribed by Board Order 96-008, adopted January 26, 1996. The WDRs are being updated to incorporate design modifications that have taken place since 1996 at the Facility and implement the most current laws and regulations applicable to the discharge.

**Wastewater Treatment Facility and Discharge**

5. The tertiary treatment process at the WRF consists of coagulation/flocculation, clarification, filtration, and disinfection, in that order, and the following treatment units, illustrated on the Process Flow Schematic (Attachment "B"), incorporated herein and made part of this Board Order by reference:
  - a. One concrete influent reservoir, covered (0.5 MG)
  - b. One steel influent equalization reservoir, open (2.0 MG)
  - c. Two steel effluent reservoirs, covered (2.3 MG)
  - d. Four influent pumps (2,300 GPM-per-unit)
  - e. Four effluent pumps (2,300 GPM-per-unit)
  - f. Two backwash pumps (2,300 GPM-per-unit)
  - g. Two flocculation structures
  - h. Six adsorption clarifiers and mixed media filter modules
  - i. One filtered effluent siphon and chlorination chamber

- j. Two shallow groundwater recovery wells.
6. Sludge collected at the influent reservoirs and backwash from the filters is pumped back to Palm Springs WWTF for appropriate treatment and disposal.
  7. In its Report of Waste Discharge, DWA informed the Colorado River Basin Water Board that it installed two shallow groundwater recovery wells in 2013, which it intends to use to provide a standby supply of supplemental irrigation water to be used during times when demands for recycled water exceeds the supply available from the Facility.
  8. The WRF influent, which comes directly from the Palm Springs WWTP's effluent, is characterized by the City of Palm Springs WWTF Self-Monitoring Reports (SMRs) for the period of July 2008 through June 2013, submitted pursuant to Board Order 96-073, as follows:

	<u>Units</u>	<u>Average</u>	<u>Maximum</u>	<u>Minimum</u>
Biochemical Oxygen Demand	mg/L <sup>1</sup>	11.4	22.6	5.1
Total Suspended Solids	mg/L	12.5	26.7	5.0
Settleable Solids	ml/L <sup>2</sup>	<0.1	<0.1	<0.1
pH	pH units	7.3	7.4	7.2
Total Dissolved Solids	mg/L	482	600	420
Sulfate	mg/L	89.5	120	75.9
Chloride	mg/L	79.1	90.8	66.6
Fluoride	mg/L	0.5	0.7	0.1
Nitrate as N	mg/L	9.0	16.0	1.3
Nitrite as N	mg/L	0.5	1.70	<0.15
Total Nitrogen	mg/L	14.4	39.6	6.2

9. The Discharger's SMRs for the five-year period spanning from June 2008 through May 2013, submitted pursuant to Board Order 96-008, characterize the WRF discharge as follows:

<u>Constituent</u>	<u>Units</u>	<u>Average</u> <sup>3</sup>	<u>Maximum</u>	<u>Minimum</u>
Total Effluent Flow	MGD	3.67	6.24	1.53
Turbidity	NTU <sup>4</sup>	1.21	1.58	.67
Chlorine Residual	mg/L	6.25	12.77	2.39
Fecal Coliform	MPN/100ml <sup>5</sup>	NA <sup>6</sup>	49	<1.8

10. The recycled water use sites are shown in Recycled Water User Map (Attachment "C"), incorporated herein and made part of this Board Order by reference.

<sup>1</sup> mg/L – milligrams per liter

<sup>2</sup> ml/L – milliliters per liter

<sup>3</sup> Average, maximum and minimum values are based on monthly averages.

<sup>4</sup> NTU – Nephelometric Turbidity Units

<sup>5</sup> MPN/100ml – most probable number per 100 milliliters

<sup>6</sup> Average monthly values for Fecal Coliform are not available.

### **Hydrogeologic Conditions**

11. Annual precipitation averages approximately 5 inches. Annual evapotranspiration rate in the region is approximately 60 inches.
12. There are no surface waters in the vicinity of the WRF. A drainage course referred to as Tahquitz Wash is located approximately 600 feet south of the site.
13. Water supply to the community from groundwater production wells within the subbasin to the Coachella Valley Groundwater Basin has an average Total Dissolved Solids (TDS) concentration of about 350 mg/L.
14. The Discharger reports that there are no production wells located on the site or adjacent to the site.
15. The soil type in the vicinity of the facility is Myoma fine sand to very fine sand.
16. Regional groundwater flow in the area is generally from the northwest to the southeast.
17. The site is located in a seismically active desert region.

### **Basin Plan, Beneficial Uses, and Regulatory Considerations**

18. The Water Quality Control Plan for the Colorado River Basin Region of California (Basin Plan), as amended to date, designates the beneficial uses of ground and surface waters in this Region, and contains implementation programs and policies to achieve objectives. In addition, State Water Resources Control Board (State Water Board) Resolution 88-63 requires that, with certain exceptions, the Regional Water Board assign the municipal and domestic supply use to water bodies that do not have beneficial uses listed in the Basin Plan.
19. The proposed discharge is within the Coachella Valley Hydrologic Unit. The beneficial uses of groundwater in the Coachella Valley Hydrologic Unit include:
  - a. Municipal supply (MUN),
  - b. Industrial supply (IND), and
  - c. Agricultural supply (AGR).
20. WDRs implement numeric and narrative water quality objectives for ground and surface waters established by the Basin Plan. The numeric objectives for groundwater designated for municipal and domestic supply are the maximum contaminant levels (MCLs) and bacteriological limits specified in Section 64421 et seq. of Title 22, California Code of Regulations (CCR). The narrative objectives are:
  - a. Ground water for use as domestic or municipal water supply (MUN) shall not contain taste or odor-producing substances in concentrations that adversely affect beneficial uses as a result of human activity (Basin Plan, page 3-8).
  - b. Discharges of water softener regeneration brines, other mineralized wastes, and toxic wastes to disposal facilities which ultimately discharge in areas where such wastes can percolate to ground water usable for domestic and municipal purposes are prohibited (Basin Plan, page 3-8).

21. It is the policy of the State of California that every human being has the right to safe, clean, affordable, and accessible water adequate for human consumption, cooking, and sanitary purposes. This order promotes that policy by requiring discharges to meet maximum contaminant levels designed to protect human health and ensure that water is safe for domestic use.
22. Section 13267 of the California Water Code (CWC) authorizes the Regional Water Boards to require technical and monitoring reports. The Monitoring and Reporting Program (MRP) establishes monitoring and reporting requirements to implement federal and state requirements.
23. This Order establishes WDRs pursuant to Division 7, Chapter 4, Article 4, of the CWC for discharges that are not subject to regulation under Clean Water Act (CWA) Section 402 (33 U.S.C. Section 1342).
24. Pursuant to CWC Section 13263(g), the discharge of waste is a privilege, not a right, and adoption of this Order does not create a vested right to continue the discharge.
25. The discharge authorized by this Board Order, and treatment and storage facilities associated with discharges of treated municipal wastewater, except for discharges of residual sludge and solid waste, are exempt from the requirements of Consolidated Regulations for Treatment, Storage, Processing, or Disposal of Solid Waste, as set forth in Title 27, CCR, Division 2, Subdivision 1, commencing with section 20005. This exemption is based on Section 20090(a) of Title 27, which states in relevant part that discharges of domestic sewage or treated effluent are exempt provided that such discharges are regulated by WDRs, or for which WDRs have been waived, and which are consistent with applicable water quality objectives, and treatment or storage facilities associated with municipal wastewater treatment plants, provided that residual sludge or solid waste from wastewater treatment facilities shall be discharged only in accordance with the applicable Title 27 provisions. These requirements have been met. The discharge is domestic sewage, this Board Order regulates that discharge in a manner consistent with applicable surface and ground water quality objectives, and residual sludge or solid waste from the Facility will be managed pursuant to Title 27.
26. The discharge to the storage ponds for reuse authorized by this Board Order, and treatment and storage facilities associated with discharges of treated municipal wastewater, except for discharges of residual sludge and solid waste, are exempt from the requirements of Consolidated Regulations for Treatment, Storage, Processing, or Disposal of Solid Waste, as set forth in Title 27, CCR, Division 2, Subdivision 1, Section 20090(h).

#### **Recycled Water**

27. State policy promotes the use of recycled water to the maximum extent in order to supplement existing surface and ground water supplies to help meet water needs (CWC sections 13510-13512). One of the primary conditions on the use of recycled water is protection of public health (CWC sections 13521, 13522, 13550(a)(3)). The discharge as authorized by this Board Order is consistent with the states recycled water policy and meets the requirements of CCR, Title 22, Division 4, Chapter 3, section 60301 to assure protection of public health.



28. The State Water Board adopted a Recycled Water Policy (Policy) on February 3, 2009, and amended the Policy on January 22, 2013. Section 7,b.(4) of the amended Policy states that permits or requirements for landscape irrigation projects shall include, in addition to any other appropriate recycled water monitoring requirements, monitoring for priority pollutants in the recycled water at the recycled water production facility once per year, except when the recycled water production facility has a design production flow for the entire water reuse system of one MGD or less. For these smaller facilities, recycled water shall be monitored for priority pollutants once every five years. Priority pollutants are those identified in 40 CFR Part 423, Appendix A.
29. The California Department of Public Health (CDPH), formerly California Department of Health Services (DHS), is statutorily required to establish uniform statewide recycling criteria for the various uses of recycled water to assure protection of public health where recycled water use is involved (CWC section 13521). CDPH has promulgated regulatory criteria in Title 22, Division 4, Chapter 3, section 60301 et seq. of the CCR. CDPH regulatory criteria include specified approved uses of recycled water, numerical limitations and requirements, treatment method requirements and performance standards. CDPH regulations allow use of alternate methods of treatment in some cases, so long as the alternate methods are determined by CDPH to provide equivalent treatment and reliability. The Title 22, Section 60301.230 disinfected tertiary recycled water standard is an appropriate level of treatment and performance for the intended reuse.
30. A 1996 Memorandum of Agreement (MOA) between the DHS, State Water Board, and the regional water boards on the use of recycled water allocates primary areas of responsibility and authority between these agencies. The MOA provides methods and mechanisms necessary to assure ongoing and continuous future coordination of activities relative to the use of recycled water in California.
31. The CDPH has established statewide reclamation criteria for the use of recycled water and has developed guidelines for specific uses:
  - a. Recycled water used for surface irrigation of the following is required to be at least disinfected Secondary-23 recycled water (Title 22 CCR Section 60301.225):
    - i. Cemeteries,
    - ii. Freeway landscaping,
    - iii. Restricted access golf courses,
    - iv. Ornamental nursery stock and sod farms where access by the general public is not restricted
    - v. Pasture for animals producing milk for human consumption, and
    - vi. Any nonedible vegetation where access is controlled so that the irrigated area cannot be used as if it were part of a park, playground or schoolyard.
  - b. Recycled water used for surface irrigation of the following is required to be at least disinfected tertiary recycled water (Title CCR Section 60301.230):
    - i. Food crops, including all edible root crops, where the recycled water comes into contact with the edible portion of the crop,
    - ii. Parks and playgrounds,
    - iii. School yards,

- iv. Residential landscaping,
  - v. Unrestricted access golf courses, and
  - vi. Any other irrigation use not specified in Section 60304 and not prohibited by other sections of the CCR.
32. The Discharger signed a wastewater reclamation agreement with the City of Palm Springs, dated February 19, 1985, and a wastewater reclamation Memorandum of Understanding (MOU), dated June 12, 1985, whereby the City delivers secondary treated wastewater to the Discharger for further treatment and distribution for beneficial reuse by the Discharger.
33. DWA produced an Engineering Report, dated May 1988, for approval by DHS and the Colorado River Basin Water Board for the treatment and distribution of tertiary treated and disinfected recycled water.

### **Groundwater Degradation**

34. State Water Board Resolution 68-16, "Policy with Respect to Maintaining High Quality Waters of the State", (Resolution 68-16) states:

"Whenever the existing quality of water is better than the quality established in policies as of the date on which such policies become effective, such existing high quality will be maintained until it has been demonstrated to the State that any change will be consistent with maximum benefit to the people of the State, will not unreasonably affect present and anticipated beneficial use of such water and will not result in water quality less than that prescribed in the policies."

Resolution 68-16 further states:

"Any activity which produces or may produce a waste or increased volume or concentration of waste and which discharges or proposes to discharge to existing high quality waters will be required to meet waste discharge requirements which will result in the best practicable treatment or control [BPTC] of the discharge necessary to assure that (a) a pollution or nuisance will not occur and (b) the highest water quality consistent with maximum benefit to the people of the State will be maintained."

35. Some degradation of groundwater from the discharge to the storage ponds is consistent with Resolution No. 68-16, provided that the degradation:
- a. Is confined to a reasonable area;
  - b. Is minimized by means of full implementation, regular maintenance, and optimal operation of BPTC measures;
  - c. Is limited to waste constituents typically encountered in domestic wastewater; and
  - d. Does not result in the loss of any beneficial use as prescribed in the applicable basin plan, or violation of any water quality objective.
36. The discharge of wastewater from the WRF, as permitted herein, reflects BPTC. The controls assure the discharge does not create a condition of pollution or nuisance, and that water quality will be maintained which is consistent with the anti-degradation provisions of Resolution 68-16. The WRF incorporates:

- a. Technology for tertiary treated disinfected domestic wastewater;
  - b. Solids handling facilities;
  - c. An operation and maintenance manual;
  - d. Staffing to assure proper operation and maintenance; and
37. Constituents in domestic wastewater effluent that present the greatest risk to groundwater quality are nitrogen, coliforms (pathogen-indicator organisms), and dissolved salts (TDS). Treatment for removal of solids, soluble organic matter, and nitrogen are performed at the Palm Springs WWTP. DWA's WRF provides additional removal of suspended organic and inorganic matter through coagulation/flocculation, clarification and filtration. Disinfection is provided for pathogen removal.
38. Title 22, CCR, Section 64431, Maximum Contaminant Level (MCL) for Nitrate plus Nitrite as Nitrogen is 10 mg/L. Elevated concentrations of nitrate in domestic water supplies can be toxic to human life and may cause infants to develop methemoglobinemia (blue baby syndrome). To account for the fate of transport for the various components of Total Nitrogen, as a conservative value it is assumed that all nitrogen present converts to nitrate/nitrite. Nitrogen in domestic wastewater is treated by Palm Springs WWTP prior to entering the WRF. Palm Springs WWTP is prescribed effluent limitations and monitoring requirements for Nitrogen. The average Total Nitrogen in Palm Springs WWTP effluent is 14.4 mg/L. Since the majority of WRF effluent is used for irrigation purposes, a considerable amount of remaining Nitrogen can reasonably be expected to be taken up by plants; hence, it is not likely that nitrates will reach groundwater at a rate or in concentrations causing groundwater to exceed those prescribed in Title 22, CCR, Section 64431.
39. The WRF provides disinfection by chlorination to Title 22 tertiary recycled water standards. Considering the level of treatment and the depth to groundwater in the area, is not likely that pathogen-indicator bacteria will reach groundwater at densities exceeding those prescribed in Title 22, CCR.
40. The typical incremental addition of dissolved salts from domestic water usage is 150 to 380 mg/L. Domestic water supply to the community showed an average TDS concentration of approximately 350 mg/L from 2008 through 2012, according to the latest available DWA Water Quality Report. Average TDS in the Palm Springs WWTP effluent for the period of June 2008 through June 2013 is 482 mg/L. The CDPH recommends that the concentration of TDS in drinking water be limited to 500 mg/L as a secondary MCL (Title 22, CCR, Section 64449).
41. Board Order 96-008 does not require TDS monitoring for recycled water from the WRF. Since all influent into the WRF comes from Palm Springs WWTP, and the tertiary treatment process provided by the WRF is not expected to substantially increase TDS concentrations, the effluent limitation of 400 mg/L above domestic source water for TDS prescribed under Board Order 96-008, and upheld by this Board Order, is sufficient to protect present and anticipated beneficial uses of groundwater, it is not likely that groundwater will exhibit significant degradation by TDS. This Board Order will include TDS monitoring to more accurately quantify any incremental increase resulting from the tertiary treatment processes.
42. Groundwater limits equal to water quality objectives for indicator waste constituents are

appropriate and protective of water quality objectives. The Discharger provides a valuable service to the community that is protective of human health and the environment and contributes to the economic development of the area. This factor, when considered with the associated minor increase in nitrogen and TDS, are consistent with maximum benefit to the people of the State. Accordingly, the discharge as authorized is consistent with the anti-degradation provisions of Resolution 68-16.

43. This discharge is also consistent with the State Water Board's Recycled Water Policy. The discharge will be subject to any requirements that may be imposed by a salt and nutrient management plan (SNMP), currently being developed by the Coachella Valley Integrated Regional Water Management Plan (IRWMP) group, as required by the Recycled Water Policy. The Discharger is participating in the IRWMP effort to develop the SNMP.

#### **CEQA and Public Participation**

44. In accordance with Section 15301, Chapter 3, Title 14 of the California Code of Regulations, the issuance of these WDRs, which govern the operation of an existing facility involving negligible or no expansion of use beyond that previously existing, is exempt from the provisions of the California Environmental Quality Act (Public Resources Code, Section 21000 et seq.).
45. The Colorado River Basin Water Board has notified the Discharger and all known interested agencies and persons of its intent to draft WDRs for this discharge, and has provided them with an opportunity for a public meeting and an opportunity to submit comments.
46. The Colorado River Basin Water Board, in a public meeting, heard and considered all comments pertaining to this discharge.

IT IS HEREBY ORDERED, that Board Order 96-008 is rescinded upon the effective date of this Order, except for enforcement purposes, and, in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted thereunder, the Discharger shall comply with the following:

#### **A. Discharge Prohibitions**

1. Discharge of waste classified as "hazardous", as defined in Title 23, CCR, Section 2521(a), or "designated", as defined in California Water Code Section 13173, is prohibited.
2. Discharges of water softener regeneration brines, other mineralized wastes, and toxic wastes to disposal facilities are prohibited.
3. Discharge of treated wastewater at a location other than the designated disposal areas or as recycled water used for irrigation at approved use areas, is prohibited.
4. The WRF shall be maintained to prohibit sewage or treated effluent from surfacing or overflowing.
5. The discharge of any wastewater from the facility to any surface waters or surface

drainage courses is prohibited.

6. The discharge of waste to land not owned or authorized for such use by the Discharger is prohibited.
7. Surfacing or ponding of wastewater outside of the designated disposal locations is prohibited.
8. Bypass or overflow of untreated or partially treated waste is prohibited.

## **B. Effluent Limitations**

1. The 30-day monthly average daily discharge from the WRF shall not exceed 10.0 MGD.
2. Effluent from the WRF shall not have a pH below 6.0 or above 9.0.
3. Total Dissolved Solids (TDS) shall not be greater than 400 mg/L above domestic water supply.
4. Disinfected Tertiary recycled water directly reused shall conform to the following:
  - a. The filtered wastewater has been disinfected by either:
    - i. A chlorine disinfection process following filtration that provides a Contact Time (CT) (the product of total chlorine residual and modal contact time measured at the same point) value of not less than 450 milligram-minutes per liter at all times with a modal contact time of at least 90 minutes, based on peak dry weather design flow; or
    - ii. A disinfection process that, when combined with the filtration process, has been demonstrated to inactivate and/or remove 99.999 percent of the plaque-forming units of F-specific bacteriophage MS2, or polio virus in the wastewater. A virus that is at least as resistant to disinfection as polio virus may be used for purposes of the demonstration; The median concentration of total coliform bacteria measured in the disinfected effluent shall not exceed an MPN of 2.2 per 100 milliliters utilizing the bacteriological results of the last seven days for which analyses have been completed and the number of total coliform bacteria shall not exceed an MPN of 23 per 100 milliliters in more than one sample in any 30 day period. No sample shall exceed an MPN of 240 total coliform bacteria per 100 milliliters.
  - b. Wastewater that has been coagulated and passed through natural undisturbed soils or a bed of filter media pursuant to the following:
    - i. At a rate that does not exceed 5 gallons per minute per square foot of surface area in mono, dual or mixed media gravity, upflow or pressure filtration systems, or does not exceed 2 gallons per minute per square foot of surface area in traveling bridge automatic backwash filters; and
    - ii. Turbidity of the filtered wastewater does not exceed any of the following:
      - (1) An average of 2 NTU within a 24-hour period;
      - (2) 5 NTU more than 5 percent of the time within a 24-hour period; and
      - (3) 10 NTU at any time.

- c. Wastewater that has been passed through a microfiltration, ultrafiltration, nanofiltration, or reverse osmosis membrane so that the turbidity of the filtered wastewater does not exceed any of the following:
  - i. 0.2 NTU more than 5 percent of the time within a 24-hour period; and
  - ii. 0.5 NTU at any time.
- d. Wastewater that has not been coagulated:
  - i. filter effluent turbidity does not exceed 2 NTU;
  - ii. the turbidity of the influent to the filters is continuously measured;
  - iii. the influent turbidity does not exceed 5 NTU for more than 15 minutes and never exceeds 10 NTU; and
  - iv. that there is the capability to automatically activate chemical addition or divert the wastewater should the filter influent turbidity exceed 5 NTU for more than 15 minutes

### **C. Discharge Specifications**

1. The treatment or disposal of wastes from the WRP shall not cause pollution or nuisance as defined in Sections 13050(I) and 13050(m) of Division 7 of the California Water Code, respectively.
2. The Discharger shall not accept secondary effluent in excess of the design treatment capacity of the WRF.
3. All treatment, storage, and disposal areas shall be designed, constructed, operated, and maintained to prevent inundation or washout due to floods with a 100-year return frequency.
4. Public contact with non-disinfected wastewater shall be precluded through such means as fences, signs, and other acceptable alternatives.
5. Objectionable odors originating at this facility shall not be perceivable beyond the limits of the WRF.
6. On-site wastes, including windblown spray from recycled water application, shall be strictly confined to the lands specifically designated for the disposal operation, and on-site irrigation practices shall be managed so there is no runoff of effluent from irrigated areas.
7. There shall be at least a 4-foot horizontal and 1-foot vertical separation (with domestic water above the recycled water pipeline) between all newly installed constant pressure pipelines transporting domestic water and those transporting recycled water. All newly installed recycled water distribution lines shall be colored purple or labeled with purple tape. Existing pipelines are excluded from this requirement.
8. There shall be no-cross connection between potable water supply and piping containing recycled water. Supplementing recycled water with water used for domestic supply shall not be allowed except with an air-gap separation. An air-gap or reduced pressure principle device shall be provided at all domestic water service connections to recycled water use areas.

9. Irrigation with, or impoundment of disinfected tertiary recycled water shall not take place within 100 feet of any domestic water supply well.
10. Irrigation with, or impoundment of, undisinfected secondary recycled water shall not take place within 150 feet of any domestic water supply well.
11. The portions of the recycled water piping system that are in areas subject to access by the general public shall not include any hose bibs.
12. Sludge and filter backwash pumped from the WRF to Palm Springs Wastewater Treatment Plant (WWTP) shall be pumped in such a way that they shall not cause the pass through of pollutants from the WWTP to the environment, nor cause upset in the treatment processes or operation of the WWTP.

#### **D. Groundwater Limitations**

1. Discharge from the WRF shall not cause groundwater to:
  - a. Contain waste constituents in concentrations statistically greater than background water quality.
  - b. Contain constituents in excess of California Maximum Contaminant Levels (MCLs), as set forth in the California Code of Regulations, Title 22, Section 64426.1 for bacteriological constituents; Section 64431 for inorganic chemicals; Section 64432.1 for nitrates; and Section 64444 for organic chemicals.
  - c. Acquire taste, odor, toxicity, or color that creates nuisance or impairs beneficial use.

#### **E. Provisions**

##### **Recycled Water**

1. The Discharger shall provide the following information regarding off-site use of disinfected tertiary recycled water:
  - a. Name and location of the golf courses/landscape areas being irrigated.
  - b. Quantity and quality of the recycled water provided to individual customers.
  - c. The discharger shall immediately notify the Colorado River Basin Water Board's Executive Officer of any changes regarding the location and quantity of recycled water provided to individual customers.
2. Personnel must be informed that recycled water is meant for irrigation and landscaping purposes only, and is not approved for drinking, hand washing, etc. Personnel must also be informed of the locations of domestic and recycled water lines to ensure that the potable and recycled systems are not interconnected.
3. The Discharger shall conduct a cross-connection control test, at least once every four (4) years. The cross-control tests shall be conducted by an American Water Works Association (AWWA) certified cross-connection control program specialist or equivalent. Prior to conducting the test the Discharger shall notify the CDPH and the Riverside County Department of Environmental Health. Results of the cross-connection test shall be submitted to the Colorado River Basin Water Board, CDPH and County Department of Health Services within 30 days of completion or the next monthly monitoring and reporting

program report.

4. Adequate measures shall be taken to minimize public contact with recycled water. Clearly visible, adequately sized warning signs shall be posted in sufficient numbers around the application and storage areas. The size and number of warning signs shall be mutually determined by the Discharger and CDPH.
5. The storage, delivery, or use of recycled water shall not individually or collectively, directly or indirectly, result in pollution, or adversely affect water quality, as defined in the California Water Code.
6. The delivery and use of recycled water shall be in conformance with the reclamation criteria contained in CCR, Title 22, or amendments thereto, for the irrigation of food crops, irrigation of fodder, fiber, and seed crops, landscape irrigation, supply of recreational impoundments and ground water recharge.
7. The Discharger shall not deliver recycled water for reuse to those users whom, by reason of their operational practices, may cause a nuisance associated with wastewater or otherwise contribute to the violation of the requirements of this Board Order.
8. Prior to delivering recycled water to any new user, the Discharger shall submit to the Colorado River Basin Water Board a report discussing any new distribution system being constructed by the Discharger to provide service to the new user.
9. Recycled water shall not be delivered to any new user who has not first submitted a Report of Waste Discharge and has received a Waste Discharge Requirements permit from the Colorado River Basin Water Board and approval from CDPH.
10. Recycled water shall not be applied in a manner or at a location where it could come in contact with drinking water fountains, food handling, food storage or dining areas.
11. Irrigated areas shall be properly managed to minimize ponding.
12. Recycled water shall not be used as domestic supply water or intentionally used as animal water supply.
13. The Discharger shall designate an on-site supervisor responsible for operation of the recycled water system. The supervisor shall be responsible for the installation, operation and maintenance of the irrigation system, prevention of potential hazards, maintenance of the distribution system plans in "as-built" form, and for the distribution of the recycled water. The name of the on-site supervisor shall be listed on the monthly monitoring report.

#### **Standard Provisions**

14. The Discharger shall comply with all of the conditions of this Board Order. Noncompliance is a violation of the Porter-Cologne Water Quality Control Act (CWC, § 13000 et seq.), and is grounds for enforcement action.
15. The Discharger shall comply with Monitoring and Reporting Program (MRP) R7-2014-0008, incorporated herein and made part of this order by reference, and future revisions thereto, as specified by the Colorado River Basin Water Board Executive Officer.



16. The Discharger shall not cause degradation of any water supply in accordance with State Water Resources Control Board Resolution 68-16.
17. Standby, power generating facilities shall be available to operate the plant during a commercial power failure.
18. Adequate measures shall be taken to assure that flood or surface drainage waters do not erode or otherwise render portions of the discharge facilities inoperable.
19. The WRF shall be supervised and operated by persons possessing certification of appropriate grade pursuant to Section 3680, Chapter 26, Division 3, Title 23 of the California Code of Regulations.
20. The Discharger shall at all times properly operate and maintain all systems and components of collection, treatment and control, installed or used by the Discharger to achieve compliance with this Board Order. Proper operation and maintenance includes effective performance, adequate process controls, and appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities/systems when necessary to achieve compliance with this Board Order. All systems in service or reserved shall be inspected and maintained on a regular basis. Records of inspections and maintenance shall be retained, and made available to the Colorado River Basin Water Board Executive Officer on request.
21. The Discharger shall ensure that all site-operating personnel are familiar with the content of this Board Order, and shall maintain a copy of this Board Order at the site.
22. The Discharger shall allow the Colorado River Basin Water Board, or an authorized representative, upon presentation of credentials and other documents as may be required by law, to:
  - a. Enter the premises regulated by this Board Order, or the place where records are kept under the conditions of this Board Order;
  - b. Have access to and copy, at reasonable times, records kept under the conditions of this Board Order;
  - c. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Board Order; and
  - d. Sample or monitor at reasonable times, for the purpose of assuring compliance with this Board Order or as otherwise authorized by the California Water Code, any substances or parameters at this location.
23. Uncovered reservoirs shall be managed to prevent breeding of mosquitoes, prevent odors and to minimize the accumulation of debris and organic material.
24. Disposal of oil and grease, biosolids, screenings, and other solids collected from liquid wastes shall be pursuant to Title 27, and the review and approval of the Colorado River Basin Water Board Executive Officer.
25. Any proposed change in use or disposal of biosolids requires the approval of the Colorado River Basin Water Board Executive Officer, and U.S. Environmental Protection Agency Regional Administrator, who must be notified at least 90 days in advance of the change.

26. Sludge use and disposal shall comply with Federal and State laws and regulations, including permitting requirements, and technical standards in 40 CFR Part 503. If the State and Regional Water Boards are delegated the authority to implement 40 CFR Part 503 regulations, this Order may be revised to incorporate appropriate time schedules and technical standards. The Discharger shall comply with the standards and time schedules in 40 CFR part 503, whether or not part of this Order.
27. The Discharger shall provide a report to the Colorado River Basin Water Board when it determines that the plant's average dry-weather flow rate for any month exceeds 80 percent of the design capacity. The report should indicate what steps, if any, the Discharger intends to take to provide for the expected wastewater treatment capacity necessary when the plant reaches design capacity.
28. Prior to implementing a modification that results in a material change in the quality or quantity of wastewater treated or discharged, or a material change in the location of discharge, the Discharger shall report all pertinent information in writing to the Colorado River Basin Water Board, and obtain revised requirements.
29. Prior to a change in ownership or management of WRF, the Discharger shall transmit a copy of this Board Order to the succeeding owner/operator, and forward a copy of the transmittal letter to the Colorado River Basin Water Board.
30. The Discharger shall provide adequate notice to the Colorado River Basin Water Board Executive Officer of the following:
  - a. The introduction of pollutants into any treatment facility described in the Findings of this Board Order from an indirect Discharger which would be subject to Section 301 or 306 of the Clean Water Act, if the pollutants were discharged directly;
  - b. Any substantial change in the volume or character of pollutants introduced into any treatment facility described in the Findings of this Board Order, by an existing or new source; and
  - c. Any planned physical alteration or addition to the facilities described in this Board Order, or change planned in the Discharger's sludge use or disposal practice, where such alterations, additions, or changes may justify the application of Board Order conditions that are different from or absent in the existing Board Order, including notification of additional disposal sites not reported during the Board Order application process, or not reported pursuant to an approved land application plan.
31. The Discharger shall report orally, any noncompliance that may endanger human health or the environment. The noncompliance shall be reported immediately to the Colorado River Basin Water Board Executive Officer, and the Office of Emergency Services as soon as:
  - a. The Discharger has knowledge of the discharge,
  - b. Notification is possible, and
  - c. Notification will not substantially impede cleanup or other emergency measures.

During non-business hours, the Discharger shall leave a message on the Colorado River Basin Water Board office voice recorder at (760) 346-7491. A written report shall also be provided within five (5) business days of the time the Discharger becomes aware of the incident. The written report shall contain a description of the noncompliance and its cause, the period of noncompliance, the anticipated time to achieve full compliance, and the steps

taken or planned, to reduce, eliminate, and prevent recurrence of the noncompliance. The Discharger shall report all intentional or unintentional spills in excess of one thousand (1,000) gallons occurring within the facility or collection system to the Colorado River Basin Water Board office in accordance with the above time limits.

32. The Discharger shall report all instances of noncompliance. Reports of noncompliance shall be submitted with the Discharger's next scheduled SMR or earlier if requested by the Colorado River Basin Water Board Executive Officer, or if required by an applicable standard for sludge use and disposal.
33. By-pass (i.e., the intentional diversion of waste streams from any portion of the treatment facilities, except diversions designed to meet variable effluent limits) is prohibited. The Colorado River Basin Water Board may take enforcement action against the Discharger for by-pass unless:
  - a. By-pass was unavoidable to prevent loss of life, personal injury, or severe property damage. Severe property damage means substantial physical damage to property, damage to the treatment facilities that causes them to be inoperable, or substantial and permanent loss of natural resources reasonably expected to occur in the absence of a by-pass. Severe property damage does not mean economic loss caused by delays in production; and  

There were no feasible alternatives to by-pass, such as the use of auxiliary treatment facilities or retention of untreated waste. This condition is not satisfied if adequate back-up equipment was not installed to prevent by-pass occurring during equipment downtime, or preventive maintenance.
  - b. By-pass is:
    - i. Required for essential maintenance to assure efficient operation; and
    - ii. Neither effluent nor receiving water limitations are exceeded; and
    - iii. The Discharger notifies the Colorado River Basin Water Board ten (10) days in advance.
34. In the event of an unanticipated by-pass, the Discharger shall immediately report the incident to the Colorado River Basin Water Board. During non-business hours, the Discharger shall leave a message on the Colorado River Basin Water Board office voice recorder. A written report shall be provided within five (5) business days the Discharger is aware of the incident. The written report shall include a description of the by-pass, any noncompliance, the cause, period of noncompliance, anticipated time to achieve full compliance, and steps taken or planned, to reduce, eliminate, and prevent recurrence of the noncompliance.

### **Limitations**

35. This Board Order does not authorize violation of any federal, state, or local laws or regulations.
36. This Board Order does not convey property rights of any sort, or exclusive privileges, nor does it authorize injury to private property or invasion of personal rights, or infringement of federal, state, or local laws or regulations.
37. This Board Order may be modified, rescinded, or reissued, for cause. The filing of a

request by the Discharger for a Board Order modification, rescission or reissuance, or notification of planned changes or anticipated noncompliance, does not stay any Board Order condition. Causes for modification include a change in land application plans, or sludge use or disposal practices, and adoption of new regulations by the State or Colorado River Basin Water Board (including revisions to the Basin Plan), or Federal government.

I, Robert Perdue, Executive Officer, do hereby certify the foregoing is a full, true and correct copy of an Order adopted by the California Regional Water Quality Control Board, Colorado River Basin Region, on September 14, 2013.

Ordered By:

A handwritten signature in black ink, appearing to read "R. Perdue", is written over a horizontal line.

ROBERT PERDUE  
Executive Officer

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
COLORADO RIVER BASIN REGION**

**MONITORING AND REPORTING PROGRAM R7-2014-0008  
FOR**

**DESERT WATER AGENCY, OWNER/OPERATOR  
WATER RECLAMATION FACILITY  
Palm Springs – Riverside County**

Location of Wastewater Reclamation Facility:  
S ½ of the SW ¼ of Section 20, T4S, R5E, SBB&M

**A. Monitoring**

1. This Monitoring and Reporting Program (MRP) describes requirements for monitoring a wastewater system and groundwater quality (when needed). This MRP is issued pursuant to California Water Code (Water Code) section 13267. The Discharger shall not implement any changes to this MRP unless and until a revised MRP is issued by the Executive Officer.
2. Water Code section 13267 states, in part:

“In conducting an investigation specified in subdivision (a), the regional board may require that any person who has discharged, discharges, or is suspected of having discharged or discharging, or who proposes to discharge waste within its region, or any citizen or domiciliary, or political agency or entity of this state who has discharged, discharges, or is suspected of having discharged or discharging, or who proposes to discharge, waste outside of its region that could affect the quality of waters within its region shall furnish, under penalty of perjury, technical or monitoring program reports which the regional board requires. The burden, including costs, of these reports shall bear a reasonable relationship to the need for the report and the benefits to be obtained from the reports. In requiring those reports, the regional board shall provide the person with a written explanation with regard to the need for the reports, and shall identify the evidence that supports requiring that person to provide the reports.”
3. Water Code section 13268 states, in part:

“(a) (1) Any person failing or refusing to furnish technical or monitoring program reports as required by subdivision (b) of § 13267, or failing or refusing to furnish a statement of compliance as required by subdivision (b) of Section 13399.2, or falsifying any information provided therein, is guilty of a misdemeanor, and may be liable civilly in accordance with subdivision (b). (b) (1) Civil liability may be administratively imposed by a regional board in accordance with Article 2.5 (commencing with § 13323) of Chapter 5 for a violation of subdivision (a) in an amount which shall not exceed one thousand dollars (\$1,000) for each day in which the violation occurs.”
4. The Discharger owns and operates the wastewater system that is subject to Board Order R7-2014-0008. The reports are necessary to ensure that the Discharger complies with the Order. Pursuant to Water Code section 13267, the Discharger shall implement the MRP and shall submit the monitoring reports described herein.

5. All samples shall be representative of the volume and nature of the discharge or matrix of material sampled. The time, date, and location of each grab sample shall be recorded on the sample chain of custody form. If composite samples are collected, the basis for sampling (time or flow weighted) shall be approved by Colorado River Basin Water Board staff.
6. Field test instruments (such as those used to test pH, dissolved oxygen, and electrical conductivity) may be used provided that:
  - a. The user is trained in proper use and maintenance of the instruments;
  - b. The instruments are field calibrated prior to monitoring events at the frequency recommended by the manufacturer;
  - c. Instruments are serviced and/or calibrated by the manufacturer at the recommended frequency; and
  - d. Field calibration reports are submitted as described in the "Reporting" section of this MRP.
7. The collection, preservation and holding times of all samples shall be in accordance with United States Environmental Protection Agency (USEPA) approved procedures. Unless otherwise approved by the Colorado River Basin Water Board Executive Officer, all analyses shall be conducted by a laboratory certified by California Department of Public Health (CDPH). All analyses shall be conducted in accordance with the latest edition of the "Guidelines Establishing Test Procedures for Analysis of Pollutants" (40 CFR Part 136), promulgated by the USEPA.
8. The Discharger shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this Board Order, and records of all data used to complete the application for this Board Order, for a period of at least five (5) years from the date of the sample, measurement, report or application.
9. All monitoring instruments and devices used by the Discharger to fulfill the prescribed monitoring program shall be properly maintained and calibrated as necessary to ensure their continued accuracy. In the event that continuous monitoring equipment is out of service for period greater than 24-hours, the Discharger shall obtain representative grab samples each day the equipment is out of service. The Discharger shall correct the cause(s) of failure of the continuous monitoring equipment as soon as practicable. The Discharger shall report the period(s) during which the equipment was out of service and if the problem has not been corrected, shall identify the steps which the Discharger is taking or proposes to take to bring the equipment back into service and the schedule for these actions.
10. Samples shall be collected at the location specified in the Waste Discharge Requirements. If no location is specified, sampling shall be conducted at the most representative sampling point available.
11. Given the monitoring frequency prescribed by MRP R7-2014-0008, if only one sample is available for a given reporting period, compliance with monthly average, or weekly average Discharge Specifications, will be determined from that sample.

12. The Discharger shall comply with the following:

- a. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.
- b. The Discharger shall retain records of all monitoring information, copies of all reports required by this Board Order, and records of all data used to complete the application for this Board Order, for a period of at least 5 years from the date of the sample, measurement, report or application. This period may be extended by request of the Colorado River Basin Board's Executive Officer at any time.
- c. Records of monitoring information shall include:
  - i. The date, exact place, and time of sampling or measurements.
  - ii. The individual(s) who performed the sampling or measurements.
  - iii. The date(s) analyses were performed.
  - iv. The individual(s) who performed the analyses.
  - v. The analytical techniques or methods used; and
  - vi. The results of such analyses.

13. If the facility is not in operation, or there is no discharge during a required reporting period, the Discharger shall forward a letter to the Colorado River Basin Water Board indicating that there has been no activity during the required reporting period.

**Tertiary Effluent Monitoring**

14. Effluent from the WRF shall be monitored according to the following schedule:

<u>Constituent</u>	<u>Units</u>	<u>Type of Sample</u>	<u>Sampling Frequency</u>	<u>Reporting Frequency</u>
Total Effluent Flow	MGD <sup>7</sup>	Flow Measurement	Daily <sup>8</sup>	Monthly
pH	pH units	Grab	Monthly	Monthly
Volume of Wastewater Used for Irrigation at Each Location	MGD	Flow Measurement	Daily	Monthly
Fecal Coliform	MPN/100 mL <sup>9</sup>	Grab	Daily	Monthly
Total Coliforms	MPN/100 mL	Grab	Daily	Monthly
Chlorine Residual	mg/L <sup>10</sup>	Grab	Daily	Monthly
Chlorine Contact Time (CT)	mg*min/L <sup>11</sup>	Calculation	Daily	Monthly

<sup>7</sup> MGD – million gallons per day

<sup>8</sup> Reported for each day with average monthly flow calculated

<sup>9</sup> MPN/100 mL – Most Probable Number per 100 milliliters

<sup>10</sup> mg/L – milligrams per liter

<sup>11</sup> milligram minutes per liter is chlorine concentration x modal contact time.

<u>Constituent</u>	<u>Units</u>	<u>Type of Sample</u>	<u>Sampling Frequency</u>	<u>Reporting Frequency</u>
Nitrate (NO <sub>3</sub> <sup>-</sup> N) as Nitrogen	mg/L	Grab	Quarterly	Quarterly
Nitrite (NO <sub>2</sub> <sup>-</sup> N) as Nitrogen	mg/L	Grab	Quarterly	Quarterly
Total Kjeldahl Nitrogen as Nitrogen	mg/L	Grab	Quarterly	Quarterly
Turbidity	NTU <sup>12</sup>	Continuous	Daily	Monthly
20° C BOD <sub>5</sub>	mg/L	Grab	Monthly	Monthly
Total Dissolved Solids	mg/L	Grab	Monthly	Monthly
Total Suspended Solids	mg/L	Grab at peak flow	Monthly	Monthly
Dissolved Oxygen	mg/L	Grab	Monthly	Monthly
Priority Pollutants <sup>13</sup>	µg/L <sup>14</sup>	Grab	Annually	Annually

15. The Discharger shall provide the following information regarding off-site use of tertiary effluent annually:

- Name, location, and acreage of the golf courses/landscape areas being irrigated.
- Name and person, company or agency responsible for the operation and maintenance of the irrigation system.
- Quantity and quality of the tertiary effluent being provided to individual customers.
- The Discharger shall immediately notify the Colorado River Basin Board's Executive Officer of any changes regarding Items a, b, c, above.

## B. Reporting

- The Discharger shall inspect and document any operation/maintenance problems by inspecting each unit process. In addition, calibration of flow meters and equipment shall be performed in a timely manner and documented. Operation and Maintenance reports shall be submitted to the Colorado River Basin Water Board Office annually.
- The Discharger shall report the results of the cross-connection test in the monthly Self-Monitoring Report (SMR) following completion of the test.
- The Discharger shall arrange the data in tabular form so that the specified information is readily discernible. The data shall be summarized in such a manner as to clearly illustrate whether the facility is operating in compliance with WDR. Where appropriate, the Discharger shall include supporting calculations (e.g., for monthly averages).

<sup>12</sup> Nephelometric Turbidity Units

<sup>13</sup> 40CFR Part 423 Appendix A

<sup>14</sup> µg/L – micrograms per liter



4. The results of any analysis taken, more frequently than required at the locations specified in this MRP shall be reported to the Colorado River Basin Water Board.
5. The SMR shall be certified under penalty of perjury to be true and correct, and shall contain the required information at the frequency designated in this MRP.
6. Each SMR shall contain the following statement:

"I declare under the penalty of law that I have personally examined and am familiar with the information submitted in this document, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of a fine and imprisonment for knowing violations".
7. The SMR, and other information requested by the Colorado River Basin Water Board, shall be signed by a principal executive officer or ranking elected official.
8. A duly authorized representative of the Discharger may sign the documents if:
  - a. The authorization is made in writing by the person described above;
  - b. The authorization specified an individual or person having responsibility for the overall operation of the regulated disposal system; and
  - c. The written authorization is submitted to the Colorado River Basin Water Board's Executive Officer.
9. The Discharger shall report any failure in the facility (wastewater treatment plant, and collection and disposal systems). The incident shall be reported immediately to the Colorado River Basin Water Board Executive Officer as soon as:
  - a. The Discharger has knowledge of the discharge,
  - b. Notification is possible, and
  - c. Notification will not substantially impede cleanup or other emergency measures.Results of analyses performed shall be provided within 15 days of sample collection.
10. The Discharger shall attach a cover letter to the SMR. The information contained in the cover letter shall clearly identify violations of the WDR, discuss corrective actions taken or planned and the proposed time schedule of corrective actions. Identified violations should include a description of the requirement that was violated and a description of the violation.
11. Daily, weekly, and monthly monitoring shall be included in the monthly monitoring report. Monthly monitoring reports shall be submitted to the Colorado River Basin Water Board by the 15<sup>th</sup> day of the following month. Quarterly monitoring reports shall be submitted by January 15<sup>th</sup>, April 15<sup>th</sup>, July 15<sup>th</sup> and October 15<sup>th</sup>. Annual monitoring reports shall be submitted to the Colorado River Basin Water Board by January 15<sup>th</sup> of the following year.

12. The Discharger shall submit monitoring reports to:

California Regional Water Quality Control Board  
Colorado River Basin Region  
73-720 Fred Waring, Suite 100  
Palm Desert, CA 92260

Ordered By: \_\_\_\_\_

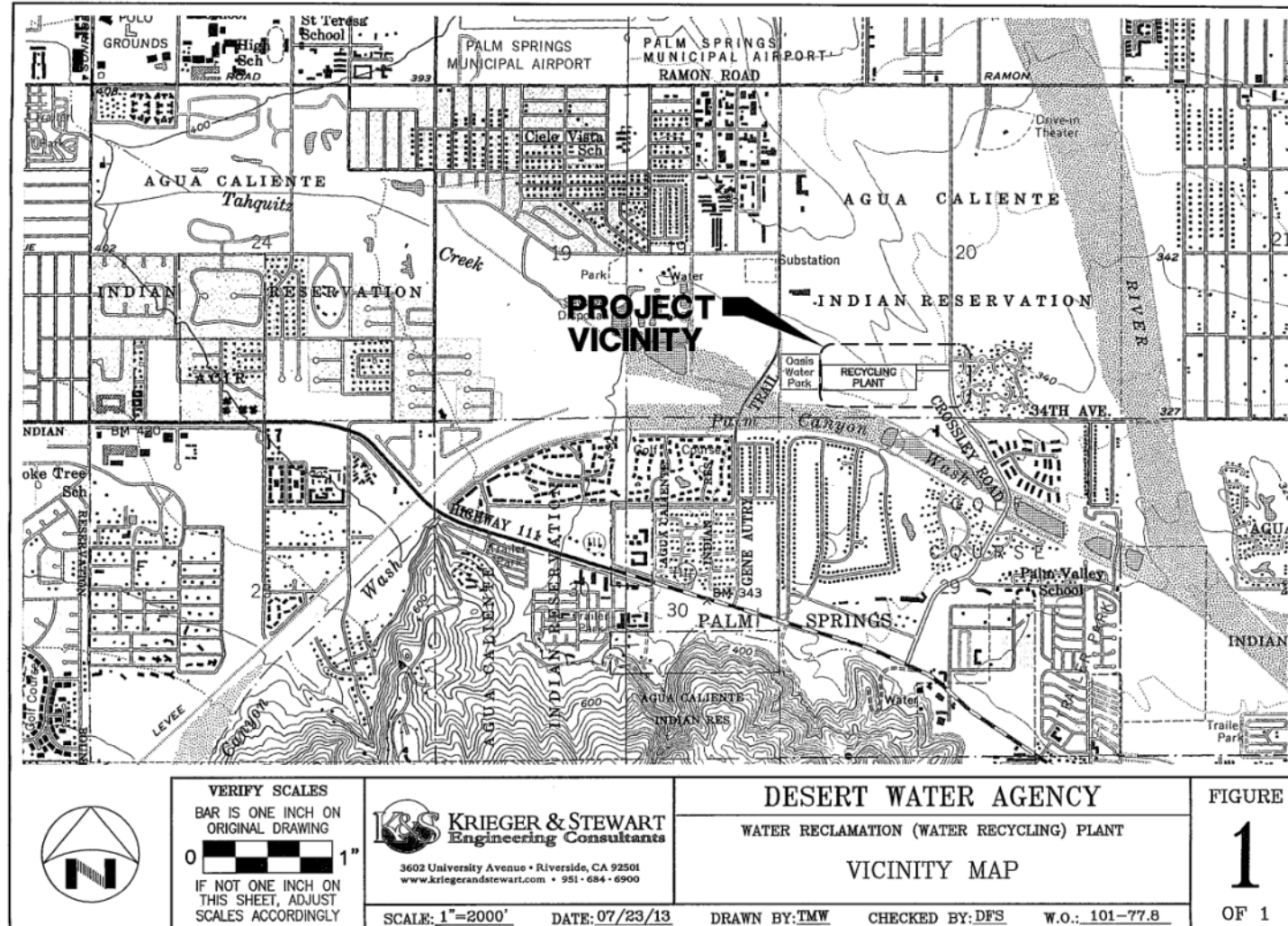


ROBERT PERDUE  
Executive Officer

\_\_\_\_\_  
1/16/14  
Date

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
COLORADO RIVER BASIN REGION

ATTACHMENT "A"

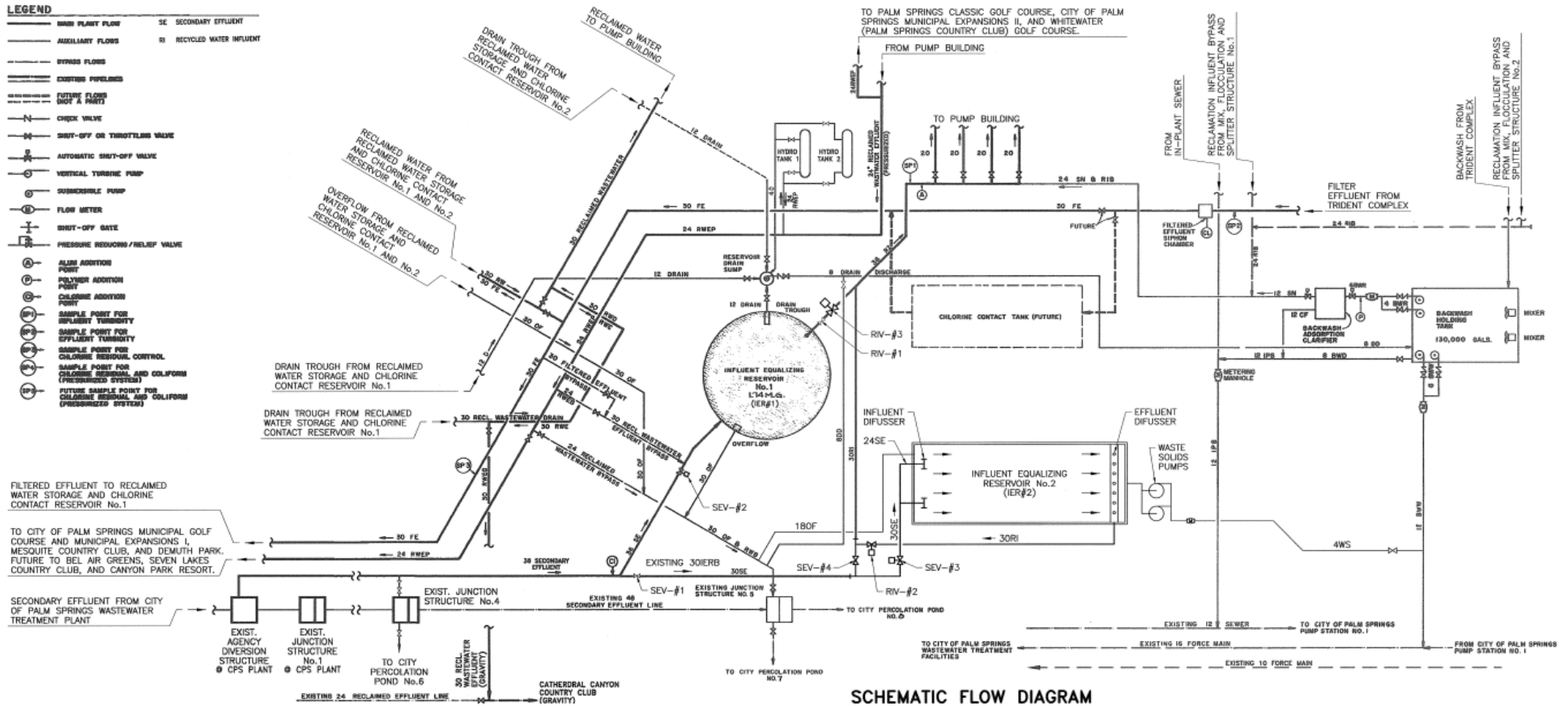


VICINITY MAP

DESERT WATER AGENCY OWNER/OPERATOR  
WATER RECLAMATION FACILITY  
Palm Springs – Riverside County

# CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD COLORADO RIVER BASIN REGION

## ATTACHEMENT "B"



DESERT WATER AGENCY OWNER/OPERATOR  
WATER RECLAMATION FACILITY  
Palm Springs – Riverside County

## ATTACHMENT "C"



Board Order R7-2014-0008



**STATE WATER RESOURCES CONTROL BOARD  
ORDER NO. WQ 2019-0036 -EXEC**

**AMENDING MONITORING AND REPORTING PROGRAMS  
FOR  
WASTE DISCHARGE REQUIREMENTS, WATER RECLAMATION REQUIREMENTS,  
MASTER RECYCLING PERMITS, AND GENERAL WASTE  
DISCHARGE REQUIREMENTS.**

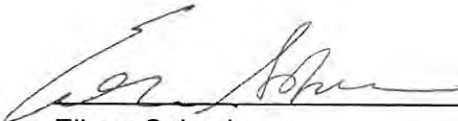
The California State Water Resources Control Board (hereafter, State Water Board) finds:

1. The State Water Board and regional water quality control boards (hereafter, Water Boards) are authorized to prescribe waste discharge requirements (WDRs) pursuant to Water Code section 13263, general WDRs pursuant to Water Code section 13263(i), water reclamation requirements (WRRs) pursuant to Water Code section 13523, and master recycling permits pursuant to Water Code section 13523.1. For the purposes of this Order, permittees under these permits are hereby referred to as Dischargers.
2. On December 6, 2016, the State Water Board adopted [Resolution No. 2016-0061](#), to reaffirm support for the development of salt and nutrient management plans and direct staff to initiate a stakeholder process to update the Water Quality Control Policy for Recycled Water (Recycled Water Policy). Resolution No. 2016-0061 directs staff to update the Recycled Water Policy, including consideration of an evaluation of the requirements and frequency of monitoring for priority pollutants.
3. On December 11, 2018, the State Water Board adopted [Resolution No. 2018-0057](#), amending the Recycled Water Policy, including the removal of requirements for landscape irrigation recycled water projects to monitor for priority pollutants. Resolution No. 2018-0057 directs the State Water Board Executive Director to issue an order pursuant to Water Code section 13267 and Water Code section 13383 to implement the monitoring requirements of the Recycled Water Policy.
4. This Order does not preempt or supersede the authority of federal, state, or local governmental agencies to prohibit, restrict, or control discharges of waste subject to their jurisdiction.

**IT IS HEREBY ORDERED THAT** pursuant to Water Code section 13267 for Dischargers subject to WDRs, general WDRs, WRRs, and master recycling permits:

1. Monitoring and reporting programs are amended to remove requirements for priority pollutant monitoring in recycled water used for landscape irrigation for all Dischargers listed in Attachment I.

7/23/19  
\_\_\_\_\_  
Date

  
\_\_\_\_\_  
Eileen Sobeck  
Executive Director

**ATTACHMENT I**  
**LIST OF DISCHARGERS**

WATER CODE SECTION 13267 ORDER AMENDING MONITORING AND  
REPORTING PROGRAMS FOR WASTE DISCHARGE REQUIREMENTS, WATER  
RECLAMATION REQUIREMENTS, MASTER RECYCLING PERMITS, AND GENERAL  
WASTE DISCHARGE REQUIREMENTS.

<b>California Integrated Water Quality System Regulatory Measure ID</b>	<b>Facility Name</b>	<b>Organization</b>	<b>City</b>
401754	4-S Ranch WRF	Olivenhain Municipal Water District	Encinitas
402136	Anacapa Foods LLC		Watsonville
382539	Anaheim Water Recycling Demonstration Project	Anaheim City	Anaheim
402914	Brentwood WWTP	Brentwood City	Brentwood
403428	Burbank WRP	Burbank City DPW	Burbank
379409	Camps Miller and Kilpatrick WWTP	County of Los Angeles, Dept of Internal Services	Los Angeles
400018	Camrosa Water Reclamation Facility	Camrosa Water District	Camarillo
408361	Carlsbad WRF	Carlsbad MWD	Carlsbad
402929	City of San Clemente WRP	San Clemente City	San Clemente
374041	Corona WWRF No. 2	Corona City DWP	Corona
392490	Desert Water Agency Recycled Water Facility	Desert Water Agency	Palm Springs



**STATE WATER RESOURCES CONTROL BOARD  
ORDER NO. WQ 2019-0037-EXEC**

**AMENDING MONITORING AND REPORTING PROGRAMS  
FOR  
WASTE DISCHARGE REQUIREMENTS, NATIONAL POLLUTANT DISCHARGE  
ELIMINATION SYSTEM PERMITS, WATER RECLAMATION REQUIREMENTS,  
MASTER RECYCLING PERMITS, AND GENERAL WASTE DISCHARGE  
REQUIREMENTS**

The California State Water Resources Control Board (hereafter, State Water Board) finds:

1. The State Water Board and regional water quality control boards (hereafter, regional water board(s) and collectively, Water Boards) are authorized to prescribe waste discharge requirements (WDRs) pursuant to Water Code section 13263, general WDRs pursuant to Water Code section 13263(i), water reclamation requirements (WRRs) pursuant to Water Code section 13523, master recycling permits pursuant to Water Code section 13523.1, and National Pollutant Discharge Elimination System (NPDES) permits pursuant to Water Code section 13377. For the purposes of this Order, permittees under these permits are hereby referred to as Dischargers.
2. The Open and Transparent Water Data Act, AB 1755 of 2016 requires the State Water Board to improve access to water data by creating a statewide information system to integrate critical water data in a user friendly, publicly accessible website to simplify and expedite decision-making.
3. On March 7, 2017, the State Water Board adopted [Resolution No. 2017-0012](#), Comprehensive Response to Climate Change. Resolution No. 2017-0012 directs staff to coordinate with the regional water quality control boards to make annual reporting of recycled water data a requirement of waste discharge permits and water reclamation requirements, and to develop an online data entry system to track recycled water use.
4. On July 10, 2018, the State Water Board adopted [Resolution No. 2018-0032](#), adopting principles of open data as a core value and directing programs and activities to implement strategic actions to improve data accessibility and associated innovation. Resolution No. 2018-0032 directs staff to follow the core principles for open data including making all critical public data available in machine readable datasets and using data to make decisions in the best interest of the Water Boards mission.



5. On December 11, 2018, the State Water Board adopted [Resolution No. 2018-0057](#), amending the Water Quality Control Policy for Recycled Water (Recycled Water Policy). Resolution No. 2018-0057 directs the State Water Board Executive Director to issue orders pursuant to Water Code section 13267 and Water Code section 13383 to implement the monitoring requirements in the Recycled Water Policy.
6. The Recycled Water Policy contains goals to increase the use of recycled water from 714,000 acre-feet per year in 2015 to 1.5 million acre-feet per year by 2020 and to 2.5 million acre-feet per year by 2030.
7. Water Code section 13383(a) provides that “the state board or a regional board may establish monitoring, inspection, entry, reporting, and recordkeeping requirements, as authorized by Section 13160 , 13376 , or 13377 or by subdivisions (b) and (c) of this section, for any person who discharges, or proposes to discharge, to navigable waters . . .” Point source discharges to navigable waters are subject to NPDES permit requirements.
8. Water Code section 13267(b), provides that “a regional board may require any person who has discharged, discharges, or is suspected of having discharged or discharging, or who proposes to discharge waste within its region... or is suspected of having discharged or discharging, or who proposes to discharge, waste outside of its region that could affect the quality of water within its region shall furnish, under penalty of perjury, technical or monitoring reports which the regional board requires... In requiring those reports, the regional board shall provide the person with a written explanation with regard to the need for the reports and shall identify the evidence that supports requiring that person to provide the reports.”
9. The recycled water tracking requirements in this Order may have associated costs for the Dischargers’ staff time required to compile and submit the required information. Monthly data collection is not expected to be burdensome since volumetric data may be calculated based on flow, a metric that facilities commonly use and monitor. The costs associated with the requirements in this Order are estimated to be solely associated with the Dischargers’ staff time required to compile the required information and submit it to the State Water Board. These costs are estimated to be reasonable based on the assumption that the requirements in this Order would require less than 50 hours annually.
10. Water Code section 13267(b) further specifies that the burden, including costs, of these reports must bear a reasonable relationship to the State Water Board’s need for the reports and the benefits to be obtained from the reports. The cost of the technical reports bears a reasonable relationship to the benefit to be gained because the reports will capture volumetric trends that will help the State Water Board identify potential opportunities for increased water recycling in California. The data submitted in the annual reports will be made publicly available to improve the effectiveness and efficiency of Water Boards programs and statewide water planning efforts, improve public trust, facilitate conversations with stakeholders, and encourage public participation.

11. Water Code section 13267(f) authorizes the State Water Board to carry out the authority granted to the regional board if it consults with the regional water quality control boards and determines that it will not duplicate the efforts of the regional water quality control boards. The State Water Board has consulted with the regional water quality control boards and made this determination.
12. In order to establish a realistic estimate of statewide recycled water use and potential for increased recycled water use statewide, the Recycled Water Policy requires Dischargers to report the volume of treated wastewater and recycled water. Section 3 of the Recycled Water Policy requires wastewater and recycled water Dischargers to annually report monthly volumes of influent, wastewater produced, and effluent, including treatment level and discharge type. The Recycled Water Policy also requires Dischargers to annually report recycled water use by volume and category of reuse.
13. Annual reporting is necessary to evaluate progress towards the recycled water goals in the Recycled Water Policy and evaluate the need to update the recycled water goals in the future based on consistent statewide data. The annual report will meet implementation needs of the Recycled Water Policy and fulfill data gaps for additional statewide water planning efforts. The burden and cost of preparing the reports is reasonable and consistent with the interest of the state in maintaining water quality and developing alternative water supplies to increase water resiliency.
14. Technical and monitoring reports specified in this Order are required. Failing to furnish the reports by the due date or falsifying information in the reports are misdemeanors and may result in assessment of civil liabilities against the Discharger.
15. This Order does not preempt or supersede the authority of federal, state, or local governmental agencies to prohibit, restrict, or control discharges of waste subject to their jurisdiction.
16. This Order will be in effect for each Discharger until the applicable regional water quality control board reissues or otherwise amends the Discharger's monitoring and reporting program to incorporate the requirements of this Order, at which time this Order will no longer be applicable to that Discharger.

**IT IS HEREBY ORDERED THAT** pursuant to Water Code section 13383 for Dischargers subject to NPDES permits and Water Code section 13267 for Dischargers subject to WDRs, general WDRs, WRRs, and master recycling permits:

1. Monitoring and reporting programs are amended to include the reporting provisions in Attachment I for all Dischargers listed in Attachment II.
2. Dischargers shall continue to comply with all existing permit and monitoring and reporting program provisions, with the exception of provisions of this Order addressing reuse volume reporting, which shall supersede existing reuse volume reporting.
3. This Order will have no further force or effect after all of the applicable regional water quality control boards have reissued or otherwise amended all the monitoring and reporting programs for the Dischargers listed in Attachment II to incorporate the requirements of this Order and all provisions of Attachment I.

Date

7/24/15

Eileen Sobeck  
Executive Director



## ATTACHMENT I – MONITORING AND REPORTING PROGRAM

### 1) ANNUAL REPORTING

Dischargers shall submit an annual report to the State Water Board by April 30 of each calendar year furnished with the information detailed in section 2 of this monitoring and reporting program (MRP). For calendar year 2019, data shall be reported for the months January through December. The Discharger must submit this annual report containing monthly data in electronic format via the State Water Board's Internet GeoTracker system at <http://geotracker.waterboards.ca.gov/> as required by this MRP. Required data shall be submitted to the GeoTracker database under a site-specific global identification number. Any data will be made publicly accessible as machine readable datasets. Dischargers shall continue to comply with all existing permit and MRP provisions, with the exception of provisions of this MRP addressing volume/reuse volume reporting, which shall supersede existing volume/reuse volume reporting where provisions are duplicative.

### 2) VOLUMETRIC MONITORING

Any Discharger subject to this MRP must report in accordance with each of the items in section 3 of the Recycled Water Policy as described below:

- a) *Influent.*  
Monthly volume of wastewater collected and treated by the wastewater treatment plant.
- b) *Production.*  
Monthly volume of wastewater treated, specifying level of treatment.
- c) *Discharge.*  
Monthly volume of treated wastewater discharged to each of the following, specifying level of treatment:
  - 1) Inland surface waters, specifying volume required to maintain minimum instream flow.
  - 2) Enclosed bays, estuaries and coastal lagoons, and ocean waters.
  - 3) Natural systems, such as wetlands, wildlife habitats, and duck clubs, where augmentation or restoration has occurred, and that are not part of a wastewater treatment plant or water recycling treatment plant.
  - 4) Underground injection wells, such as those classified by U.S. EPA's Underground Injection Control Program, excluding groundwater recharge via subsurface application intended to reduce seawater intrusion into a coastal aquifer with a seawater interface.

- 5) Land, where beneficial use is not taking place, including evaporation or percolation ponds, overland flow, or spray irrigation disposal, excluding pasture or fields with harvested crops.

d) *Reuse.*

Monthly volume of recycled water distributed.

e) *Reuse Categories.*

Annual volume of treated wastewater distributed for beneficial use in compliance with California Code of Regulations, title 22 in each of the use categories listed below:

- 1) Agricultural irrigation: pasture or crop irrigation.
- 2) Landscape irrigation: irrigation of parks, greenbelts, and playgrounds; school yards; athletic fields; cemeteries; residential landscaping, common areas; commercial landscaping; industrial landscaping; and freeway, highway, and street landscaping.
- 3) Golf course irrigation: irrigation of golf courses, including water used to maintain aesthetic impoundments within golf courses.
- 4) Commercial application: commercial facilities, business use (such as laundries and office buildings), car washes, retail nurseries, and appurtenant landscaping that is not separately metered.
- 5) Industrial application: manufacturing facilities, cooling towers, process water, and appurtenant landscaping that is not separately metered.
- 6) Geothermal energy production: augmentation of geothermal fields.
- 7) Other non-potable uses: including but not limited to dust control, flushing sewers, fire protection, fill stations, snow making, and recreational impoundments.
- 8) Groundwater recharge: the planned use of recycled water for replenishment of a groundwater basin or an aquifer that has been designated as a source of water supply for a public water system. Includes surface or subsurface application, except for seawater intrusion barrier use.
- 9) Seawater intrusion barrier: groundwater recharge via subsurface application intended to reduce seawater intrusion into a coastal aquifer with a seawater interface.

- 10) Reservoir water augmentation: the planned placement of recycled water into a raw surface water reservoir used as a source of domestic drinking water supply for a public water system, as defined in section 116275 of the Health and Safety Code, or into a constructed system conveying water to such a reservoir (Water Code § 13561).
- 11) Raw water augmentation: the planned placement of recycled water into a system of pipelines or aqueducts that deliver raw water to a drinking water treatment plant that provides water to a public water system as defined in section 116275 of the Health and Safety Code (Water Code § 13561).
- 12) Other potable uses: both indirect and direct potable reuse other than for groundwater recharge, seawater intrusion barrier, reservoir water augmentation, or raw water augmentation.

## ATTACHMENT II

### LIST OF DISCHARGERS

WATER CODE SECTION 13267 AND 13383 ORDER AMENDING MONITORING AND REPORTING PROGRAMS FOR WASTE DISCHARGE REQUIREMENTS, NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMITS, WATER RECLAMATION REQUIREMENTS, MASTER RECYCLING PERMITS, AND GENERAL WASTE DISCHARGE REQUIREMENTS

California Integrated Water Quality System Regulatory Measure ID	Facility Name	Organization	City
401754	4-S Ranch WRF	Olivenhain Municipal Water District	Encinitas
142909	AC/S Environmental Security, MCB Camp Pendleton	AC/S Environmental Security, MCB Camp Pendleton	Camp Pendleton
135709	Acton Rehabilitation Center	Los Angeles County Health Dept	Acton
392758	Adelanto WWTP	Adelanto Public Utility Authority	Adelanto
403980	Adin CSD	Adin CSD	Adin
146721	Airforce Research Lab STP	US Air Force Edwards Air Force Base	Edwards AFB
397427	Alamitos Barrier Recycled Water Project/Leo J. Vander Lans Water Treatment Fac.	Water Replenishment District of Southern California	Lakewood
629209	Alamitos Barrier Recycled Water Project/Leo J. Vander Lans Water Treatment Fac.	Alamitos Barrier Recycled Water Project/Leo J. Vander Lans Water Treatment Fac.	Long Beach
395089	Alan Horton WWTP	Mission Springs Water District	Desert Hot Springs
396049	Alturas Municipal WWTP	Alturas City	Alturas
131411	Amador City WW Export System	Amador City	Amador City
141187	Amador County Regional Outfall		Sutter Creek
349009, 412756	American Canyon Water Reclamation Facility (WRF)	American Canyon City PWD	American Canyon
407661	American Valley WWTP	American Valley CSD	Quincy
402136	Anacapa Foods LLC		Watsonville
382539	Anaheim Water Recycling Demonstration Project	Anaheim City	Anaheim



<b>California Integrated Water Quality System Regulatory Measure ID</b>	<b>Facility Name</b>	<b>Organization</b>	<b>City</b>
132468	Angel Island State Pk - WWTP	Ca Dept of Parks & Rec Marin District	Petaluma
146751	Angels City WWTP	Angels City	Angels Camp
148673	Arbuckle WWTP	Arbuckle PUD	Arbuckle
321411	Arcata City WWTF	Arcata City	Arcata
145426	Armona CSD WWTF	Armona CSD	Armona
404417	Arnold WWTP	Calaveras Cnty Water District	San Andreas
147823	Arvin WWTF	Arvin City	Arvin
142084	Atascadero State Hospital	Ca Dept of Mental Health	Atascadero
142083	Atascadero WWTP	Atascadero City	Atascadero
422026	Atwater Regional WWTF	Atwater City	Atwater
132086	Auburn LK Onsite WW Disp	Georgetown Divide PUD	Georgetown
407662	Auburn WWTP	Auburn City	Auburn
424707	Avalon WWTF	Avalon City	Avalon
142310	Avenal WWTF	Avenal City	Avenal
418016	Avila WWTP	Avila Beach CSD	Avila Beach
410188	Bailey Creek WWTF	Walker Ranch CSD	Quincy
147595	Baker WTF	Baker CSD	Baker
332777	Bakersfield WWTP #2	Bakersfield City	Bakersfield
343591	Bakersfield WWTP #3	Bakersfield City	Bakersfield
407229	Banning STP-Non NPDES	Banning City	Banning
403462	Barstow WS	Golden State Water Company	Rancho Cordova
146486	Barstow WTF Mojave River Bed	Barstow City	Barstow
146725	Barstow/Daggett Airport WTF	San Bernardino Cnty Airports - Dagget	Victorville
407233	BB Reg WWA-Lucerne Vly	Big Bear Area Regional WW Agency	Big Bear City
368158	Beale AFB WWTP	US Air Force Beale Air Force Base CES/CEAN	Beale Afb
399826	Bear Valley CSD WWTP		Tehachapi
148640, 407542	Bear Valley WWTF	Bear Valley Water District (Bear Valley, CA)	Bear Valley
387658	Beaumont WWTP No. 1	Beaumont City	Beaumont
396744	Benicia WWTP	Benicia City	Benicia
402313	Bieber STP	Lassen Co Waterworks Dist #1	Bieber



California Integrated Water Quality System Regulatory Measure ID	Facility Name	Organization	City
148817	Davis Migrant Center WWTF		Woodland
146219	DDJC, Tracy - WWTP, Stormwater	US Dept of Defense, Defense Logistics Agency	Stockton
396979	Deer Creek WWTP	El Dorado Irrigation District	Placerville
146261	Del Rey WWTF	Del Rey CSD	Del Rey
375255	Delano WWTF	Delano City	Delano
400654	Delhi WWTF	Delhi CWD	Delhi
349731, 397694, 389437	Delta Diablo SD	Delta Diablo	Antioch
395086	Desert Crest WWTP	Mission Springs Water District	Desert Hot Springs
148480	Desert Lake CSD WTF	Desert Lake CSD	Boron
392490	Desert Water Agency Recycled Water Facility	Desert Water Agency	Palm Springs
394937	Deuel Vocational Institution	Ca Dept of Corrections & Rehabilitation	Sacramento
145349	Dinuba WWTF	Dinuba City	Dinuba
396976	Discovery Bay WWTP	Town of Discovery Bay CSD	Discovery Bay
148816	Dixon Migrant Center WWTF		Woodland
394601	Dixon WWTF	Dixon City PWD	Dixon
331539	Don Pedro Sewer Zone 1	Mariposa Cnty DPW	Mariposa
321118, 323039	Donald C. Tillman WWRP	Los Angeles City Bureau of Sanitation	Los Angeles
401602	Donner Summit PUD WWTP	Donner Summit Public Utilities District	Soda Springs
139235	Dorris City STP	Dorris City	Dorris
194921	Dos Palos WWTF	Dos Palos City	Dos Palos
389066	Douglas Flat/Vallecito WWTP	Calaveras Cnty Water District	San Andreas
395737	Dry Creek WWTP	Roseville City	Roseville

<b>California Integrated Water Quality System Regulatory Measure ID</b>	<b>Facility Name</b>	<b>Organization</b>	<b>City</b>
316139	Dublin San Ramon SD Water Recycling	Dublin San Ramon Services District (Water Recycling Program)	Pleasanton
413162	Dublin San Ramon SD WWTP	Dublin San Ramon Services District (Water Recycling Program)	Pleasanton
368740	Dunnigan Wastewater Treatment Facility	California American Water Company Sacramento	Sacramento
427817	Dunsmuir WWTP	Dunsmuir City	Dunsmuir
146098	DVNM HDQ Furnace Creek WWTF	USDI National Park Service Death Valley	Death Valley
205765	DWA Operating Center 97-70018	Desert Water Agency	Palm Springs
144976	Eagle Lake Dist Office	USDA Forest Service Lassen National Forest, Eagle Lake District	Susanville
145515	Earlimart WWTF	Earlimart PUD	Earlimart
374448	East Bay MUD Water Recycling (E. Bayshore)	East Bay MUD Water Recycling (E. Bayshore)	Oakland
374449	East Bay MUD Water Recycling (RARE Water Project)	East Bay MUD Water Recycling (RARE Water Project)	Oakland
396970	Easterly WWTP	Vacaville City DPW	Vacaville
354386	Eastern Municipal Water District	Eastern Municipal Water District	Perris
146485	Eastern Sierra CSD WWTF	Eastern Sierra CSD	Bishop
194744	Eastman Lake Admin Area	US Army Corps of Engineers Sacramento	Sacramento
142547	EBMUD Recycled Water-North Richmond Water Reclmtn Plant	East Bay MUD Water Recycling (North Richmond WRP)	Oakland
401017	EBMUD WPCP	East Bay MUD (WPCP)	Oakland
148034, 298259	Edward C. Little Water Recycling Plant	West Basin MWD	Carson
824178	Edward C. Little WRP- West Coast Basin Barrier Project - Expansion Phase III	Edward C. Little WRP- West Coast Basin Barrier Project - Expansion Phase III	El Segundo

**APPENDIX C**  
**DESERT WATER AGENCY**  
**ORDINANCE NO. 67: REGULATIONS GOVERNING RECYCLED WATER SERVICE**  
**(JULY 1, 2017)**

**ORDINANCE NO. 67  
DESERT WATER AGENCY**

**REGULATIONS GOVERNING  
RECYCLED WATER SERVICE**

**EFFECTIVE DATE: July 1, 2017**

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# REGULATIONS GOVERNING RECYCLED WATER SERVICE

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# REGULATIONS GOVERNING RECYCLED WATER SERVICE

## SECTION 1 - DEFINITION OF TERMS

- 1-1      **AGENCY DEFINITIONS:** Whenever the words defined in this section, or pronouns used in their stead, occur in these Rules and Regulations, they shall have the meanings here given:
- 1-1.1      **AGENCY** shall mean the Desert Water Agency organized and operated pursuant to the provisions of the Desert Water Agency Law, Stats.1961, Ch. 1069.
- 1-1.2      **APPLICANT** shall mean an individual, partnership, corporation or agency which is the owner of the premises for which recycled water service is being applied.
- 1-1.3      **BACKUP FACILITY CHARGE** shall mean a charge levied on a premises for the purpose of providing recycled water service connection capacity in the Agency's overall recycled water system.
- 1-1.4      **BOARD** shall mean the Board of Directors of the Desert Water Agency.
- 1-1.5      **CONTRACTOR** shall mean any individual, firm, corporation, partnership, or association duly licensed to perform work by the State of California in connection with the installation of recycled water service facilities.
- 1-1.6      **CUSTOMER** shall mean the owner of the premises receiving recycled water service.
- 1-1.7      **DEVELOPER** shall mean a person, firm, corporation, partnership, or association who proposes to develop real property, or who subdivides real property for purposes of development.
- 1-1.8      **GENERAL MANAGER** shall mean the General Manager of the Desert Water Agency.
- 1-1.9      **INSTALLATION CHARGE** shall mean a charge levied on any premises for material, labor, and equipment to install recycled water system facilities.
- 1-1.10      **INTRACT** or **ONSITE** shall mean that area which lies inside the peripheral boundary of a subdivided area and/or a developed area.
- 1-1.11      **LOCAL AGENCY** shall mean a city, county, or independent special district of the State of California.

- 1-1.12      **LOT** shall mean a parcel or that portion of a parcel of land which is delineated or described as a single integral unit of a parcel map.
- 1-1.13      **MAIN** or **RECYCLED WATER MAIN** shall mean a recycled water pipeline and appurtenances controlled by the Agency and located in a street, alley, easement, thoroughfare, or right of way which is used to serve connections for individuals, premises, customers, and the general public.
- 1-1.14      **MAIN EXTENSION** shall mean the installation of any Agency recycled water main and appurtenances either intract or offtract beyond the existing recycled water system.
- 1-1.15      **MONTHLY SERVICE CHARGE** shall mean a charge levied on any premises to cover costs for operating, maintaining and replacing the facilities providing recycled water service, and for the billing, collection, and administrative costs.
- 1-1.16      **OFFTRACT** or **OFFSITE** shall mean that area which lies outside the peripheral boundary of a subdivided area and/or a developed area.
- 1-1.17      **PERSON** shall mean any individual, firm, corporation, company, political subdivision, city, county, district, the State of California, or the United States of America, or any department or agency thereof. The singular shall in each case include the plural.
- 1-1.18      **PREMISES** shall mean any lot, property, or any building or other structure.
- 1-1.19      **PRIVATE PLUMBING** shall mean the customer's pipeline and appurtenances extending from a point designated by the Agency to the customer's lake, pump building, water storage structure, surface impoundment, or irrigation system which receives recycled water.
- 1-1.20      **RECYCLED WATER** is water which, as a result of treatment of municipal wastewater is suitable for a direct beneficial use or a controlled use that would not otherwise occur and is therefore considered a valuable resource.
- 1-1.21      **REGULATIONS** shall mean the current edition of, and any amendments or revisions to, the Agency's Regulations Governing Recycled Water Service.
- 1-1.22      **REPLACEMENT CHARGE** shall mean a charge on any premises covering material, labor, and equipment to replace a service connection or portions thereof including, but not limited to, meter boxes, valve covers, extensions, and valve lids.
- 1-1.23      **SERVICE AREA** shall mean that area for which the Agency provides recycled water service.

- 1-1.24      **SERVICE CONNECTION** shall mean that service piping between a recycled water main and the customer's private plumbing.
- 1-1.25      **STANDARD SPECIFICATIONS** shall mean the current edition of the Agency's Recycled Water System Construction and Operating Specifications.
- 1-1.26      **SUBDIVISION** shall mean the division of any improved or unimproved land, shown on the latest equalized county assessment roll as a unit or as contiguous units, for the purpose of sale, lease, or financing, whether immediate or future, except for leases of agricultural land for agricultural purposes. SUBDIVISION includes a condominium project or an apartment complex.
- 1-2          **Other Definitions:** Words or terms not defined above shall be defined in accordance with the **Glossary - Water and Waste Water Control Engineering** prepared by the American Public Health Association and the Water Pollution Control Federation.

## SECTION 2 - AUTHORITY

- 2-1      **General Authority:** The General Manager may prescribe and enforce rules and procedures not in conflict or inconsistent with existing regulations to implement the application, administration, interpretation, and enforcement of these Regulations.
- 2-2      **Revision of Fees and Charges:** The Board may from time to time by motion, resolution, or ordinance add, fix, alter, change, amend, or revise any fees or charges for facilities and services.
- 2-3      **Authority of Inspectors:** The General Manager or his duly authorized representatives and/or employees of the Agency shall be permitted to enter upon all premises to which recycled water service is being provided for the purpose of determining the size, depth, grade, location, and condition of any recycled water facility and to determine possible hazards relating to the health, safety, and welfare of the people throughout the Agency's recycled water system in accordance with these Regulations.
- 2-4      **Recycled Water Service:** The Agency provides recycled water service as directed by the General Manager. Property owners within the Agency who use potable water for non-potable uses, including but not limited to cemeteries, golf courses, parks, highway landscape areas and industrial use, and for whom recycled water is available at a reasonable cost, are required to use recycled water in lieu of potable water for such purposes pursuant to California Water Code Section 13550.

## SECTION 3 – RECYCLED WATER SERVICE

### 3-1 **General Provisions:**

3-1.1 **Shortage of Recycled Water Supply and Interruption of Service:** The Agency shall attempt to furnish and deliver a continuous and sufficient supply of recycled water to the customer, and to avoid any shortage or interruption of delivery of same. However, the Agency will not be liable for interruption, shortage, or insufficiency of supply, or any loss or damage occasioned thereby. The Agency cannot assure a continuous, uninterrupted supply of recycled water.

3-1.2 **Right to Temporarily Suspend Service:** The Agency, whenever necessary for any reason, shall have the right to suspend temporarily the delivery of recycled water. In such cases, the Agency will attempt to provide a reasonable notice thereof, as circumstances may permit.

### 3-1.3 **Recycled Water Pressure Conditions:**

3-1.3.1 **Acceptance:** The signing of an application for recycled water connections or for recycled water service shall constitute acceptance and consent to such conditions of pressure and service as may from time to time exist, and the applicant agrees to hold the Agency harmless from any and all injury or damage caused by, or arising out of low, high, or fluctuating pressure or interruptions of service.

3-1.3.2 **Higher Elevation Service Requests:** The Agency assumes no obligation to serve recycled water to elevations higher than its existing facilities can serve. Due to topography, and other causes, recycled water pressure is not uniform throughout the territory the system serves, and the Agency reserves the right to change to different pressures in various areas served. Where premises are situated at such an elevation that they cannot be assured of a dependable supply from the distribution system of the Agency and/or where the desired rates of flow and/or pressures required by the particular operation to be conducted on the premises cannot be assured by the Agency, the applicant agrees to accept such recycled water service as the Agency is able to render from its distribution system; to construct, if necessary, and maintain at customer's expense on customer's premises, a reservoir and/or a booster pump of sufficient capacity to furnish an auxiliary supply of recycled water at such times as pressure in the Agency's mains may be insufficient to supply the premises with recycled water; and to release the Agency from all claims for failure to furnish an adequate recycled water supply.

3-1.4 **Obstructing Meter Facility:** Recycled water meters and appurtenances shall be the property of the Agency and normally are placed on public property or on Agency easements. It shall be a violation of these Regulations to damage or interfere with them or to place obstructions on or over the meter and/or appurtenances.



- 3-1.5      **Changes in Customer's Equipment:** Customers making any material change in the size, character, or extent of the equipment or operations utilizing recycled water service, or whose change in operation results in an increase in the use of recycled water, shall immediately give the Agency a written notice of the nature of the change.
- 3-1.6      **Notices:** Notices from the Agency to a customer will normally be given in writing, and either mailed or delivered at the last known address. Where conditions warrant and in emergencies, the Agency may resort to notification either by telephone or messenger. Notices from the customer to the Agency must be delivered in writing to the Agency's office.
- 3-1.7      **Change in Distribution System:** Any person making improvements or changes which will result in cutting, refitting, relocating, raising, or lowering service connections, recycled water mains, meters, valves, or other parts of the recycled water system of the Agency, shall indemnify the Agency for all costs incurred by the Agency in making such changes. When the location of a meter is changed at the customer's request, the cost of making the change will be at the customer's expense.
- 3-1.8      **Resale of Recycled Water:** A customer of the Agency may not enter into any contract or agreement to resell recycled water received from the Agency, nor shall the customer deliver or cause to be delivered, recycled water acquired from the Agency to premises other than those described in the application for service.
- 3-1.9      **Responsibility for Private Plumbing Facilities:** The Agency has no responsibility for the maintenance or operation of a customer's recycled water system beyond the Agency's meter or point of ownership by the Agency. The customer shall be responsible and liable for his own private plumbing facilities. The customer shall, at his own risk and expense, furnish, install, and keep in good and safe condition all the equipment that may be required for receiving, controlling, applying, and utilizing recycled water. The Agency shall not be responsible for any loss or damage caused by the improper care or wrongful act of the customer or any of his tenants, agents, employees, contractors, licensees, or permittees in installing or maintaining, using, operating, or interfering with such equipment. The Agency shall not be responsible for damage to property caused by spigots, faucets, valves, faulty pipes, and other equipment that are open when water is turned on at the meter, either when the recycled water is turned on originally or when turned on after a temporary turn off. Customers having aquatic animals, plants, and landscaping or anything else requiring a continuous water supply should take all necessary action to prevent damage or the causing of injury as a result of the shutting off of the recycled water supply. The customer agrees to hold the Agency harmless from any and all claims resulting from matters involving quantities, quality, time or occasion of delivery, or any other phase of the maintenance, operation, and service of a customer's recycled water system.

- 3-1.10      **Quick Closing Valves:** No person or customer shall install or use a quick closing valve or other device when such valve or device during its operation causes water hammer or an abrupt change of pressure in any Agency service connection or main. When such a condition exists, the customer shall be required to discontinue use of such valve or device immediately upon notification by the Agency. Upon failure to comply with a notice of correction of such condition, the recycled water service shall be discontinued until the correction is made by a proper installation to eliminate all such water hammer or abrupt change of pressure which affects Agency service connections or mains, and the customer shall be responsible for payment of applicable fees for resumption of service.
- 3-1.11      **Ground Wire Attachments:** The Agency will hold the customer or any other responsible party liable for any damage to the Agency's property which may be occasioned by the attachment of any ground wires to any plumbing which is, or may be connected to a service connection or main belonging to the Agency.
- 3-2          **Agency Consent:** No premises shall receive recycled water service from the Agency's recycled water system without prior consent of the Agency. No consent shall be given unless proper application has been made as provided in Section 4, and applicable charges have been paid in accordance with these Regulations. The applicant is responsible for paying all costs and expenses incidental to the installation and maintenance of the customer's own private plumbing facilities.
- 3-3          **Unauthorized Connections:**
- 3-3.1        **Violations:** Customers are alerted to Civil Code Section 1882, which imposes triple damages for the illegal reconnection or diversion of water, and Penal Code Sections 624 and 625, which make it a crime to tamper with water facilities. The following shall constitute a violation of these Regulations and may result in additional charges by the Agency as well as any other civil or criminal actions imposed or authorized by law.
- 3-3.1.1     **Connections:** To tap or make any connection to the Agency's recycled water mains.
- 3-3.1.2     **Wasting Recycled Water:** To cause or permit the waste of recycled water from the Agency's recycled water system or to maintain, or cause or permit to be maintained any leaky outlets, apparatus, or plumbing fixtures through which recycled water is permitted to run to waste.
- 3-3.1.3     **Activating Service by Customer:** Turning on the recycled water supply or permitting or causing it to be turned on without first having made proper application and having paid all required fees and charges is prohibited. Any violator will be held liable for all charges and damages as a result of unauthorized activation of recycled water service, which charges and damages may be tripled as authorized by law and recycled water service shall be discontinued until the above charges and damages are paid in full.

- 3-3.2      **Responsibility for Private Plumbing:** The Agency assumes no responsibility for the delivery of recycled water through private plumbing or for any damage resulting from the operation of same.
- 3-4      **Damage to Agency Facilities:** When recycled water is used or wasted due to a line break or other system impairment, the person causing the break or impairment shall pay all costs incurred by the Agency in repairing such damage, including staff and overhead costs and all direct and indirect costs incurred by the Agency. When the line break or system impairment creates an emergency condition, the minimum billing shall be \$500 because of the necessary, intangible and indirect costs of all such emergencies to the Agency and its recycled water customers.
- 3-5      **Notification of Change of Ownership:** It shall be the duty of every owner signing an application for recycled water service to notify the Agency of any change in the ownership of said premises at least two business days prior to such change. Every applicant shall be liable for the recycled water furnished pursuant to such application until the Agency receives written notice to cancel such service. Upon discovery of ownership change, recycled water service will be discontinued unless the subsequent owner makes arrangements with the Agency to continue service.
- 3-6      **Access to Premises:** The Agency's duly authorized agents shall at all reasonable times have the right to enter the customer's premises for any purpose properly connected with its operations.
- 3-7      **Responsibility:** The Agency's responsibility ends at the customer's side of the meter, or in the case of other special installations, at the point where the Agency's facilities end.
- 3-8      **Ownership:** All service connections and meters shall remain at all times the property of the Agency.
- 3-9      **Maintenance and Replacements:** All service connections and meters shall be maintained, repaired, and replaced by the Agency when rendered unserviceable through normal wear and tear; provided that where replacements, repairs, and adjustments of any service and/or meter are rendered necessary by the act, negligence, or carelessness of the customer, the customer shall bear the expense.



## SECTION 4 – RECYCLED WATER SERVICE CONNECTIONS

- 4-1      **Application:**    An applicant who desires recycled water service must complete an application form supplied by the Agency. Each applicant for recycled water service may be required to establish credit in accordance with Section 8.
- 4-2      **Premises To Be Served:** The applicant shall describe the premises to be served, and only the premises so specified will be connected to the Agency's recycled water system.
- 4-3      **Division of Property:** Whenever property having a service connection is divided into two or more parcels, the existing service connection shall serve the parcel which it directly enters, and new service connections shall be required for each of the remaining parcels.
- 4-4      **Approval of Drawings:** Service connections made to the Agency's existing recycled water mains for any premises shall be installed only by the Agency. A developer may be allowed to install service connections to those mains installed by the developer prior to acceptance by the Agency. All proposed service connections shall require recycled water improvement drawings and shall depict the proposed facilities. All drawings and specifications shall substantially conform to the Agency's Standard Specifications and shall be submitted to the Agency in advance of construction for prior approval by the Agency.
- 4-5      **Licensed Contractors:** Only duly authorized and licensed contractors, or employees or agents of the Agency shall be permitted to install recycled water facilities.
- 4-6      **Service Size:**    The Agency reserves the right to determine the size of the service connection.
- 4-7      **Service Connection Location:** Where practicable, the Agency will install the service connection at a location selected by the applicant, but the Agency reserves the right to determine the location in relation to boundaries of the premises to be served. Customarily, a service connection will terminate at a point behind and adjacent to the curb in streets or adjacent to the property line where no curb exists. In locations where the applicant's premises do not directly abut on a public thoroughfare, the Agency, at its option, may provide a service connection of conventional length terminating at some practicable location on public property or on Agency-owned easement, and the applicant has the responsibility of connecting thereto. The applicant's private plumbing connecting to the Agency's service connection should not be installed until the service connection is installed. In the event the applicant's private plumbing is installed prior to the time the service connection is installed, and its location does not correspond with that of the service

connection, then the applicant must bear the additional cost of connecting the applicant's private plumbing to the Agency's service connection.

4-8        **Cost of Installation:** The Agency will permit the installation of recycled water service connections to the applicant's premises at the applicant's expense in accordance with Section 6-1.

4-9        **Appurtenances:**

4-9.1      **Valves:** Each service connection shall have a meter isolation valve on the inlet side of the meter for exclusive use by the Agency in controlling the use of the recycled water through the service connection, meter, flow control valve, and a meter isolation valve on the outlet side of the meter. If Agency facilities are damaged by the customer, the Agency shall provide for all repairs and the customer shall be responsible for all replacement and/or repair costs.

4-9.2      **Meters:** All recycled service connections shall be metered. Customarily, meters will be installed in public property adjacent to the curb or property line, but, at the option of the Agency, meters may be installed on the customer's premises in an appropriate housing. No rent or other charge will be paid by the Agency for a meter located on the customer's property. Meters will be sealed by the Agency at the time of installation, and no seal shall be altered or broken except by authorized employees or agents of the Agency. If a meter seal is altered or a meter is damaged by a customer, the Agency shall have the right to charge the customer for the replacement of the meter, and may triple the charges when authorized by law.

4-9.3      **Cost of Installation:** The cost of installing the meter and all appurtenances shall be borne by the customer and shall be in accordance with Section 6-1.

4-10      **Plan Checking:** The Agency will review and check the drawings for service connections where main extensions are not required at the applicant's expense as provided in Section 6-8.

4-11      **Inspection of Connections:** Every recycled water service connection installed by other than the Agency shall be subject to inspection in accordance with Section 6-9. The Agency may have an inspector in attendance at all times during the actual work.

## SECTION 5 – MAIN EXTENSIONS

### 5-1 **General Provisions:**

- 5-1.1 **Individual Extensions:** The Agency will permit extension of its recycled water mains and service connections to individual's premises at the individual's expense, subject to the Agency's requirements and conditions.
- 5-1.2 **Agency Ownership:** Any such facilities which do not constitute private plumbing will be the sole property of the Agency upon acceptance by the Agency. Before service is provided for permanent use, the applicant shall execute any and all documents required by the Agency to vest title to those facilities in the Agency.
- 5-1.3 **Specifications:** The size, type, quality of materials, and the actual construction will be done in accordance with the Agency's Standard Specifications and approved drawings. Construction shall be performed by a contractor acceptable to the Agency, or by the Agency itself with its own forces. The installation of the main extension will be under the inspection by and subject to the approval of the Agency.
- 5-1.4 **Costs:** Adjustment of any difference between the estimated cost and the actual cost of any main extension constructed hereunder will be made as provided for in Section 6-2.
- 5-1.5 **Feasibility:** The right is reserved, as the Agency may require, to determine the economic and/or engineering feasibility of any main extension and the Agency will not approve extensions for which feasibility is negative or uncertain as determined by the Agency in its sole discretion.
- 5-1.6 **Location:** Main extensions are to be installed in conjunction with proposed street improvements to the premises whenever possible. Main extensions will be located in streets, in easements provided to the Agency by the applicant or in easements obtained by the Agency, or in property deeded to the Agency. Prior to installing a main extension, the applicant shall provide the Agency with such easements or deeds as may be necessary or reasonably appropriate to the operation thereof. The Agency will not be required to make extensions where street grades have not been brought to those established by public authority.
- 5-1.7 **Agency Right to Allow Connections:** The Agency shall have the right at any time to allow other users to connect to the Agency's recycled water system at any location, whether built by the Agency or by another party and transferred to the Agency, subject to payment of such fees as may be required by agreement or by resolution of the Board.

- 5-1.8 **Minimum Sizing:** The Agency will not permit a main extension of less than eight inches in diameter unless approved in advance by the Agency.
- 5-1.9 **Agency Right to Design and Construct:** The Agency reserves the right to design and construct any recycled water facilities which will become part of the Agency's system. The cost of said facilities shall be borne by the applicant including, but not limited to design, materials and installation.
- 5-2 **Types of Extensions:**
- 5-2.1 **General:**
- 5-2.1.1 **Offtract Improvements:** If offtract improvements are required to serve the applicant's intract improvements, the cost of all required facilities shall be borne by the applicant including, but not limited to, design, materials and installation.
- 5-2.2 **By Agency:** The Agency, at its option, may extend its recycled water system to the applicant's premises at the applicant's expense. The applicant shall pay the Agency a deposit equal to the estimated cost of the main extension, as determined by the Agency. Said deposit shall be used to compensate the Agency and/or any contractors and suppliers engaged by the Agency in the installation of the main extension. Within 60 days after the cost of the main extension has been determined, any difference between the cost and the deposit shall be paid by or refunded to the applicant. The Agency will not be required to pay interest on the deposit. Where two or more applicants apply for service from the same main extension, the Agency may allocate the costs proportionately.
- 5-2.3 **By Applicant:** The applicant shall furnish security bond to the Local Agency to guarantee the installation of the main extension in the amount equal to the estimated cost thereof as determined by the Agency. The applicant will be required to enter into a written agreement with the Agency for the construction and installation of required facilities and deposit with the Agency a sum of money equal to twenty percent of the estimated construction costs as determined by the Agency for the purpose of covering the cost of inspection and incidentals. The mains and appurtenances shall be installed by a contractor holding a valid California Contractor's license in accordance with the provisions of Division 3, Chapter 9, of the Business and Professions Code of the State of California, or any amendments thereto. As used in this Section, the word "applicant" shall be deemed to include the word "subdivider."
- 5-3 **Inspection:** The Agency will provide inspection of the main extension at the applicant's expense as provided in Section 6-9.
- 5-4 **Plan Checking:** The Agency will review and check the drawings for the main extension prior to approval at the applicant's expense as provided in Section 6-8.

5-5

**Design Review:** The Agency will perform design review for tentative projects on an actual cost basis. An estimate will be prepared by the Agency prior to performing said review in accordance with Section 6-10.



## SECTION 6 – FEES AND CHARGES

6-1        **Service Connections and Meter Installations:** Each applicant shall pay to the Agency charges for the installation of metered recycled water service connections then in effect as established by resolution of the Board.

6-1.1     **Time of Payment:** Recycled Water Service Connection and Meter Installation Charges shall be paid to the Agency prior to the provision of recycled water service.

6-1.2     **Meter Installations:** Charges for meter installations shall be based on the size and location of the meter and the actual installation cost plus any applicable overheads required to provide adequate service.

6-1.3     **Backup Facility Charges:** Every applicant for a recycled water service connection shall, in addition to all other charges, pay a Backup Facility Charge based on the size of the applicant's metered connection.

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. The Backup Facility Charge shall also apply to existing metered service connections for which increased delivery capability is requested and larger service connections and meters are installed. In such event, the charge shall apply to the difference in service and delivery capacity between the new meter and the old meter which is being replaced.

6-1.3.1   **Exemption:** The Backup Facility Charge may be reduced or eliminated where certain recycled water improvement facilities constructed will be required of an applicant. The reduction or elimination will be no greater than the value of the constructed facilities as determined by the Agency's General Manager, whose decision will be final.

6-1.4     **Flow Control Valve Installation:** Charges will be collected for the installation of flow control valves and all appurtenances. The charge will be determined in accordance with the size of the flow control valve required and actual installation cost and any applicable overheads required to provide adequate service.

6-1.5     **Outlet Valve:** Charges will be collected for installation of an outlet valve. The charge shall be based on the size and actual installation cost and any applicable overheads required to provide adequate service.

6-1.6     **Service Connection Installations:** Charges will be collected for the installation of service connections. Charge shall be based on the size and actual installation cost and any applicable overheads required to provide adequate service.

- 6-1.6.1     **Exemption:** A developer who installs recycled water facilities in accordance with Section 5-2.3 shall not be charged a Service Connection Charge for those service connections that developer installs.
- 6-2     **Adjustable Funds for Meter Installation:** A charge will be collected for installation of service connections. An estimate shall be prepared by the Agency, and upon payment of the amount of said estimate by the applicant, the work shall be scheduled. Adjustable funds are estimates only, subject to any price change and open to final accounting. Any monies remaining above actual costs will be returned to the applicant within 60 days in accordance with Section 5-2.2 and any difference above estimates will be billed to applicant. Any amounts billed to applicants are due and payable within ten days thereafter. Should the same not be paid within ten days, the Agency shall discontinue recycled water service to the premises where the work was done and shall not furnish recycled water thereto until said bill, together with additional charge for restoration of service, is paid.
- 6-3     **Service Relocations:** A charge will be collected for the relocation of activated service connections and shall consist of the actual cost including labor, material, and equipment plus applicable overheads. Payment and necessary refund shall be in accordance with Section 6-2.
- 6-4     **Service Abandonments:** A charge will be collected for the abandonment of service connections and shall consist of the actual cost including labor, material, and equipment plus applicable overheads. Payment and necessary refund shall be in accordance with Section 6-2.
- 6-5     **Change in Meter Sizes:** A charge will be collected for the installation of a larger meter at the request of the customer and upon Agency approval. The charge will consist of the cumulative difference in meter charges between the smaller meter and the larger meter in accordance with Section 6-1.2, 6-1.3, and 6-1.4. If, however, the installation of a larger meter requires a larger service connection installation, the charge to the customer shall include the full cost of the service connection in accordance with Section 6-2.
- 6-6     **Meter Test Deposits:** A deposit will be required to cover the reasonable cost of a meter test and set by resolution of the Board.
- 6-7     **Replacements:** A charge will be collected for the replacement of service connections or portions thereof including, but not limited to, meter boxes, valve covers, extensions, and valve lids. The specific amounts of such charges and the time of payment by the customer shall be determined by the Agency and may include a reasonable minimum.
- 6-8     **Plan Check Fees:** Plan Check Fees are established by resolution of the Board and shall be charged for the Agency's services in checking the plans for required recycled water facilities.



- 6-9      **Inspection Fees:** The Agency shall provide inspection at the applicant's expense at the applicable hourly rate paid by the Agency for an inspector plus approved administrative and general charges.
- 6-10     **Design Review Fees:** Design Review Fees are established by resolution of the Board and shall be charged for the Agency's services in analyzing the recycled water system requirements for proposed developments.
- 6-11     **Restoration of Services:** A charge to be set by resolution of the Board will be collected for restoring service that has been discontinued.
- 6-12     **Development Review Charge:** Development Review Charges are established by resolution of the Board and shall be charged for the Agency's service in the preparation of will serve letters, developer bond amounts, and response to initial studies.

## SECTION 7 – MONTHLY CHARGES

- 7-1        **Metered Services:** For all metered service, the charges for service shall consist of “Monthly Service Charge,” “Quantitative Charge,” and “Zone Pumping Charge” for recycled water delivered.
- 7-1.1      **Monthly Service Charges:** The monthly charge for all types or classes of service shall be determined by the size of the meter and shall be set by resolution of the Board or by mutual agreement.
- 7-1.2      **Quantitative Charges:** The quantitative charge for all metered recycled water used for all purposes shall be set by resolution of the Board or by mutual agreement.
- 7-1.3      **Flow Control Valves:** Monthly Service Charges as set by resolution of the Board will be collected for testing and necessary minor repairs of each valve.

## SECTION 8 – CREDIT POLICY

8-1      **Establishing Credit:** Recycled water service, in all cases, will be kept in the name of the property owner. Each applicant for recycled water service will be required to establish credit to the satisfaction of the Agency before service will be rendered. Owner's credit will be deemed established with no deposit required, if the new owner can provide proof of ownership for the property to be serviced, and/or the owner has had previous service within the Agency service area during the past two years and maintained an account history where service has not been discontinued for nonpayment for 12 consecutive months.

8-2      **Amount of Deposit:** Where credit cannot be established pursuant to Sections 8-1, a deposit shall be required and shall be determined based on meter size. The minimum deposit shall be set by resolution of the Board.

8-3      **Application of Deposit:** Deposits shall be held for one year. Upon the completion of one year's continuous service, during which time service had not been discontinued for nonpayment, the deposit shall be applied to the recycled water account. If service is discontinued for nonpayment, the deposit shall remain with the Agency for 2 years from the date of reconnection of service after being disconnected for non-payment or until service is ordered discontinued by the applicant.

The deposit, less the amount of any unpaid recycled water bills, will be refunded without interest upon discontinuance of service by request of the applicant.

Refundable deposits may be forfeited to the Agency, as provided by law, if unclaimed by the depositor within three years from the date service is discontinued.

## SECTION 9 – DISCONTINUANCE AND RESTORATION OF SERVICE

### 9-1 **Discontinuance of Service:**

- 9-1.1 **Agency Initiated:** The Agency has the right to discontinue service if a customer fails to comply with these Regulations or any other rule, regulation, ordinance, or resolution of the Agency. Under such circumstances, the Agency will make a reasonable effort to notify the customer prior to discontinuance of service. However, such notice shall not be required when the noncompliance, violation, or infraction by the customer results, or is likely to result, in a dangerous or unsanitary condition on the premises, or in the recycled water system, or elsewhere.

Except as otherwise provided above, prior to discontinuing service for reasons other than non-payment (delinquency), the Agency will give the customer a notice in writing specifying the reason or reasons why service may be discontinued and granting an opportunity to be heard within five days of receipt of said notice. A copy of the notice will also be sent to the service address if different from the billing address. If the customer or occupant fails or refuses to comply with the notice or fails to request an opportunity to be heard within a period of five days after presentation of the notice, then the Agency may discontinue service to the customer. If the person requests the opportunity to be heard and is heard, the Agency will thereafter determine if service shall be continued.

- 9-1.2 **At Customer's Request:** A customer may have service discontinued by notifying the Agency at least 2 business days in advance of the desired date of discontinuance. Service will only be discontinued on the Agency's normal working days and during normal working hours unless approved by the Agency in advance.

### 9-2 **Restoration of Service:**

- 9-2.1 **General Provisions:** A customer whose service has been discontinued may have it restored by making application and by paying applicable restoration of service charges in accordance with Section 6-11.

- 9-2.2 **Unauthorized Restoration:** It shall be a violation of these Regulations, and a crime, for any person to make an unauthorized reconnection to the Agency's recycled water system once service to the premises has been discontinued in accordance with Section 3-3.1.3.

## SECTION 10 – METER READING, BILLING AND COLLECTION

### 10-1 **Meter Reading, and Billing:**

10-1.1 **Rendering of Bills:** Bills for recycled water service shall be based upon monthly meter reading and monthly billings.

10-1.2 **Proration of Bills:** The charges applicable to opening periods, closing bills, and bills rendered for periods corresponding to less than one month will be computed as follows:

The amount of the minimum charge and the quantity allowed therefore, in each of several quantity rate blocks, will be prorated on the basis of the ratio of the number of days in the period that service is provided to the number of days in an average billing period. The measured quantity of usage will be applied to such prorated amounts and quantities.

10-1.3 **Payment of Bills:** During each month, the Agency shall mail a statement covering charges for all recycled water received by the customer during the preceding month. Charges shall be due and payable upon receipt of the statement. If it is necessary for the Agency to visit the premises to collect payment, a collection fee to be determined by the General Manager will be added to the amount owing. Any check or electronic form of payment submitted for payment of recycled water service which is not honored and has been returned by the bank shall be subject to a return payment fee. Such checks/payments shall be replaced by the customer with cash or money order, including the returned payment fee as determined by the Agency, in order to avoid a discontinuance of recycled water service.

10-1.4 **Delinquent Accounts:** The bill for recycled water service shall be delinquent if not paid within 30 days after billing. When delinquency occurs, a final notice will be mailed to the billing address. If payment has not been received 15 days after a final notice has been issued, the service address, if different from the billing address, will be tagged 48 hours in advance of scheduled turn off to give the customer opportunity to pay the outstanding account. If customer does not pay the outstanding account or make arrangements for payment by the date of scheduled turn off, then service may be discontinued without further notice.

Service shall not be restored to the premises until all charges outstanding must be paid including fees, if any, have been paid in full. An owner whose service has been discontinued for nonpayment of bills, or whose deposit shall have been applied in whole or in part to the payment of any bills, will be required to reestablish credit by a cash deposit in accordance with Section 8-1.

A customer who has a delinquency for any premises served by the Agency may not receive recycled water service, water service, or sewer service on another premise

until all delinquencies, including fees, are paid in full. Additionally, when a service has been terminated for nonpayment, all charges may be transferred to another account held in the sole name of the same owner. This account will become delinquent if payment is not made within 15 days from the date of delinquency transfer, and will be subject to shutoff without further notice. The Agency may file liens against the property or any other properties owned by the delinquent customer within the State of California to enforce collection of delinquent accounts.

10-2      **Meter Test at Customer's Request:**

10-2.1      **General Provisions:** A customer may request the Agency test the meter serving the premises. The Agency will require the customer to deposit an amount for such test in accordance with Section 6-6. The deposit will be returned if the meter is found to register more than two percent fast. The Agency shall require the customer's presence when the test is conducted. A written report of the test will be available to the customer.

10-3      **Adjustment of Bills for Meter Error:**

10-3.1      **General Provisions:** When a meter is found to be out of order, the charge for recycled water will be based, at the option of the Agency, on one of the following:

The average monthly consumption for the three preceding months during which the meter is known to have registered correctly, or;

An estimate of consumption based either upon the customer's prior use during the same season of the year or upon a reasonable comparison with the use of other customers receiving the same class of service during the same period and under similar circumstances and conditions, or;

The consumption as registered by a substitute meter, or;

In accordance with Section 10-3.3.

10-3.2      **Meter Reading Inaccessibility:** When a meter is covered or otherwise inaccessible so that it cannot be read, an average bill will be rendered and accumulated errors, if any, will be adjusted when the meter is first thereafter read.

10-3.3      **Adjustment Based on Meter Test:** If a meter tested in accordance with Section 10-2 is found to be registering more than five percent fast, another meter will be installed and the Agency will refund to the customer the meter test deposit plus the amount of the overcharge based on corrected meter readings for the period the meter was in use, but not to exceed a period of four months immediately preceding the request for the meter test.

When, upon testing, a meter is found to be registering more than 5 percent slow, the Agency may bill the customer for the amount of the undercharge based on corrected meter readings for the period the meter was in service but not to exceed a period of two months immediately preceding the request for the meter test. The meter test deposit will be retained by the Agency to cover the testing of the meter.



## SECTION 11 – CROSS CONNECTIONS

- 11-1      **General Provisions:** There shall be no connections installed, located, maintained, or operated between the recycled water supply system of the Agency, including its appurtenant mains, pipes, fixtures and equipment, and any other water supply system which might cause contamination or pollution of the water and physical parts of the Agency's water system. The Agency shall have the right to discontinue the supply of recycled water to the premises where this condition exists.
- 11-2      **Protection from Cross Connections and Backflow:** Water service connections shall be protected from the hazards of cross connection and backflow in accordance with the regulations of the California State Department of Public Health, the County of Riverside, this Agency, or any other provision of law.
- 11-3      **Installation and Maintenance of Devices:** Flow control devices of an approved type shall be installed and maintained at the expense of the customer in accordance with Sections 6-1.4 for installation and 7-1.3 for monthly charges.
- 11-4      **Discontinuance of Service:** The service of recycled water to any premises may be discontinued by the Agency without notice if unprotected cross connections exist on the premises, or if a defect is found in an installed backflow protection device, or if a backflow protection device has been removed or bypassed, and service will not be restored until such conditions or defects are corrected. Discontinuance of service may be summary, immediate, and without notice whenever, in the judgment of the General Manager, such action is necessary to protect the potable water supply or the safety of the potable water system, and the Agency's determination shall be final and conclusive.
- 11-5      **Testing Charges:** All flow control devices shall be tested at least once a year, or more often in those instances where successive inspections indicate repeated failure. The defective devices shall be repaired, overhauled or replaced at the expense of the customer. A charge shall be added to the recycled water bill for testing and minor repairs. Charges for repairs amounting to \$100 or more, including applicable overheads, will be billed to the customer separately.

## SECTION 12 – ENFORCEMENT

- 12-1      **General Provisions:** The following procedures are established for enforcement of these Regulations, not for penalty. All customers shall be held strictly responsible for any and all acts of tenants, agents, or employees, and those customers shall be liable for any expense, loss, or damage incurred by the Agency, all pursuant to these Regulations.
- 12-2      **Violations:**
- 12-2.1    **Written Notice:** Any person found in violation of these Regulations will be notified pursuant to Section 9-1.1, except when immediate discontinuance of service is required as provided for in that Section.
- 12-2.2    **Corrective Action:** Upon notification by the Agency of any violation of these Regulations, the customer shall immediately take whatever corrective action may be necessary.
- 12-3      **Discontinuance of Service:** The Agency may discontinue service for any violation of the Regulations as provided in Section 9-1 and 11-4.

## SECTION 13 – SEVERABILITY

- 13-1      **Severability of Regulations:** These Regulations and the various sections, parts and clauses thereof, are hereby declared to be separable. If any part, section, subsection, paragraph, sentence, clause, or phrase of these Regulations is for any reason held to be unconstitutional or unlawful, such provision shall not affect the validity of the remaining portions of these Regulations.

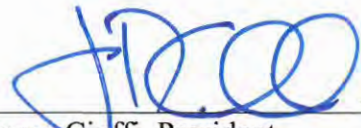
## SECTION 14 – WASTEWATER RECLAMATION MEMORANDUM OF UNDERSTANDING

- 14-1      **General Provisions:** Nothing in this ordinance should be interpreted or construed to modify, alter, or supersede any portion or terms of the Wastewater Reclamation Memorandum of Understanding between the City of Palm Springs and the Desert Water Agency dated June 12, 1985.

## SECTION 15 - ADOPTION

- 15-1      **Effective Date:** Except as otherwise provided herein, this Ordinance becomes effective on July 1, 2017.
- 15-2      **Previous Ordinance Repealed:** Ordinance No. 60 is hereby repealed.

**ADOPTED** this 20<sup>th</sup> day of June 2017.



James Cioffi, President  
Board of Directors

**ATTEST:**



Kristin Bloomer, Secretary-Treasurer  
Board of Directors

**APPENDIX D**  
**DESERT WATER AGENCY**  
**DRAFT RULES AND REGULATIONS FOR**  
**RECYCLED WATER FACILITIES**

**DRAFT**

RULES AND REGULATIONS FOR  
RECYCLED WATER FACILITIES

DESERT WATER AGENCY  
P.O. BOX 1707 PALM SPRINGS, CA 92263  
1200 GENE AUTRY TRAIL SOUTH PALM SPRINGS, CA 92264

(760) 323-4971



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**APPENDIX**

**SECTION 1  
GENERAL PROVISIONS**

**1.1 SPECIFIC AUTHORITY**

The various regulations for recycled water service are promulgated by the Desert Water Agency Ordinance No.67 or successor.

**1.2 SEVERABILITY**

If any section, subsection, sentence, clause or phrase of these regulations is for any reason held to be invalid or unconstitutional, such decision shall not affect the remaining portions of these Regulations. The Board hereby declares that it would have approved said Regulations by section, subsection, sentence, clause or phrase thereof irrespective of the fact that any one or more sections, subsections, sentences, clauses or phrases be declared invalid or unconstitutional.

**1.3 ENFORCEMENT**

The Desert Water Agency shall enforce these Regulations in all matters concerning the use of any recycled water and/or recycled water service. Each and every condition and requirement with respect to the use, connection, disconnection, reconnection, and/or discontinuance of recycled water and/or recycled water service provided by and set forth in these Regulations shall apply with equal force and effect to any person, persons or firm, public or private. There shall be no deviation from these Regulations except upon written authorization by the General Manager, who will act at all times within any and all applicable Regulatory Agency constraints. An appeal procedure shall be provided and action of the Board shall be final.

**1.4 AMENDMENTS**

These Regulations may be amended by Board Resolution at any regular or special meeting for cause determined by the Board or staff and without the approval of any User or Owner. Moreover, any amendments so made are immediately incorporated by the Regulations and will be administrated as such. Insofar as the Regulations support portions of the California Administration Code, Title 17 and Title 22, any amendments to those documents are also immediately incorporated by the Regulations.

**1.5 PRECEDENCE**

These Regulations shall take precedence when they require higher quality material, equipment, design and/or construction methods than are required by the local governing codes, rules and regulations.

**1.6 LOCAL AUTHORITY**

Except as noted in Section 1.5 of these Regulations, all on-site facilities shall be designated to meet the standards of the local government codes, rules and regulations.

1.7 SERVICE AREA

The Regulations set forth herein pertain to recycled water service to lands and/or improvements lying within the legal boundaries of the Agency unless otherwise stated.

1.8 DEFINITIONS

Whenever the following terms, or pronouns used in their place, occur in these Regulations, or in any documents that these Regulations govern, the intent and meaning shall be interpreted as follows:

Agency - Shall mean the Desert Water Agency organized and operated pursuant to the provisions of the Desert Water Agency Law, Stats. 1961, Ch. 1069.

Applicant - Shall mean the individual, partnership, corporation, or agency which is the owner of the premises for which recycled water service is being applied.

Application Rate - The rate at which recycled water is applied to an irrigation or construction area, expressed in inches per hour.

Approved Backflow Preventer - A device installed to protect the potable water supply from contamination by recycled water, such as treated wastewater. This device shall be recognized as such by the Foundation for Cross-Connection Control and Hydraulic Research, University of Southern California.

Approved Use - An application of recycled water in a manner, and for a purpose, designated in a user permit issued by the Desert Water Agency and in compliance with any and all applicable Regulatory Agency requirements.

Approved Use Area - A site, with well-defined boundaries, designated in a user permit issued by the Desert Water Agency to receive recycled water for an approved use and acknowledged by any and all applicable Regulatory Agencies.

As-Built Drawings - Record drawings that show the completed facilities as constructed or modified.

Board - The Board of Directors of the Desert Water Agency.

Construction Use - An approved use of recycled water to support construction activities such as soil compaction during grading.

Contractor - Shall mean an individual, firm, corporation, partnership, or association duly licensed to perform work by the State of California in connection with the installation of recycled water service facilities.

Design Area - A site, with well-defined boundaries, proposed to receive recycled water for an approved use as delineated in an application for a user permit.

Effluent - Treated wastewater discharged from a wastewater treatment facility or water recycling facility.

Engineer - The Engineering Supervisor of the Desert Water Agency or an authorized agent.

General Manager - The General Manager of the Desert Water Agency.

General Public - Any person or persons at large who may come in contact with facilities and/or areas where recycled water is approved for use.

Infiltration Rate - The rate at which the soil will accept water as applied during irrigation, expressed in inches per hour.

Inspector - Any person authorized by the Desert Water Agency to perform inspection of either on-site or off-site facilities prior to construction, during construction, after construction and during operation.

Irrigation Period - The time, from start of water flow to cessation, during which a specific area receives recycled water by direct irrigation applications, regardless of how often the specific area is irrigated - that is, the length of the duty cycle.

Irrigation Use - An approved use of recycled water for landscape irrigation as defined for recycled water under Title 22, Division 4, Article 4, of the California Administrative Code.

Nonpotable Water - Water which does not conform to applicable standards for potable water.

Off-Site - Designates or relates to recycled water facilities up to and including the water meter.

On-site - Designates or relates to facilities owned and operated by a User.

Operations Personnel - Any employee of a User, whether permanent or temporary, or any contracted worker whose regular or assigned work involves the supervision, operation, or maintenance of equipment on any portion of on-site facilities using recycled water.

Operator - Any person, persons, or firm who by entering into an agreement with a User is responsible for operating on-site facilities.

Owner - Any holder of legal title, contract purchaser, or lessee under a lease with an unexpired term of more than one (1) year, of property for which recycled water service has been requested or established.

Peak Moisture Demand - The demand during those periods of maximum seasonal temperatures and plant growth and, hence, equal to the maximum seasonal net evapotranspiration requirements.

Plans - The plans, working drawings, profiles, typical cross sections, and supplemental drawings, or reproductions thereof, approved by the Engineer, which show locations, character, dimensions, or details of the work.

Ponding - Retention of recycled water on the surface of the ground or other natural or man-made surface for a period of time following the cessation of an approved recycled water use activity such that a hazard or potential hazard to the public health results.

Potable Water - That water which is pure and wholesome, does not endanger the lives or health of human beings, and conforms to the latest edition of the United States Public Health Service Drinking Water Standards, the California Safe Drinking Water Act, or other applicable standards.

Rate and Fee Schedule - The schedule of all rates, charges, fees and assessments to be made in connection with the use of recycled water served by the Desert Water Agency, as approved or as amended by the Board.

Recycled Water - Is water which, as a result of treatment of municipal wastewater is suitable for direct beneficial use or a controlled use that would not otherwise occur and is therefore considered a valuable resource.

Recycled Water System - The Desert Water Agency facilities that produce, convey, supply, store, and intercept recycled water.

Regulations - Shall mean the current edition of, and any amendments or revisions to, the Agency's Regulations Governing Recycled Water Service.

Regulatory Agencies - Those public agencies legally constituted to protect the public health and water quality, such as the State Water Resources Control Board, California Regional Water Quality Control Boards, and the Riverside County Department of Environmental Health.

Runoff - Flow of recycled water along the surface of the ground or other natural or manmade surface, including but not limited to pedestrian walkways, streets, playground surfaces and grassy slopes.

Service - The furnishing of recycled water to a User through a metered connection to the on-site facilities.

System Failure - Any malfunction of on-site facilities that could lead to a violation of these Regulations.

Terms - All terms relating to matters of opinion or judgment, such as in regard to approvals, requirements, directions, or acceptances, denote the opinion or judgments of the Desert Water Agency.

Treated Wastewater - Wastewater treated in accordance with the requirements of "Water Recycling Criteria", of the California Code of Regulations.

User - Any person, persons, or firm (includes any public utility, municipally or other public body or institution) issued a user permit by the Desert Water Agency. The User and Owner may be one and the same.

User Permit - A permit issued by the Desert Water Agency to a recycled water service Applicant after the satisfactory completion of the service application procedures set forth in these Regulations. This permit constitutes a service agreement that legally binds the User to all conditions in these Regulations and to any and all applicable Regulatory Agency requirements.

Violation - Noncompliance with any condition or conditions of these Regulations and/or a user permit by any person, action, or occurrence, whether willfully or by accident.

Water Recycling - The planned renovation of wastewater to produce an effluent that is approved for specific beneficial use by the appropriate Regulatory Agency.

Water Recycling Facility (WRF) - The Desert Water Agency facility that produces recycled water.

Windblown Spray - Dispersed, airborne particles of recycled water capable of being transmitted through the air to locations other than that for which the direct application of recycled water is approved.

Work - The entire improvement proposed to be constructed pursuant to a legal agreement and consistent with these Regulations.

#### 1.9 SYSTEM RESPONSIBILITY

All off-site facilities are the property of the Desert Water Agency and shall be under the management and control of the Desert Water Agency. Only authorized employees of the Desert Water Agency shall have any right to operate said system and/or property in any manner. The Off-Site Supervisor, designated by the Desert Water Agency, shall be responsible for the operation of the off-site distribution systems, for the surveillance of all Users, and for the assessment of water quality as it relates to compliance with requirements of Regulatory Agencies.

#### 1.10 PROTECTION OF PUBLIC HEALTH

The Desert Water Agency reserves the right to take any action with respect to the operation of the recycled water system and at such time as it deems proper to safeguard public health.

#### 1.11 AUTHORIZED USES

These Regulations limit the application of recycled water to irrigation use. Any other uses may be approved on a case-by-case basis by the Desert Water Agency. The Desert Water Agency may grant permission for other uses only after the appropriate Regulatory Agencies have granted such approvals as may be required.

#### 1.12 APPROVED USE AREAS

Recycled water may only be used in areas approved by the Desert Water Agency. Approval may be obtained only through the service application procedure contained in these Regulations. In all cases, approval of a use area by the Desert Water Agency will be contingent upon complete satisfaction of the requirements of the applicable Regulatory Agencies.

#### 1.13 DESIGN APPROVAL

Prior to the construction of on-site facilities that will use or receive recycled water, the design of such facilities must be approved by the Desert Water Agency. Approval shall be obtained only through the procedure contained in these Regulations. Approval shall be contingent upon evidence that all applicable design requirements, including those contained within these Regulations, are satisfied.

#### 1.14 CONSTRUCTION INSPECTION

The Desert Water Agency or its authorized agents shall inspect the construction of on-site facilities that will use or receive recycled water to verify that they are constructed in conformance with the plans and these Regulations.

**1.15 FINAL INSPECTION**

Before the Desert Water Agency approved service start-up of any facilities using recycled water, the installed system shall be tested under design operating conditions to establish that the operation is in accordance with all applicable requirements, including those contained within these Regulations. Assuming all other requirements are satisfied, service start-up will be contingent upon successful operational testing.

**1.16 SERVICE CONDITIONS**

The Desert Water Agency reserves the right to control and schedule the use of recycled water, if in the opinion of the General Manager or his designated representative control and scheduling are necessary to maintain acceptable working conditions in the recycled water distribution system. These and other service conditions in the Regulations will be administered by the Desert Water Agency at its discretion.

**1.17 RATE AND FEE SCHEDULE**

All rates and fees regarding recycled water service and their respective administrative provisions shall be fixed and established by the Board. The most current rate and fee schedule so established is hereby incorporated into these Regulations.

**1.18 LIABILITY**

The Desert Water Agency assumes no responsibility for the maintenance and operation of any on-site recycled water system beyond that which it retains with respect to violations of the Regulatory Agency requirements. The Owner assumes all liability and responsibility of every other kind to the end that the Desert Water Agency shall be kept whole and blameless at all times in any claim resulting from matters involving quantities, quality, time or occasion of delivery, or any other phase of the maintenance, operation, and service of the Owner's on-site facilities.

**1.19 SURVEILLANCE**

It is the responsibility of the User to provide surveillance and supervision of his on-site facilities in a manner that assures compliance at all times with these Regulations. It is the responsibility of the Desert Water Agency to provide surveillance and supervision of its off-site facilities in a manner that assures compliance at all times with the Regulations. Moreover, as a control check for on-site surveillance, the Desert Water Agency shall regularly inspect the on-site systems and their operations for conformance with these Regulations. The Desert Water Agency shall report any and all violations to the appropriate Regulatory Agencies in accordance with applicable procedures that have been established by law, code, permit, or practice.

**1.20 CONTINGENCY RESERVATIONS**

If at any time during the construction or operation of facilities designed to use recycled water real or potential hazards are evidenced, the Desert Water Agency reserves the right and has the authority to terminate recycled water service in the interest of protecting the public health or other elements of the recycled water system. In the event that recycled water service is so terminated, the Desert Water Agency may supply water to the affected on-site facilities either temporarily or permanently from the potable water system.



## 1.21 SPECIFIC PROHIBITIONS

### 1.21.1 Runoff Conditions

Conditions that directly or indirectly cause runoff outside of the approved use area, whether by design, construction practice, or system operation, are strictly prohibited.

### 1.21.2 Ponding Conditions

Conditions that directly or indirectly cause ponding outside of or within the approved use area, whether by design, construction practice, or system operation, are strictly prohibited.

### 1.21.3 Windblown Spray Conditions

Conditions that directly or indirectly permit windblown spray to pass outside of the use area approved in the currently effective user permit issued by the Desert Water Agency and without the prior knowledge and approval of the appropriate Regulatory Agencies is strictly prohibited.

### 1.21.4 Unapproved Uses

Use of recycled water for any purposes other than those explicitly approved in the currently effective user permit issued by the Desert Water Agency and without the prior knowledge and approval of the appropriate Regulatory Agencies is strictly prohibited.

### 1.21.5 Disposal in Unapproved Areas

Disposal of recycled water for any purposes, including approved uses, in areas other than those explicitly approved in the currently effective user permit issued by the Desert Water Agency and without the prior knowledge and approval of the appropriate Regulatory Agencies is strictly prohibited.

### 1.21.6 Cross Connections

Cross connections, as defined by the California Administrative Code, Title 17, resulting from the use of recycled water or from the physical presence of a recycled water service, whether by design, construction practice, or system operation, are strictly prohibited.

### 1.21.7 Unprotected Drinking Fountains

Any and all drinking fountains located within the approved use area designated by the user permit shall be protected by placement and/or structure from contact with recycled water, whether by windblown spray or by direct application through irrigation or other approved use. Lack of such protection, whether by design, construction practice, or system operation, is strictly prohibited.

### 1.21.8 Unprotected Public Facilities

Facilities that may be used by the General Public, including but not limited to eating surfaces and playground equipment, and located within the approved use area designated by the user permit, shall be protected by placement and/or structure from contact with

recycled water, whether by windblown spray or by direct application through irrigation or other approved use. Lack of such protection, whether by design, construction practice, or system operation, is strictly prohibited.

1.21.9 Hose Bibs

Use or installation of hose bibs on any on-site system that presently operates or is designed to operate with recycled water, regardless of the hose bib construction or identification, is strictly prohibited.

1.21.10 Fire Hydrants

Use or installation of fire hydrants on any on-site system that presently operates or is designed to operate with recycled water, regardless of the fire hydrant construction or identification, is strictly prohibited.

## **SECTION 2 REQUIREMENTS FOR DESIGN AND OPERATION**

### **2.1 DESIGN REQUIREMENTS**

#### **2.1.1 On-Site Irrigation Systems**

##### **2.1.1.1 Design Responsibility**

The Design of an on-site irrigation system that will use recycled water, and the preparation of plans and construction specifications, shall be under the responsibility of a landscape architect or engineer registered with the State of California.

##### **2.1.1.2 Provisions for Recycled Water**

In those areas where recycled water is not immediately available for use when the design area is ready for construction, the on-site irrigation system shall nevertheless be designed to use recycled water. Provisions shall be made and these Regulations followed to allow for connection to the recycled water distribution system when it becomes available. In the interim, potable water will be supplied to the on-site system through an approved temporary potable water connection. As part of the off-site system, the configuration for such an interim connection is found in the Desert Water Agency's current "Domestic Water System Construction Specifications".

An approved backflow preventer shall be required as long as the on-site system is using potable water. This device shall be provided and installed by the Owner. Only the Desert Water Agency shall remove said back-flow preventer and make the connection to the recycled water distribution system when recycled water becomes available. At such time the Desert Water Agency shall return the device to the Owner. All points of connection to the Desert Water Agency's off-site facilities shall be determined by the Desert Water Agency. Backflow prevention devices shall not be required on irrigation systems using recycled water.

Notification of all action taken with backflow prevention devices shall be made by the Desert Water Agency to the Riverside County Department of Environmental Health.

##### **2.1.1.3 Design Capacity**

The on-site irrigation system shall be designed to meet the peak moisture demand of all plant materials used within the design area.

##### **2.1.1.4 Design Application Rates**

The on-site irrigation system shall be designed to apply irrigation water in a manner compatible with the infiltration rates of the soil types within the approved use area. Evidence that infiltration rates have been assessed shall be included with the design. Where varying soil types are present to the extent that they cannot be

adequately addressed by separate parts of the system, the design of the irrigation system shall be compatible with the lowest infiltration rate present.

#### 2.1.1.5 System Layout

The irrigation system shall be designed to prevent discharge onto areas that are not approved for use. Part-circle sprinklers shall be used adjacent to roadways and boundary lines to confine the discharge from the irrigation system to the design area.

The system design shall avoid spray patterns that include obstructions that tend to concentrate recycled water to provide ponding and/or runoff, such as spraying against bridge abutments and outlet structures.

#### 2.1.1.6 System Control Devices

The system design shall include automatic system control devices that can be programmed to prevent the ponding and/or runoff of recycled water. These devices shall include automatic controllers, valves, and associated equipment. The devices shall be designed so that, if the current application program is producing any runoff, they can be readily reprogrammed on site to prevent such occurrences.

#### 2.1.1.7 Exceptions to Design Requirements for Retrofitted Sites

With the exception of pipe identification and pipe separation, facilities where the existing buried piping system is converted from potable to recycled water must meet the same requirements as new facilities. However, any new buried piping added to existing piping at a retrofitted site must meet the identification and separation requirements for new systems (See Section 3). In addition, any existing piping that is currently above ground, and piping uncovered for any reason during construction, must be marked according to pipe identification requirements of Section 3 to the extent feasible.

## 2.2 OPERATIONAL REQUIREMENTS

An abbreviated listing of operational requirements for irrigation use is included in the Appendix as Exhibit 1. Copies of this listing are available at Desert Water Agency offices.

### 2.2.1 On-Site Irrigation Systems

#### 2.2.1.1 Supervision

The operation and surveillance of on-site irrigation systems shall be under the management of the On-Site Supervisor designated by the User or the Operator and approved by the Desert Water Agency. This supervisor or his representative shall be available during normal working hours at an address listed with the Desert Water Agency for the purpose of hosting an inspection tour or for discussing operational aspects of the system. The On-Site Supervisor or his representative shall be available via telephone at a number listed with the Desert Water Agency for emergency off-hours contact.

#### 2.2.1.2 Personnel Training

It shall be the responsibility of the Operator to ensure that all Operations Personnel are trained in and familiarized with the use of recycled water, and are familiar with all pertinent information contained in these Regulations and those applicable portions of the California Administrative Code. This information shall be supplied by the Desert Water Agency upon request of the Operator. That the training will be provided shall be attested by the Operator in the certification form for recycled water service.

#### 2.2.1.3 On-Site Information

The Operator shall be responsible for furnishing the Operations Personnel system operating instructions, maintenance instructions, controller charts, and record drawings to ensure proper operation in accordance with the irrigation system design, these Regulations, and *Order No. R7-2014-0008, Waste Discharge Requirements for Desert Water Agency, Owner/Operator, Water Reclamation Facility, Palm Springs – Riverside County*, issued by the California Regional Water Quality Control Board, Colorado River Basin Region (Regional Board). At least one complete set of this information shall be kept on site or in the nearest field office or maintenance building established by the Operator. The Operator retains the responsibility of properly disseminating this information to all appropriate Operations Personnel.

#### 2.2.1.4 On-Site Inspection

Inspection of the on-site irrigation system and the approved use area being served may be made at any time by the Desert Water Agency or representatives of the various Regulatory Agencies. The User, the Operator and any Operations Personnel are obligated to cooperate with those making the inspection and to assist in the performance of operational tests as requested.

#### 2.2.1.5 Irrigation Application Rates

Recycled water shall be applied at a rate that does not exceed the infiltration rate of the soil. When the application rate exceeds the infiltration rate of the soil, automatic system control devices shall be utilized and programmed to prevent the ponding and/or runoff of irrigation water. The irrigation system shall not be allowed to operate for a time longer than the landscape's water requirement. If runoff or ponding occurs before the landscape's water requirements are met, the automatic controls shall be reprogrammed with additional watering cycles to meet the requirements and prevent runoff.

#### 2.2.1.6 Confinement of Irrigation

The on-site irrigation system shall be operated to prevent discharge onto areas which are not approved for use. Over-spray resulting from attempts to reach remote portions of the approved use area shall not be practiced. This situation shall be rectified by appropriate design corrections to the system layout.

#### 2.2.1.7 Periods of Operation

To the extent practicable, the operation of the irrigation system shall be during periods of minimal use of the approved use area by the General Public. Such periods of operation shall remain within any general period of recycled water irrigation operation specified by the Desert Water Agency.

#### 2.2.1.8 Maintenance

A preventative maintenance program designed to ensure the continued operation of all system elements within the requirements of these Regulations shall be evidenced by the Operator and open to inspection by the Desert Water Agency.

### 2.3 SUBMITTALS AND RECORDS

#### 2.3.1 On-Site Irrigation Systems

##### 2.3.1.1 Preliminary Investigation

The Applicant shall meet with the Desert Water Agency at the earliest possible date to determine whether the property to be irrigated is within the Desert Water Agency system boundary. At this time, the availability of existing recycled water distribution lines can also be reviewed. It shall be the responsibility of the Applicant to determine how the Desert Water Agency can serve the proposed area. This determination shall be submitted to the Desert Water Agency at least 10 working days prior to the date on which feasibility acceptance is desired. Feasibility acceptance must be obtained prior to making formal application for recycled water service.

##### 2.3.1.2 System Design Documents

The following information shall be submitted to and approved by the Desert Water Agency prior to commencing any construction:

Plans and Specifications - Four copies of the plans and specifications, signed by the design engineer or landscape architect, for the construction of the on-site irrigation system, shall be submitted to the Desert Water Agency for review and approval. Only that section of the specifications dealing with the materials for the irrigation system need be submitted. Plans and specifications shall be submitted at least 10 working days prior to the date on which action by the Desert Water Agency is desired. As part of this submittal, a construction cost estimate for the subject facilities shall be provided. A fee for review and inspection shall be paid prior to the Desert Water Agency's approval of the plans. This fee shall be in accordance with the current rate and fee schedule adopted by the Desert Water Agency.

Meter Criteria - The following information shall be provided, either on the plans or as a separate submittal, for every irrigation system meter desired:

- (a) Meter size (inches)

- (b) Gross area served through the irrigation meter (square feet or acres).
- (c) Peak flow through the meter (gpm).
- (d) Estimate of the yearly water requirement through the meter (acre feet).
- (e) Design pressure at the meter (psi). NOTE: The Agency will dictate the minimum pressure that will be provided to the site.

Irrigation Criteria - A legend showing the pertinent data for the materials used in the system shall be recorded on the plans. The legend shall include a pipe schedule listing pipe sizes and materials of construction, valve types, and the following information for each type of sprinkler head:

- (a) Manufacturer and model number.
- (b) Sprinkler radius (feet).
- (c) Operating pressure (psi).
- (d) Flow (gpm).
- (e) Sprinkler pattern.

Soils Evaluation - A statement shall be included on the plans which lists major soil types and their respective average infiltration rates, and which relates the location of these soil types to the irrigation system layout.

Call-Outs - Exterior drinking fountains and other public facilities shall be shown and called out on the plans. If no exterior drinking fountains or other public facilities are present in the design area, then it shall be specifically stated on plans that none exists.

Standard Notes - Standard notes that are to be listed on all plans area as follows:

- (a) The design and installation of the on-site irrigation system shall conform to "Rules and Regulations for Recycled Water Facilities" of the Desert Water Agency.
- (b) All on-site irrigation piping installed under this design shall be identified as recycled water piping in accordance with "Rules and Regulations for Recycled Water Facilities" of the Desert Water Agency.
- (c) The Desert Water Agency's Engineering Office shall be notified 24 hours prior to the start of any construction at (760) 323-4971.

One copy of the plans and specifications as approved by the Desert Water Agency shall be forwarded to each of the following agencies by the Desert Water Agency for their review and recordation: the Riverside County Department of Building and Safety, the State Water Resources Control Board, Division of Drinking Water, and the Riverside County Department of Environmental Health.



### 2.3.1.3 Record Drawings and Documents

Record drawings shall be submitted by the design engineer or landscape architect and approved by the Desert Water Agency before a request for regular service start-up is made. The following shall apply:

Recording Changes - All changes in the work constituting departures from the original design drawings, including changes in both pressure and nonpressure lines, shall be accurately recorded on one set of drawings. Upon completion of each increment of work, all such information and dimensions shall be transferred to the drawings. The changes and dimensions shall be recorded in a legible and workmanlike manner to the satisfaction of the Desert Water Agency. After the drawings are approved by the Desert Water Agency, all information shall be transferred to a set of reproducible drawings. All changes to reproducible drawings shall be made in ink (no ballpoint pen). Eradicating fluid shall be used when redoing drawings.

Dimensioning - All dimensions shall be taken from two permanent points of reference such as buildings, monuments, sidewalks, curbs, or pavements. Locations shown on as-built drawings shall be kept day by day as the project is being installed.

Specific Call-Outs - The locations and depths of the following items shall be shown:

- (a) Points of connection.
- (b) Routing of sprinkler pressure lines.
- (c) Gate valves.
- (d) Sprinkler control valves (buried only).
- (e) Quick coupling valves.
- (f) Routing of control wires.
- (g) Control stations.

As-Built Drawings - For the purpose of reference, as-built drawings shall be maintained on site at all times.

Control charts shall be prepared by the design engineer or landscape architect, submitted with the record drawings, and approved by the Desert Water Agency before formal request for service start-up is made. The chart submittals shall include the following:

Chart Requirement - One controller chart shall be provided for each automatic controller supplied showing the system area covered by the controller. The chart shall be sized as large as the controller door will allow.

Chart Scale - Each chart shall be reduced drawing of the as-built system. The controller sequence shall be clearly legible at the reduction chosen.

Chart Coloring - Each chart shall be a black-line print with a different color used to show the area of coverage for each station.

Chart Packaging - After approval by the Desert Water Agency, all charts shall be hermetically sealed between two pieces of plastic, each piece being a minimum of 10 mils thick.

### **SECTION 3 SPECIFICATIONS FOR CONSTRUCTION**

#### **3.1 GENERAL CONDITIONS**

All construction work for on-site recycled water facilities shall be in conformance with the Agency's Recycled Water System Construction Specifications except as herein modified.

##### **3.1.1 Trade Names or Equals**

The Contractor shall be permitted to supply any of the specified materials or to offer equivalent materials in accordance with Part III of the Agency's Specifications.

##### **3.1.2 Permits and Licenses**

Except as otherwise provided, the Contractor shall procure all permits and licenses, pay all charges and fees, and give all notices necessary and incidental to the due and lawful prosecution of the work.

##### **3.1.3 Connections to Existing District Facilities**

The Contractor shall not make a connection to existing DWA facilities nor interrupt recycled water service in any portion of the DWA service area unless it has been approved by the DWA. If it becomes necessary to interrupt service to any existing system, this interruption shall be done at a time determined by the DWA.

##### **3.1.4 Personal Liability**

Neither the members of the Board, the Engineer, nor any other officer, employee or authorized agent of the Agency shall be personally responsible for any liability arising out of the work performed.

##### **3.1.5 Loss and Damage**

Neither the Board, the Engineer, nor the Agency shall be answerable or accountable in any manner for any loss or damage that may happen to the work or any part thereof or for any material or equipment used in performing the work; or for injury or damage to any person or persons, either workman or the public; or for damage to adjoining property from any cause whatsoever during the progress of the work or at any time before final acceptance.

##### **3.1.6 Legal Responsibility**

The Contractor shall keep himself fully informed of all laws, ordinances, and regulations that in any manner affect those engaged or employed in the work or the materials used in the work, or that in any way affect the conduct of the work, and of all such orders and decrees of bodies or tribunals having any jurisdiction or authority over the same. If any discrepancy or inconsistency is discovered in the plans, drawings, specifications or other documents in relation to any such law, ordinance, regulations, order or decree, the Contractor shall forthwith report the same to the Agency in writing. The Contractor shall observe and comply with and shall cause all of his agents and employees to observe and

comply with and shall cause all of his agents and employees to observe and comply with all such existing and future laws, ordinances, resolutions, regulations, orders and decrees, and shall protect and indemnify the Board, the Engineer, the Agency and all of its and their officers and agents against any claim or liability arising from or based on the violation of any such law, ordinance, regulations, order or decree, whether by himself or his employees or authorized agent harmless from all costs, losses, expenses, damages, attorneys' fees and other costs of defense that the Agency may incur with respect to or on account of the work, and with respect to the failure, neglect or refusal of Contractor to faithfully perform the work and all of Contractor's obligations under the contract. Such costs, expenses, and damages shall include all costs incurred by the Agency to defend against any claims, stop notices or lawsuits based thereon in which the Agency is made a party.

The Contractor shall observe the rules and regulations of the State of California, Department of Industrial Relations, Division of Industrial Safety and, in particular, rules and regulations relating to shoring of trenches and excavations. All work shall be done in accordance with all directives, provisions and requirements pertaining to the method and manner of performing the work, in accordance with CAL-OSHA latest amendment or revision.

#### 3.1.7 Inspection Authority

The Agency shall at all times have access to the work during construction and shall be furnished with such information as it may desire regarding the progress, workmanship and character of materials used in the work.

The Agency shall have the authority to suspend the work wholly or in part for such time as it may deem necessary due to the failure on the part of the Contractor to carry out orders given or to perform any provisions of the plans or specifications. The Contractor shall immediately comply with the written order of the Agency to suspend the work wholly or in part. The work shall be resumed when methods or defective work are corrected as ordered and approved in writing by the Agency. Failure to comply with requests of the Agency may prevent the release of entire project.

### 3.2 MATERIALS OF CONSTRUCTION

#### 3.2.1 On-Site Irrigation Systems

Materials of construction for on-site irrigation systems shall be in accordance with the Agency's Recycled Water System Construction Specifications except as herein modified.

##### 3.2.1.1 Piping

For four-inch diameter polyvinyl chloride (PVC) piping, the minimum class or schedule to be installed in on-site irrigation systems shall be Class 235 (DR18).

##### 3.2.1.2 Valves

Quick coupling valves shall be permitted for use only during the initial landscape germination period and shall be removed at the end of that period. The manner of removal shall be subject to approval by the Agency. Quick coupling valves shall conform to the following:

Rating - Quick Coupling Valves shall be 3/4 inch or one-inch nominal size with brass construction and a normal working pressure of 150 psi.

Cover - The cover shall be permanently attached to the quick coupling valve. It shall be of rubber or vinyl construction and purple in color.

Other valves shall be of the type and manufacture shown on the plans or approved equal. All underground gate valves three inches and smaller may be furnished with either operating nuts or handwheels.

#### 3.2.1.3 Valve Boxes

All remote control valves, gate valves, and pressure relief valves shall be installed in suitable valve boxes, complete with locking and hinged cover. All shall be Ametek, Brooks, Christy, or approved equal. Each shall be marked with "ND" or "RW" to indicate the use of nondomestic water (recycled water) and with "PRV", "GV", "BV", or "RCV" to indicate type. Station numbers for control valves shall be stenciled in white on the purple valve cover.

#### 3.2.1.4 Irrigation Heads

All on-site irrigation (sprinkler) heads shall conform to the following:

Rating - Sprinkler heads shall be the types and sizes with the radius of throw, pressure, discharge, and any other designations, as indicated on the plans.

Manufacture - All heads of a particular type of function in the system shall be of the same manufacture and shall be marked with the manufacturer's name and identification in such a position that they can be identified without being removed from the system.

Risers - All sprinkler risers shall be as shown on the plans.

#### 3.2.1.5 System Control Devices

All on-site irrigation controllers and appurtenances shall conform to the following:

Type - Automatic controllers shall be of the type and manufacturer shown on the plans or approved equal. Each controller shall be capable of three repeats daily.

Wiring - All control and supply wiring shall conform to local electrical codes.

### 3.3 METHODS OF CONSTRUCTION

#### 3.3.1 On-Site Irrigation Systems

Methods of construction for on-site irrigation systems shall be in accordance with the Agency's Recycled Water System Construction Specifications.

### 3.3.1.1 Valve Installations

All on-site valves shall be installed in accordance with the following specifications:

Location - Piping systems shall be supplied with valves at all points shown on the drawings or specified herein, arranged to give complete regulating control throughout.

Size - Valves shall be the full size of the line in which they are installed unless otherwise indicated.

Adjustment - Remote control valves shall be adjusted so that the most remote sprinkler heads operate at the pressure recommended by the head manufacturer. Remote control valves shall be adjusted so a uniform distribution of water is applied by the sprinkler heads to the planting areas for each individual valve system.

Clearance - Quick coupling valves that are part of the initial installation shall be set approximately 12 inches from walks, curbs, headerboards, or paved areas where applicable. Vertical positioning of quick coupling valves shall be such that the sleeve tops will be flush with settled finish grade as determined after the turf is established.

Method - All valves shall be installed as shown in details and in accordance with manufacturer's recommendations.

Valve Boxes - Valve boxes shall be set 1/2 inch above the designated finish grade in lawn areas and two inches above finish grade in ground cover areas. Valve boxes installed near walks, curbs, headerboards and paving shall abut those items. The top surface shall be flush with items listed above. Pea gravel shall be installed in the base of each valve box.

Markers - Valve markers shall be used in play field areas, with two-inch PVC pipe leading to each underground valve box. Valve markers shall be as manufactured by Rainbird or equivalent with locking top. Control station numbers shall be placed on the underside of each control valve marker.

### 3.3.1.2 System Control Device Installations

All on-site irrigation controllers and electrical appurtenances shall be installed in accordance with the following specifications:

Location - Each automatic controller shall be installed at the approximate location shown on the plans. All pedestal mounted controllers shall be mounted on a suitable concrete base.

Power Supply - All local and applicable codes shall take precedence in the furnishing and/or connecting of 110-volt electrical service to the controller.

Control Wiring - The installation of all electrical equipment and control wiring shall comply with local and state codes and be performed by those skilled and licensed in the trade. Unless the governing code specifies otherwise, low voltage control wire may be installed by the sprinkler irrigation contractor when code allows. A minimum of 18-inch coverage shall be provided over low voltage leads.

Connections and Splicing - Connecting and splicing of wire at valves shall be made using connectors, Scotchlok or equal.

#### 3.3.1.3 Separation from Other Utilities

Separation between on-site recycled water lines and sanitary sewers and potable water lines shall be established upon installation in accordance with the latest requirements set forth by the State Water Resources Control Board, Division of Drinking Water and Riverside County Department of Environmental Health.

### 3.4 INSPECTION

#### 3.4.1 On-Site Irrigation Systems

##### 3.4.1.1 Obligations

The inspection of the work shall not relieve the Contractor of any of his obligations to complete the work as prescribed by the applicable specifications. Defective work shall be made good and unsuitable materials may be rejected notwithstanding the fact that such defective work and unsuitable materials have been previously overlooked by the Inspector and accepted. The installation and inspection of unsuitable materials shall not be construed as acceptance, and modification to these specifications shall only be made by the Agency in writing.

##### 3.4.1.2 Construction Schedule

The Contractor shall submit a schedule to the Agency outlining his proposed construction operation. Reception of this submittal shall be acknowledged by the Agency and shall initiate the construction inspection process. The Contractor shall give the Agency at least 24 hours notice before the desired time of starting work.

Whenever the Contractor varies the period during which work is carried on each day or deviates from the schedule, he shall give due notice to the Inspector so that proper inspection may be provided. Any work done in the absence of the Inspector shall be subject to rejection.

##### 3.4.1.3 Notification and Approvals

All work shall be subject to inspection by the Agency and shall be left open and uncovered until the installation is approved by the Inspector. No pipe, valves, fittings or other materials shall be installed until inspected and approved by the Inspector. All installations that are to be backfilled shall be inspected and approved by the Inspector prior to backfilling; and the contractor shall give due notice to the Inspector in advance of backfilling so that proper inspection may be provided. Unless the Agency expressly states otherwise, 24 hours notice shall be



given by the Contractor in advance of any and all inspection requirements, whether for materials or construction work.

#### 3.4.1.4 Inspection Intervals

The Contractor shall not proceed with any subsequent phase of work until the previous phase has been inspected and approved by the Inspector. Inspection shall be made on a continuous basis and shall specifically include, but not be limited to, the following intervals of work:

- a. Reception of all materials to work site prior to any installation.
- b. Trench excavation and bedding prior to placement of the pipe fittings or structures.
- c. Placing of pipe, fittings and structures.
- d. Placing of backfill and compaction and/or consolidation of backfill within the pipe zone.
- e. Placing the remainder of backfill (inspection performed by Riverside County Dept. of Building and Safety, where in public right-of-way) and performing necessary backfill, compaction and testing as required herein.
- f. Testing and inspection after all compaction and backfill requirements are achieved and prior to paving.

#### 3.4.1.5 Final Inspection

Following the completion of all construction work and the submittal and approval of record documents, the Contractor shall request final inspection of the work. This request shall include the scheduling of the operational testing.

### 3.5 REVIEW AND TESTING

#### 3.5.1 On-Site Irrigation Systems

##### 3.5.1.1 Materials

The Contractor shall furnish the Agency such information as it may desire regarding the character and quality of materials used. When requested by the Agency, the Contractor shall submit a certification that the product meets the requirements of these specifications. All pipe and accessories shall be carefully inspected by the Contractor for damage in transit. Any damaged pipe or fittings delivered and unloaded at trench-side shall be rejected and removed by the Contractor from the site of the work.

##### 3.5.1.2 Installed Piping Systems

New piping systems shall be subjected to a hydrostatic pressure test administered by the Inspector with the cooperation of the Contractor. Before testing, the pipe

shall be backfilled or center-loaded to hold the pipe in place while testing. The water necessary to maintain this pressure shall be measured through a meter or other means satisfactory to the Inspector. The leakage shall be considered as the amount of water entering the pipe during the test, less the measured leakage through valves and bulkheads. Any noticeable leaks shall be stopped and any defective pipe shall be replaced with new sections. The Agency shall establish the criteria by which the leakage is determined to be excessive and unacceptable.

The test shall be made prior to connecting the new piping system with existing systems or a service connection. The test shall be conducted with valves open, and the open ends of pipes, valves and fittings suitably plugged. Valves shall be operated during the test period.

All concrete anchor blocks shall be allowed to cure a sufficient time to develop design strength prior to testing. All labor, materials, tools, and equipment for the testing shall be furnished by the Contractor.

#### 3.5.1.3 Operational Testing

Prior to final acceptance by the Agency, all on-site irrigation systems shall be required to successfully pass an operational test as administered by the Engineer or Inspector. The operational test shall be requested of the Agency by the Owner only after all other construction requirements are satisfied and other inspection procedures completed. The test shall be conducted in the presence of representatives from the Agency, the Owner or User, the Engineer and the Contractor. The scheduling of these tests shall be the responsibility of the Owner.

The system or portions of the system in turn shall be placed into operation and the following items examined:

- a. Cycling of the program for the automatic controllers.
- b. General coverage of the irrigation pattern.
- c. All aspects of the irrigation conditions, including tendencies toward windblown spray, runoff and ponding.
- d. Required protection of all public facilities present in the approved use area.

Any required corrections shall be noted in the form of a punch list and submitted to the Owner by the Agency for correction by the Contractor. Regular service start-up shall not be authorized until all corrections are made to the satisfaction of the Agency.

## 3.6 IDENTIFICATION

### 3.6.1 On-Site Irrigation Systems

#### 3.6.1.1 Posting Approved Use Area

Posting the use of recycled water shall be required at any on-site field office or maintenance building established by the User. Posting shall not be required at other locations within the approved use area, except as required for automatic controllers in Section 3.6.1.4 or as may be required by the Regulatory Agencies on a case-by-case basis. If the use area is physically broken into more than one segment, it shall not be required that the User post each of the various operating segments. The required posting shall consist of at least one sign bearing the words "DO NOT DRINK RECYCLED WATER USED FOR IRRIGATION" in English and Spanish, with white letters at least two inches high on a purple background. The sign shall be so placed that it can be readily seen by all Operations Personnel utilizing the facilities.

#### 3.6.1.2 Pipe Identification

All recycled water irrigation piping under constant water pressure shall be identified and marked in the following manner:

PVC – All PVC irrigation piping conveying recycled water shall be purple. If the lead time for purple PVC piping affects the construction schedule, standard PVC piping may be installed with purple polyethylene encasement in accordance with AWWA Standard C105, stenciled with "CAUTION: RECYCLED WATER—DO NOT DRINK" and 3-inch minimum width purple tape with contrasting lettering bearing the continuous wording, "Caution: Recycled Water" permanently affixed atop all piping. If materials and/or warning tape are not available, other identification methods may be approved by the Agency with the concurrence of the Riverside County Department of Environmental Health.

Other Piping - All other irrigation piping under constant water pressure shall be stenciled with green paint or marked with warning tape as noted for PVC pipe.

Warning Tape - If warning tape is selected as the method of identification, it shall be attached to the top of the pipe with plastic tape and banded to the pipe at least once every five feet.

All PVC potable water piping installed within the same project limits as the on-site recycled water irrigation piping shall be installed in accordance with the uniform plumbing code and all other local governing codes, rules and regulations.

#### 3.6.1.3 Valve Identification

All gate valves, manual control valves, electrical control valves, pressure-reducing valves, and pressure-relief valves installed below grade shall be housed in a valve box with a purple locking cover. All such valves installed above grade shall have their handles, operators, and/or bodies painted purple.

#### 3.6.1.4 Control Device Identification

Each automatic controller and its associated equipment shall be identified with a sign bearing the words "RECYCLED WATER USED FOR IRRIGATION" in English and Spanish, in white letters at least one-inch high on a purple background. The sign shall be so placed that it can be readily seen by any Operations Personnel utilizing the equipment.

## **SECTION 4 PROCEDURES FOR ADMINISTRATION**

### **4.1 OBTAINING SERVICE**

Interactions between the Agency and the Owner/User, or representatives, are outlined in the preceding sections of these Regulations concerning the design and construction phases of a recycled water service or system. Additional interactions are required for the administration of a recycled water service. A summary of all required interactions is included in the Appendix as Exhibit 2. Copies of this summary are available at the DWA Operations Center.

#### **4.1.1 Application Submittal**

An application for recycled water service shall be submitted to the Agency only after the Agency has accepted the feasibility to the proposed service. Approval for service shall be indicated by the Agency's issuing a user permit to the Applicant. The user permit shall come into force only after construction of the subject project has been completed, final acceptance has been granted by the Agency, and approval for service start-up has been given by the Regional Water Quality Control Board (RWQCB).

The application for recycled water service shall be made in writing and signed by the Applicant, who may be the Owner or authorized representative. The application form shall be furnished by the Agency and shall request information concerning the Applicant's company, the Applicant's relationship to the subject property as legal owner, tenant or lessee, the type of recycled water use, a bounds description of the property to be served, the purpose for which the property is to be used, the total area to be served per this application, and any special conditions for service pursuant to these Regulations. Certain technical information, derived from the design and peculiar to the type of recycled water use, may also be requested. A sample of the application form is included in the Appendix as Exhibit 3. Blank application forms are available at the DWA Operations Center.

The application form shall be accompanied by a service exhibit measuring 8 1/2 inches by 11 inches. This exhibit shall be a scaled drawing delineating the subject service area, identifying the location and size of all service connections, delineating any areas in which recycled water service is to be specifically excluded, identifying the location of wells in or near the use area and showing the nearest major arterial highway(s).

#### **4.1.2 Agency Evaluation**

Upon receipt of an application, the General Manager or his designated representative shall review the application and make such investigation relating thereto as he deems necessary. The General Manager may prescribe specific requirements in writing to the Applicant as to the design of the facilities, the manner of construction, the method of operation, and the conditions of service. An evaluation shall be performed which will establish that all information obtained on the form is consistent with these Regulations and the applicable requirements of the Regulatory Agencies. Upon successful completion of its evaluation, the Agency shall submit the application form and the required exhibit to the RWQCB for its approval. Concurrently, the Agency shall submit copies of the application form and the required exhibit to the State Water Resources Control Board, Division of Drinking Water, and the Riverside County Department of Environmental Health for their review.

#### 4.1.3 Agency Determination

The Agency reserves the right to determine the size of the recycled water service line, the service connection, the meter, and any and all other appurtenances to the service. The recycled water service line shall be installed to a curb line or property line of the approved use area, abutting upon a public street, highway, alley, easement, lane or road (other than a freeway) in which is installed a recycled water distribution main of the Agency.

#### 4.1.4 Issuing of User Permit (Service Agreement)

A user permit issued by the agency to the Applicant shall constitute a legally binding service agreement between the two parties. In its administration, a user permit hereby incorporates these Regulations and any additional requirements prescribed by the General Manager or by the Board, or both, to ensure continued operation of the recycled water system and to protect the public health. A user permit shall be issued only upon approval by the RWQCB. The Agency shall assign an accounting number to each permit issued.

#### 4.1.5 Establishing Service Connection

Following the Agency's approval of on-site facility design or layout, the Agency will provide the User or Operator with the fee amount that will be required to install the on-site facility. The User or Operator shall then request the Agency to install the service connection. The request for service connection shall be accompanied by payment of the requisite fee for installation and connection as previously indicated by the Agency.

Once the request for service connection has been received, along with payment of the requisite fee, the Agency will purchase the materials required for installation of the service connection, and will direct the User or Operator to stake the location of service. Once the location of service has been staked, the Agency will schedule the installation work. The Agency will make the installation, including all required appurtenances, within three weeks after the Agency has been notified that the location of service has been staked,

Prior to regular service start-up the service connection may be used to supply water to on-site facilities to permit the testing of all or a portion of the facilities during installation. The Inspector shall be notified at least 24 hours in advance of such intended use of recycled water. This interim service shall be accomplished by a jumper supplied and installed by the Agency. The Inspector shall be advised of all use of recycled water through the jumper.

#### 4.1.6 Certification Submittal

Once the Operator of an on-site recycled water system has been selected by the User, the certification of recycled water service must be initiated. The operation certification by the Operator shall be submitted to the Agency as part of the request for service start-up. The agency shall evaluate this submittal and advise the Operator of the need for any additional information or action.

Following receipt of operation certification and after granting final inspection approval of the on-site facilities, the Agency shall complete design and construction certification. The completed recycled water service certification shall be processed with the User's request for service start-up by the Agency through the RWQCB. A sample of the certification

form is included in the Appendix as Exhibit 4. Blank certification forms are available at the DWA Operations Center.

If the User selects a new Operator during the course of service, a new operation certification form shall be submitted by the new Operator to the Agency. The Agency shall then process this form through the RWQCB.

#### 4.1.7 Service Start-Up

Following final inspection of the project by the Agency, the User shall request regular service start-up. Upon receipt of such request, the Agency shall apprise the RWQCB of the intent to begin service. This appraisal shall include the submitting of the completed recycled water service certification and shall be made within ten working days from receipt of the request. The RWQCB shall indicate its approval of service start-up on the certification form. Upon authorization by the RWQCB, the Agency shall begin regular service within five working days of receipt of authorization.

To provide regular service start-up, the Agency shall first remove any jumper that may have been employed for interim service during installation and testing of the on-site facilities. The Agency shall then set the water meter, which is purchased by the Owner/User, and complete the start-up installation.

The request for service start-up shall be accompanied by a cash deposit as indicated in the current rate and fee schedule. The deposit less the amount of any unpaid water charge shall be refunded upon discontinuance of service, or after the deposit has been held 12 consecutive months, during which time continuous recycled water service has been received and all charges for such service have been paid before delinquency in accordance with the requirements of the Agency.

#### 4.1.8 Confirmation of Service Start-Up

Within ten working days of service start-up the Agency shall confirm such start-up to the RWQCB and to the State Water Resources Control Board, Division of Drinking Water and the Riverside County Department of Environmental Health.

### 4.2 CONDITIONS OF SERVICE

The Agency reserves the right to revoke a user permit if all or any of the service conditions contained herein are not satisfied at all times.

#### 4.2.1 Regulatory Conditions

Service to a User may be terminated at any time the quality of the recycled water does not comply with the requirements of Regulatory Agencies or at any time the User's operations do not conform to these Regulations.

#### 4.2.2 Financial Conditions

Conditions relating to service fees and billing shall be the same as established for the domestic (potable) water system. Rates and fees for the recycled water use shall be as established by the Board.



#### 4.2.3 Operational Conditions

##### 4.2.3.1 Liability

The Agency shall not be liable for any damage caused by water or resulting from defective plumbing, broken or faulty service on recycled water mains. The Agency shall not be liable for any damage caused by any onsite facilities.

##### 4.2.3.2 Service Pressure

When a reasonable service pressure would not be available to on-site facilities not previously served from the domestic (potable) water system, the User shall be responsible for correcting this situation. If the available service pressure would be too high, the User shall provide a pressure-reducing valve downstream of the meter to obtain a reasonable working pressure. If the available service pressure would be too low, the User shall provide booster pumping to correct the deficiency.

When a reasonable service pressure will not be available to on-site facilities previously served from the domestic water system, correcting of this situation will be the responsibility of the User upon conversion to the recycled water system and it shall be handled as follows:

- (a) If the User-provided booster pumping or a pressure-reducing valve was required for on-site facilities when service was provided from the domestic water system, then the User will provide booster pumping or a pressure-reducing for the recycled water service.
- (b) If reasonable service pressure was available for the on-site facilities when service was provided from the domestic water system, then any modifications or correction of this situation shall be handled on a case-by-case basis in conjunction with the Agency.

##### 4.2.3.3 Service Scheduling

In order to maintain acceptable working conditions throughout the recycled water distribution system, the Agency may schedule the use of recycled water. Such scheduling may involve programming deliveries to different Users and/or to various portions of a single user's on-site system. Any scheduling shall take into account applicable constraints of Regulatory Agencies, the requirements of these Regulations, and the operating constraints of affected Users.

##### 4.2.3.4 Relation of Property to Service

A service connection shall not be used to supply adjoining property of a different Owner, or to supply property of the same Owner across a street or alley. When property provided with a service connection is sub-divided, such service connection shall be considered as belonging to the lot or parcel of land that it directly enters.

#### 4.2.3.5 Metering

All recycled water used on any premises where a meter is installed shall pass through the meter. Users shall be held responsible and charged for all water passing through their meters.

#### 4.2.3.6 Other Conditions

Conditions relating to meter reading and testing, turn-offs and turn-ons shall be the same as established for the domestic (potable) water system.

### 4.3 SYSTEM SUPERVISION

#### 4.3.1 On-Site Irrigation Systems

The Agency shall receive in the certification of recycled water service from the Operator the following information regarding the individual designated as On-Site Supervisor; his name, the address and telephone number of his location during normal working hours, and the telephone number at which he or his designated representative can receive messages during off hours. The Agency shall evaluate the designated individual and approve or reject the designation for just cause. It shall be the responsibility of the Operator to notify the Agency of a change in the designation of the On-Site Supervisor. Following such notification, the Agency shall again perform its evaluation.

The On-Site Supervisor shall be thoroughly familiar with the entire system within his responsibility and with all applicable conditions of recycled water use. He shall be the contact person for the Operator in all matters between the Operator and the Agency concerning the operation of the on-site system and the use of recycled water.

### 4.4 REPORTING

As delineated in these Regulations, certain reporting or notification between the parties involved with the use of recycled water may be conducted in person or by telephone. The following reporting shall be made in writing and relates to ongoing recycled water service.

#### 4.4.1 To the User

The following reporting shall be made by the Agency to the User:

- (a) The quantity of recycled water consumed by the User during the billing period, to be submitted as part of the Agency's billing for recycled water service and based on the User's meter reading.
- (b) The quality of recycled water delivered to the User, to be submitted only at the specific request of the User and based on analytical work performed by the Agency, a bacteriological analysis generally being performed daily and a chemical analysis generally being performed once a month.

4.4.2 To the Regulatory Agencies

Most reporting by the Agency to Regulatory Agencies has to do with WRF performance and quality of plant effluent and is beyond the scope of these Regulations which deal with the distribution of the recycled water after treatment or interception. With respect to distribution of the recycled water, the Agency shall report the following types of information to the appropriate Regulatory Agency:

- (a) Names of Users and identification of lands that are irrigated with recycled water.
- (b) Quantities of recycled water used by each User.
- (c) Type of use made by each User.
- (d) Any failure of pipeline or facilities that causes water to be discharged into unauthorized areas.
- (e) Any violation of the Agency's Regulations that causes a violation of the Regulatory Agency requirements.

4.5 VIOLATIONS

4.5.1 Determination

The Agency reserves the right to determine whether a violation of the Regulations has resulted from any action or occurrence that is the responsibility of a User. Insofar as the violation of these Regulations constitutes a violation of any Regulatory Agency requirement, the Agency makes its determination on behalf of the concerned agency and bears the ultimate responsibility for the violation.

4.5.2 Specific Violations

Specific violations shall include those that directly cause non-compliance with any one of the specific prohibitions as listed in these Regulations; runoff conditions, ponding conditions, windblown spray conditions, unapproved uses, disposal in unapproved areas, cross connections, unprotected drinking fountains, unprotected public facilities, hose bibs, and fire hydrants. However, by definition, noncompliance with any condition or conditions of these Regulations, whether willfully or by accident, shall constitute a violation.

4.5.3 Corrective Action

If the Off-Site Supervisor's investigation results in the determination that a violation has occurred, then he shall immediately notify the Operator. It shall be the responsibility of the Operator to initiate action that will correct the conditions having caused the violation. If, in the opinion of the Off-Site Supervisor, the violation constitutes an immediate danger to the public health, then service shall be terminated immediately by shutting off the meter and locking it. Service shall be resumed only after the violation has been corrected to the satisfaction of the Off-Site Supervisor.

If the violation is determined to be of lesser degree, then a timetable for completing the corrections shall be negotiated with the Off-Site Supervisor by the Operator, with the final

approval by the Agency. Corrections not being made in accordance with the timetable shall also result in the termination of service by shutting off the meter and locking it.

Regardless of the extent of the violation, the User shall incur a service start-up fee for the resumption of a service that has been locked off.

4.5.4 Appeal

If the User feels that he has just cause, he may appeal the determination of the Off-Site Supervisor to the DWA Board. Such appeal must be presented in writing to the General Manager for presentation to the Board at its regular meeting. The appeal shall state the conditions that the Off-Site Supervisor has determined to be a violation and the User's opinion to the contrary. The action of the Board shall be final.

4.6 RATE AND FEE SCHEDULE

Rates, fees, and charges will be as set forth in the Agency's most current ordinance governing recycled water service.

**APPENDIX**

Exhibit 1 – Operational Requirements

Exhibit 2 – Service Interactions

Exhibit 3 – Application for Recycled Water Service

Exhibit 4 – Certification Form for Recycled Water

**OPERATIONAL REQUIREMENTS  
FOR RECYCLED WATER FACILITIES  
DESERT WATER AGENCY**

The following is an abbreviated listing of operational requirements for on-site facilities using recycled water. For more detailed information, refer to the "Rules and Regulations for Recycled Water Facilities," Section 2.2.1 (irrigation use), Section 1.2.1 (prohibitions), and Section 1.8 (definitions).

(1) **SUPERVISION**

Operation and the surveillance of on-site facilities shall be under management of the On-Site Supervisor designated by the User or the Operator and approved by the Desert Water Agency. The On-Site Supervisor or his representative shall be available via telephone at the number listed with the Agency.

(2) **PERSONNEL TRAINING**

It shall be the responsibility of the Operator to ensure that all Operations Personnel are trained in and familiarized with use of recycled water. The providing of training shall be attested by an Operator in certification form for recycled water service.

(3) **ON-SITE INFORMATION**

The Operator shall be responsible for furnishing Operations Personnel system operating and maintenance instructions, as well as other relevant documents, to ensure proper operation in accordance with system design and Regulations. This information shall be kept on site or in nearest field office. Operator retains responsibility of disseminating this information to all appropriate Operations Personnel.

(4) **ON-SITE INSPECTION**

Inspection of on-site facilities and approved use area being served may be made at any time by Agency or representatives of various Regulatory Agencies. User, Operator, and any Operations Personnel are obligated to cooperate.

(5) **IRRIGATION APPLICATION RATES (Irrigation Use Only)**

Recycled water shall be applied at a rate that does not exceed the infiltration rate of soil. The irrigation system shall not be allowed to operate for any time longer than the landscape's water requirement. Automatic system control devices shall be utilized and programmed to prevent ponding and/or runoff of irrigation water.

(6) **CONFINEMENT OF IRRIGATION (Irrigation Use Only)**

The on-site irrigation system shall be operated to prevent discharge onto area that are not approved for use. Over-spray shall not be practiced.

(7) PERIODS OF OPERATION

To the extent practicable, operation of irrigation facilities shall be during periods of minimal use of approved use area by General Public.

(8) MAINTENANCE

A preventative maintenance program designed to ensure continued operation of all facility elements within requirements of Regulations shall be evidenced by Operator and open to inspection by Agency.

(9) SPECIFIC PROHIBITIONS

Runoff Conditions  
Ponding Conditions  
Windblown Spray Conditions  
Unapproved Uses  
Disposal in Unapproved Areas  
Cross Connections  
Unprotected Drinking Fountains  
Unprotected Public Facilities  
Hose Bibs  
Fire Hydrants

(10) SELECTED DEFINITIONS

Inspector - Any person authorized by the Desert Water Agency to perform inspection of on-site or off-site facilities during construction and operation.

Off-Site - Designates or relates to recycled water facilities up to and including water meter.

On-Site - Designates or relates to facilities owned and operated by User.

Operator - Any person, persons, or firm, who by entering into agreement with User is responsible for operating on-site facilities.

User - Any person, persons, or firm issued a user permit by the Agency.

**SERVICE INTERACTIONS  
FOR RECYCLED WATER FACILITIES  
DESERT WATER AGENCY**

The following interactions with the Agency can occur during the obtaining and ongoing administration of recycled water service. Interactions are listed in the order of normal occurrence. References are made to appropriate sections of the "Rules and Regulations for Recycled Water Facilities."

(1) PRELIMINARY INVESTIGATION (Ref. Sec. 2.3.1)

Applicant meets with Agency personnel to establish potential service locations and service pressures for proposed irrigation facilities. Areas that may receive recycled water and areas that must receive potable water are established.

(2) APPLICATION SUBMITTAL (Ref. Sec. 4.1.1)

Applicant completes and submits to Agency an application form and service exhibit showing proposed area(s) that are to receive recycled water, proposed service locations, meter sizes, size and location of offsite facilities that would provide service, and any other specific callouts regarding recycled water use.

(3) USER PERMIT ISSUANCE (Ref. Sec. 4.1.2 and 4.1.4)

Agency reviews application form and service exhibit and, if acceptable, submits copies to RWQCB for their approval. Agency concurrently submits copies to State Water Resources Control Board, Division of Drinking Water, and the Riverside County Department of Environmental Health, for their review. If regulatory review of application is successful, Agency issues user permit with assigned accounting number.

(4) PLAN SUBMITTAL (Ref. 2.3.1)

Irrigation designer prepares plans and specifications and submits two copies to Agency for review. Designer concurrently submits additional required information along with construction cost estimate to establish plan review and inspection fee. Plan review and inspection fee is paid before Agency approved. Plans must be approved prior to facilities installation.

(5) CONSTRUCTION SCHEDULE (Ref. Sec. 3.4.1)

Contractor submits facilities installation schedule to Agency for initiating inspection process. At least 24 hours notice must be given before starting work and before all inspection requirements.

(6) SERVICE CONNECTION (Ref. Sec. 4.1.5)

User or Operator requests Agency make service connection prior to facilities installation. Prior to regular service start-up interim service may be provided by jumper installed by Agency. Service connection request must be accompanied by all requisite sites.



(7) RECORD DOCUMENT SUBMITTAL (Ref. Sec. 2.3.1)

Irrigation system designer shall prepare record drawings and control charts and submit information to the Agency for review and approval prior to regular service start-up.

(8) CERTIFICATION SUBMITTAL (Ref. Sec. 4.1.6)

Contractor requests Agency to perform final inspection after completion of facilities installation and approval of any required record documents. Operational testing is included as part of final inspection.

(9) CERTIFICATION SUBMITTAL (Ref. Sec. 4.1.6 )

Operator completes and submits operation certification form as part of regular service start-up request. After final inspection, Agency completes design and construction certification form and submits copies to RWQCB for their approval. If User changes Operator, new operation certification form must be processed through Agency and RWQCB.

(10) SERVICE START-UP (Ref. Sec. 4.1.7 and 4.1.8)

User requests Agency for service start-up after final inspection and completed certification. Agency notifies RWQCB of intent to begin service and, upon authorization by RWQCB, Agency begins regular service. Agency removes jumpers and/or sets meters as required. Start-up requests must be accompanied by cash deposit. After start-up, Agency confirms service to RWQCB, State Water Resources Control Board, Division of Drinking Water, and the Riverside County Department of Environmental Health.

(11) SYSTEM SURVEILLANCE (Ref. Sec. 4.3.1 and 4.3.3)

Agency Off-Site Supervisor regularly inspects on-site system and its operation for conformance with these Requirements.

(12) REPORTING (Ref. Sec. 4.4.1)

Agency reports volume of recycled water consumed by User as part of billing. Agency reports quality of recycled water only upon specific request by User.

(13) VIOLATIONS (Ref. Sec. 4.5.1 - 4. 5.4)

Agency's Off-Site Supervisor determines violations of these Regulations and immediately notifies Operator. Violations constituting immediate public health danger and minor violations not corrected in reasonable time can result in service termination by shutting off meter and locking it. Service resumption must be accompanied by start-up fee. User may appeal determination to DWA Board.

**DESERT WATER AGENCY**  
**APPLICATION FORM FOR RECYCLED WATER SERVICE**  
(Please Type or Print All Information)

User Account No.: \_\_\_\_\_  
(By DWA)

Descriptive Information  
(Completed by Applicant)

Organization Name: \_\_\_\_\_

Relationship to Property: \_\_\_\_\_

Responsible Individual: \_\_\_\_\_ Title: \_\_\_\_\_

Organization Address: \_\_\_\_\_  
(Address, City, State, Zip Code)

Organization Telephone: (     )     - \_\_\_\_\_

Property Owner (if different than Applicant): \_\_\_\_\_

Planning Area No(s): \_\_\_\_\_ Nearest Arterials: \_\_\_\_\_

Tract No (s): \_\_\_\_\_

Use of Parcel(s): \_\_\_\_\_

Total Area Served with Water Per This Application (Irrigation Only): \_\_\_\_\_ acres

Design Peak Flow Based on Above Acres x 10 gpm/acre (Irrigation Only): \_\_\_\_\_ gpm

Expected Date to Commence Recycled Water Service (Month/Year): \_\_\_\_\_

Additional Information: \_\_\_\_\_

Nondomestic Water Service Approval (Completed by RWQCB)

Based on information contained within the Application Form for Recycled Water Service and within the Certification Form for Recycled Water Service, the Regional Water Quality Control Board, Colorado River Basin Region hereby approves the use of recycled water, including treated wastewater, on the area(s) described therein insofar as that use of recycled water is consistent with the requirements of Order R7-2014-0008, or its addenda.

RWQCB Approval: \_\_\_\_\_

Date: \_\_\_\_\_

RWQCB Title: \_\_\_\_\_

**DESERT WATER AGENCY**  
**CERTIFICATION FORM FOR RECYCLED WATER SERVICE**  
(Please Type or Print All Information)

User Account No.: \_\_\_\_\_  
(By DWA)

Operation Certification  
(Completed by Operator)

Operator of On-Site Recycled Water System (Company Name) \_\_\_\_\_

Relationship to Property Owner \_\_\_\_\_

On-Site Supervisor: \_\_\_\_\_ Relationship to Owner: \_\_\_\_\_

Business Telephone: \_\_\_\_\_ Off-hours Telephone: \_\_\_\_\_

I have reviewed the "Rules and Regulations for Recycled Water Facilities" of Desert Water Agency and certify that the operation of this recycled water service will be in accordance with all applicable requirements contained therein, including providing for the required training and supervision of all personnel under my control who will be involved with the use of recycled water.

Operator's Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Company Title: \_\_\_\_\_

---

Design and Construction Certification  
(Completed by DWA)

Off-Site Supervisor: \_\_\_\_\_ DWA Title: \_\_\_\_\_

Business Address: \_\_\_\_\_  
(Address, City, State, Zip Code)

Business Telephone: \_\_\_\_\_ Off-hours Telephone: \_\_\_\_\_

I certify that the design and construction of the recycled water service is in accordance with all applicable requirements contained in the "Rules and Regulations for Recycled Water Facilities" of Desert Water Agency.

DWA Signature: \_\_\_\_\_ Date: \_\_\_\_\_

DWA Title: \_\_\_\_\_

Nondomestic Water Service Approval (Completed by RWQCB)

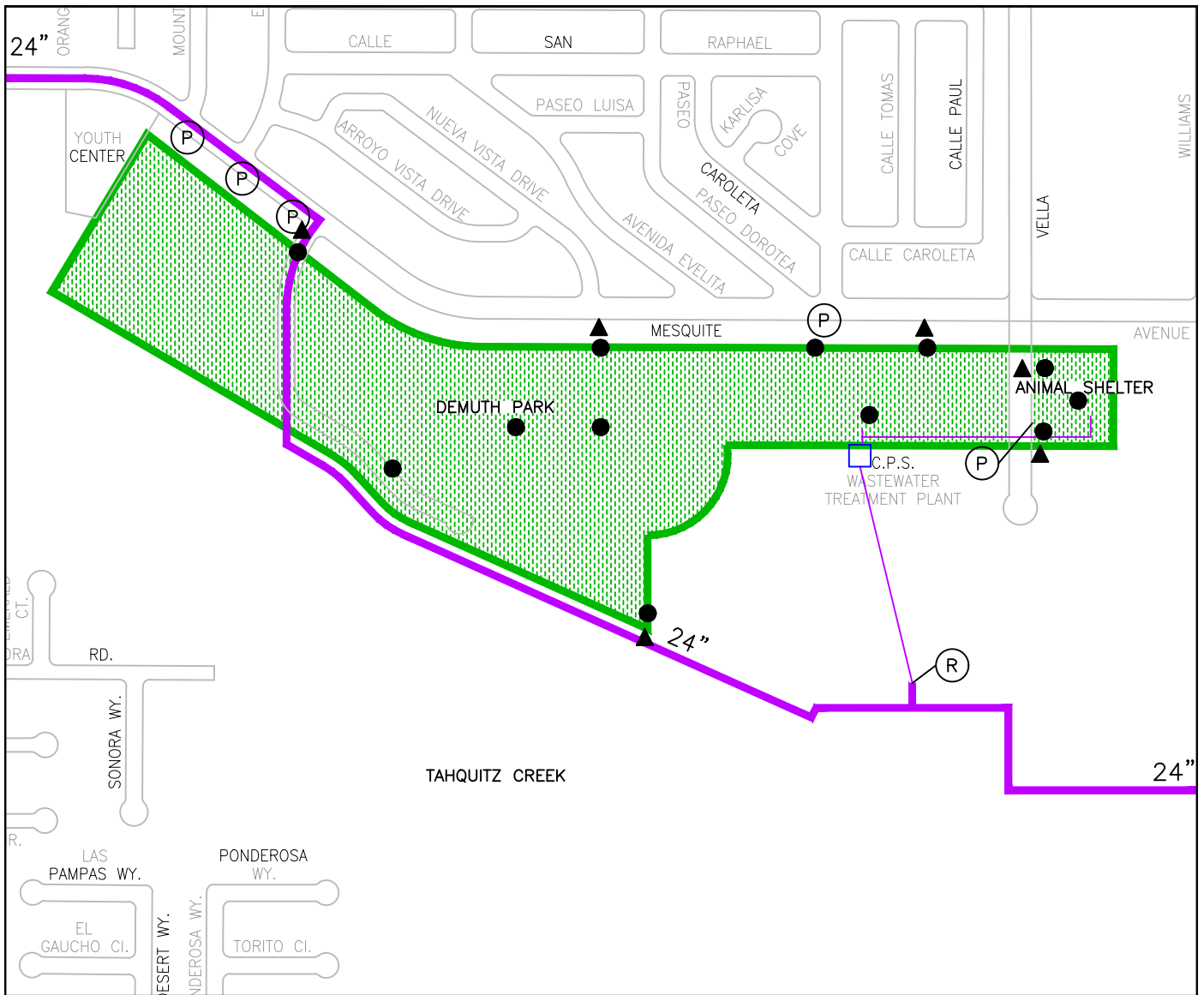
Based on information contained within the Application Form for Recycled Water Service and within the Certification Form for Recycled Water Service, the Regional Water Quality Control Board Colorado River Basin Region hereby approves the use of recycled water, including treated wastewater, on the area(s) described therein insofar as that use of recycled water is consistent with the requirements of Order R7-2014-0008, or its addenda.

RWQCB Approval: \_\_\_\_\_

Date: \_\_\_\_\_

RWQCB Title: \_\_\_\_\_

**APPENDIX E**  
**FACILITY MAPS OF DESERT WATER AGENCY**  
**AREA RECYCLED WATER SITES**



#### LEGEND

SITE BOUNDARY ( BARRIER)

PUBLIC ENTRY/PARKING

RECLAIMED USE AREA

"RECYCLED WATER—DO NOT DRINK FROM IRRIGATION FIXTURES" SIGN

DWA RECYCLED WATER MAIN

PRIVATE RECYCLED WATER STORAGE

DWA WELL SITE

PRIVATE WELL SITE

PRIVATE RECLAIMED DISTRIBUTION MAIN

DWA RECLAIMED BOOSTER PUMP

PRIVATE RECLAIMED BOOSTER PUMP

POTABLE WATER METER AND BACKFLOW

RECLAIMED WATER METER

#### CROSS CONNECTION CONTROL METHODS

NOTIFICATION SIGNS

LABELING OF RECLAIMED AND POTABLE FACILITIES

BACKFLOW DEVICES AT ALL PUBLIC POTABLE WATER CONNECTIONS TESTED ANNUALLY

ANNUAL SITE INSPECTION BY DWA

RECYCLED WATER AND POTABLE WATER SHUT DOWN TEST PERFORMED EVERY 4 YEARS

**DESERT WATER**



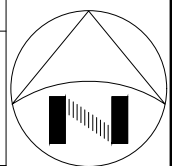
1200 GENE AUTRY TRAIL SOUTH  
PALM SPRINGS, CA 92263  
(760) 323-4971

**DESERT WATER AGENCY**

**RECYCLED WATER SITE INFORMATION**

**DEMUTH PARK AND ANIMAL SHELTER**

**CITY OF PALM SPRINGS, KENNETH KERSHAW 760-323-8283**



SCALE: N.T.S. DATE: 09/11/2019 DRAWN BY: HM CHECKED BY: DT W.O.: N/A



#### LEGEND

- |   |                                     |
|---|-------------------------------------|
| SITE BOUNDARY (  BARRIER)                                   | DWA WELL SITE                       |
| PUBLIC ENTRY/PARKING  | PRIVATE WELL SITE                   |
| RECLAIMED USE AREA  | PRIVATE RECLAIMED DISTRIBUTION MAIN |
| "RECYCLED WATER-DO NOT DRINK FROM IRRIGATION FIXTURES" SIGN | DWA RECLAIMED BOOSTER PUMP          |
| DWA RECYCLED WATER MAIN                                     | PRIVATE RECLAIMED BOOSTER PUMP      |
| PRIVATE RECYCLED WATER STORAGE                              | POTABLE WATER METER AND BACKFLOW    |
|   | RECLAIMED WATER METER               |

CROSS CONNECTION CONTROL METHODS  
NOTIFICATION SIGNS  
ANNUAL SITE INSPECTION BY DWA

#### DESERT WATER

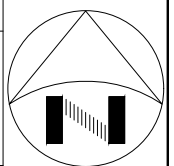


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PALM SPRINGS, CA 92263  
(760) 323-4971

#### DESERT WATER AGENCY

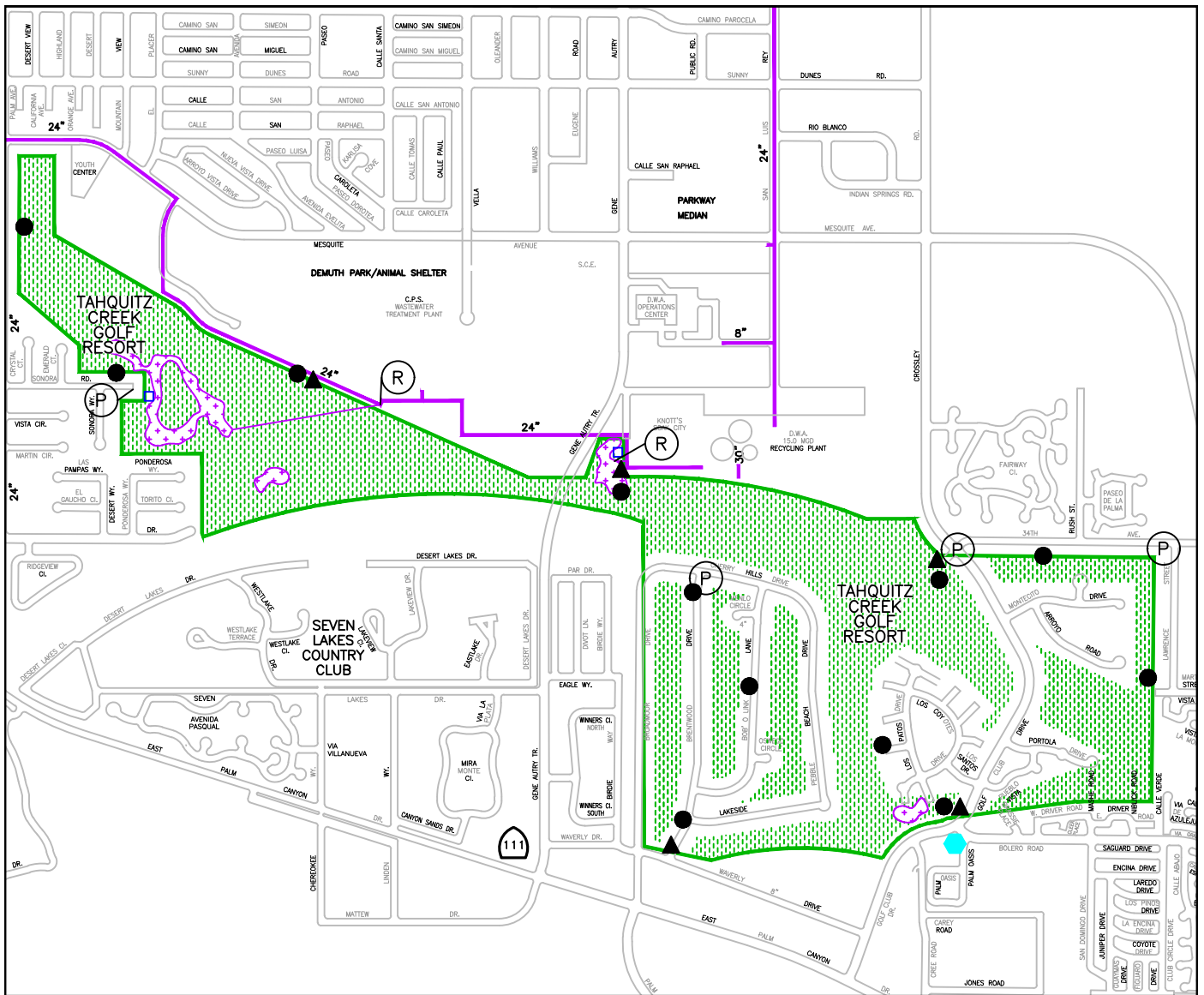
#### RECYCLED WATER SITE INFORMATION

MID-VALLEY PARKWAY  
CITY OF PALM SPRINGS, KENNETH KERSHAW 760-323-8283



SCALE: N.T.S. DATE: 09/11/2019 DRAWN BY: HM CHECKED BY: DT W.O.: N/A





#### LEGEND

- |  |   |  |                                     |
|--|---|--|-------------------------------------|
|  | SITE BOUNDARY (  BARRIER)                                   |  | DWA WELL SITE                       |
|  | PUBLIC ENTRY/PARKING  |  | PRIVATE WELL SITE                   |
|  | RECLAIMED USE AREA  |  | PRIVATE RECLAIMED DISTRIBUTION MAIN |
|  | "RECYCLED WATER-DO NOT DRINK FROM IRRIGATION FIXTURES" SIGN |  | DWA RECLAIMED BOOSTER PUMP          |
|  | DWA RECYCLED WATER MAIN                                     |  | PRIVATE RECLAIMED BOOSTER PUMP      |
|  | PRIVATE RECYCLED WATER STORAGE                              |  | POTABLE WATER METER AND BACKFLOW    |
|  |   |  | RECLAIMED WATER METER               |

#### CROSS CONNECTION CONTROL METHODS

##### NOTIFICATION SIGNS

##### LABELING OF RECLAIMED AND POTABLE FACILITIES

BACKFLOW DEVICES AT ALL PUBLIC POTABLE WATER CONNECTIONS TESTED ANNUALLY

ANNUAL SITE INSPECTION BY DWA

RECYCLED WATER AND POTABLE WATER SHUT DOWN TEST PERFORMED EVERY 4 YEARS

#### DESERT WATER

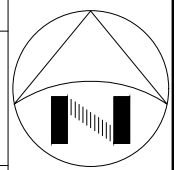


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PALM SPRINGS, CA 92263  
(760) 323-4971

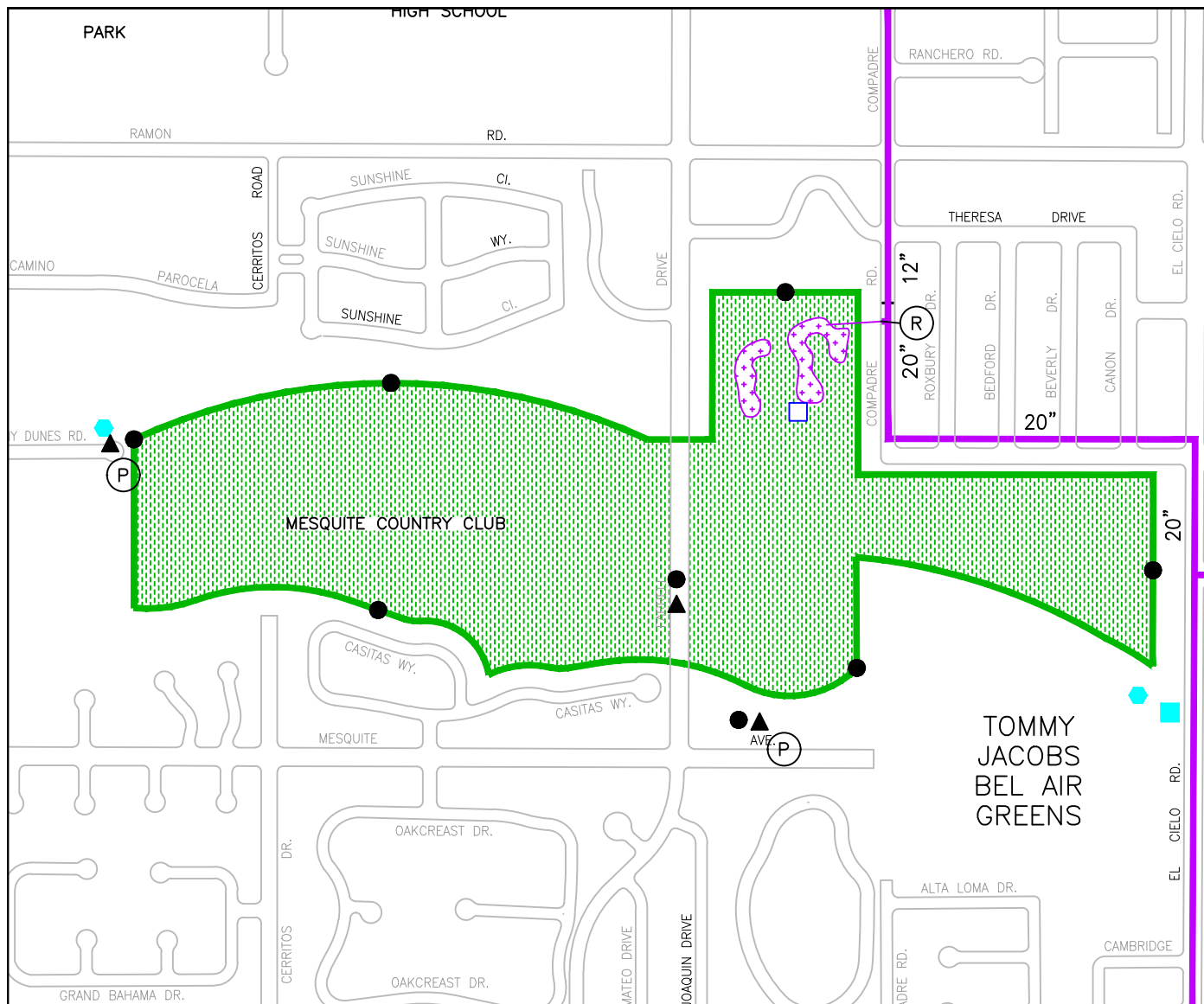
#### DESERT WATER AGENCY

#### RECYCLED WATER SITE INFORMATION

TAHQUITZ CREEK GOLF RESORT  
CITY OF PALM SPRINGS, DANIEL DOMINGUEZ 760-328-1005



SCALE: N.T.S. DATE: 09/11/2019 DRAWN BY: HM CHECKED BY: DT W.O.: N/A



#### LEGEND

- |   |                                     |
|---|-------------------------------------|
| SITE BOUNDARY (  BARRIER)                                   | DWA WELL SITE                       |
| PUBLIC ENTRY/PARKING  | PRIVATE WELL SITE                   |
| RECLAIMED USE AREA  | PRIVATE RECLAIMED DISTRIBUTION MAIN |
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| DWA RECYCLED WATER MAIN                                     | PRIVATE RECLAIMED BOOSTER PUMP      |
| PRIVATE RECYCLED WATER STORAGE                              | POTABLE WATER METER AND BACKFLOW    |
|   | RECLAIMED WATER METER               |

#### CROSS CONNECTION CONTROL METHODS

NOTIFICATION SIGNS

LABELING OF RECLAIMED AND POTABLE FACILITIES

BACKFLOW DEVICES AT ALL PUBLIC POTABLE WATER CONNECTIONS TESTED ANNUALLY

ANNUAL SITE INSPECTION BY DWA

RECYCLED WATER AND POTABLE WATER SHUT DOWN TEST PERFORMED EVERY 4 YEARS

**DESERT WATER**

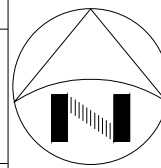


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PALM SPRINGS, CA 92263  
(760) 323-4971

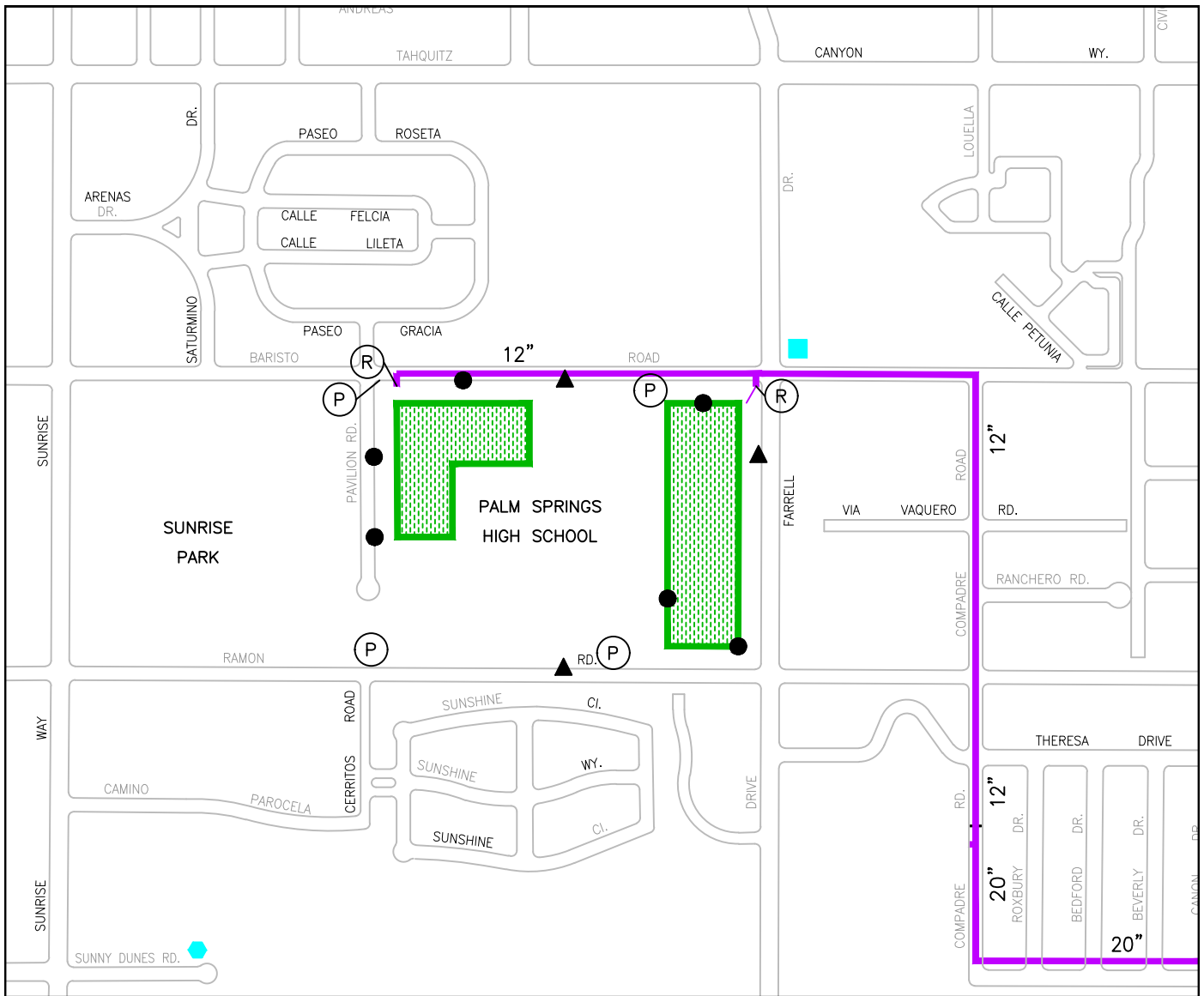
**DESERT WATER AGENCY**

**RECYCLED WATER SITE INFORMATION**

MESQUITE COUNTRY CLUB  
PALM PARTNERS CAPITAL, ROBERT FROST 760-323-9377



SCALE: N.T.S. DATE: 09/11/2019 DRAWN BY: HM CHECKED BY: DT W.O.: N/A



#### LEGEND

- |   |                                     |
|---|-------------------------------------|
| SITE BOUNDARY (  BARRIER)                                   | DWA WELL SITE                       |
| PUBLIC ENTRY/PARKING  | PRIVATE WELL SITE                   |
| RECLAIMED USE AREA  | PRIVATE RECLAIMED DISTRIBUTION MAIN |
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| DWA RECYCLED WATER MAIN                                     | PRIVATE RECLAIMED BOOSTER PUMP      |
| PRIVATE RECYCLED WATER STORAGE                              | POTABLE WATER METER AND BACKFLOW    |
|   | RECLAIMED WATER METER               |

#### CROSS CONNECTION CONTROL METHODS

NOTIFICATION SIGNS

LABELING OF RECLAIMED AND POTABLE FACILITIES

BACKFLOW DEVICES AT ALL PUBLIC POTABLE WATER CONNECTIONS TESTED ANNUALLY

ANNUAL SITE INSPECTION BY DWA

RECYCLED WATER AND POTABLE WATER SHUT DOWN TEST PERFORMED EVERY 4 YEARS

**DESERT WATER**

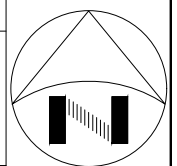


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PALM SPRINGS, CA 92263  
(760) 323-4971

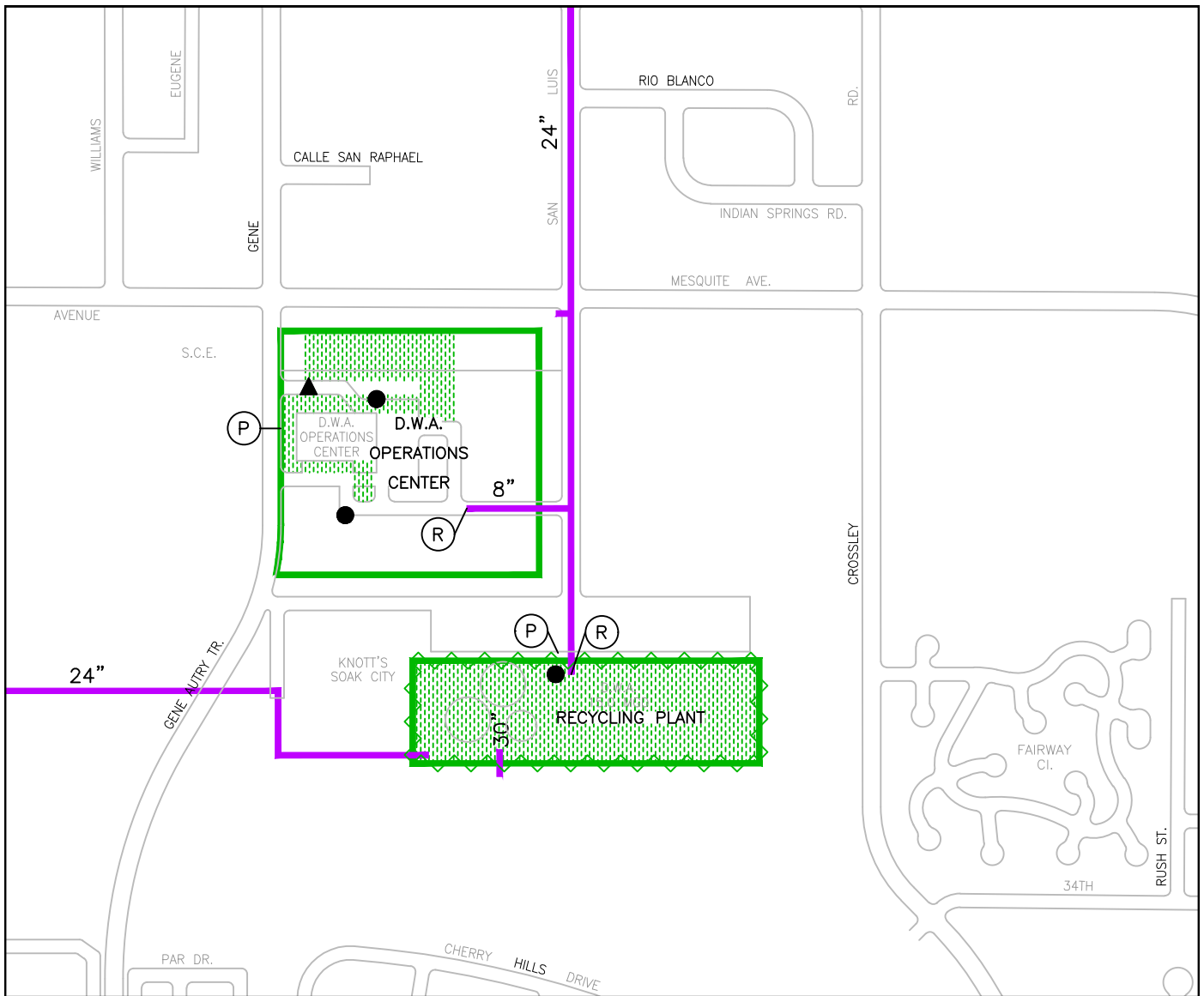
**DESERT WATER AGENCY**

### RECYCLED WATER SITE INFORMATION

PALM SPRINGS HIGH SCHOOL  
PALM SPRINGS UNIFIED SCHOOL DISTRICT, DAVID FAREY 760-322-4115



SCALE: N.T.S.      DATE: 09/11/2019      DRAWN BY: HM      CHECKED BY: DT      W.O.: N/A



#### LEGEND

	SITE BOUNDARY (  BARRIER)		DWA WELL SITE
	PUBLIC ENTRY/PARKING		PRIVATE WELL SITE
	RECLAIMED USE AREA		PRIVATE RECLAIMED DISTRIBUTION MAIN
	"RECYCLED WATER—DO NOT DRINK FROM IRRIGATION FIXTURES" SIGN		DWA RECLAIMED BOOSTER PUMP
	DWA RECYCLED WATER MAIN		PRIVATE RECLAIMED BOOSTER PUMP
	PRIVATE RECYCLED WATER STORAGE		POTABLE WATER METER AND BACKFLOW
			RECLAIMED WATER METER

#### CROSS CONNECTION CONTROL METHODS

NOTIFICATION SIGNS

LABELING OF RECLAIMED AND POTABLE FACILITIES

BACKFLOW DEVICES AT ALL PUBLIC POTABLE WATER CONNECTIONS TESTED ANNUALLY

ANNUAL SITE INSPECTION BY DWA

RECYCLED WATER AND POTABLE WATER SHUT DOWN TEST PERFORMED EVERY 4 YEARS

**DESERT WATER**

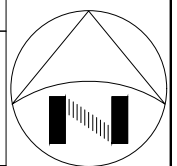


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PALM SPRINGS, CA 92263  
(760) 323-4971

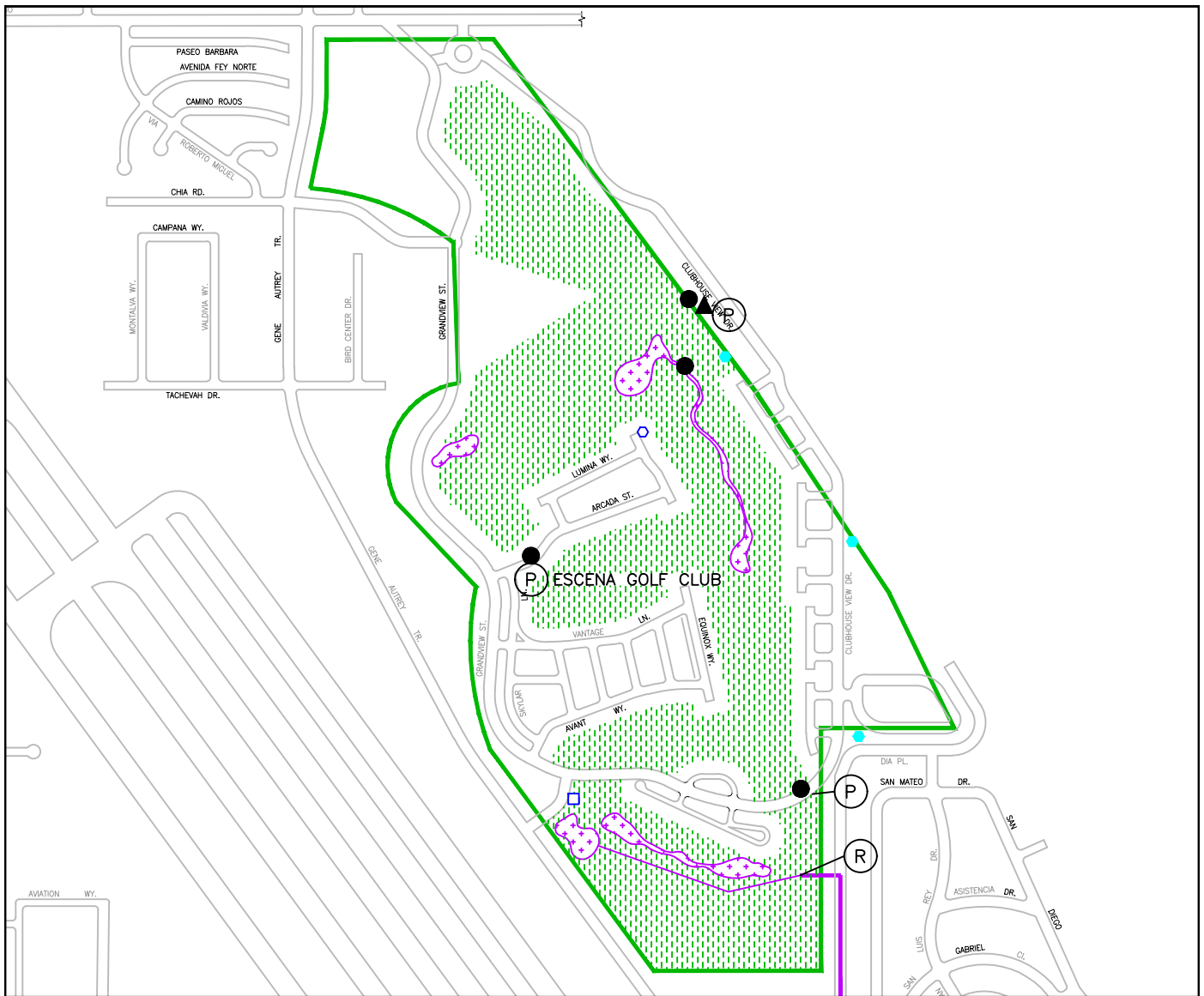
**DESERT WATER AGENCY**

### RECYCLED WATER SITE INFORMATION

DESERT WATER AGENCY OPERATIONS CENTER  
DESERT WATER AGENCY, HEATHER MARCKS 760-323-4971



SCALE: N.T.S. DATE: 09/11/2019 DRAWN BY: HM CHECKED BY: DT W.O.: N/A



#### LEGEND

- |   |                                     |
|---|-------------------------------------|
| SITE BOUNDARY (  BARRIER)                                   | DWA WELL SITE                       |
| PUBLIC ENTRY/PARKING  | PRIVATE WELL SITE                   |
| RECLAIMED USE AREA  | PRIVATE RECLAIMED DISTRIBUTION MAIN |
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#### CROSS CONNECTION CONTROL METHODS

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**DESERT WATER**

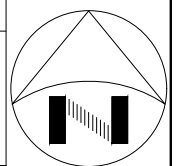


1200 GENE AUTRY TRAIL SOUTH  
PALM SPRINGS, CA 92263  
(760) 323-4971

**DESERT WATER AGENCY**

**RECYCLED WATER SITE INFORMATION**

ESCENA GOLF COURSE  
JOHN FITZPATRICK 760-778-2737



SCALE: N.T.S. DATE: 09/11/2019 DRAWN BY: HM CHECKED BY: DT W.O.: N/A

**APPENDIX F**  
**RECYCLED WATER CUSTOMER CONTACT INFORMATION**

## **RECYCLED WATER CUSTOMER CONTACT INFORMATION**

1. Tahquitz Creek Golf Resort  
1885 Golf Club Drive  
Palm Springs, CA 92264  
Phone: (760) 328-1005  
Fax: (760) 324-8122  
www.tahquitzgolfresort.com
  - Brandon Alexander, General Manager  
(760) 485-4949  
balexander@centurygolf.com
  - Tom Russell, Course Superintendent  
(760) 464-8151
  - Miguel Mendoza, Grounds Keeper  
(760) 835-4228
2. Palm Springs High School  
2401 E. Baristo Road  
Palm Springs, CA 92262  
(760) 778-0400
  - Ralph Zepeda, Site Supervisor  
(760) 831-2078
3. Mesquite Country Club  
2700 E. Mesquite Avenue  
Palm Springs, CA 92262  
(760) 323-9377
  - Fernando Moyron, Course Superintendent  
(760) 323-1002
  - Perky  
(760) 323-9377
4. Demuth Park and Mid-Valley Parkway
  - Edward Moore  
(760) 323-8117  
(760) 285-6919
  - Rick Minjares  
(760) 567-1034
  - Juan Garcia  
(760) 272-5929 (WWTP)
5. Palm Springs Animal Shelter  
4575 E. Mesquite Avenue  
Palm Springs, CA 92264  
(760) 416-5718
6. Escena Golf Club  
1100 Clubhouse View Drive  
Palm Springs, CA 92262  
(760) 778-2737
  - David Moeller
  - Manuel Guerra
  - John Fitzpatrick  
(760) 992-0005
  - Carlos Zazueta  
(760) 322-3003
7. DWA Operations Center and Recycled Water Plant
  - Steve Johnson  
(760) 323-4971 ext. 140

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

**JUNE 15, 2021**

**RE: REQUEST ADOPTION OF RESOLUTION NO. 1261  
ESTABLISHING RATES, FEES AND CHARGES FOR SEWER  
SERVICE**

In 2011, the City of Palm Springs performed a rate study and published a 20-year rate increase plan. The City adopted a multi-year rate plan approved by a Prop 218 hearing, with the last approved increase effective on July 1, 2016. The City did not perform a subsequent Prop 218 hearing to approve any subsequent increase or communicate with the Agency that there would be no future increases.

The Agency continued to follow the multi-year rate increase plan past the initial five-year term. This resulted in an over-collection and remittance of pass through charges to the City. Agency staff is in communication with the City to receive a lump-sum reimbursement for the overcharged amounts. Once received, customer accounts of the affected properties will be credited for the overcharge.

The Finance Committee reviewed the proposed rate revision and its impact on the proposed 2021/2022 Wastewater Budget.

DWA rates remain unchanged in Resolution No. 1261. The City of Palm Springs sewer service pass-through charges have been revised to reflect the current City sewer rate schedule as follows:

<b>City of Palm Springs Sewer rate</b>	<b>Current</b>	<b>Proposed July 1, 2021</b>
<b>per EDU</b>	\$23.00	\$20.00
<b>Per FU</b>	\$2.28	\$1.98

Staff recommends that the Board of Directors adopt Resolution No. 1261 for sewer rates, fees and charges reflecting the rate reduction effective July 1, 2021.



## **RESOLUTION NO. 1261**

### **RESOLUTION OF THE BOARD OF DIRECTORS OF DESERT WATER AGENCY ESTABLISHING RATES, FEES AND CHARGES FOR SEWER SERVICE**

**WHEREAS**, by previous action this Board has approved various rates, fees and charges for sewer service, as provided by law; and

**WHEREAS**, in addition to the Agency's charges for sewer services, charges imposed by Coachella Valley Water District (CVWD) must also be collected by the Agency, as CVWD's collection agent, for sewer service and treatment in Cathedral City; and

**WHEREAS**, in addition to the charges collected for CVWD in the Cathedral City area, the Agency has also entered into an agreement with the City of Palm Springs (City) to provide wastewater treatment and disposal service to the Agency's customers receiving sewage collection service from the Agency in the Dream Homes and Palm Oasis areas; and

**WHEREAS**, said agreement requires the Agency to collect from those customers the City's sewer capacity and customer service charges for wastewater treatment and disposal provided by the City, in addition to collecting the Agency's charges for sewer services; and

**WHEREAS**, this resolution reflects the current CVWD and adjusted City rates for sewage treatment and disposal services, which are subject to change by those entities, and restating other Agency rates, fees and charges which remain unchanged;

**NOW, THEREFORE**, be it resolved by the Board of Directors of Desert Water Agency that the rates, fees and charges assessed by the Agency for sewer services by the Agency shall be, and that those charged by CVWD and the City for sewer service within the Agency's sewer service areas are, as follows:

1. Capacity Charges

	CVWD Treatment Cathedral City (Effective 07/01/14)	City Treatment Palm Oasis / Dream Homes (Effective 07/01/15)
A.) Residential (including single family, apartments, condos and mobile home park spaces  (1 EDU=1 Unit or Space)	1. Total Charge: \$5,240.00 per EDU  a. \$4,190.00/EDU (CVWD) b. \$1,050.00/EDU (DWA)	2. Charge: \$ 3,000.00/Unit/Space  a. \$3,000.00/Unit/Space (CPS)
B.) Commercial, Industrial, Institutional	1. Total Charge: \$5,240.00 per EDU  a. \$4,190.00/EDU (CVWD) b. \$1,050.00/EDU (DWA)	2. Charge: \$306.00/FU (Fixture Unit)  a. \$306.00/FU (CPS)
C.) Hotel /Motel  (1/2 EDU = 1 Room)	1. Total Charge: \$5,240.00 per EDU  a. \$4,190.00/EDU (CVWD) b. \$1,050.00/EDU (DWA)	2. Charge: \$1,500.00/Room (with kitchen)  a. \$1,500.00/Room (CPS)  3. Charge: \$1,290.00/Room (without kitchen)  a. \$1,290.00/Room (CPS)
D.) R.V. Park  (1/2 EDU = 1Space)	1. Total Charge: \$5,240.00 per EDU  a. \$4,190.00/EDU (CVWD) b. \$1,050.00/EDU (DWA)	2. Charge: \$2,340.00/Space  a. \$2,340.00/Space (CPS)

2. Accounting of Funds. All revenues collected from capacity charges shall be deposited with other such fees in a separate capital facilities account or fund in a manner to avoid any commingling of the charges with other revenues and funds of the Agency, except for the temporary investments, and such revenues may be expended solely for the purpose for which the capacity charges are collected. Any interest income earned by moneys in said account or fund shall also be deposited in that account or fund and may be expended only for the purpose for which the capacity charges are imposed. The Agency shall make findings once each fiscal year with respect to any portion of the capacity charges remaining unexpended or uncommitted in the account five or more years after deposit of the charges. The findings shall identify the purpose to which the capacity charges are to be put, and will demonstrate a reasonable relationship between the charges and the purpose for which the charges were imposed.

3. Connection Fee.

a.) Single Family Residence - \$1,700

b.) Other than Single Family Residence:

A charge for all new connections based on the front footage served thereby shall be levied and collected at the rate of \$70 per lineal foot of frontage, or the actual rate in accordance with a valid main extension refund agreement, whichever is greater.

4. Plan Check Fees.

a.) Existing Main Available (lateral installation only)

1) Single Family Residence (1-4" Lateral) - no fee

2) Single Family Residence (other than above) and all other types of development - \$140

b.) The Plan Check fee for Agency-installed sewer facilities with no mains shall be \$280. For developer-installed facilities with mains, the fee shall be \$280 plus \$0.35 per lineal foot of main installed.

5. Design Review Fees.

a.) Desert Water Agency Engineering Department - \$140/Hour

b.) Engineering Consultants - Actual Cost plus 15%

c.) Legal Consultants - Actual Cost plus 15%

6. Monthly Service Charges

	<u>CVWD Treatment</u> Cathedral City (Effective 07/01/19)	<u>City Treatment</u> Palm Oasis / Dream Homes (Effective 07/01/21)
<b>A. Residential</b>		
Single Family, Condo  (1 EDU = 1 Unit)	1. Total Charge: \$28.98/EDU  a. \$23.04/EDU (CVWD) b. \$5.94/EDU (DWA)  <b>Rate (1)</b>	2. Total Charge: \$25.94/Unit  a. \$20.00/Unit (CPS) b. \$5.94/Unit (DWA)  <b>Rate (5)</b>
Mobile Home Park  (1 EDU = 1 Space)	1. Total Charge: \$28.98/EDU  a. \$23.04/EDU (CVWD) b. \$5.94/EDU (DWA)  <b>Rate (1)</b>	2. Total Charge: \$25.94/Space plus \$1.98/FU  a. \$20.00/Space (CPS) b. \$5.94/Space (DWA) c. \$1.98/FU (CPS)  <b>Rate (6)</b>
Apartments  (1 EDU = 1 Unit)	1. Total Charge: \$28.98/EDU  a. \$23.04/EDU (CVWD) b. \$5.94/EDU (DWA)  <b>Rate (4)</b>	2. Total Charge: \$25.94/Unit  a. \$20.00/Unit (CPS) b. \$5.94/Unit (DWA)  <b>Rate (7)</b>
<b>B. Hotel / Motel</b>  (1/2 EDU = 1 Room)	1. Total Charge: \$28.98/EDU  a. \$23.04/EDU (CVWD) b. \$5.94/EDU (DWA)  <b>Rate (4)</b>	N/A
<b>C. R.V. Park</b>  (1/2 EDU = 1 Space)	1. Total Charge: \$28.98/EDU  a. \$23.04/EDU (CVWD) b. \$5.94/EDU (DWA)  <b>Rate (4)</b>	N/A

6. Monthly Service Charges (Cont.)

	<u>CVWD Treatment</u> Cathedral City (Effective 07/01/19)	<u>City Treatment</u> Palm Oasis / Dream Homes (Effective 07/01/21)
D. Commercial, Industrial, or Institutional (Other than schools)	1. Total Charge: \$28.98/EDU  a. \$23.04/EDU (CVWD) b. \$5.94/EDU (DWA)  <b>Rate (4)</b>	2. Total Charge: \$1.98/FU (Minimum \$20.00) plus \$5.94/EDU  a. \$1.98/FU (CPS) (minimum \$20.00) b. \$5.94/EDU (DWA)  <b>Rate (8)</b>
E. Schools and Colleges Kindergarten Elementary Schools & Colleges	1. Total Charge: \$28.98/EDU  a. \$23.04/EDU (CVWD) b. \$5.94/EDU (DWA)  <b>Rate (3)</b>	2. (See Commercial)  <b>Rate (8)</b>
All Other Schools	1. Total Charge: \$28.98/EDU  a. \$23.04/EDU (CVWD) b. \$5.94/EDU (DWA)  <b>Rate (2)</b>	N/A
*The number of students to be used in calculating the monthly sewer charges shall be based on the previous year's average monthly attendance.		
F. Interceptor/Separator Surcharge	\$14.00  <b>Rate (4)</b>	N/A

7. Sewer Lateral Inspection. The charge for inspection of all new sewer laterals installed on existing mains shall be \$140 per lateral.
8. Main Extension By Applicant Deposit. The applicant shall deposit with the Agency a sum in the amount equal to twenty percent (20%) of the estimated main extension construction costs, as determined by the Agency, for inspection and incidental costs. The Agency shall refund the applicant any deposit amount above the final inspection and incidental costs. The Agency shall also collect additional money, as required, if the initial deposit amount does not cover the final inspection and incidental costs.

9. Development Review. A charge for Agency provided Administrative Services shall be collected at the rate of \$140 for each of the following:

- a.) Will Serve Letter
- b.) Development Bond Amount Letter
- c.) Response to Initial Study
- d.) Non-Interference Letter

10. Effective Date: The charges set forth herein shall become effective July 1, 2021 and as of that date this Resolution shall replace Resolution No. 1229.

**ADOPTED** this 15<sup>th</sup> day of June 2021.

---

Kristin Bloomer, President

ATTEST:

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Joseph Stuart, Secretary-Treasurer

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

**JUNE 15, 2021**

**RE: REQUEST ADOPTION OF RESOLUTION NO. 1262 REVISING THE  
AGENCY RESERVE POLICY**

In May 2006, the Board adopted Resolution No. 926 establishing a policy of Agency reserves, further revised by Resolution No. 1187 in June 2018. The reserve policy defines three types of reserves: 1) Restricted, 2) Unrestricted and 3) Administration.

State Water Project tax revenues may only fund State Water Project related charges and Reserves designated for State Water Project.

It has become necessary for the Agency to revise the reserve policy to refine the current Reserve for Additional Water in order to allocate restricted SWP tax revenue, set aside for purchasing additional SWP water, in an appropriately restricted reserve fund. It is proposed that the current Reserve for Additional Water in the General Fund will be split into two separate reserves; a restricted Reserve for Additional SWP Water and an unrestricted Reserve for Additional Non-SWP Water. In the unrestricted Reserve for Additional Non-SWP Water, the Board may continue allocate unrestricted Agency funds to this reserve and, upon approval by the Board, accessed for other Agency purposes. The proposed changes to the reserve policy have been reviewed by legal counsel.

Staff requests the Board adopt Resolution No. 1262, revising the Agency's Reserve Policy effective July 1, 2021.

## **RESOLUTION NO. 1262**

### **A RESOLUTION OF THE BOARD OF DIRECTORS OF THE DESERT WATER AGENCY REVISING THE AGENCY RESERVE POLICY**

**WHEREAS**, the Board of Directors of the Desert Water Agency (“Agency”) is charged with responsibility for providing an imported water supply to the areas located within the Agency’s boundaries, for recharge of local groundwater supplies, for the construction, operation, maintenance, repair and replacement of facilities to treat, store, transport and deliver water to Agency customers, and for the collection and accumulation of revenues necessary to accomplish these purposes; and

**WHEREAS**, the implementation of Board policy over a period of many years has resulted in the accumulation of funds to be utilized for variety of Agency activities and to protect the Agency’s customers and taxpayers from the financial impacts of catastrophic events, contractual obligations, and from fluctuations in Agency expenses; and

**WHEREAS**, the Board believes it would be helpful and prudent to formally adopt reserve categories within this policy to ensure that the Agency at all times will have sufficient funds available to meet its operating, capital, contractual and debt service obligations; and

**WHEREAS**, this Board also wishes to provide for the creation and/or re-allocation of certain reserve accounts in the Operating and General Funds, and to set forth in writing the Agency’s policy regarding the accumulation of reserves, the purposes for which they may be expended, and the levels which the Agency should strive to maintain;

**NOW THEREFORE**, be it resolved that the Board of Directors of Desert Water Agency hereby provides for the creation of three types of reserve categories – Restricted, Unrestricted, and Administrative Reserves – and hereby allocates existing reserve funds as follows:

1. **RESTRICTED RESERVES (FUNDS)**

**Restricted Funds** – are funds that are restricted by law or contract to be used for only a specific purpose, such as contractual obligations, bond covenants, etc.



The Restricted Reserves will include, but not be limited to, the following:

- (a) **State Water Contract Fund** (General Fund) - All revenue collected from taxes levied on real property within the Agency's boundaries to pay amounts due and owing to the State of California Department of Water Resources ("DWR") pursuant to the Agency's contract with the State ("State Water Contract") for participation in the State Water Resources Development System shall be deposited into the State Water Contract Fund. The revenues deposited into the State Water Contract Fund may be utilized only to pay the Agency's financial obligations on the State Water Contract. The Agency shall endeavor to maintain money in the State Water Contract Fund in an amount which is more than two and one-half (2-1/2) times the total of the previous year's invoices from DWR, but not more than six (6) times the total of such invoices, so that a reserve may be maintained to absorb temporary increases in charges from DWR, help to stabilize Agency tax rates, and protect against economic conditions which could result in the failure of numerous Agency taxpayers to pay their taxes.
- (b) **California Water Fix (CWF) Reserve** (General Fund) – The California Water Fix Reserve is a sub-set of the State Water Contract Fund. California Water Fix is a \$16 billion plan being implemented by the DWR to build two tunnels to carry fresh water from the Sacramento River to State Water Project diversion facilities in the South Delta, and to restore habitat in the Delta. The Agency is a participating contractor in the CWF. The Agency is obligated to pay its share of the CWF Capital & Operating costs over the next 40 years. The current projection from the DWR for the Agency's portion of the cost of CWF is \$35,262,100 over the next 10 years. Revenue collected from taxes levied on real property within the Agency's boundaries will be utilized to pay amounts due and owing to DWR per the State Water Contract (see State Water Contract Fund). The Agency will endeavor to maintain money in the CWF Fund for current and future payments in order to smooth tax rates (rate stabilization) and protect against economic conditions, which could result in the failure of Agency taxpayers to pay their taxes. The target for this reserve will also be two and one-half (2 1/2) times the annual charges from DWR for the Agency's share of CWF, but not more than six (6) times the annual charges for CWF.

(c) **Reserve for Additional State Water Project Water** (General Fund) - The reserve for Additional State Water Project Water is a sub-set of the State Water Contract Fund. The Reserve for Additional State Water Project Water may be utilized for the purchase of additional State Water Project water, to augment the Agency's annual allocation of water pursuant to the Table A of the Agency's State Water Contract, and for related costs. The Agency shall endeavor to maintain the Reserve for Additional State Water Project Water in an amount which is greater than the total of the previous year's invoices from DWR pursuant to the Agency's State Water Contract, but which does not exceed five (5) times that amount.

(d) **Bond Reserve Fund** (Operating and/or General Funds) –The Bond Reserve Fund will be utilized in the event the Agency incurs bonds or other finance debt. As bond indebtedness occurs, the following guidelines will be enforced:

This Fund is governed by bond covenants for the Agency's revenue bonds. Bond covenants require that this fund be maintained at a level sufficient to fund maximum annual debt service payments. These funds are held by the bond trustee during the term of the bonds, and are to be used in the event that the Agency is unable to meet its required semi-annual debt service obligation.

Reserve funds for each revenue bond or other form of financing issued will be used to make the last two semi-annual debt service payments for that issue. Annual interest earnings on bond reserve funds shall be applied to each year's debt service payments.

## 2. **UNRESTRICTED (DESIGNATED) RESERVES**

**Unrestricted (Designated) Reserves** – are funds, though not required by any covenant or contractual requirement, that are necessary and play a critical role in providing reliable service and funding short and long term capital projects, capital replacement projects, potential environmental obligations and responding to emergencies. Unrestricted (Designated) Reserves include, but are not limited to:

(a) **Reserve for Operations** (Operating and/or General Funds) – A “Reserve for Operations” is hereby created to be utilized to pay the costs of operating the Agency's facilities and operations, as the case may be, including unanticipated costs of operation. The Agency shall endeavor to

maintain in each reserve for operations an amount sufficient to pay for six (6) months of normal operation, but not exceeding one year of normal operation. However, funds appropriated to any Reserve for Operations may be accessed at any time for any other Agency purpose, upon approval by the Board.

- (b) **Reserve for Replacements** (Operating and/or General Funds) – A “Reserve for Replacements” is hereby created for the Agency’s Operating and/or General Accounts to which the Board may appropriate unrestricted Agency revenues. Each Reserve for Replacements may be utilized to replace the Agency’s physical plant, as needed. The Agency shall endeavor to maintain in each Reserve for Replacements an amount approximately equal to the accumulated amount of depreciation of the Agency’s physical plant (not including State Water Project facilities) for the Agency’s facilities and as reflected in the annual audit of the Agency presented to the Board each year. However, the funds appropriated to each Reserve for Replacements may be accessed at any time for any other Agency purpose, upon approval by the Board. Funds appropriated to a Reserve for Replacements may be invested in the same manner as other Agency surplus funds, and the earnings thereon shall be credited to the Agency’s Operating and/or General Fund Accounts, as the case may be.
- (c) **Reserve for Disaster Response** (Operating Fund) – A “Reserve for Disaster Response” is hereby created for the Agency’s Operating Fund, to which the Board may appropriate unrestricted Agency revenues. The Reserve for Disaster Response may be utilized to procure such equipment and supplies, perform such repairs, employ such personnel, and take such other measures as may be necessary or appropriate in the event of a disaster or calamity requiring Agency response. The Agency shall endeavor to maintain in the Reserve for Disaster Response an amount approximately equal to 15% of the value of the Agency’s net physical plant or for the Agency’s general system, as the case may be, and as reflected in the annual audit of the Agency presented to the Board each year. However, the funds appropriated to the Reserve for Disaster Response may be accessed at any time for any other Agency purpose, upon approval by the Board. Funds appropriated to a Reserve for Disaster Response may be invested in the same manner as other Agency surplus funds, and the earnings thereon shall be credited to the Agency’s Operating Fund.

- (d) **Land Acquisition Reserve** (Operating and General Funds) – A “Reserve for Land Acquisition” is hereby created for the Operating and General Funds to which the Board may appropriate unrestricted Agency revenues. The Land Acquisition Reserve may be utilized to acquire property necessary for future Agency groundwater recharge facilities, power generating facilities, well sites, reservoir sites, booster plants, water treatment facilities, lift stations, recycling facilities, and/or any other Agency operations. The Agency will endeavor to maintain the Land Acquisition Reserve in an amount not to exceed \$5,000,000 in each fund, respectively.
- (e) **Reserve for Additional Non-State Water Project Water** (General Fund) – The board may appropriate unrestricted Agency revenues to the reserve for Additional Non-State Water Project Water. The Reserve for Additional Non-State Water Project Water may be utilized for the purchase or development of additional non- State Water Project water, to augment the Agency’s annual allocation of water pursuant to the Table A of the Agency’s State Water Contract, and for related costs. The Agency shall endeavor to maintain the Reserve for Additional Non- State Water Project Water in an amount which is greater than the total of the previous year’s invoices from DWR pursuant to the Agency’s State Water Contract, but which does not exceed five (5) times that amount. However, the funds appropriated to the Reserve for Additional Water may be accessed at any time for any other Agency purpose, upon approval by the Board. Funds appropriated to the Reserve for Additional Non- State Water Project Water may be invested in the same manner as other Agency surplus funds, and the earnings thereon shall be credited to the Agency’s General Fund.
- (f) **Regulatory Compliance Reserve** (Operating and General Fund) – A “Reserve for Regulatory Compliance” is hereby created to which the Board may appropriate unrestricted Agency revenues. The Regulatory Compliance Reserve may be utilized by the Operating and/or General Funds to comply with any regulatory legislation or requirements imposed on the Agency for groundwater and/or surface water treatment by any Federal, State or Local authority. The Agency shall endeavor to maintain the Reserve for Regulatory Compliance in an amount not to exceed \$10,000,000 per fund, respectively. However, the Funds appropriated to the Regulatory Compliance Reserve may be accessed at any time for any other Agency purpose upon approval by the Board.

### 3. **ADMINISTRATIVE RESERVES (Operating Fund)**

Administrative reserves are funds, though not required by any covenant or contractual provision, that are utilized for the administrative costs associated with personnel. Administrative Reserves include, but are not limited to:

- (a) **Retirement Benefits Reserve (Operating Fund)** – A “Reserve for Retirement Benefits” is hereby created to be utilized to pay the cost of retiree benefits such as, but not limited to, health, dental and vision insurance premiums and PERS adjustments. The Agency shall endeavor to maintain in the Retirements Benefits Reserve a minimum of two times the actual cost from the preceding year, but not to exceed four (4) times the cost, in order to absorb any rate increases and/or the addition of new retirees. However, the funds appropriated to the Retirement Benefits Reserve may be accessed at any time for any other Agency purpose upon approval by the Board.

### 4. **ADDITIONAL ACCOUNTS**

In addition to the Restricted, Unrestricted and Administrative Accounts identified above, the Board may approve the creation of such additional accounts, whether temporary or permanent, as the Board deems necessary or appropriate, by amendment to this Resolution or by simple motion. In such event, the Board will identify the purposes for which such additional accounts are created, provide guidance as to the amount which the Agency should endeavor to main in each such account, and establish the limits and restrictions pertaining thereto.

### 5. **PROCEDURE FOR MONITORING RESERVE LEVELS**

Each year, the Agency’s Finance Director, during the annual budget presentation, shall provide the Board with a report indicating the beginning and ending balance for each of the reserve funds or accounts created pursuant to this Resolution, shall document the purposes for which expenditures have been made therefrom, and shall make recommendations to replenish or augment funds or account balances as appropriate.

6. **EFFECTIVE DATE** – The policies set forth herein shall become effective on July 1, 2021 and as of that date shall replace the policies set forth in Resolution No. 1187.

**ADOPTED AND APPROVED** this 15th day of June, 2021.

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Kristin Bloomer, President

ATTEST:

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Joseph K. Stuart, Secretary-Treasurer

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

**JUNE 15, 2021**

**RE: REQUEST ADOPTION OF FISCAL YEAR 2021/2022 OPERATING,  
GENERAL AND WASTEWATER BUDGETS**

Attached for your review is the final draft of the proposed Operating, General and Wastewater Fund Budgets for Fiscal Year 2021/2022.

After the June 1, 2021 Draft Budget presentation, the following adjustments have been made:

Operating Fund:

- Prior year capital carryover budget decreased by \$100,000 as a result of a manual entry error located in quality checks.
- Maintenance – Information Systems Equipment expense increased by \$40,000 for the identification and reclassification of a one-time expense to an annual reoccurring expense during quality checks.

Reserves for the Operating Fund have also been increased by \$60,000 as a result of the revisions.

Staff is available to answer any questions the Board may have with regard to the budgets, and requests adoption of the budgets for Fiscal Year 2021/2022.



# DESERT WATER AGENCY

fiscal year 2021-2022

# BUDGET

OPERATING FUND  
GENERAL FUND  
WASTEWATER FUND

DESERT WATER





# DESERT WATER AGENCY

**Fiscal Year 2021 / 2022**

BUDGETS

Operating Fund

General Fund

Wastewater Fund

**DESERT WATER AGENCY**  
**OPERATING FUND BUDGET**  
2021 / 2022

**DESERT WATER AGENCY  
OPERATING FUND  
2021-2022 BUDGET WITH PRIOR YEAR COMPARISON**

	ACTUAL 2019-2020	ACTUAL TO 3/31/2021	BUDGET 2020-2021	OVER OR UNDER	BUDGET 2021-2022
<b><u>OPERATING REVENUES</u></b>					
Water Sales	\$34,934,691	\$28,126,841	\$36,397,500	(\$8,270,659)	\$35,568,000
Power Sales	\$52,726	\$23,184	\$33,000	(\$9,816)	\$31,900
Reclamation Sales	\$1,523,815	\$857,596	\$1,479,000	(\$621,404)	\$996,000
TOTAL OPER REVENUES	\$36,511,232	\$29,007,622	\$37,909,500	(\$8,901,879)	\$36,595,900
<b><u>WATER SERVICES</u></b>					
Fire Protection	\$371,803	\$288,980	\$376,200	(\$87,220)	\$343,600
Back-up Facility Charge	\$1,186,060	\$1,109,321	\$900,000	\$209,321	\$1,080,000
Service Charges	\$648,081	\$367,712	\$641,700	(\$273,988)	\$475,950
Charge for Inst of Serv & Mtr	\$197,653	\$147,486	\$166,800	(\$19,314)	\$161,000
TOTAL WATER SERVICE	\$2,403,597	\$1,913,500	\$2,084,700	(\$171,200)	\$2,060,550
TOTAL OPER REVENUES	\$38,914,829	\$30,921,121	\$39,994,200	(\$9,073,079)	\$38,656,450
<b><u>OPERATING EXPENSES</u></b>					
<b><u>SOURCE OF SUPPLY</u></b>					
Supervision & Engineering	\$67,885	\$49,582	\$58,800	(\$9,218)	\$76,800
Operating Labor & Expense	\$55,263	\$41,342	\$145,800	(\$104,458)	\$55,980
Misc Source of Supply	\$20,828	\$30,123	\$55,200	(\$25,077)	\$107,000
Maintenance of Struct & Improv	\$63,403	\$58,727	\$95,700	(\$36,973)	\$256,500
Maint, Rds, Coll, Impo, Res	\$91,300	\$10,637	\$168,000	(\$157,363)	\$72,100
Maintenance of Intakes	\$189,724	\$229,811	\$219,600	\$10,211	\$113,350
Maintenance of Wells	\$7,595	\$8,056	\$10,200	(\$2,144)	\$12,450
Groundwater Replenishment	\$4,660,579	\$4,206,943	\$4,997,850	(\$790,907)	\$5,307,000
TOTAL SOURCE OF SUPPLY	\$5,156,577	\$4,635,221	\$5,751,150	(\$1,115,929)	\$6,001,180
<b><u>PUMPING</u></b>					
Supervision & Engineering	\$113,796	\$83,241	\$110,400	(\$27,159)	\$126,000
Pumping Labor Expense	\$164,171	\$117,725	\$190,000	(\$72,275)	\$191,000
Misc Exp & Care of Grounds	\$120,046	\$103,475	\$124,200	(\$20,725)	\$131,500
Maintenance of Structures	\$87,284	\$63,395	\$65,400	(\$2,005)	\$374,600
Maint of Pumping Equipment	\$178,680	\$166,739	\$325,200	(\$158,461)	\$325,000
Power Purchases	\$2,403,509	\$2,076,628	\$2,650,000	(\$573,372)	\$3,210,000
TOTAL PUMPING	\$3,067,485	\$2,611,203	\$3,465,200	(\$853,997)	\$4,358,100

**DESERT WATER AGENCY  
OPERATING FUND  
2021-2022 BUDGET WITH PRIOR YEAR COMPARISON**

	ACTUAL 2019-2020	ACTUAL TO 3/31/2021	BUDGET 2020-2021	OVER OR UNDER	BUDGET 2021-2022
<b><u>REGULATORY WATER TREATMENT</u></b>					
Supervision & Engineering	\$107,922	\$88,553	\$111,600	(\$23,047)	\$126,960
Operating Labor Expense	\$159,450	\$151,526	\$144,000	\$7,526	\$195,625
Water Analysis/Health Dept.	\$117,021	\$90,849	\$192,000	(\$101,151)	\$189,000
Chem & Filtering Material	\$133,923	\$97,841	\$117,600	(\$19,759)	\$140,450
Maint of Structures	\$4,215	\$11,540	\$4,200	\$7,340	\$14,750
Maint of Water Treat Equipment	\$67,612	\$61,440	\$75,000	(\$13,560)	\$95,000
TOTAL WATER TREATMENT	\$590,144	\$501,749	\$644,400	(\$142,651)	\$761,785
<b><u>TRANSMISSION &amp; DISTRIBUTION</u></b>					
Supervision & Engineering	\$501,958	\$374,495	\$532,800	(\$158,305)	\$631,920
Storage Facilities Expense	\$119,552	\$88,484	\$141,000	(\$52,516)	\$149,500
Trans & Distr Lines Expense	\$103,266	\$69,897	\$155,100	(\$85,204)	\$153,000
Meter Expense	\$81,452	\$22,982	\$102,300	(\$79,318)	\$122,400
Customer Install Expense	\$149,295	\$68,861	\$160,800	(\$91,939)	\$146,500
Cross Connect Expense	\$118,629	\$90,914	\$138,300	(\$47,386)	\$140,000
Misc Supply Expense	\$46,227	\$43,570	\$40,200	\$3,370	\$49,000
Maintenance of Struct & Impv	\$404	\$651	\$2,700	(\$2,049)	\$2,500
Maintenance of Reservoirs	\$335,751	\$88,202	\$725,400	(\$637,198)	\$614,000
Maintenance of Mains	\$970,198	\$572,268	\$1,200,000	(\$627,732)	\$1,300,000
Maintenance of Whitewater MWC	\$34,714	\$21,814	\$421,800	(\$399,986)	\$50,150
Maintenance of Fire Services	\$69,497	\$35,973	\$95,400	(\$59,427)	\$110,000
Maintenance of Services	\$245,683	\$175,198	\$250,200	(\$75,002)	\$275,000
Maintenance of Meters	\$70,700	\$57,329	\$102,000	(\$44,671)	\$130,860
Maintenance of Hydrants	\$86,268	\$65,641	\$120,000	(\$54,359)	\$150,000
TOTAL TRANS & DIST	\$2,933,593	\$1,776,278	\$4,188,000	(\$2,411,722)	\$4,024,830
<b><u>CUSTOMER ACCOUNT EXPENSE</u></b>					
Supervision & Engineering	\$163,487	\$125,203	\$156,600	(\$31,397)	\$193,560
Meter Reading Expense	\$115,945	\$98,800	\$132,000	(\$33,200)	\$145,200
Customer Rec & Coll Exp	\$698,349	\$522,384	\$771,000	(\$248,616)	\$775,600
Information Systems Supplies	\$2,402	\$0	\$3,600	(\$3,600)	\$2,500
Uncollectible Accounts	\$24,355	\$38,856	\$74,400	(\$35,544)	\$70,800
TOTAL CUST ACCT EXPENSE	\$1,004,539	\$785,243	\$1,137,600	(\$352,357)	\$1,187,660

**DESERT WATER AGENCY  
OPERATING FUND  
2021-2022 BUDGET WITH PRIOR YEAR COMPARISON**

	ACTUAL 2019-2020	ACTUAL TO 3/31/2021	BUDGET 2020-2021	OVER OR UNDER	BUDGET 2021-2022
<b><u>ADMINISTRATIVE &amp; GEN EXPENSE</u></b>					
Administrative & Gen Salaries	\$833,000	\$583,292	\$895,200	(\$311,908)	\$1,051,800
Office Supplies & Expense	\$257,124	\$207,681	\$298,320	(\$90,639)	\$297,320
Legal	\$116,681	\$92,130	\$92,400	(\$270)	\$120,000
Engineering	\$351,826	\$81,027	\$135,000	(\$53,973)	\$84,000
Auditing	\$37,765	\$39,293	\$42,000	(\$2,707)	\$42,000
Appraisals & Consultants	\$50,804	\$84,780	\$367,400	(\$282,620)	\$402,000
Insurance & Claims	\$199,624	\$156,265	\$204,000	(\$47,735)	\$218,400
Injuries & Safety	\$389,850	\$361,984	\$511,200	(\$149,216)	\$436,000
Pension	\$2,975,544	\$2,735,187	\$2,952,400	(\$217,213)	\$2,706,000
Health Care Benefits	\$460,571	\$1,417,952	\$1,705,200	(\$287,248)	\$1,846,600
OPEB Benefits	\$0	\$0	\$0	\$0	\$0
Other Employee Benefits	\$885,325	\$394,845	\$530,500	(\$135,655)	\$597,100
Payroll Taxes - FICA	\$533,075	\$416,966	\$585,000	(\$168,034)	\$588,000
Unemployment Insurance	\$2,425	\$13,449	\$3,000	\$10,449	\$18,000
Vacation Pay	\$888,149	\$771,665	\$917,300	(\$145,635)	\$1,016,400
Maintenance - Oper Center	\$242,842	\$215,100	\$270,600	(\$55,500)	\$332,300
Maintenance - Solar Facilities	\$5,005	\$4,641	\$5,100	(\$459)	\$6,500
Information Systems	\$385,809	\$269,097	\$340,200	(\$71,103)	\$507,000
Maint - Office Equip	\$56,579	\$67,988	\$56,700	\$11,288	\$59,900
Maint - Info. Systems Equip	\$199,924	\$142,103	\$157,800	(\$15,697)	\$384,900
Maint - Telemetry Equip	\$29,648	\$20,093	\$30,000	(\$9,907)	\$30,000
Maint - Comm Equip	\$7,551	\$4,289	\$8,100	(\$3,811)	\$9,600
Supervision & Engineering	\$195,612	\$147,679	\$201,600	(\$53,921)	\$237,600
Storeroom Expense	\$79,478	\$59,075	\$80,100	(\$21,025)	\$80,000
Transportation	\$333,202	\$223,138	\$375,000	(\$151,862)	\$1,237,000
Tools & Work Equipment	\$106,615	\$98,520	\$140,400	(\$41,880)	\$145,000
Heavy Equipment Maint	\$2,112	\$4,908	\$20,400	(\$15,492)	\$15,000
Director's Fees	\$40,339	\$25,723	\$46,500	(\$20,777)	\$48,000
Public Information	\$123,977	\$101,035	\$202,800	(\$101,765)	\$178,310
Water Conservation	\$76,806	\$66,389	\$175,200	(\$108,811)	\$177,930
Water Conservation - Turf Buy Back	\$97,119	\$126,456	\$380,400	(\$253,944)	\$386,200
TOTAL ADMIN & GEN EXP	\$9,964,379	\$8,932,753	\$11,729,820	(\$2,797,067)	\$13,258,860
	\$0				
<b><u>REGULATORY EXPENSES</u></b>					
Certificates/Training/School	\$99,647	\$3,312	\$125,400	(\$122,088)	\$130,200
Health Department / Services	\$14,824	\$10,666	\$18,000	(\$7,334)	\$18,000
State - Regulatory	\$141,618	\$141,630	\$168,000	(\$26,370)	\$169,750
Federal - Regulatory	\$4,414	\$2,409	\$25,200	(\$22,791)	\$10,250
Reclamation - Regulatory	\$42,147	\$5,155	\$75,000	(\$69,845)	\$24,750
AQMD Compliance	\$944	\$806	\$1,200	(\$394)	\$1,500
RMP/OSHA/Misc.	\$26,630	\$18,253	\$40,200	(\$21,947)	\$60,000
Legal	\$0	\$50	\$0	\$50	\$0
TOTAL REGULATORY EXPENSES	\$330,224	\$182,281	\$453,000	(\$270,719)	\$414,450

**DESERT WATER AGENCY  
OPERATING FUND  
2021-2022 BUDGET WITH PRIOR YEAR COMPARISON**

	ACTUAL 2019-2020	ACTUAL TO 3/31/2021	BUDGET 2020-2021	OVER OR UNDER	BUDGET 2021-2022
<b><u>SNOW CREEK HYDRO EXPENSE</u></b>					
Snow Creek Hydro	\$42,332	\$29,893	\$36,600	(\$6,707)	\$36,600
TOTAL SNOW CREEK HYDRO	\$42,332	\$29,893	\$36,600	(\$6,707)	\$36,600
<b><u>RECLAMATION PLANT EXPENSE</u></b>					
Pumping Expense	\$330,891	\$172,247	\$363,000	(\$190,753)	\$322,950
Treatment Expense	\$513,835	\$273,520	\$572,700	(\$299,180)	\$561,900
Transportation/Distribution	\$68,782	\$35,227	\$1,388,400	(\$1,353,173)	\$1,710,100
Administrative & General	\$159,521	\$111,256	\$189,900	(\$78,644)	\$227,400
TOTAL RECL PLANT EXP	\$1,073,028	\$592,251	\$2,514,000	(\$1,921,749)	\$2,822,350
<b><u>OTHER OPERATING EXPENSE</u></b>					
Depreciation (Inc Recl)	\$6,167,149	\$4,694,651	\$6,222,600	(\$1,527,949)	\$6,556,800
Services Rendered Cust	\$120,778	\$108,452	\$165,000	(\$56,548)	\$160,800
Dir Costs App to W.O.'s	\$844,779	(\$747,244)	\$446,400	(\$1,193,644)	\$730,400
Indir Adm & Gen Exp Cap	(\$1,715,461)	(\$1,374,115)	(\$1,735,200)	\$361,085	(\$1,860,000)
TOTAL OTHER OPER EXP	\$5,417,245	\$2,681,743	\$5,098,800	(\$2,417,057)	\$5,588,000
TOTAL OPERATING EXPENSES	\$29,579,546	\$22,728,616	\$35,018,570	(\$12,289,954)	\$38,453,815
NET INCOME FROM OPER	\$9,335,283	\$8,192,505	\$4,975,630	\$3,216,875	\$202,635
<b><u>NON-OPERATING REVENUES</u></b>					
Revenue from Leases	\$138,871	\$128,686	\$171,100	(\$42,414)	\$171,100
Interest	\$532,683	\$168,976	\$180,000	(\$11,024)	\$138,000
Gains/Loss Investments	\$0	\$0	\$0	\$0	\$0
Other Income	\$130,244	(\$8,685)	\$0	(\$8,685)	\$250,000
DWA Front Footage Chgs	\$0	\$0	\$0	\$0	\$0
Gains on Retirements	\$60,279	\$126,099	\$24,800	\$101,299	\$38,600
Discounts	\$336	\$295	\$600	(\$305)	\$500
Revenue - Contributed	\$1,585,673	\$0	\$315,000	(\$315,000)	\$315,000
TOTAL NON-OPER REV	\$2,448,086	\$415,371	\$691,500	(\$276,129)	\$913,200
<b><u>NON OPERATING EXPENSES</u></b>					
OPEB Interest	\$1,137,027	\$0	\$1,110,000	(\$1,110,000)	\$1,047,000
Exp App to Prior Years	(\$292)	\$364	\$0	\$364	\$0
Services to Others	\$0	\$0	\$0	\$0	\$0
Customer Assistance Program	\$20,000	\$0	\$60,000	(\$60,000)	\$60,000
Grant Expenses	\$0	\$27,119	\$0	\$27,119	\$39,000
Losses on Retirements	\$99,777	\$145,570	\$54,000	\$91,570	\$175,000
TOTAL NON-OPER EXP	\$1,256,512	\$173,053	\$1,224,000	(\$1,050,947)	\$1,321,000
TOTAL NET INCOME	\$10,526,856	\$8,434,823	\$4,443,130	\$3,991,693	(\$205,165)

**DESERT WATER AGENCY  
OPERATING FUND  
2021-2022 BUDGET WITH PRIOR YEAR COMPARISON**

	<u>ACTUAL 2019-2020</u>	<u>ACTUAL TO 3/31/2021</u>	<u>BUDGET 2020-2021</u>	<u>OVER OR UNDER</u>	<u>BUDGET 2021-2022</u>
<b><u>APPLICATION OF COMMIT FUNDS</u></b>					
Capital Loan to Wastewater Fund	\$0	\$0	\$0	\$0	\$0
Other Post Emp. Benefits (GASB 75)	<u>\$640,867</u>	<u>\$584,518</u>	<u>\$725,000</u>	<u>(\$140,482)</u>	<u>\$725,000</u>
TOTAL COMMIT FUNDS	\$640,867	\$584,518	\$725,000	(\$140,482)	\$725,000
 BALANCE REMAINING	 \$9,885,989	 \$7,850,304	 \$3,718,130	 \$4,132,174	 (\$930,165)
Add Back Depreciation (Plant/Equip)	<u>\$6,167,149</u>	<u>\$4,694,651</u>	<u>\$6,222,600</u>	<u>(\$1,527,949)</u>	<u>\$6,556,800</u>
Funds Avail For Capital Additions	\$16,053,138	\$12,544,955	\$9,940,730	\$2,604,225	\$5,626,635
Less Capital Additions:					
Routine Improvements	\$3,457,042	\$2,705,505	\$9,519,600	(\$6,814,095)	\$11,307,800
General Plan Improvements	\$0	\$0	\$100,000	(\$100,000)	\$100,000
 BALANCE	 \$12,596,095	 \$9,839,451	 \$859,550	 \$8,979,901	 (\$5,781,165)
 TOTAL BUDGET			 <b>\$43,303,950</b>		 <b>\$51,907,615</b>
	<u>2020-2021 BEGIN BAL</u>	<u>2020-2021 ADJUSTMENTS</u>	<u>2021-2022 ADDITIONS</u>	<u>2021-2022 DELETIONS</u>	<u>BALANCE</u>
Estimated Reserve Fund Balance 6/30/21					\$36,684,000
Inter-Fund Loan/LC - General Fund					\$0
Reserves:					
Reserve for Operations	\$12,866,000	\$0	\$791,000	\$0	
Reserve for Replacements	\$2,760,000	\$0	\$0	\$0	
Reserve for Disaster Response	\$2,000,000	\$0	\$0	\$0	
Reserve for Land Acquisition	\$675,000	\$0	\$0	\$0	
Reserve for Regulatory Compliance	\$0	\$0	\$0	\$0	
Reserve for Retirement Benefits	<u>\$5,000,000</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	
Total Reserves - 6/30/22	\$23,301,000	\$0	\$791,000	\$0	(\$24,092,000)
Required for 2020-21 Carryover Capital Items					(\$6,810,325)
2021-2022 Budget Balance					(\$5,781,165)
Unappropriated Fund Balance 6/30/22					\$510

**BUDGET AMOUNT SUMMARY:**

Total Operating Expenses	\$38,453,815
Non-Operating Expenses	\$1,321,000
Application of Committed Funds	\$725,000
Capital Additions	<u>\$11,407,800</u>
<b>TOTAL BUDGET</b>	<b>\$51,907,615</b>

**DESERT WATER AGENCY - OPERATING FUND  
2021-2022 BUDGET  
CAPITAL IMPROVEMENTS**

W.O. No.	DESCRIPTION	ACCOUNT NO.	ESTIMATED COST
<b><u>ROUTINE</u></b>			
<b>PIPELINES</b>			
18-161--16	18/19 Main Replacements - <b>Augment</b>	11171	\$350,000
21-111--08	Pipeline Replacement - Luring Sands Tract, Val Vista Tract, E. Via Altamara, Broadmoor Drive, E. Waverly Drive	11171	\$4,100,000
21-112--20	Vista Chino Pipeline Replacement - Planning	11171	\$25,100
21-399	Contingency - Mains	11171	\$200,000
<b>TOTAL PIPELINES</b>			<b>\$4,675,100</b>
<b>WELLS</b>			
21-114-W-45	Pumping Plant- Well 45 Plant Construction	11151	\$1,600,000
<b>TOTAL WELLS</b>			<b>\$1,600,000</b>
<b>RESERVOIRS</b>			
21-115-R-09	Southridge Reservoir #1 (No. 9) Earthquake Valve	11176	\$32,300
21-116-R-17	Southridge Reservoir #2 (No. 17) Earthquake Valve	11176	\$32,300
21-117-R-20	Chino Reservoir #2 (No. 20) Earthquake Valve	11176	\$32,300
21-118-R-27	Chino Reservoir #3 (No. 27) Earthquake Valve	11176	\$32,300
21-119-R-25	Andreas Hills Reservoir #1 (No. 25) Earthquake Valve	11176	\$32,300
21-120-R-31	Andreas Hills Reservoir #2 (No. 31) Earthquake Valve	11176	\$32,300
<b>TOTAL RESERVOIRS</b>			<b>\$193,800</b>
<b>TRANSPORTATION EQUIPMENT</b>			
21-122-M	2022 Ford F-350 XL Reg. CAB w/ Utility Body (Unit 36)	11183	\$75,000
21-123-M	2022 Ford F-450 XL REG. CAB w/ Dump Body (Unit 49)	11183	\$79,500
21-124-M	2022 Ford F- 450 XL REG. CAB w/ Dump Body (Unit 2)	11183	\$79,500
<b>TOTAL TRANSPORTATION EQUIPMENT</b>			<b>\$234,000</b>



**DESERT WATER AGENCY - OPERATING FUND**  
**2021-2022 BUDGET**  
**CAPITAL IMPROVEMENTS**

W.O. No.	DESCRIPTION	ACCOUNT NO.	ESTIMATED COST
<b>METERS</b>			
21-202-E-01	Encoder Receiver Transmitter (ERT) Purchases	11173	\$365,000
21-202-M-01	1" Meter Purchases	11173	\$107,000
21-202-M-02	2" Meter Purchases	11173	\$51,000
21-202-M-03	3" Meter Purchases	11173	\$4,400
21-202-M-06	6" Meter Purchases	11173	\$3,000
21-202-M-15	1 1/2" Meter Purchases	11173	\$72,000
21-202-M-75	3/4" Meter Purchases	11173	\$133,000
<b>TOTAL METERS</b>			<b>\$735,400</b>
<b>SERVICES</b>			
21-100-S-01	1" Service Replacements	11172	\$1,115,000
21-100-S-02	2" Service Replacements	11172	\$476,000
21-201-S-01	1" Invoiced Services	11172	\$55,000
21-201-S-02	2" Invoiced Services	11172	\$45,000
<b>TOTAL SERVICES</b>			<b>\$1,691,000</b>
<b>MISCELLANEOUS</b>			
18-179-M	I-Series Modernization - <b>Augment</b>	11188	\$150,000
20-178-M	Accounting Software / ERP System - <b>Augment</b>	11188	\$1,500,000
21-126-M	Survey Equipment Ground Penetrating Radar (GPR)	11186	\$38,600
21-127-M	N Sunrise Traffic Attenuation	11181	\$14,900
21-128-M	Meter Reading Equipment Replacement	11188	\$72,500
21-129-M	Board Room AV Enhancements	11181	\$59,500
21-130-M	Corporate Firewall Replacement	11188	\$31,000
21-131-M	Snow Creek Firewall Replacement	11188	\$20,000
21-132-M	Server Replacement	11188	\$142,000
21-499	Contingency - Other	VARIOUS	\$150,000
<b>TOTAL MISCELLANEOUS</b>			<b>\$2,178,500</b>
<b>TOTAL ROUTINE</b>			<b>\$11,307,800</b>

**DESERT WATER AGENCY - OPERATING FUND  
2021-2022 BUDGET  
CAPITAL IMPROVEMENTS**

W.O. No.	DESCRIPTION	ACCOUNT NO.	ESTIMATED COST
<b><u>GENERAL PLAN</u></b>			
<b>PIPELINES</b>			
21-699	Main Oversizing	11171	\$100,000
		<b>TOTAL PIPELINES</b>	<b>\$100,000</b>
<b>TOTAL GENERAL PLAN</b>			<b>\$100,000</b>
<b>TOTAL CAPITAL IMPROVEMENTS 2021-2022</b>			<b>\$11,407,800</b>

## Reserve Policy Analysis 2021 / 2022 Budget

### OPERATING FUND

In June 2021, the Board of Directors established a policy for Agency Reserves (Resolution No. 1262). Per section 5 of the policy, an annual review of the reserves will be presented during the annual budget presentation. Presented below is the reserve analysis:

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#### Reserve for Operations

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Reserve should be equal to 6-months to 1 year of operations

2021 / 2022	Cost of Operations	\$ 38,453,815
	<i>Minimum Reserve Requirement</i>	\$ 19,226,908
	<i>Maximum Allowable Reserve Balance</i>	\$ 38,453,815
2020 / 2021	Current Reserve Balance	\$ 12,866,000
2021 / 2022	Reserve Adjustment *	\$ 791,000
<b>2021 / 2022</b>	<b>Reserve Balance</b>	<b>\$ 13,657,000</b>
2021 / 2022	Minimum Target Reserve Shortfall	\$ (5,569,908)
2021 / 2022	Maximum Reserve Shortfall	\$ (24,796,815)

\* Proposed \$731,000 addition to the Reserve for Operations in Fiscal Year 2021 / 2022

<b>2021 / 2022</b>	<b>RESERVE FOR OPERATIONS</b>	<b>\$ 13,657,000</b>
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#### Reserve for Replacements

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Reserve should be equal to the accumulated depreciation of assets

	Accumulated Depreciation at 4/30/21	\$ 137,248,787
	<i>Maximum Reserve Balance</i>	\$ 137,248,787
2020 / 2021	Current Reserve Balance	\$ 2,760,000
2021 / 2022	Reserve Adjustment *	\$ -
<b>2021 / 2022</b>	<b>Reserve Balance</b>	<b>\$ 2,760,000</b>
2021 / 2022	Maximum Reserve Shortfall	\$ (134,488,787)

\* There are no excess funds available to add to the Reserve for Replacements in Fiscal Year 2021 / 2022

<b>2021 / 2022</b>	<b>RESERVE FOR REPLACEMENTS</b>	<b>\$ 2,760,000</b>
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**Reserve Policy Analysis**  
2021 / 2022 Budget

**OPERATING FUND**

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**Reserve for Disaster Response**

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Reserve should be equal to approximately 15% of the Agency's General System

System Value at 4/30/21	\$	264,334,478
15% of System Value	\$	39,650,200
<i>Maximum Reserve Balance</i>	\$	39,650,200
2020 / 2021 Current Reserve Balance	\$	2,000,000
2021 / 2022 Reserve Adjustment *	\$	-
<b>2021 / 2022 Reserve Balance</b>	<b>\$</b>	<b>2,000,000</b>
2021 / 2022 Maximum Reserve Shortfall	<b>\$</b>	<b>(37,650,200)</b>

\* There are no excess funds available to add to the Reserve for Disaster Response in Fiscal Year 2021 / 2022

<b>2021 / 2022</b>	<b>RESERVE FOR DISASTER RESPONSE</b>	<b>\$</b>	<b>2,000,000</b>
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**Reserve for Land Acquisitions**

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Reserve shall not exceed \$5,000,000

<i>Maximum Reserve Balance</i>	\$	5,000,000
2020 / 2021 Current Reserve Balance	\$	675,000
2021 / 2022 Reserve Adjustment *	\$	-
<b>2021 / 2022 Reserve Balance</b>	<b>\$</b>	<b>675,000</b>
2021 / 2022 Maximum Reserve Shortfall	<b>\$</b>	<b>(4,325,000)</b>

\* There are no excess funds available to add to the Reserve for Land Acquisition in Fiscal Year 2021 / 2022

<b>2021 / 2022</b>	<b>RESERVE FOR LAND ACQUISITIONS</b>	<b>\$</b>	<b>675,000</b>
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**Reserve Policy Analysis**  
2021 / 2022 Budget

**OPERATING FUND**

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**Reserve for Regulatory Compliance**

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Reserve shall not exceed \$10,000,000

<i>Maximum Reserve Balance</i>		\$ 10,000,000
2020 / 2021	Current Reserve Balance	\$ -
2021 / 2022	Reserve Adjustment *	\$ -
<b>2021 / 2022</b>	<b>Reserve Balance</b>	<b>\$ -</b>
2021 / 2022	Maximum Reserve Shortfall	<b>\$ (10,000,000)</b>

\* There are no excess funds available to add to the Reserve for Regulatory Compliance in Fiscal Year 2021 / 2022

<b>2021 / 2022</b>	<b>RESERVE FOR REGULATORY COMPLIANCE</b>	<b>\$ -</b>
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**Reserve for Retirement Benefits**

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Reserve should equal two times the actual annual retirement benefit costs from the preceding year but not to exceed four times the cost

	Annual OPEB Costs - Actuarial study (2021)	\$ 1,581,838
	Annual CalPERS Normal Contributions	\$ 833,484
	<i>Minimum Reserve Requirement</i>	\$ 4,830,644
	<i>Maximum Allowable Reserve Balance</i>	\$ 9,661,288
2020 / 2021	Current Reserve Balance	\$ 5,000,000
2021 / 2022	Reserve Adjustment *	\$ -
<b>2021 / 2022</b>	<b>Reserve Balance</b>	<b>\$ 5,000,000</b>
2021 / 2022	Minimum Target Reserve Shortfall	\$ -
2021 / 2022	Maximum Reserve Shortfall	<b>\$ (4,661,288)</b>

\* There are no excess funds available to add to the Reserve for Retirement Benefits in Fiscal Year 2020/2021

<b>2021 / 2022</b>	<b>RESERVE FOR RETIREMENT BENEFITS</b>	<b>\$ 5,000,000</b>
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**Reserve Policy Analysis**  
2021 / 2022 Budget

**OPERATING FUND**

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**Reserve Policy Summary**

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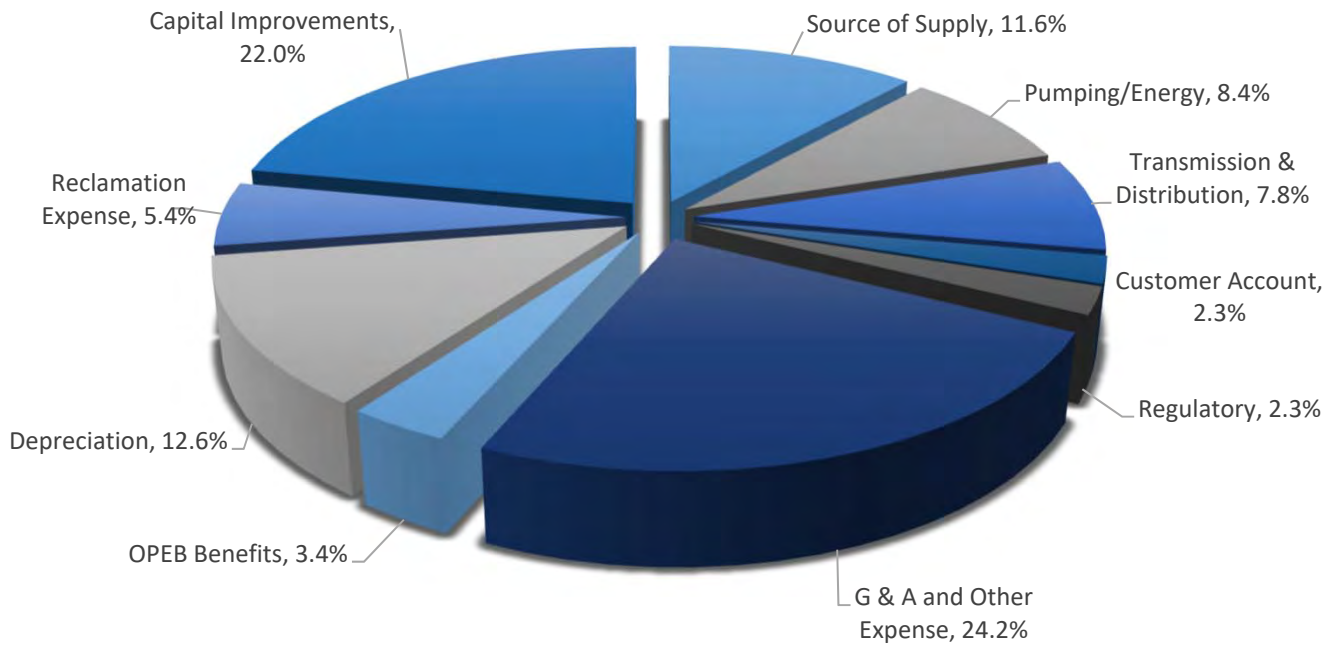
** 2021 / 2022	Minimum Reserve Requirement	\$ 215,956,538 *
** 2021 / 2022	Maximum Reserve Requirement	\$ 240,014,090
<b>2021 / 2022</b>	<b>Projected Total Reserves</b>	<b>\$ 24,092,000</b>
2021 / 2022	Projected Minimum Reserve Shortfall	<b>\$ (192,033,894)</b>
2021 / 2022	Maximum Reserve Shortfall	<b>\$ (215,922,090)</b>

\* Where no minimum reserve balance is established, the maximum reserve balance is used

\*\* Reserve Policy and Reserve Requirements (Resolution No. 1262) Based on established ACWA and AWWA Policy Principles and Guidelines

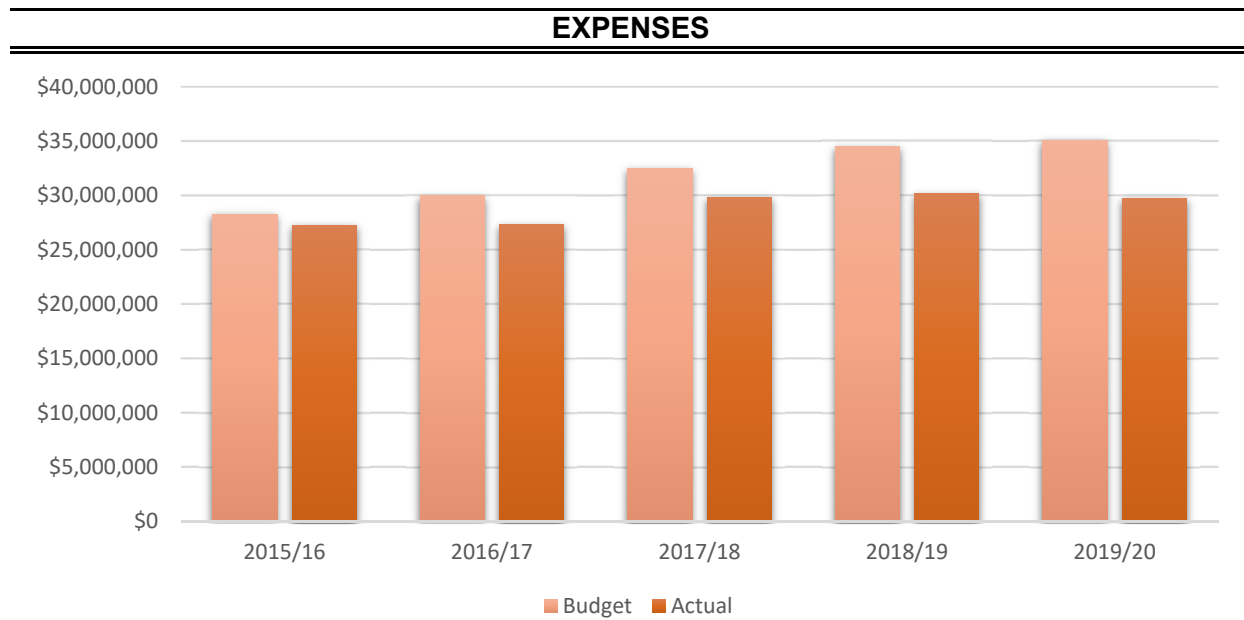
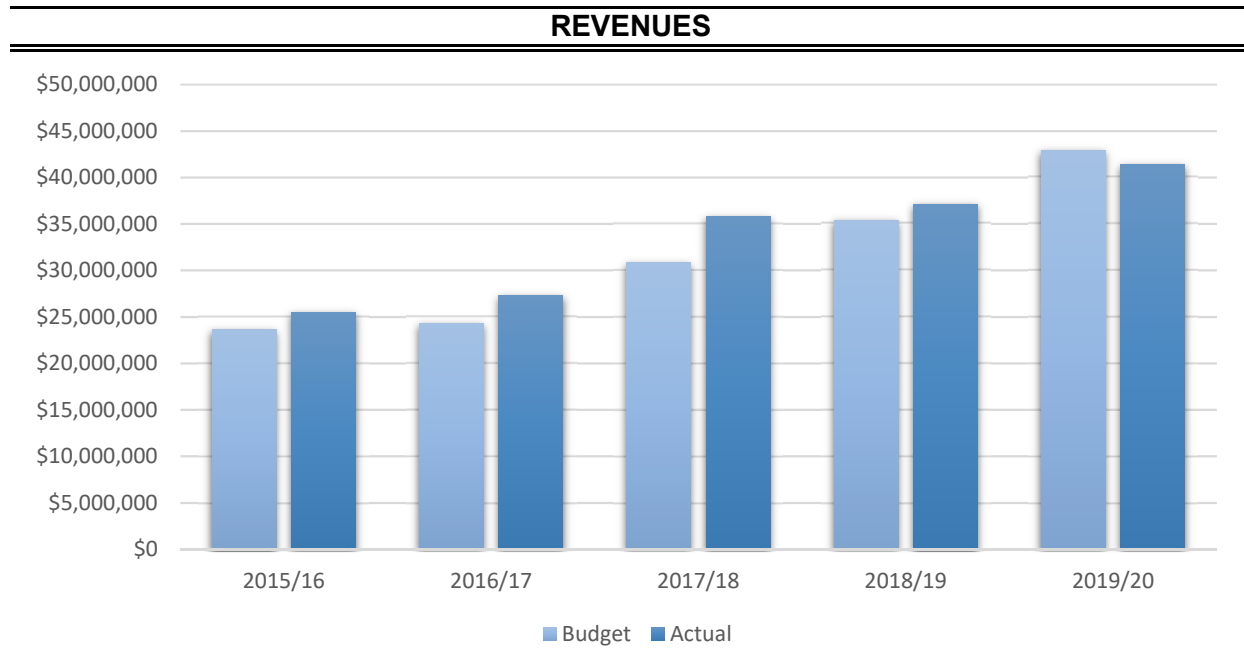
**DESERT WATER AGENCY  
OPERATING FUND BUDGET  
2021 - 2022 SUMMARY**

Category	Cost	%
Source of Supply	\$ 6,001,180	11.6%
Pumping/Energy	\$ 4,358,100	8.4%
Transmission & Distribution	\$ 4,024,830	7.8%
Customer Account	\$ 1,187,660	2.3%
Regulatory	\$ 1,176,235	2.3%
G & A and Other Expense	\$ 12,600,660	24.2%
OPEB Benefits	\$ 1,772,000	3.4%
Depreciation	\$ 6,556,800	12.6%
Reclamation Expense	\$ 2,822,350	5.4%
Capital Improvements	\$ 11,407,800	22.0%
<b>TOTAL</b>	<b>\$ 51,907,615</b>	<b>100.0%</b>



**DESERT WATER AGENCY  
OPERATING FUND BUDGET**

***Historical Analysis  
Budget vs. Actual***





**DESERT WATER AGENCY**  
**GENERAL FUND BUDGET**  
2021 / 2022

**DESERT WATER AGENCY  
GENERAL FUND BUDGET  
2021-2022 BUDGET WITH PRIOR YEAR COMPARISON**

	ACTUAL 2019-2020	ACTUAL TO 3/31/2021	BUDGET 2020-2021	OVER (UNDER) BUDGET	BUDGET 2021-2022
<b><u>OPERATING REVENUES</u></b>					
Groundwater Replenishment Assessment	\$6,359,292	\$5,609,808	\$6,590,000	(\$980,192)	\$7,609,400
Power Sales - Whitewater Hydro	\$113,234	\$97,603	\$148,800	(\$51,197)	\$5,500
TOTAL OPERATING REVENUES	\$6,472,525	\$5,707,411	\$6,738,800	(\$1,031,389)	\$7,614,900
<b><u>OPERATING EXPENSES</u></b>					
<b><u>SOURCE OF SUPPLY</u></b>					
Watershed Management - West Fork	\$0	\$0	\$0	\$0	\$0
Whitewater Mutual Water Co	\$0	\$0	\$12,000	(\$12,000)	\$12,000
Whitewater Basin Management	\$313,019	\$88,836	\$200,000	(\$111,164)	\$280,000
Mission Creek Basin Management	\$22,703	\$26,862	\$69,000	(\$42,138)	\$188,400
Mission Creek - Garnett Hill Mgmt Plan	\$0	\$0	\$3,000	(\$3,000)	\$20,000
Indio Subbasin Management Plan	\$21,148	\$0	\$33,000	(\$33,000)	\$22,500
San Geronio Pass Management Plan	\$0	\$0	\$0	\$0	\$20,000
Groundwater Monitoring Wells	\$0	\$0	\$900	(\$900)	\$900
U.S.G.S. Water Quality Monitoring System	\$13,000	\$9,900	\$13,600	(\$3,700)	\$13,200
U.S.G.S. Stream Gauging Study	\$75,528	\$55,653	\$76,800	(\$21,148)	\$76,800
Monitoring Wells #2 & #6	\$0	\$0	\$6,000	(\$6,000)	\$6,000
Urban Water Management Plan	\$6,735	\$3,145	\$30,000	(\$26,855)	\$0
Salt Nutrient Plan	\$1,449	\$3,673	\$200,000	(\$196,327)	\$220,000
Groundwater Rights DWA/CVWD	\$342,103	\$139,438	\$408,000	(\$268,562)	\$300,000
SGMA	\$30,406	\$188,904	\$609,600	(\$420,696)	\$355,000
USDOJ Federal Rule Litigation	\$118,384	\$189,345	\$120,000	\$69,345	\$210,000
TOTAL SOURCE OF SUPPLY	\$944,475	\$705,754	\$1,781,900	(\$1,076,146)	\$1,724,800
<b><u>STATE WATER PROJECT EXPENSE</u></b>					
Delta O.M.P. & R.	\$2,622,792	\$1,347,175	\$2,695,000	(\$1,347,825)	\$2,802,000
Transportation O.M.P. & R.	\$4,722,207	\$5,191,203	\$5,680,000	(\$488,797)	\$6,757,000
Variable	\$8,508,853	\$852,843	\$5,686,500	(\$4,833,657)	\$6,186,000
Off-Aqueduct Power Facilities	\$82,196	\$129,563	\$210,000	(\$80,437)	\$98,000
East Branch Enlargement	\$503,112	\$350,774	\$488,000	(\$137,226)	\$428,000
Replacement Component	\$0	\$0	\$0	\$0	\$0
Delta Conveyance (formerly CWF)	\$50,000	\$0	\$300,000	(\$300,000)	\$300,000
Water Purchases	\$0	\$26,462	\$2,475,000	(\$2,448,538)	\$2,430,000
Lake Perris Seepage Recovery Project	\$0	\$0	\$0	\$0	\$0
CVWD Reimb (Delta, Var, OAP)	(\$1,095,670)	\$90,187	(\$1,123,800)	\$1,213,987	(\$723,000)
MWD Reimb (Delta, Trans, Var, OAP)	\$0	\$0	\$0	\$0	\$0
TOTAL STATE WTR PROJ. EXPENSE	\$15,393,490	\$7,988,207	\$16,410,700	(\$8,422,493)	\$18,278,000
<b><u>WHITewater HYDRO EXPENSE</u></b>					
Supervision & Labor	\$8,036	\$6,844	\$15,000	(\$8,156)	\$15,750
Miscellaneous/SCE	\$5,966	\$5,506	\$12,000	(\$6,494)	\$7,200
Tools & Work Equipment	\$0	\$0	\$2,100	(\$2,100)	\$2,100
Maint Structures & Improvements	\$0	\$0	\$1,200	(\$1,200)	\$1,200
Maint of Equipment	\$6,908	\$2,840	\$60,000	(\$57,160)	\$60,000
Whitewater Hydro Contract Management	\$13,443	\$9,739	\$24,000	(\$14,261)	\$15,000
TOTAL WHITEWTR HYDRO EXPENSE	\$34,352	\$24,930	\$114,300	(\$89,370)	\$101,250
<b><u>CUSTOMER ACCOUNT EXPENSE</u></b>					
Meter Reading Expense	\$0	\$50	\$0	\$50	\$600
Uncollectible Accounts	\$0	\$723	\$0	\$723	\$0
TOTAL WHITEWTR HYDRO EXPENSE	\$0	\$773	\$0	\$773	\$600

**DESERT WATER AGENCY  
GENERAL FUND BUDGET  
2021-2022 BUDGET WITH PRIOR YEAR COMPARISON**

	ACTUAL 2019-2020	ACTUAL TO 3/31/2021	BUDGET 2020-2021	OVER (UNDER) BUDGET	BUDGET 2021-2022
<b><u>ADMIN &amp; GENERAL EXPENSE (cont)</u></b>					
Salaries	\$353,821	\$249,356	\$492,814	(\$243,458)	\$443,400
Office Supplies & Expenses	\$6,626	\$7,561	\$14,700	(\$7,139)	\$14,700
Legal	\$414,954	\$401,018	\$504,000	(\$102,982)	\$660,000
State Water - Audit Fees	\$17,631	\$16,881	\$28,000	(\$11,119)	\$28,800
Engineering	\$104,435	\$19,663	\$80,000	(\$60,337)	\$66,000
Appraisals & Consultants	\$192,074	\$158,534	\$160,000	(\$1,466)	\$290,000
Auditing	\$10,606	\$12,642	\$14,000	(\$1,358)	\$16,000
Conferences & Seminars	\$45,713	\$159	\$74,000	(\$73,841)	\$74,000
Membership Dues & Subscriptions	\$97,340	\$65,868	\$99,700	(\$33,832)	\$101,100
Bay-Delta Hearings	\$90,220	\$111,109	\$68,000	\$43,109	\$135,000
SWC-Energy Fund	\$11,771	\$5,839	\$13,000	(\$7,161)	\$13,000
Utilities	\$31,904	\$45,054	\$32,000	\$13,054	\$60,000
Property & Liability Insurance	\$46,386	\$51,031	\$51,000	\$31	\$82,800
Other Employee Benefits	\$445,126	\$414,253	\$472,200	(\$57,947)	\$439,000
Payroll Taxes	\$51,044	\$39,124	\$46,200	(\$7,076)	\$55,000
Uncollectible Accounts	\$0	\$0	\$0	\$0	\$0
LAFCO Expenses	\$13,216	\$13,847	\$15,000	(\$1,153)	\$15,000
Integrated Regional Water Mgmt Plan (IRWMP)	\$33,190	\$128,502	\$35,000	\$93,502	\$38,000
IRWMP Conservation Program	\$1,555	\$889	\$0	\$889	\$0
Operations Center Security	\$3,077	\$0	\$7,500	(\$7,500)	\$7,500
Operations Center Maintenance	\$98,329	\$64,170	\$109,200	(\$45,030)	\$103,200
Directors' Fees	\$73,285	\$25,724	\$46,500	(\$20,776)	\$48,000
Public Information	\$127,545	\$107,285	\$187,800	(\$80,515)	\$168,900
Water Conservation	\$355,945	\$175,576	\$539,575	(\$364,000)	\$539,300
Election Expense	\$504	\$30,000	\$95,000	(\$65,000)	\$0
TOTAL ADMIN & GENERAL EXPENSE	\$2,626,296	\$2,144,086	\$3,185,189	(\$1,041,103)	\$3,398,700
<b><u>OTHER OPERATING EXPENSES</u></b>					
Depreciation	\$805,223	\$828,675	\$6,330,000	(\$5,501,325)	\$1,200,000
Direct/Indirect Costs	(\$49,527)	(\$55,076)	(\$120,000)	\$64,924	(\$107,000)
TOTAL OTHER OPERATING EXPENSES	\$755,696	\$773,599	\$6,210,000	(\$5,436,401)	\$1,093,000
TOTAL OPERATING EXPENSES	\$19,754,309	\$11,637,349	\$27,702,089	(\$16,064,740)	\$24,596,350
<b>NET OPERATING INCOME (loss)</b>	<b>(\$13,281,784)</b>	<b>(\$5,929,938)</b>	<b>(\$20,963,289)</b>	<b>\$15,033,351</b>	<b>(\$16,981,450)</b>
<b><u>NON-OPERATING REVENUES</u></b>					
Property Taxes	\$31,979,950	\$19,410,582	\$29,690,000	(\$10,279,418)	\$35,416,000
Interest - Invested Reserves	\$2,884,141	\$1,427,592	\$1,443,600	(\$16,008)	\$802,800
Interest - Wastewater Fund	\$0	\$0	\$0	\$0	\$0
Supplemental Imported Water Fees	\$464,984	\$459,230	\$330,000	\$129,230	\$488,600
Gains/Loss Investments	\$1,172,527	\$164,226	\$0	\$164,226	\$582,100
Other	\$49,643	(\$1,425)	\$0	(\$1,425)	\$0
TOTAL NON-OPERATING REVENUES	\$36,551,244	\$21,460,204	\$31,463,600	(\$10,003,396)	\$37,289,500

**DESERT WATER AGENCY  
GENERAL FUND BUDGET  
2021-2022 BUDGET WITH PRIOR YEAR COMPARISON**

	ACTUAL 2019-2020	ACTUAL TO 3/31/2021	BUDGET 2020-2021	OVER (UNDER) BUDGET	BUDGET 2021-2022
<b><u>NON-OPERATING EXPENSES</u></b>					
Prior Year - State Water Project	(\$72,628)	\$379,980	\$0	\$379,980	\$0
Prior Year Expenses	(\$18,002)	\$675	\$0	\$675	\$0
Other	\$0	(\$20)	\$0	(\$20)	\$0
TOTAL NON-OPERATING EXPENSES	(\$90,629)	\$380,635	\$0	\$380,635	\$0
<b>TOTAL NET INCOME</b>	\$23,360,089	\$15,149,631 \$27,167,615	\$10,500,311	\$4,649,320	\$20,308,050
<b><u>APPLICATION OF COMMIT FUNDS</u></b>					
Bond Service - Principle/Interest	\$1,345,535	\$331,371	\$1,345,300	(\$1,013,929)	\$1,338,950
TOTAL COMMIT FUNDS	\$1,345,535	\$331,371	\$1,345,300	(\$1,013,929)	\$1,338,950
 BALANCE REMAINING	 \$22,014,554	 \$14,818,260	 \$9,155,011	 \$5,663,249	 \$18,969,100
Add Back Depreciation	\$805,223	\$828,675	\$6,330,000	(\$5,501,325)	\$1,200,000
Funds Avail For Capital Additions	\$22,819,776	\$15,646,935	\$15,485,011	\$161,924	\$20,169,100
 <b><u>CAPITAL ADDITIONS</u></b>					
Delta	\$1,310,346	\$1,684,248	\$1,498,800	\$185,448	\$1,608,200
Transportation	\$2,565,560	\$2,451,530	\$2,450,000	\$1,530	\$2,419,000
Revenue Bond Surcharge	\$498,601	\$816,408	\$1,095,000	(\$278,592)	\$1,100,000
East Branch Enlargement	\$471,745	\$1,512,470	\$1,617,000	(\$104,530)	\$16,616,000
Tehachapi	\$0	\$76,326	\$76,000	\$326	\$88,000
Delta Conveyance	\$0	\$0	\$19,215,000	(\$19,215,000)	\$0
Lake Perris Seepage Recovery Project	\$0	\$0	\$400,000	(\$400,000)	\$1,458,000
Sites Reservoir Project	\$0	\$0	\$650,000	(\$650,000)	\$975,000
Whitewater Hydro - Battery Replacement	\$0	\$0	\$0	\$0	\$0
Whitewater Hydro - Bypass Pipeline	\$0	\$0	\$0	\$0	\$0
Snow Creek Village - Treatment Facility	\$454,212	\$3,362,245	\$0	\$3,362,245	\$0
Op. Cntr - Wireless Gate Control System	\$0	\$0	\$0	\$0	\$0
Palm Oasis Surface Water Filtration Plant (Design)	\$26,479	\$269,212	\$0	\$269,212	\$15,000,000
Op. Cntr - Board Room Video Wall Matrix	\$0	\$0	\$0	\$0	\$0
Op. Cntr - Security Cameras	\$0	\$0	\$0	\$0	\$0
Op. Cntr - Alarm Upgrades	\$0	\$0	\$0	\$0	\$0
Op. Cntr - Board Room Security Window Film	\$0	\$0	\$0	\$0	\$0
Whitewater Hydro PLC Modernization	\$0	\$36,087	\$0	\$36,087	\$0
Chino West Canyon Treatment Facility	\$0	\$0	\$0	\$0	\$0
Whitewater Area Land Purchase	\$0	\$0	\$179,000	(\$179,000)	\$0
Operations/Engineering Office Remodel	\$0	\$0	\$5,500	(\$5,500)	\$0
Operations Center ADA Guard Railing	\$0	\$0	\$4,748	(\$4,748)	\$0
Mission Creek Recharge Basin Flow Meters	\$0	\$0	\$0	\$0	\$124,000
Board Room AV Enhancements	\$0	\$0	\$0	\$0	\$29,800
Contingency	\$0	\$0	\$150,000	(\$150,000)	\$150,000
TOTAL CAPITAL ADDITIONS	\$5,326,944	\$10,208,527	\$27,341,048	(\$17,132,521)	\$39,568,000
 <b>BALANCE</b>	 \$17,492,833	 \$5,438,408	 (\$11,856,037)	 \$17,294,445	 (\$19,398,900)
 <b>TOTAL BUDGET</b>			 <b>\$56,388,437</b>		 <b>\$65,503,300</b>

**DESERT WATER AGENCY  
GENERAL FUND BUDGET  
2021-2022 BUDGET WITH PRIOR YEAR COMPARISON**

	<u>2020-2021 BEGIN BAL</u>	<u>2020-2021 ADJUSTMENTS</u>	<u>2021-2022 ADDITIONS</u>	<u>2021-2022 DELETIONS</u>	<u>BALANCE</u>
Reserve Fund Balance-6/30/21					\$182,217,000
Restricted & Unrestricted Reserves:					
State Water Contract Fund	\$62,779,000		\$13,000,000		
Reserve For SWP Additional Water	\$0		\$10,493,000		
Reserve For Additional Water	\$23,782,000			\$23,782,000	
Reserve for Delta Conveyance	\$19,238,000				
Reserve For Operations	\$10,571,800			\$3,321,150	
Reserve For Replacements	\$8,892,800				
Regulatory Compliance Reserve	\$7,765,000				
Land Acquisition Reserve	\$5,000,000				
Reserve For Additional Non-SWP Water	\$0		\$23,782,000		
Total Reserves - 6/30/22	\$138,028,600	\$0	\$47,275,000	\$27,103,150	(\$158,200,450)
Required for 2020/21 Carryover Items					(\$4,616,786)
2021-2022 Budget Balance					(\$19,398,900)
Unappropriated Fund Balance - 6/30/22					\$864

**BUDGET AMOUNT SUMMARY**

Total Operating Expense	\$24,596,350
Non-Operating Expense	\$0
Application of Committed Funds	\$1,338,950
Capital Additions	\$39,568,000
<b>TOTAL BUDGET</b>	<b>\$65,503,300</b>

**DESERT WATER AGENCY  
GENERAL FUND BUDGET  
2021 - 2022**

**SUMMARY OF ASSESSED VALUATIONS  
AND RESULTING TAX RATES**

Assessed Valuations		
Secured	\$17,425,460,669	
Unsecured	\$621,459,469	
<b>Total Estimated Assessed Valuations*</b>		<b>\$18,046,920,138</b>
Tax Rate	<b>2020-2021</b>	<b>2021-2022</b>
Secured	\$0.10	\$0.10
Unsecured	\$0.10	\$0.10
Estimated Revenue from Property Taxes		
Secured	\$17,425,400	
Unsecured	\$621,400	
SBE Unitary	\$14,553,200	
RPTTF	\$1,302,000	
County 1% General Purpose Allocation	\$1,514,000	
<b>TOTAL ESTIMATED PROPERTY TAXES</b>		<b>\$35,416,000</b>

\* Assessed values reflect a combined 2.50% delinquency and value adjustment factor for secured and unsecured valuations

**DESERT WATER AGENCY  
GENERAL FUND BUDGET  
FISCAL 2021 - 2022**

**Estimated State Water Project Payments**

CAPITAL										O.M.P. & R.			
2021	Revenue Bond Surcharge	Delta	Lake Perris Seepage Recovery	Sites Reservoir	Transportation	Tehachapi	East Branch Enlargement	Delta	Transportation	Variable	Aqueduct Power Facilities	East Branch Enlargement	Total
July	\$551,000	\$872,000	\$1,458,000	---	\$1,200,000	---	---	\$242,450	\$511,950	\$520,300	\$16,000	\$33,400	\$5,405,100
August	---	---	---	---	---	---	---	\$242,450	\$511,950	\$520,300	\$16,000	\$33,400	\$1,324,100
September	---	---	---	---	---	\$37,500	\$1,006,000	\$242,450	\$511,950	\$520,300	\$16,000	\$33,400	\$2,367,600
October	---	---	---	---	---	---	---	\$242,450	\$511,950	\$520,300	\$16,000	\$33,400	\$1,324,100
November	---	---	---	---	---	---	---	\$242,450	\$511,950	\$520,300	\$16,000	\$33,400	\$1,324,100
December	---	---	---	---	---	---	---	\$242,450	\$511,950	\$520,300	\$16,000	\$33,400	\$1,324,100
<b>2022</b>													
January	\$549,000	\$870,000	---	\$975,000	\$1,219,000	---	\$15,000,000	\$224,550	\$614,250	\$510,700	\$325	\$37,900	\$20,000,725
February	---	---	---	---	---	---	---	\$224,550	\$614,250	\$510,700	\$325	\$37,900	\$1,387,725
March	---	---	---	---	---	\$50,500	\$610,000	\$224,550	\$614,200	\$510,700	\$325	\$37,950	\$2,048,225
April	---	---	---	---	---	---	---	\$224,550	\$614,200	\$510,700	\$325	\$37,950	\$1,387,725
May	---	---	---	---	---	---	---	\$224,550	\$614,200	\$510,700	\$325	\$37,950	\$1,387,725
June	---	---	---	---	---	---	---	\$224,550	\$614,200	\$510,700	\$375	\$37,950	\$1,387,775
	\$1,100,000	\$1,742,000	\$1,458,000	\$975,000	\$2,419,000	\$88,000	\$16,616,000	\$2,802,000	\$6,757,000	\$6,186,000	\$98,000	\$428,000	\$40,669,000

Based on calendar year costs being shared 26.16% DWA and 73.84% CVWD on Variable, Delta Water and Off Aqueduct Charges:

	2021	Variable	Delta Charge	Off Aqueduct	Total	DWA-26.16%	CVWD-73.84%
DWA	55,750 AF	\$6,243,452	\$4,769,576	\$190,951	\$11,203,979	\$2,930,961	\$8,273,018
CVWD	128,450 AF	\$15,493,841	\$11,836,248	\$221,412	\$27,551,501	\$7,207,473	\$20,344,028
					\$38,755,480	\$10,138,434	\$28,617,046
DWA	55,750 AF	\$6,128,158	\$4,769,576	\$3,217	\$10,900,951	\$2,851,689	\$8,049,262
CVWD	128,450 AF	\$15,207,724	\$11,836,248	\$7,983	\$27,051,955	\$7,076,791	\$19,975,164
					\$37,952,906	\$9,928,480	\$28,024,426

**STATE WATER PROJECT TABLE A ALLOTMENTS:**

DWA - 38,100 A.F. + MWD Transfer 11,900 A.F. = 50,000 A.F.  
CVWD - 23,100 A.F. + MWD Transfer 88,100 A.F. + Tulare Transfer 9,000 A.F. = 121,100 A.F.  
Beginning January 1, 2010 : Berrenda-Mesa 16,000 A.F. Transfer = DWA 4,000 A.F. / CVWD 12,000 A.F.  
Beginning January 1, 2010 : Westlake Farms 7,000 A.F. Transfer = DWA 1,750 A.F. / CVWD 5,250 A.F.  
Calendar years 2021 & 2022 = DWA 55,750 A.F. / CVWD 128,450 A.F.  
TOTALS \$76,708,386 \$56,641,472  
Less Amount Billed Direct to CVWD (\$54,603,456)  
Amount Due To DWA \$2,038,016  
ONE-HALF FOR FISCAL YEAR \$1,019,008

**DESERT WATER AGENCY - GENERAL FUND**  
**2021-2022 BUDGET**  
**CAPITAL IMPROVEMENTS**

W.O. No.	DESCRIPTION	ACCOUNT NO.	ESTIMATED COST
<b><u>ROUTINE</u></b>			
<b>MISCELLANEOUS</b>			
19-153-M	Palm Oasis Surface Water Filtration Plant - <b>Augment</b>	11169	\$15,000,000
21-134-M	Mission Creek Recharge Basin Flow Meters	11173	\$124,000
21-129-M	Board Room AV Enhancements	11185	\$29,800
21-499	Contingency - Other	VARIOUS	\$150,000
<b>TOTAL MISCELLANEOUS</b>			<b>\$15,303,800</b>
<b>TOTAL CAPITAL IMPROVEMENTS 2021-2022</b>			<b>\$15,303,800</b>



## Reserve Policy Analysis 2021/2022 Budget

### GENERAL FUND

In June 2021, the Board of Directors established a policy for Agency Reserves (Resolution No. 1262). Per section 5 of the policy, an annual review of the reserves will be presented during the annual budget presentation. Presented below is the reserve analysis:

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#### State Water Contract Fund Reserve

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Minimum reserve requirement is two and one half times prior year DWR Statement of Charges, not to exceed six times the total of such charges

##### 2021 DWR Statement of Charges

Delta Capital	\$ 1,744,245
Delta OMP&R	\$ 2,908,935
Transportation Capital	\$ 2,400,233
Transportation OMP&R	\$ 6,143,301
Variable Entitlement	\$ 6,088,584
Water System Revenue Bond	\$ 1,100,987
Off Aqueduct	\$ 190,951
Conservation Replacement	\$ -
East Branch Enlargement Capital	\$ 1,252,533
East Branch Enlargement OMP&R	\$ 400,600
Tehachapi Second Afterbay	\$ 98,120
<b>Total 2021 Statement of Charges</b>	<b>\$ 22,328,489</b>

*Minimum Reserve Requirement* \$ 55,821,223

*Maximum Allowable Reserve Balance* \$ 133,970,934

2020 / 2021	Current Reserve Balance	\$ 62,779,000
2021 / 2022	Reserve Adjustment *	\$ 13,000,000
<b>2021 / 2022</b>	<b>Reserve Balance</b>	<b>\$ 75,779,000</b>
2021 / 2022	Minimum Target Reserve Shortfall	\$ -
2021 / 2022	Maximum Reserve Shortfall	\$ (58,191,934)

\* Proposed \$13,000,000 addition to the State Water Contract Fund Reserve in Fiscal Year 2021 / 2022

<b>2021 / 2022</b>	<b>STATE WATER CONTRACT RESERVE</b>	<b>\$ 75,779,000</b>
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**Reserve Policy Analysis**  
2021/2022 Budget

**GENERAL FUND**

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**Reserve for Delta Conveyance Facilities**

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Minimum reserve requirement is two and one half times annual charges, not to exceed six times the total of such charges

10 Year DWR Cost projection	\$	43,424,000
Average Annual Charge	\$	4,342,400
<i>Minimum Reserve Requirement</i>	\$	10,856,000
<i>Maximum Allowable Reserve Balance</i>	\$	26,054,400
2019 / 2020 Current Reserve Balance	\$	19,238,000
2021 / 2022 Reserve Adjustment *	\$	-
<b>2021 / 2022 Reserve Balance</b>	<b>\$</b>	<b>19,238,000</b>
2021 / 2022 Minimum Target Reserve Shortfall	\$	-
2021 / 2022 Maximum Reserve Shortfall	<b>\$</b>	<b>(6,816,400)</b>

\* There are no excess funds available to add to the Reserve for Delta Conveyance Facilities in Fiscal Year 2021 / 2022

<b>2021 / 2022</b>	<b>RESERVE FOR DELTA CONVEYANCE</b>	<b>\$</b>	<b>19,238,000</b>
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**Reserve Policy Analysis**  
2021/2022 Budget

**GENERAL FUND**

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**Reserve for SWP Additional Water**

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The minimum reserve requirement should be greater than the prior year DWR Invoices, not to exceed five times the total of such charges

**2021 DWR Statement of Charges**

Delta Capital	\$ 1,744,245
Delta OMP&R	\$ 2,908,935
Transportation Capital	\$ 2,400,233
Transportation OMP&R	\$ 6,143,301
Variable Entitlement	\$ 6,088,584
Water System Revenue Bond	\$ 1,100,987
Off Aqueduct	\$ 190,951
Conservation Replacement	\$ -
East Branch Enlargement Capital	\$ 1,252,533
East Branch Enlargement OMP&R	\$ 400,600
Tehachapi Second Afterbay	\$ 98,120
<b>Total 2021 Statement of Charges</b>	<b>\$ 22,328,489</b>

*Minimum Reserve Requirement* \$ 22,328,489

*Maximum Allowable Reserve Balance* \$ 111,642,445

2019 / 2020	Current Reserve Balance	\$ -
2021 / 2022	Reserve Adjustment *	\$ 10,493,000
<b>2021 / 2022</b>	<b>Reserve Balance</b>	<b>\$ 10,493,000</b>
2021 / 2022	Minimum Target Reserve Shortfall	\$ (11,835,489)
2021 / 2022	Maximum Reserve Shortfall	\$ (101,149,445)

\* Proposed \$10,493,000 addition to the Reserve for Additional Water in Fiscal Year 2021 / 2022

<b>2021 / 2022</b>	<b>RESERVE FOR ADDITIONAL WATER</b>	<b>\$ 10,493,000</b>
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**Reserve Policy Analysis**  
2021/2022 Budget

**GENERAL FUND**

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**Reserve for Additional Water**

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The Reserve for Addition Water has been replaced with the Reserve for Additional Non-SWP Water.  
The Reserve balance has been transferred to the Reserve for Additional Non-SWP Water.

2019 / 2020	Current Reserve Balance	\$	23,782,000
2021 / 2022	Reserve Adjustment *	\$	(23,782,000)
<b>2021 / 2022</b>	<b>Reserve Balance</b>	\$	-
2021 / 2022	Minimum Target Reserve Shortfall	\$	-
2021 / 2022	Maximum Reserve Shortfall	\$	-

\* Proposed \$23,782,000 reduction to the Reserve for Additional Water in Fiscal Year 2021 / 2022

<b>2021 / 2022</b>	<b>RESERVE FOR ADDITIONAL WATER</b>	\$	-
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**Reserve Policy Analysis**  
2021/2022 Budget

**GENERAL FUND**

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**Reserve for Non-SWP Additional Water**

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The minimum reserve requirement should be greater than the prior year DWR Invoices, not to exceed five times the total of such charges

**2021 DWR Statement of Charges**

Delta Capital	\$ 1,744,245
Delta OMP&R	\$ 2,908,935
Transportation Capital	\$ 2,400,233
Transportation OMP&R	\$ 6,143,301
Variable Entitlement	\$ 6,088,584
Water System Revenue Bond	\$ 1,100,987
Off Aqueduct	\$ 190,951
Conservation Replacement	\$ -
East Branch Enlargement Capital	\$ 1,252,533
East Branch Enlargement OMP&R	\$ 400,600
Tehachapi Second Afterbay	\$ 98,120
<b>Total 2021 Statement of Charges</b>	<b>\$ 22,328,489</b>

*Minimum Reserve Requirement* \$ 22,328,489

*Maximum Allowable Reserve Balance* \$ 111,642,445

2019 / 2020	Current Reserve Balance	\$ -
2021 / 2022	Reserve Adjustment *	\$ 23,782,000
<b>2021 / 2022</b>	<b>Reserve Balance</b>	<b>\$ 23,782,000</b>
2021 / 2022	Minimum Target Reserve Shortfall	\$ -
2021 / 2022	Maximum Reserve Shortfall	<b>\$ (87,860,445)</b>

\* Proposed \$23,782,000 addition to the Reserve for Additional Water in Fiscal Year 2021 / 2022

<b>2021 / 2022</b>	<b>RESERVE FOR ADDITIONAL WATER</b>	<b>\$ 23,782,000</b>
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**Reserve Policy Analysis**  
2021/2022 Budget

**GENERAL FUND**

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**Reserve for Operations**

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Reserve should be equal to 6-months to 1 year of operations

2021 / 2022	Cost of Operations	\$	24,596,350
Less: 2021 / 2022	State Water Project Expense	\$	(17,345,700)
	Net Cost of Operations	\$	7,250,650
	<i>Minimum Reserve Requirement</i>	\$	3,625,325
	<i>Maximum Allowable Reserve Balance</i>	\$	7,250,650
2020 / 2021	Current Reserve Balance	\$	10,571,800
2021 / 2022	Reserve Adjustment *	\$	(3,321,150)
<b>2021 / 2022</b>	<b>Reserve Balance</b>	<b>\$</b>	<b>7,250,650</b>
2021 / 2022	Minimum Target Reserve Shortfall	\$	-
2021 / 2022	Maximum Reserve Shortfall	\$	-

\* Proposed \$3,321,150 decrease to the Reserve for Operations in Fiscal Year 2021 / 2022

<b>2021 / 2022</b>	<b>RESERVE FOR OPERATIONS</b>	<b>\$</b>	<b>7,250,650</b>
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**Reserve Policy Analysis**  
2021/2022 Budget

**GENERAL FUND**

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**Reserve for Replacements**

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Reserve should be equal to the accumulated depreciation of assets (excluding State Water Project Capital)

6/30/2020 Audited Accumulated Depreciation	\$ 108,608,112
Less: SWP - Transportation	\$ (64,219,642)
SWP - Delta	\$ (14,524,751)
SWP - East Branch Enlargement	\$ (14,801,907)
SWP - Water System Rev Bond	\$ (5,173,402)
SWP - Advance Water Deliveries	\$ (69,273)
SWP - Tehachapi Second Afterbay	\$ (10,467)
<b>Net Accumulated Depreciation</b>	<b>\$ 9,808,669</b>
<i>Maximum Reserve Balance</i>	<i>\$ 9,808,669</i>
2020 / 2021 Current Reserve Balance	\$ 8,892,800
2021 / 2022 Reserve Adjustment *	\$ -
<b>2021 / 2022 Reserve Balance</b>	<b>\$ 8,892,800</b>
2021 / 2022 Maximum Reserve Shortfall	\$ (915,869)

\* There are no excess funds available to add to the Reserve for Replacements in Fiscal Year 2021 / 2022

<b>2021 / 2022</b>	<b>RESERVE FOR REPLACEMENTS</b>	<b>\$ 8,892,800</b>
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**Reserve Policy Analysis**  
2021/2022 Budget

**GENERAL FUND**

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**Reserve for Regulatory Compliance**

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Reserve shall not exceed \$10,000,000

	<i>Maximum Reserve Balance</i>	\$	10,000,000
2019 / 2020	Current Reserve Balance	\$	7,765,000
2021 / 2022	Reserve Adjustment *	\$	-
<b>2021 / 2022</b>	<b>Reserve Balance</b>	<b>\$</b>	<b>7,765,000</b>
2021 / 2022	Maximum Reserve Shortfall	<b>\$</b>	<b>(2,235,000)</b>

\* There are no excess funds available to add to the Reserve for Regulatory Compliance in Fiscal Year 2021 / 2022

<b>2021 / 2022</b>	<b>RESERVE FOR REGULATORY COMPLIANCE</b>	<b>\$</b>	<b>7,765,000</b>
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**Reserve for Land Acquisitions**

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Reserve shall not exceed \$5,000,000

	<i>Maximum Reserve Balance</i>	\$	5,000,000
2019 / 2020	Current Reserve Balance	\$	5,000,000
2021 / 2022	Reserve Adjustment *	\$	-
<b>2021 / 2022</b>	<b>Reserve Balance</b>	<b>\$</b>	<b>5,000,000</b>
2021 / 2022	Maximum Reserve Shortfall	\$	-

\* No proposed adjustment to the Reserve for Land Acquisition in 2021 / 2022, reserve is at maximum allowable balance.

<b>2021 / 2022</b>	<b>RESERVE FOR LAND ACQUISITIONS</b>	<b>\$</b>	<b>5,000,000</b>
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**Reserve Policy Analysis**  
2021/2022 Budget

**GENERAL FUND**

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**Reserve Policy Summary**

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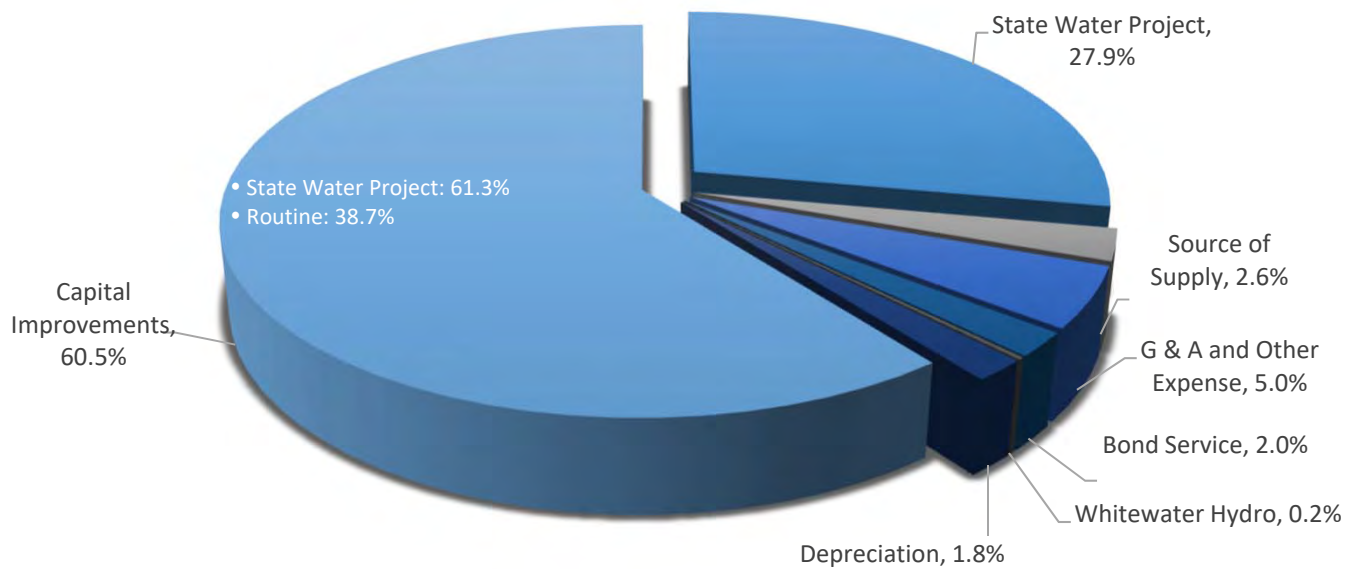
**	2021 / 2022	Minimum Reserve Requirement	\$ 139,768,195 *
**	2021 / 2022	Maximum Reserve Requirement	\$ 415,369,543
	<b>2021 / 2022</b>	<b>Projected Total Reserves</b>	<b>\$ 158,200,450</b>
	2021 / 2022	Projected Minimum Reserve Shortfall	\$ (14,986,358)
	2021 / 2022	Projected Maximum Reserve Shortfall	\$ (257,169,093)

\* Where no minimum reserve balance is established, the maximum reserve balance is used

\*\* Reserve Policy and Reserve Requirements (Resolution No. 1262) Based on established ACWA and AWWA Policy Principles and Guidelines

**DESERT WATER AGENCY  
GENERAL FUND BUDGET  
2021 - 2022 SUMMARY**

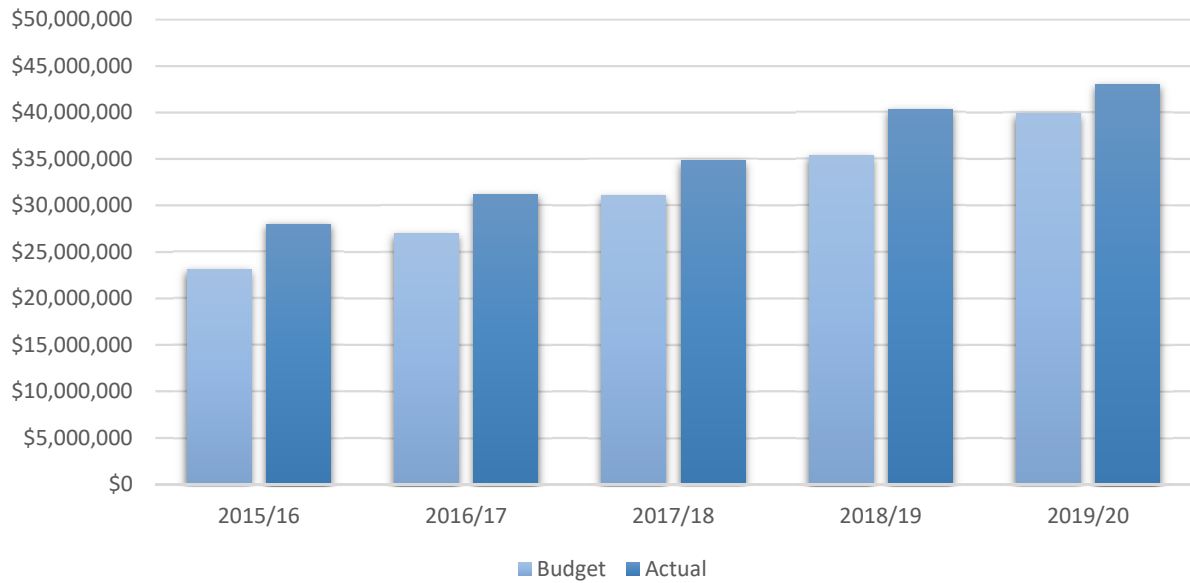
Category	Cost	%
State Water Project	\$ 18,278,000	27.9%
Source of Supply	\$ 1,724,800	2.6%
G & A and Other Expense	\$ 3,292,300	5.0%
Bond Service	\$ 1,338,950	2.0%
Whitewater Hydro	\$ 101,250	0.2%
Depreciation	\$ 1,200,000	1.8%
Capital Improvements	\$ 39,568,000	60.5%
<b>TOTAL</b>	<b>\$ 65,503,300</b>	<b>100.0%</b>



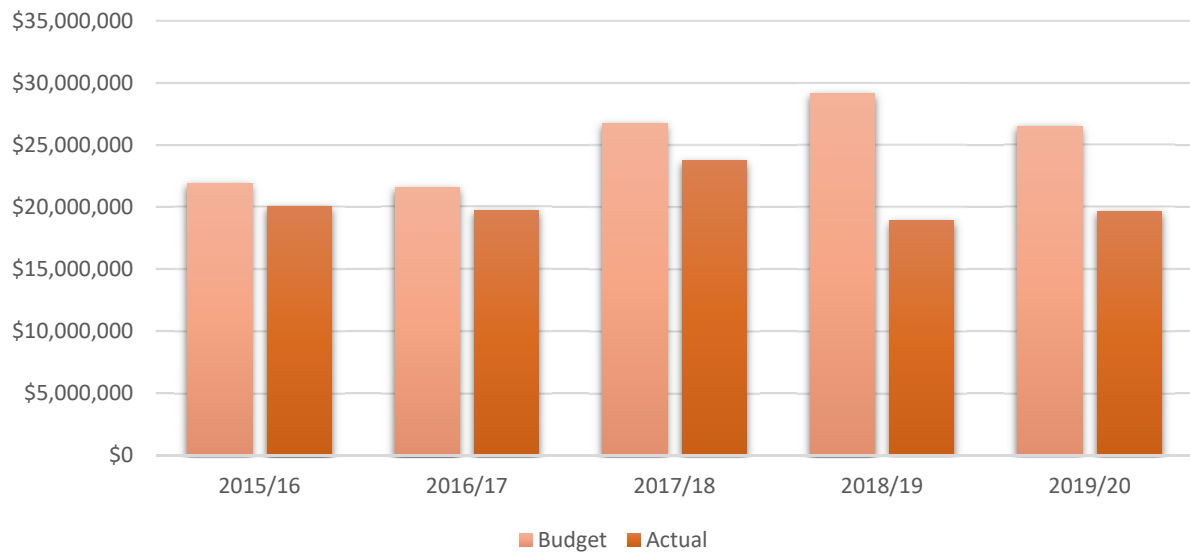
**DESERT WATER AGENCY  
GENERAL FUND BUDGET**

***Historical Analysis  
Budget vs. Actual***

**REVENUES**



**EXPENSES**



**DESERT WATER AGENCY**  
**WASTEWATER FUND BUDGET**  
2021 / 2022

**DESERT WATER AGENCY  
WASTEWATER FUND  
2021-2022 BUDGET WITH PRIOR YEAR COMPARISON**

	ACTUAL 2019-2020	ACTUAL TO 3/31/2021	BUDGET 2020-2021	OVER OR UNDER	BUDGET 2021-2022
<b><u>OPERATING REVENUES:</u></b>					
Capacity Charges	\$43,050	\$35,963	\$21,000	\$14,963	\$26,250
Wastewater Service	\$1,133,635	\$769,779	\$1,133,700	(\$363,921)	\$1,115,400
Plan Check Fees/Inspection/Svc	\$4,702	\$3,090	\$2,800	\$290	\$3,500
 TOTAL REVENUES	 \$1,181,387	 \$808,831	 \$1,157,500	 (\$348,669)	 \$1,145,150
<b><u>OPERATING EXPENSES:</u></b>					
C.V.W.D. Wastewater Service	\$728,911	\$496,245	\$733,200	(\$236,955)	\$750,000
City of P.S. - Wastewater Service	\$126,480	\$84,175	\$127,200	(\$43,025)	\$110,100
Office Supplies & Expense	\$400	\$513	\$2,100	(\$1,587)	\$900
Meetings and Seminars	\$0	\$0	\$0	\$0	\$0
Legal	\$589	\$20,537	\$900	\$19,637	\$6,000
Engineering	\$0	\$1,581	\$3,000	(\$1,420)	\$3,000
Auditing	\$2,635	\$2,634	\$2,700	(\$66)	\$3,000
Programming	\$2,839	\$1,530	\$2,100	(\$570)	\$2,400
Utilities	\$7,687	\$6,254	\$7,800	(\$1,546)	\$9,000
Insurance	\$3,729	\$10,281	\$3,900	\$6,381	\$12,000
Communications Equipment	\$0	\$0	\$0	\$0	\$3,250
Maintenance of Pumps	\$641	\$31,471	\$1,200	\$30,271	\$1,625
Maintenance of Laterals	\$1,662	\$1,499	\$3,900	(\$2,401)	\$4,200
Maintenance of Lift Stations	\$46,373	\$63,453	\$38,400	\$25,053	\$89,150
Maintenance of Mains	\$20,728	\$19,098	\$75,000	(\$55,902)	\$90,000
Tools & Work Equipment	\$0	\$0	\$200	(\$200)	\$200
Transportation Expense	\$3,909	\$1,184	\$11,700	(\$10,516)	\$11,700
Regulatory Expense	\$0	\$0	\$100,000	(\$100,000)	\$0
Uncollectible Accounts	\$0	\$0	\$0	\$0	\$0
Depreciation	\$567,123	\$425,328	\$568,000	(\$142,672)	\$640,000
 TOTAL OPERATING EXPENSE	 \$1,513,706	 \$1,165,782	 \$1,681,300	 (\$515,518)	 \$1,736,525
 NET INCOME FROM OPER.	 (\$332,319)	 (\$356,951)	 (\$523,800)	 \$166,849	 (\$591,375)
<b><u>NON-OPERATING REVENUES</u></b>					
Interest Short Term	\$28,909	\$7,570	\$9,000	(\$1,430)	\$6,000
Contributed Revenue - Customer	\$0	\$0	\$0	\$0	\$0
Other Income	\$4,975	\$404	\$0	\$404	\$0
 TOTAL NON-OPR. REV.	 \$33,884	 \$7,974	 \$9,000	 (\$1,026)	 \$6,000

**DESERT WATER AGENCY  
WASTEWATER FUND  
2021-2022 BUDGET WITH PRIOR YEAR COMPARISON**

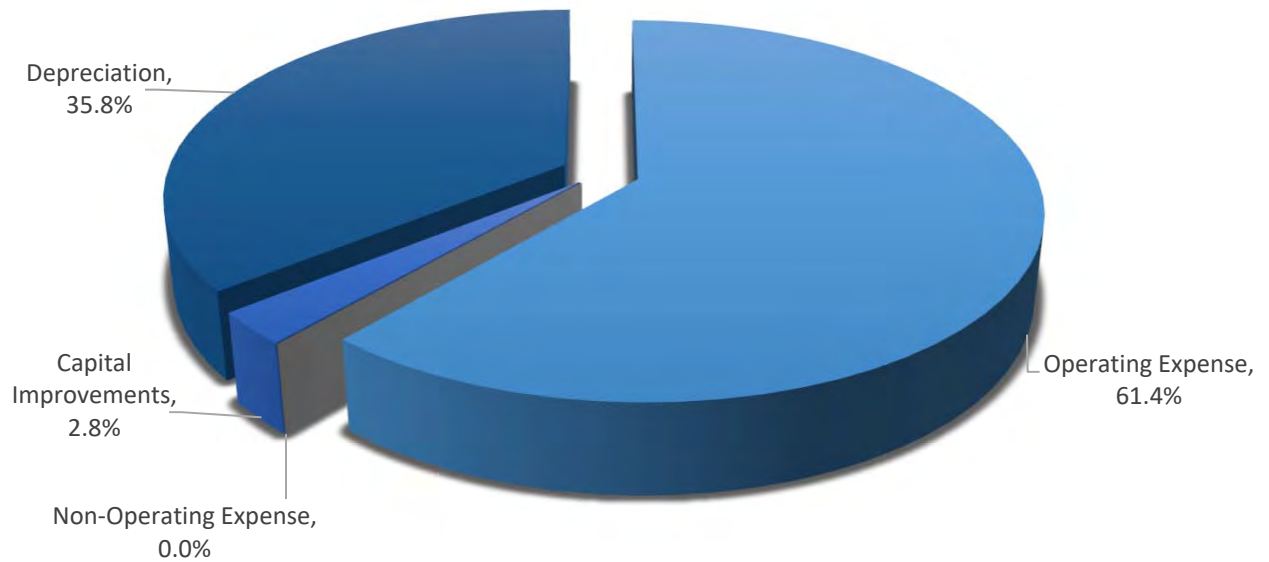
	ACTUAL 2019-2020	ACTUAL TO 3/31/2021	BUDGET 2020-2021	OVER OR UNDER	BUDGET 2021-2022
<b><u>NON-OPERATING EXPENSES</u></b>					
Interest - General Fund Loan	\$0	\$0	\$0	\$0	\$0
Sewer Assessment Fees	\$796	\$799	\$850	(\$51)	\$850
Loss on Retirement	\$0	\$0	\$0	\$0	\$0
Prior Year Expenses	\$0	\$0	\$0	\$0	\$0
TOTAL NON-OPR. EXP.	\$796	\$799	\$850	(\$51)	\$850
TOTAL NET INCOME	(\$299,231)	(\$349,776)	(\$515,650)	\$165,874	(\$586,225)
<b><u>APPLICATION OF COMMIT. FUNDS</u></b>					
Principal - General Fund Loan	\$0	\$0	\$0	\$0	\$0
Principal - Operating Fund Loan	\$0	\$0	\$0	\$0	\$0
TOTAL COMM. FUNDS	\$0	\$0	\$0	\$0	\$0
Balance Remaining	(\$299,231)	(\$349,776)	(\$515,650)	\$165,874	(\$586,225)
Add Back Depreciation Exp.	\$567,123	\$425,328	\$568,000	(\$142,672)	\$640,000
Funds Avail. Capital Add.	\$267,892	\$75,552	\$52,350	\$23,202	\$53,775
<b><u>LESS CAPITAL ADDITIONS:</u></b>					
Lift Station - Generator Enclosure	\$0	\$0	\$0	\$0	\$35,000
Date Palm Lift Station Odor Scrubber	\$0	\$0	\$0	\$0	\$0
Contingency	\$0	\$0	\$15,000	(\$15,000)	\$15,000
TOTAL CAPITAL ADDITIONS	\$0	\$0	\$15,000	(\$15,000)	\$50,000
<b><u>BALANCE</u></b>	\$267,892	\$75,552	\$37,350	\$38,202	\$3,775
<b><u>TOTAL BUDGET</u></b>			<b>\$1,697,150</b>		<b>\$1,787,375</b>
<b><u>ESTIMATED RESERVE FUND BALANCE:</u></b>					
Estimated Reserve Fund Balance 6/30/21			\$1,830,000		
2021-2022 Budget Balance			\$3,775		
Required for 2020/21 Carryover Items			(\$91,500)		
Estimated Reserve Fund Balance 6/30/22			\$1,742,275		
<b><u>BUDGET AMOUNT SUMMARY:</u></b>					
Total Operating Expenses			\$1,736,525		
Total Non-operating Expenses			\$850		
Application of Committed Funds			\$0		
Capital Additions			\$50,000		
<b>TOTAL BUDGET:</b>			<b>\$1,787,375</b>		

**DESERT WATER AGENCY - WASTEWATER FUND**  
**2021-2022 BUDGET**  
**CAPITAL IMPROVEMENTS**

W.O. No.	DESCRIPTION	ACCOUNT NO.	ESTIMATED COST
<b><u>ROUTINE</u></b>			
<b>MISCELLANEOUS</b>			
16-000-M	Cathedral Canyon Lift Station Generator - <b>Augment</b>	10053	\$35,000
21-499	Contingency - Other	VARIOUS	<u>\$15,000</u>
<b>TOTAL MISCELLANEOUS</b>			<b>\$50,000</b>
<b>TOTAL CAPITAL IMPROVEMENTS 2021-2022</b>			<b>\$50,000</b>

**DESERT WATER AGENCY  
WASTEWATER FUND BUDGET  
2021 - 2022 SUMMARY**

Category	Cost	%
Operating Expense	\$ 1,096,525	61.4%
Non-Operating Expense	\$ 850	0.0%
Capital Improvements	\$ 50,000	2.8%
Depreciation	\$ 640,000	35.8%
<b>TOTAL</b>	<b>\$ 1,787,375</b>	<b>100.0%</b>

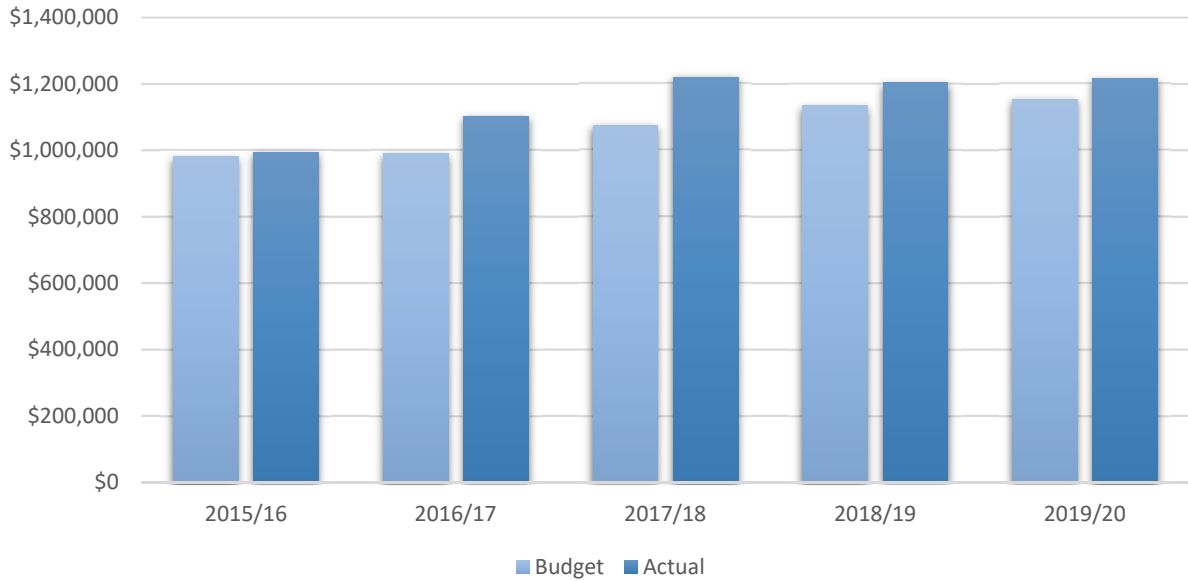




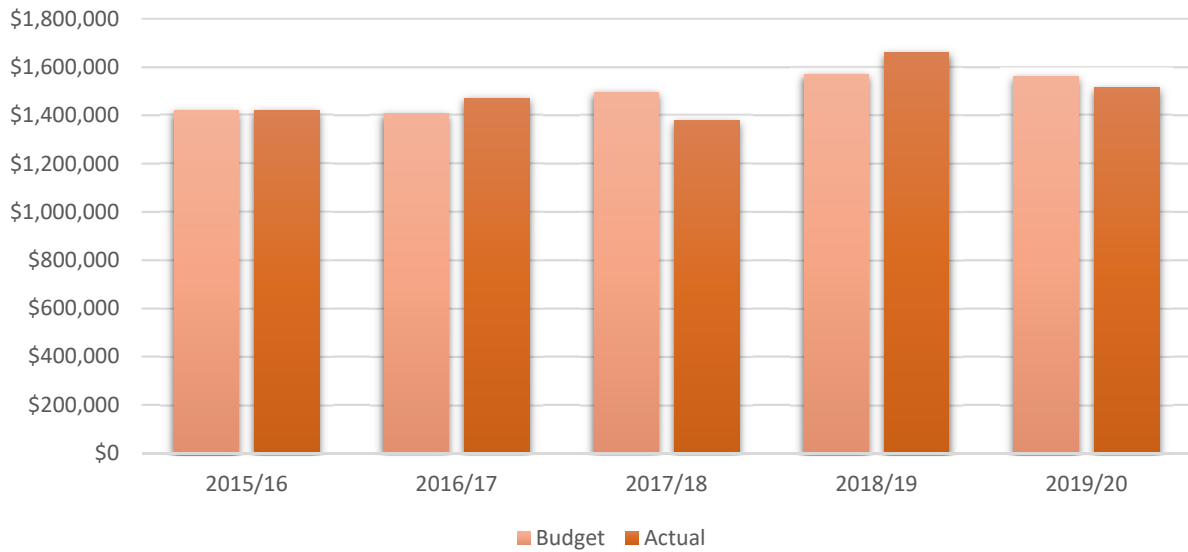
**DESERT WATER AGENCY  
WASTEWATER FUND BUDGET**

***Historical Analysis  
Budget vs. Actual***

**REVENUES**



**EXPENSES**



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

**JUNE 15, 2021**

**RE: REQUEST BOARD APPROVAL FOR EXTENSION OF COVID-19  
FINANCIAL RELIEF TO CUSTOMERS, REINSTATEMENT OF LATE  
FEES, AND AUTHORIZATION TO OFFER EXTENDED  
REPAYMENT PLANS UP TO 48-MONTHS**

Like so many other government agencies, the COVID-19 public health emergency has changed the way Desert Water Agency conducts business. It has also heavily impacted the financial wellbeing of many local residents and businesses.

Desert Water Agency's Board of Directors acted promptly at the onset of this crisis. On March 17, 2020, the Board took multiple actions in response to the COVID-19 pandemic. These actions included, but not limited to, the suspension of Late Fees and water disconnections for non-payment, and absorption of Paymentus remote payment convenience fees. The Board voted unanimously to extend the financial relief measures on multiple occasions with the most recent set to expire today, June 15, 2021.

On April 2, 2020, Governor Gavin Newsom issued Executive Order N-42-20 which prohibits the water shutoff for any resident or critical business. There is no termination date in the Executive Order, so the timing for it to be discontinued by the Governor is unknown.

Desert Water Agency's prohibition on shutoffs is more comprehensive than that of the Governor because it is inclusive of all customer types. Additionally, water agencies are not required to halt late fees or assume processing fees as DWA's Board elected to do.

If the Board takes no action, the Agency would default into following Executive Order N-42-20. Shutoffs would still be halted until the Governor determines otherwise, late fees will be collected and the Agency will not cover the cost of processing charges for phone or credit card payments.

On April 6, 2021, Governor Gavin Newsom outlined California's next step in the COVID-19 pandemic recovery plan. Today, June 15<sup>th</sup>, California is scheduled to fully open its economy. The Finance Committee has reviewed the following proposed actions to begin the process of restoring delinquent accounts to good standing by transitioning to payments plans and reinstating late fees.

## **Delinquent Accounts**

### Statistics:

There are 1,051 delinquent accounts as of June 1, 2021 that are at least one (1) month past due, representing 4.4% of all accounts which amounts to \$513,060 in past due payments. Of these accounts, 621 accounts (59.1% of delinquent accounts) will be able to utilize the Agency's current 12-month payment plan offering where the installment payment does not exceed 25% of the account's average monthly bill.

The remaining 430 accounts will require an extended repayment plan in order to achieve a monthly installment payment of approximately 25% of the account's average monthly bill. Of these 430 accounts, 325 accounts will be able to achieve a 25% maximum installment payment with a 48-month repayment term. The remaining 105 accounts will require a slightly higher monthly payment in order to achieve a 48-month repayment term.

### Proposed COVID-19 Payment Plan:

1. Offer extended payment plans of up to 48-months the maximum term to be set where the minimum monthly installment payment is 25% of the account's average monthly bill. Enrollment in the extended payment plan option will only be offered for a limited time, to commence at the time late fees are reinstated and to close two months after disconnections of service for non-payment have been reinstated. After the close of the enrollment period, only the previously established 12-month payment plans will be offered.
2. Once late fees and/or disconnections of service for non-payment are reinstated, accounts at least one-month past due with a delinquent amount over \$100, will be auto-enrolled in a payment plan. Accounts with delinquent charges under \$100 will be eligible to enroll in a payment plan upon request.
3. Liens will be filed on properties with a payment plan amount in excess of \$1,000 and a repayment term in excess of 12 months.
4. If an account falls behind on their payment plan:
  - a. Late fees will apply. Accounts must remain current on both water/sewer charges billed after enrollment in the payment plan and installment payments in order to avoid any late fees.
  - b. When disconnections of service for non-payment are reinstated, a disconnection notice will be issued. To avoid disconnection, the account must become current on both water/sewer charges billed after enrollment in the payment plan and installment payments.
5. If an account is disconnected for failing to come current on the water/sewer charges billed after enrollment in the payment plan and installment payments, the account will be required to pay the reconnection fee, deposit (if required), come current on all water/sewer bill charges and installment payments in order to reconnect water service.

## **Reinstatement of Late Fees**

On March 17, 2020, the Board halted the assessment of all late fees. With the reopening of the California economy today, June 15, 2021, Agency staff desires to reinstate late fees on delinquent accounts.

As of June 1<sup>st</sup>, there are 294 accounts that are less than one-month past due as compared to the account's average monthly bill. The reinstatement of late fees will once again incentivize timely payments.

The reinstatement of late fees, if approved, will begin the auto-enrollment in payment plans for customers over one-month past due and in excess of \$100 according to the proposed COVID-19 payment plan.

The proposed late fee reinstatement date is August 1, 2021. This will allow for a full billing cycle to communicate the reinstatement of late fees with customers, allowing time to make any necessary payments or enroll in a payment plan prior to any adverse effects, such as the assessing of a late fee.

### **Staff recommends the Board of Directors:**

1. Extend financial relief for customers (disconnection of service for non-payment and absorption of remote payment fees) for an additional 35 days, June 15<sup>th</sup> through July 20<sup>th</sup>.
2. Reinstatement of late fees for delinquent accounts, effective August 1, 2021.
3. Authorize the limited-time offering of extended payment plan terms not to exceed 48-months where the minimum installment payment to be set at 25% of the account's average monthly bill. Enrollment period to open August 1, 2021 and close 2 months after the reinstatement of disconnections of service for non-payment.

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

**JUNE 15, 2021**

**RE: REQUEST APPROVAL OF 2021-2024 MEMORANDUM OF  
UNDERSTANDING BETWEEN THE DESERT WATER AGENCY  
AND THE DESERT WATER AGENCY EMPLOYEES'  
ASSOCIATION FOR EMPLOYEE SALARIES AND BENEFITS**

This Board Agenda Item is to approve the Memorandum of Understanding (MOU) between Desert Water Agency (DWA) and the Desert Water Agency Employee Association (DWAEA) from July 1, 2021 – June 30, 2024.

1. Term of agreement: 7/1/2021 – 6/30/2024
2. Cost of Living (COLA) Adjustments:
  - a. Effective July 1, 2021 increase salary schedule by 4.1% based on March CPI data.
  - b. Effective July 1, 2022, increase salary schedule by March CPI with a 0% minimum and a 5% maximum.
  - c. Effective July 1, 2023, increase salary schedule by March CPI with a 0% minimum and a 5% maximum.
3. Other negotiated changes to benefits and policies:
  - a. Commencing July 1, 2021, increase the employee boot allowance to cover the cost of two pairs of boots per fiscal year.
  - b. Commencing July 1, 2021, provide a stipend equal to the cost of adding a line of cell phone service, as an alternative option to utilize personal cell phones.
  - c. Commencing January 1, 2022, provide a Flex Spending Account option to all employees. There will be a one-year trial period for the program.
4. Effective July 1, 2021, the Agency monthly contribution to deferred compensation account for employees with two or more years of service hired after May 1, 2007 is increased from \$145 to \$150 per month.

5. Effective July 1, 2022, the Agency monthly contribution to deferred compensation account for employees with two or more years of service hired after May 1, 2007 is increased from \$150 to \$155 per month.
6. Effective July 1, 2023, the Agency monthly contribution to deferred compensation account for employees with two or more years of service hired after May 1, 2007 is increased from \$155 to \$160 per month.
7. A salary survey for all job classifications will be performed toward the end of 2021 and, with Board approval of any changes, have an implementation date of January 1, 2022.

The costs for the changes to this agreement are estimated to be \$334,350 annually. The increased benefit costs were included in the 2021-2022 Budget.

It is recommended that the Board of Directors approve the Memorandum of Understanding (MOU) between Desert Water Agency (DWA) and the Desert Water Agency Employee Association (DWAEA) from July 1, 2021 – June 30, 2024.

Attachment: DWAEA 2021-2024 MOU

Kristin Bloomer, President (Division 5)  
James Cioffi, Vice President (At large)  
Joseph K. Stuart, Secretary-Treasurer (At large)  
Patricia G. Oygur, Director (At large)  
Paul Ortega, Director (Division 4)



Mark S. Krause, General Manager-Chief Engineer  
Best, Best & Krieger, General Counsel  
Krieger & Stewart, Consulting Engineers

June 15, 2021

Desert Water Agency Employees' Association  
Attn: Ryan Molhoek - Chairman/DWAEA  
1200 South Gene Autry Trail  
Palm Springs, CA 92264

**RE: Employee Salaries and Fringe Benefits through June 30, 2024**

Ladies and Gentlemen of the DWA Employees' Association:

Pursuant to the meet-and-confer process under state law, the following salary and fringe benefit package was negotiated between the Desert Water Agency Employees' Association and the General Manager. This negotiated package extends to June 30, 2024, and I have received your written notice that the proposal was initially accepted by the DWA Employees' Association by a majority vote on May 26, 2021, and I was informed by Secretary Samantha Lopez that the final negotiated terms of the MOU (as outlined below) were subsequently approved by a majority vote of the DWAEA on June 1, 2021.

This proposal has been approved by the Desert Water Agency Board of Directors at their regular meeting on June 15, 2021, and has a commencement date of July 1, 2021.

The specific terms negotiated and agreed upon are as follows:

1. Commencing July 1, 2021, increase the employee boot allowance to cover the cost of two pairs of boots per fiscal year.
2. Commencing July 1, 2021, provide a stipend equal to the cost of adding a line of cell phone service, as an alternative option to utilize personal cell phones.
3. Commencing January 1, 2022, provide a Flex Spending Account option to all employees. There will be a one year trial period for the program.
4. Commencing the pay period including July 1, 2021, each Agency employee will receive a cost of living increase of 4.1% which is equal to the percent change for the year ending March 2021, with the percentage derived from the Bureau of Labor Statistics "Consumer Price Indexes - Pacific Cities and U.S. City Average", "Urban Wage Earners and Clerical Workers" for Riverside-San Bernardino-Ontario County Index.

5. Commencing the pay period including July 1, 2022, each Agency employee will receive a cost of living increase equal to the percent change for the year ending March 2022, with the percentage derived from the Bureau of Labor Statistics "Consumer Price Indexes - Pacific Cities and U.S. City Average", "Urban Wage Earners and Clerical Workers" for Riverside-San Bernardino-Ontario County Index. The minimum will not be lower than 0% (in the event the actual index goes below 0%); the maximum will be 5%.
6. Commencing the pay period including July 1, 2023, each Agency employee will receive a cost of living increase equal to the percent change for the year ending March 2023, with the percentage derived from the Bureau of Labor Statistics "Consumer Price Indexes - Pacific Cities and U.S. City Average", "Urban Wage Earners and Clerical Workers" for Riverside-San Bernardino-Ontario County Index. The minimum will not be lower than 0% (in the event the actual index goes below 0%); the maximum will be 5%.
7. Effective July 1, 2021, the Agency monthly contribution to deferred compensation account for employees with two or more years of service hired after May 1, 2007 is increased from \$145 to \$150 per month.
8. Effective July 1, 2022, the Agency monthly contribution to deferred compensation account for employees with two or more years of service hired after May 1, 2007 is increased from \$150 to \$155 per month.
9. Effective July 1, 2023, the Agency monthly contribution to deferred compensation account for employees with two or more years of service hired after May 1, 2007 is increased from \$155 to \$160 per month.
10. A salary survey for all job classifications will be performed toward the end of 2021 and, with Board approval of any changes, have an implementation date of January 1, 2022.
11. A benefit survey will be performed during the month of March 2024.
12. Commencing in early 2024, a new Salary and Fringe Benefits Memorandum of Understanding will be negotiated between the DWA Employees' Association and the General Manager/ Chief Engineer, and will be implemented (with the Board's approval) on July 1, 2024.



If you agree that this letter correctly memorializes our understanding, please sign below and return one copy to me at your earliest convenience. Another copy of this letter agreement has been enclosed for your records.

Sincerely,

Mark Krause  
General Manager

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We agree to the above.  
**DESERT WATER AGENCY EMPLOYEES ASSOCIATION**

\_\_\_\_\_  
Date

\_\_\_\_\_  
Chairman – Ryan Molhoek

\_\_\_\_\_  
Date

\_\_\_\_\_  
Secretary – Samantha Lopez

\_\_\_\_\_  
Date

\_\_\_\_\_  
Treasurer – Paul Monroy

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

**JUNE 15, 2021**

**RE: APPROVAL OF JULY 2021 COST-OF-LIVING SALARY INCREASE  
FOR DWA EMPLOYEES AND CONTRACT AMENDMENT FOR  
GENERAL MANAGER**

The 2021-2024 Memorandum of Understanding between the Desert Water Agency (DWA) and the Desert Water Agency Employees' Association (DWAEA) calls for a cost of living salary increase effective July 1<sup>st</sup> of each year (see Attachment #1). The increase is equal to the percentage change for the year ending each March, with the percentage derived from the Bureau of Labor Statistics. For March 2021, the CPI percentage was 4.1% (see Attachment #2).

The General Manager has an Employment Agreement that provides for a cost-of-living adjustment to the base salary of the same percentage as provided to all Agency employees (see Attachment #3). Upon approval by the Board, the General Manager's Employment Agreement will be amended to reflect a 4.1% base salary increase (see Attachment #4 and Attachment #5).

Staff has updated the Desert Water Agency's Monthly Salary Schedule to reflect a 4.1% increase for all salary ranges effective the pay periods including July 1, 2021 (see Attachment #6).

Fiscal Impact

The total fiscal impact has been included in the 2021-2022 year budget.

Staff is requesting the Board of Directors:

1. Approve a 4.1% Cost of Living Increase to DWA Employees and the General Manager with an effective date of the pay periods including July 1, 2021.
2. Approve the July 2021 DWA Monthly Salary Schedule reflecting a 4.1% increase.
3. Approve Seventh amendment to the General Manager's Employment Agreement to reflect a 4.1% cost-of-living increase to the base salary. This agreement also includes the bonus that was approved by the Board of Directors at their meeting on March 2, 2021.

Attachments

Attachment #1 – 2021-2024 DWAEA Memorandum of Understanding

Attachment #2 – March 2021 Consumer Price Index

Attachment #3 – General Manager's Employment Agreement

Attachment #4 – Seventh Amendment to General Manager Employment Agreement

Attachment #5 – Minutes from March 2, 2021 Board Meeting

Attachment #6 – Combined Salary Schedule

Kristin Bloomer, President (Division 5)  
James Cioffi, Vice President (At large)  
Joseph K. Stuart, Secretary-Treasurer (At large)  
Patricia G. Oygur, Director (At large)  
Paul Ortega, Director (Division 4)



Mark S. Krause, General Manager-Chief Engineer  
Best, Best & Krieger, General Counsel  
Krieger & Stewart, Consulting Engineers

June 15, 2021

Desert Water Agency Employees' Association  
Attn: Ryan Molhoek - Chairman/DWAEA  
1200 South Gene Autry Trail  
Palm Springs, CA 92264

**RE: Employee Salaries and Fringe Benefits through June 30, 2024**

Ladies and Gentlemen of the DWA Employees' Association:

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This proposal has been approved by the Desert Water Agency Board of Directors at their regular meeting on June 15, 2021, and has a commencement date of July 1, 2021.

The specific terms negotiated and agreed upon are as follows:

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3. Commencing January 1, 2022, provide a Flex Spending Account option to all employees. There will be a one year trial period for the program.
4. Commencing the pay period including July 1, 2021, each Agency employee will receive a cost of living increase of 4.1% which is equal to the percent change for the year ending March 2021, with the percentage derived from the Bureau of Labor Statistics "Consumer Price Indexes - Pacific Cities and U.S. City Average", "Urban Wage Earners and Clerical Workers" for Riverside-San Bernardino-Ontario County Index.

5. Commencing the pay period including July 1, 2022, each Agency employee will receive a cost of living increase equal to the percent change for the year ending March 2022, with the percentage derived from the Bureau of Labor Statistics "Consumer Price Indexes - Pacific Cities and U.S. City Average", "Urban Wage Earners and Clerical Workers" for Riverside-San Bernardino-Ontario County Index. The minimum will not be lower than 0% (in the event the actual index goes below 0%); the maximum will be 5%.
6. Commencing the pay period including July 1, 2023, each Agency employee will receive a cost of living increase equal to the percent change for the year ending March 2023, with the percentage derived from the Bureau of Labor Statistics "Consumer Price Indexes - Pacific Cities and U.S. City Average", "Urban Wage Earners and Clerical Workers" for Riverside-San Bernardino-Ontario County Index. The minimum will not be lower than 0% (in the event the actual index goes below 0%); the maximum will be 5%.
7. Effective July 1, 2021, the Agency monthly contribution to deferred compensation account for employees with two or more years of service hired after May 1, 2007 is increased from \$145 to \$150 per month.
8. Effective July 1, 2022, the Agency monthly contribution to deferred compensation account for employees with two or more years of service hired after May 1, 2007 is increased from \$150 to \$155 per month.
9. Effective July 1, 2023, the Agency monthly contribution to deferred compensation account for employees with two or more years of service hired after May 1, 2007 is increased from \$155 to \$160 per month.
10. A salary survey for all job classifications will be performed toward the end of 2021 and, with Board approval of any changes, have an implementation date of January 1, 2022.
11. A benefit survey will be performed during the month of March 2024.
12. Commencing in early 2024, a new Salary and Fringe Benefits Memorandum of Understanding will be negotiated between the DWA Employees' Association and the General Manager/ Chief Engineer, and will be implemented (with the Board's approval) on July 1, 2024.

If you agree that this letter correctly memorializes our understanding, please sign below and return one copy to me at your earliest convenience. Another copy of this letter agreement has been enclosed for your records.

Sincerely,

Mark Krause  
General Manager

---

We agree to the above.

**DESERT WATER AGENCY EMPLOYEES ASSOCIATION**

\_\_\_\_\_  
Date

\_\_\_\_\_  
Chairman – Ryan Molhoek

\_\_\_\_\_  
Date

\_\_\_\_\_  
Secretary – Samantha Lopez

\_\_\_\_\_  
Date

\_\_\_\_\_  
Treasurer – Paul Monroy

# CONSUMER PRICE INDEXES PACIFIC CITIES AND U. S. CITY AVERAGE

## MARCH 2021

(All items indexes. 1982-84=100 unless otherwise noted. Not seasonally adjusted.)

MONTHLY DATA	All Urban Consumers (CPI-U)						Urban Wage Earners and Clerical Workers (CPI-W)					
	Indexes			Percent Change			Indexes			Percent Change		
				Year ending		1 Month ending				Year ending		1 Month ending
	Mar 2020	Feb 2021	Mar 2021	Feb 2021	Mar 2021	Mar 2021	Mar 2020	Feb 2021	Mar 2021	Feb 2021	Mar 2021	Mar 2021
U. S. City Average.....	258.115	263.014	264.877	1.7	2.6	0.7	251.375	256.843	258.935	1.9	3.0	0.8
West.....	273.995	278.702	280.625	1.6	2.4	0.7	265.211	270.740	272.841	2.0	2.9	0.8
West – Size Class A <sup>1</sup> .....	282.880	287.470	289.308	1.4	2.3	0.6	272.547	278.288	280.294	1.8	2.8	0.7
West – Size Class B/C <sup>2</sup> .....	159.129	162.042	163.257	1.8	2.6	0.7	158.553	161.823	163.169	2.1	2.9	0.8
Mountain <sup>3</sup> .....	106.621	108.386	109.308	1.5	2.5	0.9	106.715	108.905	110.009	2.1	3.1	1.0
Pacific <sup>3</sup> .....	106.411	108.262	108.947	1.6	2.4	0.6	106.376	108.605	109.363	1.9	2.8	0.7
Los Angeles-Long Beach-Anaheim, CA.....	276.589	281.347	282.648	1.0	2.2	0.5	266.964	272.816	274.097	1.4	2.7	0.5
BI-MONTHLY DATA (Published for odd months)	Indexes			Percent Change			Indexes			Percent Change		
				Year ending		2 Months ending				Year ending		2 Months ending
	Mar 2020	Jan 2021	Mar 2021	Jan 2021	Mar 2021	Mar 2021	Mar 2020	Jan 2021	Mar 2021	Jan 2021	Mar 2021	Mar 2021
	Mar 2020	Jan 2021	Mar 2021	Jan 2021	Mar 2021	Mar 2021	Mar 2020	Jan 2021	Mar 2021	Jan 2021	Mar 2021	Mar 2021
Riverside-San Bernardino-Ontario, CA <sup>3</sup> .....	107.162	109.550	110.981	2.2	3.6	1.3	107.425	110.204	111.823	2.4	4.1	1.5
San Diego-Carlsbad, CA.....	302.589	307.688	315.035	1.7	4.1	2.4	285.543	291.490	298.292	2.5	4.5	2.3
Urban Hawaii.....	285.321	287.634	290.361	1.4	1.8	0.9	282.885	284.959	288.147	1.4	1.9	1.1
BI-MONTHLY DATA (Published for even months)	Indexes			Percent Change			Indexes			Percent Change		
				Year ending		2 Months ending				Year ending		2 Months ending
	Feb 2020	Dec 2020	Feb 2021	Dec 2020	Feb 2021	Feb 2021	Feb 2020	Dec 2020	Feb 2021	Dec 2020	Feb 2021	Feb 2021
	Feb 2020	Dec 2020	Feb 2021	Dec 2020	Feb 2021	Feb 2021	Feb 2020	Dec 2020	Feb 2021	Dec 2020	Feb 2021	Feb 2021
Phoenix-Mesa-Scottsdale, AZ <sup>4</sup> .....	145.746	145.660	147.186	0.5	1.0	1.0	144.346	144.665	146.173	1.0	1.3	1.0
San Francisco-Oakland-Hayward, CA.....	299.690	302.948	304.387	2.0	1.6	0.5	292.010	295.687	297.170	2.2	1.8	0.5
Seattle-Tacoma-Bellevue, WA.....	282.115	283.409	286.950	1.4	1.7	1.2	278.081	279.308	282.795	1.6	1.7	1.2
Urban Alaska.....	226.510	227.259	229.478	0.3	1.3	1.0	224.731	226.615	229.145	1.1	2.0	1.1

1 Population over 2,500,000    2 Population 2,500,000 and under, Dec 1996 = 100    3 Dec 2017=100    4 Dec 2001=100

**NOTE:** In January 2018, BLS introduced a new geographic area sample for the Consumer Price Index (CPI): [www.bls.gov/regions/west/factsheet/2018cpirevisionwest.pdf](http://www.bls.gov/regions/west/factsheet/2018cpirevisionwest.pdf)

1967=100 base year indexes and tables with semiannual and annual average data are available at: [www.bls.gov/regions/west/factsheet/consumer-price-index-data-tables.htm](http://www.bls.gov/regions/west/factsheet/consumer-price-index-data-tables.htm)

Release date April 13, 2021. The next release date is scheduled for May 12, 2021. For questions, please contact us at [BLSinfoSF@bls.gov](mailto:BLSinfoSF@bls.gov) or (415) 625-2270.

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

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

### **Section 1.     Employment.**

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

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

### **Section 2.     Term of the Agreement.**

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

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

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

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

### **Section 3.     Termination and Severance Pay.**

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

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

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

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

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

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



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

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

#### **Section 4. Salary and Expenses.**

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

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

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

#### **Section 5. Benefits.**

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

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

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

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

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

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

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

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

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

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

#### **Section 6. Performance Evaluation.**

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

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

#### **Section 7. Bonding.**

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

#### **Section 8. General Provisions.**

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

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

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

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

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

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

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

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

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

By: Mark S. Krause  
MARK S. KRAUSE

**DESERT WATER AGENCY**

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

**APPROVED AS TO FORM:**

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

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

This Seventh Amendment to Employment Agreement (this “Seventh Amendment”) between the DESERT WATER AGENCY (the “Agency”) and MARK S. KRAUSE (“General Manager – Chief Engineer”) is entered into this 15th day of June 2021.

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

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

Section 4.1 entitled “Salary and Expenses” is hereby amended to reflect the 2021 annual bonus:

**“Section 4.     Salary and Expenses.”**

4.1     Effective June 25, 2021, the Board of Directors agrees to pay the GM-CE for his services rendered a base salary of Twenty-Four Thousand, Eight Hundred and Eighty-Six Dollars and twenty-three cents (\$24,886.23) per month in installments at the same time as other employees of the Agency are paid. The base salary will be adjusted annually by the same percentage adjustment provided to all Agency employees for changes in the cost of living, if any.

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

The Board approved a 2021 bonus of five percent (5%) of salary plus an additional \$2,000.00. Thus, a bonus of Sixteen Thousand, Nine Hundred and Thirty-One Dollars and Seventy-Four Cents \$16,931.74) is payable to the GM-CE for his service from 2020 through 2021.

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

**DESERT WATER AGENCY**

**MARK S. KRAUSE**

By: \_\_\_\_\_  
President, Board of Directors

By: \_\_\_\_\_

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

**March 2, 2021**

DWA Board via	Kristin Bloomer, President	)
Teleconference:	James Cioffi, Vice President	)
	Joseph K. Stuart, Secretary-Treasurer	)
	Patricia G. Oygar, Director	)
	Paul Ortega, Director	)

DWA Staff via	Mark S. Krause, General Manager	)
Teleconference:	Steve Johnson, Assistant General Manager	)
	Esther Saenz, Finance Director	)
	Sylvia Baca, Asst. Secretary of the Board	)
	Kris Hopping, Human Resources Director	)
	Xochitl Peña, Outreach Specialist II	)
	Kim McCance, Senior Admin. Asst.	)

Consultants via	Michael T. Riddell, Best Best & Krieger	)
Teleconference:		

Public via	David Freedman, Palm Springs Sustainability Comm.	)
Teleconference:	Steve Grasha, Desert Hot Springs Resident	)

19060. President Bloomer opened the meeting at 8:00 a.m. and asked everyone to join her in the Pledge of Allegiance. **Pledge of Allegiance**

19061. President Bloomer called upon Assistant Secretary of the Board Baca to conduct the roll call: **Roll Call**

Present: Ortega, Oygar, Stuart, Cioffi, Bloomer

19062. President Bloomer called for approval of the February 16, 2021 Regular Board Meeting Minutes. **Approval of 02/16/21 Regular Board Mtg. Minutes**

Director Ortega moved for approval. After a second by Vice President Cioffi, the minutes were approved by the following roll call vote: **Approval of 02/16/21 Regular Board Mtg. Minutes (Cont.)**

AYES: Ortega, Oygar, Stuart, Cioffi, Bloomer  
 NOES: None  
 ABSENT: None  
 ABSTAIN: None

19063. President Bloomer called upon General Manager Krause to provide an update on Agency operations. **General Manager's Report**

Mr. Krause provided an update on Agency operations and noted his meetings and activities for the past several weeks.

In response to Director Ortega, Mr. Krause explained there are a number of participants in the Salt & Nutrient Management Plan and the Agencies are looking at different ways of funding. He noted the projected date for funding is by end of this year.

19064. President Bloomer noted the minutes for the February 25, 2021 Executive Committee meeting were provided in the Board's packet. **Committee Reports**  
Executive 02/25/21

19065. President Bloomer opened the meeting for public comment. **Public Comment**

There being no one from the public wishing to address the Board, President Bloomer closed the public comment period.

19066. President Bloomer called upon General Manager Krause to present staff's Request for Board Approval of Resolution No. 1252 Concurring in Nomination of Randall Reed of Cucamonga Valley Water District to the office of ACWA/JPIA Executive Committee **Items for Action:**  
Request Adoption of Resolution No. 1252  
Concurring in Nomination of Randall Reed of CVWD to office of ACWA/JPIA Executive Committee

Mr. Krause reported that during the February 25 Executive Committee meeting there was support of Mr. Reed's nomination to the Executive Committee of ACWA/JPIA. If the Board concurs in the nomination of Mr. Reed, it may do so by adopting this resolution. Staff recommends that the Board adopt Resolution No. 1252. Following adoption, staff will forward a copy of the resolution to Cucamonga Valley Water District and ACWA/JPIA offices.

Vice President Cioffi moved for approval of staff's request. After a second by Director Ortega, the motion carried by the following roll call vote:

AYES: Ortega, Oygar, Stuart, Cioffi, Bloomer  
 NOES: None  
 ABSENT: None  
 ABSTAIN: None

**Items for Action:**  
 (Cont.)  
 Request Adoption of  
 Resolution No. 1252

**Resolution No. 1252**  
**Adopted**

**RESOLUTION NO. 1252**  
**RESOLUTION OF THE BOARD OF DIRECTORS OF**  
**DESERT WATER AGENCY CONCURRING**  
**IN NOMINATION OF RANDALL REED**  
**TO THE EXECUTIVE COMMITTEE OF THE**  
**ASSOCIATION OF CALIFORNIA WATER AGENCIES**  
**JOINT POWERS INSURANCE AUTHORITY ("ACWA JPIA")**

19067. President Bloomer called upon General Manager Krause to present staff's Request for Board Approval of Resolution No. 1253 Concurring in Nomination of Melody McDonald of San Bernardino Valley Water Conservation District to the office of ACWA/JPIA Executive Committee

Request Adoption of  
 Resolution No. 1253  
 Concurring in  
 Nomination of Melody  
 McDonald of  
 SBVWCD to office of  
 ACWA/JPIA  
 Executive Committee

Mr. Krause reported that during the February 25 Executive Committee meeting there was support of Ms. McDonald's nomination to the Executive Committee of ACWA/JPIA. If the Board concurs in the nomination of Ms. McDonald, it may do so by adopting this resolution. Staff recommends that the Board adopt Resolution No. 1253. Following adoption, staff will forward a copy of the resolution to San Bernardino Valley Water Conservation District and ACWA/JPIA offices.

Vice President Cioffi moved for approval of staff's request. After a second by Director Ortega, the motion carried by the following roll call vote:

AYES: Ortega, Oygar, Stuart, Cioffi, Bloomer  
 NOES: None  
 ABSENT: None  
 ABSTAIN: None



**RESOLUTION NO. 1253**  
**RESOLUTION OF THE BOARD OF DIRECTORS OF**  
**DESERT WATER AGENCY CONCURRING**  
**IN NOMINATION OF MELODY MCDONALD**  
**TO THE EXECUTIVE COMMITTEE OF THE**  
**ASSOCIATION OF CALIFORNIA WATER AGENCIES**  
**JOINT POWERS INSURANCE AUTHORITY ("ACWA JPIA")**

**Resolution No. 1253**  
**Adopted**

19068. President Bloomer noted that Board packets included Outreach & Conservation reports for February 2021.

**Discussion Items:**  
 Outreach &  
 Conservation –  
 February 2021  
 Activities & Events

19069. President Bloomer called upon Secretary-Treasurer Stuart to provide his report on the Urban Water Institute's Virtual Conference.

Directors' Report on  
 UWI Virtual  
 Conference Attendance  
 02/17 – 02/18

Secretary-Treasurer Stuart noted his attendance at the Urban Water Institute's Virtual Conference held on February 17-18, 2021.

Secretary Treasurer  
 Stuart

19070. President Bloomer called upon Director Ortega to provide his report on the ACWA DC Virtual Conference, February 24, 2021.

Director's Report on  
 ACWA DC Virtual  
 Conference Attendance  
 02/24

Director Ortega and President Bloomer noted their attendance at the ACWA DC Virtual Conference held on February 24, 2021.

Director Ortega and  
 President Bloomer

19071. At 8:49 a.m., President Bloomer convened into a Teleconference 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; (C) Existing Litigation, pursuant to Government Code Section 54956.9 (d) (1), Albrecht et al vs. County of Riverside; (D) Existing Litigation, pursuant to Government Code Section 54956.9 (d) (1), Abbey et al vs. County of Riverside; (E) Existing Litigation, pursuant to Government Code Section 54956.9 (d) (1) Bonnie Kessner, et al vs. Desert Water Agency, et al; (F) Pending Litigation, Pursuant to Government Code Section 54956.9 (d) (2), Possible Intervention in Case: AT&T vs. County of Riverside, (G) Potential Litigation, Pursuant to Government Code Section 54956.9 (d) (2) (One Case); (H) Pending Administrative Proceeding Pursuant to Government Code Section 54956.9 (d) (1) Regional Water Quality Control Board Claim No. 7018 0680 0000 1010 7377, and (I) Public Employee Performance Evaluation, pursuant to Government Code Section 54957, General Manager.

**Closed Session:**  
 A. Existing Litigation –  
 ACBCI vs. CVWD, et  
 al. (2 Cases)  
 B. Existing Litigation –  
 MSWD vs. DWA  
 C. Existing Litigation –  
 Albrecht et al vs.  
 Riverside County  
 D. Existing Litigation –  
 Abbey et al vs.  
 Riverside County  
 E. Existing Litigation-  
 Bonnie Kessner, et al  
 vs. Desert Water  
 Agency et al  
 F. Existing Litigation -  
 Possible Intervention in  
 Case: AT&T vs.  
 County of Riverside  
 G. Potential Litigation-  
 (1 Case)  
 H. Pending Admin.  
 Proceeding, RWQCB  
 Claim  
 I. Public Employee  
 Performance  
 Evaluation – General  
 Manager

19072. At 11:08 a.m., President Bloomer reconvened the meeting into open session and announced there was no reportable action taken on Items No. 10-A thru No. 10-H.

**Reconvene** – No Reportable Action taken on Items No. 10-A thru No. 10-H.

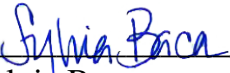
Regarding Item No. 10-I, President Bloomer stated a performance evaluation was conducted for General Manager Krause. She then made a motion to amend the General Manager's employment agreement with the following items: 1) Additional \$2,000 cash bonus; 2) 5% salary bonus; and 3) Cost-of-living increase effective July 1. Director Cioffi seconded the motion, which carried by the following roll call vote:

Item No. 10-I

AYES: Ortega, Oygur, Stuart, Cioffi, Bloomer  
 NOES: None  
 ABSENT: None  
 ABSTAIN: None

19073. In the absence of any further business, President Bloomer adjourned the meeting at 11:12 a.m.

**Adjournment**

  
 \_\_\_\_\_  
 Sylvia Baca  
 Assistant Secretary of the Board

**Desert Water Agency**  
**Position Classification and Monthly Salary Schedule**  
**Effective 06/18/2021 for Pay Period 1 Employees. Effective 06/25/2021 for Pay Period 2 Employees.**

DEPARTMENT	POSITION TITLE	RANGE	STEP 1	STEP 2	STEP 3	STEP 4	STEP 5
<b>ACCOUNTING</b>							
	Account Clerk I	24	\$ 4,089	\$ 4,298	\$ 4,506	\$ 4,743	\$ 4,977
	Account Clerk II	31	\$ 4,858	\$ 5,108	\$ 5,366	\$ 5,641	\$ 5,921
	Account Clerk III	33	\$ 5,108	\$ 5,366	\$ 5,641	\$ 5,921	\$ 6,221
	Account Clerk/Telephone Operator	20	\$ 3,706	\$ 3,892	\$ 4,089	\$ 4,298	\$ 4,506
	Accountant	46	\$ 7,030	\$ 7,396	\$ 7,770	\$ 8,159	\$ 8,576
	Accounting Supervisor	53	\$ 8,369	\$ 8,783	\$ 9,223	\$ 9,681	\$ 10,172
	Controller	66	\$ 11,496	\$ 12,070	\$ 12,683	\$ 13,333	\$ 14,006
	Senior Account Clerk	40	\$ 6,066	\$ 6,378	\$ 6,698	\$ 7,030	\$ 7,396
<b>ADMINISTRATIVE</b>							
	Administrative Assistant I	33	\$ 5,108	\$ 5,366	\$ 5,641	\$ 5,921	\$ 6,221
	Administrative Assistant II	38	\$ 5,775	\$ 6,066	\$ 6,378	\$ 6,698	\$ 7,030
	Administrative Assistant III	40	\$ 6,066	\$ 6,378	\$ 6,698	\$ 7,030	\$ 7,396
	Executive Secretary/Assistant Secretary to the Board	53	\$ 8,369	\$ 8,783	\$ 9,223	\$ 9,681	\$ 10,172
	Senior Administrative Assistant	46	\$ 7,030	\$ 7,396	\$ 7,770	\$ 8,159	\$ 8,576
<b>CONSTRUCTION - FLEET MAINTENANCE</b>							
<b>Construction</b>							
	Assistant Construction Superintendent	53	\$ 8,369	\$ 8,783	\$ 9,223	\$ 9,681	\$ 10,172
	Construction Superintendent	65	\$ 11,220	\$ 11,781	\$ 12,380	\$ 13,006	\$ 13,666
	Equipment Operator	36	\$ 5,496	\$ 5,775	\$ 6,066	\$ 6,378	\$ 6,698
	Water Service Foreman	46	\$ 7,030	\$ 7,396	\$ 7,770	\$ 8,159	\$ 8,576
	Water Service Worker I	28	\$ 4,506	\$ 4,743	\$ 4,977	\$ 5,234	\$ 5,496
	Water Service Worker II	33	\$ 5,108	\$ 5,366	\$ 5,641	\$ 5,921	\$ 6,221
	Water Service Worker III	37	\$ 5,641	\$ 5,921	\$ 6,221	\$ 6,534	\$ 6,865
<b>Fleet Maintenance</b>							
	Fleet Mechanic Foreman	43	\$ 6,534	\$ 6,865	\$ 7,212	\$ 7,578	\$ 7,963
	Fleet Mechanic I	31	\$ 4,858	\$ 5,108	\$ 5,366	\$ 5,641	\$ 5,921
	Fleet Mechanic II	36	\$ 5,496	\$ 5,775	\$ 6,066	\$ 6,378	\$ 6,698

**Desert Water Agency**  
**Position Classification and Monthly Salary Schedule**  
**Effective 06/18/2021 for Pay Period 1 Employees. Effective 06/25/2021 for Pay Period 2 Employees.**

DEPARTMENT	POSITION TITLE	RANGE	STEP 1	STEP 2	STEP 3	STEP 4	STEP 5
<b>FIELD SERVICES</b>							
	Field Services Representative I	34	\$ 5,234	\$ 5,496	\$ 5,775	\$ 6,066	\$ 6,378
	Field Services Representative II	37	\$ 5,641	\$ 5,921	\$ 6,221	\$ 6,534	\$ 6,865
	Field Services Supervisor	53	\$ 8,369	\$ 8,783	\$ 9,223	\$ 9,681	\$ 10,172
	Field Services Technician I	27	\$ 4,408	\$ 4,628	\$ 4,858	\$ 5,108	\$ 5,366
	Field Services Technician II	30	\$ 4,743	\$ 4,977	\$ 5,234	\$ 5,496	\$ 5,775
	Field Services Technician III	37	\$ 5,641	\$ 5,921	\$ 6,221	\$ 6,534	\$ 6,865
<b>ENGINEERING - OPERATIONS</b>							
<b>Engineering</b>							
	Associate Engineer	56	\$ 9,007	\$ 9,455	\$ 9,933	\$ 10,425	\$ 10,951
	Engineering Technician I	34	\$ 5,234	\$ 5,496	\$ 5,775	\$ 6,066	\$ 6,378
	Engineering Technician II	39	\$ 5,921	\$ 6,221	\$ 6,534	\$ 6,865	\$ 7,212
	Engineering Technician III	43	\$ 6,534	\$ 6,865	\$ 7,212	\$ 7,578	\$ 7,963
	GIS Specialist I	46	\$ 7,030	\$ 7,396	\$ 7,770	\$ 8,159	\$ 8,576
	GIS Specialist II	49	\$ 7,578	\$ 7,963	\$ 8,369	\$ 8,783	\$ 9,223
	Laboratory Director	53	\$ 8,369	\$ 8,783	\$ 9,223	\$ 9,681	\$ 10,172
	Operations and Engineering Manager	72	\$ 13,333	\$ 14,006	\$ 14,712	\$ 15,443	\$ 16,219
	Senior Engineer	64	\$ 10,951	\$ 11,496	\$ 12,070	\$ 12,683	\$ 13,333
	Senior Engineering Technician	45	\$ 6,865	\$ 7,212	\$ 7,578	\$ 7,963	\$ 8,369
	Staff Engineer	51	\$ 7,963	\$ 8,369	\$ 8,783	\$ 9,223	\$ 9,681
<b>Operations</b>							
	Operations Technician Foreman	51	\$ 7,963	\$ 8,369	\$ 8,783	\$ 9,223	\$ 9,681
	Operations Technician I	37	\$ 5,641	\$ 5,921	\$ 6,221	\$ 6,534	\$ 6,865
	Operations Technician II	41	\$ 6,221	\$ 6,534	\$ 6,865	\$ 7,212	\$ 7,578
	Operations Technician III	46	\$ 7,030	\$ 7,396	\$ 7,770	\$ 8,159	\$ 8,576
	Operations Technician in Training	30	\$ 4,743	\$ 4,977	\$ 5,234	\$ 5,496	\$ 5,775
	System Operator I	35	\$ 5,366	\$ 5,641	\$ 5,921	\$ 6,221	\$ 6,534
	System Operator II	38	\$ 5,775	\$ 6,066	\$ 6,378	\$ 6,698	\$ 7,030
	System Operator III	41	\$ 6,221	\$ 6,534	\$ 6,865	\$ 7,212	\$ 7,578
	System Operator in Training	30	\$ 4,743	\$ 4,977	\$ 5,234	\$ 5,496	\$ 5,775
	Water Operations Supervisor	60	\$ 9,933	\$ 10,425	\$ 10,951	\$ 11,496	\$ 12,070

**Desert Water Agency**  
**Position Classification and Monthly Salary Schedule**  
**Effective 06/18/2021 for Pay Period 1 Employees. Effective 06/25/2021 for Pay Period 2 Employees.**

DEPARTMENT	POSITION TITLE	RANGE	STEP 1	STEP 2	STEP 3	STEP 4	STEP 5
<b>FACILITIES MAINTENANCE AND SAFETY</b>	Facilities and Safety Officer	<b>54</b>	\$ 8,576	\$ 9,007	\$ 9,455	\$ 9,933	\$ 10,425
<b>INFORMATION SYSTEMS</b>	Information Systems Manager	<b>65</b>	\$ 11,220	\$ 11,781	\$ 12,380	\$ 13,006	\$ 13,666
	Computer Operator I	<b>31</b>	\$ 4,858	\$ 5,108	\$ 5,366	\$ 5,641	\$ 5,921
	Computer Operator II	<b>40</b>	\$ 6,066	\$ 6,378	\$ 6,698	\$ 7,030	\$ 7,396
	PC Support Technician I	<b>37</b>	\$ 5,641	\$ 5,921	\$ 6,221	\$ 6,534	\$ 6,865
	PC Support Technician II	<b>43</b>	\$ 6,534	\$ 6,865	\$ 7,212	\$ 7,578	\$ 7,963
	Senior PC Support Technician	<b>51</b>	\$ 7,963	\$ 8,369	\$ 8,783	\$ 9,223	\$ 9,681
	Programmer I	<b>50</b>	\$ 7,770	\$ 8,159	\$ 8,576	\$ 9,007	\$ 9,455
	Programmer II	<b>54</b>	\$ 8,576	\$ 9,007	\$ 9,455	\$ 9,933	\$ 10,425
<b>MANAGEMENT</b>	General Manager	<b>Contract</b>	n/a	n/a	n/a	n/a	\$ 24,887
	Assistant General Manager	<b>83</b>	\$ 17,453	\$ 18,324	\$ 19,240	\$ 20,206	\$ 21,215
	Finance Director	<b>81</b>	\$ 16,626	\$ 17,453	\$ 18,324	\$ 19,240	\$ 20,206
	Human Resources Director	<b>66</b>	\$ 11,496	\$ 12,070	\$ 12,683	\$ 13,333	\$ 14,006
<b>OUTREACH AND CONSERVATION</b>	Outreach and Conservation Associate	<b>45</b>	\$ 6,865	\$ 7,212	\$ 7,578	\$ 7,963	\$ 8,369
	Outreach and Conservation Manager	<b>55</b>	\$ 8,783	\$ 9,223	\$ 9,681	\$ 10,172	\$ 10,683
	Outreach Specialist I	<b>41</b>	\$ 6,221	\$ 6,534	\$ 6,865	\$ 7,212	\$ 7,578
	Outreach Specialist II	<b>45</b>	\$ 6,865	\$ 7,212	\$ 7,578	\$ 7,963	\$ 8,369
<b>SNOW CREEK SECURITY</b>	Snow Creek Security	<b>17</b>	\$2,620	\$2,751	\$2,890	\$3,032	\$3,184
<b>BOARD DIRECTOR</b>	Board Director (Grandfathered Only)		\$ 779.50	\$ 779.50	\$ 779.50	\$ 779.50	\$ 779.50

STATE WATER CONTRACTORS  
ANNUAL MEMBERSHIP AND BOARD MEETINGS

May 20, 2021

**I. ANNUAL MEMBERSHIP MEETING**

- (a) Election of Board members: Thomas Pate; Laura Hidas; JJ Westra; Craig Wallace; Ray Stokes; Steve Arakawa; Jeff Stone; Robert Cheng and Kathy Cortner
- (b) SWC office space lease was renewed for 5 years; tenant improvements include technology improvements to accommodate virtual meetings

**II. DWR MANAGEMENT REPORT (Ted Craddock)**

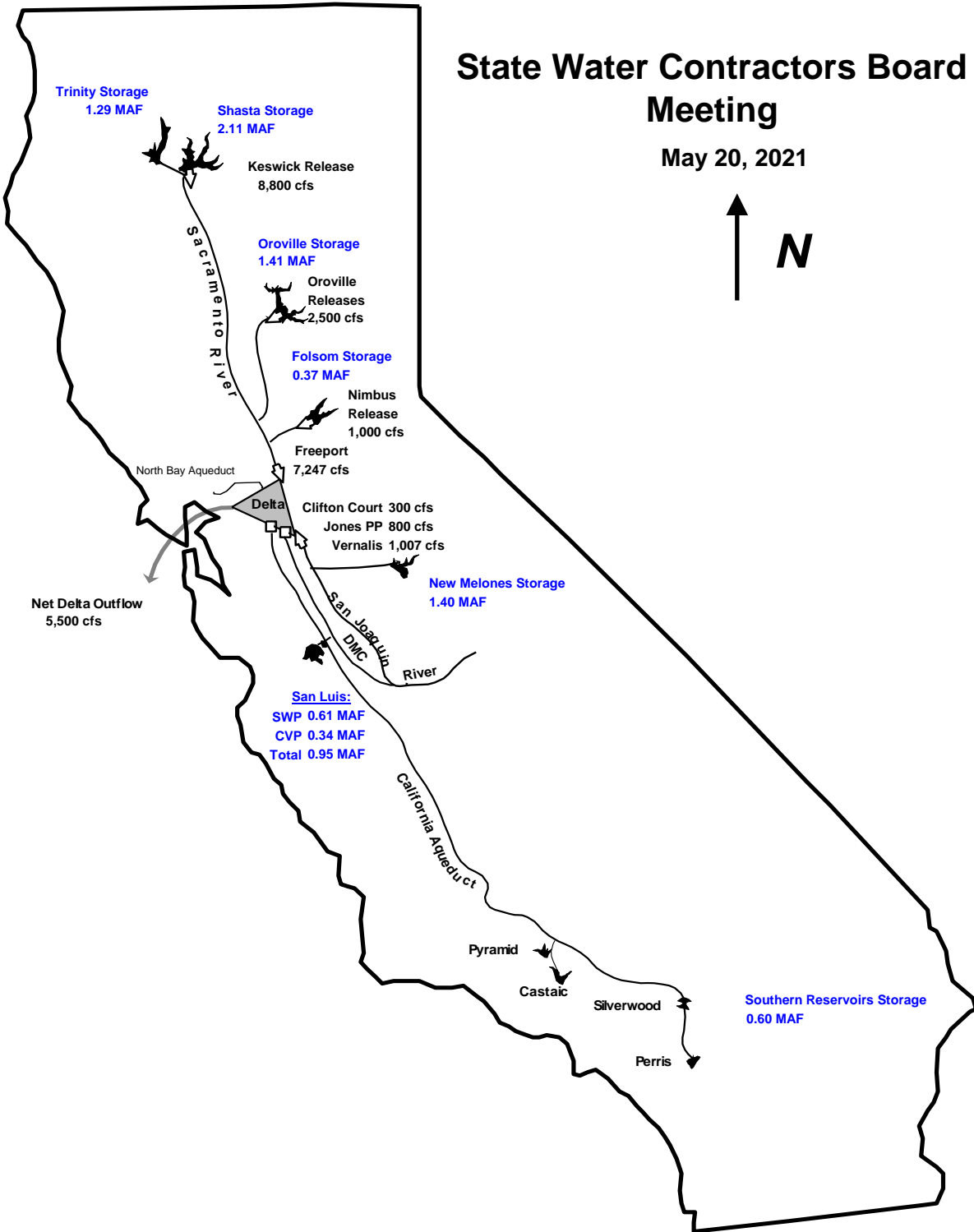
- (a) Critically dry conditions exist; the last two months saw no significant precipitation
- (b) The State Water Resources Control Board has been asked to relax Delta outflow requirements to minimize the loss of water stored in Lake Oroville
- (c) DWR will install temporary barriers in the Delta to help control salt water intrusion
- (d) 850,000 AF of water will be kept in storage in Oroville for next year
- (e) Storage in San Luis Reservoir projected to be 350,000 AF in September
- (f) Governor's budget proposes \$5.2 Billion to "roar back" from Covid-19 pandemic, some to be available for infrastructure

**III. WATER OPERATIONS REPORT**

- (a) April 1 snowpack as only 70% of average; snow melt in April was only 22% of average (unprecedented low)
- (b) DWR filed a Temporary Urgency Change Petition on May 17 to relax flow requirements in the Delta

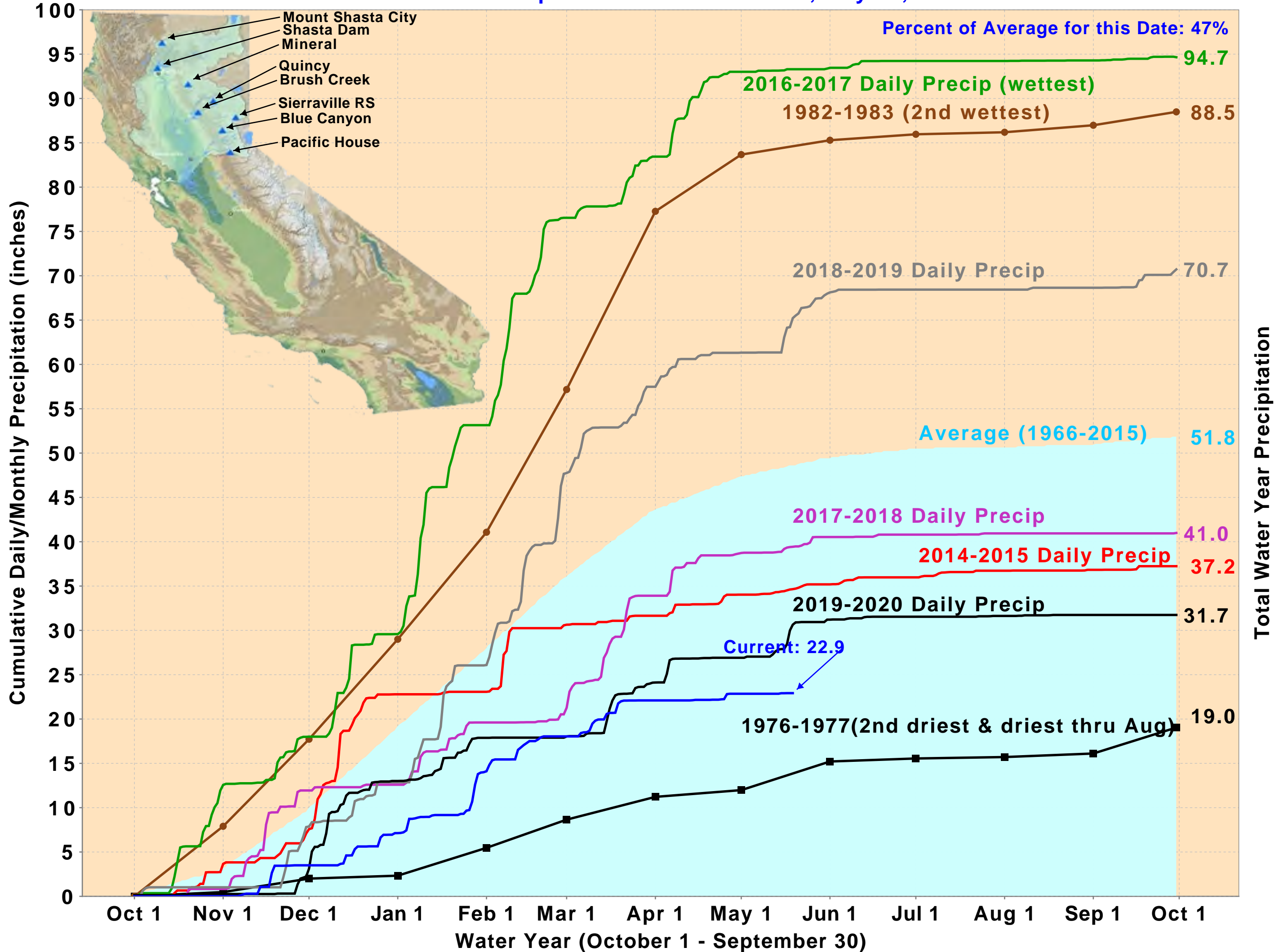
# State Water Contractors Board Meeting

May 20, 2021



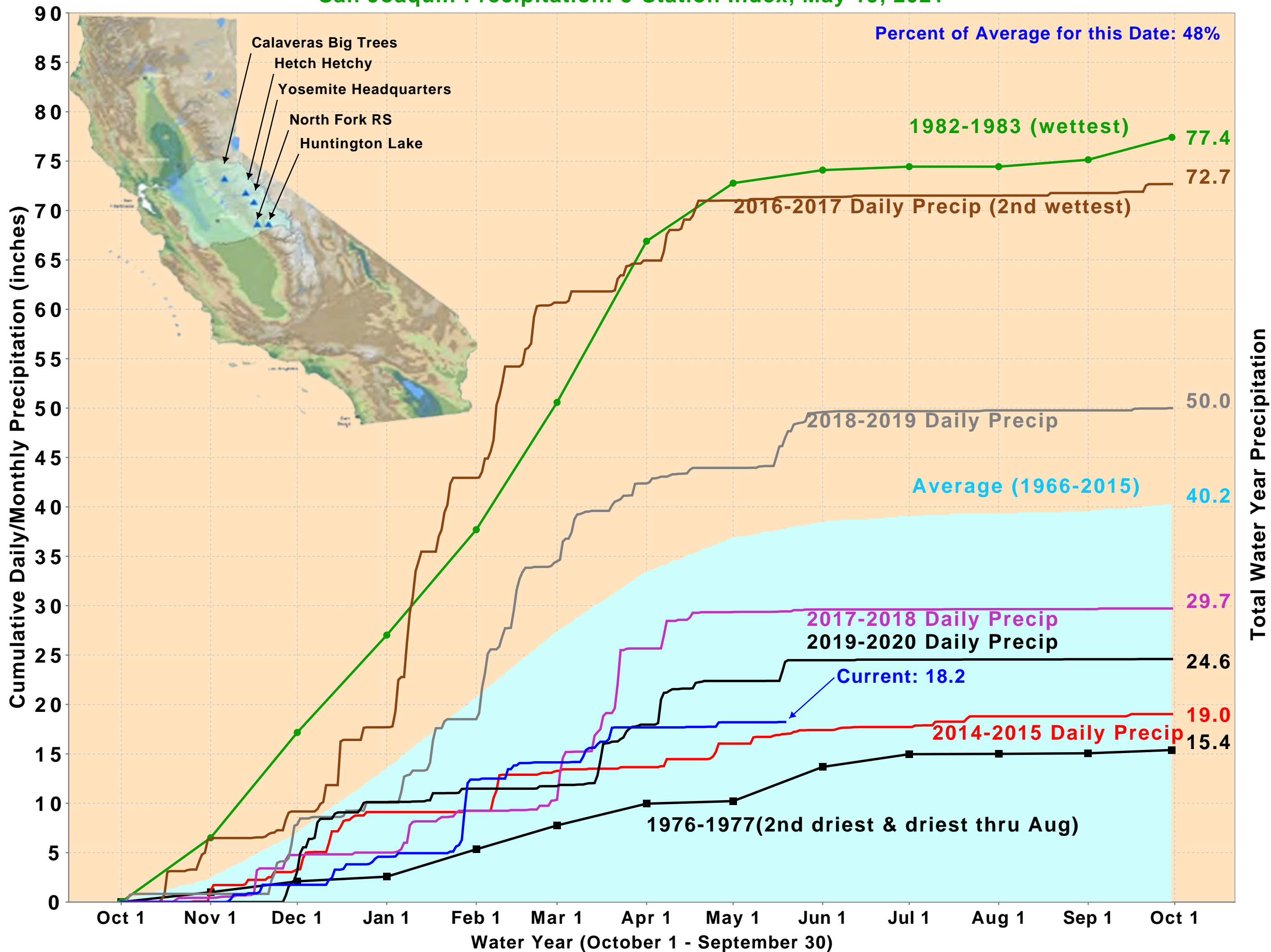
Data Compiled on:  
5/19/2021

# Northern Sierra Precipitation: 8-Station Index, May 19, 2021

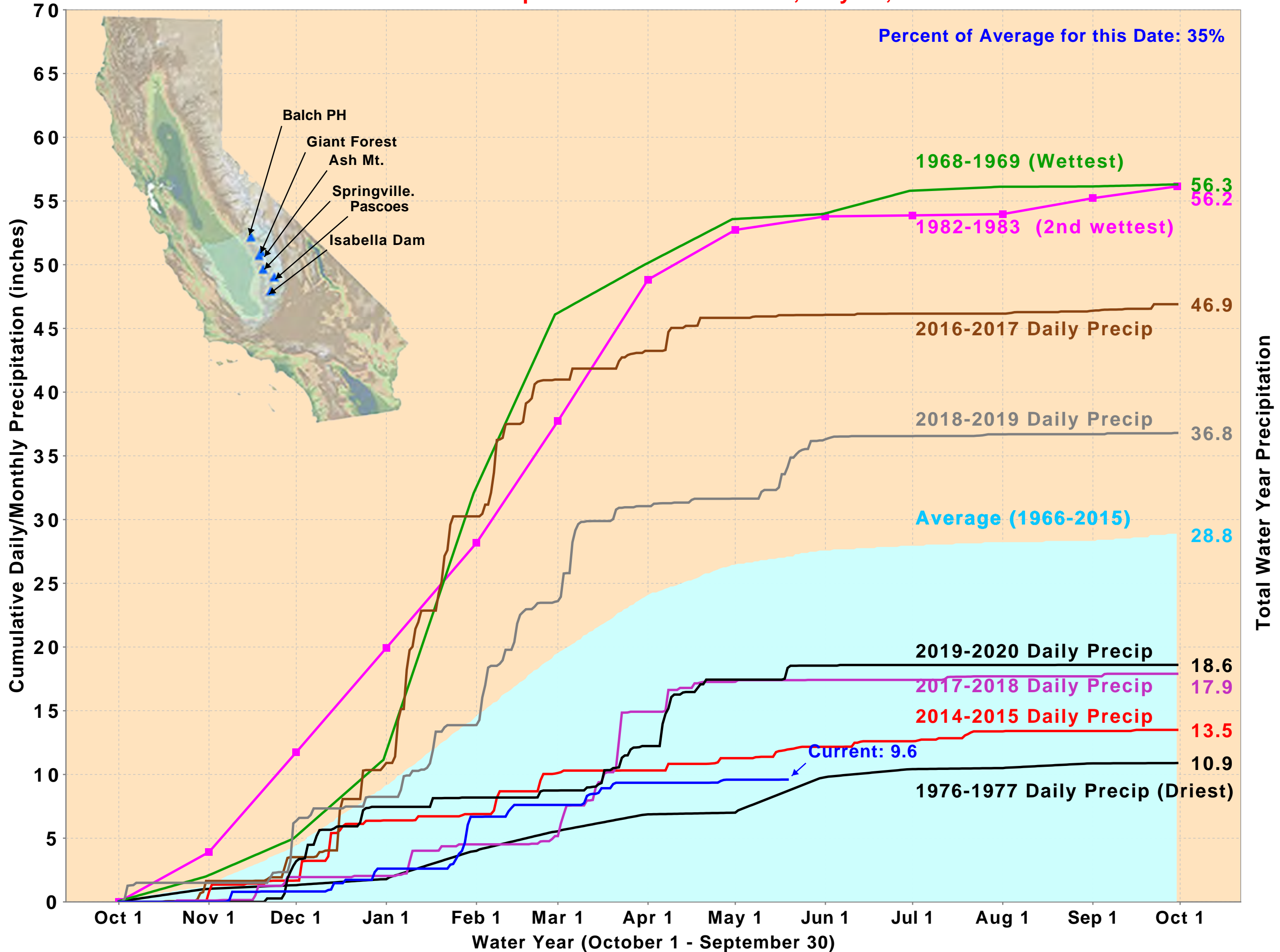




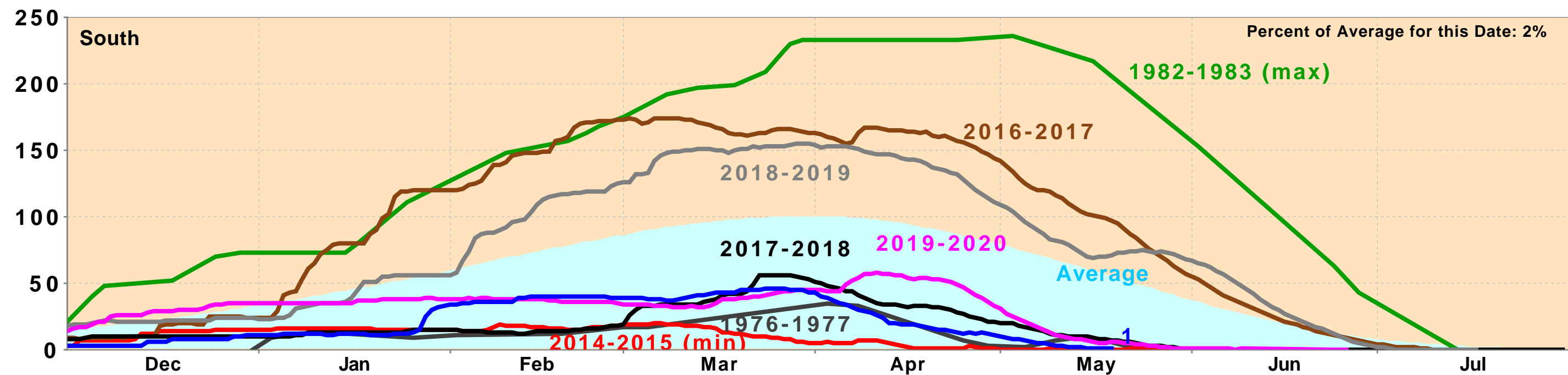
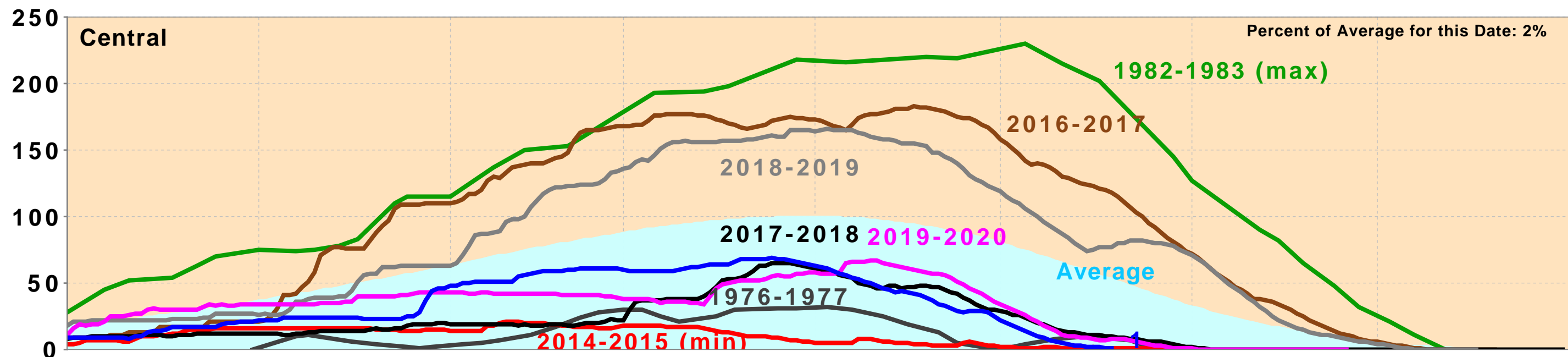
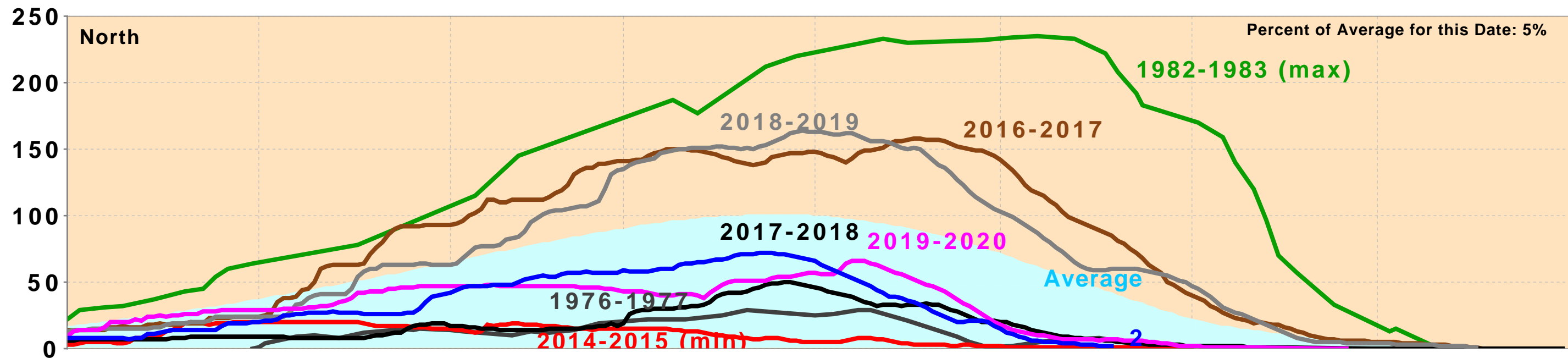
# San Joaquin Precipitation: 5-Station Index, May 19, 2021



# Tulare Basin Precipitation: 6-Station Index, May 19, 2021



# California Snow Water Content, May 19, 2021, Percent of April 1 Average





# Reservoir Conditions

Ending At Midnight - May 18, 2021

## CURRENT RESERVOIR CONDITIONS

