DESERT WATER AGENCY
DECEMBER 17, 2019

BOARD OF DIRECTORS
REGULAR MEETING AGENDA

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

Desert Water Agency operates independently of any other local government. Its autonomous elected board members are directly accountable to the people they serve. The Agency is one of the desert's two State Water Contractors and provides water and resource management, including recycling, for a 325-square-mile area of Western Riverside County, encompassing parts of Cathedral City, Desert Hot Springs, outlying Riverside County and Palm Springs.

1. PLEDGE OF ALLEGIANCE

2. INTRODUCTION OF NEW EMPLOYEE **KRAUSE**

3. APPROVAL OF MINUTES November 19, 2019 **STUART**

4. GENERAL MANAGER'S REPORT **KRAUSE**

5. COMMITTEE REPORTS Executive – December 12, 2019 **STUART**

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. ACTION ITEM (S)

A. Request Acceptance of FY 2018-2019 Singer Lewak LLP Annual Audit **SAENZ**
B. Request Adoption of Resolution No. 1224 Policy on Discontinuation of Residential Water Service for Nonpayment **SAENZ**
C. Request Adoption of Ordinance No. 70 Regulations Governing Water Service **SAENZ**
D. Request Adoption of Ordinance No. 71 Regulations Governing Sewer Service **SAENZ**
E. Request Adoption of Resolution No. 1225 Establishing Rates, Fees & Charges for Sewer Service **SAENZ**
F. Request Adoption of Resolution No. 1226 Establishing Rates, Fees & Charges for Domestic Water Service, Backup Facility, Supplemental Water Supply Development & Service Connection Charges **SAENZ**
G. Request Approval of Budget Augmentation for Work Order 13-119-L & Re-Allocation of a Portion of Regulatory Compliance Reserve General Fund Account for Surface Water Treatment Facility in Chino Canyon **JOHNSON**
H. Request Board Action on Claim for Damages Filed by Vanessa Spaeth **KRAUSE**
I. Request Adoption of Resolution No. 1227 & No. 1228 to File Application for Sustainable Groundwater Management Grant Program – Round 3 Planning Grant for Indio and Mission Creek Subbasins Modelling, Data Collection and Alternative Plan Update **KRAUSE**
J. Request Approval of First Amendment to 2019 Reservoir Project Agreement **KRAUSE**

8. DISCUSSION ITEM (S)

A. Report on ACWA Fall Conference Attendance **BOARD**
B. November Water Use Reduction Figures **METZGER**
C. State Water Contractors' Meeting – November 21, 2019 **RIDDELL**

9. OUTREACH & CONSERVATION **METZGER**

A. Activities & Events

10. DIRECTORS COMMENTS AND 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

B. CONFERENCE WITH LEGAL COUNSEL – EXISTING LITIGATION
Pursuant to Government Code Section 54956.9 (d) (1)
Name of Case: Mission Springs Water District vs. Desert Water Agency

C. CONFERENCE WITH LEGAL COUNSEL – EXISTING LITIGATION
Pursuant to Government Code Section 54956.9 (d) (1)
Name of Case: Albrecht et al vs. County of Riverside

D. CONFERENCE WITH LEGAL COUNSEL – EXISTING LITIGATION
Pursuant to Government Code Section 54956.9 (d) (1)
Name of Case: Abbey et al vs. County of Riverside

E. CONFERENCE WITH LEGAL COUNSEL – EXPOSURE TO LITIGATION
Pursuant to Government Code Section 54956.9 (d) (2)
Alan Neil Freiman, et al vs. Safari Park, Inc.
Riverside County Superior Court Case No. PSC1806308

F. CONFERENCE WITH LEGAL COUNSEL – ANTICIPATED LITIGATION
Pursuant to Government Code Section 54956.9 (d) (2)
Claim Submitted by Driscoll & Omens

12. RECONVENE INTO OPEN SESSION – REPORT FROM CLOSED SESSION

13. ADJOURN

Desert Water Agency
REGULAR BOARD MEETING
December 17, 2019

The following employee is scheduled to attend and be introduced to the Board of Directors at the December 17, 2019 Board Meeting:

Samantha Lopez
May 23, 2019
Accounting Supervisor

3

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

November 19, 2019

DWA Board:	Joseph K. Stuart, President	)
	Kristin Bloomer, Vice President	)
	Craig Ewing, Secretary-Treasurer	)
	Patricia G. Oygar, Director	)
	James Cioffi, Director	)
DWA Staff:	Mark S. Krause, General Manager	)
	Steve Johnson, Assistant General Manager	)
	Esther Saenz, Finance Director	)
	Sylvia Baca, Asst. Secretary of the Board	)
	Ashley Metzger, Outreach & Cons. Manager	)
	Kris Hopping, Human Resources Manager	)
Consultant:	Michael T. Riddell, Best Best & Krieger	)
	Bob Reeb, Reeb Government Relations, LLC	)
Public:	David Freedman, P.S. Sustainability Commission	)
	Dr. Lani Miller, P.S. Sustainability Commission	)
	Mike McCulloch, Palm Springs resident	)

Pledge of Allegiance

18590. President Stuart opened the meeting at 8:00 a.m. and asked everyone to join Secretary-Treasurer Ewing in the Pledge of Allegiance.

Approval of 11/05/19 Regular Board Mtg. Minutes

18591. President Stuart called for approval of the November 5, 2019 Regular Board Meeting Minutes.

Director Oygar moved for approval. After a second by Vice President Bloomer, the minutes were approved by the following vote:

AYES:	Oygar, Bloomer, Stuart
NOES:	None
ABSENT:	None
ABSTAIN:	Ewing, Cioffi (Due to absence)

General Manager's Report

18592. President Stuart called upon General Manager Krause to provide an update on Agency operations.

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

Committee Reports – Human Resources 11/12/19

18593. President Stuart noted the minutes for the November 12, 2019 Human Resources Committee meeting were provided in the Board's packet.

Executive 11/14/19

18594. President Stuart noted the minutes for the November 14, 2019 Executive Committee meeting were provided in the Board's packet.

Secretary-Treasurer's Report (October)

18595. President Stuart called upon Secretary-Treasurer Ewing to present an overview of financial activities for the month of October 2019.

Operating Fund

Secretary-Treasurer Ewing reported that the Operating Fund received $3,304,638 in Water Sales Revenue, $176,651 in Reclamation Sales Revenue, $4,268 from SCE for Snow Creek Hydro Power Sales for September 2019, and $88,326 from Construction Deposits. $6,190,177 was paid out in Accounts Payable. Year-to-date Water Sales are 7% under budget, Year-to-date Total Revenues are 4% under budget and Year-to-date Total Expenses are 13% under budget. There were 23,265 active services as of October 31, 2019 compared to 23,241 active services as of September 30, 2019.

General Fund

Reporting on the General Fund, Mr. Ewing stated that $558,984 was received in Property Tax revenues, $1,908,430 in Groundwater Assessments ($451,116 from private pumpers and $1,457,314 from the Operating Fund), $365,562 in State Water Project refunds, and $45,249 was received from SCE for Whitewater Hydro Power Sales for the month of September 2019. $554,642 was paid in State Water Project charges (YTD $5,472,800).

Wastewater Fund

Reporting on the Wastewater Fund, Mr. Ewing reported $2,825 was received in Sewer Contract payments. There are a total of 32 contracts with total delinquents of 5 (16%). $77,437 was paid out in Accounts Payable.

Public Comment

18596. President Stuart opened the meeting for public comment.

Mike McCulloch

Mr. McCulloch spoke noting there is a homeless problem under the Gene Autry Trail bridge at the wash. He indicated the property belongs to the Riverside County Flood Control and he is keeping watch for activity.

Items for Action: Request Authorization for GM to Execute Professional Services Agreement with Water Systems Consulting for CVUWMP

18597. President Stuart called upon Outreach & Conservation Manager Metzger to present Staff's request for Authorization for the General Manager to Execute Professional Services Agreement with Water Systems Consulting for the Coachella Valley Urban Water Management Plan.

Mrs. Metzger reported the six local water agencies (Desert Water Agency, Coachella Valley Water District, Coachella Water Authority, Indio Water Authority, Mission Springs Water District and Myoma Dunes Water Company) plan to develop a regional Urban Water Management Plan to submit in 2021 per Department of Water Resource requirements.

She noted the group selected Water Systems Consulting (WSC) as the consultant to develop the regional plan. Mrs. Metzger indicated Desert Water Agency will be responsible for $25,927.77 or 14.5% of costs. This will achieve a savings for the Agency of more than $110,000 over the 2015 Urban Water Management Plan. The Agency will act as the contract manager for this project and will invoice its five partner agencies for their shares of the costs.

Mrs. Metzger pointed out that the Board authorized the General Manager to sign the letter of agreement on October 15, 2019. All participating agencies have signed the letter of agreement which dictates cost share and decision-making protocol. Staff requests authorization for the General Manager to sign the Professional Services Agreement with Water Systems Consulting for the Coachella Valley Urban Water Management Plan which would be effective today.

Director Oygar moved to approve staff's request. After a second by Director Cioffi, the motion carried by the following vote:

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

Request Approval of Public Events Compensation Policy and Adoption of Resolution No. 1224

18598. President Stuart called upon Outreach & Conservation Manager Metzger to present staff's request for Approval of Public Events Compensation Policy and Adoption of Resolution No. 1224.

Mrs. Metzger noted that members of the Agency Board of Directors do not currently receive compensation for representing the Agency at public events and that other local special districts (Coachella Valley Water District and Mission Springs Water District to name a few) do compensate Directors for their role in attending or staffing events on behalf of the Agency. She indicated that in order to offer compensation, the Agency must adopt a

Items for Action:
(Cont.)
Request Approval of Public Events Compensation Policy and Adoption of Resolution No. 1224

new resolution to outline the terms of that compensation pursuant to DWA Ordinance No. 62 and No. 64 that outline Board Member compensation.

Mrs. Metzger noted the resolution outlines a policy for Board Members to receive one hundred dollars for each day of service representing the Agency at approved public events. The resolution outlines the requirements that must be met in order to receive compensation. Staff recommends approval of Resolution No. 1224.

Director Oygar responded that she does not support Resolution No. 1224 and the amendments to Ordinance's 62 and 64. She suggested keeping the issue of Board compensation flexible, not having a policy and distinguish between representing DWA and attending required meetings. If the attendance falls within receiving compensation, then it should be presented before the Board for approval. Additionally, she suggested taking this issue to the Executive Committee and General Manager to review the Board Compensation survey, then take it before the Board as a discussion item.

After a brief discussion, a decision was made to have the Executive Committee review this subject.

Secretary-Treasurer Ewing made a motion to present Board Compensation Policy to the Executive Committee for further discussion. After a second by Director Cioffi the motion carried by the following vote:

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

18599. President Stuart called upon General Manager Krause to present staff's request for Board Action Regarding Claim filed by Driscoll & Omens on behalf of Karen Persson.

Mr. Krause reported on October 29, 2019, the Agency received a claim by certified mail from the law firm of Driscoll & Omens in Albany, CA submitted on behalf of Karen Persson who resides at 2323 N. Sandra Rd. in Palm Springs, seeking reimbursement of Agency charges for water service during 2018 and 2019 that allegedly exceeded the reasonable cost of providing service in violation of Proposition 218. He noted the claim does not explain the basis for alleging that the Agency's charges for water service exceeded the cost of providing service, nor does it specify the amount of the alleged over-charges. Furthermore, the applicable statute provides that claims must be submitted within one year of the injury or damage. Therefore, the

law bars claims for alleged overcharges that allegedly occurred prior to October 29, 2018.

Items for Action: Request Board Action Regarding Claim Filed by Driscoll & Omens on Behalf of Karen Persson

Mr. Krause noted that this same law firm has submitted substantially identical claims with a number of other public agencies that provide water service, on behalf of clients residing within their service areas, and that none of the claims explain the basis for the alleged overcharges. Staff recommends that the Board deny the claim as untimely and for lack of merit and that staff be directed to send notice that the claim has been rejected.

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

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

18600. President Stuart called upon General Manager Krause to present staff's Request for Board Authorization to Execute an Exchange Agreement with Metropolitan Water District (MWD).

Request Board Authorization to Execute Exchange Agreement (MWD)

Mr. Krause reported CVWD has taken this agreement request to their Board last week which was approved and adopted and MWD is scheduled to take the request to their Board on December 3, 2019. Key elements of this agreement, which will terminate on December 31, 2035, include 1) Ending MWD's right to call back 100,000 acre-feet of Table A amount, 2) Enabling MWD's ability to continue to advance deliver water to CVWD and DWA when conditions allow, 3) Providing the ability for 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, and 5) Allowing access to MWD's water storage accounts and defining the cost-sharing structure.

Mr. Krause noted the purpose of this Board request is to replace the previously executed exchange and advance delivery agreements with the 2019 Exchange Agreement, which provides a more streamlined and efficient means of tracking and managing imported water supply deliveries to the western Coachella Valley. No changes to existing CVWD or DWA Table A amounts or SWP Water Supply Contracts are proposed. There will be no change to the December 31, 2035 expiration date of the current exchange and advance delivery agreements, which is aligned with the original SWP contract terminating in 2035 (contract extension amendment approval is ongoing).

Items for Action: (Cont.) Request Board Authorization to Execute Exchange Agreement (MWD)

He pointed out that in consideration for MWD managing DWA's and CVWD's long-term water supply programs such as Glorious Lands (GLC)/Rosedale Rio Bravo, Sites Reservoir, Lake Perris Seepage Recovery, and Delta Conveyance with the same priority as their Table A water, DWA and CVWD will share in the water management costs incurred by MWD. The costs share is in line with the MWD's cost of putting water into storage ($155/af) when necessary. The prior exchange agreements have been a foundational piece to DWA's water management strategy for elimination of groundwater overdraft in the Indio and Mission Creek Subbasins. Authorizing the General Manager to execute the 2019 Exchange Agreement will provide certainty and continuity for staff to meet DWA's water management goals until 2035.

Mr. Krause stated approval of the 2019 Agreement is not subject to CEQA because it does not constitute a "project," pursuant to State CEQA Guidelines §15378(a) and §15378 (b)(5). The action has no potential to result in a direct or reasonably foreseeable indirect physical change in the environment because the action will merely consolidate and reformat existing agreements, with only minor changes, merely consolidates existing agreements into a single agreement without any change to the previously approved entitlements, and constitutes an organizational or administrative activity that will not result in a direct or indirect physical adverse change in the environment not previously analyzed. Even if approval of the 2019 Agreement did constitute a "project" subject to CEQA, the action would be exempt from CEQA review pursuant to State CEQA Guidelines §15061(b)(3) because it can be seen with certainty that there is no possibility that approval of the 2019 Exchange Agreement may have a significant effect on the environment. A Notice of Exemption will be filed with the County Clerk.

In conclusion, Mr. Krause noted that after nearly two years of negotiations and discussions, staff is requesting that the Board authorize the General Manager to execute the completed 2019 Exchange Agreement between Desert Water Agency (DWA), Metropolitan Water District of Southern California (MWD), and Coachella Valley Water District (CVWD). Based on the environmental review process required under the California Environmental Quality Act (CEQA), it was determined that the amended and restated agreement is exempt under CEQA, and the reasons are provided under the section above.

Items for Action: (Cont.) Request Board Authorization to Execute Exchange Agreement (MWD)

Director Oygar moved to approve staff's request. After a second by Secretary-Treasurer Ewing, the motion carried by the following vote:

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

The Board thanked Mr. Krause and Mr. Riddell for their years of hard work on this agreement.

Request Approval of Eighth Amendment to Tolling & Waiver Agreement with DWR

18601. President Stuart called upon General Manager Krause to present staff's request for Approval of Eighth Amendment to Tolling & Waiver Agreement with DWR.

Mr. Krause reported that the current Tolling Agreement to suspend the deadline for challenging protested items on the statement of charges (SOC) received from the Department of Water Resources (DWR) under the Agency's water supply contract will expire on December 31, 2019. The State Water Contractors (SWC) staff are requesting adoption of an Eighth Amendment to the Tolling Agreement which would extend the Agreement for 2 years to December 31, 2021. In accordance with contract requirements, formal protests concerning the annual SOC's are due no later than December 21st each year. He noted that the Tolling Agreement provides the SWC's the time and the forum to lodge their protests and provides DWR the ability to address the protest items and potentially avoid legal action. Staff requests authorization to execute the Eighth Amendment extending the Tolling Agreement for up to two years pending contractor consensus and legal counsel review.

Director Cioffi moved to approve staff's request. After a second by Director Oygar, the motion carried by the following vote:

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

Request Board Approval of Desert Water Agency Position Classification Schedule Change

18602. President Stuart called upon Human Resources Manager Hopping to present staff's request for Approval of Desert Water Agency Position Classification Schedule Change.

Mrs. Hopping announced that this item will be discussed during Closed Session.

18603. President Stuart called upon Outreach & Conservation Manager Metzger to provide a report on the October Water Use Reduction Figures.

Discussion Item:

October Water Use Reduction Figures

Mrs. Metzger reported that the Agency and it customers achieved an 11.5% reduction in potable water production during October 2019 compared to the same month in 2013. She noted the cumulative savings over the last twelve months is 19.4%.

18604. President Stuart asked Mr. Reeb to present his 2019 Annual Legislative Report.

Legislative Report

Mr. Reeb provided a highlight of his report and discussed the following items: 1) State Budget, 2) Water Tax, 3) Agency Successfully Fights Back Against Proposed New Mandates, 4) Perfluoroalkyl and polyfluoroalkyl substances (PFAS), 5) Agency Remains Active on the Legislative Front, and 6) DWA an Effective Advocate on Behalf of its Taxpayers and Customers.

18605. Secretary-Treasurer Ewing noted on a recent trip to Egypt, he visited the Aswan High Dam built in the 1960's which created Lake Nasser and since the creation of the lake, the rainfall has increased.

Director's Comments/Requests
Secretary-Treasurer Ewing

Vice President Bloomer reported the Riviera Hotel has received approval for two of their buildings to be changed into time-shares and will be doing a remodel and they are interested in the toilet rebate program for commercial properties.

Vice President Bloomer

President Stuart commended staff on the DWA facility tour. He noted he received many compliments.

President Stuart

18606. At 10:05 a.m., President Stuart convened into Closed Session for the purpose of Conference with Legal Counsel, (A) Existing Litigation, pursuant to Government Code Section 54956.9 (d) (1), Agua Caliente Band of Cahuilla Indians vs. Coachella Valley Water District, et al; (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 54959.9 (d) (1), Albrecht et al vs. County of Riverside; (D) Existing Litigation, pursuant to Government Code Section 54959.9 (d) (1), Abbey et al vs. County of Riverside; (E) Exposure to Litigation, pursuant to Government Code Section 54956.9 (d) (2), Alan Neil Freiman et al vs. Safari Park, Inc.; (F) Conference with Labor Negotiators, Pursuant to Government Code Section 54957.6 (1), Employee Organization: DWA Employees' Association, Negotiators, General Manager Krause, Assistant General Manager Johnson, Finance Director Saenz, Human Resources Manager Hopping.

Closed Session:
A. Existing Litigation – ACBCI vs. CVWD, et al.
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. Exposure to Litigation – Alan Neil Freiman, et al vs. Safari Park, Inc.
F. Labor Negotiators – Employee Organization

18607. At 11:12 a.m., President Stuart reconvened the meeting into open session and announced there was no reportable action taken for Items No. 10-A thru No. 10-E.

Reconvene: No Reportable Action on Items No. 10-A thru No. 10-E

Regarding Item No. 10-F, Secretary-Treasurer Ewing made a motion to accept the Salary Survey and accept the revised salary classification. After a second by Director Cioffi, the motion carried by the following vote:

Item No. 10-F

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

18608. In the absence of any further business, President Stuart adjourned the meeting at 11:13 a.m.

Adjournment

_____
Joseph K. Stuart, President

ATTEST:

_____
Craig Ewing, Secretary-Treasurer

GENERAL MANAGER'S REPORT
DECEMBER 17, 2019

Damaged Fire Hydrant – Vice Tract

On December 2 at approximately 8:30 a.m., Construction staff responded to the notification of a hit fire hydrant in the Vibe Tract (Mystic Mountain View). Staff replaced the bolts and gasket, and placed the hydrant back into service. The water loss was from a fully open 6-inch fire hydrant bury which ran for approximately 30 minutes. A police report was filed.

Stolen Backflows

On December 6 at approximately 6:30 a.m. Construction staff responded to a report of four stolen backflows. The first two were at 213-23 La Verne Way (Palm Canyon Terrace Estates). The second one was at Canyon South HOA (off of La Verne Way). The last three were at West Homeowners Association (off of South Palm Canyon Drive). Authorization was given to replace all of them. Staff advised all of the customers to file a police report. The water loss was metered.

Stolen Backflow

On December 10 at approximately 7:45 a.m. Construction staff responded to a report of a stolen backflow at 1470-76 Andreas Road. Authorization was given to replace and put them back into service, which was done. The water loss was metered and staff filed a police report.

2020 State Water Project Allocation

On December 3, DWR announced an initial State Water Project allocation of 10 percent for the 2020 calendar year, which amounts to 5,575.0 acre-feet of water. State allocations are based on conservative assumptions and may change depending on rain and snow received this winter.

SWP Delivery and Whitewater Hydro Generation Update

As of the end of November, approximately 227,860 AF has been delivered to the Whitewater spreading basins for the year. On October 24, water deliveries were suspended by MWD and were not expected to resume until January 2020. Due to the recent rain activity within the region, water demands by farmers decreased, requiring MWD to store the surplus water. On December 9, MWD began deliveries to the Whitewater recharge basins, and have scheduled the water delivery through the end of December. We anticipate receiving an additional 12,500 AF of water during that time period, to be applied to the advanced delivery account.

As a result of the newly scheduled water deliveries, the Whitewater Hydro Plant is scheduled to start on December 18, and will run until the end of the water deliveries. We anticipate generating approximately 300,000 kWh with an approximate SCE settlement amount of $25,000.

November 20, 2019 Water Strategies Memorandum

Water Conservation Rebate Tax Parity – Language has been introduced in the latest draft of the Federal “Green Act” that would make rebates for water conservation non-taxable. Water Strategies entire memo is attached with more details and topics.

MEMORANDUM

TO: Desert Water Agency
FROM: Water Strategies, LLC
SUBJECT: Federal Update
DATE: November 20, 2019

Highlights in this report:

- Water Conservation Rebate Tax Parity
- Federal Funding
- County of Maui Supreme Court Case Update
- Endangered Species Act
- Agriculture Return Flows in Court

I. Water Conservation Rebate Tax Parity

On November 20, House Ways and Means Chairman Thompson (D – CA) released a draft of the Growing Renewable Energy and Efficiency Now (GREEN) Act.

The draft legislation is intended to be a comprehensive approach to tackling climate change by using the tax code to extend and expand renewable energy uses and reduce greenhouse gas emissions.

Section 305 of the GREEN Act contains the exact language of H.R. 2313, which is the bipartisan Water Conservation Rebate Tax Parity Act introduced in April 2019 by Congressman Huffman (D - CA) and Congressman Gosar (R – AZ).

This measure would change Federal tax law, clarifying that rebates for water conservation and water runoff management improvements are not taxable income. This would ensure that homeowners do not pay income tax when they receive the rebates.

If passed, the IRS would treat water conservation rebates in the same manner as they currently treat energy conservation rebates for insulation, Energy Star-certified windows and doors, and energy efficient appliances.

II. Federal Funding

The Senate passed its first package of funding bills, which includes the Interior and Environment Appropriations bill, on October 31 by a vote of 84-9. The Energy and Water funding bill has not been scheduled for floor time. Senate Appropriations Committee Chairman Richard Shelby (R-AL) has indicated that with the impending impeachment inquiry, the Senate may not have time to consider the remaining funding bills, thereby setting up another Continuing Resolution that he said could run through February or March. To date, all federal agencies are funded under a Continuing Resolution that runs through November 21.

On September 26, the Senate Appropriations Committee unanimously approved the FY2020 Interior and Environment Appropriations bill, which funds the Environmental Protection Agency and various agencies throughout the Department of the Interior. Funding levels for the Environmental Protection Agency are listed below:

	House Bill Status: Cleared House Floor	Senate Bill Status: Cleared Senate Committee	FY2019 Enacted Level	FY2020 President's Request
Environmental Protection Agency	**$9.53 B**	**$9.011 B**	**$8.853 B**	**$6.23 B**

III. County of Maui Court Case Update

The County of Maui mayor motioned for the case, *Hawai'i Wildlife Fund, et. al., v. County of Maui*, to proceed to the Supreme Court despite efforts by the Maui County Council to settle the case.

The case, stemming from controversy over discharges from Maui County's Lahaina wastewater facility, will provide the Supreme Court an opportunity to address the question: is pollution that moves through groundwater before reaching federally regulated waters, in this case the Pacific Ocean, subject to Clean Water Act's National Pollution Discharge Elimination System (NPDES) permitting requirements? The case was heard on November 6.

IV. Endangered Species Act

The U.S. Fish and Wildlife Service proposed to remove Endangered Species Act protection from the interior least tern. The protection has helped interior least tern numbers expand nearly tenfold over the past three decades. The tern would be the 45th species to be delisted for recovery in the United States, including 21 in the past five years.

The interior least tern nests next to major rivers of the Great Plains and Lower Mississippi Valley. The Fish and Wildlife Service added it to the Endangered Species Act list in 1985, citing its diminished population, scattered distribution, and threats to its breeding habitat. The tern is also one of the four target species in the Platte River Recovery Implementation Program (PRRIP).

V. Agriculture Return Flows in Court

On September 6, the U.S. Court of Appeals for the Ninth Circuit reversed the lower court's ruling in the of the petitioners' complaint in the case *Pacific Coast Federation of Fishermen's Associations, et al. v. Glaser*, pointing to an incorrect interpretation of Clean Water Act permitting exception for agricultural discharges.

The case concerns the irrigation system largely operated by the federal government as part of the California Central Valley Project and captures agricultural wastewater. A group of fisherman

claim the Bureau of Reclamation improperly allowed the discharge of pollutants into navigable waters without a National Pollution Discharge Elimination System (NPDES) permit.

Reclamation and the water authority, however, point to an exception from permitting requirements under the Clean Water Act for discharges "composed entirely" of return flows from irrigation agriculture.

The appeals court ruled that the test is whether the return flows that are released by the irrigation system into navigable waters are entirely, not mostly, composed of agricultural-related return flows.

It was conceded that some of the flows handled by the irrigation system were not agriculturally related. The matter was returned to the lower court to apply the correct interpretation of this permitting exception to the facts of this case. This is a very large and complex federal irrigation system, and lower court's disposition of this case is likely to be important. It would be very timely and costly for irrigators to comply with NPDES permits for all non-agriculture related discharges.

Should you have any questions or want additional information, please feel free to contact our office by phoning (202) 698-0690 or by e-mailing tyler.young@waterstrategies.com.

December 10, 2019, Desert Horticultural Society Co-Hosted Event

On the evening of December 10, DWA and the Desert Horticultural Society of Coachella Valley (DHSofCV) co-hosted an event at our facility. The event was a fundraiser for the DHSofCV scholarship fund. Tickets were sold for a succulent ornament craft party. About 15 people attended. DWA may also partner with DHSofCV on a similar Valentine's Day craft event.

DWA-MWD-CVWD Exchange Agreement Signing

On December 11, General Manager Mark Krause attended a special luncheon and signing ceremony at the Colorado River Water Users Association to commemorate the newly extended exchange agreement between Metropolitan Water District of Southern California, Coachella Valley Water District and Desert Water Agency. Representatives of all three organizations were present and signed the agreement in front of an audience and cameras.

This exchange agreement extension, which allows for water imports without building an exorbitantly expensive physical connection to the State Water Project, is the result of years of negotiations and brings significant benefits to our customers including increased reliability. Staff will work to inform customers about this milestone and the benefits negotiated on their behalf.

DWA Featured in ACWA Groundwater Management Video

Desert Water Agency and several other water agencies were featured in a video produced by ACWA called, "Replenishing Groundwater." The video highlights sustainable practices and managers working in areas that rely heavily on groundwater. It is one video in a series called *California H2O: Flowing for the Future* designed to help water agencies tell their stories to the public. General Manager Mark Krause was interviewed and Outreach & Conservation Manager Ashley Metzger helped coordinate and edit the video. Staff will integrate the video into its social media and web channels.

Videos can be accessed at www.acwa.com/h2ovideo.

The other videos include:

- **"Urban Innovation"** showcases state-of-the-art technologies and innovation being used to increase water supply and drought resilience.
- **"From Peaks to the Pacific"** reinforces the need for headwaters management to protect the state's water supply reliability and water quality in the face of devastating wildfires.
- **"A Powerful Connection"** examines water agencies' long history of renewable energy projects and energy efficiency practices.
- **"Saving For a Dry Day"** explores the ongoing efforts to increase water storage throughout the state and better measure and map California's biggest reservoir, the Sierra snowpack.
- **"A Safe Supply"** looks at local efforts to forge collaborations and use state-of-the-art water treatment technology to ensure delivered water is safe to drink.
- **"Tractors and Tech"** showcases the increasingly sophisticated measures used to improve the efficiency of agricultural irrigation.
- **"Investing in Our Future"** looks at the need to invest in aging infrastructure and highlights innovative ways in which water agencies are using technology to keep that investment cost as low as possible for customers.
- **"Fixing the Bay-Delta. What's at Stake"** examines the key issues that make the Delta one of the state's most crucial water resources.
- **"Small Changes, Big Impact"** highlights how water agencies have helped Californians embrace a more water-efficient way of life through education and rebate programs.

SWC Letter to the California Department of Fish and Wildlife

The SWC have enthusiastically offered their support for the DFW proposal to fill in key knowledge gaps in what we know about salmon fry (newly hatched salmon) migration routes and habitat use in the Delta. Millions of dollars have been spent on restoration projects, yet there are few tools to evaluate how the projects will effect endangered salmon runs.

Additionally, the SWC have offered their support for the proposed Sacramento River Nutrient Change Study. The SWC funded an initial phase of this study when the Regional Sacramento Wastewater Treatment Plant (WWTP) went off line for maintenance. A baseline for nutrient loading was established without influence from the WWTP. This will help evaluate the effect of planned WWTP upgrades which will incorporate biological nutrient removal and improve our understanding of the nutrient dynamics in the Bay-Delta system.

Desert Water Agency received the President's Special Recognition Award at the recent Fall conference in San Diego.

The award is for achieving a low ratio of "Paid Claims and Case Reserves" to "Deposit Premiums" in the Property program for the period 04/01/15 – 03/31/18.

DWA will be closed on December 24 and December 25 for the Christmas holiday.

November 21, 2019

Mr. Matt Wells, Branch Chief
Watershed Restoration Grants Branch
California Department of Fish and Wildlife
1416 Ninth Street, 12th Floor
Sacramento, CA 95814

Dear Mr. Wells:

We offer our enthusiastic support for the proposal "*Filling in key gaps: individual-based models of Delta-rearing Chinook fry migration and growth for evaluating restoration and water management scenarios*" by a strong team of scientists from the University of California Santa Cruz, QEDA Consulting, and collaborators from NOAA Fisheries. We are familiar with the proposal team's current work on the Sacramento River winter-run Chinook salmon life cycle model (WRLCM), and a sub-model for the Delta, the Enhanced Particle Tracking Model (ePTM).

They, along with many others, have noted a key data gap in the most poorly understood life stage, fry, because of the difficulties in tagging and monitoring these small-sized fish. Within the Sacramento-San Joaquin Delta in particular, surprisingly little is known about how fry migrants traverse the estuary and utilize habitat in non-natal areas. Yet, millions of dollars are spent on restoration projects in the Delta to develop habitat for this stage with few tools to evaluate how the projects will affect endangered salmon runs.

With their proposal, the team will attempt to fill these knowledge gaps of fry migrant habitat use in the Delta by developing an individual-based model (IBM) of fry movement and rearing within a particle tracking model (PTM) framework. The resulting model, the Fry ePTM, has at least two primary applications. First, the proposed Fry ePTM model results would feed directly into the WRLCM for evaluating a suite of management scenarios, which is similar to how the current smelt ePTM is being used. Second, the proposed Fry ePTM could be used as a tool to evaluate proposed alternatives for habitat restoration in the Delta, not only for endangered winter-run, but all runs of Central Valley Chinook salmon. This application is critical, since we currently don't have quantitative ways to evaluate rearing fry habitat in the Delta.

We have interacted directly with the proposal team on the development of the WRLCM and the smolt ePTM over the past five years and consider their approach to be rigorous and effective. It is our understanding that, if funded, they will continue to keep us involved with their development of this new tool.

Sincerely,

Jennifer Pierre
General Manager

1121 L Street, Suite 1050 • Sacramento, California 95814-3944 • 916.447.7357 • FAX 916.447.2734 • www.swc.org

November 22, 2019

Mr. Matt Wells, Branch Chief
Watershed Restoration Grants Branch
California Department of Fish and Wildlife
1416 Ninth Street, 12th Floor, Sacramento, CA 95814

Dear Mr. Wells:

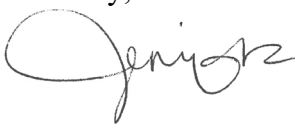
On behalf of the State Water Contractors (SWC), I am writing to offer our support for the proposal "*Sacramento River Nutrient Change Study: Using Changes in Nutrient Loading and Transport to Test Hypotheses about Potential Nutrient Management Actions*" by a multidisciplinary team of scientists from the Sacramento Regional County Sanitation District (Regional San), US Geological Survey, Applied Marine Sciences, Inc., San Francisco State University, BSA Environmental Services Inc., and Resource Management Associates.

The SWC helped fund an initial phase of this study earlier this year when Regional San temporarily ceased effluent discharges to the Sacramento River during a valve replacement project at the Sacramento Regional Wastewater Treatment Plant (SRWTP) as part of the EchoWater Project. The focus of this work was to understand how a no-discharge scenario changed nutrient concentrations in the lower Sacramento River and Delta and to evaluate effects on the ecosystem. In addition to the work funded by the SWC, the research team collected a full suite of river ecosystem data downstream of the SRWTP under current effluent nutrient loading conditions. The focus of this work was to have a baseline for comparison with post-upgrade nutrient loading conditions in 2021. For both phases, samples included water quality, phytoplankton, zooplankton and clam biomass, phytoplankton carbon uptake, and zooplankton growth, complemented with high frequency water quality boat mapping and hydraulic flow modeling. Samples are currently being analyzed.

This Prop 1 proposal is for studies to capture effects of the next phase of the treatment plant upgrade, which will incorporate biological nutrient removal. As the discharge of nutrients decreases, the researchers will be able to measure and map changes in nutrient forms and concentrations and evaluate the effects that those changes have on the ecosystem. The study will address five scientific uncertainties: the main factors affecting potential nutrient-related effects and how the relative importance of the factors vary with space and time; if nutrient management in the northern Delta will increase abundance or nutritional quality of pelagic phytoplankton; the level and type of nutrient change needed to affect harmful algal blooms (HABS), macrophytes or phytoplankton abundance; the most likely alterations in nutrient conditions due to climate change, habitat restoration, and changes in nitrogen forms and loads; and the nutrient levels needed to support adequate primary production for the aquatic food web.

The upgrade of the SRWTP is a large-scale engineering project that will take course over several years and is expected to result in significant water quality changes in the lower Sacramento River and Delta. It is critical to study and evaluate the ecosystem response to the SRWTP upgrade in a robust way. We anticipate that research from this proposal will improve our understanding of nutrient dynamics in the Bay-Delta system.

Sincerely,



Jennifer Pierre
General Manager

Human Resources Meetings and Activities

Meetings:

11/20/19	United Way Board Meeting	UWD Offices
11/21/19	DWA Safety Meeting	DWA
12/02/19	Weekly Staff Meeting	DWA
12/04/19	United Way Executive Board Meeting	UWD Offices
12/09/19	Weekly Staff Meeting	DWA
12/16/19	Weekly Staff Meeting	DWA
12/17/19	DWA Board Meeting	DWA

Activities:

12/03/19	Spoke at two DWAEA Meetings
12/04/19	Engineering Intern Interviews
12/05/19	Engineering Intern Interviews
12/05/19	Laserfiche Training (City of Palm Desert)
12/10/19	2019 Annual Labor & Employment Law Update Webinar
12/12/19	Staff Engineer Interviews

SYSTEM LEAK DATA

(PERIOD BEGINNING NOVEMBER 11, 2019 THRU DECEMBER 10, 2019)

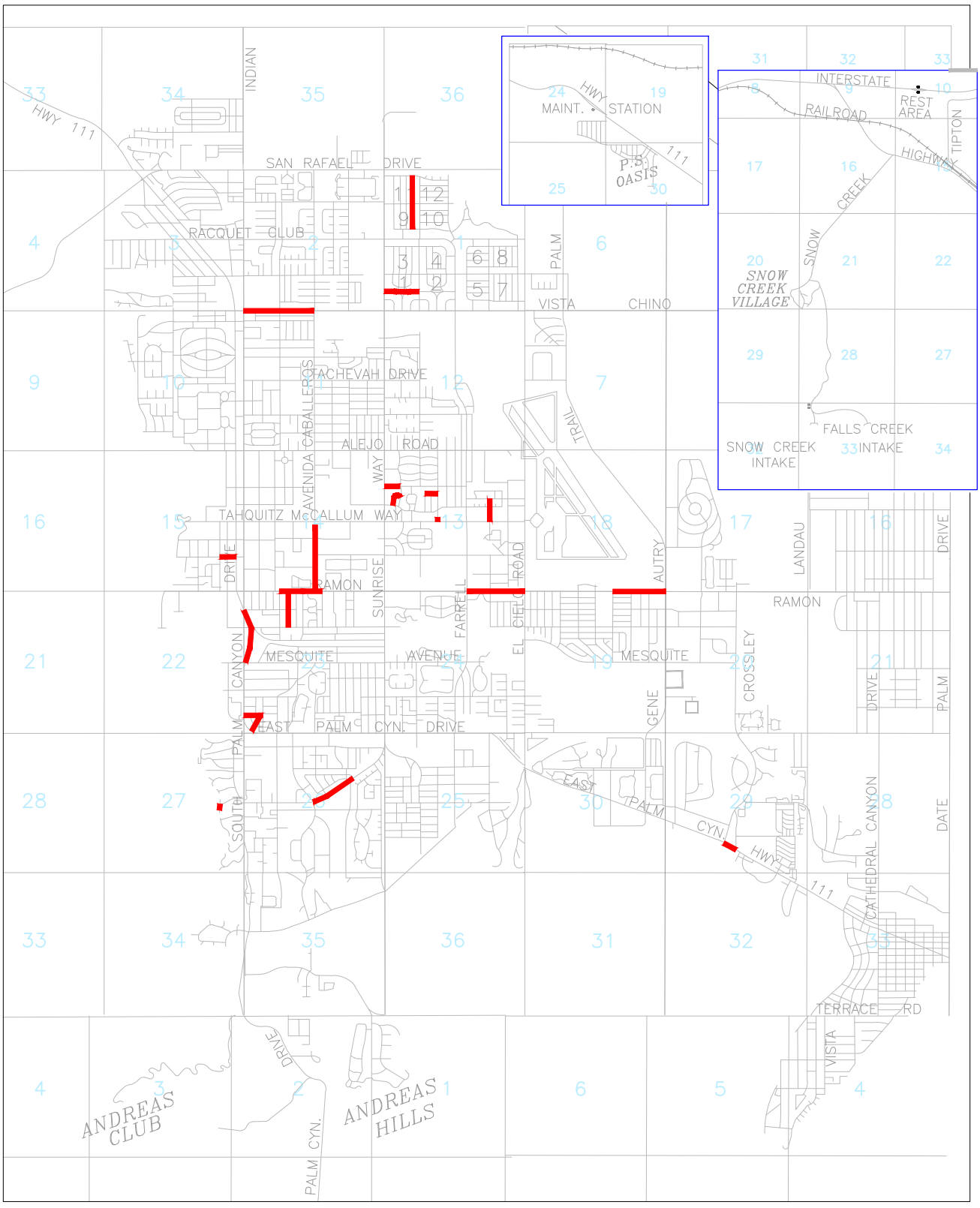
STREET NAME	NUMBER OF LEAKS	PIPE DIAMETER (INCHES)	YEAR INSTALLED	PIPE MATERIAL	PIPE CONSTRUCTION
VIA ENTRADA	3	4	1937	STEEL	BARE/UNLINED
VISTA CHINO	2	20	1949	STEEL	BARE/UNLINED
LOUELLA RD	2	6	1955	STEEL	BARE/UNLINED
RAMON RD (4423NE)	2	6	1955	STEEL	BARE/UNLINED
RAMON RD (4423NW)	2	6	1955	STEEL	BARE/UNLINED
E PALM CANYON DR	2	6	1955	STEEL	BARE/UNLINED
AVENIDA OLANCHA	2	4	1955	STEEL	BARE/UNLINED
TERRY LN	2	4	1956	STEEL	BARE/UNLINED
AVENIDA CABALLEROS	1	14	1953	STEEL	BARE/UNLINED
RAMON RD	1	12	1956	STEEL	BARE/UNLINED
RAMON RD	1	12	1956	STEEL	BARE/UNLINED
LA VERNE WY	1	10	1956	STEEL	BARE/UNLINED
S PALM CANYON DR	1	10	1938	STEEL	BARE/UNLINED
CAMINO MONTE	1	8	1964	STEEL	BARE/UNLINED
DESERT PARK AVE	1	6	1955	STEEL	BARE/UNLINED
AMADO RD	1	6	1946	STEEL	BARE/UNLINED
SUNSET WY	1	6	1956	STEEL	BARE/UNLINED
BARISTO RD	1	4	1936	STEEL	BARE/UNLINED
LURING DR	1	4	1946	STEEL	BARE/UNLINED
CYPRESS RD	1	4	1958	STEEL	BARE/UNLINED
INDIAN TR	1	3	1935	STEEL	BARE/UNLINED
TOTAL LEAKS IN SYSTEM:	**30**				

Streets highlighted in blue are being proposed as part of the
2019/2020 Replacement Pipeline Project

SYSTEM INFORMATION:	
*OLDEST PIPE IN THE SYSTEM (YEAR OF INSTALLATION):	1935
AVERAGE YEAR OF INSTALLATION OF UNLINED STEEL PIPE (SYSTEMWIDE):	1952
AVERAGE AGE OF UNLINED STEEL PIPE (SYSTEMWIDE):	66 YEARS
AVERAGE AGE OF PIPELINE AT THE TIME OF REPLACEMENT:	68 YEARS
TOTAL LENGTH OF PIPE IN SYSTEM OLDER THAN 68 YEARS (LINEAR FEET):	**142,113**
TOTAL LENGTH OF UNLINED PIPE SYSTEMWIDE (LINEAR FEET):	303,391
**AVERAGE LENGTH OF PIPE REPLACED ANNUALLY (LINEAR FEET):	14,500
PROJECTED TIME FRAME FOR 100% REPLACEMENT OF UNLINED STEEL PIPE:	21 YEARS
PROJECTED TIME FRAME FOR 100% REPLACEMENT OF PIPE OLDER THAN 68 YEARS:	**10 YEARS**
YEAR AGENCY TRANSITIONED TO CEMENT LINED STEEL PIPE:	1960

*** THIS PIPELINE IS BEING REPLACED AS PART OF THE 2018/2019 REPLACEMENT PIPELINES PROJECT.**

**** PLEASE NOTE THIS FIGURE REPRESENTS THE AVERAGE LINEAR FOOTAGE OF PIPELINE REPLACED ANNUALLY GIVEN AN AVERAGE ANNUAL BUDGET OF $3 MILLION.**



SYSTEM LEAKS

(Period beginning November 11, 2019 thru December 10, 2019)

DESERT WATER AGENCY

PALM SPRINGS, CALIFORNIA

LEGEND

- LEAK(S) RECORDED
- LEAK(S) RECORDED; INCLUDED IN PROPOSED LIST OF STREETS FOR 2019/2020 REPLACEMENT PIPELINES

DWG. BY	DATE	SCALE
SR	12/19	NTS

EXHIBIT "A"

General Manager's Meetings and Activities

Meetings:

11/19/19	DWA Bi-Monthly Board Meeting	DWA
11/20/19	SWC Delta Committee Meetings	SAC
11/20/19	SWC Policy Meeting	SAC
11/21/19	SWC Monthly Board Meeting	SAC
11/21/19	East Branch Enlargement Cost Allocation Meeting	SAC
11/21/19	Sites Reservoir Committee Monthly Meeting	SAC
11/22/19	DWA Encoder Receiver Transmitter (ERT) Fixed Network	DWA
11/25/19	DWA Weekly Staff Meetings	DWA
12/02/19	DWA Weekly Staff Meetings	DWA
12/02/19	Agency Tour for party from New Zealand (Polly)	DWA
12/02/19	Delta Conveyance Facility SWC Discussions	Conf. Call
12/03/19	ACWA Conference	SD
12/04/19	ACWA Conference	SD
12/05/19	ACWA Conference	SD
12/09/19	DWA Weekly Staff Meetings	DWA
12/10/19	Colorado River Water Users Association Conf.	LV
12/11/19	Colorado River Water Users Association Conf.	LV
12/12/19	Executive Committee Meeting	DWA
12/16/19	DWA Weekly Staff Meetings	DWA
12/17/19	DWA Bi-Monthly Board Meeting	DWA

Activities:

1) SWP – CWF Voluntary Settlement Agreement Framework
2) SWP Contract Extension Amendment
3) DWA Remote Meter Reading Fixed Network
4) Whitewater Hydro – Automatic Re-start
5) State and Federal Contractors Water Authority and Delta Specific Project Committee (Standing)
6) Whitewater River Surface Water Recharge
7) ACBCI Section 14 Facilities & Easements
8) Lake Oroville Spillway Damage
9) Replacement Pipelines 2019-2020
10) DC Project – Finance JPA Committee (Standing)
11) DWA/CVWD/MWD Operations Coordination/Article 21/Pool A/Pool B/Yuba Water
12) DWA/CVWD/MWD Agreements Meetings (Meeting #8)
13) SWP 2019 Water Supply
14) ACBCI Water Rights Lawsuit
15) Whitewater Hydro Operations Coordination with Recharge Basin O&M
16) SGMA Tribal Stakeholder Meetings

Activities:
(Cont.)

17) Whitewater Spreading Basins – BLM Permits
18) Lake Perris Dam Seepage Recovery Project Participation
19) Delta Conveyance Project Cost Allocation
20) DWA Surface Water Filtration Feasibility Snow Creek Village/Palm Oasis
21) MCSB Delivery Updates
22) Well 6 Meaders Cleaners RWQB Meetings
23) SGMA – Indio Subbasin Classification
24) SGMA – San Gorgonio Pass Subbasin
25) UWMP Population Calculation Update/Valley-Wide UWMP
26) RWQCB Update to the SNMP

Minutes
Executive Committee Meeting
December 12, 2019

Directors Present: Joe Stuart, Kristin Bloomer
Staff Present: Mark Krause, Steve Johnson, Esther Saenz

1. Discussion Items

A. Review Agenda for December 17, 2019 Regular Board Meeting
The proposed agenda for the December 17, 2019 meeting was reviewed.

B. 2020 Board Conference Schedule
The 2020 Board conference schedule was reviewed with possible changes.

C. Developer Installed Water Sanitary Sewer Facilities Agreement

D. Expense Reports
The October & November expense reports were reviewed.

2. Other

None

3. Adjourn

7-A

STAFF REPORT
TO
DESERT WATER AGENCY
BOARD OF DIRECTORS

DECEMBER 17, 2019

RE: REQUEST ACCEPTANCE OF SINGER LEWAK LLP ANNUAL AUDIT FOR 2018-2019 FISCAL YEAR

Chad Halliday of Singer Lewak LLP, will be in attendance at today's meeting, at which time he will present their report on the Audit of Desert Water Agency's financial activities for Fiscal Year 2018-2019, and will answer any questions the Board may have with regard to the audit.

Staff has reviewed the Audit Report and recommends its acceptance.

STAFF REPORT
TO
DESERT WATER AGENCY
BOARD OF DIRECTORS

DECEMBER 17, 2019

RE: REQUEST ADOPTION OF RESOLUTION NO. 1224 POLICY ON DISCONTINUATION OF RESIDENTIAL WATER SERVICE FOR NONPAYMENT; ORDINANCE NO. 70 REGULATIONS GOVERNING WATER SERVICE; ORDINANCE NO. 71 REGULATIONS GOVERNING SEWER SERVICE; RESOLUTION NO. 1225 ESTABLISHING RATES, FEES & CHARGES FOR SEWER SERVICE; AND RESOLUTION NO. 1226 ESTABLISHING RATES, FEES & CHARGES FOR DOMESTIC WATER SERVICE, BACKUP FACILITY, SUPPLEMENTAL WATER SUPPLY DEVELOPMENT & SERVICE CONNECTION CHARGES

Senate Bill 998 (SB 998) was signed into law by Governor Brown on September 28, 2018 and Desert Water Agency is required to comply with the Act by February 1, 2020. The purpose of the Act is to provide additional procedural protections to residential water customers before the discontinuation of water service for nonpayment.

SB 998 Required Policy on Discontinuation of Residential Water Service for Nonpayment

SB 998 requires community water systems with more than 200 water service connections to have a written policy on the discontinuation of residential water service for nonpayment and make it available on the Agency's website. The policy must be available in English, Spanish, Chinese, Tagalog, Vietnamese, and Korean, and any other language spoken by at least 10 percent of the Agency's population.

The policy must contain:

1. A plan for deferred or reduced payments;
2. Alternative payment schedules;
3. A formal mechanism for a customer to contest or appeal a bill; and
4. A telephone number for a customer to contact to discuss options for averting discontinuation of residential service for nonpayment

The attached Policy on Discontinuation of Residential Water Service for Nonpayment has been reviewed by legal counsel and determined to be compliant with Senate Bill 998.

In addition to requiring the Agency to adopt a policy on the discontinuation of water service for nonpayment, the Act requires specific procedural requirements before a customer may have service terminated for nonpayment.

The Policy on Discontinuation of Residential Water Service for Nonpayment provides the procedural guidelines regarding notifying customers regarding delinquent charges and pending shut off.

Notification Requirements:

- Written notice to Occupant ten (10) days prior to discontinuation
- In-person or Telephonic notice seven (7) days prior to discontinuation
- Posting of notice of imminent discontinuation of residential service and policy at property at least forty-eight (48) hours before discontinuation of service. (Required on if the Agency is unable to make contact with the customer or an adult person living at the service address by phone or in person)

SB 998 Required updates to existing Regulations and Resolutions

The Agency must revise Regulations Governing Water Service, Regulations Governing Sewer Service, and Resolution establishing Rates, Fees & Charges for Domestic Water Service, Backup Facility, Supplemental Water Supply Development & Service Connection Charges in order to bring procedures and practices into compliance with SB 998.

Revisions to Regulations Governing Water Service:

- Water service discontinuation only after charges are delinquent for 60 days or more.
- Included in SB 998 is the provision for tenants to become the customer of record without being required to pay the landlord's delinquent charges. While Desert Water Agency, in practice, has allowed tenants to sign up for service when circumstances have required, this provision has not been previously written into Desert Water's Ordinance Governing Water Service and has therefore been added. The property owner will remain fully responsible for any past-due charges.

Revisions to Regulations Governing Sewer Service:

- Monthly sewer charges are collected in the same billing as water service and therefore require the same revisions as Regulations Governing Water Service.

Revisions to the Resolution establishing Rates, Fees & Charges for Domestic Water Service, Backup Facility, Supplemental Water Supply Development & Service Connection Charges:

- SB 998 provides for reduce reconnection fees for customers demonstrating financial hardship. Reconnections during normal working hours shall not exceed $50. Desert Water's normal working hour reconnection fee is $70. Customers can demonstrate financial hardship by signing a declaration that he or she has a household income below 200% of the federal poverty level.

Additional SB 998 Requirements

Annual Reporting:

The Agency will be required to annually report to the State Water Resources Control Board the number of times service is discontinued due to inability to pay. This information must also be posted on the Agency's website. The Agency is unable to determine the circumstances that lead to discontinuation of water service in all instances and will therefore report all disconnections.

SB 998 Financial Impact

Notification Requirements:

Currently, Desert Water posts notifications of pending disconnection at each service address 48 hours prior to termination of service. SB 998 requires telephonic notice seven (7) days prior to disconnection. This will not create a duplication or increase in notification efforts, but a transfer from posting notice to telephonic notice. Staff anticipates no material change in labor costs due to this change in notification requirements.

Reduced Reconnection Fees:

In fiscal year 2018/2019, there were approximately 700 instances where residential water service was disconnected for nonpayment. Approximately 40-50% of households may qualify for a reduced turn on fee. Staff expects minimal loss of revenue ($4,500) due to the service reconnection fee being lowered for customers demonstrating financial hardship. Reduced reconnection fees will be supplemented by non-restricted late fee revenues.

Other Ordinance and Resolution Changes

Staff has also taken this opportunity to evaluate the current Ordinance and Resolutions for other revisions or corrections not associated with SB 998. Upon completing the review of all the documents, staff recommends the following revisions and/or corrections:

Ordinance No. 70 - Regulations Governing Water Service
Resolution No. 1226 Establishing Rates, Fees, & Charges for Domestic Water Service, Backup Facility, Supplemental Water Supply Development & Service Connection Charges

- Change Supplemental Imported Water Capacity Charges (SIWCC) to Supplemental Water Supply Development Charges. This name change was approved by the Board in July 2018, however, staff did not make the changes to the documents.
- Add Fire Flow Model and Verification Fees. Currently, the fire department performs field fire flow testing for developers with assistance from Agency construction department staff for valve turning. The fire department is no longer going to offer this service and after consulting with several water districts, it was found that field fire flow tests are rarely performed by other districts. Instead,

districts utilize computer models to analyze system fire flows. This is the preferred method by most districts because it is accurate, can be analyzed using peak demand conditions, and saves water. The proposed fees of $500 for performing a fire flow model with a verification letter and $70 for the letter only, are based on consulting engineering costs to perform the model analysis for the Agency.

Ordinance No. 70 - Regulations Governing Water Service

- Section 6-2.3, Types of Extension, By Applicant: Change "…deposit with Agency a sum of money equal to ten percent of the estimated construction costs…" to the following: "…deposit with Agency a sum of money equal to *twenty* percent of the estimated construction costs…". The deposit funds are used by the Agency for inspection costs. Agency staff have found that ten percent of the estimated costs do not cover inspection costs and are proposing the change to twenty percent.

Resolution No. 1226 Establishing Rates, Fees, & Charges for Domestic Water Service, Backup Facility, Supplemental Water Supply Development & Service Connection Charges
Resolution No. 1225 Establishing Rates, Fees, & Charges for Sewer Service

- Change Plan Check Fees for Agency installed facilities from $140 to $280 and change developer installed facility plan check fees from $140 plus $0.10 per lineal foot to $280 plus $0.35 per lineal foot. Agency staff is requesting this change based on the number of plan check hours that, on average, must be performed by engineering staff. Also, the Agency has been using $0.10 per lineal foot since at least 1980 and staff is recommending the change to $0.35 per foot to bring the fee to present day value.
- Add Non-Interference Letters to the Development Review fee schedule at a rate of $140 per letter. Staff has received several request from developers for Non-Interference Letters regarding rights-of-way within proposed developments. This requires staff to research existing rights-of-way which may take several hours.

Resolution No.1226 Establishing Rates, Fees, & Charges for Domestic Water Service, Backup Facility, Supplemental Water Supply Development & Service Connection Charges

- Revise Backup Facility Charges zone designations, changing from number system to letter system. This change is consist with the Agency billing system zone designations.

Staff requests adoption of Resolution No. 1224 Policy on Discontinuation of Residential Water Service for Nonpayment; Ordinance No. 70 Regulations Governing Water Service; Ordinance No. 71 Regulations Governing Sewer Service; Resolution No. 1225 Establishing Rates, Fees & Charges for Sewer Service; and Resolution No. 1226 Establishing Rates, Fees & Charges for Domestic Water Service, Backup Facility, Supplemental Water Supply Development & Service Connection Charges.

RESOLUTION NO. 1224

RESOLUTION OF THE BOARD OF DIRECTORS OF DESERT WATER AGENCY ADOPTING A POLICY ON DISCONTINUATION OF RESIDENTIAL WATER SERVICE FOR NONPAYMENT

WHEREAS, Desert Water Agency ("Agency") is groundwater management agency duly organized under the laws of the State of California; and

WHEREAS, the Agency operates a public water system that supplies water to residential, commercial, and industrial customers; and

WHEREAS, in 2018, the California Legislature adopted Senate Bill 998, which imposes new and expanded customer protections regarding discontinuation of residential water service for nonpayment and related matters; and

WHEREAS, California Health and Safety Code Section 116906 requires each urban and community water system, including the Agency, to have a written policy on discontinuance of residential service for nonpayment, and such written policy must address specified subjects required by law; and

WHEREAS, the Board of Directors desires to adopt the Policy on Discontinuation of Residential Water Service ("Policy") attached to and incorporated into this Resolution as **Exhibit A**.

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

1. The Board hereby adopts the attached Policy on Discontinuation of Residential Water Service ("Policy") as set forth in **Exhibit A**.

2. If any section, subsection, clause or phrase in this Resolution or the application thereof to any person or circumstances is for any reason held invalid, the validity of the remainder of this Resolution or the application of such provisions to other persons or circumstances shall not be affected thereby. The Board hereby declares that it would have adopted this Resolution and each section, subsection, sentence, clause, or phrase thereof, irrespective of the fact that one or more sections, subsections, sentences, clauses or phrases or the application thereof to any person or circumstance be held invalid.

3. This Resolution shall take effect on February 1, 2020. The attached Policy shall apply to all water bills issued after that date.

ADOPTED this 17th day of December, 2019.

_____
Joseph K. Stuart, President

ATTEST:

_____
Craig Ewing, Secretary-Treasurer

POLICY ON DISCONTINUATION OF RESIDENTIAL WATER SERVICE FOR NONPAYMENT

Adopted by Resolution 1224 of the Desert Water Agency Board of Directors on December 17, 2019

1. **Application of Policy.** This Policy on Discontinuation of Residential Water Service (this "Policy") shall apply to all Desert Water Agency ("Agency") accounts for residential water service, but shall not apply to any accounts for non-residential service. To the extent this Policy conflicts with any other rules, regulations, or policies of the Agency, this Policy shall control.

2. **Contact Information.** For questions or assistance regarding your water bill, the Agency staff can be reached at (760) 323-4971. Customers may also visit the Agency in person Monday through Friday, from 8:00 a.m. to 5:00 p.m., except on Agency holidays, which are listed at www.dwa.org. For emergency contact outside of business hours, customers can call 760-323-4971 and dial "9".

3. **Billing Procedures.** Water service charges are payable to the Agency once every month or at such other frequency as determined by the Board of Directors from time to time. All bills for water service are due and payable fifteen (15) days after mailing or e-mailing by the Agency. Any bills not paid within such period are considered delinquent.

4. **Discontinuation of Water Service for Nonpayment.** If a bill is delinquent for at least sixty (60) days, the Agency may discontinue water service to the service address.

4.1 Written Notice to Customer. The Agency will provide a mailed notice to the customer of record at least fifteen (15) days before discontinuation of water service. The notice will contain:

(a) the name and address of the customer;

(b) the amount of the delinquency;

(c) the date by which payment or payment arrangements must be made to avoid discontinuation of service;

(d) the procedure by which the customer may initiate a complaint or request an investigation or appeal concerning service or charges

(e) a description of the procedure by which the customer may request an alternative payment arrangement, which may include an extension, amortization, or other alternative payment schedule;

(f) the procedure for the customer to obtain information on financial assistance, if applicable; and

(g) the telephone number where the customer may request a payment arrangement or receive additional information from the Agency.

4.2 Written Notice to Occupants or Tenants.

(a) The Agency will also send a notice to the occupants living at the service address at least ten (10) days before discontinuation of water service under the

following circumstances: (i) the Agency furnishes individually metered service to a single-family dwelling, multi-unit residential structure, mobile home park, and the owner, manager, or operator is the customer of record; or (ii) the customer of record's mailing address is not the same as the service address. The notice will be addressed to "Occupant," will contain the information required in Section 4.1 above, and will inform the residential occupants that they have the right to become customers of the Agency without being required to pay the amount due on the delinquent account. Terms and conditions for occupants to become customers of the Agency are provided in Section 8 below.

(b) If the Agency furnishes water to residences through a master meter, the Agency will make a good faith effort, at least ten (10) days prior to termination, to notify the residential occupants that the account is in arrears and the service will be terminated on a date specified in the notice. The Agency will provide notice by either: (i) mailing the notice to each residential unit; (ii) posting the notice on the door of each residential unit, (iii) if providing notice to each unit is impracticable or infeasible, posting two (2) copies of the notice in each accessible common area and at each point of access to the structure or structures; or (iv) making some other good faith, reasonable effort to provide written notice to the occupants. The notice will be addressed to "Occupant," will contain the information required in Section 4.1 above, and will inform the residential occupants that they have the right to become customers of the Agency without being required to pay the amount due on the delinquent account. Terms and conditions for occupants to become customers of the Agency are provided in Section 8 below.

4.3 In-Person or Telephonic Notice. The Agency will also make a reasonable, good faith effort to contact the customer of record or an adult person living at the premises of the customer in person or by telephone at least seven (7) days before discontinuation of service. The Agency will offer to provide in writing a copy of this Policy and to discuss options to avert discontinuation of water service for nonpayment, including the possibility of an extension, amortization, or other payment arrangement.

4.4 Posting of Notice at Service Address. If the Agency is unable to make contact with the customer or an adult person living at the customer's address in person or by telephone, the Agency will make a good faith effort to leave a notice of imminent discontinuation of residential service and a copy of this Policy in a conspicuous place at the service address. The notice and copy of this Policy will be left at the residence at least forty-eight (48) hours before discontinuation of service. The notice shall include:

(a) the name and address of the customer;

(b) the amount of the delinquency;

(c) the date by which payment or payment arrangements must be made to avoid discontinuation of service;

(d) the procedure for the customer to obtain information on financial assistance, if applicable; and

(e) the telephone number where the customer may request a payment arrangement or receive additional information from the Agency.

4.5 Circumstances Under Which Service Will Not Be Discontinued. The Agency will not discontinue residential water service for nonpayment under the following circumstances:

(a) During an investigation by the Agency of a customer dispute or complaint under Section 5.1 below;

(b) During the pendency of an appeal to the Board of Directors under Section 5.3 below; or

(c) During the period of time in which a customer's payment is subject to a Agency-approved extension, amortization, or other alternative payment schedule under Section 6 below, and the customer remains in compliance with the approved payment arrangement.

4.6 Special Medical and Financial Circumstances Under Which Services Will Not Be Discontinued.

(a) The Agency will not discontinue water service if all of the following conditions are met:

(i) The customer, or a tenant of the customer, submits to the Agency the certification of a licensed primary care provider that discontinuation of water service will be life threatening to, or pose a serious threat to the health and safety of, a resident of the premises where residential service is provided;

(ii) The customer demonstrates that he or she is financially unable to pay for residential service within the Agency's normal billing cycle. The customer is deemed financially unable to pay during the normal billing cycle if: (a) any member of the customer's household is a current recipient of CalWORKs, CalFresh, general assistance, Medi-Cal, Supplemental Security Income/State Supplementary Payment Program, or California Special Supplemental Nutrition Program for Women, Infants, and Children, or (b) the customer declares under penalty of perjury that the household's annual income is less than 200 percent of the federal poverty level; and

(iii) The customer is willing to enter into an alternative payment arrangement, including an extension, amortization or other alternative payment schedule with respect to the delinquent charges.

(b) For any customers who meet all of the above conditions, the Agency shall offer the customer one of the following options, to be selected by the Agency in its discretion: (1) an extension of the payment period; (2) amortization of the unpaid balance; or (3) an other alternative payment schedule; The Agency's General Manager will select the most appropriate payment arrangement, taking into consideration the information and documentation provided by the customer, as well as the Agency's payment needs.

(c) The customer is responsible for demonstrating that the conditions in subsection (a) have been met. Upon receipt of documentation from the customer, the Agency will review the documentation within seven (7) days and: (1) notify the customer of the alternative payment arrangement selected by the Agency and request the customer's signed assent to participate in that alternative arrangement; (2) request additional information from the customer; or (3) notify the customer that he or she does not meet the conditions in subsection (a).

(d) The Agency may discontinue water service if a customer who has been granted an alternative payment arrangement under this section fails to do any of the following for sixty (60) days or more: (a) to pay his or her unpaid charges by the extended payment date; (b) to pay any amortized amount due under the amortization schedule; (c) to pay any amount due under an alternative payment schedule; or (c) to pay his or her current charges for water service. The Agency will post a final notice of intent to disconnect service in a prominent and conspicuous location at the service address at least five (5) business days before discontinuation of service. The final notice will not entitle the customer to any investigation or review by the Agency.

4.7 Time of Discontinuation of Service. The Agency will not discontinue water service due to nonpayment on a Saturday, Sunday, legal holiday, or at any time during which the Agency's office is not open to the public.

4.8 Restoration of Service. Customers whose water service has been discontinued may contact the Agency by telephone or in person regarding restoration of service. Restoration shall be subject to payment of: (a) any outstanding amounts, including applicable interest or penalties; (b) any reconnection fees, subject to the limitations in Section 7.1, if applicable; (c) and a security deposit, if required by the Agency.

5. Procedures to Contest or Appeal a Bill.

5.1 Time to Initiate Complaint or Request an Investigation. A customer may initiate a complaint or request an investigation regarding the amount of a bill at least two

(2) business days before the shutoff date on the bill by submitting a written complaint or request to the Agency.

5.2 Review by Agency. A timely complaint or request for investigation shall be reviewed by a manager of the Agency, who shall provide a written determination to the customer. The review will include consideration of whether the customer may receive an extension, amortization, or other alternative payment schedule under Section 6. The Agency may, in its discretion, review untimely complaints or requests for investigation; however, such complaints or requests are not subject to appeal.

5.3 Appeal to Board of Directors. Any customer whose timely complaint or request for an investigation pursuant to this Section 5 has resulted in an adverse determination by the Agency may appeal the determination to the Board of Directors by filing a written notice of appeal with the Agency Secretary within ten (10) business days of the Agency's mailing of its determination. Upon receiving the notice of appeal, the Agency Secretary will set the matter to be heard at an upcoming Board meeting and mail the customer written notice of the time and place of the hearing at least ten (10) days before the meeting. The decision of the Board shall be final.

6. Extensions and Other Alternative Payment Arrangements.

6.1 Time to Request an Extension or Other Alternative Payment Arrangement. If a customer is unable to pay a bill during the normal payment period, the customer may request an extension or other alternative payment arrangement described in this Section 6. If a customer submits his or her request within thirteen (13) days after mailing of a written notice of discontinuation of service by the Agency, the request will be reviewed by a manager of the Agency. Agency decisions regarding extensions and other alternative payment arrangements are final and are not subject to appeal to the Agency's Board of Directors.

6.2 Extension. If approved by the Agency, a customer's payment of his or her unpaid balance may be temporarily extended for a period not to exceed six (6) months after the balance was originally due. The Agency's General Manager shall determine, in his or her discretion, how long an extension shall be provided to the customer. The customer shall pay the full unpaid balance by the date set by the Agency and must remain current on all water service charges accruing during any subsequent billing periods. The extended payment date will be set forth in writing and provided to the customer.

6.3 Amortization. If approved by the Agency, a customer's payment of his or her delinquent balance may be amortized over a period not to exceed twelve (12) months, as determined by the Agency's General Manager in his or her discretion. If amortization is approved, the delinquent balance will be divided by the number of months in the amortization period, and that amount will be added to the customer's monthly bills for water service until fully paid. During the amortization period, the customer must remain current on all water service charges accruing during any subsequent billing periods. The amortization schedule and amounts due will be set forth in writing and provided to the customer.

6.4 Alternative Payment Schedule. If approved by the Agency, a customer may pay his or her delinquent balance pursuant to an alternative payment schedule that will not exceed twelve (12) months, as determined by the Agency's General Manager in his or her discretion. If approved, the alternative payment schedule may allow periodic lump-sum payments that do not coincide with the Agency's established payment date or may provide for payments made more or less frequently than the Agency's regular payment date. During the period of the alternative payment schedule, the customer must remain current on all water service charges accruing during any subsequent billing periods. The alternative payment schedule and amounts due will be set forth in writing and provided to the customer.

6.5 Failure To Comply. If a customer has been granted a payment arrangement under this Section 6 and fails to: (1) pay the unpaid charges by the extension date; (2) pay an amount due under an amortization schedule; or (3) pay an amount due under an alternative payment schedule, then the Agency may terminate water service. The Agency will post a final notice of intent to disconnect service in a prominent and conspicuous location at the service address at least five (5) business days before discontinuation of service. The final notice will not entitle the customer to any investigation or review by the Agency.

7. Specific Programs for Low-Income Customers.

7.1 Reconnection Fee Limits and Waiver of Interest. For residential customers who demonstrate to the Agency a household income below 200 percent of the federal poverty line, the Agency will:

(a) Limit any reconnection fees during normal operating hours to fifty dollars ($50), and during non-operational hours to one hundred fifty dollars ($150). The limits will only apply if the Agency's reconnection fees actually exceed these amounts. These limits are subject to an annual adjustment for changes in the Bureau of Labor Statistics' Consumer Price Index for All Urban Consumers (CPI-U) beginning January 1, 2021.

7.2 Qualifications. The Agency will deem a residential customer to have a household income below 200 percent of the federal poverty line if: (a) any member of the household is a current recipient of CalWORKs, CalFresh, general assistance, Medi-Cal, Supplemental Security Income/State Supplementary Payment Program, or California Special Supplemental Nutrition Program for Women, Infants, and Children, or (b) the customer declares under penalty of perjury that the household's annual income is less than 200 percent of the federal poverty level.

8. Procedures for Occupants or Tenants to Become Customers of the Agency.

8.1 Applicability. This Section 8 shall apply only when the property owner, landlord, manager, or operator of a residential service address is listed as the customer

of record and has been issued a notice of intent to discontinue water service due to nonpayment.

8.2 Agreement to Agency Terms and Conditions of Service. The Agency will make service available to the actual residential occupants if each occupant agrees to the terms and conditions of service and meets the requirements of the Agency's rules and regulations. Notwithstanding, if one or more of the occupants are willing and able to assume responsibility for the subsequent charges to the account to the satisfaction of the Agency, or if there is a physical means, legally available to the Agency, of selectively discontinuing service to those occupants who have not met the requirements of the Agency's rules and regulations, the Agency shall make service available to the occupants who have met those requirements.

8.3 Verification of Tenancy. To be eligible to become a customer without paying the amount due on the delinquent account, the occupant shall verify that the delinquent account customer of record is or was the landlord, manager, or agent of the dwelling. Verification may include, but is not limited to, a lease or rental agreement, rent receipts, a government document indicating that the occupant is renting the property, or information disclosed pursuant to Section 1962 of the Civil Code, at the discretion of the Agency.

8.4 Methods of Establishing Credit. If prior service for a period of time is a condition for establishing credit with the Agency, residence and proof of prompt payment of rent for that period of time is a satisfactory equivalent.

8.5 Deductions from Rental Payment. Pursuant to Government Code Section 60371(d), any occupant who becomes a customer of the Agency pursuant to this Section 8 and whose periodic payments, such as rental payments, include charges for residential water service, where those charges are not separately stated, may deduct from the periodic payment each payment period all reasonable charges paid to the Agency for those services during the preceding payment period.

9. **Language for Certain Written Notices.** All written notices under Section 4 and Section 6.6 of this Policy shall be provided in English, Spanish, Chinese, Tagalog, Vietnamese, Korean, and any other language spoken by ten percent (10%) or more people within the Agency's service area.

10. **Other Remedies.** In addition to discontinuation of water service, the Agency may pursue any other remedies available in law or equity for nonpayment of water service charges, including, but not limited to: securing delinquent amounts by filing liens on real property, filing a claim or legal action, or referring the unpaid amount to collections. In the event a legal action is decided in favor of the Agency, the Agency shall be entitled to the payment of all costs and expenses, including attorneys' fees and accumulated interest.

11. **Discontinuation of Water Service for Other Customer Violations.** The Agency reserves the right to discontinue water service for any violations of Agency ordinances, rules, or regulations other than nonpayment.

12. **Fees and Charges Incurred.** Except as otherwise expressly stated in this Policy, any fees and charges incurred by a customer under any other rules, regulations, or policies of the Agency, including, but not limited to, delinquent charges, shall be due and payable as set forth therein.

13. **Decisions by Agency Staff.** Any decision which may be taken by the Agency's General Manager under this Policy may be taken by his or her designee.

7-C

ORDINANCE NO. 70
DESERT WATER AGENCY

REGULATIONS GOVERNING WATER SERVICE

EFFECTIVE DATE: February 1, 2020

REGULATIONS GOVERNING WATER SERVICE

SECTION 5 TEMPORARY SERVICE CONNECTIONS

SECTION 6 MAIN EXTENSION

SECTION 7 FEES AND CHARGES

SECTION 8 MONTHLY CHARGES

REGULATIONS GOVERNING 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 **ACCOUNT ESTABLISHMENT FEE** shall mean an administrative charge for Agency services to establish an account in the new owner's name.

1-1.2 **AGENCY** shall mean the Desert Water Agency organized and operated pursuant to the provisions of the Desert Water Agency Law, Stats. 1961, Ch. 1069.

1-1.3 **APPLICANT** shall mean an individual, partnership, corporation, or agency which is the owner of the premises for which water service is being applied.

1-1.4 **BACKUP FACILITY CHARGE** shall mean a charge levied on a premises for the purpose of providing water service connection capacity in the Agency's overall water supply.

1-1.5 **BOARD** shall mean the Board of Directors of the Desert Water Agency.

1-1.6 **COMMERCIAL FIRE PROTECTION SERVICE** shall mean any un-metered service connection to a private on-site automatic fire system designed and intended for fire extinguishing.

1-1.7 **CONNECTION CHARGE** (Front Footage Charge) shall mean a charge levied on any premises for the purpose of providing water service.

1-1.8 **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 water facilities.

1-1.9 **CUSTOMER** shall mean the owner of a premises receiving water service.

1-1.10 **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.

1-1.11 **GENERAL MANAGER** shall mean the General Manager of the Desert Water Agency.

1-1.12 **INSTALLATION CHARGE** shall mean a charge levied on any premises covering material, labor and equipment for installing water system facilities.

1-1.13 **INTRACT** or **ONSITE** shall mean that area which lies inside the peripheral boundary of a subdivided area and/or a developed area.

1-1.14 **LOCAL AGENCY** shall mean a city, county, or city and county.

1-1.15 **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 subdivision or parcel map.

1-1.16 **MAIN** or **WATER MAIN** shall mean a 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.

1-1.17 **MAIN EXTENSION** shall mean the installation of any Agency water main and appurtenances either Intract or Offtract beyond the existing water system.

1-1.18 **MONTHLY SERVICE CHARGE** shall mean a charge levied on any premises for the purpose of covering costs for operating, maintaining and replacing the facilities, providing water service, and for billing, collection, and administrative costs.

1-1.19 **OFFTRACT** or **OFFSITE** shall mean that area which lies outside the peripheral boundary of a subdivided area and/or a developed area.

1-1.20 **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.

1-1.21 **PREMISES** shall mean any lot, or property, or any building or other structure.

1-1.22 **PRIVATE PLUMBING** shall mean the customer's pipeline and appurtenances extending from a point designated by the Agency, or at the point of connection to the Agency's meter to the customer's house, building, or structure which receives water.

1-1.23 **REGULATIONS** shall mean the current edition of, and any amendments or revisions to, the Agency's Regulations Governing Water Service.

1-1.24 **REPLACEMENT CHARGE** shall mean a charge on any premises covering material, labor and equipment for replacing a service connection or portions thereof including, but not limited to, meter boxes, valve covers, extensions, and valve lids.

1-1.25 **RESIDENTIAL FIRE PROTECTION SERVICE** shall mean any metered service connection to a private on-site automatic fire sprinkler system designed and intended for fire suppression.

1-1.26 **SERVICE AREA** shall mean that area for which the Agency provides water service.

1-1.27 **SERVICE CONNECTION** shall mean that service piping between a water main and the customer's private plumbing.

1-1.28 **STANDARD SPECIFICATIONS** shall mean the current edition of the Agency's Water System Construction Specifications.

1-1.29 **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.

1-1.30 **SUPPLEMENTAL WATER SUPPLY DEVELOPMENT CHARGE** shall mean a charge levied on a premises for providing water source capacity provided by the Agency's purchase of supplemental water for development.

1-1.31 **TENANT** shall mean an occupant of the residential property who has been allowed to become a customer of record according to the Agency's Policy on Discontinuation of Residential Water Service.

1-1.32 **WATER** shall mean water used for residential, commercial, and irrigation purposes.

1-2 **Other Definitions**: Words or terms not defined above shall be defined in accordance with the **Glossary - Water and Waste 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 water service is being provided for the purpose of determining the size, depth, grade, location, and condition of any water facility, and to determine possible hazards relating to the health, safety and welfare of the people throughout the Agency's water system in accordance with the provisions of these Regulations.

SECTION 3 - WATER SERVICE

3-1 **General Provisions**:

3-1.1 **Shortage of Water Supply and Interruption of Service**: The Agency shall exercise reasonable diligence and care to furnish and deliver a continuous and sufficient supply of water to the customer. 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 water.

3-1.2 **Right to Temporarily Suspend Service**: The Agency, whenever it shall find it necessary for any reason shall have the right to suspend temporarily the delivery of water. In such cases, the Agency will attempt to provide a reasonable notice thereof, as circumstances may permit.

3-1.3 **Water Pressure Conditions**:

3-1.3.1 **Acceptance**: The signing of an application for water connections or for water service shall be prima facie 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 damages 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 water to elevations higher than its existing facilities can serve. Due to topography, and other causes, the pressure is not uniform over 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 parties, in consideration of the installation of water service must agree to accept such 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 water at such times as pressure in the Agency's mains may be insufficient to supply the premises with water and to execute a written release to the Agency for all claims for failure to furnish an adequate water supply.

3-1.4 **Obstructing Meter Boxes**: Water meters and meter boxes are 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 vehicles, dirt, trash, leaves, or lawn cuttings or other obstructions on or over the meter boxes.

3-1.5 **Damage to Meters by Hot Water**: Customer shall be liable for damage which may result from the backing up of hot water from the customer's premises to the

water meter. Should damage occur, the customer shall be notified in accordance with Section 10-1.1 to correct the plumbing condition causing such damage and shall be assessed and charged for the cost of repairs to the water meter. Should the condition not be corrected and/or the meter repair bill not paid within ten days after notice in accordance with Section 11-1.3, the water service for said premises shall be discontinued, and service shall not be restored until said bill is paid together with a charge for restoration of service.

3-1.6 **Changes in Customer's Equipment**: Customers making any material change in the size, character, or extent of the equipment or operations utilizing water service, or whose change in operation results in an increase in the use of water, shall immediately give the Agency a written notice of the nature of the change.

3-1.7 **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 may be given verbally or in writing at the Agency's office.

3-1.8 **Changes in Distribution System**: Any person making improvements or changes which will result in cutting, refitting, relocating, raising, or lowering of service connections, water mains, fire hydrants, meters, valves, or other parts of the water system by the Agency, will be required to agree in writing to indemnify the Agency for all cost 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.

3-1.9 **Resale of Water**: A customer of the Agency may not enter into any contract or agreement to resell water received from the Agency, nor shall the customer deliver or cause to be delivered, water acquired from the Agency to premises other than those prescribed in the application for service.

3-1.10 **Responsibility for Private Plumbing Facilities**: The Agency has no responsibility in the maintenance and operation of a customer's 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 water. The Agency shall not be responsible for any loss or damage caused by the improper care or wrongful act of the customer or of 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 water is turned on originally or when turned on after a temporary turn off. Customers having water heaters, boilers, refrigeration, or other devices requiring a continuous water supply should take all necessary action to prevent damage or the causing of injury to such devices as a result of the shutting off of the water supply. At the

discretion of the Agency, a meter bypass may be installed as a part of the service to provide for a continuous supply of water during removal or repair of the meter. The Agency shall be kept whole and harmless at all times of any 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 water system.

3-1.11 **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 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.

3-1.12 **Check Valves**: If the placing of an approved check valve or other device on the customer's side of the water meter is necessary for the safety of the Agency's water system or appurtenances thereof, such approved check valve shall be immediately installed by the Agency at the expense of the customer. Future maintenance and repairs will be performed by the Agency at the customer's expense. Check valves or other devices necessary for the safety and protection of the customer's private plumbing and appliances will be the responsibility of the customer to install and thereafter maintain.

3-1.13 **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 water service from the Agency's water system without prior consent by 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 the Regulations, and may result in additional charges by the Agency as well as any other civil or criminal remedies imposed, termination of service, or authorized by law.

3-3.1.1 **Connections**: To tap or make any connection to the Agency's facilities or unmetered private fire protection services.

3-3.1.2 **Operate Valves**: To open the valve or extract water from fire hydrants except for the suppression and extinguishment of fire or except when written consent is given by the Agency for temporary construction water use.

3-3.1.3 **Wasting Water**: To cause or permit the waste of water from the Agency's water system, or to maintain or cause or permit to be maintained, any leaky outlets, apparatus, or plumbing fixtures through which water is permitted to run to waste.

3-3.1.4 **Activating Service by Customer**: Should a person turn on the water supply, or permit or cause it to be turned on, without first having made proper application and having paid all required fees and charges, said person will be held liable for all charges and damages as a result of unauthorized activation of water service and water service shall be discontinued until the above charges are paid.

3-3.2 **Responsibility for Private Plumbing**: The Agency assumes no responsibility for the delivery of water through private plumbing or for any damage resulting from the operation of same.

3-4 **Damage to Agency Facilities**: When 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. In situations which, in the discretion of the General Manager, are emergencies, an additional charge in the amount of 100% of the above figure shall be imposed to attempt to recoup in behalf of the Agency and its water customers all direct and indirect costs of such damage, including the threat to the public health and safety caused thereby. In such emergency situations, the minimum billing shall be $500 because of the necessary, intangible, and indirect costs of all such emergencies to the Agency and its water customers.

3-5 **Notification of Change of Ownership**: It shall be the duty of every owner signing an application for 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 water furnished pursuant to such application until the Agency receives written notice to cancel such service. Upon discovery of ownership change, water service will be discontinued unless the subsequent owner makes arrangements with the Agency to continue the service. Discontinuance of water service may require discontinuance of sewer service from the Agency.

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 an unmetered or other special installation, 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 Replacement**: 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 - WATER SERVICE CONNECTIONS

4-1 **Application**: An applicant who desires water service must complete an application form supplied by the Agency. Each applicant for water service may be required to establish credit in accordance with Section 9.

4-2 **Premises to be Served**: The applicant shall describe the premises to be served, and only the premises so specified shall be connected to the Agency's water system. The Agency reserves the right to make separate connections to each and every unit, or to make a single connection to the entire premises.

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 **Separate Service Connections**: A service connection of size and material specified by the Agency shall be required for service to each lot or parcel of a subdivision.

4-5 **Approval of Drawings**: Service connections made to existing Agency water mains for any premises shall be installed only by the Agency. A developer may be allowed by the Agency to install service connections to mains installed by the developer, prior to acceptance by the Agency. Such connections shall require 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.

4-6 **Licensed Contractors**: Only duly authorized and licensed contractors, or employees or agents of the Agency, shall be permitted to install water facilities.

4-7 **Service Size**: The Agency reserves the right to determine the size of the service connection.

4-8 **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 an Agency-owned easement, and the applicant has the responsibility of connecting thereto. The applicant's private plumbing to connect 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.

4-9 **Cost of Installation**: The Agency will permit the installation of water service connections to the applicant's premises at the applicant's expense in accordance with Section 7-1.

4-10 **Appurtenances**:

4-10.1 **Stops and Valves**: Each service connection shall have an Agency-owned meter stop on the inlet side of the meter for exclusive use by the Agency in controlling the use of the water through the service connection, a meter, a check valve, and a customer control valve on the outlet side of the meter for use by the customer. If the meter stop is damaged by the customer, the customer shall be responsible for the cost of replacing meter stop. The repair or replacement of the customer control valve on the customer's side of the meter will be the responsibility of the customer.

4-10.2 **Meters**: All service connections shall be metered except in those cases where, for a limited time, the Agency shall find it desirable not to meter the service because of construction work or other special circumstances. Customarily, meters will be installed in public property adjacent to the curb or property line, but, at the option of the Agency, they 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.

4-10.3 **Cost of Installation**: The cost of installing the meter stop, meter, check valve, customer control valve, meter box, and all necessary pipe and fittings shall be borne by the customer and shall be in accordance with Section 7-1.

4-11 **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 7-9. Plan Check Fees as provided in Section 7-9 shall not apply to applicants for service connections to single family residences (classified as R-1).

4-12 **Inspection of Connections**: Every water service connection installed by other than the Agency shall be subject to inspection, at the applicant's expense, as provided in Section 7-10. The Agency may have an inspector in attendance at all times during the actual work.

SECTION 5 - TEMPORARY SERVICE CONNECTIONS

5-1 **General Provisions**: Temporary services, whether from a fire hydrant or otherwise, are installed for the convenience and use of individuals, contractors and companies doing construction work. However, temporary services are not limited to construction purposes, but may be installed for any use at the discretion of the Agency. Service from facilities installed by a developer shall be considered temporary until the development has been accepted by the Agency. Any temporary service may be discontinued during any emergency for the duration of the emergency. The length and nature of such emergency will be determined by the Agency. Temporary services are not transferable except to the successors of interest of the applicant by operation of the law.

5-2 **Applications**: An applicant who desires temporary water service must make application with the Agency.

5-3 **Duration**: Temporary service connections shall be terminated within six months after installation unless the applicant makes written application for and receives written extension of time from the Agency.

5-4 **Responsibility for Metered Connections**: The applicant for temporary service shall be held responsible for loss or damage to the temporary service connections from the time of installation until removal, or until 2 business days after notice in writing has been received by the Agency that the applicant has no further need of the temporary service.

5-5 **Meter Readings, Billings and Collections**: Meter readings, billings, and collections shall be in accordance with Section 11.

5-6 **Meter and Backflow Protection Device Deposits**: Deposits for meters and backflow protection device shall be in accordance with Section 7-12.1.

5-7 **Meter and Backflow Protection Device Installation Charges**: Charges for installations of meters and backflow protection device shall be in accordance with Section 7-12.2.

5-8 **Monthly Service Charges**: Monthly service charges shall be in accordance with Section 8-4.

5-9 **Service from Fire Hydrants**:

5-9.1 **General Provisions**: Upon application to and approval by the Agency, water may be procured from fire hydrants. The applicant must specify hydrant location when making application. All hydrant meters will be equipped with the appurtenant apparatus necessary to deliver fire flow demands without the necessity of disconnecting an existing temporary fire hydrant service. The Agency will make the installation, all construction meter moves to other hydrant locations, and remove

the construction meter at the applicant's request and expense. Construction meter moves will be made within two working days of notifying the Agency of the request to move said meter. Whenever the Agency deems the conditions feasible, it may accept requests for the installation, relocation and removal of temporary service connection by telephone. The original receipt issued shall serve as a permit to receive water from only the designated hydrant. When service is terminated, the deposit shall be refunded less any outstanding charges.

5-9.2 **Meter Relocation Charges**: Meter relocation charges shall be in accordance with Section 7-12.3.

5-10 **Service from Other Than Fire Hydrants**:

5-10.1 **General Provisions**: A temporary service connection from a primary source other than a fire hydrant may be procured upon application to and approval by the Agency. The application shall be made in accordance with Section 4.

5-10.2 **Service Installation and Removal Charges**: The charge for installation and removal shall be the greater of (a) the actual cost of installation including labor, material, and equipment plus applicable overheads, or (b) the charge for a regular service connection of equal size. Payment and any necessary refund shall be made in accordance with Section 7-1.5 and 7-2.

SECTION 6 - MAIN EXTENSIONS

6-1 **General Provisions**:

6-1.1 **Individual Extensions**: The Agency will permit extension of its water mains and service connections to individual's premises at the individual's expense, subject to the Agency's requirements and conditions.

6-1.2 **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 or temporary use, the applicant shall execute any and all documents required by the Agency to vest title to those facilities in the Agency.

6-1.3 **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 of and subject to the approval by the Agency.

6-1.4 **Costs**: Adjustment of any difference between the estimated cost and the actual cost of any main extension constructed hereunder will be made as provided in Section 6-2.2.

6-1.5 **Feasibility**: The right is reserved, as the interests of 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 the feasibility is negative or uncertain, as determined by the Agency in its sole discretion.

6-1.6 **Location**: Main extensions will be required in all streets fronting the premises and are to be installed in conjunction with proposed street improvements to the premises. 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.

6-1.7 **Parallel Mains**: Where the premises are located adjacent to a street exceeding 70 feet in width, or a freeway, waterway, or railroad right-of-way, the Agency may elect to install a main extension on the same side thereof as the premises in lieu of extending a service connection across said street, freeway, waterway or railroad right-of-way from an existing or proposed unit. Parallel mains may also be required to eliminate island or median crossings of service and fire hydrant connections.

6-1.8 **Agency Right to Allow Connections**: The Agency shall have the right at any time to allow other users to connect to the Agency's 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.

6-1.9 **Minimum Sizing**: The Agency will not permit a main extension of less than eight inches in diameter unless approved in advanced by the Agency.

6-1.10 **Agency Right to Design and Construct**: The Agency reserves the right to design and construct water facilities at its discretion. The cost of said facilities shall be borne by the applicant including, but not limited to design, materials, and installation.

6-1.11 **Separate Service Connections**: A service connection of size and material required by the Agency's specifications shall be placed to each lot or parcel of a subdivision.

6-2 **Types of Extensions**:

6-2.1 **General**:

6-2.1.1 **Oversizing**: If the Agency elects to require a size or type of main extension in excess of the requirements of the applicant, the applicant will be reimbursed for the additional incremental cost of the material for the oversized requirement only, pursuant to the terms and conditions fixed by the Agency's General Manager.

6-2.1.2 **Off-tract Improvements**: If off-tract improvements are required to serve the applicant's in-tract improvements, the cost of required facilities shall be borne by the applicant, including, but not limited to design, materials and installation.

6-2.1.2.1 **Main Extension Refund Agreement**: The Agency may elect to enter into a refunding agreement with the applicant. The refunding agreement shall contain such terms and conditions as the Board shall from time to time deem appropriate. Any refund shall be based on a front footage charge.

6-2.2 **By Agency**: The Agency, at its option, may extend its 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.

6-2.3 **By Applicant**: The applicant shall furnish security 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".

6-3 **Inspection**: The Agency will provide inspection of the main extension at the applicant's expense as provided in Section 7-10.

6-4 **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 7-9.

6-5 **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 7-11.

SECTION 7 - FEES AND CHARGES

7-1 **Service Connections and Meter Installations**: Each applicant shall pay to the Agency charges for the installation of regular metered service connections and metered residential fire protection service connections then in effect as established by resolution of the Board.

7-1.1 **Time of Payment**: Service Connection and Meter Installation Charges shall be paid to the Agency prior to issuance of a financial arrangement letter from the Agency to the appropriate governmental entity or prior to the provision of water service, whichever occurs first.

7-1.2 **Meter Installations**: Charges for meter installations shall be based on the size of the meter.

7-1.3 **Backup Facility Charges and Supplemental Water Supply Development Charges**: Every applicant for a regular metered service connection or metered residential fire protection service connection shall, in addition to all other charges, pay a Backup Facility Charge and Supplemental Water Supply Development Charge based on the size and type of use 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 new water production and storage facilities. Supplemental Water Supply Development Charges are necessary to supplemental water supplies for development. Backup Facility Charges and Supplemental Water Supply Development Charges 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, both charges shall apply to the difference in service and delivery capacity between the new meter and the old meter which is being replaced.

7-1.3.1 **Exemption**: The Backup Facility Charge and Supplemental Water Supply Development Charge shall apply to all applications for metered service, regardless of type of use, but shall not apply to applications for temporary service or unmetered private fire protection service. The Backup Facility Charge may be reduced or eliminated where certain water improvement facilities constructed in the Base Zone 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.

7-1.4 **Customer Control Valve Installations**: Charges will be collected for the installation of customer control valves. The charge will be determined in accordance with the size of the meter required.

7-1.5 **Service Connection Installations**: Charges will be collected for the installation of service connections. Charge shall be based on the size required to provide adequate service.

7-1.5.1 **Exemption**: A developer who installs water facilities in accordance with Section 6-2.3 shall not be charged a Service Connection Charge for those service connections that developer installs.

7-1.5.2 **Pavement/Concrete Removals and Replacements**: If pavement/concrete removal and replacement or other street improvements are required, a charge will be added to the Service Connection Charge to cover the additional cost of the pavement/concrete removal.

7-2 **Service Size Larger Than Two Inch Installations**: A charge will be collected for installation of service connections larger in diameter than two inches. 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. Should the records show that the cost exceeded the amount deposited by the applicant, the applicant shall be billed for the difference and same shall become due and payable within ten days thereafter. Should the same not be paid within ten days, the Agency shall discontinue water service to the premises where the work was done and shall not furnish water thereto until said bill, together with an additional charge for restoration of service, is paid.

7-3 **Service Relocations**: A charge will be collected for the relocation of activated service connections and shall be the greater of (a) the actual cost including labor, material and equipment plus applicable overheads, or (b) the charge of a regular service connection of equal size. Payment shall be in accordance with Sections 7-1 and 7-2.

7-4 **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 shall be in accordance with Sections 7-1 and 7-2.

7-5 **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 Sections 7-1.2, 7-1.3 and 7-1.4. If, however, the installation of a larger meter requires a larger service connection installation, the charge to the customer shall also include the full cost of the service connection in accordance with Section 7-1 and 7-2.

7-6 **Connection Charges (Front Footage Charge)**: Every applicant who wishes to connect to the Agency's water system shall execute the Agency's standard water service application and pay the Connection Charge where applicable as set by resolution of the Board.

7-6.1 **Exemption**: A developer who installs water facilities in accordance with Section 6-2.3 shall not be charged a Connection Charge for those water facilities that developer installs.

7-7 **Meter Test Deposits**: A deposit will be required to cover the reasonable cost of a meter test as set by resolution of the Board.

7-8 **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.

7-9 **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 water facilities.

7-10 **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.

7-11 **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 water system requirements for proposed developments.

7-12 **Temporary Service Connections**: Temporary Service Connection Charges as follows are set by resolution of the Board:

7-12.1 **Deposits**: A deposit will be required for each construction meter, in addition to a deposit for each backflow protection device. When service is terminated, the deposits shall be refunded less any outstanding charges.

7-12.2 **Installations**: A charge will be collected for the installation of each construction meter, in addition to a charge for the installation of the backflow protection device.

7-12.3 **Relocations**: A charge will be collected for the relocation of each construction meter and backflow protection device.

7-13 **Restoration of Service**: A charge to be set by resolution of the Board will be collected for restoring service that has been discontinued.

7-14 **Backflow Protection Device Installations**: A charge will be collected for the installation of each backflow protection device as set by resolution of the Board.

7-15 **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, development bond amounts, and response to initial studies.

7-16 **Water Quality Sampling**: A charge will be collected for Agency collection and analysis of development Bacteriological Samples as set by resolution of the Board.

7-17 **Account Establishment Fee**: An administrative fee charged for the establishment of an account in a new owner's name as set by resolution of the Board.

7-18 **Fire Flow Model and Verification Fees.** Fire Flow Model and Verification Fees are established by resolution of the Board and shall be charged for the Agency's services in analyzing the water system for proposed development fire flow requirements.

SECTION 8 - MONTHLY CHARGES

8-1 **Metered Services**: For all metered service, the charges for service shall consist of "Monthly Service Charge," "Quantitative Charge," and "Zone Pumping Charge" for water delivered.

8-1.1 **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.

8-1.2 **Quantitative Charges**: The quantitative charge for all metered and unmetered water used for all purposes shall be set by resolution of the Board.

8-1.3 **Zone Pumping Charges**: The service zones of the Agency are designated on a Service Area Map on file in the Agency's office. It shall consist of a base rate zone and separate pumping elevation zones. The Quantitative Charge shall be set by resolution of the Board and shall apply to all zones. In addition, charges to be set by resolution of the Board shall be collected in the pumping elevation zones to reflect the extra costs of pumping to such higher elevations.

8-2 **Commercial Fire Protection Services**: A Monthly Service Charge as set by resolution of the Board shall be determined by the size of the service for unmetered commercial fire protection services.

8-3 **Backflow Protection Devices**: Monthly charges as set by resolution of the Board will be collected for testing and necessary minor repairs of each device.

8-4 **Construction and Temporary Services**: Monthly Service Charges in accordance with Section 8-1 will be collected for metered and unmetered service for construction work and for service of temporary or limited duration.

8-4.1 **Backflow Protection Devices**: Monthly service charges to be set by resolution of the Board.

8-5 **Late Payment Charge**: Monthly water charges that become delinquent after 30 days (billing period) will incur a late fee charge set by Resolution of the Board.

SECTION 9 - CREDIT POLICY

9-1 **Establishing Credit**: Water service, in all cases, will be kept in the name of the property owner. Each applicant for 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 residential 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. All non-residential service will require a deposit, unless the owner has other non-residential service with the Agency and has maintained an account history where service has not been discontinued for nonpayment for 12 consecutive months.

9-2 **Amount of Deposit**: Where credit cannot be established pursuant to Sections 9-1, a deposit shall be required and shall consist of two times the average monthly bill using the most recent 12 months of consecutive service to determine the average. Where a deposit amount cannot be determined by taking an average of the 12 most recent months of service, a minimum deposit will be required based on the size of the water meter which serves the property. The minimum deposit shall be set by resolution of the Board.

9-3 **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 water account. If service is discontinued for nonpayment, the deposit shall remain with the Agency until completion of 24 months of continuous service or until service is ordered discontinued by the Applicant.

The deposit, less the amount of any unpaid water and sewer bills, will be refunded without interest upon discontinuance of service by 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 10 - DISCONTINUANCE AND RESTORATION OF SERVICE

10-1 **Discontinuance of Service**:

10-1.1 **Agency Initiated**: The Agency has the right to discontinue water or sewer service, or both, if a customer fails to comply with these Regulations. Under such circumstances, the Agency will make a reasonable effort to notify the customer. Prior to discontinuance of service, notice is not necessary when the noncompliance, violation, or infraction of these Regulations by the customer results, or is likely to result in a dangerous or unsanitary condition on the premises, or in the water system, or elsewhere. In such case the Agency may order immediate discontinuance of service.

Before discontinuing service, subject to the exception as otherwise provided above, the Agency will give the customer 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. The service address, if different from the billing address, will also receive a notice with an opportunity to be heard within five days of receipt of said notice. If the customer or occupant fails or refuses to comply with the notice or fails to request an opportunity to be heard within five days after the 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.

Residential customers who become 60 days delinquent will be notified according to Desert Water Agency's Policy on Discontinuation of Residential Water Service.

10-1.2 **At Customer's Request**: A customer may have service discontinued by notifying the Agency at least 48 hours (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.

10-2 **Restoration of Service**:

10-2.1 **General Provisions**: A customer whose service has been discontinued may have it restored by making application and paying applicable restoration of service charges in accordance with Section 7-13.

10-2.2 **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 water system once service to the premises has been discontinued in accordance with Section 3-3.1.4.

SECTION 11 - METER READING, BILLING AND COLLECTION

11-1 **Meter Reading and Billing**:

11-1.1 **Rendering of Bills**: Bills for water service shall be based upon monthly meter readings and monthly billings.

11-1.2 **Pro-ration 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 the 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.

11-1.3 **Payment of Bills**: During each month, the Agency shall mail a statement covering charges for all 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 charge to be determined by the General Manager will be added to the amount owing. Any form of payment submitted for payment of water service which is not honored and has been returned by the bank shall be subject to a return payment fee. Such payments shall be replaced by the customer with cash or cashier's check including a returned payment fee as determined by the Agency in order to avoid discontinuance of water service.

11-1.4 **Delinquent Accounts**:

11-1.4.1 **Commercial Water Service:** The bill for commercial water service shall be delinquent if not paid within 15 days after billing. Bills for commercial sewer service, groundwater replenishment service, or other services provided by the Agency shall be delinquent if not paid when due. Nonpayment of any such delinquency after 30 days shall constitute a violation of this ordinance and shall be cause for terminating commercial water service as well as commercial sewer service. When delinquency occurs, a final notice (including a late fee charge) will be mailed to the billing address. If payment has not been received 15 days after 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 occupant opportunity to pay the outstanding account. If occupant does not pay the outstanding account or make arrangements for payment by the date of scheduled turn off, then water and/or sewer service may be discontinued without further notice.

11-1.4.2 **Residential Water Service:** The bill for residential water service shall be delinquent if not paid within 15 days after billing. Bills for residential sewer service shall be delinquent if not paid when due. Nonpayment of any such delinquency

after 60 days shall constitute a violation of this ordinance and shall be cause for terminating residential water service as well as residential sewer service. When delinquency of 60 days occurs, the Agency will pursue collection attempts as outlined in the Desert Water Agency's Policy on Discontinuation of Residential Water Service.

If, in such circumstance, where a tenant has become the customer of record according to the provisions within Desert Water Agency's Policy on Discontinuation of Residential Water Service, the property owner will remain fully responsible for any and all past-due charges for water service to the property, whether incurred by the property owner or by any tenant at the property who becomes the customer of record. The Agency may pursue any and all remedies for all past-due charges for water service to the property, including recording a lien against the property.

11-1.4.3 **Restoration of Service Due to Disconnection for Non-Payment:** Service shall not be restored to the premises until all charges 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 9-1.

A customer who has a delinquency for any premises served by the Agency may not receive water service, recycled water service, or sewer service on another premises 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 turnoff 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.

11-2 **Meter Test at Customer's Request**:

11-2.1 **General Provisions**: A customer may request the Agency to test the meter serving the premises. The Agency will require the customer to deposit an amount for such test in accordance with Section 7-7. The deposit will be returned if the meter is found to register more than two percent fast. The Agency shall request the customer's presence when the test is conducted. A written report of the test will be available to the customer.

11-3 **Adjustment of Bills for Meter Error**:

11-3.1 **General Provisions**: When a water meter is found to be out of order, the charge for 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 11-3.3.

11-3.2 **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.

11-3.3 **Adjustment Based Upon Meter Test**: If a meter tested in accordance with Section 11-2 is found to be registering more than two 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 proceeding the request for the meter test.

When, upon test, a meter is found to be registering more than 25 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 12 – COMMERCIAL FIRE PROTECTION SERVICE CONNECTIONS

12-1 **General Provisions**: When a commercial fire protection service connection is installed, the control valve thereon will be left closed and sealed until a written order to turn on the water is received from the customer. The Agency shall not be liable for damage of any kind for any reason that may occur on or to the premises served. A double check valve must be installed on the commercial fire protection service connection of a type approved by the National Board of Fire Underwriters and equipped with a bypass detection meter.

12-2 **Installation Charge**: The charge for a commercial fire protection service installation shall be the actual cost including labor, material and equipment plus applicable overheads. Payment shall be made in accordance with Section 7-2.

12-3 **Conditions for Service**: Unless otherwise approved by the Agency, a commercial fire protection service connection of size and material required by the Agency's specifications shall be placed to each and every lot or parcel of a subdivision requiring private fire protection service.

Commercial fire protection service shall be used for no other purposes than for the discharge of water in case of fire and for the use of water therefor through automatic or manual means for the extinguishing of fire; and it shall be unlawful to install on said systems any taps, hose bibs or outlets from which water may be drawn for other uses.

12-4 **Penalties for Misuse**: Use of water from a commercial fire protection service for purposes other than extinguishing a fire or testing of the fire line shall constitute a violation of these regulations and the customer shall be charged for the unauthorized use as determined by the Agency's General Manager.

For repeated unauthorized usage, the Agency reserves the right to discontinue the commercial fire protection service and install a regular or fire flow meter at the customer's expense, including all fees as outlined in Section 7-1.3. Upon installation of said metered facility, service shall thereafter be classified as a metered service and shall be billed at the applicable rate. The Agency shall not be held liable for damage which may result from said discontinuance of service.

SECTION 13 - CROSS CONNECTIONS

13-1 **General Provisions**: There shall be no connections installed, located, maintained, or operated between the 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 water to the premises where this condition exists.

13-2 **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 and ordinances of the County of Riverside or any other provision of law.

13-3 **Installation and Maintenance of Devices**: Backflow protection devices of an approved type shall be installed and maintained at the expense of the customer. Installation costs will be charged in accordance with Section 7-14. Maintenance costs to be charged in accordance with Section 13-5.

13-4 **Discontinuance of Service**: The service of 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 if, in the judgment of the General Manager, such action is necessary to protect the water supply or the safety of the water system, and the Agency's determination shall be final and conclusive.

13-5 **Testing Charges**: All backflow protection 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 in accordance with Section 8-3 shall be added to the 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 14 - ENFORCEMENT

14-1 **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.

14-2 **Violations**:

14-2.1 **Written Notice**: Any Person found in violation of these Regulations will be notified pursuant to Section 10-1.1, except when immediate discontinuance of service is required as provided in that Section.

14-2.2 **Corrective Action**: Upon notification by the Agency of any violation of these Regulations, the Customer shall immediately take whatever corrective action may be necessary.

14-3 **Discontinuance of Service**: The Agency may discontinue service for any violation of these Regulations as provided in Section 10.

14-4 **Abatement**: During any period of discontinuance of service, occupancy of such premises shall constitute a public nuisance, whereupon the Agency may cause abatement proceedings to be brought against said premises. In such event, and as a condition of restoration of service, the Customer shall reimburse the Agency for reasonable attorney's fee and cost of suit arising in said action, in addition to the charges provided for in Section 9 and Section 10.

SECTION 15 - SEVERABILITY

15-1 **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 16 - ADOPTION

16-1 **Effective Date**: Except as otherwise provided herein, this Ordinance becomes effective on February 1, 2020.

16-2 **Previous Ordinance Repealed**: Ordinance No. 66 is hereby repealed.

ADOPTED this 17th day of December, 2019.

_____
Joseph Stuart, President
Board of Directors

ATTEST:

_____
Craig Ewing, Secretary-Treasurer
Board of Directors

7-D

ORDINANCE NO. 71
DESERT WATER AGENCY

REGULATIONS GOVERNING SEWER SERVICE

EFFECTIVE DATE: February 1, 2020

REGULATIONS GOVERNING SEWER SERVICE

SECTION 5 SEWER EXTENSIONS

SECTION 6 FEES AND CHARGES

SECTION 7 MONTHLY CHARGES

SECTION 14 EFFLUENT TO COACHELLA VALLEY WATER DISTRICT

SECTION 15 EFFLUENT TO CITY OF PALM SPRINGS

SECTION 16 ADOPTION

REGULATIONS GOVERNING SEWER 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 **APARTMENT** shall mean any dwelling unit within a building containing three or more dwelling units with separate plumbing facilities, but shall not include any building commonly known as a hotel, motel, or condominium.

1-1.3 **APPLICANT** shall mean an individual, partnership, corporation or agency which is the owner of the premises for which sewer service is being applied.

1-1.4 **BOARD** shall mean the Board of Directors of the Desert Water Agency.

1-1.5 **BUILDING SEWER** shall mean the customer's pipeline extending from the customer's house, building or structure, which receives waste discharge from the house, building, or structure and conveys it to the street lateral.

1-1.6 **CAPACITY CHARGE** shall mean a charge levied on a premises for the purpose of providing treatment capacity in a waste water reclamation plant and for conveyance capacity in the sewer system.

1-1.7 **CITY** shall mean the City of Palm Springs.

1-1.8 **CONDOMINIUM** shall mean a unit of a development as defined in Section 1350 of the Civil Code.

1-1.9 **CONNECTION CHARGE (Front Footage Charge)** shall mean a charge levied by the Agency on any premises for the purpose of providing sewer service.

1-1.10 **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 sewer facilities.

1-1.11 **CUSTOMER** shall mean the owner of the premises receiving sewer service.

1-1.12 **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.

1-1.13 **DISTRICT** shall mean the Coachella Valley Water District.

1-1.14 **DUPLEX** shall mean any building containing two dwelling units, excluding any building commonly known as a hotel, motel, apartment, or condominium.

1-1.15 **DWELLING UNIT** shall mean a single family residence; each unit of a duplex, triplex or greater number of similar units; each unit of an apartment, condominium, motel, hotel, and each mobile home.

1-1.16 **EFFLUENT** shall mean waste water or other liquid, partially or completely treated, or in its natural state, flowing out of a treatment plant, or associated basin or reservoir.

1-1.17 **EQUIVALENT DWELLING UNIT (EDU)** shall mean a single family residence; each unit of a duplex, triplex, or a greater number of similar units; each unit of an apartment complex, condominium complex, and each mobile home. Each recreational vehicle or travel trailer park space, and motel or hotel, shall constitute 0.5 equivalent dwelling units. Equivalent dwelling unit (EDU) for commercial use shall be based on actual water consumption or as determined by Agency.

1-1.18 **FIXTURE UNIT (FU)** shall mean a unit value determined by the plumbing and fixture design for both the water supply and wastewater for each building.

1-1.19 **GENERAL MANAGER** shall mean the General Manager of the Desert Water Agency.

1-1.20 **INDUSTRIAL WASTES** shall mean industrial process wastes, including wastes from any producing, manufacturing, processing, or treatment process.

1-1.21 **INSTALLATION CHARGE** shall mean a charge levied on any premises covering material, labor, and equipment for installing sewer system facilities.

1-1.22 **INTERCEPTOR / SEPARATOR SURCHARGE** shall mean the charge established to provide inspection of an interceptor / separator as determined necessary.

1-1.23 **INTRACT** or **ONSITE** shall mean that area which lies inside the peripheral boundary of a subdivided area and/or a developed area.

1-1.24 **LOCAL AGENCY** shall mean a city, county, or city and county.

1-1.25 **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 subdivision or parcel map.

1-1.26 **MONTHLY SERVICE CHARGE** shall mean a charge levied on any premises for the purpose of covering costs for operating, maintaining and replacing the facilities, providing sewer service, and for billing, collection, and administrative costs.

1-1.27 **OFFTRACT** or **OFFSITE** shall mean that area which lies outside the peripheral boundary of a subdivided area and/or a developed area.

1-1.28 **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.

1-1.29 **PREMISES** shall mean any lot, or property, or any building or other structure.

1-1.30 **PRIVATE PLUMBING** shall mean the customer's pipeline and appurtenances extending from a point designated by the Agency or at the point of connection to the Agency's lateral to the customer's house, building, or structure.

1-1.31 **REGULATIONS** shall mean the current edition of, and any amendments or revisions to, the Agency's Regulations Governing Sewer Service.

1-1.32 **SERVICE AREA** shall mean that area for which the Agency provides sewer service.

1-1.33 **SERVICE CONNECTION** shall mean the same as STREET LATERAL.

1-1.34 **SEWAGE** shall mean any untreated residential, commercial, or industrial wastewater or liquid introduced into the sewer system.

1-1.35 **SEWER SERVICE** or **SERVICE** shall mean the furnishing of facilities for the collection, treatment and disposal of sewage, and all the administrative functions auxiliary thereto.

1-1.36 **SEWER SYSTEM** shall mean the facilities for collection, treatment and disposal of sewage constructed by the Agency, maintained and operated by the Agency for the purpose of providing sewage service.

1-1.37 **SEWER MAIN** or **SEWER** shall mean any sanitary sewage or treated industrial waste, or both, consisting of pipe and appurtenances including cleanouts and manholes for the collection of sewage and conveyance thereof.

1-1.38 **SEWER EXTENSION** shall mean the installation of any sewer and appurtenances, either intract or offtract beyond the existing sewer system.

1-1.39 **STANDARD SPECIFICATIONS** shall mean the current edition of the Standard Specifications for the Construction of Sewer Systems of the Agency.

1-1.40 **STREET LATERAL** shall mean that service piping between a sewer main and the customer's private plumbing.

1-1.41 **STREET SEWER** shall mean that portion of any sewer main controlled by the Agency, located in a street, alley, easement, thoroughfare or right of way which is used for connections to serve individuals, premises, customers, and the general public.

1-1.42 **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 project.

1-1.43 **TENANT** shall mean an occupant of the residential property who has been allowed to become a customer of record according to the Agency's Policy on Discontinuation of Residential Water Service.

1-1.44 **WASTE WATER RECLAMATION PLANT** shall mean any arrangement of devices and structures used for treating sewage.

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 sewer service is being provided for the purpose of determining the size, depth, grade, location, and condition of any sewer facility, and to determine the location and discharge connections of plumbing fixtures; and inspection, observation, measurement, sampling, and testing of the quantity and nature of sewage being discharged to any sewer in accordance with the provisions of these Regulations.

SECTION 3 – SEWER SERVICE

3-1 **Required Service Connection**: Upon providing a sewer in any area within the Agency's service area, the Agency may declare the further maintenance or use of septic tanks or any other local means of sewage disposal in such area to be a public nuisance and may require all buildings to be connected with the sewer within 90 days from the completion of such sewer or within 90 days after written notice. In any event, the prevailing monthly sewer charge shall be imposed to all such developed properties at the expiration of the 90 day notice period. A sewer will be deemed available if the main sewer has been constructed and is available for use in any public street, alley, or right of way within 100 feet of the building to be served.

3-2 **Changes in Customer's Equipment**: Customers making any material change in the size, character or extent of the equipment or operations utilizing sewer service, or whose change in operation results in an increase in the discharge of wastewater, shall immediately give the Agency a written notice of the nature of the change.

3-3 **Changes in Collection System**: Any person making improvements or changes which will result in cutting, refitting, relocating, raising or lowering of street laterals, sewer mains or other parts of the sewer system by the Agency will be required to agree in writing to indemnify the Agency for all costs incurred by the Agency in making such changes. When the location of a street lateral is changed at the customer's request, the cost of making such change will be at the customer's expense.

3-4 **Agency Consent**: No premises shall receive sewer service 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.

3-5 **Damage to Agency Facilities**: When damage is 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. In situations which in the discretion of the General Manager are emergencies, an additional charge in the amount of 100% of the above figure shall be imposed to attempt to recoup in behalf of the Agency and its sewer service customers all direct and indirect costs of such damage, including the threat to the public health and safety caused thereby. In such emergency situations, the minimum billing shall be $500 because of the necessary, intangible and indirect costs of all such emergencies to the Agency and its sewer customers.

3-6 **Unauthorized Connections**: It shall be a violation of these Regulations to alter, disturb, uncover, use, make any connections to, or openings into any street sewer or appurtenances thereto without first obtaining permission in writing from the Agency. No person shall make a connection of roof downspouts, exterior foundation drains, areaway drains, air conditioning drains, swimming pool drains, or other sources of surface runoff or ground water to a street lateral which is connected directly or indirectly to a street sewer.

3-7 **Responsibility for Private Plumbing Facilities**: The Agency has no responsibility in the maintenance and operation of a customer's sewer system beyond the 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 discharging sewage. The Agency shall not be responsible for any loss or damage caused by the improper care or wrongful act of the customer or of any of his tenants, agents, employees, contractors, licensees, or permittees in installing or maintaining, using, operating, or interfering with such equipment. The Agency shall be kept whole and harmless at all times of any claims resulting from matters involving quantities, quality, time or occasion of service, or any other phase of the maintenance, operation, and service of a customer's sewer system.

3-8 **Notification of Change of Ownership**: It shall be the duty of every owner signing an application for sewer service to notify the Agency of any change in the ownership of said premises at least two (2) business days prior to such change. Every applicant shall be liable for the sewer service furnished pursuant to such application until the Agency receives written notice to cancel such service. Upon discovery of ownership change, sewer service will be discontinued unless the subsequent owner makes arrangements with the Agency to continue the service. Discontinuance of sewer service may require discontinuance of water service from the Agency.

3-9 **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.

3-10 **Responsibility**: The Agency's responsibility ends at the customer connection to Agency facilities located within Agency or public right-of-way.

3-11 **Ownership**: All street laterals shall remain at all times the property of the Agency.

3-12 **Maintenance**: Street laterals located within an Agency or public right-of-way shall be maintained and repaired by the Agency. Any expense caused to the Agency shall be charged to the customer whenever the act, negligence or carelessness of the customer results in the need for repair by the Agency. If determined by Agency that customer's responsibility begins at the wye connection of the lateral, maintenance and repairs to said lateral shall be performed by the customer.

3-13 **Replacement**: Street laterals within an Agency or public right-of-way shall be replaced by the Agency when rendered unserviceable through normal wear and tear, at the Agency's expense. Whenever the act, negligence, or carelessness of the customer results in the need for replacement of street laterals by the Agency, the expense of replacement will be charged to the customer. In locations where the applicant's premises do not directly abut on a public thoroughfare, the Agency shall not be responsible for replacement of that portion of the lateral that extends beyond the Agency or public right-of-way which shall be a portion of the customer's private plumbing.

SECTION 4 – SEWER SERVICE CONNECTIONS

4-1 **Application**: An applicant who desires sewer service must complete an application form supplied by the Agency. Each applicant for sewer 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 sewer. The Agency reserves the right to make separate connections to each and every unit, or to make a single connection to the entire premises.

4-3 **Division of Property**: Whenever property having a street lateral is divided into two or more parcels, the existing street lateral shall serve only the parcel which it directly enters, and new street laterals shall be required for each of the remaining parcels.

4-4 **Separate Service Connections**: A street lateral of size and material specified by the Agency shall be required for service to each lot or parcel of a subdivision.

4-5 **Approval of Drawings**: Every connection made to any sewer main from any premises shall be installed in accordance with the Agency's Standard Specifications. Sewer drawings will be required and they shall depict plan and profile views of 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.

4-6 **Licensed Contractors**: Only duly authorized and licensed contractors, or employees or agents of the Agency shall be permitted to install sewer facilities.

4-7 **Street Lateral Size**: The Agency reserves the right to determine the size of the street lateral.

4-8 **Street Lateral Location**: Where practicable, the street lateral may be installed 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 street lateral will terminate at a point behind and adjacent to the curb in streets or adjacent to the property line where no curb exits. In locations where the applicant's premises do not directly abut on a public thoroughfare, the Agency, at its option, may approve the installation of a street lateral of conventional length terminating at some practicable location on public property or on an Agency-owned easement, and the applicant has the responsibility of connecting thereto. In the event the applicant's building sewer is installed prior to the time the street lateral is installed, and its location does not correspond with that of the street lateral, then the applicant must bear the additional cost of connecting the street lateral piping with the applicant's building sewer.

4-9 **Installation**: All street laterals to be installed by a developer shall be plugged. Connection to the building sewer is prohibited unless otherwise approved in writing by the Agency.

4-10 **Cost of Installation**: The Agency will permit the installation of street laterals to the applicant's premises at the applicant's expense.

4-11 **Interceptors / Separators**: All interceptors/separators (i.e. grease, oil, sand and lint traps) shall be installed in accordance with the applicable governmental and/or Agency requirements. The applicant shall pay the cost of installation and maintenance. The Agency may at any time inspect the installation and the operation of the facility and require the applicant to perform any maintenance necessary. In all cases, the Agency shall be the final authority in determining the requirements of the installation and inspection of all interceptors/separators.

4-11.1 **Interceptor / Separator Surcharge**: The prevailing Interceptor/Separator Surcharge as provided for in Section 7-2 will be imposed on all premises required to install interceptors/separators.

4-11.2 **Interceptor / Separator Installation**: No interceptor/separator shall be installed without prior approval from the Agency. Applicant shall notify the Agency two (2) business days prior to the start of installation and all installations shall be inspected by the Agency at the applicable hourly rate paid for an inspector by the Agency.

4-12 **Plan Checking**: The Agency will review and check the drawings for sewer service connections, where sewer main extensions are not required, at the applicant's expense as provided in Section 6-3. Plan Check Fees, as provided in Section 6-3, shall not apply to applicants for sewer service connections to single family residences (classified as R-1).

4-13 **Inspection and Connection**: Every connection made to any sewer main shall be subject to inspection in accordance with Section 6-4. The Agency may have an inspector in attendance at all times during the actual work of connection.

SECTION 5 – SEWER EXTENSIONS

5-1 **General Provisions**:

5-1.1 **Individual Extensions**: The Agency will permit extension of its sewer mains and street laterals 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 or temporary 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 their actual construction will be done in accordance with the Agency's Standard Specifications and the 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 sewer extension will be under the inspection of 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 sewer extension constructed hereunder will be made as provided in Section 5-2.2.

5-1.5 **Feasibility**: The right is reserved, as the interests of the Agency may require, to determine the economic and/or engineering feasibility of any sewer extension and the Agency will not approve extensions for which the feasibility is uncertain as determined by the Agency in its sole discretion.

5-1.6 **Location**: Sewer extensions will be required in all streets fronting the premises and to be installed in conjunction with proposed street improvements to the premises. Sewer extensions will be located in streets, in easements provided to the Agency by the applicant, in easements obtained by the Agency, or in property deeded to the Agency. Prior to installing a sewer 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 **Parallel Mains**: Where the premises are located adjacent to a street exceeding 70 feet in width, or a freeway, waterway, or railroad right of way, the Agency may elect to install a sewer main extension on the same side thereof as the premises in lieu of extending a service connection across said street, freeway, waterway, or railroad right of way from an existing or proposed unit. Parallel mains may also be required to eliminate island or median crossings of sewer laterals.

5-1.8 **Agency Right to Allow Connections**: The Agency shall have the right at any time to allow other users to connect to the Agency's sewer 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.

5-1.9 **Minimum Sizing**: The Agency will not permit a sewer main extension of less than eight inches in diameter unless approved in advance by the Agency.

5-1.10 **Agency Right to Design and Construct**: The Agency reserves the right to design and construct sewer facilities at its discretion. 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 **Oversizing**: If the Agency requires a size or type of sewer extension in excess of the requirements of the applicant, the applicant will be reimbursed for the additional incremental cost of the material for the oversized requirement only, pursuant to the terms and conditions fixed by the Agency's General Manager.

5-2.1.2 **Offtract Improvements**: If offtract improvements are required to serve the applicant's intract improvements, the cost of required facilities shall be borne by the applicant, including but not limited to design, materials and installation.

5-2.1.2.1 **Main Extension Refund Agreement**: The Agency may elect to enter into a refunding agreement with the applicant. The refunding agreement shall contain such terms and conditions as the Board shall from time to time deem appropriate. Any refund shall be based on a front footage charge.

5-2.2 **By Agency**: The Agency, at its option, may extend its sewer 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 sewer 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 sewer extension. Within 60 days after the cost of the sewer 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 sewer extension, the Agency may allocate the costs proportionately.

5-2.3 **By Applicant**: The applicant shall furnish security to the Local Agency to guarantee the installation of the sewer extension in the amount equal to the estimated cost thereof as determined by the Agency. The applicant will be required to 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 sewers 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 sewer extension at the applicant's expense as provided in Section 6-4.

5-4 **Plan Checking**: The Agency will review and check the drawings for the sewer extension prior to approval at the applicant's expense as provided in Section 6-3.

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 6-5.

SECTION 6 – FEES AND CHARGES

6-1 **Capacity Charges**: Each applicant shall pay to the Agency a sewer capacity charge, then in effect, as established by resolution of the Board. Capacity charges are based on equivalent dwelling units (EDU) and/or fixture units (FU) as determined by the Agency, and are subject to revision from time to time.

6-1.1 **Time of Payment**: The Capacity Charge shall be paid to the Agency prior to issuance of a financial arrangement letter from the Agency to the appropriate governmental entity or prior to the provision of water or sewer service, whichever occurs first.

6-2 **Connection Charges (Front Footage Charge)**: Every applicant who wishes to connect to the Agency's sewer system shall execute the Agency's standard sewer service application and pay the Connection Charge where applicable in an amount established by resolution of the Board.

6-2.1 **Time of Payment**: The Connection Charge shall be paid to the Agency prior to issuance of a financial arrangement letter from the Agency to the appropriate governmental entity or prior to the provision of water or sewer service, whichever occurs first.

6-2.2 **Exemption**: A developer who installs sewer facilities in accordance with Section 5-2.3 shall not be charged a Connection Charge for those sewer facilities that developer installs.

6-3 **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 drawings for required sewer facilities.

6-4 **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.

6-5 **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 sewer requirements for proposed developments.

6-6 **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 **Monthly Service Charges**: The monthly charge for all types or classes of service shall be set by Resolution of the Board. Service Charges are based on equivalent dwelling units (EDU) and/or fixture units (FU) as determined by the Agency and are subject to revision as deemed necessary.

7-1.1 **Quantitative Charges**: A Quantitative Charge for other than residential use and irrigation purposes shall be charged for metered water use as established by resolution of the Board.

7-1.2 **Treatment By Other Entities**: Charges include those payments the Agency is required to make to other entities to cover operation and maintenance and "in lieu of" taxes.

7-2 **Interceptor / Separator Surcharge**: The monthly charge for those premises with interceptors/separators shall be set by resolution of the Board.

SECTION 8 – CREDIT POLICY

8-1 **Establishing Credit**: Sewer service, in all cases, will be kept in the name of the owner for water service. Each application for sewer service will be required to establish credit to the satisfaction of the General Manager before service will be rendered. Owner credit for sewer service will be deemed established with no additional deposit required, provided the requirements for establishing credit for water service has been approved

SECTION 9 – DISCONTINUANCE AND RESTORATION OF SERVICE

9-1 **Discontinuance of Service:**

9-1.1 **Agency Initiated**: The Agency has the right to discontinue water or sewer service, or both, if a customer fails to comply with these Regulations. Under such circumstances, the Agency will make a reasonable effort to notify the customer. Prior to discontinuance of service, notice is not necessary when the noncompliance, violation or infraction of these Regulations by the customer results in a dangerous or unsanitary condition on the premises, or in the sewer system, or elsewhere. In such case, the Agency may order immediate discontinuance of service.

Before discontinuing service, subject to the exception as otherwise provided above, 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. If the customer fails or refuses to comply with the notice or fails to require 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.

Residential customers who become 60 days delinquent will be notified according to Desert Water Agency's Policy on Discontinuation of Residential Water Service.

9-1.2 **At Customer's Request**: A customer may have service discontinued by notifying the Agency at least two (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.

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 sewer system once service has been discontinued, in accordance with Section 3-6.

SECTION 10 – BILLING AND COLLECTION

10-1 **Rendering of Bills**: The charges fixed for any premises served shall be billed and collected with the charges for water service furnished by the Agency. Bills for sewer service shall be rendered monthly and are due and payable upon receipt. Any check or electronic payment submitted for payment of sewer service which is not honored and returned by the bank shall be subject to a return payment fee. Such checks not paid in cash, money order or cashier's check by the customer shall result in a discontinuance of sewer or water service.

10-2 **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 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.

10-3 **Payment of Bills**: During each month, the Agency shall mail a statement covering charges for all sewer service 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 charge to be determined by the General Manager will be added to the amount owing. Any check or electronic payment submitted for payment of sewer service which is not honored and has been returned by the bank shall be subject to a return payment fee. Such payments shall be replaced by the customer with cash, money order or cashier's check including a returned payment fee as determined by the Agency in order to avoid discontinuance of sewer and water service.

10-4 **Delinquent Accounts**:

10-4.1 **Commercial Sewer Service:** The bill for commercial sewer service shall be delinquent if not paid within 15 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 occupant opportunity to pay the outstanding account. If occupant does not pay the outstanding account or make arrangements for payment by the date of scheduled turn off, then water or sewer service, or both, may be discontinued without further notice.

10-4.2 **Residential Sewer Service:** The bill for residential sewer service shall be delinquent if not paid within 15 days after billing. Nonpayment of any such delinquency after 60 days shall constitute a violation of this ordinance and shall be

cause for terminating residential water or sewer service, or both may be discontinued. When delinquency of 60 days occurs, the Agency will pursue collection attempts as outlined in the Desert Water Agency's Ploicy on Discontinuation of Residential Water Service.

If, in such circumstance, where a tenant has become the customer of record according to the provisions within Desert Water Agency's Policy on Discontinuation of Residential Water Service, the property owner will remain fully responsible for any and all past-due charges for water service to the property, whether incurred by the property owner or by any tenant at the property who becomes the customer of record. The Agency may pursue any and all remedies for all past-due charges for water service to the property, including recording a lien against the property.

10-4.3 **Restoration of Service Due to Disconnection for Non-Payment:** Service shall not be restored to the premises until all charges which are delinquent, 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 premise(s) served by the Agency may not receive sewer service, water service, or recycled water 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 turnoff without further notice. The Agency may file liens against the property or any other properties owned within the State of California by the delinquent customer to enforce collection of delinquent accounts.

SECTION 11 – REGULATIONS OF WASTE AND WATER

11-1 **Discharges**: Except as hereafter provided, no person or customer shall discharge or cause to be discharged any of the following described wastes or waters into any sewer of the Agency:

11-1.1 Any liquid or vapor having a temperature higher than 150°F.

11-1.2 Any waters or wastes which contain more than 150 milligrams per liter (mg/L) of fat, oil or grease.

11-1.3 Any gasoline, benzine, naphtha, fuel oil, or other flammable or explosive liquid, solid or gas.

11-1.4 Any waste products resulting from the handling, storage and sale of fruits and vegetables in wholesale or retail produce establishments, and wastes from plants engaged in the preparation, processing, or preserving of foods not intended primarily for immediate consumption.

11-1.5 Any ashes, cinders, sand, mud, straw, shavings, metal, glass, rags, feathers, tar, coal tar, asphalt, cement, plastics, wood, paunch manure, or any other solid or viscous substance capable of causing obstruction to the flow in sewers or other interference with the proper operation of the sewer system.

11-1.6 Any waters or wastes having a pH lower than 5.0 or higher than 9.5 having any other corrosive property capable of causing damage or hazard to structures, equipment, or personnel engaged in the operation or maintenance of the sewer system.

11-1.7 Any waters or wastes having corrosive property capable of causing damage to or hazard to, or containing a toxic or poisonous substance in sufficient quantity to injure or interfere with the operation of a waste water reclamation plant, or to constitute a hazard to humans or animals.

11-1.8 Any waters or wastes containing dissolved, suspended, or settleable solids of such character and quantity that abnormal attention or expense is required to handle such materials in the sewer system.

11-1.9 Any noxious or malodorous gas or substance in a quantity capable of creating a public nuisance.

11-1.10 Any water or wastes having a biological oxygen demand (BOD) greater than 400 mg/L by weight.

11-1.11 Any water or wastes containing more than 500 mg/L by weight of suspended solids (SS).

11-1.12 Any waters or wastes containing wax, whether emulsified or not, in excess of 100 mg/L or containing substances which may solidify or become viscous at temperatures between 32°F and 150°F.

11-1.13 Any garbage that has not been properly shredded.

11-1.14 Any radioactive wastes or isotopes of such half-life or concentration as may exceed limits established by the Agency in compliance with applicable State or Federal regulations.

11-1.15 Unusual volume of flow or concentration of wastes constituting slugs.

11-1.16 Waters or wastes containing substances which are not amenable to treatment or reduction by the treatment processes employed, or are amenable to treatment only to such degree that the waste water reclamation plant effluent cannot meet the requirements of other agencies having jurisdiction.

11-1.17 Any storm water, surface water, ground water, roof runoff, subsurface drainage, cooling water, or industrial waste.

11-1.18 Any brines or dissolved salts in excess of 1000 mg/L to the sewer system including discharge of salts from regeneration of water softening units in industrial, commercial establishments and private residences and homes.

11-2 **Admission of Prohibited Discharges**: If any waters or wastes are discharged, or are proposed to be discharged to the sewer system, which waters or wastes contain the substances or possess the characteristics enumerated in Section 11-1, and which in the judgment of the Agency may have a deleterious effect upon the sewer system, or which otherwise create a hazard to life or constitute a public nuisance, the Agency may:

11-2.1 Reject the wastes.

11-2.2 Require pretreatment to an acceptable condition for discharge to the sewer system.

11-2.3 Require control over the quantities and rates of discharge to the sewer system.

11-2.4 Require payment to cover the added cost of handling the treatment of waters or wastes not covered by existing sewer charges under the provisions of these Regulations.

11-3 **Pretreatment:** Where required, in the opinion of the Agency, the customer shall provide at his own expense such pretreatment or handling as may be necessary to meet the Agency's requirements and any plans, specifications, and any other pertinent information relating to proposed preliminary treatment, interceptors/separators, or handling facilities shall be submitted for the approval of the Agency and no construction of such facilities shall be commenced until approval is obtained and standards set forth in this Section are met.

11-4 **Industrial Wastes**: Pretreatment of industrial wastes shall be in accordance with the Environmental Protection Agency pretreatment standards which have been promulgated for specific industrial classes.

11-5 **Maintenance of Pretreatment Facilities**: When pretreatment facilities are provided for any waters or wastes to meet the requirements of this Section, they shall be maintained in satisfactory and effective operation by the customer at its expense.

11-6 **Monitoring**:

11-6.1 **Control Manhole**: When required by the Agency, the customer discharging industrial wastes shall install a suitable control manhole together with such necessary meters and other appurtenances in the building sewer to facilitate observation, sampling, and measurement of the wastes. Such manhole shall be accessible and safely located, and shall be constructed in accordance with plans approved by the General Manager. The manhole shall be installed by the customer at customer's expense, and shall be maintained by the customer so as to be safe and accessible at all times.

11-6.2 **Sampling**: All measurements, tests, and analyses of the characteristics of water and wastes to which reference is made in these Regulations shall be determined in accordance with the latest edition of Standard Methods for the Examination of Water and Wastewater, published by the American Public Health Association, and shall be determined at the control manhole provided or upon suitable samples taken at said control manhole. In the event that no special manhole has been required, the control manhole shall be considered to be the nearest downstream manhole in the sewer system from the point where the building sewer is connected. Sampling shall be carried out by customarily accepted methods to reflect the effect of constituents upon the waste water reclamation plant and to determine the existence of hazards to life, limb and property.

11-6.3 **Interceptors / Separators**: (i.e. grease, oil, sand and lint) Interceptors / Separators shall be provided when, in the opinion of the Agency, they are necessary for the proper handling of liquid wastes containing grease in excessive amounts, or any flammable wastes, sand or other harmful ingredients; except that such interceptors / separators shall not be required for dwelling units. All interceptors / separators shall be of a type and capacity approved by the Agency, and shall be located as to be readily and easily accessible for cleaning and inspection. Interceptors / separators shall be maintained in continuously efficient operation at all times by the customer and at the customer's expense.

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 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 these Regulations as provided in Section 9-1.

12-4 **Abatements**: During any period of discontinuance of service, occupancy of such premises shall constitute a public nuisance, whereupon the Agency may cause abatement proceedings to be brought against said premises. In such event, and as a condition of restoration of service, the customer shall reimburse the Agency for reasonable attorney's fee and the cost of suit arising in said action, in addition to the charges provided for in Section 8 and Section 9.

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 – EFFLUENT TO COACHELLA VALLEY WATER DISTRICT

14-1 **Provisions**: The provisions of this Section shall apply to all facilities constructed for the purpose of transporting effluent to the Coachella Valley Water District ("District") for treatment or disposal.

14-2 **Plan Checks and Inspection**: Plans and specifications for construction of sewer facilities shall be subject to approval by the Agency, as well as by the District, at District's request. Construction of the facilities will be subject to inspection by the Agency, as well as by the District, at District's request. The developer of property requiring such construction shall pay to the Agency the prevailing charges for plan checking and inspection services, as determined by the Agency and District.

14-3 **Connections**: Agency shall notify and obtain District's approval before connecting into District's sewer system.

14-4 **Bonds**: The developer of any property shall provide such bonds or other security as the Agency and the District may require to ensure construction of sewer facilities. Neither the Agency nor the District shall be required to give assurances to any governmental agency that sewer service will be provided to the property until such security has been provided or the facilities have been accepted by the Agency and District.

14-5 **Transfer of Title**: Upon satisfactory completion of construction, a developer shall convey to District the title of those facilities lying within District's boundaries. The developer shall convey to the Agency the title to those facilities lying within the Agency's boundaries and within the boundaries of the Whitewater River Stormwater Channel. Title shall be free and clear of all mechanic's liens, or other liens or encumbrances of any kind. The developer shall provide such evidence of clear title as may be required by the Agency or District. The developer shall also convey to the Agency and District all appropriate rights of way for such facilities. All instruments of conveyance shall be in a form approved by the Agency and District.

14-6 **Sewer Capacity Charge**: Each developer whose property is provided with sewer service shall pay to the Agency the Capacity Charge established by the Agency and in effect at the time application for service is made, but in no event shall such charge be less than that established by District.

14-7 **Operations and Maintenance**: The Agency shall operate and maintain all sewer facilities constructed pursuant to this Section, including such facilities as may be constructed within District's boundaries.

14-8 **Monthly Charges**: Users shall pay a monthly charge for services provided by the Agency and District in an amount determined by resolution of the Board.

14-8.1 **District Charges**: The amount of the charge attributable to services provided by District shall consist of two components:

14-8.1.1 **Monthly Service Charge**: A monthly service charge equal to that charged by District within its Improvement District No. 80, less customer account expense.

14-8.1.2 **"In Lieu of Taxes" Charge**: An amount, as determined by District, to compensate District for the use of its sewer system, and to provide funds equal to taxes or other charges for sewer service collected from landowners and customers within District which are not applicable to customer outside of its boundaries.

14-8.2 **Agency Charges**:

14-8.2.1 **Monthly Service Charge**: The amount of the monthly charge attributable to the Agency shall include the amount necessary as determined by the Agency, to cover its costs for upgrading and maintaining the facilities, for billing, collections, and administrative costs. The monthly charges are subject to change at any time by resolution of the Board.

14-9 **Termination**: The Agency shall have the right at any time to terminate the flow of effluent to District and to provide for the treatment or disposal of such effluent entirely within the Agency's boundaries.

SECTION 15 – EFFLUENT TO CITY OF PALM SPRINGS

15-1 **Provisions**: The provisions of this Section shall apply to all facilities constructed for the purpose of transporting effluent to the City of Palm Springs ("City") for treatment or disposal.

15-2 **Plan Checks and Inspection**: Plans and specifications for construction of sewer facilities shall be subject to approval by the Agency, as well as by the City, at City's request. Construction of the facilities will be subject to inspection by the Agency, as well as by the City, at City's request. The developer of property requiring such construction shall pay to the Agency the prevailing charges for plan checking and inspection services, as determined by the Agency and City.

15-3 **Connections**: Agency shall notify and obtain City's approval before connecting into City's sewer system.

15-4 **Bonds**: The developer of any property shall provide such bonds or other security as the Agency and the City may require to ensure construction of sewer facilities. Neither the Agency nor the City shall be required to give assurances to any governmental agency that sewer service will be provided to the property until such security has been provided or the facilities have been accepted by the Agency and City.

15-5 **Transfer of Title**: Upon satisfactory completion of construction, a developer shall convey to City the title of those facilities lying within City's boundaries. The developer shall convey to the Agency the title to those facilities lying within the Agency's boundaries. Title shall be free and clear of all mechanic's liens, or other liens or encumbrances of any kind. The developer shall provide such evidence of clear title as may be required by the Agency or City. The developer shall also convey to the Agency and City all appropriate rights of way for such facilities. All instruments of conveyance shall be in a form approved by the Agency and City.

15-6 **Sewer Capacity Charge**: Each developer whose property is provided with sewer service shall pay to the Agency the Capacity Charge established by the Agency and in effect at the time application for service is made, but in no event shall such charge be less than that established by City in the City's fee resolution.

15-7 **Operations and Maintenance**: The Agency shall operate and maintain all sewer facilities constructed pursuant to this Section, including such facilities as may be constructed within City's boundaries.

15-8 **Monthly Charges**: Users shall pay a monthly charge for services provided by the Agency and City in an amount determined by resolution of the Board.

15-8.1 **City Charges**: The amount of the charge attributable to services provided by City be as established by the City in the City's fee resolution. Monthly charges are subject to change at any time by resolution of the City.

15-8.2 **Agency Charges**: The amount of the monthly charge attributable to the Agency shall include the amount necessary as determined by the Agency to cover its cost for upgrading and maintaining the facilities, for billing, collections, and administrative costs. The monthly charges are subject to change at any time by resolution of the Board.

15.9 **Termination**: The Agency shall have the right at any time to terminate the flow of effluent to City and to provide for the treatment or disposal of such effluent entirely within the Agency's boundaries.

SECTION 16 - ADOPTION

16-1 **Effective Date**: Except as otherwise provided herein, this Ordinance becomes effective on February 1, 2020.

16-2 **Previous Ordinance Repealed**: Ordinance No. 67 is hereby repealed.

ADOPTED this 17th day of December 17, 2019.

_____
James Cioffi, President
Board of Directors

ATTEST:

_____
Kristin Bloomer, Secretary-Treasurer
Board of Directors

RESOLUTION NO. 1225

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, it is appropriate at this time to revise the Agency's monthly charge for sewer service, while restating all other rates, fees and charges which remain unchanged; and

WHEREAS, on December 15, 2016, this Board conducted a majority protest hearing for the proposed revision of the Agency's monthly charge for sewer service, over the next subsequent five years, as required by law, and has determined that a majority protest does not exist; 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, while adjusting the Agency's monthly sewer service charge and restating other Agency charges already in effect;

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 currently 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

	CVWD Treatment Cathedral City (Effective 07/01/19)	City Treatment Palm Oasis / Dream Homes (Effective 07/01/19)
A. Residential		
Single Family, Condo (1 EDU = 1 Unit)	1. Total Charge: $28.98/EDU a. $23.04/EDU (CVWD) b. $5.94/EDU (DWA) ***Rate (1)***	2. Total Charge: $28.94/Unit a. $23.00/Unit (CPS) b. $5.94/Unit (DWA) ***Rate (5)***
Mobile Home Park (1 EDU = 1 Space)	1. Total Charge: $28.98/EDU a. $23.04/EDU (CVWD) b. $5.94/EDU (DWA) ***Rate (1)***	2. Total Charge: $28.94/Space plus $2.18/FU a. $23.00/Space (CPS) b. $5.94/Space (DWA) c. $2.28/FU (CPS) ***Rate (6)***
Apartments (1 EDU = 1 Unit)	1. Total Charge: $28.98/EDU a. $23.04/EDU (CVWD) b. $5.94/EDU (DWA) ***Rate (4)***	2. Total Charge: $28.94/Unit a. $23.00/Unit (CPS) b. $5.94/Unit (DWA) ***Rate (7)***
B. Hotel / Motel (1/2 EDU = 1 Room)	1. Total Charge: $28.98/EDU a. $23.04/EDU (CVWD) b. $5.94/EDU (DWA) ***Rate (4)***	N/A
C. R.V. Park (1/2 EDU = 1 Space)	1. Total Charge: $28.98/EDU a. $23.04/EDU (CVWD) b. $5.94/EDU (DWA) ***Rate (4)***	N/A

6. Monthly Service Charges (Cont.)

	CVWD Treatment Cathedral City (Effective 07/01/19)	City Treatment Palm Oasis / Dream Homes (Effective 07/01/19)
D. Commercial, Industrial, or Institutional (0ther than schools)	1. Total Charge: $28.98/EDU a. $23.04/EDU (CVWD) b. $5.94/EDU (DWA) ***Rate (4)***	2. Total Charge: $2.28/FU (Minimum $23.00) plus $5.94/EDU a. $2.28/FU (CPS) (minimum $23.00) b. $5.94/EDU (DWA) ***Rate (8)***
E. Schools and Colleges Kindergarten Elementary Schools & Colleges	1. Total Charge: $28.98/EDU a. $23.04/EDU (CVWD) b. $5.94/EDU (DWA) ***Rate (3)***	2. (See Commercial) ***Rate (8)***
All Other Schools	1. Total Charge: $28.98/EDU a. $23.04/EDU (CVWD) b. $5.94/EDU (DWA) ***Rate (2)***	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 ***Rate (4)***	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. 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

9. Effective Date: The charges set forth herein shall become effective February 1, 2020 and as of that date this Resolution shall replace Resolution No. 1212.

ADOPTED this 17th day of December 2019.

_____
Joseph K. Stuart, President

ATTEST:

_____
Craig Ewing, Secretary-Treasurer

RESOLUTION NO. 1226

A RESOLUTION OF THE BOARD OF DIRECTORS OF DESERT WATER AGENCY ESTABLISHING RATES, FEES & CHARGES FOR DOMESTIC WATER SERVICE, BACKUP FACILITY, SUPPLEMENTAL WATER SUPPLY DEVELOPMENT AND SERVICE CONNECTION CHARGES

WHEREAS, by previous action this Board has approved various rates, fees and charges for water service, as provided by law; and

WHEREAS, it is appropriate at this time to revise the Agency's Rates, Fees & Charges for Domestic Water Service, while restating all other rates, fees and charges which remain unchanged; and

NOW, THEREFORE, BE IT RESOLVED by the Board of Directors of Desert Water Agency that the Agency's rates, fees and charges for water service shall be as follows:

1. Backup Facility Charges. Every applicant for a regular service connection shall, in addition to other charges, pay a Backup Facility Charge based on the size and location of the applicant's service and meter connection as follows:

SNOW CREEK VILLAGE ZONE (Zone J)

Meter	Charge
5/8 x 3/4 inch	$2,082
1 inch	$5,207
1-1/2 inch	$10,414
2 inch	$16,662

PALM OASIS ZONE (Zone I)

Meter	Charge
5/8 x 3/4 inch	$1,493
1 inch	$3,734
1-1/2 inch	$7,468

2 inch	$11,948

Backup Facility Charges (Cont.)

BASE ZONE (Zone A)

Meter	Charge
5/8 x 3/4 inch	$2,470
1 inch	$6,175
1-1/2 inch	$12,350
2 inch	$19,760

CHINO ZONE (Zone C)

Meter	Charge
5/8 x 3/4 inch	$3,026
1 inch	$7,565
1-1/2 inch	$15,130
2 inch	$24,208

CHINO "A" ZONE (Zone D)

Meter	Charge
5/8 x 3/4 inch	$3,679
1 inch	$9,198
1-1/2 inch	$18,396
2 inch	$29,433

CHINO "B" ZONE (Zone E)

Meter	Charge
5/8 x 3/4 inch	$3,276
1 inch	$8,190
1-1/2 inch	$16,380
2 inch	$26,208

Backup Facility Charges (Cont.)

ACANTO ZONE (Zone B)

Meter	Charge
5/8 x 3/4 inch	$4,108
1 inch	$10,271
1-1/2 inch	$20,542
2 inch	$32,867

SOUTHRIDGE "A" ZONE (Zone K)

Meter	Charge
5/8 x 3/4 inch	$4,390
1 inch	$10,977
1-1/2 inch	$21,954
2 inch	$35,126

SOUTHRIDGE "B" ZONE (Zone L)

Meter	Charge
5/8 x 3/4 inch	$2,320
1 inch	$5,800
1-1/2 inch	$11,600
2 inch	$18,560

EAST ZONE (Zone F)

Meter	Charge
5/8 x 3/4 inch	$2,357
1 inch	$5,893
1-1/2 inch	$11,786
2 inch	$18,857

Backup Facility Charges (Cont.)

EAST "A" ZONE (Zone G)

Meter	Charge
5/8 x 3/4 inch	$2,541
1 inch	$6,354
1-1/2 inch	$12,708
2 inch	$20,332

EAST "B" ZONE (Zone H)

Meter	Charge
5/8 x 3/4 inch	$3,030
1 inch	$7,575
1-1/2 inch	$15,150
2 inch	$24,240

2. Supplemental Water Supply Development Charges. Every applicant for a regular service connection shall, in addition to other charges, pay a Supplemental Water Supply Development Charge based on the size of the applicant's service and meter connection as follows:

Meter Size	
Residential	Charge
5/8 x 3/4 inch	$1,370.00
1 inch	$2,250.00
1-1/2 inch	$4,440.00
2 inch	$10,960.00
3 inch	$72,070.00
Commercial	Charge
5/8 x 3/4 inch	$1,250.00
1 inch	$2,740.00
1-1/2 inch	$8,830.00
2 inch	$15,090.00
3 inch	$21,350.00
6 inch	$677,430.00
Irrigation	Charge
5/8 x 3/4 inch	$1,720.00
1 inch	$6,530.00
1-1/2 inch	$25,210.00
2 inch	$23,970.00

3. Backup Facility Charges and Supplemental Water Supply Development Charges for Increased Service. A Backup Facility Charge and a Supplemental Water Supply Development Charge shall be required for all existing regular service connections for which increased capacity is requested and larger service connections and meters are installed. Said charges shall apply to the difference in service capacity between the new meter and service, and the meter and service which is being replaced.

4. Exemption. The Backup Facility Charge shall apply to all applications for regular service, regardless of the type of use, but shall not apply to applications for temporary service. The Backup Facility Charge may be exempted, or partially exempted for private commercial fire protection service, and where certain water supply, storage, treatment and transmission facilities are required of an applicant. The exemption will be determined by the Agency, whose decision will be final.

5. Accounting of Funds. All revenues collected from backup facility 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 temporary investments, and such revenues may be expended solely for the purpose for which the backup facility 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 backup facility charges are imposed. The Agency shall make findings once each fiscal year with respect to any portion of the backup facility 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 backup facility charges are to be put, and will demonstrate a reasonable relationship between the charges and the purpose for which the charges were imposed.

6. Meter Installation Charge. The charge for meter installation shall be as follows:

Size	Charge
5/8 x ¾ inch	$255.00
1 inch	$355.00
1-1/2 inch	$530.00
2 inch	$705.00

7. Customer Control Valve Charge. The customer control valve charge shall be as follows:

Size	Charge
1 inch	$360.00
1-1/2 inch	$370.00
2 inch	$435.00

8. Service Connection Charge. The charge for service connection shall be as follows:

	Size	Charge
a.)	1 inch	$1,800.00
	2 inch	$3,230.00
b.)	Payment Patch	$1,380.00
	Concrete Patch	$664.00

9. Connection Charge. A charge for all new connections based on the front footage served thereby shall be levied and collected at the rate of $70.00 per lineal foot of frontage, or the actual rate in accordance with a valid main extension refund agreement, whichever is greater.

10. Meter Test Deposit. The required deposit for testing a water meter shall be as follows:

Size	Charge
5/8 & 3/4 inch to 2 inches	$70.00
3 inch or larger	$140.00

11. Plan Check Fees. The plan check fees for Agency installed water 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. There is no charge for single residences not falling within the above categories.

12. Design Review Fees. Fees charged for design review for water facilities shall be as follows:

a.) Agency Engineering Department	$140.00 per hour
b.) Engineering Consultants	Actual cost plus 15%
c.) Legal Consultants	Actual cost plus 15%

13. Fire Flow Model and Verification Fees. The following charges shall be imposed for fire flow model analysis and verification within our domestic water service area;

a.) Fire Flow Model and Letter	$500.00
b.) Fire Flow Verification Letter	$70.00

14. Temporary Service Connection Charge. The following deposits and charges shall be imposed for a temporary service connection:

a.) Deposits	
Meter	$964.00
Backflow Device	$500.00
Total	$1,464.00
b.) Meter Installation Charges	
Meter	$70.00
Backflow Device	$70.00
Total	$140.00
c.) Meter Relocation Charges	
Each Occurrence	$70.00

15. Restoration of Service. The charge for service restored on Agency's normal working days and during normal working hours will be $70. The charge for service restored other than that on Agency's normal working days and after normal working hours will be $150. To have service restored the same day, during working hours, payment must be received between 8:00 a.m. and 4:00 p.m. Payments received after 4:00 p.m. will be at the after-hours rate for

restoration of service the same day.

Customers demonstrating financial hardship, as outlined in the Agency's Policy on Discontinuation of Residential Water Service, shall pay a reduced service restoration fee of $50 during Agency normal working Days and during normal working hours.

If service is discontinued or turned off by customer request for any reason, other than repairs, the restoration charges will be enforced if restoration of service is requested within 90 days of the initial request of discontinuance.

16. Backflow Protection Device Installation Charges. The following charges shall be imposed for the installation of a backflow protection device:

a.) Double Check Device

Size	Charge
3/4 inch	$647.00
1 inch	$812.00
1-1/2 inch	$1,480.00
2 inch	$1,870.00

b.) Reduced Pressure Principal Device Assemblies

Size	Charge
3/4 inch	$843.00
1 inch	$1,005.00
1-1/2 inch	$1,689.00
2 inch	$2,053.00

c.) Double Check Device with Fire Service Outlet

Size	Charge
1 inch	$1,000.00
1-1/2 inch	$1,668.00
2 inch	$2,149.00

d.) Reduced Pressure Device with Fire Service Outlet

Size	Charge
1 inch	$1,193.00
1-1/2 inch	$1,877.00
2 inch	$2,333.00

17. Metered Service Charge. Service charges for water service include a monthly service charge, a quantitative rate charge, and a zone charge if applicable, as follows:

a.) Monthly Service Charge

Size	Charge
5/8 x 3/4 inch	$27.60
1 inch	$27.60
1-1/2 inch	$52.70
2 inch	$82.82
3 inch	$163.14
4 inch	$253.50
6 inch	$504.50
8 inch	$805.69
10 inch	$2,110.87
12 inch	$2,663.06

b.) Quantitative Rate Charge

The base rate charge for all metered and unmetered water used for all purposes other than through temporary service facilities shall be $2.08 per 100 cubic feet.

c.) Temporary Service Quantitative Rate Charge

The base rate charged for all metered and unmetered water used for construction and temporary service shall be $1,030.48 ($2.37 per 100 cubic feet) per acre foot.

d.) Zone Charges

Zone	Charge per 100 Cubic Feet
A, C, F, J	$0.00
B, D, G, I	$0.24
E, H, K	$0.28
L	$0.61
M	$2.70

Metered Service Charge. (Cont.)

e.) Drought Rate Surcharge
The surcharge is in addition to the Quantitative Rate Charge. It may be applied in times of mandatory restrictions or extreme water supply shortage.

Use Reduction Required	Addition to Quantitative Rate Charge
10%	$0.14
20%	$0.32
30%	$0.55
40%	$0.85
50%	$1.28
60%	$1.92

18. Private Fire Protection Monthly Service Charges. The monthly service charge for private fire protection shall be as follows:

Service Size	Charge
2 inch	$7.99
4inch	$26.48
6 inch	$57.31
8 inch	$98.42
10 inch	$153.23

19. Backflow Protection Device Repair Charge. The monthly charge for backflow protection device repair shall be as follows:

Size	Charge
3/4 inch	$3.00
1 inch	3.50
1-1/4 inch	3.50
1-1/2 inch	3.50
2 inch	3.50
2-1/2 inch	3.50
3 inch	3.50
4 inch	5.80
6 inch	5.80
8 inch	7.00
10 x 12 inch	7.00

Metered Service Charge. (Cont.)

20. Construction and Temporary Service Monthly Charges. The construction and temporary service monthly charge shall include the following and be set as follows:

    a. Monthly Service Charges
       To be in accordance with Item 16-a of this Resolution

    b. Quantitative Charges
       To be in accordance with Item 16-c of this Resolution

    c. Zone Pumping Charges
       To be in accordance with Item 16-d of this Resolution

    d. Backflow Protection Device Charge: $34.15

21. Deposit to Establish Credit. The minimum deposit to establish credit will be two (2) times the average monthly bill. If this cannot be determined, the minimum deposit shall be as follows:

Size	Deposit
5/8 x 3/4 inch	$ 100.00
1 inch	100.00
1-1/2 inch	150.00
2 inch	200.00

22. 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

Metered Service Charge. (Cont.)

23. Water Quality Sampling. The charge for Agency collection and analysis of development bacteriological samples shall be at the rate of $75.00 per sample.

24. Account Establishment Fee Charge. An administrative charge for Agency services to establish account in the new owner's name shall be $30.00 per account.

25. Late Fee. An administrative late fee charge of $25.00 per account will be assessed on accounts that are delinquent (30 days past due).

26. Effective Date: The charges set forth herein shall become effective on February 1, 2020 and as of that date shall replace the charges set forth in Resolution No. 1211.

ADOPTED this 17th day of December 2019.

_____
Joseph K. Stuart, President

ATTEST:

_____
Craig Ewing, Secretary-Treasurer

BACKUP FACILITY CHARGES
FOR WATER SERVICE
October 16, 2018

New development creates an additional demand for water. In order to meet the new demand, new wells must be constructed to provide more water, new storage tanks must be constructed to store water for emergency use, equalizing, and fire storage, and new transmission pipelines must be constructed to transport water from wells to storage tanks and throughout the distribution system. New development in hillside areas and service areas above the Base Zone places demand upon facilities, such as booster pumping plants, water storage tanks and transmission pipelines, whose basic function is to lift the water up to and store in these higher zones.

For the past eight years, new development has added an annual average of about 120 service connections to the Desert Water Agency water system. At this growth rate, every seven years new connections will create a demand for water equivalent to the production capacity of one well. The increased demand will also burden storage, transmission, and booster pumping facilities in all Zones. These facilities must be in place ahead of new connections. Therefore, in most cases, the facilities are constructed in anticipation of demand, and costs of the facilities are recovered through the Backup Facility Charge.

Staff has reviewed the costs that make up the Backup Facility Charge and find that a tiered rate based on our pressure zones is justified to recover cost of the well plants, booster plants, treatment plants, surface water facilities, storage reservoirs, and transmission mains required by each zone.

All new development requiring water service will be charged for Backup Facilities. The charge is based upon the capacity/service size ratio of the service provided and the proportional potential demand placed upon the available water production, transmission, treatment, pressure boosting and storage facilities within the appropriate pressure zone. The charge is not based upon the type of service connection (i.e., residential, commercial, and industrial). The amount of the charge for any particular development is based on the number of services, service size, meter size and the assigned number of capacity units per service as determined by the Agency. The capacity unit (C.U.) is based on the capacity/service size ratio of the service connection.

Service capacity ratios have historically been based on the relationship between capacity and pipe diameter. Originally established in 1973, the service capacity/diameter relationship for the Agency was based on a 1" service size capacity ratio of Q=KD^2.54. Depending on the specific hydraulic formula selected the service size relationship can range from D^2.5 to D^2.667. These hydraulic formula and capacity/diameter relationships are empirical and therefore approximate. The selected relationship of D^2.54 is reasonable in that it is slightly less than the median relationship of D^2.58.

However, capacity is ultimately limited by the maximum continuous operation flow rate of the meter installed on each service connection. To account for this, the Agency has opted to utilize the AWWA meter factors in lieu of the abovementioned D^2.54 formula. AWWA meter factors are an industry standard and, therefore, a reasonable method to use in determining equivalent capacity units within the system.

To determine the standard capacity for each of the Agency's pressure zones, all active services smaller and larger than the standard one-inch service are converted to one-inch equivalent capacity units using the AWWA meter factors discussed above.

The Agency currently operates 12 different pressure zones. Calculation of the C.U. for each service size in the zones are shown in the tables below:

SYSTEM CAPACITY UNITS – SNOW CREEK VILLAGE ZONE

SERVICE SIZE	SERVICES	AWWA METER FACTORS	CAPACITY UNITS
3/4"	0	0.40	0
1"	45	1.00	45
1-1/2"	0	2.00	0
2"	2	3.20	6.4
Total	47		51

SYSTEM CAPACITY UNITS – PALM OASIS ZONE

SERVICE SIZE	SERVICES	AWWA METER FACTORS	CAPACITY UNITS
3/4"	0	0.40	0
1"	193	1.00	193
1-1/2"	0	2.00	0
2"	12	3.20	38.4
Total	205		231

SYSTEM CAPACITY UNITS – BASE ZONE

SERVICE SIZE	SERVICES	AWWA METER FACTORS	CAPACITY UNITS
3/4"	98	0.40	39.2
1"	11,672	1.00	11,672
1-1/2"	491	2.00	982
2"	1,977	3.20	6,326.4
Total	14,238		19,019

SYSTEM CAPACITY UNITS – CHINO ZONE

SERVICE SIZE	SERVICES	AWWA METER FACTORS	CAPACITY UNITS
3/4"	6	0.40	2.4
1"	1,802	1.00	1,802
1-1/2"	111	2.00	222
2"	269	3.20	860.8
Total	2,188		2,887

SYSTEM CAPACITY UNITS – CHINO "A" ZONE

SERVICE SIZE	SERVICES	AWWA METER FACTORS	CAPACITY UNITS
3/4"	0	0.40	0
1"	68	1.00	68
1-1/2"	43	2.00	86
2"	9	3.20	28.8
Total	120		182

SYSTEM CAPACITY UNITS – CHINO "B" ZONE

SERVICE SIZE	SERVICES	AWWA METER FACTORS	CAPACITY UNITS
3/4"	0	0.40	0
1"	54	1.00	54
1-1/2"	0	2.00	0
2"	0	3.20	0
Total	54		54

SYSTEM CAPACITY UNITS – ACANTO ZONE

SERVICE SIZE	SERVICES	AWWA METER FACTORS	CAPACITY UNITS
3/4"	0	0.40	0
1"	372	1.00	372
1-1/2"	5	2.00	10
2"	30	3.20	96
Total	407		478

SYSTEM CAPACITY UNITS – SOUTHRIDGE "A" ZONE

SERVICE SIZE	SERVICES	AWWA METER FACTORS	CAPACITY UNITS
3/4"	0	0.40	0
1"	5	1.00	5
1-1/2"	15	2.00	30
2"	0	3.20	0
Total	20		35

SYSTEM CAPACITY UNITS – SOUTHRIDGE "B" ZONE

SERVICE SIZE	SERVICES	AWWA METER FACTORS	CAPACITY UNITS
3/4"	0	0.40	0
1"	6	1.00	6
1-1/2"	1	2.00	2
2"	3	3.20	9.6
Total	10		18

SYSTEM CAPACITY UNITS – EAST ZONE

SERVICE SIZE	SERVICES	AWWA METER FACTORS	CAPACITY UNITS
3/4"	89	0.40	35.6
1"	3,723	1.00	3,723
1-1/2"	174	2.00	348
2"	660	3.20	2,112
Total	4,646		6,218

SYSTEM CAPACITY UNITS – EAST "A" ZONE

SERVICE SIZE	SERVICES	AWWA METER FACTORS	CAPACITY UNITS
3/4"	6	0.40	2.4
1"	344	1.00	344
1-1/2"	8	2.00	16
2"	7	3.20	22.4
Total	365		384

SYSTEM CAPACITY UNITS – EAST "B" ZONE

SERVICE SIZE	SERVICES	AWWA METER FACTORS	CAPACITY UNITS
3/4"	11	0.40	4.4
1"	381	1.00	381
1-1/2"	14	2.00	28
2"	6	3.20	19.2
Total	412		432

The charge per capacity unit for each zone is obtained by determining the cost of water production, pressure boosting, treatment, storage and transmission facilities and dividing it by the total capacity units served by the facilities. The method for determining facility cost and total capacity units for each zone is discussed below.

The total number of current services in each zone was obtained from the Desert Water Agency Information Systems Department.

SNOW CREEK VILLAGE ZONE

The existing capacity units (C.U.) for the Snow Creek Village Zone is 51. To determine the total capacity units for the zone, we must first calculate the max demand day (MDD) value utilizing the current General Plan formula:

- MDD = 1.85 x Average Day Annual Demand (ADD)

The Snow Creek Village Zone is served from two surface water sources. Since 1993, the stream sources have had an average capacity rate of 1,257 GPM, or 1.81 MGD. Based on meter consumption data for 2017, the current ADD for the zone is equal to 0.032 MGD, therefore, the MDD is equal to 0.061 MGD. If the MDD is equal to 0.061 MGD, the current gal/C.U./day is equal to 1,196 gal/C.U./day, or (0.06 MGD÷51).

The General Plan has calculated a max demand for the area to be 1.12 MGD, with the remaining water to be delivered to the Base and Chino Zones. Since all service capacity must be met by the stream capacity, the existing units are using 5.4% of the total capacity of the stream source (0.061 MGD ÷ 1.12 MGD). The total maximum capacity units for the entire system are then equal to 944, or (51 ÷ 0.054).

Facility costs were determined by analyzing facility cost valuation from Agency Annual Operating Statistics Reports, cost estimates prepared in conjunction with the currently proposed budget and rate study, and by assessing the current facilities using the 2008 General Plan Update. The facilities cost valuation per capacity unit was determined from the total number of capacity units and the facilities costs.

The Snow Creek Village Zone charge is composed of costs per capacity unit for production (stream source), treatment, storage and transmission facilities assignable to the Snow Creek Village Zone service.

SNOW CREEK VILLAGE ZONE PRODUCTION COST

In order to calculate the cost of surface water per capacity unit we first determine the cost of those facilities from actual project costs. Surface water is transmitted from the diversions into the Snow Creek Village Zone where it is distributed to the zone services.

DESCRIPTION	YEAR CONSTRUCTED	*SURFACE WATER FACILITY COST
Snow Creek Diversion	1990	$2,000,000
Falls Creek Diversion	1990	$1,300,000
TOTAL		**$3,300,000**

* Actual project costs, unadjusted for present value.

The surface water not only benefits the Snow Creek Village Zone, the water can also benefit the Base Zone and Chino Zones. The Snow Creek Village Zone will use 61.2% of the total stream capacity (1.12 ÷ 1.81); therefore, the cost per capacity unit for the Snow Creek Village Zone is $3,300,000 (0.612) ÷ 944 C.U. = **$2,139/C.U.**

SNOW CREEK VILLAGE WATER TREATMENT COSTS

In order to calculate the cost of water treatment per capacity unit we first determine the cost of those facilities from actual project costs for this zone. Water is treated using chlorine and U.V. in this zone. Since the chlorine facilities were part of the production facilities costs, we will only include U.V for this calculation.

UV TREATMENT

DESCRIPTION	YEAR CONSTRUCTED	*FOREBAY COST
UV Treatment (Snow Creek/Falls Creek)	2014	$317,142
TOTAL		**$317,142**

*Actual project costs.

The UV treated surface water not only benefits the Snow Creek Village Zone, it can also benefit the Base Zone and Chino Zones. The Snow Creek Village Zone will use 61.2% of the total stream capacity (1.12 ÷ 1.81); therefore, the cost of treatment per capacity unit is $317,142 (0.612) ÷ 944 C.U. = **$205/C.U.**

SNOW CREEK VILLAGE ZONE WATER STORAGE COSTS

In order to calculate the cost of water storage per capacity unit we first determine the cost of those facilities from actual project costs and approved capital improvement budgets. The most current water storage estimated costs are used to determine the ratio of water storage cost to unit of storage volume. The unit cost of water storage per gallon (utilizing the most recent storage facility project costs is $3,844,585 ÷ 5,500,000 GAL= $0.70/GAL. By applying this ratio to each water storage reservoir, the cost of each reservoir within the zone are then determined.

SNOW CREEK VILLAGE ZONE WATER STORAGE COSTS

DESCRIPTION	WATER STORAGE CAPACITY (GAL.)	UNIT COST PER UNIT STORAGE ($/GAL.)	ZONE STORAGE COST
Equalization	1,000,000	0.70	$700,000
Village	150,000	0.70	$105,000
TOTAL			**$805,000**

The Equalization Reservoir not only benefits the Snow Creek Village Zone, it can also benefit the Base Zone and Chino Zones. The Snow Creek Village Zone current storage requirements are 0.168 MG, which is 16.8% of the Equalization Reservoir capacity (0.168 ÷ 1.0); therefore, the cost per capacity unit is $700,000 (0.168) ÷ 944 C.U. = $124/C.U. and the cost of storage per capacity unit for the Village Reservoir is therefore, $105,000 ÷ 944 C.U. = $111/C.U., for a total of **$235/C.U.**

FUTURE STORAGE CAPACITY REQUIREMENTS

The General Plan requires that the Agency have 18 hours ADD emergency storage, along with fire flow and equalization storage during energy Time of Use (T.O.U.) periods. The 18 hour ADD during T.O.U periods for the zone is 0.024 MG, or (0.032 x 0.75). The fire flow requirement for the zone is 0.12 MG, or (1,000 GPM for 2 hours per General Plan) and the equalization, or operational storage is 40% of the MDD and is therefore equal to 0.024 MG. Adding all of these components equates to 0.168 MG of storage. The current storage capacity for the system is 1.15 MG.

The existing stream capacity of the zone will accommodate an additional 893 capacity units (944 - 51). These additional units will add 1.0 MGD to the MDD. This additional demand will increase the storage requirement to 0.97 MG. Since this is less than the existing storage capacity, no future storage is required.

SNOW CREEK VILLAGE ZONE WATER TRANSMISSION MAIN COSTS

Historically, the Agency has calculated the cost of water transmission mains per capacity unit by determining the cost of those facilities from actual project costs and approved capital improvement budgets. The ratio of cost per lineal foot to diameter is determined.

DESCRIPTION	YEAR CONSTRUCTED	PIPELINE LENGTH (L.F.)	*PIPELINE COST	PIPELINE UNIT COST ($/L.F.)
12"Alejo/Tamarisk/ Indian Canyon	2012/2014/2015	4,958	$1,290,176	$260/L.F.
14"	-	-	-	-
15"	-	-	-	-
16" Sunny Dunes	2013	1,100	$301,462	$274/L.F.
18"	-	-	-	-
20" E. Well Field	-	-	-	-
24" E. Well Field	-	-	-	-
26"	-	-	-	-

30" N. Well Field	-	-	-	-
36" Avenida Caballeros	2014/2015	2,659	$2,509,219	$944/L.F.
42"	-	-	-	-

* Actual project cost, unadjusted for present value.

Due to the lack of current data available for the varying sizes of transmission mains in our system, the Agency has opted to utilize a "unit construction cost for pipelines" equation used by Eastern Municipal Water District (EMWD) in their 2015 rate study (study conducted by Kennedy/Jenks Consultants). Said equation assumes that unit cost ($/linear foot) = Diameter (inch) x 40.47 x [Diameter (inch) $^{\wedge -0.309}$]. Utilization of said equation allows the Agency to determine uniform unit construction estimates for all sizes of transmission mains in our system.

***ESTIMATED WATER TRANSMISSION MAIN UNIT CONSTRUCTION COSTS**

TRANSMISSION MAIN DIAMETER (INCHES)	**TRANSMISSION MAIN LENGTH ($/L.F.)**
12"	225
14"	250
15"	265
16"	275
18"	300
20"	320
24"	365
26"	385
30"	425
36"	480
42"	535

*Based on the following EMWD assumption: cost $/L.F. = Diameter (inch) x 40.47 x [Diameter (inch) $^{\wedge -0.309}$].

The most current water transmission main estimated costs are used to determine the ratio of water main cost to diameter as shown in the table on the previous page. By applying these ratios to system transmission mains, the cost of all size mains for the entire system is determined by zone.

SNOW CREEK VILLAGE ZONE WATER TRANSMISSION MAIN COSTS

TRANSMISSION MAIN DIAMETER (INCHES)	TRANSMISSION MAIN LENGTH (L.F.)	UNIT COST PER UNIT LENGTH ($/L.F.)	ZONE TRANSMISSION MAIN COST
12”	1,500	225	$337,500
***24”**	9,600	365	$3,504,000*
TOTAL			**$3,841,500**

*The 24” main not only benefits the Snow Creek Village Zone, it can also benefit the Base Zone and Chino Zones. The Snow Creek Village Zone will use 61.2% of the total stream capacity rate (1.12 ÷ 1.81); therefore, the cost of transmission main per capacity unit for the 24” main is therefore, $3,504,000 (0.612) ÷ 944 C.U. = **$2,271/C.U.**

The cost of transmission main per capacity unit for the 12” main is therefore, $337,500 ÷ 944 C.U. = **$357/C.U.**

COST PER ZONE SUMMARY

ZONE	SURFACE WATER COST	TREATMENT COST	STORAGE COST	TRANSMISSION COST	TOTAL CAPACITY UNIT COST
Snow Creek Village	$2,139	$205	$235	$2,628	$5,207

The cost of a 1-inch service in the zone is comprised of the cumulative capacity unit costs for surface water production, treatment, storage and transmission facilities.

In order to determine the capacity unit cost for each meter size the AWWA meter factors are used. The table below shows the capacity unit charge (Backup Facility Charge) per meter size.

SNOW CREEK VILLAGE FINAL BACKUP FACILITY CHARGE COST SUMMARY

METER SIZE	AWWA METER FACTOR	BACKUP FACILITY CHARGE
3/4 X 5/8	0.4	$2,082
1	**1.0**	**$5,207**
1.5	2.0	$10,414
2	3.2	$16,662

PALM OASIS ZONE

The existing capacity units (C.U.) for the Palm Oasis Zone is 231. To determine the total capacity units for the zone, we must first calculate the max demand day (MDD) value utilizing the current General Plan formula:

- MDD = 1.85 x Average Day Annual Demand (ADD)

Using annual production data from 2017, the ADD calculated for the zone equals 0.14 MGD, therefore, the MDD is equal to 0.26 MGD. If the MDD is equal to 0.26 MGD, the current gal/C.U./day is equal to 1,134 gal/C.U./day, or (0.26 MGD ÷ 231).

The current pumping capacity for the Palm Oasis Zone is 2.56 MGD. Since all service capacity must be met by the Palm Oasis Zone pumping capacity, all of the existing units are using 10.2% of the total capacity of the Palm Oasis Zone (0.26 MGD÷2.56 MGD). The total maximum capacity units for the zone is then equal to 2,265, or (231÷0.102).

Facility costs were determined by analyzing facility cost valuation from Agency Annual Operating Statistics Reports, cost estimates prepared in conjunction with the currently proposed budget and rate study, and by assessing the current facilities using the 2008 General Plan Update. The facilities

cost valuation per capacity unit was determined from the total number of capacity units and the facilities costs.

The Palm Oasis Zone charge is composed of costs per capacity unit for production (wells and boosters), treatment, storage and transmission facilities assignable to the Palm Oasis Zone service.

PALM OASIS PUMPING/WATER PRODUCTION COST

In order to calculate the cost of pumping water per capacity unit we first determine the cost of those facilities from approved capital improvement budgets. The ratio of plant cost to horsepower is determined.

DESCRIPTION	YEAR CONSTRUCTED	PUMPING PLANT HORSEPOWER	PUMPING PLANT COST*
Well 39	2010	450 HP Pumping Plant	$1,320,156.59
Well 40	2009	450 HP Pumping Plant	$1,498,356.82
Well 41	2006	450 HP Pumping Plant	$1,561,858.76
Well 42	2006	200 HP Pumping Plant	$1,175,156.15
TOTAL		**1,550 HP**	**$5,555,528.32**

* Current Capital Improvement Budget Amounts for Pumping Plants.

The most current pumping plant estimated costs are used to determine the ratio of pumping plant cost to unit of horsepower from the table above. The unit cost of pumping per horsepower is $5,555,528.32 ÷ 1,550 hp= $3,584/hp. By applying this ratio to each active pumping plant the cost of each plant and the zone system pumping cost is determined.

Similarly, the cost of pressure boosting facilities is determined.

DESCRIPTION	YEAR CONSTRUCTED	BOOSTER PLANT HORSEPOWER	BOOSTER PLANT COST*
Zone 1240 Booster	2016	80 HP Booster Plant	$950,000
Janis Tuscany Booster Upgrades	2016	225 HP Booster Pumping Plant	$230,000
TOTAL		**305 HP**	**$1,180,000**

* Actual project costs, unadjusted for present value.

The most current pumping plant costs are used to determine the ratio of booster pumping plant cost to unit of horsepower from the table above. The unit cost of booster pumping per horsepower is $1,180,000 ÷ 305 hp= $3,869/hp. By applying this ratio to each active pumping plant the cost of each plant and the zone's booster pumping cost is determined.

PALM OASIS ZONE PUMPING COSTS

WELL/BOOSTER BASE ZONES	DESCRIPTION	PLANT HORSEPOWER	ZONE PUMPING COST ($3,584/HP)
Well 17	Well Pumping Plants	150	$537,600
Well 43	Well Pumping Plants	250	$896,000
Well 17 Booster	Booster Pumping Plants	80	$309,520*
TOTAL			**$1,743,120**

*$3,869/HP Unit Cost of Booster Pumping Per Horsepower.

The cost of production per capacity unit is therefore, $1,743,120 ÷ 2,265 C.U. = **$769/C.U.**

PALM OASIS ZONE WATER TREATMENT COSTS

In order to calculate the cost of water treatment per capacity unit we first determine the cost of those facilities from actual project costs.

FOREBAY TREATMENT

DESCRIPTION	YEAR CONSTRUCTED	*FOREBAY COST
Well 17 Forebay		$137,500
TOTAL		**$137,500**

The cost of forebay treatment per capacity unit is therefore, $137,500 ÷ 2,265 C.U. = **$61/C.U**.

CHLORINE INJECTION TREATMENT

DESCRIPTION	NUMBER OF ACTIVE SITES	AVG. COST PER SITE	ZONE PUMPING COST (ACTUAL)
Chlorine storage building and pad, injection vault	1	$30,440	$30,440
TOTAL			**$30,440**

*Based on average construction cost per site to install chlorine injection facilities.

The cost of chlorine injection treatment per capacity unit is therefore, $30,440 ÷ 2,265 C.U. = **$13/C.U**.

PALM OASIS ZONE WATER STORAGE COSTS

In order to calculate the cost of water storage per capacity unit we first determine the cost of those facilities from actual project costs and approved capital improvement budgets. The ratio of storage cost to volume is determined.

DESCRIPTION	YEAR CONSTRUCTED	RESERVOIR STORAGE CAPACITY	RESERVOIR COST*
Tahquitz Reservoir II	2004	5,000,000 gallons	$2,299,785**
Zone 1060	2016	500,000 gallons	$1,544,800*
TOTAL		**5,500,000 gallons**	**$3,844,585**

*Revised Budget Amount for project.

** Actual project costs, unadjusted for present value.

The most current water storage estimated costs are used to determine the ratio of water storage cost to unit of storage volume from the table above. The unit cost of water storage per gallon is $3,844,585 ÷ 5,500,000 GAL= $0.70/GAL. By applying this ratio to each water storage reservoir, the cost of each reservoir and the entire zone's water storage costs are determined.

PALM OASIS ZONE WATER STORAGE COSTS

DESCRIPTION	WATER STORAGE CAPACITY (GAL.)	UNIT COST PER UNIT STORAGE ($/GAL.)	ZONE STORAGE COST
Palm Oasis I	1,000,000	0.70	$700,000
Palm Oasis II	1,000,000	0.70	$700,000
TOTAL			**$1,400,000**

The cost of storage per capacity unit is therefore, $1,400,000 ÷ 2,265 C.U. = **$618/C.U**.

FUTURE STORAGE CAPACITY REQUIREMENTS

The General Plan requires that the Agency have 18 hours ADD emergency storage, along with fire flow and equalization storage during energy Time of Use (T.O.U.) periods. The 18 hour ADD during T.O.U periods for the zone is 0.105 MG (0.14 x 0.75). The fire flow requirement for the zone is 0.12 MG (1,000 GPM for 2 hours per General Plan) and the equalization, or operational storage is 40% of the MDD and is therefore equal to 0.105 MG. Adding all of these components equates to 0.33 MG of storage. The current storage capacity for the zone is 2.0 MG.

The existing pumping capacity of the system will accommodate an additional 2,034 capacity units (2,265 - 231). These additional units will add 2.3 MGD to the MDD. This additional demand will increase the storage requirement to 2.2 MG, requiring 0.2 MG of additional storage (2.2-2.0). The cost for the additional storage will be $140,000, or ($0.70/gal x 0.2 MG). The cost of future storage per capacity unit is therefore, $140,000 ÷ 2,265 C.U. = **$61/C.U.**

PALM OASIS ZONE WATER TRANSMISSION MAIN COSTS

Historically, the Agency has calculated the cost of water transmission mains per capacity unit by determining the cost of those facilities from actual project costs and approved capital improvement budgets. The ratio of cost per lineal foot to diameter is determined.

DESCRIPTION	YEAR CONSTRUCTED	PIPELINE LENGTH (L.F.)	*PIPELINE COST	PIPELINE UNIT COST ($/L.F.)
12"Alejo/Tamarisk/ Indian Canyon	2012/2014/2015	4,958	$1,290,176	$260/L.F.
14"	-	-	-	-
15"	-	-	-	-
16" Sunny Dunes	2013	1,100	$301,462	$274/L.F.
18"	-	-	-	-
20" E. Well Field	-	-	-	-
24" E. Well Field	-	-	-	-
26"	-	-	-	-
30" N. Well Field	-	-	-	-
36" Avenida Caballeros	2014/2015	2,659	$2,509,219	$944/L.F.
42"	-	-	-	-

* Actual project cost, unadjusted for present value.

Due to the lack of current data available for the varying sizes of transmission mains in our system, the Agency has opted to utilize a "unit construction cost for pipelines" equation used by Eastern Municipal Water District (EMWD) in their 2015 rate study (study conducted by Kennedy/Jenks Consultants). Said equation assumes that unit cost ($/linear foot) = Diameter (inch) x 40.47 x [Diameter (inch) $^{\wedge -0.309}$]. Utilization of said equation allows the Agency to determine uniform unit construction estimates for all sizes of transmission mains in our system.

***ESTIMATED WATER TRANSMISSION MAIN UNIT CONSTRUCTION COSTS**

TRANSMISSION MAIN DIAMETER (INCHES)	TRANSMISSION MAIN LENGTH ($/L.F.)
12”	225
14”	250
15”	265
16”	275
18”	300
20”	320
24”	365
26”	385
30”	425
36”	480
42”	535

*Based on the following EMWD assumption: cost $/L.F. = Diameter (inch) x 40.47 x [Diameter (inch) $^{\wedge -0.309}$].

The most current water transmission main estimated costs are used to determine the ratio of water main cost to diameter as shown in the table on the previous page. By applying these ratios to system transmission mains, the cost of all size mains for the entire system is determined by zone.

PALM OASIS ZONE WATER TRANSMISSION MAIN COSTS

TRANSMISSION MAIN DIAMETER (INCHES)	TRANSMISSION MAIN LENGTH (L.F.)	UNIT COST PER UNIT LENGTH ($/L.F.)	ZONE TRANSMISSION MAIN COST
12”	17,134	225	$3,855,150
16”	4,200	275	$1,155,000
TOTAL			**$5,010,150**

The cost of transmission mains per capacity unit is therefore, $5,010,150 ÷ 2,265 C.U. = **$2,212/C.U**.

COST PER ZONE SUMMARY

ZONE	WATER PRODUCTION COST	TREATMENT COST	STORAGE COST	TRANSMISSION COST	TOTAL CAPACITY UNIT COST
Palm Oasis	$769	$74	$679	$2,212	$3,734

The cost of a 1-inch service in the zone is comprised of the cumulative capacity unit costs for water production, treatment, storage and transmission facilities.

In order to determine the capacity unit cost for each meter size the AWWA meter factors are used. The table below shows the capacity unit charge (Backup Facility Charge) per meter size.

PALM OASIS ZONE FINAL BACKUP FACILITY CHARGE COST SUMMARY

METER SIZE	AWWA METER FACTOR	BACKUP FACILITY CHARGE
3/4 X 5/8	0.4	$1,493
1	**1.0**	**$3,734**
1.5	2.0	$7,468
2	3.2	$11,948

BASE ZONE

The existing capacity units (C.U.) for the Base Zone is 19,019. To determine the total capacity units for the zone, we must first calculate the max demand day (MDD) value utilizing the current General Plan formula:

- MDD = 1.85 x Average Day Annual Demand (ADD)

Using annual production data from 2017, the ADD calculated for the zone equals 18.5 MGD, therefore, the MDD is equal to 34 MGD. If the MDD is equal to 34 MGD, the current gal/C.U./day is equal to 1,787 gal/C.U./day, or (34 MGD ÷ 19,019).

The current pumping capacity for the Base Zone is 40.4 MGD (The total Base Zone well capacity minus the Acanto, Chino Booster and Southridge "A" capacity). Since all service capacity must be met by the Base Zone pumping capacity, all of the existing units are using 84% of the total capacity of the Base Zone (34 MGD ÷ 40.4 MGD). The total maximum capacity units for the zone is then equal to 22,641, or (19,019 ÷ 0.84).

Facility costs were determined by analyzing facility cost valuation from Agency Annual Operating Statistics Reports, cost estimates prepared in conjunction with the currently proposed budget and rate study, and by assessing the current facilities using the 2008 General Plan Update. The facilities cost valuation per capacity unit was determined from the total number of capacity units and the facilities costs.

The Base Zone charge is composed of costs per capacity unit for production (wells and boosters), treatment, surface water, storage and transmission facilities assignable to the Base Zone service.

BASE ZONE PUMPING/WATER PRODUCTION COST

In order to calculate the cost of pumping water per capacity unit we first determine the cost of those facilities from approved capital improvement budgets. The ratio of plant cost to horsepower is determined.

DESCRIPTION	YEAR CONSTRUCTED	PUMPING PLANT HORSEPOWER	PUMPING PLANT COST*
Well 39	2010	450 HP Pumping Plant	$1,320,156.59
Well 40	2009	450 HP Pumping Plant	$1,498,356.82
Well 41	2006	450 HP Pumping Plant	$1,561,858.76
Well 42	2006	200 HP Pumping Plant	$1,175,156.15
TOTAL		**1,550 HP**	**$5,555,528.32**

* Current Capital Improvement Budget Amounts for Pumping Plants.

The most current pumping plant estimated costs are used to determine the ratio of pumping plant cost to unit of horsepower from the table above. The unit cost of pumping per horsepower is $5,555,528.32/1,550 hp= $3,584/hp. By applying this ratio to each active pumping plant the cost of each plant and the zone system pumping cost is determined.

Similarly, the cost of pressure boosting facilities is determined.

DESCRIPTION	YEAR CONSTRUCTED	BOOSTER PLANT HORSEPOWER	BOOSTER PLANT COST*
Zone 1240 Booster	2016	80 HP Booster Plant	$950,000
Janis Tuscany Booster Upgrades	2016	225 HP Booster Pumping Plant	$230,000
TOTAL		**305 HP**	**$1,180,000**

* Actual project costs, unadjusted for present value.

The most current pumping plant costs are used to determine the ratio of booster pumping plant cost to unit of horsepower from the table above. The unit cost of booster pumping per horsepower is $1,180,000/305 hp= $3,869/hp. By applying this ratio to each active pumping plant the cost of each plant and the zone's booster pumping cost is determined.

BASE ZONE PUMPING COSTS

WELL/BOOSTER BASE ZONES	DESCRIPTION	PLANT HORSEPOWER	ZONE PUMPING COST ($3,584/HP)
Well 14	Well Pumping Plants	200	$716,800
Well 16	Well Pumping Plants	250	$896,000
Well 20	Well Pumping Plants	300	$1,075,200
Well 22	Well Pumping Plants	500	$1,792,000
Well 23	Well Pumping Plants	300	$1,075,200
Well 24	Well Pumping Plants	500	$1,792,000
Well 27	Well Pumping Plants	400	$1,433,600
Well 28	Well Pumping Plants	400	$1,433,600

Well 29	Well Pumping Plants	400	$1,433,600
Well 32	Well Pumping Plants	400	$1,433,600
Well 33	Well Pumping Plants	400	$1,433,600
Well 34	Well Pumping Plants	400	$1,433,600
Well 37	Well Pumping Plants	450	$1,612,800
Well 38	Well Pumping Plants	450	$1,612,800
Well 39	Well Pumping Plants	450	$1,612,800
Well 40	Well Pumping Plants	450	$1,612,800
Well 14 Booster	Booster Plant	210	$812,490*
Well 16 Booster	Booster Plant	210	$812,490*
TOTAL			**$24,489,260**

*$3,869/HP Unit Cost of Booster Pumping Per Horsepower.

The Base Zone uses 78.9% (40.4 ÷ 51.2) of the Base Zone total well capacity, therefore, the cost of production per capacity unit is $24,489,260 (0.789) ÷ 22,641 C.U. = **$853/C.U.**

BASE ZONE WATER TREATMENT COSTS

In order to calculate the cost of water treatment per capacity unit we first determine the cost of those facilities from actual project costs. The Base Zone includes

FOREBAY TREATMENT

DESCRIPTION	YEAR CONSTRUCTED	*FOREBAY COST
Well 14 Forebay	1993	$376,750
Well 16 Forebay	1993	$376,750
TOTAL		**$753,500**

Since the Base Zone uses 78.9% of total pumping capacity, the cost of forebay treatment per capacity unit is therefore, $753,500 (0.789) ÷ 22,641 C.U.= **$26/C.U**.

CHLORINE INJECTION TREATMENT

DESCRIPTION	NUMBER OF ACTIVE SITES	AVG. COST PER SITE	ZONE PUMPING COST (ACTUAL)
Chlorine storage building and pad, injection vault	12	$30,440	$365,280
TOTAL			**$365,280**

*Based on average construction cost per site to install chlorine injection facilities.

Since the Base Zone uses 78.9% of pumping capacity, the cost of chlorine injection treatment per capacity unit is therefore, $365,280 (0.789) ÷ 22,641 C.U. = **$12/C.U.**

UV TREATMENT

DESCRIPTION	YEAR CONSTRUCTED	*FOREBAY COST
UV Treatment (Snow Creek/Falls Creek)	2014	$317,142
TOTAL		**$317,142**

*Actual project costs.

The UV treated surface water not only benefits the Base Zone, the water is also used by Snow Creek Village Zone and Chino Zone. The Base Zone and Chino Zones will use 38% of the total stream capacity (0.69 ÷ 1.81); therefore, the cost per capacity unit for the UV treatment per capacity unit is $317,142 (0.38) ÷ 30,494 C.U. = **$4/C.U.**

BASE ZONE SURFACE WATER COST

In order to calculate the cost of surface water per capacity unit we first determine the cost of those facilities from actual project costs. Surface water is transmitted from the diversions into the Base Zone where it is distributed to the zone.

DESCRIPTION	YEAR CONSTRUCTED	*SURFACE WATER FACILITY COST
Snow Creek Diversion	1990	$2,000,000
Falls Creek Diversion	1990	$1,300,000
TOTAL		**$3,300,000**

* Actual project costs, unadjusted for present value.

The surface water not only benefits the Base Zone, the water also serves the Snow Creek Village Zone and Chino Zone. The Base Zone and Chino Zones will use 38% of the total stream capacity (0.69 ÷ 1.81); therefore, the cost per capacity unit is $3,300,000 (0.38) ÷ 30,494 C.U. = **$41/C.U.**

BASE ZONE WATER STORAGE COSTS

In order to calculate the cost of water storage per capacity unit we first determine the cost of those facilities from actual project costs and approved capital improvement budgets. The ratio of storage cost to volume is determined.

DESCRIPTION	YEAR CONSTRUCTED	RESERVOIR STORAGE CAPACITY	RESERVOIR COST*
Tahquitz Reservoir II	2004	5,000,000 gallons	$2,299,785**
Zone 1060	2016	500,000 gallons	$1,544,800*
TOTAL		**5,500,000 gallons**	**$3,844,585**

*Revised Budget Amount for project.

** Actual project costs, unadjusted for present value.

The most current water storage estimated costs are used to determine the ratio of water storage cost to unit of storage volume from the table above. The unit cost of water storage per gallon is $3,844,585 ÷ 5,500,000 GAL= $0.70/GAL. By applying this ratio to each water storage reservoir, the cost of each reservoir and the entire zone's water storage costs are determined.

BASE ZONE WATER STORAGE COSTS

DESCRIPTION	WATER STORAGE CAPACITY (GAL.)	UNIT COST PER UNIT STORAGE ($/GAL.)	ZONE STORAGE COST
Palm Springs North I	1,500,000	0.70	$1,050,000
Palm Springs North II	12,000,000	0.70	$8,400,000
Tahquitz I	5,000,000	0.70	$3,500,000

Tahquitz II	5,000,000	0.70	$3,500,000
Palm Springs South I	5,000,000	0.70	$3,500,000
Palm Springs South II	5,000,000	0.70	$3,500,000
Equalization	1,000,000	0.70	$700,000*
TOTAL			**$24,150,000**

* The Equalization Reservoir serves the Base Zone, Snow Creek Village Zone, and the Chino Zone. The Base Zone and Chino Zones will use 83% of the total reservoir capacity.

The required storage for the Base Zone is 29.42 MG. The existing storage capacity for the Base Zone is 34.5 MG; therefore, the Base zone storage is 85.2% of existing storage, or (29.42 ÷ 34.5).

The cost of storage per capacity unit is therefore equal to $700,000 (0.83) ÷ 30,494 plus $23,450,000(0.852) ÷ 22,641 C.U.: $19 + $882 = **$901/C.U.**

FUTURE STORAGE CAPACITY REQUIREMENTS

The General Plan requires that the Agency have 18 hours ADD emergency storage, along with fire flow and equalization storage during energy Time of Use (T.O.U.) periods. The 18 hour ADD during T.O.U periods for the zone is 13.9 MG, or (18.6 x 0.75). The fire flow requirement for the zone is 1.92 MG (8,000 GPM for 4 hours per General Plan) and the equalization, or operational storage is 40% of the MDD and is therefore equal to 13.6 MG. Adding all of these components equates to 29.42 MG of storage. The current storage capacity for the system is 34.5 MG.

The existing pumping capacity of the system will accommodate an additional 3,622 capacity units (22,641 – 19,019). These additional units will add 6.5 MGD to the MDD. This additional demand will increase the storage requirement to 34.5 MG, equaling the existing storage and therefore no future storage for the Base Zone is required.

BASE ZONE WATER TRANSMISSION MAIN COSTS

Historically, the Agency has calculated the cost of water transmission mains per capacity unit by determining the cost of those facilities from actual project costs and approved capital improvement budgets. The ratio of cost per lineal foot to diameter is determined.

DESCRIPTION	YEAR CONSTRUCTED	PIPELINE LENGTH (L.F.)	*PIPELINE COST	PIPELINE UNIT COST ($/L.F.)
12"Alejo/Tamarisk/ Indian Canyon	2012/2014/2015	4,958	$1,290,176	$260/L.F.
14"	-	-	-	-
15"	-	-	-	-
16" Sunny Dunes	2013	1,100	$301,462	$274/L.F.
18"	-	-	-	-
20" E. Well Field	-	-	-	-
24" E. Well Field	-	-	-	-
26"	-	-	-	-
30" N. Well Field	-	-	-	-
36" Avenida Caballeros	2014/2015	2,659	$2,509,219	$944/L.F.
42"	-	-	-	-

* Actual project cost, unadjusted for present value.

Due to the lack of current data available for the varying sizes of transmission mains in our system, the Agency has opted to utilize a "unit construction cost for pipelines" equation used by Eastern Municipal Water District (EMWD) in their 2015 rate study (study conducted by Kennedy/Jenks Consultants). Said equation assumes that unit cost ($/linear foot) = Diameter (inch) x 40.47 x [Diameter (inch) $^{\wedge -0.309}$]. Utilization of said equation allows the Agency to determine uniform unit construction estimates for all sizes of transmission mains in our system.

***ESTIMATED WATER TRANSMISSION MAIN UNIT CONSTRUCTION COSTS**

TRANSMISSION MAIN DIAMETER (INCHES)	TRANSMISSION MAIN LENGTH ($/L.F.)
12”	225
14”	250
15”	265
16”	275
18”	300
20”	320
24”	365
26”	385
30”	425
36”	480
42”	535

*Based on the following EMWD assumption: cost $/L.F. = Diameter (inch) x 40.47 x [Diameter (inch) $^{\sim -0.309}$].

The most current water transmission main estimated costs are used to determine the ratio of water main cost to diameter as shown in the table on the previous page. By applying these ratios to system transmission mains, the cost of all size mains for the entire system is determined by zone.

BASE ZONE WATER TRANSMISSION MAIN COSTS

TRANSMISSION MAIN DIAMETER (INCHES)	TRANSMISSION MAIN LENGTH (L.F.)	UNIT COST PER UNIT LENGTH ($/L.F.)	ZONE TRANSMISSION MAIN COST
***12”**	231,958	225	$52,190,550
14”	2,570	250	$642,500
16”	28,442	275	$7,821,550
20”	9,580	320	$3,065,600
24”	20,727	365	$7,565,355
26”	2,620	385	$1,008,700

30”	50,993	425	$21,672,025
36”	30,618	480	$14,696,640
42”	70’	535	$37,450
****20”**	9,673	320	$3,095,360**
****24”**	37,551	365	$13,706,115**
TOTAL			**$108,700,370**

*Approximately 60% of all mains in the system are transmission mains with the remaining 40% being distribution mains. Therefore, only 60% of the total mains are included in the above table.

**Main that serves surface water to both the Base Zone and the Chino Zone. The cost of this main was not added to the total. The total capacity units that benefit from this main is 30,494.

Since the Base Zone uses 78.9% of pumping capacity, the cost of transmission mains per capacity unit for the mains only in the Base Zone is therefore, $108,700,370 (0.789) ÷ 22,641 C.U.= **$3,788/C.U.**

The cost of transmission mains per capacity units for the Base Zone and Chino Zone mains is therefore, $16,801,475 ÷ 30,494 C.U. = **$550/C.U.**

COST PER ZONE SUMMARY

ZONE	WATER PRODUCTION COST	TREATMENT COST	SURFACE WATER COST	STORAGE COST	TRANSMISSION COST	TOTAL CAPACITY UNIT COST
Base	$853	$42	$41	$901	$4,338	$6,175

The cost of a 1-inch service in the zone is comprised of the cumulative capacity unit costs for water production, treatment, surface water, storage and transmission facilities.

In order to determine the capacity unit cost for each meter size the AWWA meter factors are used. The table below shows the capacity unit charge (Backup Facility Charge) per meter size.

BASE ZONE FINAL BACKUP FACILITY CHARGE COST SUMMARY

METER SIZE	AWWA METER FACTOR	BACKUP FACILITY CHARGE
3/4 X 5/8	0.4	$2,470
1	**1.0**	**$6,175**
1.5	2.0	$12,350
2	3.2	$19,760

CHINO ZONE

The existing capacity units (C.U.) for the Chino Zone is 2,887. To determine the total capacity units for the zone, we must first calculate the max demand day (MDD) value utilizing the current General Plan formula:

- MDD = 1.85 x Average Day Annual Demand (ADD)

Using annual production data from 2017, the ADD calculated for the zone equals 3.1 MGD, therefore, the MDD is equal to 5.7 MGD. If the MDD is equal to 5.7 MGD, the current gal/C.U./day is equal to 1,975 gal/C.U./day, or (5.7 MGD ÷ 2,887).

The current pumping capacity for the Chino Zone is 10 MGD (The total of Chino Zone well capacity and the Chino Booster capacity minus the Chino "A" booster capacity). Since all service capacity must be met by the Chino Zone pumping capacity, all of the existing units are using 57% of the total capacity of the Chino Zone (5.7 MGD ÷ 10 MGD). The total maximum capacity units for the zone is then equal to 5,064, or (2,887 ÷ 0.57).

Facility costs were determined by analyzing facility cost valuation from Agency Annual Operating Statistics Reports, cost estimates prepared in conjunction with the currently proposed budget and

rate study, and by assessing the current facilities using the 2008 General Plan Update. The facilities cost valuation per capacity unit was determined from the total number of capacity units and the facilities costs.

The Chino Zone charge is composed of costs per capacity unit for production (wells and boosters), treatment, surface water, storage and transmission facilities assignable to the Chino Zone service.

CHINO ZONE PUMPING/WATER PRODUCTION COST

In order to calculate the cost of pumping water per capacity unit we first determine the cost of those facilities from approved capital improvement budgets. The ratio of plant cost to horsepower is determined.

DESCRIPTION	YEAR CONSTRUCTED	PUMPING PLANT HORSEPOWER	PUMPING PLANT COST*
Well 39	2010	450 HP Pumping Plant	$1,320,156.59
Well 40	2009	450 HP Pumping Plant	$1,498,356.82
Well 41	2006	450 HP Pumping Plant	$1,561,858.76
Well 42	2006	200 HP Pumping Plant	$1,175,156.15
TOTAL		**1,550 HP**	**$5,555,528.32**

* Current Capital Improvement Budget Amounts for Pumping Plants.

The most current pumping plant estimated costs are used to determine the ratio of pumping plant cost to unit of horsepower from the table above. The unit cost of pumping per horsepower is $5,555,528.32 ÷ 1,550 hp= $3,584/hp. By applying this ratio to each active pumping plant the cost of each plant and the zone system pumping cost is determined.

Similarly, the cost of pressure boosting facilities is determined.

DESCRIPTION	YEAR CONSTRUCTED	BOOSTER PLANT HORSEPOWER	BOOSTER PLANT COST*
Zone 1240 Booster	2016	80 HP Booster Plant	$950,000
Janis Tuscany Booster Upgrades	2016	225 HP Booster Pumping Plant	$230,000
TOTAL		**305 HP**	**$1,180,000**

* Actual project costs, unadjusted for present value.

The most current pumping plant costs are used to determine the ratio of booster pumping plant cost to unit of horsepower from the table above. The unit cost of booster pumping per horsepower is $1,180,000 ÷ 305 hp= $3,869/hp. By applying this ratio to each active pumping plant the cost of each plant and the zone's booster pumping cost is determined.

CHINO ZONE PUMPING COSTS

WELL/BOOSTER BASE ZONES	DESCRIPTION	PLANT HORSEPOWER	ZONE PUMPING COST ($3,584/HP)
Well 21	Well Pumping Plants	300	$1,075,200
Well 30	Well Pumping Plants	400	$1,433,600
Well 35	Well Pumping Plants	400	$1,433,600
Chino Booster	Booster Plants	475	$1,837,775*
TOTAL			**$5,780,175**

*$3,869/HP Unit Cost of Booster Pumping Per Horsepower.

The Chino Zone uses 78% of the total zone capacity (12.8-2.8) ÷ 12.8, where 12.8 MGD is the total capacity of the wells and chino booster and 2.8 MGD is the capacity needed for Chino "A" Zone; therefore, the cost of production per capacity unit for the Chino Zone wells and booster is $5,780,175 (0.78) ÷ 5,064 C.U. = **$890/C.U.** plus a component cost of the Base Zone pumping since Chino Boosters are used to pump Base Zone water to the Chino Zone.

The Chino Zone uses 8.3% of the Base Zone wells (5.5-1.2) ÷ 51.2, where 5.5 MGD is the Chino Booster capacity, 1.2 MGD is the capacity provided to Chino "A" zone, and 51.2 MGD is the total Base Zone capacity; therefore, the component cost of production per capacity unit is ($24,489,260 (0.083) ÷ 5,064 = **$401/C.U**

CHINO ZONE WATER TREATMENT COSTS

Since Base Zone water is pumped to the Chino Zone, the treatment costs for the Chino Zone is a component of the Base Zone treatment costs and any additional treatment facilities associated with the Chino Zone.

CHINO ZONE CHLORINE INJECTION TREATMENT

DESCRIPTION	NUMBER OF ACTIVE SITES	AVG. COST PER SITE	ZONE PUMPING COST (ACTUAL)
Chlorine storage building and pad, injection vault	2	$30,440	$60,880
TOTAL			**$60,880**

*Based on average construction cost per site to install chlorine injection facilities.

The Chino Zone uses 78% of the total zone capacity (12.8-2.8) ÷ 12.8, where 12.8 MGD is the total capacity of the wells and booster and 2.8 MGD is the capacity needed for Chino "A" Zone; therefore, the cost of treatment per capacity unit for the Chino Zone facilities is $60,880 (0.78) ÷ 5,064 C.U. = **$9/C.U.**

BASE ZONE FOREBAY TREATMENT

DESCRIPTION	YEAR CONSTRUCTED	*FOREBAY COST
Well 14 Forebay	1993	$376,750
Well 16 Forebay	1993	$376,750
TOTAL		**$753,500**

BASE ZONE CHLORINE INJECTION TREATMENT

DESCRIPTION	NUMBER OF ACTIVE SITES	AVG. COST PER SITE	ZONE PUMPING COST (ACTUAL)
Chlorine storage building and pad, injection vault	12	$30,440	$365,280
TOTAL			**$365,280**

*Based on average construction cost per site to install chlorine injection facilities.

The Chino Zone uses 8.3% of the Base Zone wells (5.5-1.2) ÷ 51.2, where 5.5 MGD is the Chino Booster capacity, 1.2 MGD is the capacity provided to Chino "A" zone, and 51.2 is the total Base Zone capacity; therefore, the component costs of treatment per capacity unit for the Base Zone facilities are $753,500 (0.083) ÷ 5,064 = **$12/C.U.** and $365,280 (0.083) ÷ 5,064 = **$5/C.U.**

UV TREATMENT

DESCRIPTION	YEAR CONSTRUCTED	*FOREBAY COST
UV Treatment (Snow Creek/Falls Creek)	2014	$317,142
TOTAL		**$317,142**

*Actual project costs.

The UV treated surface water not only benefits the Chino Zone, the water is also used by Snow Creek Village Zone and Base Zone. The Base Zone and Chino Zones will use 38% of the total stream capacity (0.69 ÷ 1.81); therefore, the component cost per capacity unit for the UV treatment per capacity unit is therefore, $317,142 (0.38) ÷ 30,494 C.U. = **$4/C.U.**

CHINO ZONE SURFACE WATER COST

In order to calculate the cost of surface water per capacity unit we first determine the cost of those facilities from actual project costs. Surface water is transmitted from the diversions into the Base Zone where it is distributed to the zone.

DESCRIPTION	YEAR CONSTRUCTED	*SURFACE WATER FACILITY COST
Snow Creek Diversion	1990	$2,000,000
Falls Creek Diversion	1990	$1,300,000
TOTAL		**$3,300,000**

* Actual project costs, unadjusted for present value.

The surface water not only benefits the Chino Zone, the water also serves the Snow Creek Village Zone and Base Zone. The Base Zone and Chino Zones will use 38% of the total stream capacity (0.69 ÷ 1.81); therefore, the component cost per capacity unit is $3,300,000 (0.38) ÷ 30,494 C.U. = **$41/C.U.**

CHINO ZONE WATER STORAGE COSTS

In order to calculate the cost of water storage per capacity unit we first determine the cost of those facilities from actual project costs and approved capital improvement budgets. The ratio of storage cost to volume is determined.

DESCRIPTION	YEAR CONSTRUCTED	RESERVOIR STORAGE CAPACITY	RESERVOIR COST*
Tahquitz Reservoir II	2004	5,000,000 gallons	$2,299,785**
Zone 1060	2016	500,000 gallons	$1,544,800*
TOTAL		**5,500,000 gallons**	**$3,844,585**

*Revised Budget Amount for project.

** Actual project costs, unadjusted for present value.

The most current water storage estimated costs are used to determine the ratio of water storage cost to unit of storage volume from the table above. The unit cost of water storage per gallon is $3,844,585 ÷ 5,500,000 GAL= $0.70/GAL. By applying this ratio to each water storage reservoir, the cost of each reservoir and the entire zone's water storage costs are determined.

CHINO ZONE WATER STORAGE COSTS

DESCRIPTION	WATER STORAGE CAPACITY (GAL.)	UNIT COST PER UNIT STORAGE ($/GAL.)	ZONE STORAGE COST
Chino II	3,500,000	0.70	$2,450,000
Chino III	3,500,000	0.70	$2,450,000
TOTAL			**$4,900,000**

The required storage for the Chino Zone is 5.54 MG. The existing storage capacity for the Chino Zone is 7.0 MG; therefore, the Chino Zone storage is 79.1% of existing storage (5.54 ÷ 7.0); therefore, the cost of storage per capacity unit for the Chino Zone facilities is $4,900,000 (0.791) ÷ 5,064 C.U.= **$765/C.U.** plus the component cost of the Base Zone storage since Chino Zone utilizes Base Zone water.

BASE ZONE WATER STORAGE COSTS

DESCRIPTION	WATER STORAGE CAPACITY (GAL.)	UNIT COST PER UNIT STORAGE ($/GAL.)	ZONE STORAGE COST
Palm Springs North I	1,500,000	0.70	$1,050,000
Palm Springs North II	12,000,000	0.70	$8,400,000
Tahquitz I	5,000,000	0.70	$3,500,000
Tahquitz II	5,000,000	0.70	$3,500,000
Palm Springs South I	5,000,000	0.70	$3,500,000
Palm Springs South II	5,000,000	0.70	$3,500,000
Equalization	1,000,000	0.70	$700,000*
TOTAL			**$24,150,000**

* The Equalization Reservoir serves the Base Zone, Snow Creek Village Zone, and the Chino Zone. The Base Zone and Chino Zones will use 83% of the total reservoir capacity.

The required storage for the Chino Zone is 5.54 MG. The Chino Booster provides 43% of the Chino Zone storage; therefore, the amount of storage from the Base Zone is 2.38 MG, or (5.54 x 0.43). The existing storage capacity for the Base Zone is 34.5 MG; therefore, the Chino Zone storage is 6.9% of Base Zone storage (2.38 ÷ 34.5).

The cost of storage per capacity is therefore equal to the component of the Equalization Reservoir and the Base Zone storage, or $700,000 (0.83) ÷ 30,494 plus $23,450,000 (0.069) ÷ 5,064 C.U.: $19 + 319 = **$338/C.U.**

FUTURE STORAGE CAPACITY REQUIREMENTS

The General Plan requires that the Agency have 18 hours ADD emergency storage, along with fire flow and equalization storage during energy Time of Use (T.O.U.) periods. The 18 hour ADD during T.O.U periods for the zone is 2.3 MG (3.1 x 0.75). The fire flow requirement for the zone is 0.96 MG (4,000 GPM for 4 hours per General Plan) and the equalization, or operational storage is 40% of the MDD and is therefore equal to 2.28 MG. Adding all of these components equates to 5.54 MG of storage. The current storage capacity for the system is 7.0 MG.

The existing pumping capacity of the system will accommodate an additional 2,177 capacity units (5,064 – 2,887). These additional units will add 4.3 MGD to the MDD. This additional demand will increase the storage requirement to 9.0 MG, requiring 2.0 MG of additional storage (9.0 – 7.0). The cost for the additional storage will be $1,400,000, or ($0.70/gal x 2.0 MG). The cost of future storage per capacity unit is therefore, $1,400,000 ÷ 5,064 C.U. = **$276/C.U.**

CHINO ZONE WATER TRANSMISSION MAIN COSTS

Historically, the Agency has calculated the cost of water transmission mains per capacity unit by determining the cost of those facilities from actual project costs and approved capital improvement budgets. The ratio of cost per lineal foot to diameter is determined.

DESCRIPTION	YEAR CONSTRUCTED	PIPELINE LENGTH (L.F.)	*PIPELINE COST	PIPELINE UNIT COST ($/L.F.)
12"Alejo/Tamarisk/ Indian Canyon	2012/2014/2015	4,958	$1,290,176	$260/L.F.
14"	-	-	-	-
15"	-	-	-	-
16" Sunny Dunes	2013	1,100	$301,462	$274/L.F.
18"	-	-	-	-
20" E. Well Field	-	-	-	-
24" E. Well Field	-	-	-	-

26”	-	-	-	-
30” N. Well Field	-	-	-	-
36” Avenida Caballeros	2014/2015	2,659	$2,509,219	$944/L.F.
42”	-	-	-	-

* Actual project cost, unadjusted for present value.

Due to the lack of current data available for the varying sizes of transmission mains in our system, the Agency has opted to utilize a “unit construction cost for pipelines” equation used by Eastern Municipal Water District (EMWD) in their 2015 rate study (study conducted by Kennedy/Jenks Consultants). Said equation assumes that unit cost ($/linear foot) = Diameter (inch) x 40.47 x [Diameter (inch) $^{\wedge -0.309}$]. Utilization of said equation allows the Agency to determine uniform unit construction estimates for all sizes of transmission mains in our system.

***ESTIMATED WATER TRANSMISSION MAIN UNIT CONSTRUCTION COSTS**

TRANSMISSION MAIN DIAMETER (INCHES)	**TRANSMISSION MAIN LENGTH ($/L.F.)**
12”	225
14”	250
15”	265
16”	275
18”	300
20”	320
24”	365
26”	385
30”	425
36”	480
42”	535

*Based on the following EMWD assumption: cost $/L.F. = Diameter (inch) x 40.47 x [Diameter (inch) $^{\wedge -0.309}$].

The most current water transmission main estimated costs are used to determine the ratio of water main cost to diameter as shown in the table on the previous page. By applying these ratios to system transmission mains, the cost of all size mains for the entire system is determined by zone.

CHINO ZONE WATER TRANSMISSION MAIN COSTS

TRANSMISSION MAIN DIAMETER (INCHES)	TRANSMISSION MAIN LENGTH (L.F.)	UNIT COST PER UNIT LENGTH ($/L.F.)	ZONE TRANSMISSION MAIN COST
***12"**	26,436	225	$5,948,100
15"	940	265	$249,100
16"	4,117	275	$1,132,175
18"	5,927	300	$1,778.100
20"	1,610	320	$515,200
24"	14,021	365	$5,117,665
30"	3,400	425	$1,445,000
****20"**	9,673	320	$3,095,360**
****24"**	37,551	365	$13,706,115**
TOTAL			**$16,185,340**

*Approximately 60% of all mains in the system are transmission mains with the remaining 40% being distribution mains. Therefore, only 60% of the total mains are included in the above table.

**Main that serves surface water to both the Base Zone and the Chino Zone. The cost of this main was not added to the total. The total capacity units that benefit from this main is 30,494.

The Chino Zone uses 78% of the total capacity (12.8-2.8) ÷ 12.8, where 12.8 is the total capacity of the wells and booster and 2.8 is the capacity needed for Chino "A" Zone; therefore, the cost of transmission per capacity unit for the Chino Zone mains is $16,185,340 (0.78) ÷ 5,064 C.U. = **$2,493/C.U**. plus a component of the Base Zone mains cost since Chino Boosters are used to pump Base Zone water to the Chino Zone.

The Chino Zone uses 8.3% of the Base Zone wells (5.5-1.2) ÷ 51.2, where 5.5 MGD is the Chino Booster capacity and 1.2 MGD is the capacity provided to Chino "A" zone; therefore, the

component cost of transmission mains per capacity unit for the Base Zone facilities is ($108,700,370 (0.083) ÷ 5,064 = **$1,781/C.U.**

The component cost of transmission mains per capacity units for the shared Base Zone and Chino Zone mains is therefore, $16,801,475 ÷ 30,494 C.U. = **$550/C.U.**

COST PER ZONE SUMMARY

ZONE	WATER PRODUCTION COST	TREATMENT COST	SURFACE WATER COST	STORAGE COST	TRANSMISSION COST	TOTAL CAPACITY UNIT COST
Chino	$1,291	$30	$41	$1,379	$4,824	$7,565

The cost of a 1-inch service in the zone is comprised of the cumulative capacity unit costs for water production, treatment, surface water, storage and transmission facilities.

In order to determine the capacity unit cost for each meter size the AWWA meter factors are used. The table below shows the capacity unit charge (Backup Facility Charge) per meter size.

CHINO ZONE FINAL BACKUP FACILITY CHARGE COST SUMMARY

METER SIZE	AWWA METER FACTOR	BACKUP FACILITY CHARGE
3/4 X 5/8	0.4	$3,026
1	**1.0**	**$7,565**
1.5	2.0	$15,130
2	3.2	$24,208

CHINO "A" ZONE

The existing capacity units (C.U.) for the Chino "A" Zone is 182. To determine the total capacity units for the zone, we must first calculate the max demand day (MDD) value utilizing the current General Plan formula:

- MDD = 1.85 x Average Day Annual Demand (ADD)

Using annual production data from 2017, the ADD calculated for the zone equals 0.13 MGD, therefore, the MDD is equal to 0.24 MGD. If the MDD is equal to 0.24 MGD, the current gal/C.U./day is equal to 1,318 gal/C.U./day, or (0.24 MGD ÷ 182).

The current pumping capacity for the Chino "A" Zone is 2.8 MGD; however, 1.1 MGD is dedicated to Chino "B" Zone. The pumping capacity for Chino "A" Zone is therefore 1.7 MGD (2.8 - 1.1). Since all service capacity must be met by the Chino "A" Zone pumping capacity, all of the existing units are using 14.1% of the total capacity of the Chino "A" Zone (0.24 MGD ÷ 1.7 MGD). The total maximum capacity units for the zone is then equal to 1,290, or (182 ÷ 0.141).

Facility costs were determined by analyzing facility cost valuation from Agency Annual Operating Statistics Reports, cost estimates prepared in conjunction with the currently proposed budget and rate study, and by assessing the current facilities using the 2008 General Plan Update. The facilities cost valuation per capacity unit was determined from the total number of capacity units and the facilities costs.

The Chino "A" Zone charge is composed of costs per capacity unit for production (wells and boosters), treatment, surface water, storage and transmission facilities assignable to the Chino "A" Zone service.

CHINO "A" ZONE PUMPING/WATER PRODUCTION COST

In order to calculate the cost of pumping water per capacity unit we first determine the cost of those facilities from approved capital improvement budgets. The ratio of plant cost to horsepower is determined.

DESCRIPTION	YEAR CONSTRUCTED	PUMPING PLANT HORSEPOWER	PUMPING PLANT COST*
Well 39	2010	450 HP Pumping Plant	$1,320,156.59
Well 40	2009	450 HP Pumping Plant	$1,498,356.82
Well 41	2006	450 HP Pumping Plant	$1,561,858.76
Well 42	2006	200 HP Pumping Plant	$1,175,156.15
TOTAL		**1,550 HP**	**$5,555,528.32**

* Current Capital Improvement Budget Amounts for Pumping Plants.

The most current pumping plant estimated costs are used to determine the ratio of pumping plant cost to unit of horsepower from the table above. The unit cost of pumping per horsepower is $5,555,528.32 ÷ 1,550 hp= $3,584/hp. By applying this ratio to each active pumping plant the cost of each plant and the zone system pumping cost is determined.

Similarly, the cost of pressure boosting facilities is determined.

DESCRIPTION	YEAR CONSTRUCTED	BOOSTER PLANT HORSEPOWER	BOOSTER PLANT COST*
Zone 1240 Booster	2016	80 HP Booster Plant	$950,000
Janis Tuscany Booster Upgrades	2016	225 HP Booster Pumping Plant	$230,000
TOTAL		**305 HP**	**$1,180,000**

* Actual project costs, unadjusted for present value.

The most current pumping plant costs are used to determine the ratio of booster pumping plant cost to unit of horsepower from the table above. The unit cost of booster pumping per horsepower is $1,180,000 ÷ 305 hp= $3,869/hp. By applying this ratio to each active pumping plant the cost

of each plant and the zone's booster pumping cost is determined. Since Chino "A" Zone is provided water by booster pumps only, we will only be using the booster pump costs.

CHINO "A" ZONE PUMPING COSTS

WELL/BOOSTER BASE ZONES	DESCRIPTION	PLANT HORSEPOWER	ZONE PUMPING COST ($3,869/HP)
Janis Tuscany	Booster Plant	150	$580,350
TOTAL			**$580,350**

The Chino "A" Zone uses 60.7% of the total capacity (1.7 ÷ 2.8), where 2.8 MGD is the total capacity of the booster and 1.7 MGD is the capacity needed for Chino "A" Zone; therefore, the cost of production per capacity unit for the Chino "A" Zone booster is $580,350 (0.607) ÷ 1,290 C.U.= **$273/C.U.** plus the component cost of the Chino Zone pumping and Base Zone pumping since Chino Zone and Base Zone water is pumped to the Chino "A" Zone.

The Chino "A" Zone uses 13.3% of the Chino Zone capacity (2.8-1.1) ÷ 12.8, where 2.8 MGD is the Chino "A" Booster capacity, 1.1 MGD is the Chino "B" zone capacity, and 12.8 MGD is the capacity provided to Chino "A" zone by the Chino Zone booster; therefore, the component cost of production per capacity unit for the Chino "A" Zone is ($5,780,175 (0.133) ÷ 1,290 = **$595/C.U**

The Chino "A" Zone uses 2.3% of the Base Zone pumping capacity (1.2 ÷ 51.2), where 1.2 MGD is the capacity provided to Chino "A" Zone by the Base Zone wells and 51.2 MGD is the capacity of the Base Zone; therefore, the component cost of production per capacity unit for the Chino "A" Zone is ($24,489,260 (0.023) ÷ 1,290 = **$436/C.U**

CHINO "A" ZONE WATER TREATMENT COSTS

Since Base Zone and Chino Zone water is pumped to the Chino "A" Zone, the treatment costs for the Chino "A" Zone is a component of the Base Zone treatment costs, Chino Zone treatment costs and any additional treatment facilities associated with the Chino "A" Zone.

CHINO ZONE CHLORINE INJECTION TREATMENT

DESCRIPTION	NUMBER OF ACTIVE SITES	AVG. COST PER SITE	ZONE PUMPING COST (ACTUAL)
Chlorine storage building and pad, injection vault	2	$30,440	$60,880
TOTAL			**$60,880**

*Based on average construction cost per site to install chlorine injection facilities.

BASE ZONE FOREBAY TREATMENT

DESCRIPTION	YEAR CONSTRUCTED	*FOREBAY COST
Well 14 Forebay	1993	$376,750
Well 16 Forebay	1993	$376,750
TOTAL		**$753,500**

BASE ZONE CHLORINE INJECTION TREATMENT

DESCRIPTION	NUMBER OF ACTIVE SITES	AVG. COST PER SITE	ZONE PUMPING COST (ACTUAL)
Chlorine storage building and pad, injection vault	12	$30,440	$365,280
TOTAL			**$365,280**

*Based on average construction cost per site to install chlorine injection facilities.

The Chino "A" Zone uses 13.3% of the Chino Zone capacity (2.8-1.1) ÷ 12.8, where 2.8 MGD is the Chino "A" Booster capacity, 1.1 MGD is the Chino "B" zone capacity, and 12.8 MGD is the capacity provided to Chino "A" zone by the Chino Zone booster; therefore, the component cost of treatment per capacity unit for the Chino "A" Zone is $60,880 (0.133) ÷ 1,290 = **$6/C.U**

The Chino "A" Zone uses 2.3% of the Base Zone pumping capacity (1.2 ÷ 51.2), where 1.2 MGD is the capacity provided to Chino "A" Zone by the Base Zone wells and 51.2 MGD is the capacity of the Base Zone; therefore, the component cost of treatment per capacity unit for the Chino "A" Zone is ($753,500 + $365,280) (0.023) ÷ 1,290 = **$19/C.U**

U.V TREATMENT

DESCRIPTION	YEAR CONSTRUCTED	*FOREBAY COST
UV Treatment (Snow Creek/Falls Creek)	2014	$317,142
TOTAL		**$317,142**

*Actual project costs.

The UV treated surface water not only benefits the Chino "A" Zone, the water is also used by Snow Creek Village Zone and Base Zone. The Base Zone and Chino Zones will use 38% of the total stream capacity (0.69 ÷ 1.81); therefore, the component cost per capacity unit for the UV treatment per capacity unit is therefore, $317,142 (0.38) ÷ 30,494 C.U. = **$4/C.U.**

CHINO "A" ZONE SURFACE WATER COST

In order to calculate the cost of surface water per capacity unit we first determine the cost of those facilities from actual project costs. Surface water is transmitted from the diversions into the Base Zone where it is distributed to the zone.

DESCRIPTION	YEAR CONSTRUCTED	*SURFACE WATER FACILITY COST
Snow Creek Diversion	1990	$2,000,000
Falls Creek Diversion	1990	$1,300,000
TOTAL		**$3,300,000**

* Actual project costs, unadjusted for present value.

The surface water not only benefits the Chino "A" Zone, the water also serves the Snow Creek Village Zone and Base Zone. The Base Zone and Chino Zones will use 38% of the total stream capacity (0.69 ÷ 1.81); therefore, the component cost per capacity unit is $3,300,000 (0.38) ÷ 30,494 C.U. = **$41/C.U.**

CHINO "A" ZONE WATER STORAGE COSTS

In order to calculate the cost of water storage per capacity unit we first determine the cost of those facilities from actual project costs and approved capital improvement budgets. The ratio of storage cost to volume is determined.

DESCRIPTION	YEAR CONSTRUCTED	RESERVOIR STORAGE CAPACITY	RESERVOIR COST*
Tahquitz Reservoir II Zone 1060	2004 2016	5,000,000 gallons 500,000 gallons	$2,299,785** $1,544,800*
TOTAL		**5,500,000 gallons**	**$3,844,585**

*Revised Budget Amount for project.

** Actual project costs, unadjusted for present value.

The most current water storage estimated costs are used to determine the ratio of water storage cost to unit of storage volume from the table above. The unit cost of water storage per gallon is $3,844,585 ÷ 5,500,000 GAL= $0.70/GAL. By applying this ratio to each water storage reservoir, the cost of each reservoir and the entire zone's water storage costs are determined.

CHINO "A" ZONE WATER STORAGE COSTS

DESCRIPTION	WATER STORAGE CAPACITY (GAL.)	UNIT COST PER UNIT STORAGE ($/GAL.)	ZONE STORAGE COST
Desert Palisade Res.	500,000	0.70	$350,000
TOTAL			**$350,000**

The required storage for the Chino "A" Zone is 0.42 MG. The existing storage capacity for the Chino "A" Zone is 0.50 MG; therefore, the Chino "A" Zone storage is 84% of existing storage (0.42 ÷ 0.50); therefore, the cost of storage per capacity unit for the Chino "A" Zone facilities is $350,000 (0.84) ÷ 1,290 C.U. = **$227/C.U.** plus the component cost of the Base Zone and Chino Zone storage since Chino "A" Zone utilizes those zones for water.

CHINO ZONE WATER STORAGE COSTS

DESCRIPTION	WATER STORAGE CAPACITY (GAL.)	UNIT COST PER UNIT STORAGE ($/GAL.)	ZONE STORAGE COST
Chino II	3,500,000	0.70	$2,450,000
Chino III	3,500,000	0.70	$2,450,000
TOTAL			**$4,900,000**

BASE ZONE WATER STORAGE COSTS

DESCRIPTION	WATER STORAGE CAPACITY (GAL.)	UNIT COST PER UNIT STORAGE ($/GAL.)	ZONE STORAGE COST
Palm Springs North I	1,500,000	0.70	$1,050,000
Palm Springs North II	12,000,000	0.70	$8,400,000
Tahquitz I	5,000,000	0.70	$3,500,000
Tahquitz II	5,000,000	0.70	$3,500,000
Palm Springs South I	5,000,000	0.70	$3,500,000
Palm Springs South II	5,000,000	0.70	$3,500,000
Equalization	1,000,000	0.70	$700,000*
TOTAL			**$24,150,000**

* The Equalization Reservoir serves the Base Zone, Snow Creek Village Zone, and the Chino Zones. The Base Zone and Chino Zones will use 83% of the total reservoir capacity.

The required storage for the Chino "A" Zone is 6% of the Chino Zone total storage capacity (0.42 ÷ 7.0); therefore, the component cost of storage per capacity unit for Chino "A" Zone is $4,900,000 (0.06) ÷ 1,290 C.U.= **$227/C.U.**.

Since the Chino Booster provides 43% of the water to the Chino Zone, only 43% of the required storage will be provided from the Chino Booster. The percentage of water from the Base Zone is 0.5% or (0.42 x 43%) ÷ 34.5; therefore, the component cost of storage per capacity unit for the Chino "A" Zone is $23,450,000 (0.005) ÷ 1,290 C.U. = **$90/C.U.**.

The component cost of storage per capacity for the Equalization Reservoir is equal to $700,000 (0.83) ÷ 30,494 = **$19/C.U.**

FUTURE STORAGE CAPACITY REQUIREMENTS

The General Plan requires that the Agency have 18 hours ADD emergency storage, along with fire flow and equalization storage during energy Time of Use (T.O.U.) periods. The 18 hour ADD during T.O.U periods is 0.09 MG (0.13 x 0.75). The fire flow requirement for the system is 0.24 MG (2,000 GPM for 2 hours per General Plan) and the equalization, or operational storage is 40% of the MDD and is therefore equal to 0.09 MG. Adding all of these components equates to 0.42 MG of storage. The current storage capacity for the system is 0.50 MG.

The existing pumping capacity of the system will accommodate an additional 1,108 capacity units (1,290 - 182). These additional units will add 1.5 MGD to the MDD. This additional demand will increase the storage requirement to 2.5 MG, requiring 2.0 MG of additional storage (2.5 – 0.5). The cost for the additional storage will be $1,400,000, or ($0.70/gal x 2.0 MG). The cost of future storage per capacity unit is therefore, $1,400,000 ÷ 1,290 C.U. = **$1,085/C.U.**

CHINO "A" WATER TRANSMISSION MAIN COSTS

Historically, the Agency has calculated the cost of water transmission mains per capacity unit by determining the cost of those facilities from actual project costs and approved capital improvement budgets. The ratio of cost per lineal foot to diameter is determined.

DESCRIPTION	YEAR CONSTRUCTED	PIPELINE LENGTH (L.F.)	*PIPELINE COST	PIPELINE UNIT COST ($/L.F.)
12"Alejo/Tamarisk/ Indian Canyon	2012/2014/2015	4,958	$1,290,176	$260/L.F.
14"	-	-	-	-
15"	-	-	-	-
16" Sunny Dunes	2013	1,100	$301,462	$274/L.F.

18”	-	-	-	-
20” E. Well Field	-	-	-	-
24” E. Well Field	-	-	-	-
26”	-	-	-	-
30” N. Well Field	-	-	-	-
36” Avenida Caballeros	2014/2015	2,659	$2,509,219	$944/L.F.
42”	-	-	-	-

* Actual project cost, unadjusted for present value.

Due to the lack of current data available for the varying sizes of transmission mains in our system, the Agency has opted to utilize a “unit construction cost for pipelines” equation used by Eastern Municipal Water District (EMWD) in their 2015 rate study (study conducted by Kennedy/Jenks Consultants). Said equation assumes that unit cost ($/linear foot) = Diameter (inch) x 40.47 x [Diameter (inch) $^{\wedge -0.309}$]. Utilization of said equation allows the Agency to determine uniform unit construction estimates for all sizes of transmission mains in our system.

***ESTIMATED WATER TRANSMISSION MAIN UNIT CONSTRUCTION COSTS**

TRANSMISSION MAIN DIAMETER (INCHES)	**TRANSMISSION MAIN LENGTH ($/L.F.)**
12”	225
14”	250
15”	265
16”	275
18”	300
20”	320
24”	365
26”	385
30”	425
36”	480
42”	535

*Based on the following EMWD assumption: cost $/L.F. = Diameter (inch) x 40.47 x [Diameter (inch) $^{\wedge -0.309}$].

The most current water transmission main estimated costs are used to determine the ratio of water main cost to diameter as shown in the table on the previous page. By applying these ratios to system transmission mains, the cost of all size mains for the entire system is determined by zone.

CHINO "A" ZONE WATER TRANSMISSION MAIN COSTS

TRANSMISSION MAIN DIAMETER (INCHES)	TRANSMISSION MAIN LENGTH (L.F.)	UNIT COST PER UNIT LENGTH ($/L.F.)	ZONE TRANSMISSION MAIN COST
***12"**	6,493	225	$1,460,925
16"	3,782	275	$1,040,050
18"	1,600	300	$480,000
24"	3,600	365	$1,314,000
TOTAL			**$4,294,975**

*Approximately 60% of all mains in the system are transmission mains with the remaining 40% being distribution mains. Therefore, only 60% of the total mains are included in the above table.

The Chino "A" Zone uses 60.7% of the total capacity (1.7 ÷ 2.8), where 2.8 MGD is the total capacity of the booster and 1.7 MGD is the capacity needed for Chino "A" Zone; therefore, the cost of transmission mains per capacity unit for the Chino "A" Zone is $4,294,975 (0.607) ÷ 1,290 C.U.= **$2,020/C.U.** plus a component cost of the Chino Zone and Base Zone transmission main since Chino and Base Zone water is pumped to the Chino "A" Zone.

The Chino "A" Zone uses 13.3% of the Chino Zone capacity (2.8-1.1) ÷ 12.8, where 2.8 MGD is the Chino "A" Booster capacity, 1.1 MGD is the Chino "B" zone capacity, and 12.8 MGD is the capacity provided to Chino "A" zone by the Chino Zone booster; therefore, the component cost of transmission mains per capacity unit for the Chino "A" Zone is $16,185,340 (0.133) ÷ 1,290 = **$1,668/C.U**

The Chino "A" Zone uses 2.3% of the Base Zone pumping capacity (1.2 ÷ 51.2), where 1.2 MGD is the capacity provided to Chino "A" Zone by the Base Zone wells and 51.2 MGD is the capacity of the Base Zone; therefore, the component cost of transmission mains per capacity unit for the Chino "A" Zone is $108,700,370 (0.023) ÷ 1,290 = **$1,938/C.U**

The component cost of transmission mains per capacity units for the mains that serve the Chino "A" Zone for surface water is $16,801,475 ÷ 30,494 C.U. = **$550/C.U.**

COST PER ZONE SUMMARY

ZONE	WATER PRODUCTION COST	TREATMENT COST	SURFACE WATER COST	STORAGE COST	TRANSMISSION COST	TOTAL CAPACITY UNIT COST
Chino "A"	$1,304	$29	$41	$1,648	$6,176	$9,198

The cost of a 1-inch service in the zone is comprised of the cumulative capacity unit costs for water production, treatment, surface water, storage and transmission facilities.

In order to determine the capacity unit cost for each meter size the AWWA meter factors are used. The table below shows the capacity unit charge (Backup Facility Charge) per meter size.

CHINO "A" ZONE FINAL BACKUP FACILITY CHARGE COST SUMMARY

METER SIZE	AWWA METER FACTOR	BACKUP FACILITY CHARGE
3/4 X 5/8	0.4	$3,679
1	**1.0**	**$9,198**
1.5	2.0	$18,396
2	3.2	$29,433

CHINO "B" ZONE

The existing capacity units (C.U.) for the Chino "B" Zone is 54. To determine the total capacity units for the zone, we must first calculate the max demand day (MDD) value utilizing the current General Plan formula:

- MDD = 1.85 x Average Day Annual Demand (ADD)

Currently, there are no active services connected to this zone. If we assume that the gal/c.u./day is equal to Chino "A" Zone, 1,318, the MDD is equal to 0.071 MGD.

The current pumping capacity for the Chino "B" Zone is 1.1 MGD. Since all service capacity must be met by the Chino "B" Zone pumping capacity, all of the current units would use 6.45% of the total capacity of the Chino "B" Zone (0.071 MGD÷1.1 MGD). The total maximum capacity units for the zone is then equal to 837, or (54÷0.0645).

Facility costs were determined by analyzing facility cost valuation from Agency Annual Operating Statistics Reports, cost estimates prepared in conjunction with the currently proposed budget and rate study, and by assessing the current facilities using the 2008 General Plan Update. The facilities cost valuation per capacity unit was determined from the total number of capacity units and the facilities costs.

The Chino "B" Zone charge is composed of costs per capacity unit for production (wells and boosters), treatment, surface water, storage and transmission facilities assignable to the Chino "B" Zone service.

CHINO "B" ZONE PUMPING/WATER PRODUCTION COST

In order to calculate the cost of pumping water per capacity unit we first determine the cost of those facilities from approved capital improvement budgets. The ratio of plant cost to horsepower is determined.

DESCRIPTION	YEAR CONSTRUCTED	PUMPING PLANT HORSEPOWER	PUMPING PLANT COST*
Well 39	2010	450 HP Pumping Plant	$1,320,156.59
Well 40	2009	450 HP Pumping Plant	$1,498,356.82
Well 41	2006	450 HP Pumping Plant	$1,561,858.76
Well 42	2006	200 HP Pumping Plant	$1,175,156.15
TOTAL		**1,550 HP**	**$5,555,528.32**

* Current Capital Improvement Budget Amounts for Pumping Plants.

The most current pumping plant estimated costs are used to determine the ratio of pumping plant cost to unit of horsepower from the table above. The unit cost of pumping per horsepower is $5,555,528.32 ÷ 1,550 hp= $3,584/hp. By applying this ratio to each active pumping plant the cost of each plant and the zone system pumping cost is determined.

Similarly, the cost of pressure boosting facilities is determined.

DESCRIPTION	YEAR CONSTRUCTED	BOOSTER PLANT HORSEPOWER	BOOSTER PLANT COST*
Zone 1240 Booster	2016	80 HP Booster Plant	$950,000
Janis Tuscany Booster Upgrades	2016	225 HP Booster Pumping Plant	$230,000
TOTAL		**305 HP**	**$1,180,000**

* Actual project costs, unadjusted for present value.

The most current pumping plant costs are used to determine the ratio of booster pumping plant cost to unit of horsepower from the table above. The unit cost of booster pumping per horsepower is $1,180,000 ÷ 305 hp= $3,869/hp. By applying this ratio to each active pumping plant the cost of each plant and the zone's booster pumping cost is determined. Since Chino "B" Zone is provided water by booster pumps, we will only be using the booster pump costs.

CHINO "B" ZONE PUMPING COSTS

WELL/BOOSTER BASE ZONES	DESCRIPTION	PLANT HORSEPOWER	ZONE PUMPING COST ($3,869/HP)
Desert Palisade	Booster Plant	80	$309,520
TOTAL			**$309,520**

The cost of production per capacity unit is $309,520 ÷ 837 C.U. = **$369/C.U**. plus a component cost of the Chino "A" Zone, Chino Zone, and Base Zone pumping.

The Chino "B" Zone uses 39.2% of the Chino "A" pumping capacity (1.1 ÷ 2.8), where 2.8 MGD is the total capacity of the Chino "A" booster and 1.1 MGD is the capacity of the Chino "B" Zone; therefore, the component cost of production per capacity unit for the Chino "B" Zone is $580,350 (0.392) ÷ 837 C.U.= **$271/C.U.**

The Chino "B" Zone uses 8.5% of the Chino Zone pumping capacity (1.1 ÷ 12.8), where 12.8 MGD is the Chino Booster capacity, 1.1 MGD is the Chino "B" zone capacity; therefore, the component cost of production per capacity unit for the Chino "B" Zone is $5,780,175 (0.085) ÷ 837 = **$586/C.U**

The Chino "B" Zone uses 0.92% of the Base Zone pumping capacity (0.47 ÷ 51.2), where 0.47 MGD is the capacity provided to Chino "B" Zone by the Base Zone and 51.2 MGD is the capacity of the Base Zone; therefore, the component cost of production per capacity unit for the Chino "B" Zone is $24,489,260 (0.0092) ÷ 837 = **$263/C.U**

CHINO "B" ZONE WATER TREATMENT COSTS

Since Base Zone, Chino Zone, and Chino "A" Zone water is pumped to the Chino "B" Zone, the treatment costs for the Chino "B" Zone is a component of the Base Zone treatment costs, Chino Zone treatment costs, Chino "A" Zone treatment costs and any additional treatment facilities associated with the Chino "B" Zone.

CHINO ZONE CHLORINE INJECTION TREATMENT

DESCRIPTION	NUMBER OF ACTIVE SITES	AVG. COST PER SITE	ZONE PUMPING COST (ACTUAL)
Chlorine storage building and pad, injection vault	2	$30,440	$60,880
TOTAL			**$60,880**

*Based on average construction cost per site to install chlorine injection facilities.

BASE ZONE FOREBAY TREATMENT

DESCRIPTION	YEAR CONSTRUCTED	*FOREBAY COST
Well 14 Forebay	1993	$376,750
Well 16 Forebay	1993	$376,750
TOTAL		**$753,500**

BASE ZONE CHLORINE INJECTION TREATMENT

DESCRIPTION	NUMBER OF ACTIVE SITES	AVG. COST PER SITE	ZONE PUMPING COST (ACTUAL)
Chlorine storage building and pad, injection vault	12	$30,440	$365,280
TOTAL			**$365,280**

*Based on average construction cost per site to install chlorine injection facilities.

The Chino "B" Zone uses 8.5% of the Chino Zone capacity (1.1 ÷ 12.8), where 1.1 MGD is the Chino "B" zone capacity, and 12.8 MGD is the capacity provided by the Chino Zone booster; therefore, the component cost of treatment per capacity unit for the Chino "B" Zone is $60,880 (0.085) ÷ 837 = **$6/C.U**

The Chino "B" Zone uses 0.92% of the Base Zone pumping capacity (0.47 ÷ 51.2), where 0.47 MGD is the capacity provided to Chino "B" Zone by the Base Zone wells and 51.2 MGD is the capacity of the Base Zone; therefore, the component cost of treatment per capacity unit for the Chino "B" Zone is ($753,500 + $365,280) (0.0092) ÷ 837 = **$12/C.U**

UV TREATMENT

DESCRIPTION	YEAR CONSTRUCTED	*FOREBAY COST
UV Treatment (Snow Creek/Falls Creek)	2014	$317,142
TOTAL		**$317,142**

*Actual project costs.

The UV treated surface water not only benefits the Chino "B" Zone, the water is also used by Snow Creek Village Zone and Base Zone. The Base Zone and Chino Zones will use 38% of the total stream capacity (0.69 ÷ 1.81); therefore, the component cost per capacity unit for the UV treatment per capacity unit is therefore, $317,142 (0.38) ÷ 30,494 C.U. = **$4/C.U.**

CHINO "B" ZONE SURFACE WATER COST

In order to calculate the cost of surface water per capacity unit we first determine the cost of those facilities from actual project costs. Surface water is transmitted from the diversions into the Base Zone where it is distributed to the zone.

DESCRIPTION	YEAR CONSTRUCTED	*SURFACE WATER FACILITY COST
Snow Creek Diversion	1990	$2,000,000
Falls Creek Diversion	1990	$1,300,000
TOTAL		**$3,300,000**

* Actual project costs, unadjusted for present value.

The surface water not only benefits the Chino "B" Zone, the water also serves the Snow Creek Village Zone and Base Zone. The Base Zone and Chino Zones will use 38% of the total stream capacity (0.69 ÷ 1.81); therefore, the component cost per capacity unit is $3,300,000 (0.38) ÷ 30,494 C.U. = **$41/C.U.**

CHINO "B" ZONE WATER STORAGE COSTS

In order to calculate the cost of water storage per capacity unit we first determine the cost of those facilities from actual project costs and approved capital improvement budgets. The ratio of storage cost to volume is determined.

DESCRIPTION	YEAR CONSTRUCTED	RESERVOIR STORAGE CAPACITY	RESERVOIR COST*
Tahquitz Reservoir II Zone 1060	2004 2016	5,000,000 gallons 500,000 gallons	$2,299,785** $1,544,800*
TOTAL		**5,500,000 gallons**	**$3,844,585**

*Revised Budget Amount for project.

** Actual project costs, unadjusted for present value.

The most current water storage estimated costs are used to determine the ratio of water storage cost to unit of storage volume from the table above. The unit cost of water storage per gallon is $3,844,585 ÷ 5,500,000 GAL= $0.70/GAL. By applying this ratio to each water storage reservoir, the cost of each reservoir and the entire zone's water storage costs are determined.

CHINO "A" ZONE WATER STORAGE COSTS

DESCRIPTION	WATER STORAGE CAPACITY (GAL.)	UNIT COST PER UNIT STORAGE ($/GAL.)	ZONE STORAGE COST
Desert Palisade Res.	500,000	0.70	$350,000
TOTAL			**$350,000**

The required storage for the Chino "B" Zone is 0.28 MG. The existing storage capacity for the Chino "B" Zone is 0.50 MG; therefore, the Chino "B" Zone storage is 56% of existing storage (0.28 ÷ 0.50); therefore, the cost of storage per capacity unit for the Chino "B" Zone is $350,000 (0.56) ÷ 857 C.U. = **$228/C.U.** plus the component cost of the Base Zone and Chino Zone storage since Chino "B" Zone utilizes those zones for water.

CHINO ZONE WATER STORAGE COSTS

DESCRIPTION	WATER STORAGE CAPACITY (GAL.)	UNIT COST PER UNIT STORAGE ($/GAL.)	ZONE STORAGE COST
Chino II	3,500,000	0.70	$2,450,000
Chino III	3,500,000	0.70	$2,450,000
TOTAL			**$4,900,000**

BASE ZONE WATER STORAGE COSTS

DESCRIPTION	WATER STORAGE CAPACITY (GAL.)	UNIT COST PER UNIT STORAGE ($/GAL.)	ZONE STORAGE COST
Palm Springs North I	1,500,000	0.70	$1,050,000
Palm Springs North II	12,000,000	0.70	$8,400,000
Tahquitz I	5,000,000	0.70	$3,500,000
Tahquitz II	5,000,000	0.70	$3,500,000
Palm Springs South I	5,000,000	0.70	$3,500,000
Palm Springs South II	5,000,000	0.70	$3,500,000
Equalization	1,000,000	0.70	$700,000*
TOTAL			**$24,150,000**

* The Equalization Reservoir serves the Base Zone, Snow Creek Village Zone, and the Chino Zones. The Base Zone and Chino Zones will use 83% of the total reservoir capacity.

The required storage for the Chino "B" Zone is 4% of the Chino Zone total storage capacity (0.28 ÷ 7.0); therefore, the component cost of storage per capacity unit for the Chino "B" Zone is $4,900,000 (0.04) ÷ 837 C.U.= **$234/C.U.**.

Since the Chino Booster provides 43% of the water to the Chino Zone, only 43% of the required storage will be provided from the Chino Booster. The percentage of water from the Base Zone is 0.3% or (0.28 x 43%) ÷ 34.5, therefore, the component cost of storage per capacity unit for the Chino "B" Zone is $23,450,000 (0.003) ÷ 837 C.U. = **$84/C.U.**.

The component cost of storage per capacity for the Equalization Reservoir is equal to $700,000 (0.83) ÷ 30,494 = **$19/C.U.**

FUTURE STORAGE CAPACITY REQUIREMENTS

The General Plan requires that the Agency have 18 hours ADD emergency storage, along with fire flow and equalization storage during energy Time of Use (T.O.U.) periods. The 18 hour ADD during T.O.U periods is 0.02 MG (0.03 x 0.75). The fire flow requirement for the system is 0.24 MG (2,000 GPM for 2 hours per General Plan) and the equalization, or operational storage is 40% of the MDD and is therefore equal to 0.02 MG. Adding all of these components equates to 0.28 MG of storage. The current storage capacity for the system is 0.50 MG.

The existing pumping capacity of the system will accommodate an additional 783 capacity units (837 - 54). These additional units will add 1.03 MGD to the MDD. This additional demand will increase the storage requirement to 1.07 MG, requiring 0.57 MG of additional storage (1.07 – 0.5). The cost for the additional storage will be $1,400,000, or ($0.70/gal x 2.0 MG). The cost of future storage per capacity unit is therefore, $570,000 ÷ 837 C.U. = **$681/C.U.**

CHINO "B" WATER TRANSMISSION MAIN COSTS

Historically, the Agency has calculated the cost of water transmission mains per capacity unit by determining the cost of those facilities from actual project costs and approved capital improvement budgets. The ratio of cost per lineal foot to diameter is determined.

DESCRIPTION	YEAR CONSTRUCTED	PIPELINE LENGTH (L.F.)	*PIPELINE COST	PIPELINE UNIT COST ($/L.F.)
12"Alejo/Tamarisk/ Indian Canyon	2012/2014/2015	4,958	$1,290,176	$260/L.F.
14"	-	-	-	-
15"	-	-	-	-
16" Sunny Dunes	2013	1,100	$301,462	$274/L.F.

18”	-	-	-	-
20” E. Well Field	-	-	-	-
24” E. Well Field	-	-	-	-
26”	-	-	-	-
30” N. Well Field	-	-	-	-
36” Avenida Caballeros	2014/2015	2,659	$2,509,219	$944/L.F.
42”	-	-	-	-

* Actual project cost, unadjusted for present value.

Due to the lack of current data available for the varying sizes of transmission mains in our system, the Agency has opted to utilize a “unit construction cost for pipelines” equation used by Eastern Municipal Water District (EMWD) in their 2015 rate study (study conducted by Kennedy/Jenks Consultants). Said equation assumes that unit cost ($/linear foot) = Diameter (inch) x 40.47 x [Diameter (inch) $^{\wedge -0.309}$]. Utilization of said equation allows the Agency to determine uniform unit construction estimates for all sizes of transmission mains in our system.

***ESTIMATED WATER TRANSMISSION MAIN UNIT CONSTRUCTION COSTS**

TRANSMISSION MAIN DIAMETER (INCHES)	**TRANSMISSION MAIN LENGTH ($/L.F.)**
12”	225
14”	250
15”	265
16”	275
18”	300
20”	320
24”	365
26”	385
30”	425
36”	480
42”	535

*Based on the following EMWD assumption: cost $/L.F. = Diameter (inch) x 40.47 x [Diameter (inch) $^{\wedge -0.309}$].

The most current water transmission main estimated costs are used to determine the ratio of water main cost to diameter as shown in the table on the previous page. By applying these ratios to system transmission mains, the cost of all size mains for the entire system is determined by zone.

Since the same transmission mains are used by both Chino "B" and Chino A" Zones, the capacity unit cost for Chino "B" Zone will be based on a component cost of Chino "A" Zone, Chino Zone, and Base Zone values.

CHINO "A" ZONE WATER TRANSMISSION MAIN COSTS

TRANSMISSION MAIN DIAMETER (INCHES)	TRANSMISSION MAIN LENGTH (L.F.)	UNIT COST PER UNIT LENGTH ($/L.F.)	ZONE TRANSMISSION MAIN COST
***12"**	6,493	225	$1,460,925
16"	3,782	275	$1,040,050
18"	1,600	300	$480,000
24"	3,600	365	$1,314,000
TOTAL			**$4,294,975**

*Approximately 60% of all mains in the system are transmission mains with the remaining 40% being distribution mains. Therefore, only 60% of the total mains are included in the above table.

The Chino "B" Zone uses 39.2% of the total capacity (1.1 ÷ 2.8), where 2.8 MGD is the total capacity of the booster and 1.1 MGD is the capacity needed for Chino "B" Zone; therefore, the component cost of transmission mains per capacity unit for the Chino "B" Zone is $4,294,975 (0.392) ÷ 837 C.U.= **$2,011/C.U.**

The Chino "B" Zone uses 8.6% of the Chino Zone capacity (1.1 ÷ 12.8), where 1.1 MGD is the Chino "B" zone capacity, and 12.8 MGD is the capacity provided to Chino "A" zone by the Chino Zone booster; therefore, the component cost of transmission mains per capacity unit for the Chino "B" Zone is $16,185,340 (0.086) ÷ 837 = **$1,663/C.U**

The Chino "B" Zone uses 0.92% of the Base Zone pumping capacity (0.47 ÷ 51.2), where 0.47 MGD is the capacity provided to Chino "B" Zone by the Base Zone wells and 51.2 MGD is the

capacity of the Base Zone; therefore, the component cost of transmission mains per capacity unit for the Chino "B" Zone is ($108,700,370 (0.009) ÷ 837 = **$1,168/C.U**

The component cost of transmission mains per capacity units for the mains that serve the Chino "B" Zone for surface water is $16,801,475 ÷ 30,494 C.U. = **$550/C.U.**

COST PER ZONE SUMMARY

ZONE	WATER PRODUCTION COST	TREATMENT COST	SURFACE WATER COST	STORAGE COST	TRANSMISSION COST	TOTAL CAPACITY UNIT COST
Chino "B"	$1,489	$22	$41	$1,246	$5,392	$8,190

The cost of a 1-inch service in the zone is comprised of the cumulative capacity unit costs for water production, treatment, surface water, storage and transmission facilities.

In order to determine the capacity unit cost for each meter size the AWWA meter factors are used. The table below shows the capacity unit charge (Backup Facility Charge) per meter size.

CHINO "B" ZONE FINAL BACKUP FACILITY CHARGE COST SUMMARY

METER SIZE	AWWA METER FACTOR	BACKUP FACILITY CHARGE
3/4 X 5/8	0.4	$3,276
1	**1.0**	**$8,190**
1.5	2.0	$16,380
2	3.2	$26,208

ACANTO ZONE

The existing capacity units (C.U.) for the Acanto Zone is 478. To determine the total capacity units for the zone, we must first calculate the max demand day (MDD) value utilizing the current General Plan formula:

- MDD = 1.85 x Average Day Annual Demand (ADD)

Using annual production data from 2017, the ADD calculated for the zone equals 0.57 MGD, therefore, the MDD is equal to 1.05 MGD. If the MDD is equal to 1.05 MGD, the current gal/C.U./day is equal to 2,196 gal/C.U./day, or (1.05MGD ÷ 478).

The current pumping capacity for the Acanto Zone is 4.7 MGD. Since all service capacity must be met by the Acanto Zone pumping capacity, all of the existing units are using 22% of the total capacity of the Acanto Zone (1.05 MGD÷4.7 MGD). The total maximum capacity units for the zone is then equal to 2,172, or (478÷0.22).

Facility costs were determined by analyzing facility cost valuation from Agency Annual Operating Statistics Reports, cost estimates prepared in conjunction with the currently proposed budget and rate study, and by assessing the current facilities using the 2008 General Plan Update. The facilities cost valuation per capacity unit was determined from the total number of capacity units and the facilities costs.

The Acanto Zone charge is composed of costs per capacity unit for production (wells and boosters), treatment, surface water, storage and transmission facilities assignable to the Acanto Zone service.

ACANTO ZONE PUMPING/WATER PRODUCTION COST

In order to calculate the cost of pumping water per capacity unit we first determine the cost of those facilities from approved capital improvement budgets. The ratio of plant cost to horsepower is determined.

DESCRIPTION	YEAR CONSTRUCTED	PUMPING PLANT HORSEPOWER	PUMPING PLANT COST*
Well 39	2010	450 HP Pumping Plant	$1,320,156.59
Well 40	2009	450 HP Pumping Plant	$1,498,356.82
Well 41	2006	450 HP Pumping Plant	$1,561,858.76
Well 42	2006	200 HP Pumping Plant	$1,175,156.15
TOTAL		**1,550 HP**	**$5,555,528.32**

* Current Capital Improvement Budget Amounts for Pumping Plants.

The most current pumping plant estimated costs are used to determine the ratio of pumping plant cost to unit of horsepower from the table above. The unit cost of pumping per horsepower is $5,555,528.32 ÷ 1,550 hp= $3,584/hp. By applying this ratio to each active pumping plant the cost of each plant and the zone system pumping cost is determined.

Similarly, the cost of pressure boosting facilities is determined.

DESCRIPTION	YEAR CONSTRUCTED	BOOSTER PLANT HORSEPOWER	BOOSTER PLANT COST*
Zone 1240 Booster	2016	80 HP Booster Plant	$950,000
Janis Tuscany Booster Upgrades	2016	225 HP Booster Pumping Plant	$230,000
TOTAL		**305 HP**	**$1,180,000**

* Actual project costs, unadjusted for present value.

The most current pumping plant costs are used to determine the ratio of booster pumping plant cost to unit of horsepower from the table above. The unit cost of booster pumping per horsepower is $1,180,000 ÷ 305 hp= $3,869/hp. By applying this ratio to each active pumping plant the cost of each plant and the zone's booster pumping cost is determined. Since Acanto Zone is provided water by booster pumps, we will only be using the booster pump costs.

ACANTO ZONE PUMPING COSTS

WELL/BOOSTER BASE ZONES	DESCRIPTION	PLANT HORSEPOWER	ZONE PUMPING COST ($3,869/HP)
Acanto Booster	Booster Plant	300	$1,160,700
TOTAL			**$1,160,700**

The cost of production per capacity unit for the Acanto Zone is $1,160,700 ÷ 2,172 C.U.= **$534/C.U.** plus a component cost of the Base Zone pumping since Acanto Boosters are used to pump Base Zone water to the Acanto Zone.

The Acanto Zone uses 9.2% of the Base Zone wells (4.7 ÷ 51.2), where 4.7 MGD is the Acanto Booster capacity and 51.2 MGD is the Base Zone wells capacity; therefore, the component cost of production per capacity unit for the Base Zone wells is $24,489,260 (0.092) ÷ 2,172 = **$1,037/C.U**

ACANTO ZONE WATER TREATMENT COSTS

Since Base Zone water is pumped to the Acanto Zone, the treatment costs for the Acanto Zone is a component of the Base Zone treatment costs and any additional treatment facilities associated with the Acanto Zone.

BASE ZONE FOREBAY TREATMENT

DESCRIPTION	YEAR CONSTRUCTED	*FOREBAY COST
Well 14 Forebay	1993	$376,750
Well 16 Forebay	1993	$376,750
TOTAL		**$753,500**

BASE ZONE CHLORINE INJECTION TREATMENT

DESCRIPTION	NUMBER OF ACTIVE SITES	AVG. COST PER SITE	ZONE PUMPING COST (ACTUAL)
Chlorine storage building and pad, injection vault	12	$30,440	$365,280
TOTAL			**$365,280**

*Based on average construction cost per site to install chlorine injection facilities.

The Acanto Zone uses 9.2% of the Base Zone wells (4.7 ÷ 51.2), where 4.7 MGD is the Acanto Booster capacity and 51.2 MGD is the Base Zone wells capacity; therefore, the component cost of treatment per capacity unit for the Base Zone facilities is $753,500 (0.092) ÷ 2,172 = **$32/C.U.** and $365,280 (0.092) ÷ 2,172 = **$15/C.U.**

UV TREATMENT

DESCRIPTION	YEAR CONSTRUCTED	*FOREBAY COST
UV Treatment (Snow Creek/Falls Creek)	2014	$317,142
TOTAL		**$317,142**

*Actual project costs.

The UV treated surface water not only benefits the Acanto Zone, the water is also used by Snow Creek Village Zone and Base Zone. The Base Zone and Chino Zones will use 38% of the total stream capacity (0.69 ÷ 1.81); therefore, the component cost per capacity unit for the UV treatment per capacity unit is therefore, $317,142 (0.38) ÷ 30,494 C.U. = **$4/C.U.**

ACANTO ZONE SURFACE WATER COST

In order to calculate the cost of surface water per capacity unit we first determine the cost of those facilities from actual project costs. Surface water is transmitted from the diversions into the Base Zone where it is distributed to the zone.

DESCRIPTION	YEAR CONSTRUCTED	*SURFACE WATER FACILITY COST
Snow Creek Diversion	1990	$2,000,000
Falls Creek Diversion	1990	$1,300,000
TOTAL		**$3,300,000**

* Actual project costs, unadjusted for present value.

The surface water not only benefits the Acanto Zone, the water also serves the Snow Creek Village Zone and Chino Zone. The Base Zone and Chino Zones will use 38% of the total stream capacity (0.69 ÷ 1.81); therefore, the cost per capacity unit is $3,300,000 (0.38) ÷ 30,494 C.U. = **$41/C.U.**

ACANTO ZONE WATER STORAGE COSTS

In order to calculate the cost of water storage per capacity unit we first determine the cost of those facilities from actual project costs and approved capital improvement budgets. The ratio of storage cost to volume is determined.

DESCRIPTION	YEAR CONSTRUCTED	RESERVOIR STORAGE CAPACITY	RESERVOIR COST*
Tahquitz Reservoir II	2004	5,000,000 gallons	$2,299,785**
Zone 1060	2016	500,000 gallons	$1,544,800*
TOTAL		**5,500,000 gallons**	**$3,844,585**

*Revised Budget Amount for project.

** Actual project costs, unadjusted for present value.

The most current water storage estimated costs are used to determine the ratio of water storage cost to unit of storage volume from the table above. The unit cost of water storage per gallon is $3,844,585 ÷ 5,500,000 GAL= $0.70/GAL. By applying this ratio to each water storage reservoir, the cost of each reservoir and the entire zone's water storage costs are determined.

ACANTO ZONE WATER STORAGE COSTS

DESCRIPTION	WATER STORAGE CAPACITY (GAL.)	UNIT COST PER UNIT STORAGE ($/GAL.)	ZONE STORAGE COST
Andreas I	1,500,000	0.70	$1,050,000
Andreas II	1,500,000	0.70	$1,050,000
TOTAL			**$2,100,000**

The cost of storage per capacity unit for the Acanto Zone facilities is $2,100,000 ÷ 2,172 C.U.= **$967/C.U.** plus the component cost of the Base Zone storage since Acanto Zone utilizes Base Zone water.

BASE ZONE WATER STORAGE COSTS

DESCRIPTION	WATER STORAGE CAPACITY (GAL.)	UNIT COST PER UNIT STORAGE ($/GAL.)	ZONE STORAGE COST
Palm Springs North I	1,500,000	0.70	$1,050,000
Palm Springs North II	12,000,000	0.70	$8,400,000
Tahquitz I	5,000,000	0.70	$3,500,000
Tahquitz II	5,000,000	0.70	$3,500,000
Palm Springs South I	5,000,000	0.70	$3,500,000
Palm Springs South II	5,000,000	0.70	$3,500,000
Equalization	1,000,000	0.70	$700,000*
TOTAL			**$24,150,000**

* The Equalization Reservoir serves the Base Zone, Snow Creek Village Zone, and the Chino Zone. The Base Zone and Chino Zones will use 83% of the total reservoir capacity.

The required storage for the Acanto Zone is 1.08 MG. The existing storage capacity for the Base Zone is 34.5 MG; therefore, the Acanto Zone storage is 3.1% of Base Zone storage (1.08 ÷ 34.5).

The cost of storage per capacity is therefore equal to the component of the Equalization Reservoir and the Base Zone storage, or $700,000 (0.83) ÷ 30,494 plus $23,450,000 (0.031) ÷ 2,172 C.U.: $19 + 334 = **$353/C.U.**

FUTURE STORAGE CAPACITY REQUIREMENTS

The General Plan requires that the Agency have 18 hours ADD emergency storage, along with fire flow and equalization storage during energy Time of Use (T.O.U.) periods. The 18 hour ADD during T.O.U periods for the zone is 0.42 MG (.57 x 0.75). The fire flow requirement for the zone is 0.24 MG (2,000 GPM for 2 hours per General Plan) and the equalization, or operational storage is 40% of the MDD and is therefore equal to 0.42 MG. Adding all of these components equates to 1.08 MG of storage. The current storage capacity for the system is 3.0 MG.

The existing pumping capacity of the system will accommodate an additional 1,694 capacity units (2,172 - 478). These additional units will add 3.7 MGD to the MDD. This additional demand will increase the storage requirement to 4.07 MG, requiring 1.07 MG of additional storage (4.07 – 3.0). The cost for the additional storage will be $749,000, or ($0.70/gal x 1.07 MG). The cost of future storage per capacity unit is therefore, $749,000 ÷ 2,172 C.U. = **$345/C.U.**

ACANTO ZONE WATER TRANSMISSION MAIN COSTS

Historically, the Agency has calculated the cost of water transmission mains per capacity unit by determining the cost of those facilities from actual project costs and approved capital improvement budgets. The ratio of cost per lineal foot to diameter is determined.

DESCRIPTION	YEAR CONSTRUCTED	PIPELINE LENGTH (L.F.)	*PIPELINE COST	PIPELINE UNIT COST ($/L.F.)
12"Alejo/Tamarisk/ Indian Canyon	2012/2014/2015	4,958	$1,290,176	$260/L.F.
14"	-	-	-	-
15"	-	-	-	-
16" Sunny Dunes	2013	1,100	$301,462	$274/L.F.
18"	-	-	-	-
20" E. Well Field	-	-	-	-
24" E. Well Field	-	-	-	-
26"	-	-	-	-
30" N. Well Field	-	-	-	-
36" Avenida Caballeros	2014/2015	2,659	$2,509,219	$944/L.F.
42"	-	-	-	-

* Actual project cost, unadjusted for present value.

Due to the lack of current data available for the varying sizes of transmission mains in our system, the Agency has opted to utilize a "unit construction cost for pipelines" equation used by Eastern Municipal Water District (EMWD) in their 2015 rate study (study conducted by Kennedy/Jenks Consultants). Said equation assumes that unit cost ($/linear foot) = Diameter (inch) x 40.47 x [Diameter (inch) $^{\wedge -0.309}$]. Utilization of said equation allows the Agency to determine uniform unit construction estimates for all sizes of transmission mains in our system.

***ESTIMATED WATER TRANSMISSION MAIN UNIT CONSTRUCTION COSTS**

TRANSMISSION MAIN DIAMETER (INCHES)	TRANSMISSION MAIN LENGTH ($/L.F.)
12"	225
14"	250
15"	265
16"	275
18"	300
20"	320

24”	365
26”	385
30”	425
36”	480
42”	535

*Based on the following EMWD assumption: cost $/L.F. = Diameter (inch) x 40.47 x [Diameter (inch) $^{\wedge -0.309}$].

The most current water transmission main estimated costs are used to determine the ratio of water main cost to diameter as shown in the table on the previous page. By applying these ratios to system transmission mains, the cost of all size mains for the entire system is determined by zone.

ACANTO ZONE WATER TRANSMISSION MAIN COSTS

TRANSMISSION MAIN DIAMETER (INCHES)	TRANSMISSION MAIN LENGTH (L.F.)	UNIT COST PER UNIT LENGTH ($/L.F.)	ZONE TRANSMISSION MAIN COST
***12”**	8,875	225	$1,996,200
16”	6,832	275	$1,878,800
24”	23	365	$8,395
****20”**	9,673	320	$3,095,360**
****24”**	37,551	365	$13,706,115**
TOTAL			**$3,888,395**

*Approximately 60% of all mains in the system are transmission mains with the remaining 40% being distribution mains. Therefore, only 60% of the total mains are included in the above table.

The cost of transmission per capacity unit for the Acanto Zone mains is $3,888,395 ÷ 2,172 C.U.= **$1,790/C.U**. plus a component of the Base Zone mains cost since Acanto Boosters are used to pump Base Zone water to the Acanto Zone.

The Acanto Zone uses 9.2% of the Base Zone wells (4.7 ÷ 51.2), where 4.7 MGD is the Acanto Booster capacity and 51.2MGD is the Base Zone wells capacity; therefore, the component cost of transmission mains per capacity unit for the Base Zone facilities is $108,700,370 (0.092) ÷ 2,172 = **$4,604/C.U.**

The component cost of transmission mains per capacity units for the shared Base Zone and Chino Zone mains is therefore, $16,801,475 ÷ 30,494 C.U. = **$550/C.U.**

COST PER ZONE SUMMARY

ZONE	WATER PRODUCTION COST	TREATMENT COST	SURFACE WATER COST	STORAGE COST	TRANSMISSION COST	TOTAL CAPACITY UNIT COST
Acanto	$1,571	$51	$41	$1,664	$6,944	$10,271

The cost of a 1-inch service in the zone is comprised of the cumulative capacity unit costs for water production, treatment, surface water, storage and transmission facilities.

In order to determine the capacity unit cost for each meter size the AWWA meter factors are used. The table below shows the capacity unit charge (Backup Facility Charge) per meter size.

ACANTO ZONE FINAL BACKUP FACILITY CHARGE COST SUMMARY

METER SIZE	AWWA METER FACTOR	BACKUP FACILITY CHARGE
3/4 X 5/8	0.4	$4,108
1	**1.0**	**$10,271**
1.5	2.0	$20,542
2	3.2	$32.867

SOUTHRIDGE "A" ZONE

The existing capacity units (C.U.) for the Southridge "A" Zone is 35. To determine the total capacity units for the zone, we must first calculate the max demand day (MDD) value utilizing the current General Plan formula:

- MDD = 1.85 x Average Day Annual Demand (ADD)

Using annual production data from 2017, the ADD calculated for the zone equals 0.04 MGD, therefore, the MDD is equal to 0.07 MGD. If the MDD is equal to 0.07 MGD, the current gal/C.U./day is equal to 2,000 gal/C.U./day, or (0.07MGD ÷ 35).

The current pumping capacity for the Southridge "A" Zone is 0.64 MGD; however, 0.44 MGD is dedicated to Southridge "B" Zone. The pumping capacity for Southridge "A" Zone is therefore 0.20 MGD (0.64 - 0.44). Since all service capacity must be met by the Southridge "A" Zone pumping capacity, all of the existing units are using 35% of the total capacity of the Southridge "A" Zone, or (0.07 MGD ÷ 0.20 MGD). The total maximum capacity units for the zone is then equal to 100, or (35 ÷ 0.35).

Facility costs were determined by analyzing facility cost valuation from Agency Annual Operating Statistics Reports, cost estimates prepared in conjunction with the currently proposed budget and rate study, and by assessing the current facilities using the 2008 General Plan Update. The facilities cost valuation per capacity unit was determined from the total number of capacity units and the facilities costs.

The Southridge "A" Zone charge is composed of costs per capacity unit for production (wells and boosters), treatment, surface water, storage and transmission facilities assignable to the Southridge "A" Zone service.

SOUTHRIDGE "A" ZONE PUMPING/WATER PRODUCTION COST

In order to calculate the cost of pumping water per capacity unit we first determine the cost of those facilities from approved capital improvement budgets. The ratio of plant cost to horsepower is determined.

DESCRIPTION	YEAR CONSTRUCTED	PUMPING PLANT HORSEPOWER	PUMPING PLANT COST*
Well 39	2010	450 HP Pumping Plant	$1,320,156.59
Well 40	2009	450 HP Pumping Plant	$1,498,356.82
Well 41	2006	450 HP Pumping Plant	$1,561,858.76
Well 42	2006	200 HP Pumping Plant	$1,175,156.15
TOTAL		**1,550 HP**	**$5,555,528.32**

* Current Capital Improvement Budget Amounts for Pumping Plants.

The most current pumping plant estimated costs are used to determine the ratio of pumping plant cost to unit of horsepower from the table above. The unit cost of pumping per horsepower is $5,555,528.32 ÷ 1,550 hp= $3,584/hp. By applying this ratio to each active pumping plant the cost of each plant and the zone system pumping cost is determined.

Similarly, the cost of pressure boosting facilities is determined.

DESCRIPTION	YEAR CONSTRUCTED	BOOSTER PLANT HORSEPOWER	BOOSTER PLANT COST*
Zone 1240 Booster	2016	80 HP Booster Plant	$950,000
Janis Tuscany Booster Upgrades	2016	225 HP Booster Pumping Plant	$230,000
TOTAL		**305 HP**	**$1,180,000**

* Actual project costs, unadjusted for present value.

The most current pumping plant costs are used to determine the ratio of booster pumping plant cost to unit of horsepower from the table above. The unit cost of booster pumping per horsepower is $1,180,000 ÷ 305 hp= $3,869/hp. By applying this ratio to each active pumping plant the cost

of each plant and the zone's booster pumping cost is determined. Since Southridge "A" Zone is provided water by booster pumps, we will only be using the booster pump costs.

SOUTHRIDGE "A" ZONE PUMPING COSTS

WELL/BOOSTER BASE ZONES	DESCRIPTION	PLANT HORSEPOWER	ZONE PUMPING COST ($3,869/HP)
Araby	Booster Plant	50	$193,450
TOTAL			**$193,450**

The Southridge "A" Zone uses 31.3% of the Zone capacity (0.64 – 0.44) ÷ 0.64, where 0.64 MGD is the Southridge "A" Zone total pumping capacity and 0.44 MGD is the Southridge "B" Zone capacity; therefore, the component cost of production per capacity unit for the Southridge "A" Zone is $193,450 (0.313) ÷ 100 = **$605/C.U**

The Southridge "A" Zone uses 0.39% of the Base Zone pumping capacity (0.20 ÷ 51.2), where 0.20 MGD is the capacity provided to Southridge "A" Zone by the Base Zone wells and 51.2 MGD is the capacity of the Base Zone; therefore, the component cost of production per capacity unit for the Southridge "A" Zone is $24,489,260 (0.0039) ÷ 100 = **$955/C.U**

SOUTHRIDGE "A" ZONE WATER TREATMENT COSTS

Since Base Zone water is pumped to the Southridge "A" Zone, the treatment costs for the Southridge "A" Zone is a component of the Base Zone treatment costs and any additional treatment facilities associated with the Southridge "A" Zone.

BASE ZONE FOREBAY TREATMENT

DESCRIPTION	YEAR CONSTRUCTED	*FOREBAY COST
Well 14 Forebay	1993	$376,750
Well 16 Forebay	1993	$376,750
TOTAL		**$753,500**

BASE ZONE CHLORINE INJECTION TREATMENT

DESCRIPTION	NUMBER OF ACTIVE SITES	AVG. COST PER SITE	ZONE PUMPING COST (ACTUAL)
Chlorine storage building and pad, injection vault	12	$30,440	$365,280
TOTAL			**$365,280**

*Based on average construction cost per site to install chlorine injection facilities.

The Southridge "A" Zone uses 0.39% of the Base Zone pumping capacity (0.20 ÷ 51.2), where 0.20 MGD is the capacity provided to Southridge "A" Zone by the Base Zone wells and 51.2 MGD is the capacity of the Base Zone; therefore, the component cost of treatment per capacity unit for the Southridge "A" Zone is ($753,500 + $365,280) (0.0039) ÷ 100 = **$43/C.U**

U.V TREATMENT

DESCRIPTION	YEAR CONSTRUCTED	*FOREBAY COST
UV Treatment (Snow Creek/Falls Creek)	2014	$317,142
TOTAL		**$317,142**

*Actual project costs.

The UV treated surface water not only benefits the Southridge "A" Zone, the water is also used by Snow Creek Village Zone and Base Zone. The Base Zone and Chino Zones will use 38% of the total stream capacity (0.69 ÷ 1.81); therefore, the component cost per capacity unit for the UV treatment per capacity unit is therefore, $317,142 (0.38) ÷ 30,494 C.U. = **$4/C.U.**

SOUTHRIDGE "A" ZONE SURFACE WATER COST

In order to calculate the cost of surface water per capacity unit we first determine the cost of those facilities from actual project costs. Surface water is transmitted from the diversions into the Base Zone where it is distributed to the zone.

DESCRIPTION	YEAR CONSTRUCTED	*SURFACE WATER FACILITY COST
Snow Creek Diversion	1990	$2,000,000
Falls Creek Diversion	1990	$1,300,000
TOTAL		**$3,300,000**

* Actual project costs, unadjusted for present value.

The surface water not only benefits the Southridge "A" Zone, the water also serves the Snow Creek Village Zone and Base Zone. The Base Zone and Chino Zones will use 38% of the total stream capacity (0.69 ÷ 1.81); therefore, the component cost per capacity unit is $3,300,000 (0.38) ÷ 30,494 C.U. = **$41/C.U.**

SOUTHRIDGE "A" ZONE WATER STORAGE COSTS

In order to calculate the cost of water storage per capacity unit we first determine the cost of those facilities from actual project costs and approved capital improvement budgets. The ratio of storage cost to volume is determined.

DESCRIPTION	YEAR CONSTRUCTED	RESERVOIR STORAGE CAPACITY	RESERVOIR COST*
Tahquitz Reservoir II	2004	5,000,000 gallons	$2,299,785**
Zone 1060	2016	500,000 gallons	$1,544,800*
TOTAL		**5,500,000 gallons**	**$3,844,585**

*Revised Budget Amount for project.

** Actual project costs, unadjusted for present value.

The most current water storage estimated costs are used to determine the ratio of water storage cost to unit of storage volume from the table above. The unit cost of water storage per gallon is $3,844,585 ÷ 5,500,000 GAL= $0.70/GAL. By applying this ratio to each water storage reservoir, the cost of each reservoir and the entire zone's water storage costs are determined.

SOUTHRIDGE "A" ZONE WATER STORAGE COSTS

DESCRIPTION	WATER STORAGE CAPACITY (GAL.)	UNIT COST PER UNIT STORAGE ($/GAL.)	ZONE STORAGE COST
Southridge I	100,000	0.70	$70,000
Southridge II	300,000	0.70	$210,000
TOTAL			**$280,000**

The required storage for the Southridge "A" Zone is 0.30 MG. The existing storage capacity for the Southridge "A" Zone is 0.40 MG; therefore, the Southridge "A" Zone storage is 75% of existing storage (0.30 ÷ 0.40); therefore, the cost of storage per capacity unit for the Southridge "A" Zone facilities is $280,000 (0.75) ÷ 100 C.U. = **$2,100/C.U.** plus the component cost of the Base Zone storage since Southridge "A" Zone utilizes the Base Zone for water.

BASE ZONE WATER STORAGE COSTS

DESCRIPTION	WATER STORAGE CAPACITY (GAL.)	UNIT COST PER UNIT STORAGE ($/GAL.)	ZONE STORAGE COST
Palm Springs North I	1,500,000	0.70	$1,050,000
Palm Springs North II	12,000,000	0.70	$8,400,000
Tahquitz I	5,000,000	0.70	$3,500,000
Tahquitz II	5,000,000	0.70	$3,500,000
Palm Springs South I	5,000,000	0.70	$3,500,000
Palm Springs South II	5,000,000	0.70	$3,500,000
Equalization	1,000,000	0.70	$700,000*
TOTAL			**$24,150,000**

* The Equalization Reservoir serves the Base Zone, Snow Creek Village Zone, and the Chino Zones. The Base Zone and Chino Zones will use 83% of the total reservoir capacity.

The required storage for the Southridge "A" Zone is 0.80% of the Base Zone total storage capacity (0.30 ÷ 34.5); therefore, the component cost of storage per capacity unit for Southridge "A" Zone is $23,450,000 (0.008) ÷ 100 C.U.= **$1,876/C.U.**.

The component cost of storage per capacity for the Equalization Reservoir is equal to $700,000 (0.83) ÷ 30,494 = **$19/C.U.**

FUTURE STORAGE CAPACITY REQUIREMENTS

The General Plan requires that the Agency have 18 hours ADD emergency storage, along with fire flow and equalization storage during energy Time of Use (T.O.U.) periods. The 18 hour ADD during T.O.U periods for the zone is 0.03 MG (.04 x 0.75). The fire flow requirement for the zone is 0.24 MG (2,000 GPM for 2 hours per General Plan) and the equalization, or operational storage is 40% of the MDD and is therefore equal to 0.028 MG. Adding all of these components equates to 0.298 MG of storage. The current storage capacity for the system is 0.40 MG.

The existing pumping capacity of the system will accommodate an additional 65 capacity units (100 - 35). These additional units will add 0.13 MGD to the MDD. This additional demand will increase the storage requirement to 0.40 MG, equaling the existing storage and therefore no future storage for the Southridge "A" Zone is required.

SOUTHRIDGE "A" ZONE WATER TRANSMISSION MAIN COSTS

Historically, the Agency has calculated the cost of water transmission mains per capacity unit by determining the cost of those facilities from actual project costs and approved capital improvement budgets. The ratio of cost per lineal foot to diameter is determined.

DESCRIPTION	YEAR CONSTRUCTED	PIPELINE LENGTH (L.F.)	*PIPELINE COST	PIPELINE UNIT COST ($/L.F.)
12"Alejo/Tamarisk/ Indian Canyon	2012/2014/2015	4,958	$1,290,176	$260/L.F.
14"	-	-	-	-
15"	-	-	-	-
16" Sunny Dunes	2013	1,100	$301,462	$274/L.F.
18"	-	-	-	-

20" E. Well Field	-	-	-	-
24" E. Well Field	-	-	-	-
26"	-	-	-	-
30" N. Well Field	-	-	-	-
36" Avenida Caballeros	2014/2015	2,659	$2,509,219	$944/L.F.
42"	-	-	-	-

* Actual project cost, unadjusted for present value.

Due to the lack of current data available for the varying sizes of transmission mains in our system, the Agency has opted to utilize a "unit construction cost for pipelines" equation used by Eastern Municipal Water District (EMWD) in their 2015 rate study (study conducted by Kennedy/Jenks Consultants). Said equation assumes that unit cost ($/linear foot) = Diameter (inch) x 40.47 x [Diameter (inch) $^{\wedge -0.309}$]. Utilization of said equation allows the Agency to determine uniform unit construction estimates for all sizes of transmission mains in our system.

***ESTIMATED WATER TRANSMISSION MAIN UNIT CONSTRUCTION COSTS**

TRANSMISSION MAIN DIAMETER (INCHES)	TRANSMISSION MAIN LENGTH ($/L.F.)
12"	225
14"	250
15"	265
16"	275
18"	300
20"	320
24"	365
26"	385
30"	425
36"	480
42"	535

*Based on the following EMWD assumption: cost $/L.F. = Diameter (inch) x 40.47 x [Diameter (inch) $^{\wedge -0.309}$].

The most current water transmission main estimated costs are used to determine the ratio of water main cost to diameter as shown in the table on the previous page. By applying these ratios to system transmission mains, the cost of all size mains for the entire system is determined by zone.

SOUTHRIDGE "A" ZONE WATER TRANSMISSION MAIN COSTS

TRANSMISSION MAIN DIAMETER (INCHES)	TRANSMISSION MAIN LENGTH (L.F.)	UNIT COST PER UNIT LENGTH ($/L.F.)	ZONE TRANSMISSION MAIN COST
12"	775	225	$174,375
TOTAL			**$174,375**

The Southridge "A" Zone uses 31.3% of the total capacity (0.20 ÷ 0.64), where 0.64 MGD is the total capacity of the Southridge "A" booster and 0.20 MGD is the capacity needed for Southridge "A" Zone; therefore, the cost of transmission mains per capacity unit for the Southridge "A" Zone is $174,375 (0.313) ÷ 100 C.U.= **$545/C.U.** plus a component cost of the Base Zone transmission main since Base Zone water is pumped to the Southridge "A" Zone.

The Southridge "A" Zone uses 0.39% of the Base Zone pumping capacity (0.20 ÷ 51.2), where 0.20 MGD is the capacity provided to Southridge "A" Zone by the Base Zone wells and 51.2 MGD is the capacity of the Base Zone; therefore, the component cost of transmission mains per capacity unit for the Southridge "A" Zone is $108,700,370 (0.0039) ÷ 100 = **$4,239/C.U**

The component cost of transmission mains per capacity units for the mains that serve the Southridge "A" Zone for surface water is $16,801,475 ÷ 30,494 C.U. = **$550/C.U.**

COST PER ZONE SUMMARY

ZONE	WATER PRODUCTION COST	TREATMENT COST	SURFACE WATER COST	STORAGE COST	TRANSMISSION COST	TOTAL CAPACITY UNIT COST
Southridge "A"	$1,560	$47	$41	$3,995	$5,334	$10,977

The cost of a 1-inch service in the zone is comprised of the cumulative capacity unit costs for water production, treatment, surface water, storage and transmission facilities.

In order to determine the capacity unit cost for each meter size the AWWA meter factors are used. The table below shows the capacity unit charge (Backup Facility Charge) per meter size.

SOUTHRIDGE "A" ZONE FINAL BACKUP FACILITY CHARGE COST SUMMARY

METER SIZE	AWWA METER FACTOR	BACKUP FACILITY CHARGE
3/4 X 5/8	0.4	$4,390
1	**1.0**	**$10,977**
1.5	2.0	$21,954
2	3.2	$35,126

SOUTHRIDGE "B" ZONE

The existing capacity units (C.U.) for the Southridge "B" Zone is 18. To determine the total capacity units for the zone, we must first calculate the max demand day (MDD) value utilizing the current General Plan formula:

- MDD = 1.85 x Average Day Annual Demand (ADD)

Using annual production data from 2017, the ADD calculated for the zone equals 0.01 MGD, therefore, the MDD is equal to 0.0185 MGD. If the MDD is equal to 0.0185 MGD, the current gal/C.U./day is equal to 1,028 gal/C.U./day, or (0.0185MGD÷18).

The current pumping capacity for the Southridge "B" Zone is 0.44 MGD. Since all service capacity must be met by the Southridge "B" Zone pumping capacity, all of the existing units are using 4.2% of the total capacity of the Southridge "B" Zone (0.0185 MGD ÷ 0.44 MGD). The total maximum capacity units for the zone is then equal to 428, or (18÷0.042).

Facility costs were determined by analyzing facility cost valuation from Agency Annual Operating Statistics Reports, cost estimates prepared in conjunction with the currently proposed budget and rate study, and by assessing the current facilities using the 2008 General Plan Update. The facilities cost valuation per capacity unit was determined from the total number of capacity units and the facilities costs.

The Southridge "B" Zone charge is composed of costs per capacity unit for production (wells and boosters), treatment, surface water, storage and transmission facilities assignable to the Southridge "B" Zone service.

SOUTHRIDGE "B" ZONE PUMPING/WATER PRODUCTION COST

In order to calculate the cost of pumping water per capacity unit we first determine the cost of those facilities from approved capital improvement budgets. The ratio of plant cost to horsepower is determined.

DESCRIPTION	YEAR CONSTRUCTED	PUMPING PLANT HORSEPOWER	PUMPING PLANT COST*
Well 39	2010	450 HP Pumping Plant	$1,320,156.59
Well 40	2009	450 HP Pumping Plant	$1,498,356.82
Well 41	2006	450 HP Pumping Plant	$1,561,858.76
Well 42	2006	200 HP Pumping Plant	$1,175,156.15
TOTAL		**1,550 HP**	**$5,555,528.32**

* Current Capital Improvement Budget Amounts for Pumping Plants.

The most current pumping plant estimated costs are used to determine the ratio of pumping plant cost to unit of horsepower from the table above. The unit cost of pumping per horsepower is $5,555,528.32 ÷ 1,550 hp= $3,584/hp. By applying this ratio to each active pumping plant the cost of each plant and the zone system pumping cost is determined.

Similarly, the cost of pressure boosting facilities is determined.

DESCRIPTION	YEAR CONSTRUCTED	BOOSTER PLANT HORSEPOWER	BOOSTER PLANT COST*
Zone 1240 Booster	2016	80 HP Booster Plant	$950,000
Janis Tuscany Booster Upgrades	2016	225 HP Booster Pumping Plant	$230,000
TOTAL		**305 HP**	**$1,180,000**

* Actual project costs, unadjusted for present value.

The most current pumping plant costs are used to determine the ratio of booster pumping plant cost to unit of horsepower from the table above. The unit cost of booster pumping per horsepower is $1,180,000 ÷ 305 hp= $3,869/hp. By applying this ratio to each active pumping plant the cost of each plant and the zone's booster pumping cost is determined. Since Southridge "B" Zone is provided water by booster pumps, we will only be using the booster pump costs.

SOUTHRIDGE "B" ZONE PUMPING COSTS

WELL/BOOSTER BASE ZONES	DESCRIPTION	PLANT HORSEPOWER	ZONE PUMPING COST ($3,869/HP)
Southridge	Booster Plant	90	$348,210
TOTAL			**$348,210**

The cost of production per capacity unit is $348,210 ÷ 428 C.U. = **$813/C.U**. plus a component cost of the Southridge "A" Zone and Base Zone pumping.

The Southridge "B" Zone uses 68.8% of the Southridge "A" pumping capacity (0.44 ÷ 0.64), where 0.64 MGD is the total capacity of the Southridge "A" booster and 0.44 MGD is the capacity

of the Southridge "B" Zone; therefore, the component cost of production per capacity unit for the Southridge "B" Zone is $193,450 (0.688) ÷ 428 C.U.= **$310/C.U.**

The Southridge "B" Zone uses 0.86% of the Base Zone pumping capacity (0.44 ÷ 51.2), where 0.44 MGD is the capacity provided to Southridge "B" Zone by the Base Zone and 51.2 MGD is the capacity of the Base Zone; therefore, the component cost of production per capacity unit for the Southridge "B" Zone is $24,489,260 (0.0086) ÷ 428 = **$492/C.U**

SOUTHRIDGE "B" ZONE WATER TREATMENT COSTS

Since Base Zone and Southridge "A" Zone water is pumped to the Southridge "B" Zone, the treatment costs for the Southridge "B" Zone is a component of the Base Zone treatment costs, Southridge "A" Zone treatment costs and any additional treatment facilities associated with the Southridge "B" Zone.

BASE ZONE FOREBAY TREATMENT

DESCRIPTION	YEAR CONSTRUCTED	*FOREBAY COST
Well 14 Forebay	1993	$376,750
Well 16 Forebay	1993	$376,750
TOTAL		**$753,500**

BASE ZONE CHLORINE INJECTION TREATMENT

DESCRIPTION	NUMBER OF ACTIVE SITES	AVG. COST PER SITE	ZONE PUMPING COST (ACTUAL)
Chlorine storage building and pad, injection vault	12	$30,440	$365,280
TOTAL			**$365,280**

*Based on average construction cost per site to install chlorine injection facilities.

The Southridge "B" Zone uses 0.86% of the Base Zone pumping capacity (0.44 ÷ 51.2), where 0.44 MGD is the capacity provided to Southridge "B" Zone by the Base Zone wells and 51.2 MGD

is the capacity of the Base Zone; therefore, the component cost of treatment per capacity unit for the Southridge "B" Zone is ($753,500 + $365,280) (0.0086) ÷ 428 = **$22/C.U.**

UV TREATMENT

DESCRIPTION	YEAR CONSTRUCTED	*FOREBAY COST
UV Treatment (Snow Creek/Falls Creek)	2014	$317,142
TOTAL		**$317,142**

*Actual project costs.

The UV treated surface water not only benefits the Southridge "B" Zone, the water is also used by Snow Creek Village Zone and Base Zone. The Base Zone and Chino Zones will use 38% of the total stream capacity (0.69 ÷ 1.81); therefore, the component cost per capacity unit for the UV treatment per capacity unit is therefore, $317,142 (0.38) ÷ 30,494 C.U. = **$4/C.U.**

SOUTHRIDGE "B" ZONE SURFACE WATER COST

In order to calculate the cost of surface water per capacity unit we first determine the cost of those facilities from actual project costs. Surface water is transmitted from the diversions into the Base Zone where it is distributed to the zone.

DESCRIPTION	YEAR CONSTRUCTED	*SURFACE WATER FACILITY COST
Snow Creek Diversion	1990	$2,000,000
Falls Creek Diversion	1990	$1,300,000
TOTAL		**$3,300,000**

* Actual project costs, unadjusted for present value.

The surface water not only benefits the Southridge "B" Zone, the water also serves the Snow Creek Village Zone and Base Zone. The Base Zone and Chino Zones will use 38% of the total stream capacity (0.69 ÷ 1.81); therefore, the component cost per capacity unit is $3,300,000 (0.38) ÷ 30,494 C.U. = **$41/C.U.**

SOUTHRIDGE "B" ZONE WATER STORAGE COSTS

In order to calculate the cost of water storage per capacity unit we first determine the cost of those facilities from actual project costs and approved capital improvement budgets. The ratio of storage cost to volume is determined.

DESCRIPTION	YEAR CONSTRUCTED	RESERVOIR STORAGE CAPACITY	RESERVOIR COST*
Tahquitz Reservoir II Zone 1060	2004 2016	5,000,000 gallons 500,000 gallons	$2,299,785** $1,544,800*
TOTAL		**5,500,000 gallons**	**$3,844,585**

*Revised Budget Amount for project.

** Actual project costs, unadjusted for present value.

The most current water storage estimated costs are used to determine the ratio of water storage cost to unit of storage volume from the table above. The unit cost of water storage per gallon is $3,844,585 ÷ 5,500,000 GAL= $0.70/GAL. By applying this ratio to each water storage reservoir, the cost of each reservoir and the entire zone's water storage costs are determined.

SOUTHRIDGE "B" ZONE WATER STORAGE COSTS

DESCRIPTION	WATER STORAGE CAPACITY (GAL.)	UNIT COST PER UNIT STORAGE ($/GAL.)	ZONE STORAGE COST
Southridge I	100,000	0.70	$70,000
Southridge II	300,000	0.70	$210,000
TOTAL			**$280,000**

The required storage for the Southridge "B" Zone is 0.25 MG. The existing storage capacity for the Southridge "B" Zone is 0.40 MG; therefore, the Southridge "B" Zone storage is 62.5% of existing storage (0.25 ÷ 0.40). The cost of storage per capacity unit for the Southridge "B" Zone facilities is $280,000 (0.625) ÷ 428 C.U. = **$408/C.U.** plus the component cost of the Base Zone storage since Southridge "B" Zone utilizes the Base Zone water.

BASE ZONE WATER STORAGE COSTS

DESCRIPTION	WATER STORAGE CAPACITY (GAL.)	UNIT COST PER UNIT STORAGE ($/GAL.)	ZONE STORAGE COST
Palm Springs North I	1,500,000	0.70	$1,050,000
Palm Springs North II	12,000,000	0.70	$8,400,000
Tahquitz I	5,000,000	0.70	$3,500,000
Tahquitz II	5,000,000	0.70	$3,500,000
Palm Springs South I	5,000,000	0.70	$3,500,000
Palm Springs South II	5,000,000	0.70	$3,500,000
Equalization	1,000,000	0.70	$700,000*
TOTAL			**$24,150,000**

* The Equalization Reservoir serves the Base Zone, Snow Creek Village Zone, and the Chino Zones. The Base Zone and Chino Zones will use 83% of the total reservoir capacity.

The required storage for the Southridge "B" Zone is 0.70% of the Base Zone total storage capacity (0.25 ÷ 34.5); therefore, the component cost of storage per capacity unit for Southridge "B" Zone is $23,450,000 (0.007) ÷ 428 C.U.= **$383/C.U.**.

The component cost of storage per capacity for the Equalization Reservoir is equal to $700,000 (0.83) ÷ 30,494 = **$19/C.U.**

FUTURE STORAGE CAPACITY REQUIREMENTS

The General Plan requires that the Agency have 18 hours ADD emergency storage, along with fire flow and equalization storage during energy Time of Use (T.O.U.) periods. The 18 hour ADD during T.O.U periods for the zone is 0.0075 MG (0.01 x 0.75). The fire flow requirement for the zone is 0.24 MG (2,000 GPM for 2 hours per General Plan) and the equalization, or operational storage is 40% of the MDD and is therefore equal to 0.0074 MG. Adding all of these components equates to 0.25 MG of storage. The current storage capacity for the system is 0.40 MG.

The existing pumping capacity of the system will accommodate an additional 410 capacity units (428 - 18). These additional units will add 0.42 MGD to the MDD. This additional demand will increase the storage requirement to 0.58 MG requiring 0.18 MG of additional storage (0.58 – 0.40). The cost for the additional storage will be $126,000, or ($0.70/gal x 0.18 MG). The cost of future storage per capacity unit is therefore, $126,000 ÷ 428 C.U. = **$294/C.U.**

SOUTHRIDGE "B" ZONE WATER TRANSMISSION MAIN COSTS

Historically, the Agency has calculated the cost of water transmission mains per capacity unit by determining the cost of those facilities from actual project costs and approved capital improvement budgets. The ratio of cost per lineal foot to diameter is determined.

DESCRIPTION	YEAR CONSTRUCTED	PIPELINE LENGTH (L.F.)	*PIPELINE COST	PIPELINE UNIT COST ($/L.F.)
12"Alejo/Tamarisk/ Indian Canyon	2012/2014/2015	4,958	$1,290,176	$260/L.F.
14"	-	-	-	-
15"	-	-	-	-
16" Sunny Dunes	2013	1,100	$301,462	$274/L.F.
18"	-	-	-	-
20" E. Well Field	-	-	-	-
24" E. Well Field	-	-	-	-
26"	-	-	-	-
30" N. Well Field	-	-	-	-
36" Avenida Caballeros	2014/2015	2,659	$2,509,219	$944/L.F.
42"	-	-	-	-

* Actual project cost, unadjusted for present value.

Due to the lack of current data available for the varying sizes of transmission mains in our system, the Agency has opted to utilize a "unit construction cost for pipelines" equation used by Eastern Municipal Water District (EMWD) in their 2015 rate study (study conducted by Kennedy/Jenks Consultants). Said equation assumes that unit cost ($/linear foot) = Diameter (inch) x 40.47 x

[Diameter (inch) $^{\wedge -0.309}$]. Utilization of said equation allows the Agency to determine uniform unit construction estimates for all sizes of transmission mains in our system.

***ESTIMATED WATER TRANSMISSION MAIN UNIT CONSTRUCTION COSTS**

TRANSMISSION MAIN DIAMETER (INCHES)	TRANSMISSION MAIN LENGTH ($/L.F.)
12"	225
14"	250
15"	265
16"	275
18"	300
20"	320
24"	365
26"	385
30"	425
36"	480
42"	535

*Based on the following EMWD assumption: cost $/L.F. = Diameter (inch) x 40.47 x [Diameter (inch) $^{\wedge -0.309}$].

The most current water transmission main estimated costs are used to determine the ratio of water main cost to diameter as shown in the table on the previous page. By applying these ratios to system transmission mains, the cost of all size mains for the entire system is determined by zone.

SOUTHRIDGE "B" ZONE WATER TRANSMISSION MAIN COSTS

TRANSMISSION MAIN DIAMETER (INCHES)	TRANSMISSION MAIN LENGTH (L.F.)	UNIT COST PER UNIT LENGTH ($/L.F.)	ZONE TRANSMISSION MAIN COST
12"	775	225	$174,375
TOTAL			**$174,375**

The Southridge "B" Zone uses 68.8% of the total capacity (0.44 ÷ 0.64), where 0.64 MGD is the total capacity of the Southridge "B" booster and 0.44 MGD is the capacity needed for Southridge "B" Zone; therefore, the cost of transmission mains per capacity unit for the Southridge "B" Zone is $174,375 (0.688) ÷ 428 C.U.= **$280/C.U.** plus a component cost of the Base Zone transmission main since Base Zone water is pumped to the Southridge "B" Zone.

The Southridge "B" Zone uses 0.86% of the Base Zone pumping capacity (0.44 ÷ 51.2), where 0.44 MGD is the capacity provided to Southridge "B" Zone by the Base Zone wells and 51.2 MGD is the capacity of the Base Zone; therefore, the component cost of transmission mains per capacity unit for the Southridge "B" Zone is $108,700,370 (0.0086) ÷ 428 = **$2,184/C.U**

The component cost of transmission mains per capacity units for the mains that serve the Southridge "A" Zone for surface water is $16,801,475 ÷ 30,494 C.U. = **$550/C.U.**

COST PER ZONE SUMMARY

ZONE	WATER PRODUCTION COST	TREATMENT COST	SURFACE WATER COST	STORAGE COST	TRANSMISSION COST	TOTAL CAPACITY UNIT COST
Southridge "B"	$1,615	$26	$41	$1,104	$3,014	$5,800

The cost of a 1-inch service in the zone is comprised of the cumulative capacity unit costs for water production, treatment, surface water, storage and transmission facilities.

In order to determine the capacity unit cost for each meter size the AWWA meter factors are used. The table below shows the capacity unit charge (Backup Facility Charge) per meter size.

SOUTHRIDGE "B" ZONE FINAL BACKUP FACILITY CHARGE COST SUMMARY

METER SIZE	AWWA METER FACTOR	BACKUP FACILITY CHARGE
3/4 X 5/8	0.4	$2,320
1	**1.0**	**$5,800**
1.5	2.0	$11,600
2	3.2	$18,560

EAST ZONE

The existing capacity units (C.U.) for the East Zone is 6,218. To determine the total capacity units for the zone, we must first calculate the max demand day (MDD) value utilizing the current General Plan formula:

- MDD = 1.85 x Average Day Annual Demand (ADD)

Using annual production data from 2017, the ADD calculated for the zone equals 4.9 MGD, therefore, the MDD is equal to 9.0 MGD. If the MDD is equal to 9.0 MGD, the current gal/C.U./day is equal to 1,447 gal/C.U./day, or (9.0 MGD÷6,218).

The current pumping capacity for the East Zone is 12.68 MGD. Since all service capacity must be met by the East Zone pumping capacity, all of the existing units are using 71% of the pumping capacity of the East Zone (9.0 MGD÷12.68 MGD). The total maximum capacity units for the zone is then equal to 8,757, or (6,218÷0.71).

Facility costs were determined by analyzing facility cost valuation from Agency Annual Operating Statistics Reports, cost estimates prepared in conjunction with the currently proposed budget and rate study, and by assessing the current facilities using the 2008 General Plan Update. The facilities cost valuation per capacity unit was determined from the total number of capacity units and the facilities costs.

The East Zone charge is composed of costs per capacity unit for production (wells and boosters), treatment, storage and transmission facilities assignable to the East Zone service.

EAST ZONE PUMPING/WATER PRODUCTION COST

In order to calculate the cost of pumping water per capacity unit we first determine the cost of those facilities from approved capital improvement budgets. The ratio of plant cost to horsepower is determined.

DESCRIPTION	YEAR CONSTRUCTED	PUMPING PLANT HORSEPOWER	PUMPING PLANT COST*
Well 39	2010	450 HP Pumping Plant	$1,320,156.59
Well 40	2009	450 HP Pumping Plant	$1,498,356.82
Well 41	2006	450 HP Pumping Plant	$1,561,858.76
Well 42	2006	200 HP Pumping Plant	$1,175,156.15
TOTAL		**1,550 HP**	**$5,555,528.32**

* Current Capital Improvement Budget Amounts for Pumping Plants.

The most current pumping plant estimated costs are used to determine the ratio of pumping plant cost to unit of horsepower from the table above. The unit cost of pumping per horsepower is $5,555,528.32 ÷ 1,550 hp= $3,584/hp. By applying this ratio to each active pumping plant the cost of each plant and the zone system pumping cost is determined.

Similarly, the cost of pressure boosting facilities is determined.

DESCRIPTION	YEAR CONSTRUCTED	BOOSTER PLANT HORSEPOWER	BOOSTER PLANT COST*
Zone 1240 Booster	2016	80 HP Booster Plant	$950,000
Janis Tuscany Booster Upgrades	2016	225 HP Booster Pumping Plant	$230,000
TOTAL		**305 HP**	**$1,180,000**

* Actual project costs, unadjusted for present value.

The most current pumping plant costs are used to determine the ratio of booster pumping plant cost to unit of horsepower from the table above. The unit cost of booster pumping per horsepower is $1,180,000 ÷ 305 hp= $3,869/hp. By applying this ratio to each active pumping plant the cost of each plant and the zone's booster pumping cost is determined.

EAST ZONE PUMPING COSTS

WELL/BOOSTER BASE ZONES	DESCRIPTION	PLANT HORSEPOWER	ZONE PUMPING COST ($3,584/HP)
Well 25	Well Pumping Plants	400	$1,433,600
Well 26	Well Pumping Plants	400	$1,433,600
Well 31	Well Pumping Plants	400	$1,433,600
Well 36	Well Pumping Plants	400	$1,433,600
Well 41	Well Pumping Plants	450	$1,612,800
TOTAL			**$7,347,200**

The East Zone uses 90.5% of the total well capacity (12.68 ÷ 14), therefore, the cost of production per capacity unit is therefore, $7,347,200 (0.905) ÷ 8,757 C.U. = **$759/C.U.**

EAST ZONE WATER TREATMENT COSTS

In order to calculate the cost of water treatment per capacity unit we first determine the cost of those facilities from actual project costs.

CHLORINE INJECTION TREATMENT

DESCRIPTION	NUMBER OF ACTIVE SITES	AVG. COST PER SITE	ZONE PUMPING COST (ACTUAL)
Chlorine storage building and pad, injection vault	4	$30,440	$121,760
TOTAL			**$121,760**

*Based on average construction cost per site to install chlorine injection facilities.

The East Zone uses 90.5% of the total well capacity (12.68 ÷ 14), therefore the cost of chlorine injection treatment per capacity unit is $121,760(0.905) ÷ 8,757C.U. = **$12/C.U.**

EAST ZONE WATER STORAGE COSTS

In order to calculate the cost of water storage per capacity unit we first determine the cost of those facilities from actual project costs and approved capital improvement budgets. The ratio of storage cost to volume is determined.

DESCRIPTION	YEAR CONSTRUCTED	RESERVOIR STORAGE CAPACITY	RESERVOIR COST*
Tahquitz Reservoir II	2004	5,000,000 gallons	$2,299,785**
Zone 1060	2016	500,000 gallons	$1,544,800*
TOTAL		**5,500,000 gallons**	**$3,844,585**

*Revised Budget Amount for project.

** Actual project costs, unadjusted for present value.

The most current water storage estimated costs are used to determine the ratio of water storage cost to unit of storage volume from the table above. The unit cost of water storage per gallon is $3,844,585 ÷ 5,500,000 GAL= $0.70/GAL. By applying this ratio to each water storage reservoir, the cost of each reservoir and the entire zone's water storage costs are determined.

EAST ZONE WATER STORAGE COSTS

DESCRIPTION	WATER STORAGE CAPACITY (GAL.)	UNIT COST PER UNIT STORAGE ($/GAL.)	ZONE STORAGE COST
East I	5,000,000	0.70	$3,500,000
East II	5,000,000	0.70	$3,500,000
TOTAL			**$7,000,000**

The East Zone uses 81.6% of the total East Zone storage capacity (8.16 ÷ 10), therefore, the cost of storage per capacity unit is $7,000,000 (0.816) ÷ 8,757 C.U. = **$652/C.U.**

FUTURE STORAGE CAPACITY REQUIREMENTS

The General Plan requires that the Agency have 18 hours ADD emergency storage, along with fire flow and equalization storage during energy Time of Use (T.O.U.) periods. The 18 hour ADD during T.O.U periods for the zone is 3.6 MG (4.9 x 0.75). The fire flow requirement for the zone is 0.96 MG (4,000 GPM for 4 hours per General Plan) and the equalization, or operational storage is 40% of the MDD and is therefore equal to 3.6 MG. Adding all of these components equates to 8.16 MG of storage. The current storage capacity for the system is 10 MG.

The existing pumping capacity of the system will accommodate an additional 2,539 capacity units (8,757 – 6,218). These additional units will add 3.67 MGD to the MDD. This additional demand will increase the storage requirement to 11.13 MG, requiring 1.13 MG of additional storage (11.13 -10.0). The cost for the additional storage will be $791,000, or ($0.70/gal x 1.13 MG). The cost of future storage per capacity unit is therefore, $791,000 ÷ 8,757 C.U. = **$90/C.U.**

EAST ZONE WATER TRANSMISSION MAIN COSTS

Historically, the Agency has calculated the cost of water transmission mains per capacity unit by determining the cost of those facilities from actual project costs and approved capital improvement budgets. The ratio of cost per lineal foot to diameter is determined.

DESCRIPTION	YEAR CONSTRUCTED	PIPELINE LENGTH (L.F.)	*PIPELINE COST	PIPELINE UNIT COST ($/L.F.)
12"Alejo/Tamarisk/ Indian Canyon	2012/2014/2015	4,958	$1,290,176	$260/L.F.
14"	-	-	-	-
15"	-	-	-	-
16" Sunny Dunes	2013	1,100	$301,462	$274/L.F.
18"	-	-	-	-
20" E. Well Field	-	-	-	-
24" E. Well Field	-	-	-	-
26"	-	-	-	-
30" N. Well Field	-	-	-	-
36" Avenida Caballeros	2014/2015	2,659	$2,509,219	$944/L.F.
42"	-	-	-	-

* Actual project cost, unadjusted for present value.

Due to the lack of current data available for the varying sizes of transmission mains in our system, the Agency has opted to utilize a "unit construction cost for pipelines" equation used by Eastern Municipal Water District (EMWD) in their 2015 rate study (study conducted by Kennedy/Jenks Consultants). Said equation assumes that unit cost ($/linear foot) = Diameter (inch) x 40.47 x [Diameter (inch) $^{\wedge -0.309}$]. Utilization of said equation allows the Agency to determine uniform unit construction estimates for all sizes of transmission mains in our system.

***ESTIMATED WATER TRANSMISSION MAIN UNIT CONSTRUCTION COSTS**

TRANSMISSION MAIN DIAMETER (INCHES)	TRANSMISSION MAIN LENGTH ($/L.F.)
12"	225
14"	250
15"	265
16"	275
18"	300
20"	320

24”	365
26”	385
30”	425
36”	480
42”	535

*Based on the following EMWD assumption: cost $/L.F. = Diameter (inch) x 40.47 x [Diameter (inch) $^{\wedge -0.309}$].

The most current water transmission main estimated costs are used to determine the ratio of water main cost to diameter as shown in the table on the previous page. By applying these ratios to system transmission mains, the cost of all size mains for the entire system is determined by zone.

EAST ZONE WATER TRANSMISSION MAIN COSTS

TRANSMISSION MAIN DIAMETER (INCHES)	TRANSMISSION MAIN LENGTH (L.F.)	UNIT COST PER UNIT LENGTH ($/L.F.)	ZONE TRANSMISSION MAIN COST
12”	116,491	225	$26,210,475
16”	5,410	275	$1,487,750
20”	3,365	320	$1,076,800
24”	33,345	365	$12,170,955
30”	3,400	425	$1,445,000
TOTAL			**$42,390,980**

Since the East Zone uses 90.5% of pumping capacity, the cost of transmission mains per capacity unit for the East Zone is therefore, $42,390,980 (0.905) ÷ 8,757 C.U.= **$4,380/C.U.**

COST PER ZONE SUMMARY

ZONE	WATER PRODUCTION COST	TREATMENT COST	STORAGE COST	TRANSMISSION COST	TOTAL CAPACITY UNIT COST
East	$759	$12	$742	$4,380	$5,893

The cost of a 1-inch service in the zone is comprised of the cumulative capacity unit costs for water production, treatment, storage and transmission facilities.

In order to determine the capacity unit cost for each meter size the AWWA meter factors are used. The table below shows the capacity unit charge (Backup Facility Charge) per meter size.

EAST ZONE FINAL BACKUP FACILITY CHARGE COST SUMMARY

METER SIZE	AWWA METER FACTOR	BACKUP FACILITY CHARGE
3/4 X 5/8	0.4	$2,357
1	**1.0**	**$5,893**
1.5	2.0	$11,786
2	3.2	$18,857

EAST "A" ZONE

The existing capacity units (C.U.) for the East "A" Zone is 384. To determine the total capacity units for the zone, we must first calculate the max demand day (MDD) value utilizing the current General Plan formula:

- MDD = 1.85 x Average Day Annual Demand (ADD)

Using annual production data from 2017, the ADD calculated for the zone equals 0.22 MGD, therefore, the MDD is equal to 0.41 MGD. If the MDD is equal to 0.41 MGD, the current gal/C.U./day is equal to 1,067 gal/C.U./day, or (0.41MGD÷384).

The current pumping capacity for the East "A" Zone is 0.54 MGD. Since all service capacity must be met by the East "A" Zone pumping capacity, all of the existing units are using 75.9% of the capacity of the East "A" Zone (0.41 MGD ÷ 0.54 MGD). The total maximum capacity units for the zone is then equal to 505, or (384 ÷ 0.759).

Facility costs were determined by analyzing facility cost valuation from Agency Annual Operating Statistics Reports, cost estimates prepared in conjunction with the currently proposed budget and rate study, and by assessing the current facilities using the 2008 General Plan Update. The facilities cost valuation per capacity unit was determined from the total number of capacity units and the facilities costs.

The East "A" Zone charge is composed of costs per capacity unit for production (wells and boosters), treatment, storage and transmission facilities assignable to the East "A" Zone service.

EAST "A" ZONE PUMPING/WATER PRODUCTION COST

In order to calculate the cost of pumping water per capacity unit we first determine the cost of those facilities from approved capital improvement budgets. The ratio of plant cost to horsepower is determined.

DESCRIPTION	YEAR CONSTRUCTED	PUMPING PLANT HORSEPOWER	PUMPING PLANT COST*
Well 39	2010	450 HP Pumping Plant	$1,320,156.59
Well 40	2009	450 HP Pumping Plant	$1,498,356.82
Well 41	2006	450 HP Pumping Plant	$1,561,858.76
Well 42	2006	200 HP Pumping Plant	$1,175,156.15
TOTAL		**1,550 HP**	**$5,555,528.32**

* Current Capital Improvement Budget Amounts for Pumping Plants.

The most current pumping plant estimated costs are used to determine the ratio of pumping plant cost to unit of horsepower from the table above. The unit cost of pumping per horsepower is $5,555,528.32 ÷ 1,550 hp= $3,584/hp. By applying this ratio to each active pumping plant the cost of each plant and the zone system pumping cost is determined.

Similarly, the cost of pressure boosting facilities is determined.

DESCRIPTION	YEAR CONSTRUCTED	BOOSTER PLANT HORSEPOWER	BOOSTER PLANT COST*
Zone 1240 Booster	2016	80 HP Booster Plant	$950,000
Janis Tuscany Booster Upgrades	2016	225 HP Booster Pumping Plant	$230,000
TOTAL		**305 HP**	**$1,180,000**

* Actual project costs, unadjusted for present value.

The most current pumping plant costs are used to determine the ratio of booster pumping plant cost to unit of horsepower from the table above. The unit cost of booster pumping per horsepower is $1,180,000 ÷ 305 hp= $3,869/hp. By applying this ratio to each active pumping plant the cost of each plant and the zone's booster pumping cost is determined. Since East "A" Zone is provided water by booster pumps, we will only be using the booster pump costs.

EAST "A" ZONE PUMPING COSTS

WELL/BOOSTER BASE ZONES	DESCRIPTION	PLANT HORSEPOWER	ZONE PUMPING COST ($3,869/HP)
Terrace	Booster Plant	45	$174,105
TOTAL			**$174,105**

The East "A" Zone uses 40.1% of the Zone capacity (1.32 – 0.78) ÷ 1.32, where 1.32 MGD is the East "A" Zone total pumping capacity and 0.78 MGD is the East "B" Zone pumping capacity; therefore, the component cost of production per capacity unit for the East "A" Zone is $174,105 (0.401) ÷ 505 = **$138/C.U**

The East "A" Zone uses 3.9% of the East Zone pumping capacity (0.54 ÷ 14), where 0.54 MGD is the capacity provided to East "A" Zone by the East Zone wells and 14 MGD is the capacity of the East Zone; therefore, the component cost of production per capacity unit for the East "A" Zone is $7,347,200 (0.039) ÷ 505 = **$567/C.U**

EAST "A" ZONE WATER TREATMENT COSTS

Since East Zone water is pumped to the East "A" Zone, the treatment costs for the East "A" Zone is a component of the East Zone treatment costs and any additional treatment facilities associated with the East "A" Zone.

EAST ZONE CHLORINE INJECTION TREATMENT

DESCRIPTION	NUMBER OF ACTIVE SITES	AVG. COST PER SITE	ZONE PUMPING COST (ACTUAL)
Chlorine storage building and pad, injection vault	4	$30,440	$121,760
TOTAL			**$121,760**

*Based on average construction cost per site to install chlorine injection facilities.

The East "A" Zone uses 3.9% of the East Zone pumping capacity (0.54 ÷ 14), where 0.54 MGD is the capacity provided to East "A" Zone by the East Zone wells and 14 MGD is the capacity of the East Zone; therefore, the component cost of treatment per capacity unit for the East "A" Zone is $121,760 (0.039) ÷ 505 = **$9/C.U**

EAST "A" ZONE WATER STORAGE COSTS

In order to calculate the cost of water storage per capacity unit we first determine the cost of those facilities from actual project costs and approved capital improvement budgets. The ratio of storage cost to volume is determined.

DESCRIPTION	YEAR CONSTRUCTED	RESERVOIR STORAGE CAPACITY	RESERVOIR COST*
Tahquitz Reservoir II Zone 1060	2016	500,000 gallons	$1,544,800*
TOTAL		**5,500,000 gallons**	**$3,844,585**

*Revised Budget Amount for project.

** Actual project costs, unadjusted for present value.

The most current water storage estimated costs are used to determine the ratio of water storage cost to unit of storage volume from the table above. The unit cost of water storage per gallon is $3,844,585÷5,500,000 GAL= $0.70/GAL. By applying this ratio to each water storage reservoir, the cost of each reservoir and the entire zone's water storage costs are determined.

EAST "A" ZONE WATER STORAGE COSTS

DESCRIPTION	WATER STORAGE CAPACITY (GAL.)	UNIT COST PER UNIT STORAGE ($/GAL.)	ZONE STORAGE COST
CC North	500,000	0.70	$350,000
Vista Miller	225,000	0.70	$157,500
TOTAL			**$507,500**

The required storage for the East "A" Zone is 0.57 MG. The existing storage capacity for the East "A" Zone is 0.725 MG; therefore, the East "A" Zone storage is 78.6% of existing storage (0.57 ÷ 0.725); therefore, the cost of storage per capacity unit for the East "A" Zone facilities is $507,500 (0.786) ÷ 505 C.U. = **$787/C.U.** plus the component cost of the East Zone storage since East "A" Zone utilizes the East Zone for water.

EAST ZONE WATER STORAGE COSTS

DESCRIPTION	WATER STORAGE CAPACITY (GAL.)	UNIT COST PER UNIT STORAGE ($/GAL.)	ZONE STORAGE COST
East I	5,000,000	0.70	$3,500,000

East II	5,000,000	0.70	$3,500,000
TOTAL			**$7,000,000**

The East "A" Zone uses 5.7% of the total East Zone storage capacity (0.57 ÷ 10), therefore, the cost of storage per capacity unit is $7,000,000 (0.057) ÷ 505 C.U. = **$790/C.U.**

FUTURE STORAGE CAPACITY REQUIREMENTS

The General Plan requires that the Agency have 18 hours ADD emergency storage, along with fire flow and equalization storage during energy Time of Use (T.O.U.) periods. The 18 hour ADD during T.O.U periods for the zone is 0.165 MG (0.22 x 0.75). The fire flow requirement for the zone is 0.24 MG (2,000 GPM for 2 hours per General Plan) and the equalization, or operational storage is 40% of the MDD and is therefore equal to 0.164 MG. Adding all of these components equates to 0.57 MG of storage. The current storage capacity for the system is 0.725 MG.

The existing pumping capacity of the system will accommodate an additional 121 capacity units (505 - 384). These additional units will add 0.13 MGD to the MDD. This additional demand will increase the storage requirement to 0.68 MG; therefore, no future storage for East "A" Zone is required.

EAST "A" WATER TRANSMISSION MAIN COSTS

Historically, the Agency has calculated the cost of water transmission mains per capacity unit by determining the cost of those facilities from actual project costs and approved capital improvement budgets. The ratio of cost per lineal foot to diameter is determined.

DESCRIPTION	YEAR CONSTRUCTED	PIPELINE LENGTH (L.F.)	*PIPELINE COST	PIPELINE UNIT COST ($/L.F.)
12"Alejo/Tamarisk/ Indian Canyon	2012/2014/2015	4,958	$1,290,176	$260/L.F.
14"	-	-	-	-
15"	-	-	-	-
16" Sunny Dunes	2013	1,100	$301,462	$274/L.F.
18"	-	-	-	-
20" E. Well Field	-	-	-	-
24" E. Well Field	-	-	-	-
26"	-	-	-	-
30" N. Well Field	-	-	-	-
36" Avenida Caballeros	2014/2015	2,659	$2,509,219	$944/L.F.
42"	-	-	-	-

* Actual project cost, unadjusted for present value.

Due to the lack of current data available for the varying sizes of transmission mains in our system, the Agency has opted to utilize a "unit construction cost for pipelines" equation used by Eastern Municipal Water District (EMWD) in their 2015 rate study (study conducted by Kennedy/Jenks Consultants). Said equation assumes that unit cost ($/linear foot) = Diameter (inch) x 40.47 x [Diameter (inch) $^{\wedge -0.309}$]. Utilization of said equation allows the Agency to determine uniform unit construction estimates for all sizes of transmission mains in our system.

***ESTIMATED WATER TRANSMISSION MAIN UNIT CONSTRUCTION COSTS**

TRANSMISSION MAIN DIAMETER (INCHES)	TRANSMISSION MAIN LENGTH ($/L.F.)
12"	225
14"	250
15"	265
16"	275
18"	300
20"	320

24”	365
26”	385
30”	425
36”	480
42”	535

*Based on the following EMWD assumption: cost $/L.F. = Diameter (inch) x 40.47 x [Diameter (inch) $^{-0.309}$].

The most current water transmission main estimated costs are used to determine the ratio of water main cost to diameter as shown in the table on the previous page. By applying these ratios to system transmission mains, the cost of all size mains for the entire system is determined by zone.

EAST “A” ZONE WATER TRANSMISSION MAIN COSTS

TRANSMISSION MAIN DIAMETER (INCHES)	TRANSMISSION MAIN LENGTH (L.F.)	UNIT COST PER UNIT LENGTH ($/L.F.)	ZONE TRANSMISSION MAIN COST
12”	4,310	225	$969,750
TOTAL			**$969,750**

The East “A” Zone uses 40.1% of the Zone capacity (1.32 – 0.78) ÷ 1.32, where 1.32 MGD is the East “A” Zone total pumping capacity and 0.78 MGD is the East “B” Zone pumping capacity; therefore, the component cost of transmission main per capacity unit for the East “A” Zone is $969,750 (0.401) ÷ 505 = **$770/C.U**

The East “A” Zone uses 3.9% of the East Zone pumping capacity (0.54 ÷ 14), where 0.54 MGD is the capacity provided to East “A” Zone by the East Zone wells and 14 MGD is the capacity of the East Zone; therefore, the component cost of transmission main per capacity unit for the East “A” Zone is $42,390,980 (0.039) ÷ 505 = **$3,273/C.U**

COST PER ZONE SUMMARY

ZONE	WATER PRODUCTION COST	TREATMENT COST	STORAGE COST	TRANSMISSION COST	TOTAL CAPACITY UNIT COST
East "A"	$725	$9	$1,577	$4,043	$6,354

The cost of a 1-inch service in the zone is comprised of the cumulative capacity unit costs for water production, treatment, storage and transmission facilities.

In order to determine the capacity unit cost for each meter size the AWWA meter factors are used. The table below shows the capacity unit charge (Backup Facility Charge) per meter size.

EAST "A" ZONE FINAL BACKUP FACILITY CHARGE COST SUMMARY

METER SIZE	AWWA METER FACTOR	BACKUP FACILITY CHARGE
3/4 X 5/8	0.4	$2,541
1	**1.0**	**$6,354**
1.5	2.0	$12,708
2	3.2	$20,332

EAST "B" ZONE

The existing capacity units (C.U.) for the East "B" Zone is 432. To determine the total capacity units for the zone, we must first calculate the max demand day (MDD) value utilizing the current General Plan formula:

- MDD = 1.85 x Average Day Annual Demand (ADD)

Using annual production data from 2017, the ADD calculated for the zone equals 0.25 MGD, therefore, the MDD is equal to 0.46 MGD. If the MDD is equal to 0.46 MGD, the current gal/C.U./day is equal to 1,064 gal/C.U./day, or (0.46MGD÷432).

The current pumping capacity for the East "B" Zone is 0.78 MGD. Since all service capacity must be met by the East "B" Zone pumping capacity, all of the existing units are using 59% of the total capacity of the East "B" Zone (0.46 MGD÷0.78 MGD). The total maximum capacity units for the zone is then equal to 732, or (432 ÷ 0.59).

Facility costs were determined by analyzing facility cost valuation from Agency Annual Operating Statistics Reports, cost estimates prepared in conjunction with the currently proposed budget and rate study, and by assessing the current facilities using the 2008 General Plan Update. The facilities cost valuation per capacity unit was determined from the total number of capacity units and the facilities costs.

The East "B" Zone charge is composed of costs per capacity unit for production (wells and boosters), treatment, storage and transmission facilities assignable to the East "B" Zone service.

EAST "B" ZONE PUMPING/WATER PRODUCTION COST

In order to calculate the cost of pumping water per capacity unit we first determine the cost of those facilities from approved capital improvement budgets. The ratio of plant cost to horsepower is determined.

DESCRIPTION	YEAR CONSTRUCTED	PUMPING PLANT HORSEPOWER	PUMPING PLANT COST*
Well 39	2010	450 HP Pumping Plant	$1,320,156.59
Well 40	2009	450 HP Pumping Plant	$1,498,356.82
Well 41	2006	450 HP Pumping Plant	$1,561,858.76
Well 42	2006	200 HP Pumping Plant	$1,175,156.15
TOTAL		**1,550 HP**	**$5,555,528.32**

* Current Capital Improvement Budget Amounts for Pumping Plants.

The most current pumping plant estimated costs are used to determine the ratio of pumping plant cost to unit of horsepower from the table above. The unit cost of pumping per horsepower is $5,555,528.32 ÷ 1,550 hp= $3,584/hp. By applying this ratio to each active pumping plant the cost of each plant and the zone system pumping cost is determined.

Similarly, the cost of pressure boosting facilities is determined.

DESCRIPTION	YEAR CONSTRUCTED	BOOSTER PLANT HORSEPOWER	BOOSTER PLANT COST*
Zone 1240 Booster	2016	80 HP Booster Plant	$950,000
Janis Tuscany Booster Upgrades	2016	225 HP Booster Pumping Plant	$230,000
TOTAL		**305 HP**	**$1,180,000**

* Actual project costs, unadjusted for present value.

The most current pumping plant costs are used to determine the ratio of booster pumping plant cost to unit of horsepower from the table above. The unit cost of booster pumping per horsepower is $1,180,000 ÷ 305 hp= $3,869/hp. By applying this ratio to each active pumping plant the cost of each plant and the zone's booster pumping cost is determined. Since East "B" Zone is provided water by booster pumps, we will only be using the booster pump costs.

EAST "B" ZONE PUMPING COSTS

WELL/BOOSTER BASE ZONES	DESCRIPTION	PLANT HORSEPOWER	ZONE PUMPING COST ($3,869/HP)
Vista Miller	Booster Plant	60	$232,140
TOTAL			**$232,140**

The cost of production per capacity unit is $232,140 ÷ 732 C.U. = **$317/C.U**. plus a component cost of the East "A" Zone and East Zone pumping.

The East "B" Zone uses 59% of the East "A" pumping capacity (0.78 ÷ 1.32), where 1.32 MGD is the total capacity of the East "A" booster and 0.78 MGD is the capacity of the East "B" Zone; therefore, the component cost of production per capacity unit for the East "B" Zone is $174,105 (0.59) ÷ 732 C.U.= **$140/C.U.**

The East "B" Zone uses 5.6% of the East Zone pumping capacity (0.78 ÷ 14), where 0.78 MGD is the capacity provided to East "B" Zone by the Base Zone and 14 MGD is the capacity of the East Zone; therefore, the component cost of production per capacity unit for the East "B" Zone is $7,347,200 (0.056) ÷ 732 = **$562/C.U**

EAST "B" ZONE WATER TREATMENT COSTS

Since East Zone water is pumped to the East "B" Zone, the treatment costs for the East "B" Zone is a component of the East Zone and East "A" Zone treatment costs and any additional treatment facilities associated with the East "B" Zone.

EAST ZONE CHLORINE INJECTION TREATMENT

DESCRIPTION	NUMBER OF ACTIVE SITES	AVG. COST PER SITE	ZONE PUMPING COST (ACTUAL)
Chlorine storage building and pad, injection vault	4	$30,440	$121,760
TOTAL			**$121,760**

*Based on average construction cost per site to install chlorine injection facilities.

The East "B" Zone uses 5.6% of the East Zone pumping capacity (0.78 ÷ 14), where 0.78 MGD is the capacity provided to East "B" Zone by the East Zone wells and 14 MGD is the capacity of the East Zone; therefore, the component cost of treatment per capacity unit for the East "B" Zone is $121,760 (0.056) ÷ 732 = **$9/C.U**

EAST "B" ZONE WATER STORAGE COSTS

In order to calculate the cost of water storage per capacity unit we first determine the cost of those facilities from actual project costs and approved capital improvement budgets. The ratio of storage cost to volume is determined.

DESCRIPTION	YEAR CONSTRUCTED	RESERVOIR STORAGE CAPACITY	RESERVOIR COST*
Tahquitz Reservoir II Zone 1060	2004 2016	5,000,000 gallons 500,000 gallons	$2,299,785** $1,544,800*
TOTAL		**5,500,000 gallons**	**$3,844,585**

*Revised Budget Amount for project.

** Actual project costs, unadjusted for present value.

The most current water storage estimated costs are used to determine the ratio of water storage cost to unit of storage volume from the table above. The unit cost of water storage per gallon is $3,844,585 ÷ 5,500,000 GAL= $0.70/GAL. By applying this ratio to each water storage reservoir, the cost of each reservoir and the entire zone's water storage costs are determined.

EAST "B" ZONE WATER STORAGE COSTS

DESCRIPTION	WATER STORAGE CAPACITY (GAL.)	UNIT COST PER UNIT STORAGE ($/GAL.)	ZONE STORAGE COST
Foothill I	100,000	0.70	$70,000
Foothill II	500,000	0.70	$350,000
TOTAL			**$420,000**

The cost of storage per capacity unit for the East "B" Zone facilities is $420,000 ÷ 732 C.U. = **$573/C.U.** plus the component cost of the East "A" Zone and East Zone storage since East "B" Zone utilizes the East "A" and East Zone for water.

EAST "A" ZONE WATER STORAGE COSTS

DESCRIPTION	WATER STORAGE CAPACITY (GAL.)	UNIT COST PER UNIT STORAGE ($/GAL.)	ZONE STORAGE COST
CC North	500,000	0.70	$350,000
Vista Miller	225,000	0.70	$157,500
TOTAL			**$507,500**

The East "B" Zone uses 25% of the total East "A" Zone storage capacity (0.184 ÷ 0.725), therefore, the cost of storage per capacity unit is $507,500 (0.25) ÷ 732 C.U. = **$173/C.U.**

EAST ZONE WATER STORAGE COSTS

DESCRIPTION	WATER STORAGE CAPACITY (GAL.)	UNIT COST PER UNIT STORAGE ($/GAL.)	ZONE STORAGE COST
East I	5,000,000	0.70	$3,500,000
East II	5,000,000	0.70	$3,500,000
TOTAL			**$7,000,000**

The East "B" Zone uses 1.8% of the total East Zone storage capacity (0.184 ÷ 10), therefore, the cost of storage per capacity unit is $7,000,000 (0.018) ÷ 732 C.U. = **$172/C.U.**

FUTURE STORAGE CAPACITY REQUIREMENTS

The General Plan requires that the Agency have 18 hours ADD emergency storage, along with fire flow and equalization storage during energy Time of Use (T.O.U.) periods. The 18 hour ADD during T.O.U periods for the zone is 0.187 MG (0.25 x 0.75). The fire flow requirement for the zone is 0.24 MG (2,000 GPM for 2 hours per General Plan) and the equalization, or operational storage is 40% of the MDD and is therefore equal to 0.184 MG. Adding all of these components equates to 0.61 MG of storage. The current storage capacity for the system is 0.60 MG.

The existing pumping capacity of the system will accommodate an additional 300 capacity units (732 - 432). These additional units will add 0.32 MGD to the MDD. This additional demand will increase the storage requirement to 0.87 MG, requiring 0.27 MG of additional storage (0.87 – 0.60). The cost for the additional storage will be $189,000, or ($0.70/gal x 0.27 MG). The cost of future storage per capacity unit is therefore, $189,000 ÷ 732 C.U. = **$258/C.U.**

EAST "B" WATER TRANSMISSION MAIN COSTS

Historically, the Agency has calculated the cost of water transmission mains per capacity unit by determining the cost of those facilities from actual project costs and approved capital improvement budgets. The ratio of cost per lineal foot to diameter is determined.

DESCRIPTION	YEAR CONSTRUCTED	PIPELINE LENGTH (L.F.)	*PIPELINE COST	PIPELINE UNIT COST ($/L.F.)
12"Alejo/Tamarisk/ Indian Canyon	2012/2014/2015	4,958	$1,290,176	$260/L.F.
14"	-	-	-	-
15"	-	-	-	-
16" Sunny Dunes	2013	1,100	$301,462	$274/L.F.
18"	-	-	-	-
20" E. Well Field	-	-	-	-
24" E. Well Field	-	-	-	-
26"	-	-	-	-
30" N. Well Field	-	-	-	-
36" Avenida Caballeros	2014/2015	2,659	$2,509,219	$944/L.F.
42"	-	-	-	-

* Actual project cost, unadjusted for present value.

Due to the lack of current data available for the varying sizes of transmission mains in our system, the Agency has opted to utilize a "unit construction cost for pipelines" equation used by Eastern Municipal Water District (EMWD) in their 2015 rate study (study conducted by Kennedy/Jenks Consultants). Said equation assumes that unit cost ($/linear foot) = Diameter (inch) x 40.47 x

[Diameter (inch) $^{\wedge -0.309}$]. Utilization of said equation allows the Agency to determine uniform unit construction estimates for all sizes of transmission mains in our system.

***ESTIMATED WATER TRANSMISSION MAIN UNIT CONSTRUCTION COSTS**

TRANSMISSION MAIN DIAMETER (INCHES)	TRANSMISSION MAIN LENGTH ($/L.F.)
12"	225
14"	250
15"	265
16"	275
18"	300
20"	320
24"	365
26"	385
30"	425
36"	480
42"	535

*Based on the following EMWD assumption: cost $/L.F. = Diameter (inch) x 40.47 x [Diameter (inch) $^{\wedge -0.309}$].

The most current water transmission main estimated costs are used to determine the ratio of water main cost to diameter as shown in the table on the previous page. By applying these ratios to system transmission mains, the cost of all size mains for the entire system is determined by zone.

EAST "B" ZONE WATER TRANSMISSION MAIN COSTS

TRANSMISSION MAIN DIAMETER (INCHES)	TRANSMISSION MAIN LENGTH (L.F.)	UNIT COST PER UNIT LENGTH ($/L.F.)	ZONE TRANSMISSION MAIN COST
12"	4,383	225	$986,175
TOTAL			**$986,175**

The cost of transmission mains per capacity unit is $986,175 ÷ 732 C.U. = **$1,347/C.U.** plus a component cost of the East "A" Zone and East Zone transmission mains since East "B" Zone utilizes water from the East "A" Zone and East Zone.

The East "B" Zone uses 59% of the East "A" pumping capacity (0.78 ÷ 1.32), where 1.32 MGD is the total capacity of the East "A" booster and 0.78 MGD is the capacity of the East "B" Zone; therefore, the component cost of transmission main per capacity unit for the East "B" Zone is $969,750 (0.59) ÷ 732 C.U.= **$781/C.U.**

The East "B" Zone uses 5.6% of the East Zone pumping capacity (0.78 ÷ 14), where 0.78 MGD is the capacity provided to East "B" Zone by the Base Zone and 14 MGD is the capacity of the East Zone; therefore, the component cost of transmission mains per capacity unit for the East "B" Zone is $42,390,980 (0.056) ÷ 732 = **$3,243/C.U**

COST PER ZONE SUMMARY

ZONE	WATER PRODUCTION COST	TREATMENT COST	STORAGE COST	TRANSMISSION COST	TOTAL CAPACITY UNIT COST
East "B"	$1,019	$9	$1,176	$5,371	$7,575

The cost of a 1-inch service in the zone is comprised of the cumulative capacity unit costs for water production, treatment, surface water, storage and transmission facilities.

In order to determine the capacity unit cost for each meter size the AWWA meter factors are used. The table below shows the capacity unit charge (Backup Facility Charge) per meter size.

EAST "B" ZONE FINAL BACKUP FACILITY CHARGE COST SUMMARY

METER SIZE	AWWA METER FACTOR	BACKUP FACILITY CHARGE
3/4 X 5/8	0.4	$3,030
1	**1.0**	**$7,575**
1.5	2.0	$15,150
2	3.2	$24,240

FINAL BACKUP FACILITY CHARGE COST SUMMARY

SNOW CREEK VILLAGE FINAL BACKUP FACILITY CHARGE COST

METER SIZE	AWWA METER FACTOR	BACKUP FACILITY CHARGE
3/4 X 5/8	0.4	$2,082
1	**1.0**	**$5,207**
1.5	2.0	$10,414
2	3.2	$16,662

PALM OASIS ZONE FINAL BACKUP FACILITY CHARGE COST

METER SIZE	AWWA METER FACTOR	BACKUP FACILITY CHARGE
3/4 X 5/8	0.4	$1,493
1	**1.0**	**$3,734**
1.5	2.0	$7,468
2	3.2	$11,948

BASE ZONE FINAL BACKUP FACILITY CHARGE COST

METER SIZE	AWWA METER FACTOR	BACKUP FACILITY CHARGE
3/4 X 5/8	0.4	$2,470
1	**1.0**	**$6,175**
1.5	2.0	$12,350
2	3.2	$19,760

CHINO ZONE FINAL BACKUP FACILITY CHARGE COST

METER SIZE	AWWA METER FACTOR	BACKUP FACILITY CHARGE
3/4 X 5/8	0.4	$3,026
1	**1.0**	**$7,565**
1.5	2.0	$15,130
2	3.2	$24,208

CHINO "A" ZONE FINAL BACKUP FACILITY CHARGE COST

METER SIZE	AWWA METER FACTOR	BACKUP FACILITY CHARGE
3/4 X 5/8	0.4	$3,679
1	**1.0**	**$9,198**
1.5	2.0	$18,396
2	3.2	$29,433

CHINO "B" ZONE FINAL BACKUP FACILITY CHARGE COST

METER SIZE	AWWA METER FACTOR	BACKUP FACILITY CHARGE
3/4 X 5/8	0.4	$3,276
1	**1.0**	**$8,190**
1.5	2.0	$16,380
2	3.2	$26,208

ACANTO ZONE FINAL BACKUP FACILITY CHARGE COST

METER SIZE	AWWA METER FACTOR	BACKUP FACILITY CHARGE
3/4 X 5/8	0.4	$4,108
1	**1.0**	**$10,271**
1.5	2.0	$20,542
2	3.2	$32,867

SOUTHRIDGE "A" ZONE FINAL BACKUP FACILITY CHARGE COST

METER SIZE	AWWA METER FACTOR	BACKUP FACILITY CHARGE
3/4 X 5/8	0.4	$4,390
1	**1.0**	**$10,977**
1.5	2.0	$21,954
2	3.2	$35,126

SOUTHRIDGE "B" ZONE FINAL BACKUP FACILITY CHARGE COST

METER SIZE	AWWA METER FACTOR	BACKUP FACILITY CHARGE
3/4 X 5/8	0.4	$2,320
1	**1.0**	**$5,800**
1.5	2.0	$11,600
2	3.2	$18,560

EAST ZONE FINAL BACKUP FACILITY CHARGE COST

METER SIZE	AWWA METER FACTOR	BACKUP FACILITY CHARGE
3/4 X 5/8	0.4	$2,357
1	**1.0**	**$5,893**
1.5	2.0	$11,786
2	3.2	$18,857

EAST "A" ZONE FINAL BACKUP FACILITY CHARGE COST

METER SIZE	AWWA METER FACTOR	BACKUP FACILITY CHARGE
3/4 X 5/8	0.4	$2,541
1	**1.0**	**$6,354**
1.5	2.0	$12,708
2	3.2	$20,332

EAST "B" ZONE FINAL BACKUP FACILITY CHARGE COST

METER SIZE	AWWA METER FACTOR	BACKUP FACILITY CHARGE
3/4 X 5/8	0.4	$3,030
1	**1.0**	**$7,575**
1.5	2.0	$15,150
2	3.2	$24,240

STAFF REPORT
TO
DESERT WATER AGENCY
BOARD OF DIRECTORS

DECEMBER 17, 2019

RE: REQUEST APPROVAL OF BUDGET AUGMENTATION FOR WORK ORDER 13-119-L AND RE-ALLOCATION OF A PORTION OF REGULATORY COMPLIANCE RESERVE GENERAL FUND ACCOUNT FOR SURFACE WATER TREATMENT FACILITY IN CHINO CANYON

The current fiscal budget includes work order 13-119-L for the purchase of land within the Agency's service area for future surface water and wastewater treatment facilities. The existing budget for said work order is $675,000 for the purchase of approximately 5.9 acres in the Palm Oasis area. Staff is requesting a budget augmentation of $110,000, allowing staff to acquire an additional acre of land for future facilities.

For decades, the Agency has provided water service to the Palm Springs Aerial Tram lower and upper stations using surface water within the west Chino Canyon watershed. The water source is high quality water that meets the State's filtration avoidance criteria. A September 2019 isolated thunderstorm within the Chino Canyon produced a significant amount of water that eroded and washed down a tremendous amount of silt and debris into our stream intake facility. The intake was immediately cleaned by construction crews and the tram continues to remain in service, however, the water quality from the canyon has become inconsistent. Although we continue to meet the State's filtration avoidance criteria, operations have been required to remove the stream source from service periodically due to the inconsistent water quality being captured in the intake. At this time we are able to meet the tram station water demands, however, staff is concerned that the inconsistent water quality may prevent us from meeting the future tram station water demands. If that occurs, we will be forced to haul water to the lower tram station reservoir which is very costly and unsustainable.

To ensure that we are able to meet all of the tram water demands, staff recommends installing a surface water multi-media filtration system for the Chino Canyon water source. The filtration equipment will be similar to the Snow Creek Village filtration system, but on a smaller scale, at an estimated cost of $450,000.

Staff is requesting re-allocating $450,000 of the regulatory compliance reserve general fund money to a new work order for the construction of the Chino West Canyon surface water treatment facility.

STAFF REPORT
TO
DESERT WATER AGENCY
BOARD OF DIRECTORS

DECEMBER 17, 2019

RE: REQUEST BOARD ACTION REGARDING A CLAIM FOR DAMAGES FILED BY VANESSA SPAETH

Attached for the Board's review is a claim form submitted to the Agency by Vanessa Spaeth on December 2, 2019.

Ms. Spaeth claims on October 24, 2019 at 10:30 a.m., a DWA fire hydrant burst, completely flooding her house. At this time, the exact amount of the claim is not known, however, the initial amount listed in the claim totals $11,798.74.

DWA staff and ACWA-JPIA representatives have been working with Ms. Spaeth over the past several weeks.

Staff requests that the Board deny the claim for damages filed by Vanessa Spaeth and forward to ACWA-JPIA for their continued handling.

RECEIVED
DEC 02 2019
DESERT WATER AGENCY
MANAGEMENT

Claim Form

(A claim shall be presented by the claimant or by a person acting on his behalf.)

NAME OF DISTRICT: DESERT WATER AGENCY

1 Claimant name, address (**mailing** address if different), phone number, social security number, e-mail address, and date of birth.

*Effective January 1, 2010, the Medicare Secondary Payer Act (Federal Law) requires the District/Agency to report all claims involving payments for bodily injury and/or medical treatments to Medicare. As such, if you are seeking **medical damages**, we **MUST** have both your Social Security Number and your date of birth.*

Name: Vanessa Spaeth	Phone Number: 310-365-7437
Address(es): mailing: 1462 Rising Glen Rd. L.A. Ca. 90069 Damages: 298 N. Burton Way P.S. Ca. 92262	Social Security No.: Date of Birth: 09/22/1978 E-mail: vspaeth@mac.com

2 List name, address, and phone number of any witnesses.

Name:

Address:

Phone Number:

3 List the **date, time, place,** and **other circumstances** of the occurrence or transaction, which gave rise to the claim asserted.

Date: 10/24/2019 Time: 10:30am Place: 298 N. Burton Way P.S. 92262

Tell What Happened (give complete information):

A fire hydrant on the corner of Burton Way and Amado, right infront of our home, burst completely flooding my house pictures are attached

NOTE: Attach any photographs you may have regarding this claim.

4 Give a general description of the indebtedness, obligation, injury, damage, or loss incurred so far as it may be known at the time of presentation of the claim.

See attached

Remediation company/dryout
Loss of use of the prperty
POOL - drain, clean - $1200
-refil TBD
FLOORS - chipping, cracked, peeling $7788
MOBILE MINI - 2 containers to empty house to redo floors - $1020.74 ($515.27 x 2)

5 Give the name or names of the public employee or employees causing the injury, damage, or loss, if known.

Desert Water, Fire Hydrant

6 The amount claimed if it totals less than ten thousand dollars ($10,000) as of the date of presentation of the claim, including the estimated amount of any prospective injury, damage or loss, insofar as it may be known at the time of the presentation of the claim, together with the basis of computation of the amount claimed. If the amount claimed exceeds ten thousand dollars ($10,000), no dollar amount shall be included in the claim. However, it shall indicate whether the claim would be a limited civil case.

See above, final cost still undetermined

Date: 11/12/2019 Time: 12pm Signature:

ANSWER ALL QUESTIONS. OMITTING INFORMATION COULD MAKE YOUR CLAIM LEGALLY INSUFFICIENT!

Revised – July 2019

Sylvia Baca

From: Vanessa Spaeth <vspaeth3@gmail.com>
Sent: Monday, December 02, 2019 1:48 PM
To: Sylvia Baca
Subject: Re: 298 Burton Way, Fire Hydrant Damages

Here it is #4

Remediation company/Dry out

Loss of use of property… ongoing

POOL - drain, clean - $1200
-refil TBD

FLOORS - chipping, cracked, peeling $7788

MOBILE MINI - 2 containers to empty house to redo floors - $1030.74 ($515.37 x 2)

RUG PAD REPLACEMENT x 5 - TBD

RUG CLEANING x 5 - TBD

CEILING PAINT - TBD

HOT WATER HEATER CLOSET EXTERIOR DOOR REPLACEMENT - TBD

BASEBOARD MATERIALS (no labor yet) - $473

FLOODWATER REMOVAL LABOR/MATERIALS (within hours of crisis, pre remediation company) - $420

MATERIALS AND LABOR TO EMPTY HOUSE AND FILL CONTAINERS - $537

HOUSEKEEPING PREP/SUPPLIES FOR FURNITURE REMOVAL - $350

> On Dec 2, 2019, at 12:37 PM, Sylvia Baca <SBaca@dwa.org> wrote:
>
> Thanks Vanessa,
>
> Is it possible for you to either manually fill this in, or fix Box 4? It's cut off.
>
> Also, please don't include your ss#. I can redact it, if needed.
>
> Thank you,
> Sylvia
>
> -----Original Message-----
> From: Vanessa Spaeth <vspaeth3@gmail.com>

STAFF REPORT
TO
DESERT WATER AGENCY
BOARD OF DIRECTORS

DECEMBER 17, 2019

RE: REQUEST BOARD ADOPTION OF RESOLUTION NO. 1227 AUTHORIZING COACHELLA VALLEY WATER DISTRICT TO APPLY FOR AND MANAGE THE 2019 SUSTAINABLE GROUNDWATER MANAGEMENT (SGM) GRANT PROGRAM PLANNING – ROUND 3 GRANT FOR THE INDIO SUBBASIN ON BEHALF OF DESERT WATER AGENCY

REQUEST BOARD ADOPTION OF RESOLUTION NO. 1228 AUTHORIZATION COACHELLA VALLEY WATER DISTRICT TO APPLY FOR AND MANAGE THE 2019 SUSTAINABLE GROUNDWATER MANAGEMENT (SGM) GRANT PROGRAM PLANNING – ROUND 3 GRANT FOR THE MISSION CREEK SUBBASIN ON BEHALF OF DESERT WATER AGENCY

Attached for the Board's consideration are Resolution No's. 1227 and 1228 which provide authorization for the Coachella Valley Water District to prepare and execute an application for a Department of Water Resources Sustainable Groundwater Management Planning Grant for the Indio and Mission Creek Subbasins.

It should be noted that the adoption of these Resolutions is one of many requirements the Agency is obligated to fulfill in the process for obtaining grant monies from DWR. With their adoption, the resolutions will be filed along with the application for grant funds totaling $1,999,998 for the Indio Subbasin, and $1,957,281 for the Mission Creek Subbasin, with the requested grant funds to be used to update the Approved Alternative (to Groundwater Sustainability Plan) Plans, in compliance with the Sustainable Groundwater Management Act and additionally to construct monitoring wells to fill data gaps for said plans (proposed budgets attached).

In order to meet the requirements as outlined by DWR through its Sustainable Groundwater Management Act Grant Program, it is requested that the Board adopt Resolution No. 1227 and Resolution No. 1228 Authorizing the Coachella Valley Water District to apply for grant funds for the Alternative Plan Updates.

Budget Templates

Table 5B – Grant Proposal Summary Budget (Multiple Components)

Grant Proposal Title: **Indio Subbasin Modeling, Data Collection, and Alternative Plan Update**

Applicant: **Coachella Valley Water District GSA**

Grant Proposal serves a need of a DA?: ☒ Yes ☐ No

Local Cost Share requested: ☐ 25% ☐ 15% ☐ 10% ☒ 0%

Budget Categories	(a) Requested Grant Amount	(b) Local Cost Share: Non-State Fund Source[1]	(c) Total Cost	(d) % Local Cost Share (Col (b)/ Col (c))
Component 1: Grant Agreement Administration	$50,000	$0	$50,000	0%
Component 2: Groundwater Model Update and Recalibration	$426,190	$0	$426,190	0%
Component 3: Update of the Alternative Plan to Include All SGMA Requirements	$500,000	$553,998	$1,053,998	53%
Component 4: Installation of New Monitoring Wells to Fill Existing Data Gaps	$1,023,808	$0	$1,023,808	0%
Grand Total ***Sum rows (1) through (n) for each column***	**$1,999,998**	**$553,998**	**$2,553,996**	**22%**

[1] Sources of funding: *A 100% cost share waiver has been requested.*

Budget Templates

Table 5B – Grant Proposal Summary Budget (Multiple Components)

Grant Proposal Title: **Mission Creek Subbasin Modelling, Data Collection, and Alternative Plan Update**

Applicant: **Coachella Valley Water District GSA**

Grant Proposal serves a need of a DA?: ☒ Yes ☐ No

Local Cost Share requested: ☐ 25% ☐ 15% ☐ 10% ☒ 0%

Budget Categories	(a) Requested Grant Amount	(b) Local Cost Share: Non-State Fund Source[1]	(c) Total Cost	(d) % Local Cost Share (Col (b)/ Col (c))
Component 1: Grant Agreement Administration	$50,000	$0	$50,000	0%
Component 2: Groundwater Model Update and Recalibration	$478,756	$0	$478,756	0%
Component 3: Update of the Alternative Plan to Include All SGMA Requirements	$500,000	$187,889	$687,889	27%
Component 4: Installation of New Monitoring Wells to Fill Existing Data Gaps	$928,525	$0	$928,525	0%
Grand Total ***Sum rows (1) through (n) for each column***	**$1,957,281**	**$187,889**	**$2,145,170**	**9%**

[1] Sources of funding: *A 100% cost share waiver has been requested.*

RESOLUTION NO. 1227

RESOLUTION OF THE BOARD OF DIRECTORS OF DESERT WATER AGENCY TO FILE AN APPLICATION FOR A SUSTAINABLE GROUNDWATER MANAGEMENT GRANT PROGRAM – ROUND 3 PLANNING GRANT FOR THE INDIO SUBBASIN MODELLING, DATA COLLECTION, AND ALTERNATIVE PLAN UPDATE

WHEREAS, in September 2014 the Sustainable Groundwater Management Act (SGMA) was signed in to law, with an effective date of January 1, 2015, and codified as California Water Code, Section 10720 et seq; and

WHEREAS, groundwater management of high- and medium-priority basins as designated by the State of California, Department of Water Resources (DWR) is now required; and

WHEREAS, SGMA requires a Groundwater Sustainability Plan (GSP) or approved alternative be developed and implemented for each medium- or high-priority basin by a Groundwater Sustainability Agency (GSA) or combination of GSA's; and

WHEREAS, the Indio Subbasin, DWR Basin No. 7-21.01 is designated by DWR as a medium-priority basin; and

WHEREAS, the Coachella Valley Water District (CVWD), Coachella Water Authority (CWA), Desert Water Agency, (DWA), and Indio Water Authority (IWA) have been designated Groundwater Sustainability Agencies (GSAs) by DWR over their respective service areas that overlie the Indio Subbasin; and

WHEREAS, the CVWD, CWA, DWA, and IWA (collectively the Indio Subbasin GSAs) have committed through a Memorandum of Understanding (MOU) for the purpose of coordinating and cooperating regarding implementation of SGMA within their respective jurisdictions to ensure that the sustainability goals of SGMA are met within the Indio Subbasin; and

WHEREAS, the Indio Subbasin GSAs collaboratively submitted the 2010 Coachella Valley Water Management Plan Update to DWR as a functionally equivalent Alternative to a Groundwater Sustainability Plan (Alternative Plan) for the Indio Subbasin on December 29, 2016; and

WHEREAS, the DWR approved the Alternative Plan for the Indio Subbasin on July 17, 2019, and has indicated that five-year assessments and updates to the Alternative Plan for the Indio Subbasin are required to be submitted to DWR; and

WHEREAS, the first five-year assessment and update of the Alternative Plan for the Indio Subbasin is due to DWR by January 1, 2022; and

WHEREAS, the DWR is administering the Sustainable Groundwater Management (SGM) Grant Program – Round 3 Planning Grant solicitation to make approximately $47 million available for the development of Groundwater Sustainability Plans (GPSs), updates to approved Alternative Plans, and projects that help to develop GSPs and Alternative Plans.

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

Section 1. That application be made by the Coachella Valley Water District GSA, on behalf of the Desert Water Agency GSA, to the California Department of Water Resources to obtain a grant under the 2019 Sustainable Groundwater Management (SGM) Grant Program Planning – Round 3 Grant pursuant to the 2018 California Drought, Water, Parks, Climate, Coastal Protection, and Outdoor Access For All Act (Proposition 68) (Pub. Resources Code, § 80000 et seq.), and if such grant funding is awarded, to enter into an agreement on behalf of the Indio Subbasin GSAs to receive said grant funds to be used in the manner described in the grant application.

Section 2. The Coachella Valley Water District GSA is hereby authorized and directed to compile the necessary data and investigations, file such application, and if grant funds are awarded to execute the grant agreement and all documents related to the grant agreement with California Department of Water Resources.

ADOPTED this 17th day of December, 2019.

_____
Joseph Stuart, President

ATTEST:

_____
Craig Ewing, Secretary-Treasurer

RESOLUTION NO. 1228

RESOLUTION OF THE BOARD OF DIRECTORS OF DESERT WATER AGENCY TO FILE AN APPLICATION FOR A SUSTAINABLE GROUNDWATER MANAGEMENT GRANT PROGRAM – ROUND 3 PLANNING GRANT FOR THE MISSION CREEK SUBBASIN MODELLING, DATA COLLECTION, AND ALTERNATIVE PLAN UPDATE

WHEREAS, in September 2014 the Sustainable Groundwater Management Act (SGMA) was signed in to law, with an effective date of January 1, 2015, and codified as California Water Code, Section 10720 et seq; and

WHEREAS, groundwater management of high- and medium-priority basins as designated by the State of California, Department of Water Resources (DWR) is now required; and

WHEREAS, SGMA requires a Groundwater Sustainability Plan (GSP) or approved alternative be developed and implemented for each medium- or high-priority basin by a Groundwater Sustainability Agency (GSA) or combination of GSA's; and

WHEREAS, the Mission Creek Subbasin, DWR Basin No. 7-21.02 is designated by DWR as a medium-priority basin; and

WHEREAS, the Coachella Valley Water District (CVWD), and Desert Water Agency, (DWA), are Groundwater Sustainability Agencies (GSAs) by DWR over their respective service areas that overlie the Mission Creek Subbasin; and

WHEREAS, the CVWD, DWA, and Mission Springs Water District (MSWD) have committed through a Memorandum of Understanding (MOU) for the purpose of coordinating and cooperating regarding implementation of SGMA within their respective jurisdictions to ensure that the sustainability goals of SGMA are met within the Mission Creek Subbasin; and

WHEREAS, the CVWD, DWA, MSWD collaboratively submitted the 2013 Mission Creek-Garnet Hill Management Plan to DWR as a functionally equivalent Alternative to a Groundwater Sustainability Plan (Alternative Plan) for the Mission Creek Subbasin on December 29, 2016; and

WHEREAS, the DWR approved the Alternative Plan for the Mission Creek Subbasin on July 17, 2019, and has indicated that five-year assessments and updates to the Alternative Plan for the Indio Subbasin are required to be submitted to DWR; and

WHEREAS, the first five-year assessment and update of the Alternative Plan for the Mission Creek Subbasin is due to DWR by January 1, 2022; and

WHEREAS, the DWR is administering the Sustainable Groundwater Management (SGM) Grant Program – Round 3 Planning Grant solicitation to make approximately $47 million available for the development of Groundwater Sustainability Plans (GPSs), updates to approved Alternative Plans, and projects that help to develop GSPs and Alternative Plans.

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

Section 1. That application be made by the Coachella Valley Water District GSA, on behalf of the Desert Water Agency GSA, to the California Department of Water Resources to obtain a grant under the 2019 Sustainable Groundwater Management (SGM) Grant Program Planning – Round 3 Grant pursuant to the 2018 California Drought, Water, Parks, Climate, Coastal Protection, and Outdoor Access For All Act (Proposition 68) (Pub. Resources Code, § 80000 et seq.), and if such grant funding is awarded, to enter into an agreement on behalf of CVWD, DWA, MSWD to receive said grant funds to be used in the manner described in the grant application.

Section 2. The Coachella Valley Water District GSA is hereby authorized and directed to compile the necessary data and investigations, file such application, and if grant funds are awarded to execute the grant agreement and all documents related to the grant agreement with California Department of Water Resources.

ADOPTED this 17th day of December, 2019.

_____
Joseph Stuart, President

ATTEST:

_____
Craig Ewing, Secretary-Treasurer
Board of Directors

STAFF REPORT
TO
DESERT WATER AGENCY
BOARD OF DIRECTORS

DECEMBER 17, 2019

RE: REQUEST APPROVAL OF FIRST AMENDMENT TO 2019 RESERVOIR PROJECT AGREEMENT

At the September 2019 Sites Reservoir Committee Meeting, Project Agreement Members considered approval of a revised Phase 2 (2019) work plan supporting a revised completion date moving it from December 3, 2019 to March 31, 2020 (90 days). This extension was approved.

At the October 2019 committee meeting a 180 day extension was considered. It was determined that a 90 day extension was not sufficient to accomplish everything that needed to be done. The primary focus is defining a permittable and affordable project and updating the project description. The committee considered the impact of the extension on such issues as cash flow reductions (burn rate), placing certain work on hold, bank RFP's, available funding, critical tasks and deliverables. It was agreed that we needed a draft permittable project description by March 31, 2020. A possible cash call was discussed that may be necessary to help advance critical deliverables. Otherwise, there are no additional costs to the participants. The Project Agreement Members agreed to extend the term of the agreement from December 31, 2019 to June 30, 2020 (180 days).

Staff requests approval of the first amendment to the 2019 Reservoir Agreement dated January 1, 2020 (attached).

FIRST AMENDMENT TO 2019 RESERVOIR PROJECT AGREEMENT

BY AND AMONG

SITES PROJECT AUTHORITY

and

THE PROJECT AGREEMENT MEMBERS LISTED HEREIN

Dated as of January 1, 2020

THIS FIRST AMENDMENT TO RESERVOIR PROJECT AGREEMENT (this "First Amendment"), dated as of January 1, 2020, by and among SITES PROJECT AUTHORITY, a joint powers authority duly organized and existing under the laws of the State of California (the "Authority"), and the project agreement members listed in the Original Agreement referenced below (the "Project Agreement Members") and amends that certain 2019 Reservoir Project Agreement dated as of April 1, 2019 (the "Original Agreement"), by and among the Authority and the Project Agreement Members;

WITNESSETH:

WHEREAS, Authority and the Project Agreement Members have determined to extend the term of the Original Agreement to June 30, 2020; and

WHEREAS, under Section 11 of the Original Agreement, the Original Agreement may be amended by a writing executed by the Authority and at least 75% of the total weighted vote as provided in Subsection 3(g) of the then-current Committee members; and

WHEREAS**,** all acts, conditions and things required by law to exist, to have happened and to have been performed precedent to and in connection with the execution and the entering into of this First Amendment do exist, have happened and have been performed in regular and due time, form and manner as required by law, and the parties hereto are now duly authorized to execute and enter into this First Amendment;

NOW, THEREFORE, THIS FIRST AMENDMENT WITNESSETH, the Authority and the Project Agreement Members agree, as follows:

ARTICLE I

DEFINITIONS

Section 1.01. **Definitions**. All capitalized terms not otherwise defined herein shall have the meaning set forth in the Original Agreement.

ARTICLE II

AMENDMENTS TO 2019 ORIGINAL AGREEMENT

Section 2.01. **Amendments to Section 8(b) of the Original Agreement**.

(a) The reference in Section 8(b) of the Original Agreement to December 31, 2019 shall be changed to June 30, 2020. In the event that this First Amendment is not approved by Project Agreement Members with the requisite percentage of the total weighted vote as set forth in the Original Agreement by December 31, 2019, the Original Agreement shall be revived immediately upon approval by such requisite percentage, without any additional approval of the Project Agreement Members, and this First Amendment shall become effective.

ARTICLE III

MISCELLANEOUS

Section 3.01. **Effectiveness of Original Agreement**. Except as expressly amended by this First Amendment, the Original Agreement is hereby ratified and confirmed and shall continue in full force and effect in accordance with the terms and provisions thereof. The amendments set forth in this First Amendment shall be incorporated as part of the Original Agreement upon their effectiveness in accordance with Section 11 of the Original Agreement.

Section 3.02. **Execution in Several Counterparts**. This First Amendment may be executed in any number of counterparts and each of such counterparts shall for all purposes be deemed to be an original; and all such counterparts, or as many of them as the Authority and the Project Agreement Members shall preserve undestroyed, shall together constitute but one and the same instrument.

Section 3.03. **Laws Governing First Amendment**. The effect and meaning of this First Amendment and the rights of all parties hereunder shall be governed by, and construed according to, the laws of the State.

IN WITNESS WHEREOF, the Authority and Project Agreement Members hereto, pursuant to resolutions duly and regularly adopted by their respective governing bodies, have caused their names to be affixed by their proper and respective officers on the date shown below:

Dated: _____

SITES PROJECT AUTHORITY

By: _____
Name:
Title:

[PROJECT AGREEMENT MEMBER]

Dated: _____

_____

(Authority & Project Agreement Member)

By: _____
Name:
Title:

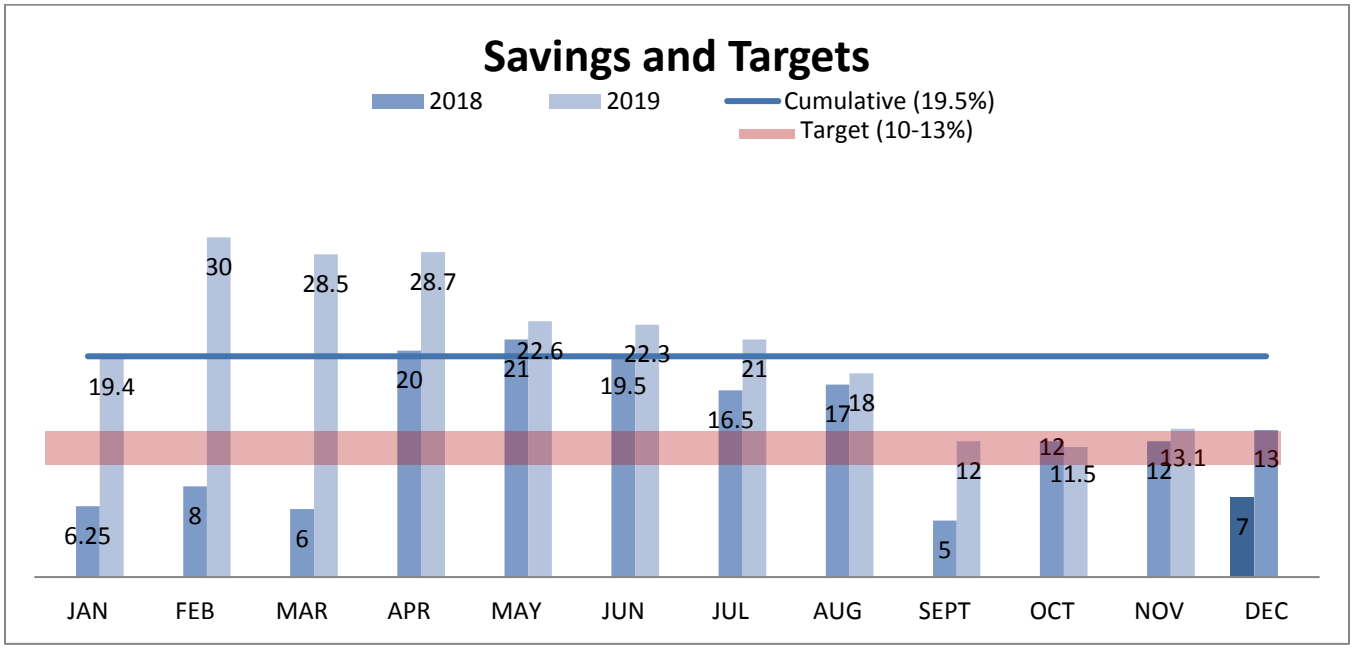
8-A

STAFF REPORT
TO
DESERT WATER AGENCY
BOARD OF DIRECTORS

DECEMBER 17, 2019

RE: NOVEMBER 2019 WATER USE REDUCTION FIGURES

Desert Water Agency and its customers achieved a 13.1% reduction in potable water production during November 2019 compared to the same month in 2013 – the baseline year used by the State Water Resources Control Board (State Water Board) to measure statewide conservation achievements. DWA continues to report its production to the state on a monthly basis, despite mandatory conservation ending in 2017.



DWA is asking its customers to save 10-13% compared to 2013 to help achieve long-term sustainability.

The cumulative savings over the last twelve-month period is 19.5%. The cumulative savings beginning in June of 2016 when we put our 10-13% target in place is 17.3%.

On the following page is additional information for this month.

November 2019 water production	2,683.69 AF
November 2013 water production	3,088.61 AF
Percent changed in this month per drought surcharge baseline (November 2015)	-20.51%
Quantity of potable water delivered for all commercial, industrial, and institutional users for the reporting month	814.78 AF
The percentage of the Total Monthly Potable Water Production going to residential use only for the reporting month	69.64%
Population (inclusive of seasonal residents)	108,032
Estimated R-GPCD	187.90
How many public complaints of water waste or violation of conservation rules were received during the reporting month?	20
How many contacts (written/ verbal) were made with customers for actual/ alleged water waste or for a violation of conservation rules?	8
How many formal warning actions (e.g.: written notifications, warning letters, door hangers) were issued for water waste or for a violation of conservation rules?	4
How many penalties were issued for water waste or for a violation of conservation rules?	1

Comments: The Agency's service area is highly seasonal making population analysis a complex task. The State Water Board analyzes data on a per capita basis.

Historically, DWA has submitted data based on the permanent population of the service area; however, that data does not accurately reflect water use in DWA's service area which has a highly seasonal population. We are currently submitting a calculation reviewed by the State Water Board. We plan to update our population figures once the Department of Water Resources accepts our technical memo on seasonal population.

Since Desert Water Agency began recycling water, the agency has reclaimed 103,196 acre feet. If our recycled water production for this month was taken into consideration against our potable production, the conservation achieved would have been several percentage points higher.

DESERT WATER AGENCY

OUTREACH & CONSERVATION ACTIVITIES

NOVEMBER 2019

Activities:

11/02	DWA provided water for the Palm Springs Pride Run/Walk 5K.
11/04	Ashley Metzger attended the Agua Caliente Cathedral City Casino ground breaking.
11/05	Ashley Metzger attended the Palm Springs Unified School District's Champions of Excellence.
11/06	Xochitl Peña attended a California Public Information video training.
11/06	Ashley Metzger attended a Palm Springs Sustainability Commission Water Conservation Sub-Committee meeting.
11/07	Ashley Metzger was on a live segment with KESQ regarding DWA's facility tours.
11/09	DWA provided the water trailer for the Palm Springs Air Museum Veterans Day celebration.
11/13	DWA hosted a fall facilities tour for approximately 100 local residents.
11/14	Ashley Metzger attended the ONE-PS meeting and provided an update.
11/14	Ashley Metzger attended Desert Valley Business Association's Public Officials luncheon.
11/14	Ashley Metzger was on a live segment with KESQ regarding DWA pipeline projects and paving.
11/15	Steve Johnson and Ashley Metzger attended a tour of the City of Palm Springs Wastewater Treatment Plant with Water Conservation Sub-Committee member.
11/18	Ashley Metzger attended the Mission Springs Water District board meeting.
11/19	Ashley Metzger participated in a DWR water use studies work group.
11/21	Hunter Industries hosted a landscaper workshop at DWA.
11/21	Ashley Metzger was on a live segment with KESQ regarding PFAS.
11/23	Ashley Metzger attended a Project WET training at Coachella Valley Water District.
11/27	Ashley Metzger was on a live segment with KESQ regarding Thanksgiving conservation tips.
11/28	DWA provided the water for Running Wild's Turkey Trot 5K downtown Palm Springs.

Public Information Releases/eBlasts:

November 12: DWA tour seats available TOMORROW (Wednesday, 11/13) – Nextdoor

November 18: Paving TOMORROW (Nov 19) – DWA pipeline replacement project – Nextdoor

November 18: **SECOND UPDATE** Paving FRIDAY (Nov 22) – DWA pipeline replacement project –

November 18: *UPDATE* Paving DELAYED – DWA pipeline replacement project – Nextdoor

November 20: RAIN ALERT – do not water until 48 hours after rain

Conservation programs

14 Grass removal inspections
7 Grass removal projects pre-approved
7 Grass removal projects given final approval

15 Washing machine rebates requested
14 Washing machine rebates approved

6 Smart controller rebates requested
5 Smart controller rebates approved

587 Nozzles requested for rebate
487 Nozzles approved for rebate

0 Toilet rebates requested (commercial only)
0 Toilet rebates approved (commercial only)

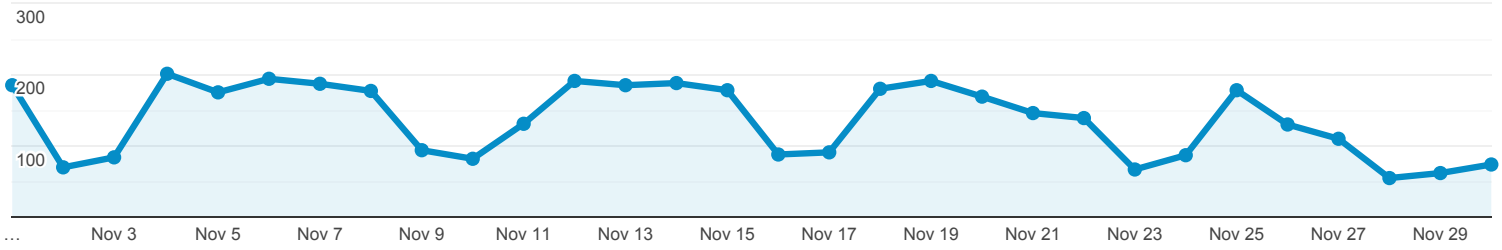
Audience Overview

All Users
100.00% Users

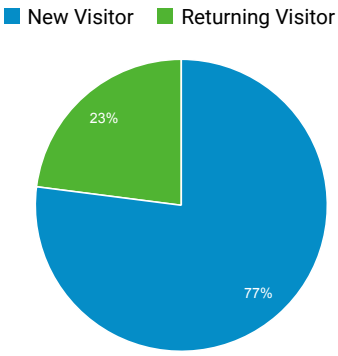
Nov 1, 2019 - Nov 30, 2019

Overview

Users



Users	3,510
New Users	2,971
Sessions	4,393
Number of Sessions per User	1.25
Pageviews	9,981
Pages / Session	2.27
Avg. Session Duration	00:01:42
Bounce Rate	48.49%



	Language	Users	% Users
1.	en-us	3,318	94.53%
2.	en-ca	61	1.74%
3.	en-gb	47	1.34%
4.	ko	8	0.23%
5.	(not set)	6	0.17%
6.	en	6	0.17%
7.	es-es	5	0.14%
8.	fr-fr	5	0.14%
9.	de	4	0.11%
10.	de-de	4	0.11%

Desert Water Agency Facebook Analytics November 2019

Actions on Page
November 8 - December 5

We have insufficient data to show for the selected time period.

Page Views
November 8 - December 5

175
Total Page Views ▲38%

Page Previews
November 8 - December 5

5
Page Previews ▼57%

Page Likes
November 8 - December 5

2
Page Likes ▼71%

Post Reach
November 8 - December 5

2,213
People Reached ▲32%

Story Reach
November 8 - December 5

Get Story Insights

See stats on how your Page's recent stories have performed.

Learn More

Recommendations
November 8 - December 5

We have insufficient data to show for the selected time period.

Post Engagement
November 8 - December 5

360
Post Engagement ▼2%

Videos
November 8 - December 5

139
3-Second Video Views ▲30%

Page Followers
November 8 - December 5

2
Page Followers ▼71%

Orders
November 8 - December 5

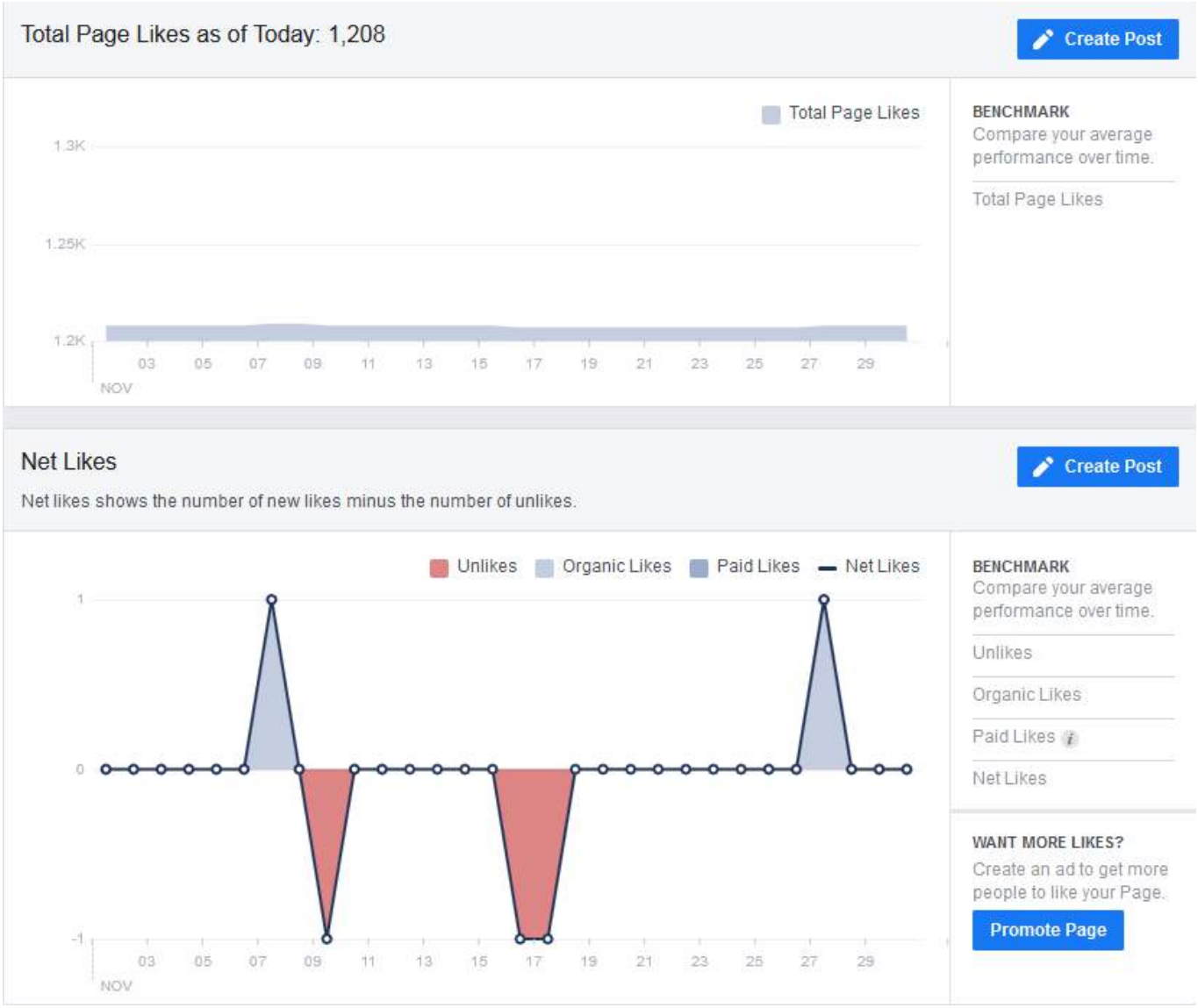
0
Number of Orders ▲0%

0
Earnings from Orders ▲0%

Facebook Analytics November 2019 continued

11/29/2019 8:00 AM	 You can save even more with our rebates on washing			57	0 3	Boost Post
11/28/2019 9:00 AM	 Happy Thanksgiving! We're thankful for our wonderful			84	5 9	Boost Post
11/27/2019 11:20 AM	 Join us for a great time for a great cause! Succulents &			1.5K	50 36	View Promotion
11/26/2019 12:00 PM	 Did you know ... we were incorporated in 1961 to			124	14 17	Boost Post
11/22/2019 12:00 PM	 Lots of your neighbors have removed their grass with our			91	4 6	Boost Post
11/21/2019 6:25 PM	 Come behind the scenes with DWA and meet Vicki.			103	11 6	Boost Post
11/19/2019 5:22 PM	 Give your sprinklers a rest for at least two days after a			685	9 10	Boost Post
11/18/2019 12:00 PM	 Our customers used 11.5 percent less water last			63	2 4	Boost Post
11/15/2019 10:36 AM	 It's America Recycles Day! We do our part by recycling			65	8 4	Boost Post
11/13/2019 1:26 PM	 We are on our afternoon Fall Tour. Thought you might			114	11 13	Boost Post
11/13/2019 11:33 AM	 What a great day for a tour! We took folks to a well site,			106	47 10	Boost Post
11/12/2019 12:08 PM	 Did you know ... we have more than 25 wells used to			108	2 12	Boost Post
11/11/2019 8:00 AM	 We are proud to have veterans on our team at			64	2 8	Boost Post
11/08/2019 10:00 AM	 Happy STEM/STEAM Day! These subjects are so			72	1 6	Boost Post
11/05/2019 10:00 AM	 Did you know ... we generate power from the			140	4 12	Boost Post
11/02/2019 10:10 AM	 Daylight Saving Time ends at 2 a.m. - don't forget to set			92	0 3	Boost Post
11/01/2019 10:09 AM	 Happy Pride Week! Enjoy all the Palm Springs Pride			88	5 7	Boost Post

Facebook Analytics November 2019 continued



Instagram November 2019

207 impressions

242 impressions

207 impressions

323 impressions

261 impressions

251 impressions

215 impressions

213 impressions

215 impressions

Nextdoor November 2019

Desert Water Agency

1200 S Gene Autry Trl, Palm Springs

Desert Water Agency

24,073 members Invite

30% of 60,723 households

141 neighborhoods

Outreach & Conservation Manager Ashley Metzger, Desert Water Ag...

RAIN ALERT - do not water until 48 after hours after rain

Recent rain storms did the watering for you this week. It is prohibited by the State of California to water during or within 48 hours of measurable rainfall. Please turn your irrigation systems off. Desert Water Agency has a rebate for smart irrigation controllers that can automatically shut off in rain for you. Hundreds of your

See more...

{{Content.data.Page[0].PageTitle}}

PROGRAMS.DWA.ORG

New 20 Nov · Subscribers of Desert Water Agency

Thank Comment 25 44 · 8626 Impressions

Outreach & Conservation Manager Ashley Metzger, Desert Water Ag...

UPDATE Paving DELAYED - DWA pipeline replacement project

There is a weather delay on this paving work. We will notify you when it has been rescheduled. **********
Desert Water Agency's contractor is scheduled to pave over the areas where pipeline was recently installed. We appreciate your patience as we upgrade the
See more...

New 18 Nov · Subscribers of Desert Water Agency in 1 neighborhood

Thank Comment 22 Impressions

Outreach & Conservation Manager Ashley Metzger, Desert Water Ag...

SECOND UPDATE Paving FRIDAY (Nov 22) - DWA pipeline replacement project

Paving is slated to take place tomorrow barring weather issues. We apologize for the schedule shifts but the rain affects paving.
********** FRIDAY (November 22) Desert Water Agency's contractor is scheduled to pave over the
See more...

New 18 Nov · Subscribers of Desert Water Agency in 2 neighborhoods

Thank Comment 1 · 35 Impressions

Outreach & Conservation Manager Ashley Metzger, Desert Water Ag...

Paving TOMORROW (Nov 19) - DWA pipeline replacement project

TOMORROW (Tuesday, November 19) Desert Water Agency's contractor will be paving over the areas where pipeline was recently replaced. We appreciate your patience as we upgrade the vital water infrastructure in your neighborhood.

If you have any issues, please contact 760-323-4971 extension 184, 127 or 272.

New 18 Nov · Subscribers of Desert Water Agency in 1 neighborhood

Thank Comment 25 Impressions

Outreach Specialist Xochitl Pena, Desert Water Agency AGENCY

DWA tour seats available TOMORROW (Wednesday, 11/13)

Due to a few cancellations, Desert Water Agency has seats available for Wednesday, November 13, 2019. The FREE bus tours will take guests to a well site, a reservoir, the water recycling plant, laboratory and solar field. We have 2 spots open for the morning tour from 8 a.m. to 11 a.m. Reserve your seat at:
See more...

New 12 Nov · Subscribers of Desert Water Agency

Thank Comment 5 13 · 3868 Impressions

Outreach & Conservation Manager Ashley Metzger, Desert Water Ag...

Tour seats open November 13

Desert Water Agency is taking locals behind the scenes on Wednesday, November 13, 2019. The FREE bus tour will take guests to a well site, a reservoir, the water recycling plant, laboratory and solar field. We have a few spots open for the morning tour from 8 a.m. to 11 a.m. If you'd like to join us, reserve your seat at:
See more...

7 Nov · Subscribers of Desert Water Agency

Thank Comment 9 13 · 3677 Impressions

Desert Water Agency Twitter Analytics November 2019

Tweets	Following	Followers
2,145	1,528	1,179

Nov 2019 · 30 days

TWEET HIGHLIGHTS

Top Tweet earned 3,321 impressions

Our second stop is a reservoir above Desert Palisades with an amazing view of #PalmSprings pic.twitter.com/IRZsSJNdkL

♥ 3

View Tweet activity

View all Tweet activity

Top media Tweet earned 1,093 impressions

Happy Pride Week! Enjoy all the Palm Springs Pride festivities and don't forget to stay hydrated! #pspride2019 #PalmSpringsPride pic.twitter.com/QcNXb4siyt

↻ 1 ♥ 2

View Tweet activity

View all Tweet activity

Top Follower followed by 76.1K people

Péricles

@PPFEnergia FOLLOWS YOU

Assessoria em Desenvolvimento de Negócios de Energia - Análise do Setor Elétrico - Energia Renovável - Eficiência Energética ➡➡ BRBR #Direita BRBR➡➡

View profile

View followers dashboard

NOV 2019 SUMMARY

Tweets	Tweet impressions
17	16.6K
Profile visits	**Mentions**
174	2
New followers	
2	