

IV.
CLOSED SESSION

V.
INFORMATION / REPORTS

YUIMA MUNICIPAL WATER DISTRICT
ADMINISTRATIVE REPORT

December 16, 2019

Amy Reeh

Assistant General Manager

GROUNDWATER MANAGEMENT AGENCY (GSA) WORKGROUP

The GSA workgroup met again on November 22, 2019 to discuss the results, if any, of the sub-committee assigned to attempt to arrive at compromise language for Task 2.3 of the GSP Scope of Work. While there was no language developed by the sub-committee, Executive Committee Member Pelcyger proposed language he thought might address concerns of all stakeholders. Other Executive Committee Members discussed the proposal, asking clarifying questions. It was agreed that a final proposed language document would be emailed to the Executive Committee for review and an electronic voting poll would be conducted among the members to ascertain if the revised SOW language had 80% support. The poll was conducted between December 3rd and December 6th.

ANNEXATIONS/NEW SERVICE REQUESTS

Pauma Valley Water Company (PVWC) PVWC is seeking to obtain funding for the annexation from the State Water Resources Control Board – DDW. PVWD continues to work through some administrative paperwork issues; prompting a revision to the original Resolution requesting annexation approval. A new resolution is being brought be for the Yuima Board at today's meeting.

Shadow Run (Schoepe) Annexation/De-Annexation: The annexation application is currently on hold at the Metropolitan Water District awaiting submission of the EIR from Shadow Run Ranch.

Rancho Corrido Annexation the Rancho Corrido Annexation request is currently at Metropolitan Water District who has put a hold on approval due to their concern that Bar 2's right to take water from Rancho Corrido's Wells 1 & 4 may result in an indirect benefit to Bar 2 of imported water. SWRCB is trying to arrange a conference call between Yuima, CWA, MET and SWRCB to resolve the issue. There has been no resolution to this issue as of today's meeting.

NORTH COUNTY EMERGENCY STORAGE PROJECT

Engineers and staff from Valley Center MWD, Yuima MWD and SDCWA to discuss and approve the RFQ for the project. Minor changes were made and the RFQ has been released. Additionally, Assistant General Manager Reeh has been in communications with GM Arant from VCMWD to discuss the cost to Yuima when using the connection during non-emergency events. AGM Reeh is currently clarifying some of the ESP agreement points with the water authority to ascertain exact costs that will be incurred by all of the parties and what infrastructure Yuima will be responsible for maintaining.

STATE WATER RESOURCES CONTROL BOARD (SWRCB)

***The District continues to work through the arduous task of addressing all of the outstanding items the SWRCB is requesting. We gain ground daily in this endeavor and anticipate having all issues resolved within the next several months.**

Staff met with the District's SWRCB representative to review the list of outstanding items the District still needs to provide the SWRCB in association with the July 2017 Sanitary Survey and Backflow deficiencies. Among these items was a request for the District to conduct hazard surveys on parcel of lands within the District boundaries that have a private well but *do not* have a service connection to the District's infrastructure. Staff explained that doing so is outside of the District's regulatory responsibility.

As part of the deficiency correction, the SWRCB is rewriting both the General District and Improvement District's Operating Permits. These will remain as separate permits. However, staff is being asked to locate and provide records (well reports, water testing results, Source Water Assessments, etc.) that date back as far 1959. Staff continues to work with the SWRCB to accommodate, within reason, the records being requested. I

In September and October, 2019 the SWRCB conducted another Sanitary Survey on the District's operating system. This inspection resulted in a few additional repairs that have been addressed. Staff has collected pictures of the repairs and submitted them as proof of completion. The follow are the items the District is completing for the SWRCB.

- Revision of the District's System Operating Manual.
- Compilation of list of all private wells within the District's service area. Including which of these parcels have a connection to the District's infrastructure and completion of a hazard survey on of those parcels.
- Summary of District Water Rights.
- List of types of chlorine products used and the manufacturer name.
- List of all AC pipe in the District's infrastructure and a maintenance plan describing how the district will inspect the condition of the pipe and how often an inspection will be completed.

OPERATIONS DEPARTMENT

San Diego County Water Authority Yuima 1 & 2 Connection

The San Diego County Water Authority has begun maintenance and upgrades to our two connections located of Lilac Road. The Board received notification of the required 10-day shutdown on November 20, 2019 along with all of our customers. An additional notification was emailed on November 27, 2019 and sent in each customers' monthly water bill. District Staff met with several of the District's large pumpers on November 12th as well. All customers have been very helpful in adhering to the shutdown restrictions. Due to the significant amount of rain District staff feels that most growers will be able to continue to cooperate with the restrictions. Additionally, District staff is working with individual growers with potted crops to allow intermittent irrigation for those crops. District staff is working 24-hour shifts to monitor water usage / storage levels and water quality. The SDCWA project is scheduled to be completed on December 17th and the District has asked customers to refrain from irrigating through the 18th in order to replenish District storage facilities in preparation for possible large demands when the restrictions are lifted.

Forebay Pump Station

Funding for the Forebay Pump Station project was received on November 8th. Total proceeds to the District was \$4.9 million dollars. The total cost to obtain the funding was \$100,000. The Notice of Award was issued on November 1st and accepted on November 7th. The Notice to Proceed was issued on November 14th with a completion date of May 8, 2020 for the pump station and June 30, 2020 for final site improvements. The pre-construction meeting was held on November 19th. Material submittals and RFI's are being received, reviewed and approved on a daily basis by TKE and Dexter Wilson whom the District has contracted with for project management. Demolition began on November 25th and the tank has been removed from the site. Weekly progress meetings are being held each Thursday at 9:00 a.m. here at the District. Currently the removal of the oil sand from under the tank is occurring. Unfortunately, there is about twice as much oil sand to be removed as originally thought. The contractor continues to make great efforts to adhere to the very tight construction schedule and is working very closely with all parties involved to ensure success. They have also raised several questions and made money saving suggestions for some aspects of the project.

Rincon Ranch Road Pipeline Replacement

TKE Engineering is currently developing plans and specs to go to bid for the line replacement. TKE and the District are working with Rincon Ranch CSD to ensure that the pipeline replacement is completed in time for the resurfacing of the road to occur. Staff will bring the Plans & Specs to the Board for approval to go to bid as soon as TKE has completed the documents.

Station 7 Pump 1

The pump housing has been set and the contractor is currently upgrading the electrical panel to accommodate the new pump requirements. District Staff is concurrently tying in the inlet and outlet piping to the new pump. The project is expected to be completed in mid-January.

Shop Bathroom

The upgrades necessary to become compliant with Health & Safety standards as requested by JPIA are about 85% complete. All flooring and fixtures have been replaced and the sink, faucet, countertop and other miscellaneous items will be installed in the near future to complete the project.

Perricone Road

As often happens after large rains the water runoff from the storm has caused significant erosion and exposed areas of the 16” Perricone line. District staff is currently discussing and researching options to permanently mitigate future erosion in the same area.

Horizontal Well Line

Due to landslides caused by the recent heavy rains, sections of the Horizontal Well line have separated again. Staff is looking for a contractor willing to traverse the steep and dangerous topography that the well line travels to locate and repair the separations. Rerouting and replacement of this line may need to occur in the near future to avoid this reoccurring problem.

Rancho Estates

District Staff assisted Rancho Estates in a recent emergency by supplying the gate valve and miscellaneous parts necessary to make the emergency repair. Staff time and cost of parts have been billed to Rancho Estates.

Barrett Reservoir

Tony Cinquini has approached the District again about purchasing the property that used to house Barrett Reservoir. Assistant Manager Reeh met with Operations staff who have indicated they cannot see a foreseeable need for the property in questions and have no objects to the selling of the land. Assistant General Manager Reeh is researching the process of selling surplus property and will bring the information to the Board at the January meeting.

FINANCE DEPARTMENT

Staff is completing the 2018-19 Comprehensive Annual Financial Report for submission to the GFOA. This will be the 12th year the District has submitted the CAFR for consideration for the Excellence in Financial Reporting Award.

Currently staff is working on transferring all of the operational recurring service orders over to Tyler Financial System. This is the final phase of implementation. During this process staff is evaluating all recurring service orders for necessity in an effort to eliminate obsolete practices.

Budget development for the 2020-21 Fiscal Year will begin in January. Assistant General Manager Reeh will be working closely with both Administrative and Operational staff to ensure that all necessary operation and maintenance costs are included, as well as necessary capital improvements. All staff continue to review processes and expenses to ensure that the District's budget is as streamlined and economical as possible.

CSA 135 Transfer of Fire District to County

LAFCO has approved the transfer of the Fire District to the County of San Diego and the responsibility of the fire district and fire protection of the area is now with the County of San Diego. District Staff is currently working with the County to complete necessary documentation to transfer the collection of the remaining 19/20 Special Fire Tax and the balance of the Fire Fund to the County. The County will be establishing a restricted fund designating the use of the funds only for CDF Station 70.

News & Notes

Top News

Madaffer Gets Sworn In

The Water Authority's Chair of the Board, Jim Madaffer, was sworn in to the Colorado River Board (CRB) on October 9. Madaffer was selected by the Water Authority's Board of Directors as the recommended candidate to be the new representative to CRB. The nomination was approved and Madaffer was appointed to the CRB by California Governor Gavin



Newsom earlier this year. For the past 75 years the Colorado River Board of California's mission has been to protect the interests and rights of the State of California, its agencies and citizens, in the water and power resources of the Colorado River System. The Colorado River Board represents the State of California and its Members in discussions and negotiations with the Colorado River Basin States, federal, state and local government agencies and Mexico regarding the management of the Colorado River. Madaffer will represent the Water Authority as a major stakeholder on the river and continue to foster partnerships with other CRB members.

Water Authority Directors Attend Opening of the Regional Advanced Purification Center



On October 10, Directors Michael Hogan and Tim Smith joined Metropolitan Water District (MWD) Chairwoman Gloria Gray, Congresswoman Grace Napolitano, and State Water Resources Control Board Chairman Joaquin Esquivel at the opening of MWD's new water recycling demonstration plant in Carson—the Regional Recycled Water Advanced Purification Center. The demonstration project, a partnership between MWD and the Sanitation Districts of Los Angeles County, will purify 500,000 gallons of a day and generate the data and information needed to determine if a full-scale, 150 million gallons daily recy-

clered water plant could technically be implemented. In 2020, MWD is expected to have additional discussions about the program and hold a workshop related to the full-scale program's planning, agreements, and financial considerations.

MWD's Mid-Cycle Biennial Budget Review

In September 2019, the Metropolitan Water District (MWD) provided a "Mid-Cycle Biennial Budget Review" for fiscal years 2019 and 2020. MWD reviewed fiscal year 2019's outcome, provided fiscal year 2020's financial outlook, and highlighted some key issues the MWD Board may consider when setting its 2021 and 2022 biennial budget and rates. MWD closed fiscal year 2019 with water sales under budget by about 257,000 acre-feet, or more than 18%; this revenue shortfall was offset primarily by expenditures also coming in below budget. MWD forecasts that water sales will continue to track below budget through fiscal year 2020 while expenditures are expected to significantly exceed budget. To manage the anticipated revenue shortfall, MWD plans to issue \$190 million in unplanned debt to cover budgeted and unbudgeted capital expenditures and shift \$90 million in Pay-As-You-Go revenues to fund operating expenditures. Additionally, MWD plans to withdraw about \$46 million from its unrestricted reserves to cover the remaining revenue gap. MWD indicated that during its upcoming 2021 and 2022 biennial budget and rate setting process, it will "review" its water sales assumptions and consider its investments in demand management programs and some of its supply programs, including the Bay-Delta fix and potential Regional Recycled Water Program, among other things. These discussions are important to sustainably manage MWD's finances. Long-range financial planning effort continues to be advocated by the Water Authority Delegates. To learn more about MWD's Mid-Cycle Biennial Budget Review, see the memo starting on page 121 in the Water Authority's October 2019 Board packet found here: <https://sdcwa.org/meetings-and-documents>.

Community Outreach

Water News Network & 75th Anniversary Section Win Press Club Honors

For the second consecutive year, the San Diego County Water Authority received two first place awards for its public outreach and education at the 2019 San Diego Press Club's 46th annual Excellence in Journalism Awards on October 30. During the evening event, which is attended by more than 500 people, San Diego's finest reporters, photographers, writers, artists, and communicators were recognized for their accomplishments in news coverage, reporting and public education.

The Water Authority received the following Press Club awards:

Websites, Public Service or Consumer Advocacy Site Water News Network website

The Water News Network has proven to be a valuable source of water news and information for the San Diego region since it started in May 2018. This is the second consecutive year the Water News Network website has won first place in this category.

Public Relations, Public Information and Trade Publications division.

Special interest on one-time publications: "San Diego County Water Authority: 75 Years and Counting"

Published June 9, 2019, this multi-page publication explored San Diego's water history, needs and the 24 member agencies that serve the region. (Publication was a supplement within the Sunday, June 9, San Diego Union-Tribune).

Helix Hosts Citizens Water Academy Class

Thanks to Helix Water District for hosting the Fall 2019 Citizens Water Academy. Sessions 1 and 2 were held at their Nat L. Eggert Operations Center in El Cajon. Helix Water District Board Member Mark Gracyk and General Manager Carlos Lugo welcomed the group and provided tours of their facility. Session 3 was held at the Water Authority's Escondido Operations Center and featured tours of the center, the Claude "Bud" Lewis Carlsbad Desalination Plant and Olivenhain Dam. This brings the number of CWA graduates to 756 and it is the 18th class to graduate since the program began in fall 2014.

Alumni have been elected to boards and commissions throughout the region, including Helix Water District Board

Member Mark Gracyk, South Bay Irrigation District Board Member José Cerda and Valley Center Municipal Water District Board Member Enrico Ferro. The three graduates have said their Citizens Water Academy experience increased their knowledge of water issues.

For more information about the Citizens Water Academy, visit www.sdcwa.org/citizens-water-academy.

Social Media Campaign Highlights 'Faces of the Water Industry'

The Water Authority, in partnership with its member agencies, is running an outreach campaign called "Faces of the Water Industry" to highlight the diversity of people and jobs in the region's water industry. Outreach materials include social media posts, Board room posters and a 2020 wall calendar. In November, Water Authority employees may pick up a copy of the calendar in POC (while supplies last!).

Over the next few weeks, the Water Authority's social media accounts will continue featuring staff from across the region, as they have since the start of October. In all, more than a dozen member agencies participated, highlighting more than 70 employees.

Besides the photos, posts include inspiring and insightful thoughts from water industry pros. "I enjoy seeing how my work on water policy directly benefits our region and supports the Water Authority's mission to provide a safe and reliable water supply to San Diego," said Liz Mendelson-Goossens, Senior Water Resources Specialist in the Water Authority's MWD Program. "Plus, it's exciting stuff! No two days are the same and there's always an opportunity to learn something new, gain another skill, or collaborate on a creative, out-of-the-box solution."



Read more stories on Instagram, Facebook, Twitter and LinkedIn by searching **#FacesOfTheWaterIndustry**.

Community Outreach

Upcoming MWD Inspection Tours

Mark your calendars for the January 31-February 1 and May 15-16 Hoover Dam and CRA system tours hosted by Directors Michael Hogan and Tim Smith, respectively! Both tours focus on the 242-mile-long system of pumping plants and canals that brings Colorado River water into Southern California and offer a special in-depth tour of Hoover Dam, which provides flood control, water, and electricity to Arizona, Nevada, and California. Tour applications open approximately six to eight weeks before the tour date. If you or someone you know is interested in participating in the tours, email MWDProgramTours@sdcwa.org to receive updates. Below is the remaining schedule for the 2019-2020 tour season:

Tour Date	Hosting Director(s)	Location
November 8-9, 2019*	Jerry Butkiewicz	Colorado River Aqueduct System
December 13-14, 2019*	Gail Goldberg	Colorado River Aqueduct System
January 31-February 1, 2020	Michael Hogan	Hoover Dam and Colorado River Aqueduct System
May 15-16, 2020	Tim Smith	Hoover Dam and Colorado River Aqueduct System

* Tour application closed at the publication of this article



October 2019 MWD State Water Project and Bay-Delta tour participants at the Big Break Regional Shoreline Visitor Center.

Water Authority to Begin Re-Assessing Pipeline Vulnerability Due to Earthquakes

The Water Authority owns and operates approximately 310 miles of large diameter pipelines in the north-south aligned First and Second Aqueducts and several east-west branches. North to them, the Metropolitan Water District of Southern California (MWD) owns and operates approximately 90 miles of the remaining pipelines in the First and Second Aqueducts from Lake Skinner. These pipelines cross major earthquake faults in southern California (see Figure 1). The Water Authority's ability to deliver water to its member agencies can be compromised if these pipelines are damaged during a strong earthquake.



The last earthquake vulnerability study on the Water Authority's pipeline system (including MWD's portion south of Lake Skinner) was performed in 1993. The study provided an estimate of the number of pipeline breaks and repair time needed to return water service to the San Diego Region following a strong earthquake. The estimated repair time from this study ranged from 60 to 180 days, which also determined the emergency storage and conveyance facilities needed if the San Diego region were cut off from MWD. This system later became known as the Emergency Storage Project which is currently in operation. Since the 1993 study, several contributing factors have significantly evolved, including the industry's current understanding of regional seismicity, seismic hazards, pipeline fragilities, and the Water Authority's pipeline materials and improvements. The Water Authority has identified a need for updating the study to reflect the current set of standards and practices in earthquake science and engineering and the vulnerability assessment.

Community Outreach

Water Authority to Begin Re-Assessing Pipeline Vulnerability Due to Earthquakes—continued

In this new study, a specialized consultant will be retained to perform a detailed seismic hazard assessment and update the repair time estimates for both the Water Authority's and MWD's pipelines south of Lake Skinner, the same area as included in the 1993 study. The consultant will also provide any recommended pipeline retrofit alternatives and material needed to help reduce repair times after strong earthquakes. A request for proposal is currently being advertised and a contract award is planned for early next year. The study is anticipated to be completed by summer of 2021.

Hodges Reservoir Speece Cone Aims to Improve Water Quality

Hodges Reservoir, owned by the City of San Diego, is connected to the Olivenhain Reservoir via pumped storage facilities. Pumped storage facilities allow water flow between the reservoirs to activate pump turbines, generating green electricity in times of peak demand. The connection provides the ability to store up to 20,000 acre-feet of water at Hodges Reservoir for emergency use. Pumped storage facilities also make water from Hodges Reservoir readily available for regional beneficial use. Prior to pumped storage construction, water was only accessible to two member agencies. Due to the diverse land uses within the 350 square mile watershed and runoff associated with upstream development, Hodges Reservoir has a host of water quality challenges that have restricted the ability to move water.

The hypolimnetic oxygenation system (HOS), comprised of a speece cone and associated piping (see diagram), will be installed at the bottom of Hodges Reservoir to oxygenate the interface where sediment and water meet. The sediment-water interface is where internal nutrient cycling occurs. The HOS system will arrest nutrient cycling upon operation and help control excessive algal productivity. The cone will be accompanied by a liquid oxygen and electrical supply facility onshore at the site of a former reservoir keeper's residence. The speece cone is 25 feet tall, 12 feet in diameter and weighs 130,000 pounds.



Speece Cone

The speece cone will be craned onto a floating barge, which will reside on Hodges Reservoir September-October 2019, while the construction team prepares the foundation. Con-

struction will be completed in early November 2019. Water quality monitoring has been collected for both Olivenhain and Hodges Reservoirs to provide a robust data set for baseline conditions. Hodges Reservoir will continue to be monitored after the installation of the HOS to account for improved water quality conditions. On October 11th, 2019 the California Lake Management Society conference hosted over 50 attendees at Hodges Reservoir who were able to observe the Speece Cone on the floating barge.



Speece Cone, Discharge Ports in the Foreground Pass

New Rebates for Smart Irrigation – Direct to Contractors – Coming Soon

Starting in December 2020, a new program known as the WaterSmart Contractor Incentive Program will be offered to contractors throughout the Water Authority service area. WSCIP aims to help commercial, public and agricultural property owners improve water-use efficiency in large landscapes, through rebates for irrigation hardware upgrades. A comprehensive package of innovative irrigation devices will be available for installation at discounted price through qualified QWEL, CLIA, CLCA contractors that have received their water management certification. Self-performing agencies and organizations such as municipalities, school districts, universities, etc. are also eligible to participate.

Qualifying project sites must include a minimum of one acre of irrigated landscape, with no maximum limit. Typical sites are projected to be larger than five acres. This program is funded through MWD's Member Agency Administered Program. The initial program phase funding is provided primarily by MWD MAAP funds of approximately \$620,000 and ends June 30, 2020. The program is administered by the Board-approved vendor, WaterWise Consulting, Inc. Call **(888) 521-9763** for more information.

Department News

Emergency Preparedness Training Tool

The Water Authority, with input from members of the Water Agency Emergency Collaborative group in San Diego and other area partners, has developed a draft Emergency Preparedness Training presentation for water agencies. This presentation communicates the big picture of what happens during an emergency that may be useful to new employees, those in new roles, and as a refresher for others. We hope to unify our response efforts by touching on overall emergency organization, needs and focus of partner agencies, and methods to navigate the process when an emergency occurs – whether your agency needs help or is providing resources and information to others. In the coming months, we will conduct a test run of the presentation with a select group of member agency representatives. We plan to issue a final version of the product for member agency use by June 2020.

Travel Policy Updates

The GM Admin Policy 304 – Business Expense Reimbursement and In-Travel Status Allowance has been updated and is now included in the GM Administrative Policies document located on the GM's intranet website. It can be accessed [here](#).

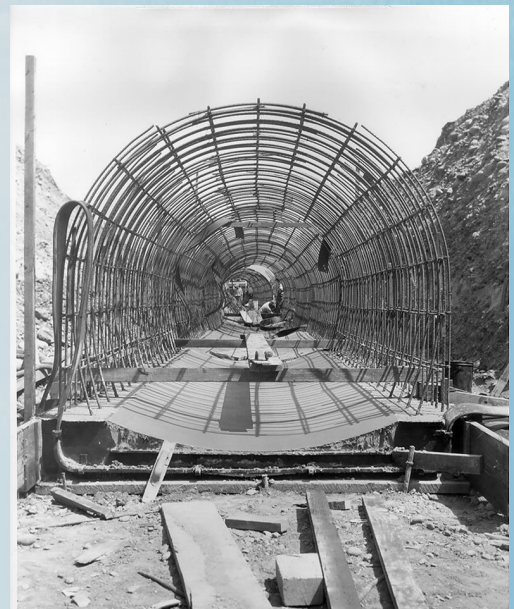
In support of this policy update, the Finance Group is in the process of reviewing all travel related forms and guidelines which are linked on the Finance intranet webpage under Department Resources. Some of these have already been revised while others will be updated in the coming months. Revised forms include Mileage Reimbursement Guidelines, Travel-Meal Reimbursement Matrix and the Travel Policy Guidelines. Please feel free to contact Wendy Joplin or Cora Pablo should you have any questions or comments regarding these forms and guidelines.

HEADWATERS

1947: Construction of the First San Diego Aqueduct

San Diego became a hub of naval activity after the United States entered World War II in 1941. The City of San Diego's population doubled in two years, and water use also doubled. It was clear the city and the Navy would soon need water from the Colorado River. An aqueduct for bringing that water to San Diego became a top priority.

On November 28, 1947, the first Colorado River water finally flowed south from the Colorado River aqueduct's western end in Riverside County for 71 miles into the City of San Diego's San Vicente Reservoir near Lakeside via the San Vicente Aqueduct, now known as Pipeline 1 of the First San Diego Aqueduct. It ran over some of the county's most rugged terrain and could deliver 65,000 acre-feet per year. The project was completed just in time -- when San Diego County had less than three weeks of water supply remaining.



News & Notes

Top News

Pipeline 4 Emergency Repair Successfully Restores Reliable Water Deliveries

On Friday, August 2, 2019, staff discovered a pipeline leak within Moosa Canyon, as they observed water discharging from the side slope of Moosa Creek. The Water Authority's second aqueduct, which contains Pipelines 3, 4 and 5, runs through this area. After staff investigated other infrastructure in the area to confirm the leak was from Pipeline 4, the General Manager's office declared an emergency on August 7, 2019 in accordance with the Water Authority's Administrative Code. With the declaration of the emergency, staff began planning for the shutdown and repair of Pipeline 4 to mitigate risks and prevent loss.

Pipeline 4 is a vital component of the Water Authority's treated water system that delivers water from the MWD delivery point down to Lower Otay Reservoir. Treated water is supplied from MWD's Skinner Water Treatment Plant, Twin Oaks Valley Water Treatment Plant, and the Carlsbad Desalination Plant. The operating pressure within Pipeline 4 in Moosa Canyon exceeds 300 psi and a catastrophic failure could have resulted in considerable environmental damage and damage to the adjacent Pipelines 3 and 5. Additionally, failure of Pipeline 4 would significantly impact the Water Authority's ability to provide treated water to the member agencies.

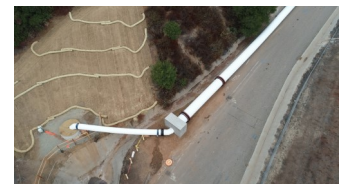
A new pipeline operation strategy was required to maintain treated water deliveries to the member agencies while safely isolating Pipeline 4 for the repair work. O&M and Engineering staff worked extensively to design a modified pipeline operation to deliver water north and south of the leak area during the pipeline repair. A 10-day Pipeline 4 shutdown occurred in early September to install two internal steel bulkheads. Crews also installed a temporary aqueduct pressure relief system near Fallbrook's Red Mountain Reservoir to protect Pipeline 4 when water deliveries resumed with the isolating bulkheads in place. Staff coordinated with MWD, Fallbrook and other affected member agencies.

After the pipeline repair area was safely isolated, a forensic analysis was performed to confirm the cause of the leak and the appropriate repair. The analysis concluded that pipeline thrust forces had shifted the pipeline and created a crack at a pipe joint, resulting in the leak. To repair and strengthen the pipeline, a carbon fiber composite relining began on October 3, 2019. This repair method is temporary and has a 10-year design life, but was chosen due to its ability to be installed in an expedited timeframe compared with standard pipeline construction. The repair consisted of installing multiple fiber-reinforced polymer layers on the internal surface of the pipe. This repair method restored the pipeline's strength needed to handle thrust forces and was completed on October 25, 2019.

Pipeline 4 was shut down again on November 4, 2019 to remove the two internal steel bulkheads and disconnect the temporary aqueduct pressure relief system. Pipeline 4 was returned to normal operation following completion of the shutdown. Next year, a comprehensive study will be performed on Pipelines 3, 4, and 5 in the Moosa Creek area to identify long-term improvements required on the pipelines. Future construction work resulting from the study will be included in the fiscal years 2022 and 2023 Capital Improvement Program budget.



Pipeline 4 Carbon Fiber Liner Installation



Temporary Aqueduct Pressure Relief System

Top News, continued

[Local Resources Program Approval for the Oceanside Pure Water and Recycled Water Expansion Phase I Project](#)

At its November 2019 meeting, the Metropolitan Water District (MWD) Board authorized a Local Resources Program (LRP) agreement with the City of Oceanside and Water Authority for the Oceanside Pure Water (Pure project) and Recycled Water Expansion Phase I Project (expansion project). Starting in 2023, the Pure and expansion projects is expected to provide about 6,000 acre-feet of water annually to Oceanside. This LRP agreement is for sliding scale subsidies of up to \$475 per acre-foot over a 15-year term and will provide Oceanside with up to \$42.7 million of LRP funding. This is the second LRP agreement approved by the MWD Board since the Water Authority successfully challenged MWD on its imposition of “rate structure integrity” clause. MWD is expected to consider the Pure Water San Diego project LRP agreement at its December meeting. For more information, see the MWD Program Report starting on page 87 in the Water Authority’s November 2019 Board packet found here: <https://sdcwa.org/meetings-and-documents>.

[MWD’s Stormwater for Recharge Pilot Program](#)

[At its November 2019 meeting, the](#) Metropolitan Water District (MWD) Board authorized \$7.5 million for its second stormwater pilot program. The [Stormwater for Recharge Pilot Program will](#) subsidize stormwater projects intended to recharge groundwater basins and is in addition to the \$5 million Stormwater for Direct Use Pilot Program approved by the Board in September 2019. The goal of the pilot is to collect data to assess the water supply benefit of capturing stormwater to recharge groundwater basins. New stormwater recharge projects are eligible to receive up to \$1 million in subsidies while existing projects can receive up to \$500,000. MWD will begin accepting applications on January 1, 2020, and projects will be selected on a first-come, first-served basis. The San Diego Integrated Regional Water Management Program has notified agencies that may be interested about this pilot program. For more information about the stormwater pilot programs, contact Goldy Herbon at GHerbon@sdcwa.org.

[State Water Project Supply Contracts and Bay-Delta Tunnel Update](#)

On November 15, 2019 during State Water Project (SWP) contract negotiations, the staffs of the SWP Contractors and the Department of Water Resources (DWR) reached a tentative Agreement in Principle (AIP) for a future contract amendment to account for the costs and benefits of the proposed Bay-Delta tunnel project. These negotiations were re-initiated in July 2019 after Governor Newsom formally abandoned the California WaterFix (WaterFix) project, rendering the WaterFix AIP invalid, and were held through public meetings in Sacramento and closed-door “caucus” sessions. The new agreement assumes a 6,000 cubic-feet per second (CFS) project—3,000 CFS less than WaterFix. The new AIP is based on an “Opt-in” approach, so individual contractors have a choice to participate in the new project. The agreement also allows for transfers and exchanges between participating and non-participating contractors. The contractors aim to have their respective boards consider the AIP by January 31, 2020, even though the Contractors have yet to reach an agreement on their funding commitment. The AIP is also silent on whether project costs will be recovered through supply, transportation, or a combination of both types of charges. These AIP negotiations were done prior to the environmental review process of Bay-Delta tunnel project alternatives; in December 2019, DWR is expected to issue a Notice of Preparation for an Environmental Impact Report (EIR). The EIR will identify and analyze various project alternatives including a preferred alternative, their impacts, and measures to mitigate those impacts. To read more about the recent developments affecting Bay-Delta policies and State Water Project operations, see the memo *Bay-Delta Update* starting on page 79 in the Water Authority’s November 2019 Board packet found here: <https://sdcwa.org/meetings-and-documents>.

Top News, continued

POC Honored for Outreach Efforts

The Water Authority's regional outreach and education program "Brought to You by Water" was recognized with several awards in the annual contest hosted by the Public Relations Society of America of San Diego/Imperial Counties on Nov. 7. The B2U program was designed to expand Water Authority relationships and help stakeholders across the region recognize the critical value of safe and reliable water supplies for our economy and quality of life. The program won Bronze Bernays Awards for a series of videos featuring local leaders and for creative tactics. It also won Silver Bernays awards in the Public Service category and the Reputation/Brand Management category.

Denise Vedder, director of the Public Outreach and Conservation Department, was honored as the public relations pro-

fessional of the year for the PRSA chapter. The honor is presented each year by the San Diego/Imperial chapter to a public relations practitioner who shows dedication to bettering the public relations field through innovative thinking and successful planning. Past winners include Diana Lucero, director of public and customer relations at the San Diego County Regional Airport Authority; Elizabeth Pecs, SDG&E customer service manager; and Chris Wahl, president of Southwest Strategies. It's an outstanding achievement that speaks volumes about the dedication and professionalism of Denise and our entire outreach team.

In addition, the City of Oceanside, Padre Dam Municipal Water District and the City of San Diego were big winners at the PRSA event, which turned out to be a big night for water agencies.

Community Outreach

San Diego IRWM program completing first phase of Prop 84 grant program

The San Diego Integrated Regional Water Management (IRWM) Grant Program is wrapping up a grant that provided \$7.9 million to support 11 high priority water projects located throughout the San Diego Region. The projects funded by DWR's Proposition 84, Round 1 grant program helped to meet the San Diego IRWM Program's goals in the areas of water supply reliability, water quality, watersheds and natural resources, and sustainable integrated water resource management.

Among the Prop 84, Round 1 projects are two sponsored by the Water Authority; two by member agencies; four by other public agencies; and three by disadvantaged community organizations. The Water Authority projects involve support for sustainable landscapes and improving water quality in Hodges Reservoir.

All of the projects contributed to regional water management integration. For example, the San Diego North Regional Recycled Water Project, sponsored by the Olivenhain Municipal Water District, integrated several recycled water projects being developed by 11 project partners in northern San Diego County. Another project was perhaps the first in the state implemented by two IRWM planning regions. The neighboring San Diego and Upper Santa Margarita regions implemented Phase I of the Implementing Nutrient Management in the Santa Margarita River Watershed Project, which aims to establish nutrient water quality objectives for the Santa Margarita River estuary and the entire Santa Margarita River watershed.

The Water Authority, a member of the San Diego IRWM grant program along with the City of San Diego and County of San Diego, wrote the program completion report in its capacity as the San Diego IRWM grant administrator.

Community Outreach

Upcoming MWD Inspection Tours

Mark your calendars for the January 31-February 1 and May 15-16 Hoover Dam and CRA system tours hosted by Directors Michael Hogan and Tim Smith, respectively! Both tours focus on the 242-mile-long system of pumping plants and canals that brings Colorado River water into Southern California and offer a special behind the scenes tour of Hoover Dam, which provides flood control, water, and electricity to Arizona, Nevada, and California. Tour applications open approximately six to eight weeks prior to the tour date. If you or someone you know is interested in participating in the tours, email MWDProgramTours@sdcwa.org to receive updates. Below is the remaining schedule for the 2019-2020 tour season:

Tour Date	Hosting Director(s)	Location
December 13-14, 2019*	Gail Goldberg	Colorado River Aqueduct System
January 31- February 1, 2020	Michael Hogan	Hoover Dam and Colorado River Aqueduct System
May 15-16, 2020	Tim Smith	Hoover Dam and Colorado River Aqueduct System

* Tour application closed at the publication of this article.

Imperial Valley Outreach Tour

The Colorado River Program (CRP) is organizing a tour for the Water Authority's Board of Directors to the Imperial Valley to view sites related to the proposed Regional Conveyance System, to visit farm fields involved with conservation tied to the Quantification Settlement Agreement, and to view mitigation projects at the Salton Sea. The tour will be held Jan. 30 and represents the second tour to the Valley for our Board. Annually, CRP organizes tours meant to help foster stronger relations between the Water Authority and the Imperial Valley, including bringing representatives from the Valley to the San Diego region to view projects related to the Water Authority's portfolio of water management initiatives.



Pictured at the San Vicente Dam and Reservoir are representatives from the Imperial Valley and Water Authority staff and management who joined in a 2019 tour of the facility organized for the Valley.



November 2019 MWD Colorado River Aqueduct tour participants at Copper Basin Reservoir.

Department News

Mission Trails Chlorine Injection System

As a result of reduced demands, the Water Authority has been experiencing higher levels of nitrification within the treated water system. In order to maintain treated water quality, the Water Authority had to flush the lower section of the second aqueduct into Lower Otay Reservoir to address degradation of water quality and nitrification. The Mission Trails Chlorine Injection System was designed to provide a method to mitigate water quality degradation and reduce flushing activities. Construction of this system was completed in August 2019 and it was placed into remote operation beginning in early October after thorough testing and commissioning. These improvements were constructed and installed by Operations & Maintenance staff with Engineering support and oversight.



Figure 1 Exterior Cabinet

Construction began in March 2019 with Facilities Maintenance staff preparing the Mission Trails Flow Regulatory Structure and SD11 flow control facility for the installation of the equipment and components. This work included modifications at the SD11 flow control facility for the installation of an exterior cabinet to house multiple online water quality analyzers. This was required for monitoring of incoming water quality parameters to determine the appropriate levels of chlorine boost necessary. The chemical dosing system and storage tank had to be incorporated into the existing footprint at Mission Trails Flow Regulatory Structure. An exterior chemical fill station was installed to allow the storage tank in the lower floors of the facility to be filled from outside of the facility. Due to the addition of this system, staff was required to install new safety features within the facility to ensure a safe working environment was maintained. This included multiple eye wash stations, an enhanced ventilation system, and spill containment.



Figure 2 Chemical Fill Station

To support the additional equipment being installed, the electrical service from SDG&E had to be upgraded to provide

adequate supply to be distributed to all the components. Technical Services staff had to develop a plan for temporary power to keep the SCADA system, controls, and communications operational during this retrofit. The installation of various control cabinets and distribution panels were also required, along with additional fiber optic cabling to provide signals from the equipment in outlying valve vaults. Extensive conduit routing was required to provide power and the

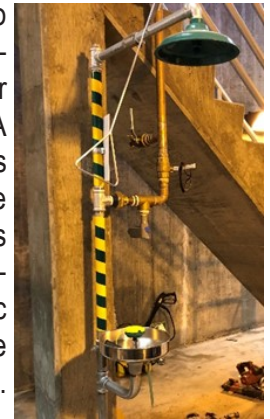
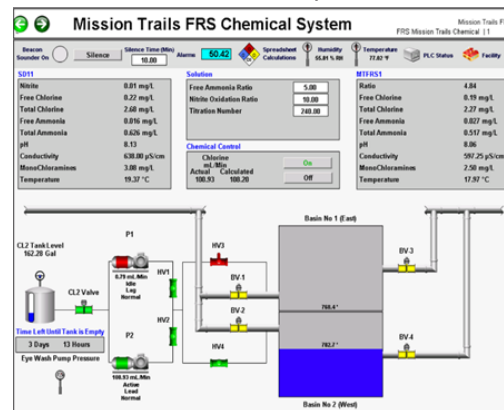


Figure 3 Eye Wash Station

ability to transmit all of the data information to the control system. SCADA staff developed the control strategy, PLC code, HMI graphics, and integrated the chemical system into the existing MFRS facility. Operations staff installed multiple online water quality equipment upstream and downstream of the injection system to provide the water quality information to safely and efficiently operate the injection system.

With the completion of this installation of the system, staff now has the ability to boost chlorine residual by injecting sodium hypochlorite into the aqueduct to recombine any free ammonia and oxidize nitrites present in the water. The control room operators are able to remotely operate and monitor the system 24/7 and the information provided by the online water quality analyzers are able to ensure the proper dosing strategy is implemented. Over the past two months, the system has been in normal operation and has provided staff the



ability to reduce the amount of flush required to maintain water quality.

Department News

[Water Authority Staff Complete The Centre's Certified Public Manager® Program](#)

On November 7, Operations and Maintenance Manager Martin Coghill, Information Security Officer Dan Constantineau, and Water Resources Manager Jeremy Crutchfield completed The Centre for Organization Effectiveness' Leadership Academy and Certified Public Manager® Program. The program is designed to prepare California's public leaders to lead organizations in complex, highly-charged political environments, as well as provide a method for public agencies to meet their succession planning goals through professional development of their managers. A unique feature of the eight-month program is each participant is required to complete a Capstone project under the guidance of a sponsor from their home organization. Congratulations to Martin, Dan and Jeremy for successfully completing the program!

HEADWATERS

[First Transfer of Water from Imperial Valley](#)

Sixteen years ago, Federal officials gave the final clearance to begin the historic transfer of water from the Imperial Irrigation District to the San Diego County Water Authority.

In December 2003, with the final approval in hand, the first 10,000 acre-feet of water from the historic Quantification Settlement Agreement flowed into San Diego County. The initial water delivery marked the beginning of the largest agriculture to urban water transfer in U.S. history, a cornerstone of the Water Authority's supply reliability strategy.



Yuima Municipal Water District - Production/Consumption Report

YUIMA GENERAL DISTRICT			FISCAL YTD		CALENDAR YTD	
Produced and Purchased Water	Oct-19	Sep-19	2019-20	2018-19	2019	2018
20-2009 IDA	0.0	0.0	0.0	0.0	0.0	0.0
0-1009 & 10-1011 SDCWA	678.0	767.6	2957.4	4756.2	4029.1	6140.5
10-1001 SCHOEPE	5.4	5.9	26.0	63.4	59.8	88.2
Total Produced and Purchased	683.4	773.5	2983.4	4819.6	4088.9	6228.7
Consumption						
Back of Book 01 CUSTOMERS GENERAL DISTRICT	322.8	347.1	1361.0	2630.4	2015.8	3377.3
10-2100 TAP 1	125.9	183.1	672.0	1006.0	883.8	1404.7
990 minus 20-2008 TAP 2	148.2	146.7	566.2	665.0	656.7	686.2
10-1200 TAP 3	95.7	100.0	398.9	593.3	574.8	761.3
Total Consumption - Yuima	692.7	776.9	2998.0	4894.7	4131.0	6229.5
Storage Level Changes	1.9	-10.9	1.1	-1.8	-0.4	-3.9
Slippage - Acre Feet	-7.4	-14.3	-13.5	-76.9	-42.4	-4.6
Slippage %	-1.1	-1.8	-0.5	-1.6	-1.0	-0.1
IMPROVEMENT DISTRICT "A"						
Produced Strub Zone Wells						
20-2012 RIVER WELL 12	15.8	17.1	68.6	137.0	134.0	158.4
20-2091 RIVER WELL 19A	44.6	49.6	195.4	361.6	354.5	398.1
20-2020 RIVER WELL 20A	27.1	20.8	109.7	257.7	218.0	310.2
20-2025 RIVER WELL 25	19.7	23.0	92.7	152.2	158.4	187.9
20-2022 FAN WELL 22	17.6	20.8	92.7	135.5	132.1	195.7
Total Produced Strub Zone Wells	124.8	131.2	559.2	1044.0	997.0	1250.3
Produced Fan Wells						
20-2007 WELL 7A	3.9	7.5	22.9	21.8	24.7	32.3
20-2000 WELL 10	0.9	1.9	5.7	6.1	6.1	9.1
20-2014 WELL 14	24.7	19.9	104.0	106.4	137.7	181.5
20-2017 WELL 17	2.5	6.5	25.1	39.7	34.6	78.4
20-2018 WELL 18	9.2	10.6	39.5	57.3	52.2	90.8
20-2023 WELL 23	5.2	5.4	22.7	28.1	29.3	29.3
20-2024 WELL 24	10.6	9.9	45.8	69.6	63.6	91.9
20-2029 WELL 29	11.4	14.6	60.3	57.9	81.6	91.9
20-20410-500 HORIZONTAL WELLS	16.5	17.5	77.2	129.6	146.5	143.4
Code K Usage WELL USE AGREEMENTS ("K")	22.6	24.4	87.6	127.8	133.7	160.7
Total Produced Fan Wells	107.5	118.1	490.6	644.6	710.0	909.1
Total Produced Strub and Fan Wells	232.3	249.3	1049.7	1688.5	1707.0	2159.4
Purchased Water						
10-2100 TAP 1	125.9	183.1	672.0	1006.0	883.8	1404.7
990 minus 20-2008 TAP 2	148.2	146.7	566.2	665.0	656.7	686.2
10-1200 TAP 3	95.7	100.0	398.9	593.3	574.8	761.3
Total Purchased Water	369.8	429.8	1637.1	2264.4	2115.2	2852.2
Total Produced and Purchased	602.1	679.1	2686.8	3952.9	3822.2	5011.6
Consumption						
Back of Book 02 CUSTOMERS IDA	575.7	652.8	2564.0	3720.7	3562.1	4832.3
Interdepartmental to Y	0.0	0.0	0.0	0.0	0.0	0.0
Total Consumption - IDA	575.7	652.8	2564.0	3720.7	3562.1	4832.3
Storage Level Changes	1.9	-4.3	2.4	-2.0	-1.1	0.2
Slippage - Acre Feet	28.3	22.0	125.2	230.1	259.0	179.5
Slippage %	4.7	3.2	4.7	5.8	6.8	3.6
Combined General District and IDA						
0-1009 & 10-1011 SDCWA	678.0	767.6	2957.4	4756.2	4029.1	6140.5
10-1001 SCHOEPE	5.4	5.9	26.0	63.4	59.8	88.2
PRODUCED YUIMA	0.0	0.0	0.0	0.0	0.0	0.0
PRODUCED IDA	232.3	249.3	1049.7	1688.5	1707.0	2159.4
Total Produced and Purchased	915.6	1022.8	4033.2	6508.1	5795.9	8388.1
Consumption	898.5	999.9	3925.0	6351.1	5577.9	8209.6
Storage Level Changes	3.8	-15.2	3.6	-3.8	-1.5	-3.7
Slippage - Acre Feet	20.9	7.7	111.7	153.2	216.6	174.9
Slippage %	2.3	0.8	2.8	2.4	3.7	2.1

Footnotes-

Yuima:

IDA: Horizontal Wells went to reservoir
10/30 and 10/31 Power out at Strub Wells

Yuima Municipal Water District - Production/Consumption Report

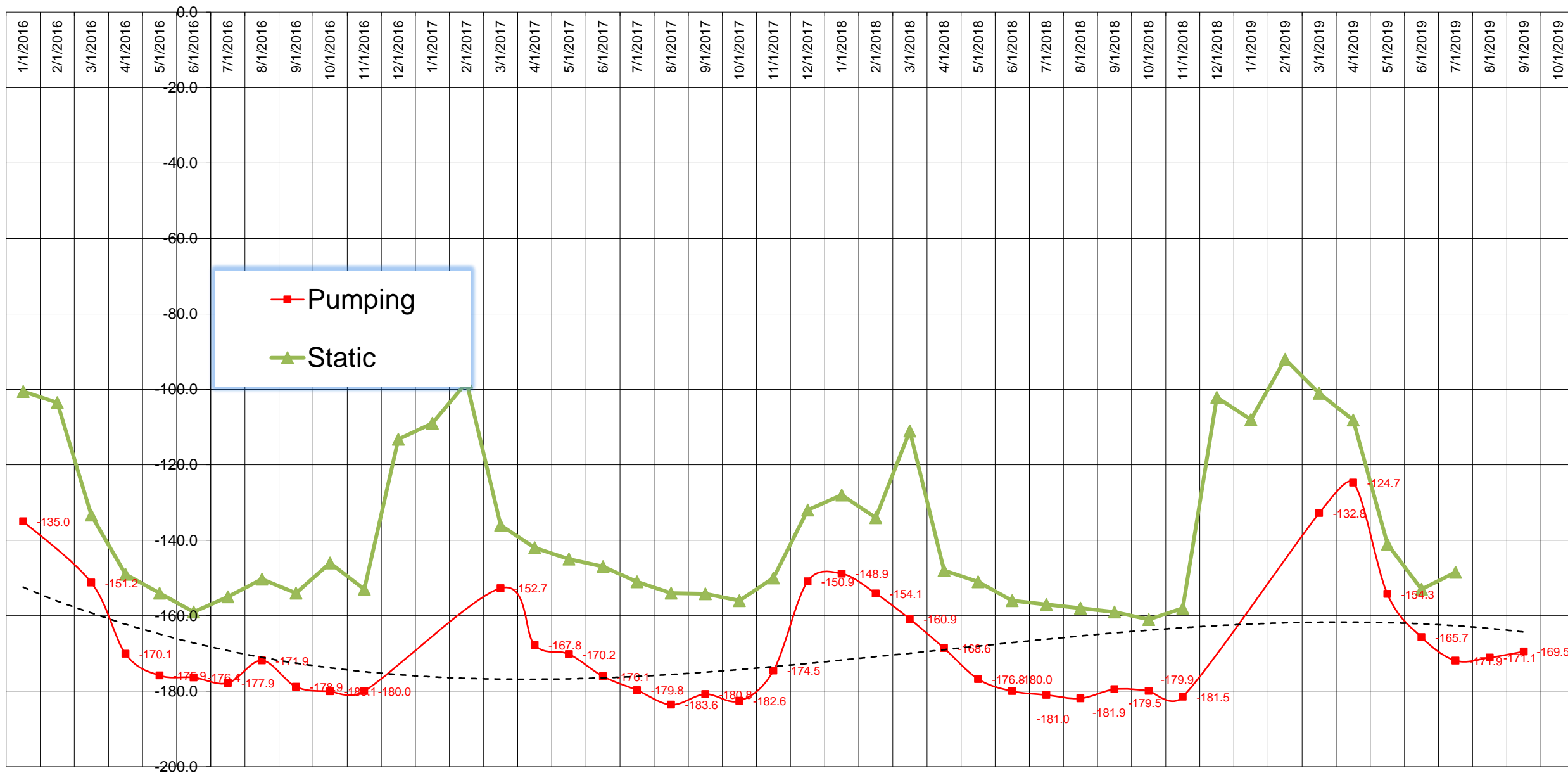
YUIMA GENERAL DISTRICT			FISCAL YTD		CALENDAR YTD	
Produced and Purchased Water	Nov-19	Oct-19	2019-20	2018-19	2019	2018
20-2009 IDA	0.0	0.0	0.0	0.0	0.0	0.0
0-1009 & 10-1011 SDCWA	360.7	678.0	3318.2	4756.2	4389.9	6140.5
10-1001 SCHOEPE	2.6	5.4	28.6	63.4	62.3	88.2
Total Produced and Purchased	363.3	683.4	3346.7	4819.6	4452.2	6228.7
Consumption						
Back of Book 01 CUSTOMERS GENERAL DISTRICT	181.9	322.8	1542.9	2630.4	2197.7	3377.3
10-2100 TAP 1	82.1	125.9	754.1	1006.0	965.9	1404.7
990 minus 20-2008 TAP 2	56.2	148.2	622.3	665.0	712.8	686.2
10-1200 TAP 3	42.1	95.7	441.0	593.3	616.9	761.3
Total Consumption - Yuima	362.3	692.7	3360.4	4894.7	4493.3	6229.5
Storage Level Changes	0.6	1.9	1.8	-1.8	0.2	-3.9
Slippage - Acre Feet	1.6	-7.4	-11.9	-76.9	-40.8	-4.6
Slippage %	0.4	-1.1	-0.4	-1.6	-0.9	-0.1
IMPROVEMENT DISTRICT "A"						
Produced Strub Zone Wells						
20-2012 RIVER WELL 12	10.5	15.8	79.1	137.0	144.5	158.4
20-2091 RIVER WELL 19A	29.7	44.6	225.2	361.6	384.2	398.1
20-2020 RIVER WELL 20A	19.0	27.1	128.7	257.7	237.0	310.2
20-2025 RIVER WELL 25	12.2	19.7	104.9	152.2	170.6	187.9
20-2022 FAN WELL 22	12.1	17.6	104.8	135.5	144.2	195.7
Total Produced Strub Zone Wells	83.6	124.8	642.7	1044.0	1080.5	1250.3
Produced Fan Wells						
20-2007 WELL 7A	3.2	3.9	26.2	21.8	27.9	32.3
20-2000 WELL 10	0.6	0.9	6.3	6.1	6.7	9.1
20-2014 WELL 14	11.9	24.7	115.9	106.4	149.6	181.5
20-2017 WELL 17	0.0	2.5	25.1	39.7	34.6	78.4
20-2018 WELL 18	6.0	9.2	45.5	57.3	58.2	90.8
20-2023 WELL 23	3.1	5.2	25.7	28.1	32.3	29.3
20-2024 WELL 24	6.7	10.6	52.5	69.6	70.3	91.9
20-2029 WELL 29	7.8	11.4	68.1	57.9	89.3	91.9
20-20410-500 HORIZONTAL WELLS	14.1	16.5	91.3	129.6	160.6	143.4
Code K Usage WELL USE AGREEMENTS ("K")	16.9	22.6	104.4	127.8	150.6	160.7
Total Produced Fan Wells	70.2	107.5	560.8	644.6	780.2	909.1
Total Produced Strub and Fan Wells	153.8	232.3	1203.5	1688.5	1860.8	2159.4
Purchased Water						
10-2100 TAP 1	82.1	125.9	754.1	1006.0	965.9	1404.7
990 minus 20-2008 TAP 2	56.2	148.2	622.3	665.0	712.8	686.2
10-1200 TAP 3	42.1	95.7	441.0	593.3	616.9	761.3
Total Purchased Water	180.4	369.8	1817.5	2264.4	2295.6	2852.2
Total Produced and Purchased	334.2	602.1	3021.0	3952.9	4156.4	5011.6
Consumption						
Back of Book 02 CUSTOMERS IDA	315.3	575.7	2879.3	3720.7	3877.4	4832.3
Interdepartmental to Y	0.0	0.0	0.0	0.0	0.0	0.0
Total Consumption - IDA	315.3	575.7	2879.3	3720.7	3877.3	4832.3
Storage Level Changes	-0.1	1.9	2.3	-2.0	-1.2	0.2
Slippage - Acre Feet	18.8	28.3	144.0	230.1	277.8	179.5
Slippage %	5.6	4.7	4.8	5.8	6.7	3.6
Combined General District and IDA						
0-1009 & 10-1011 SDCWA	360.7	678.0	3318.2	4756.2	4389.9	6140.5
10-1001 SCHOEPE	2.6	5.4	28.6	63.4	62.3	88.2
PRODUCED YUIMA	0.0	0.0	0.0	0.0	0.0	0.0
PRODUCED IDA	153.8	232.3	1203.5	1688.5	1860.8	2159.4
Total Produced and Purchased	517.1	915.6	4550.2	6508.1	6313.0	8388.1
Consumption	497.1	898.5	4422.2	6351.1	6075.0	8209.6
Storage Level Changes	0.5	3.8	4.1	-3.8	-1.0	-3.7
Slippage - Acre Feet	20.4	20.9	132.2	153.2	237.0	174.9
Slippage %	4.0	2.3	2.9	2.4	3.8	2.1

Footnotes-

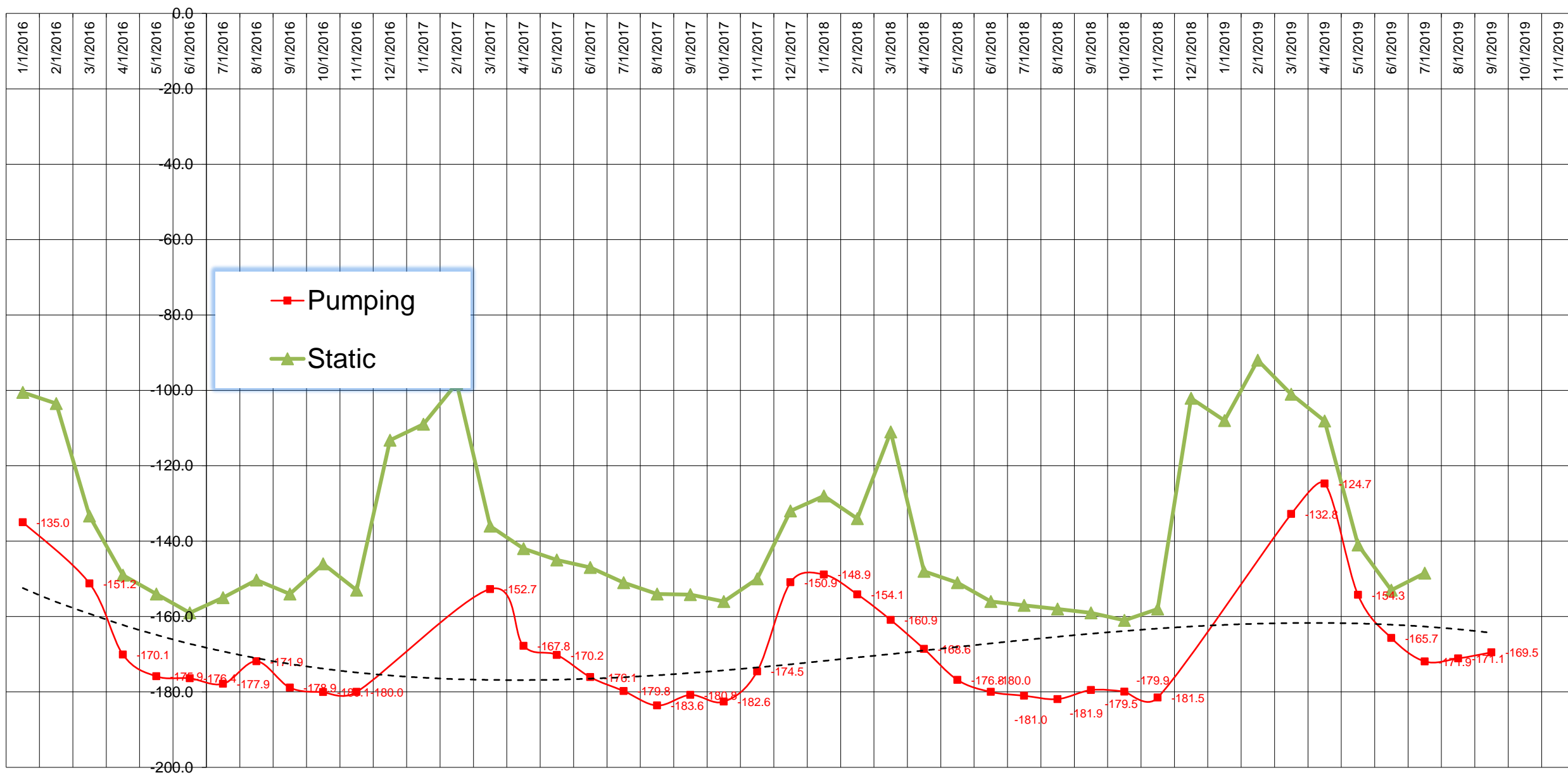
Yuima:

IDA: Horizontal Wells went to reservoir
11/11/18 Tank 8 Overflow 1.21 acre feet

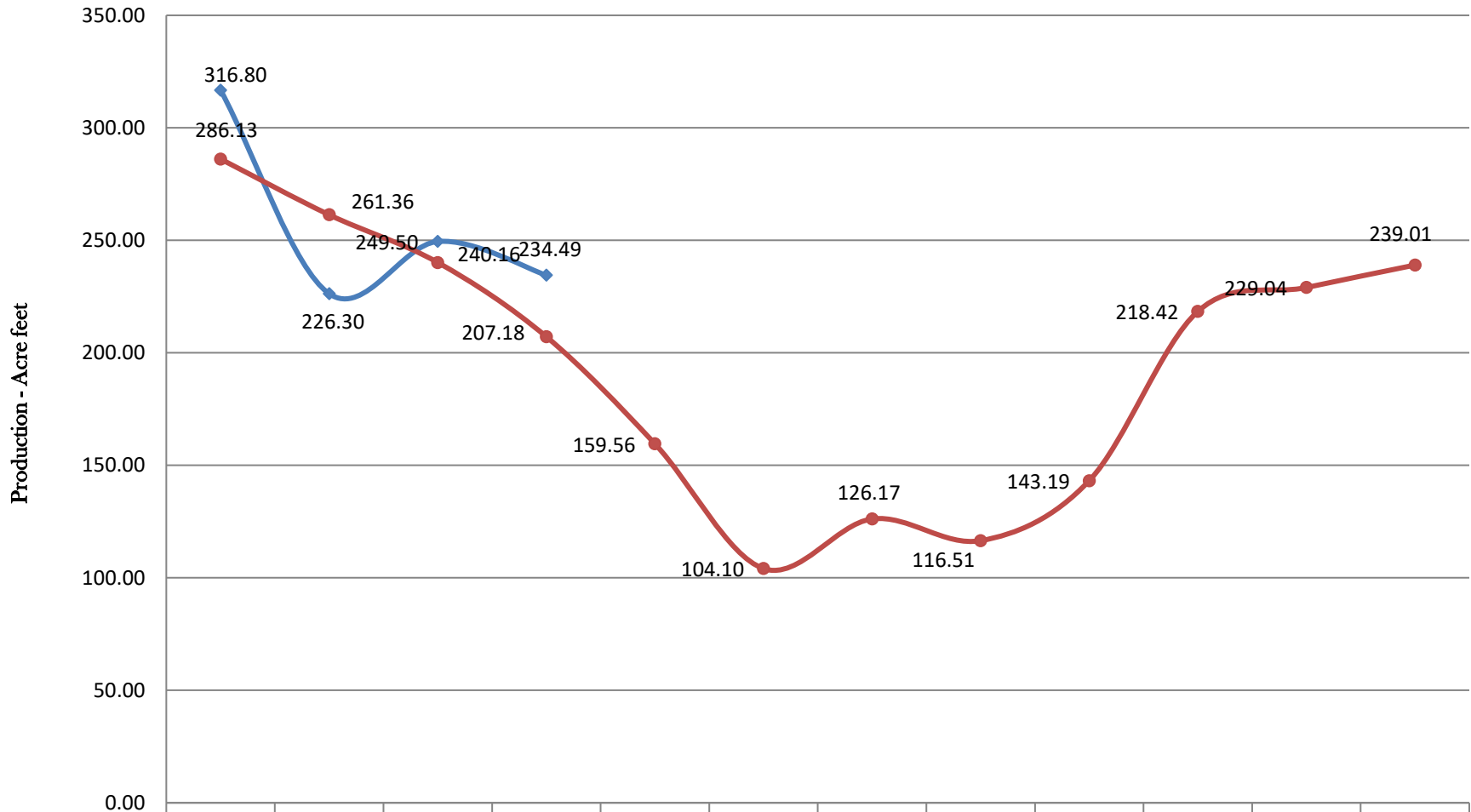
Yuima Municipal Water District
River Well Static (21A) and Pumping Levels
For Yuima Wells No. 12, 19A, 20A and 25
(Increasing Inverse = improving water levels)
Pumping and Static Levels (feet below ground level)
(Updated October, 2019) 2016-Current



Yuima Municipal Water District
River Well Static (21A) and Pumping Levels
For Yuima Wells No. 12, 19A, 20A and 25
(Increasing Inverse = improving water levels)
Pumping and Static Levels (feet below ground level)
(Updated November, 2019) 2016-Current

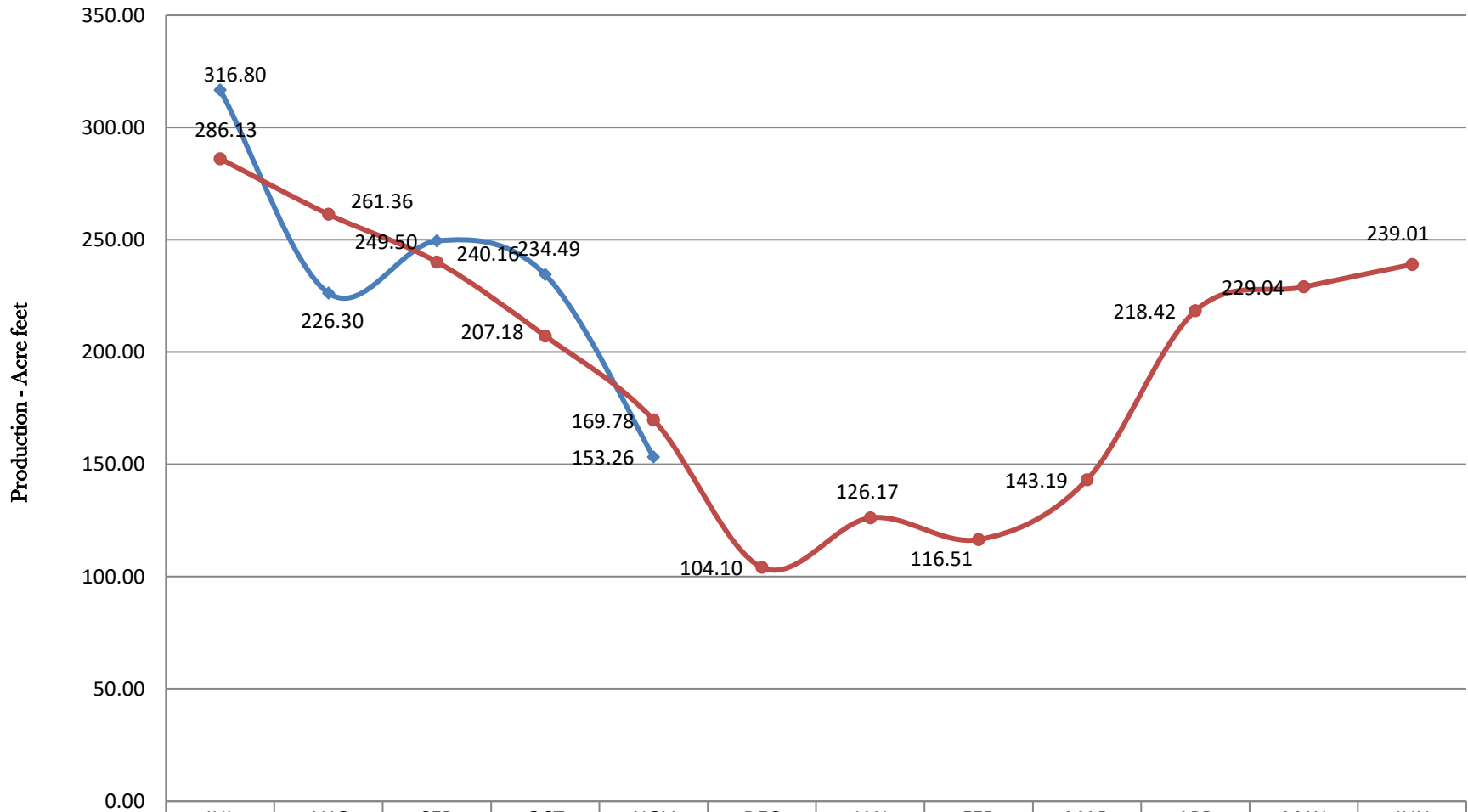


Yuima Municipal Water District
 Monthly Production from District-Owned Wells
 in Acre-feet Updated October, 2019



	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN
◆ FY 2019/20	316.80	226.30	249.50	234.49								
● 15-Yr Avg.	286.13	261.36	240.16	207.18	159.56	104.10	126.17	116.51	143.19	218.42	229.04	239.01

Yuima Municipal Water District
 Monthly Production from District-Owned Wells
 in Acre-feet Updated November, 2019



	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN
FY 2019/20	316.80	226.30	249.50	234.49	153.26							
15-Yr Avg.	286.13	261.36	240.16	207.18	169.78	104.10	126.17	116.51	143.19	218.42	229.04	239.01

(* static level with surrounding wells off 24 hrs)	July			August			September			October			November			December		
	2018			2018			2018			2018			2018			2018		
	Static Level	Pumping Level	GPM	Static Level	Pumping Level	GPM	Static Level	Pumping Level	GPM	Static Level	Pumping Level	GPM	Static Level	Pumping Level	GPM	*Static Level	Pumping Level	GPM
Monitor Well No. 21A Elev 800' Depth 251'	157			158			159			161			158			102.1		
Well No. 12 (River) Elev 800' Depth 207'		173.3	108		173	104		173	103		173.4	104		173	106	108		
Well No. 19A (River) Elev 800' Depth 215'		184.6	306	128.8	187.8	301		188.1	308		190.2	295		190	302	107.2		
Well No. 20A (River) Elev 800' Depth 225'		181.8	221	126.7	182	225		181.2	220		180.4	214		180.2	216	103.8		
Well No 25 (River) Elev 805' Depth 210'		184.3	130		184.8	128		175.8	130		175.6	118		181	110	107.3		
Well No. 3 (Fan) Elev 1220' Depth 547'	314.8			313.2			313.2			313.6			312.9			313		
Well No. 7A (Fan) Elev 1240' Depth 554'	291.6	368.1	141	292.1	365.6	138	298	366.1	133	287.2	365.3	127	287.6			279		
Well No. 8 (Fan) Elev 1227' Depth 1000'	343.8			344.1			345.3			343.2			341.9			337		
Well No. 9 (Fan) Elev 1252' Depth 436'	281.3			284.2			288.4			284.1			282.9			273.9		
Well No. 10 (Fan) Elev 1210' Depth 405'	249	287.2	36		299.8	37	252.4	299.8	36	248.5	300.1	35	245.2			238.3		
Well No. 13 (Fan) Elev 1280' Depth 403'	309.2			309.3			309.7			311.2			310.4			290		
Well No. 14 (Fan) Elev 1310' Depth 542'		433	115		421	193		409.7	125		418	168	277	414	195	254		
Well No. 17 (Fan) Elev 1375' Depth 597'		451	72		453	70		452	69		451	70	386.4	452	69	357.8		
Well No. 18 (Fan) Elev 2380' Depth 1000'		588	76		593	74		601	83		604	91		586	112	471		
Well No 22 (Fan) Elev 997.4' Depth 1100'		252.6	150		253.6	147		255	143		253.9	143		254.6	141	227.8		
Well No. 23 (Fan) Elev 1587' Depth 963'	258.1	258.1	43		364.4	43		366	41		354.2	39	274.6	365.1	38	270.1		
Well No. 24 (Fan) Elev 1530' Depth 582'		352.2	96		354.1	97		354	96		354.8	97	278.4			269		
Well No. 28 (Fan) Elev 2335' Depth 550'																		
Well No. 29 (Fan) Elev 1314' Depth 450'		361.1	118	349.2			304.1				373	128	343.4	368	126	310.6		
Well No. 41 (Horizontal) Elev 2627' Depth 555'			13.9			10.3			8.7			11.36			9.26			1.69
Well No. 42 (Horizontal) Elev 2632' Depth 675'			16.4			14.9			12.5			17.15			14.57			3.42
Well No. 43 Pressure Gauge: reads in psi			5			5			5			5			5			
Well No. 44 (Horizontal) Elev 3040' Depth 465'			6.3			6.1			5.2			6.83			5.73			1.07
Well No. 45 (Horizontal) Elev 2900' Depth 770'																		
Well No. 46 (Horizontal) Elev 3050' Depth 870'			12.4			11.6			9.2			11.59			9.69			1.91
Well No. 47 (Horizontal) Elev 3050' Depth 1007'			0.4															
Well No. 48 (Horizontal) Elev 3160' Depth 785'			30.6			31.0			27.2			33.54			27.6			5.01
Well No. 49 (Horizontal) Elev 3160' Depth 905'			7.7			7.5			6.5			8.82			7.52			1.4
Well No. 50 (Horizontal) Elev 3120' Depth 1215'			8.9			7.6			5.8			6.96			5.41			1.13
Well No. 51																		
Schoepe No. 2 (River) Elev 700' Depth 253'		191.5	16		192.1	16		191.9	15	138.2				191.5	7	152		
Schoepe No. 3 (River) Elev 700' Depth 265'		169	32		168.8	26		169.7	19	164.8				168.7	14	156.5		
Schoepe No. 3-R (River) Elev 700' Depth 200'		174.8	18		174.2	18		175.6	16	162.4				166.9	12	155.1		
Schoepe No. 4 (River) Elev 700' Depth 185'	132.5			134			136			136			136.6			131		
Schoepe No. 5 (River) Elev 700' Depth 1000'	137			138			138			139			139			134		

YUIMA MUNICIPAL WATER DISTRICT

Well Level Report

(* static level with surrounding wells off 24 hrs)	January 2018			February 2018			March 2018			April 2018			May 2018			June 2018		
	Static Level	Pumping Level	GPM	Static Level	Pumping Level	GPM	Static Level	Pumping Level	GPM	Static Level	Pumping Level	GPM	Static Level	Pumping Level	GPM	Static Level	Pumping Level	GPM
Monitor Well No. 21A Elev 800' Depth 251'	128			134.0			111.0			148.0			151.0			156.0		
Well No. 12 (River) Elev 800' Depth 207'		155.2	169	119.0	146.5	164.0	100.9	157.5	145.0		164.1	133.0		168.7	134.0		172.8	119.0
Well No. 19A (River) Elev 800' Depth 215'	124			126.0	162.4	300.0	108.8	165.1	282.0		168.5	375.0	181.3		385.0		183.2	310.0
Well No. 20A (River) Elev 800' Depth 225'		152.4	285	121.0	143.5	275.0	102.7	148.0	270.0		167.4	248.0		175.8	275.0		180.0	230.0
Well No 25 (River) Elev 805' Depth 210'		163.8	210	136.9	164.0	225.0	106.5	173.0	195.0		174.3	183.0		181.4	154.0		184.0	132.0
Well No. 3 (Fan) Elev 1220' Depth 547'	313.2			304.1			301.0			305.0			313.4			312.9	364.2	
Well No. 7A (Fan) Elev 1240' Depth 554'	287.7			287.9			277.2			283.2			278.8			290.8		145.0
Well No. 8 (Fan) Elev 1227' Depth 1000'	339			336.3			335.9			337.1			340.0			342.5		
Well No. 9 (Fan) Elev 1252' Depth 436'	287.1			279.3			272.3			274.4			276.0			278.4		
Well No. 10 (Fan) Elev 1210' Depth 405'	253.8	281.4	35	242.6			238.2			244.2			238.2			247.4	284.1	38.0
Well No. 13 (Fan) Elev 1280' Depth 403'	306.2			303.8			294.6			304.5			306.5			309.3		
Well No. 14 (Fan) Elev 1310' Depth 542'		436.2	190	295.8	421.0	285.0		426.2	285.0		427.0	225.0		428.0	220.0		431.0	160.0
Well No. 17 (Fan) Elev 1375' Depth 597'		486	74	371.0	451.0	70.0		450.0	72.0		449.0	73.0		448.0	75.0		449.0	73.0
Well No. 18 (Fan) Elev 2380' Depth 1000'		488	116	399.5			381.3				530.0	98.0		538.0	94.0		563.0	82.0
Well No 22 (Fan) Elev 997.4' Depth 1100'		250.2	163	227.8	245.6	160.0	227.8	246.9	167.0		248.7	165.0		251.6	170.0		252.3	166.0
Well No. 23 (Fan) Elev 1587' Depth 963'		288.9	49	265.8	365.1	44.0	262.6	360.1	125.0	260.4	350.9	132.0	256.0	342.3	126.0	257.1	345.1	78.0
Well No. 24 (Fan) Elev 1530' Depth 582'	269.1	355.8	104	268.2	353.0	101.0	266.4			266.5				345.6	101.0		354.2	103.0
Well No. 28 (Fan) Elev 2335' Depth 550'																		
Well No. 29 (Fan) Elev 1314' Depth 450'	345	408.1	105	304.1	355.8	133.0		358.0	134.0	338.4			339.1	358.1	132.0		358.4	125.0
Well No. 41 (Horizontal) Elev 2627' Depth 555'			9.9			11.6			21.1			11.2			9.9			7.6
Well No. 42 (Horizontal) Elev 2632' Depth 675'			21			18.1			27.8			21.9			19.2			17.6
Well No. 43 Pressure Gauge: reads in psi			5			5			5			5			5			5
Well No. 44 (Horizontal) Elev 3040' Depth 465'			7.9			5.9			15.5			7.8			8.4			7.8
Well No. 45 (Horizontal) Elev 2900' Depth 845'																		
Well No. 46 (Horizontal) Elev 3050' Depth 870'			15.7			13.8			25.3			14.5			11.2			11.1
Well No. 47 (Horizontal) Elev 3050' Depth 1007'			4.8			4.3			6.3			4.2			5.5			2.8
Well No. 48 (Horizontal) Elev 3160' Depth 785'			33.3			25.3			39.0			35.6			21.6			23.9
Well No. 49 (Horizontal) Elev 3160' Depth 905'			10.4			7.7			9.6			7.2			6.9			9.4
Well No. 50 (Horizontal) Elev 3120' Depth 1215'			11.8			9.8			22.9			12.4			25.5			13.3
Well No. 51													124.0					
Schoepe No. 2 (River) Elev 700' Depth 253'		192	21	152.0	193.0	17.0		192.0	18.0		191.3	18.0				130.8		
Schoepe No. 3 (River) Elev 700' Depth 265'	154.9			159.0	169.1	43.0		169.4	51.0		169.4	40.0				155.7		
Schoepe No. 3-R (River) Elev 700' Depth 200'	151.3			157.0	185.3	24.0		185.8	25.0		185.1	25.0				154.2		
Schoepe No. 4 (River) Elev 700' Depth 185'	125.3			129.0			129.3			131.0						129.0		
Schoepe No. 5 (River) Elev 700' Depth 1000'	122			123.0			124.0			136.0						133.0		

YUIMA MUNICIPAL WATER DISTRICT

Well Level Report

(* static level with surrounding wells off 24 hrs)	July 2019			August 2019			September 2019			October 2019			November 2019			December 2019		
	Static Level	Pumping Level	GPM	Static Level	Pumping Level	GPM	Static Level	Pumping Level	GPM	Static Level	Pumping Level	GPM	Static Level	Pumping Level	GPM	*Static Level	Pumping Level	GPM
Monitor Well No. 21A Elev 800' Depth 251'	148.5			152			146			150			87					
Well No. 12 (River) Elev 800' Depth 207'		168.5	141		170.5	150		167.4	127		163.9	127	89.2					
Well No. 19A (River) Elev 800' Depth 215'		165.9	380		162	390		162	390		162	390	90.3					
Well No. 20A (River) Elev 800' Depth 225'		171.6	211		170	200		166	210		163.3	210	91.8					
Well No 25 (River) Elev 805' Depth 210'		181.4	155		182	150		182.6	170		181.6	180	95.2					
Well No. 3 (Fan) Elev 1220' Depth 547'	312.2			312			312.4			312			310.1					
Well No. 7A (Fan) Elev 1240' Depth 554'	256.1	311.1	164	264			276	343	165	238.7		150	272.8	340.8	171			
Well No. 8 (Fan) Elev 1227' Depth 1000'	329.9			342			342.2			344.9			340.3					
Well No. 9 (Fan) Elev 1252' Depth 436'	239.1			255			260.4			264.2			257.2					
Well No. 10 (Fan) Elev 1210' Depth 405'	219.4	253.2	41	226			232	261.2	41	231.9	228		230.6	259.1	42			
Well No. 13 (Fan) Elev 1280' Depth 403'	288.4			277			303			303.1			301.2					
Well No. 14 (Fan) Elev 1310' Depth 542'		421	210		518	155		420	148		418	190	322	408	225			
Well No. 17 (Fan) Elev 1375' Depth 597'		440.6	73		392	72		393	52		368		356.2					
Well No. 18 (Fan) Elev 2380' Depth 1000'	289	486	151	229.3			239	401	135	316			241					
Well No 22 (Fan) Elev 997.4' Depth 1100'		141.4	148		227.8	146		240.2	148		239	148.2	228.3	240.1	151			
Well No. 23 (Fan) Elev 1587' Depth 963'		369	47		371	44		365.1	40		363.8	40.1	269.5	361.8	42			
Well No. 24 (Fan) Elev 1530' Depth 582'		345.3	101	278				341.8	97		343.7	98.3	268.4	339.8	99			
Well No. 28 (Fan) Elev 2335' Depth 550'																		
Well No. 29 (Fan) Elev 1314' Depth 450'		357	127		363	122	277	366	119		365.3	120	311.5	365.1	128			
Well No. 41 (Horizontal) Elev 2627' Depth 555'									15.0									
Well No. 42 (Horizontal) Elev 2632' Depth 675'									26.0									
Well No. 43 Pressure Gauge: reads in psi																		
Well No. 44 (Horizontal) Elev 3040' Depth 465'									9.0									
Well No. 45 (Horizontal) Elev 2900' Depth 770'																		
Well No. 46 (Horizontal) Elev 3050' Depth 870'									26.0									
Well No. 47 (Horizontal) Elev 3050' Depth 1007'									9.0									
Well No. 48 (Horizontal) Elev 3160' Depth 785'									37.0									
Well No. 49 (Horizontal) Elev 3160' Depth 905'																		
Well No. 50 (Horizontal) Elev 3120' Depth 1215'									33.0									
Well No. 51																		
Schoepe No. 2 (River) Elev 700' Depth 253'		191.5	19		296	16		195.5	21		192			293	18			
Schoepe No. 3 (River) Elev 700' Depth 265'	156			157			157.7			158.7			252					
Schoepe No. 3-R (River) Elev 700' Depth 200'		184.2	37		285	30		184.5	28		182	28		284	40			
Schoepe No. 4 (River) Elev 700' Depth 185'	128			115			117.5			122.7			223					
Schoepe No. 5 (River) Elev 700' Depth 1000'	131			224			121			122.9			225					

(* static level with surrounding wells off 24 hrs)	July			August			September			October			November			December		
	2018			2018			2018			2018			2018			2018		
	Static Level	Pumping Level	GPM	Static Level	Pumping Level	GPM	Static Level	Pumping Level	GPM	Static Level	Pumping Level	GPM	Static Level	Pumping Level	GPM	*Static Level	Pumping Level	GPM
Monitor Well No. 21A Elev 800' Depth 251'	157			158			159			161			158			102.1		
Well No. 12 (River) Elev 800' Depth 207'		173.3	108		173	104		173	103		173.4	104		173	106	108		
Well No. 19A (River) Elev 800' Depth 215'		184.6	306	128.8	187.8	301		188.1	308		190.2	295		190	302	107.2		
Well No. 20A (River) Elev 800' Depth 225'		181.8	221	126.7	182	225		181.2	220		180.4	214		180.2	216	103.8		
Well No 25 (River) Elev 805' Depth 210'		184.3	130		184.8	128		175.8	130		175.6	118		181	110	107.3		
Well No. 3 (Fan) Elev 1220' Depth 547'	314.8			313.2			313.2			313.6			312.9			313		
Well No. 7A (Fan) Elev 1240' Depth 554'	291.6	368.1	141	292.1	365.6	138	298	366.1	133	287.2	365.3	127	287.6			279		
Well No. 8 (Fan) Elev 1227' Depth 1000'	343.8			344.1			345.3			343.2			341.9			337		
Well No. 9 (Fan) Elev 1252' Depth 436'	281.3			284.2			288.4			284.1			282.9			273.9		
Well No. 10 (Fan) Elev 1210' Depth 405'	249	287.2	36		299.8	37	252.4	299.8	36	248.5	300.1	35	245.2			238.3		
Well No. 13 (Fan) Elev 1280' Depth 403'	309.2			309.3			309.7			311.2			310.4			290		
Well No. 14 (Fan) Elev 1310' Depth 542'		433	115		421	193		409.7	125		418	168	277	414	195	254		
Well No. 17 (Fan) Elev 1375' Depth 597'		451	72		453	70		452	69		451	70	386.4	452	69	357.8		
Well No. 18 (Fan) Elev 2380' Depth 1000'		588	76		593	74		601	83		604	91		586	112	471		
Well No 22 (Fan) Elev 997.4' Depth 1100'		252.6	150		253.6	147		255	143		253.9	143		254.6	141	227.8		
Well No. 23 (Fan) Elev 1587' Depth 963'	258.1	258.1	43		364.4	43		366	41		354.2	39	274.6	365.1	38	270.1		
Well No. 24 (Fan) Elev 1530' Depth 582'		352.2	96		354.1	97		354	96		354.8	97	278.4			269		
Well No. 28 (Fan) Elev 2335' Depth 550'																		
Well No. 29 (Fan) Elev 1314' Depth 450'		361.1	118	349.2			304.1				373	128	343.4	368	126	310.6		
Well No. 41 (Horizontal) Elev 2627' Depth 555'			13.9			10.3			8.7			11.36			9.26			1.69
Well No. 42 (Horizontal) Elev 2632' Depth 675'			16.4			14.9			12.5			17.15			14.57			3.42
Well No. 43 Pressure Gauge: reads in psi			5			5			5			5			5			
Well No. 44 (Horizontal) Elev 3040' Depth 465'			6.3			6.1			5.2			6.83			5.73			1.07
Well No. 45 (Horizontal) Elev 2900' Depth 770'																		
Well No. 46 (Horizontal) Elev 3050' Depth 870'			12.4			11.6			9.2			11.59			9.69			1.91
Well No. 47 (Horizontal) Elev 3050' Depth 1007'			0.4															
Well No. 48 (Horizontal) Elev 3160' Depth 785'			30.6			31.0			27.2			33.54			27.6			5.01
Well No. 49 (Horizontal) Elev 3160' Depth 905'			7.7			7.5			6.5			8.82			7.52			1.4
Well No. 50 (Horizontal) Elev 3120' Depth 1215'			8.9			7.6			5.8			6.96			5.41			1.13
Well No. 51																		
Schoepe No. 2 (River) Elev 700' Depth 253'		191.5	16		192.1	16		191.9	15	138.2				191.5	7	152		
Schoepe No. 3 (River) Elev 700' Depth 265'		169	32		168.8	26		169.7	19	164.8				168.7	14	156.5		
Schoepe No. 3-R (River) Elev 700' Depth 200'		174.8	18		174.2	18		175.6	16	162.4				166.9	12	155.1		
Schoepe No. 4 (River) Elev 700' Depth 185'	132.5			134			136			136			136.6			131		
Schoepe No. 5 (River) Elev 700' Depth 1000'	137			138			138			139			139			134		

YUIMA MUNICIPAL WATER DISTRICT

Well Level Report

(* static level with surrounding wells off 24 hrs)	January 2018			February 2018			March 2018			April 2018			May 2018			June 2018		
	Static Level	Pumping Level	GPM	Static Level	Pumping Level	GPM	Static Level	Pumping Level	GPM	Static Level	Pumping Level	GPM	Static Level	Pumping Level	GPM	Static Level	Pumping Level	GPM
Monitor Well No. 21A Elev 800' Depth 251'	128			134.0			111.0			148.0			151.0			156.0		
Well No. 12 (River) Elev 800' Depth 207'		155.2	169	119.0	146.5	164.0	100.9	157.5	145.0		164.1	133.0		168.7	134.0		172.8	119.0
Well No. 19A (River) Elev 800' Depth 215'	124			126.0	162.4	300.0	108.8	165.1	282.0		168.5	375.0	181.3		385.0		183.2	310.0
Well No. 20A (River) Elev 800' Depth 225'		152.4	285	121.0	143.5	275.0	102.7	148.0	270.0		167.4	248.0		175.8	275.0		180.0	230.0
Well No 25 (River) Elev 805' Depth 210'		163.8	210	136.9	164.0	225.0	106.5	173.0	195.0		174.3	183.0		181.4	154.0		184.0	132.0
Well No. 3 (Fan) Elev 1220' Depth 547'	313.2			304.1			301.0			305.0			313.4			312.9	364.2	
Well No. 7A (Fan) Elev 1240' Depth 554'	287.7			287.9			277.2			283.2			278.8			290.8		145.0
Well No. 8 (Fan) Elev 1227' Depth 1000'	339			336.3			335.9			337.1			340.0			342.5		
Well No. 9 (Fan) Elev 1252' Depth 436'	287.1			279.3			272.3			274.4			276.0			278.4		
Well No. 10 (Fan) Elev 1210' Depth 405'	253.8	281.4	35	242.6			238.2			244.2			238.2			247.4	284.1	38.0
Well No. 13 (Fan) Elev 1280' Depth 403'	306.2			303.8			294.6			304.5			306.5			309.3		
Well No. 14 (Fan) Elev 1310' Depth 542'		436.2	190	295.8	421.0	285.0		426.2	285.0		427.0	225.0		428.0	220.0		431.0	160.0
Well No. 17 (Fan) Elev 1375' Depth 597'		486	74	371.0	451.0	70.0		450.0	72.0		449.0	73.0		448.0	75.0		449.0	73.0
Well No. 18 (Fan) Elev 2380' Depth 1000'		488	116	399.5			381.3			530.0	98.0		538.0	94.0		563.0	82.0	
Well No 22 (Fan) Elev 997.4' Depth 1100'		250.2	163	227.8	245.6	160.0	227.8	246.9	167.0		248.7	165.0		251.6	170.0		252.3	166.0
Well No. 23 (Fan) Elev 1587' Depth 963'		288.9	49	265.8	365.1	44.0	262.6	360.1	125.0	260.4	350.9	132.0	256.0	342.3	126.0	257.1	345.1	78.0
Well No. 24 (Fan) Elev 1530' Depth 582'	269.1	355.8	104	268.2	353.0	101.0	266.4			266.5				345.6	101.0		354.2	103.0
Well No. 28 (Fan) Elev 2335' Depth 550'																		
Well No. 29 (Fan) Elev 1314' Depth 450'	345	408.1	105	304.1	355.8	133.0		358.0	134.0	338.4			339.1	358.1	132.0		358.4	125.0
Well No. 41 (Horizontal) Elev 2627' Depth 555'			9.9			11.6			21.1			11.2			9.9			7.6
Well No. 42 (Horizontal) Elev 2632' Depth 675'			21			18.1			27.8			21.9			19.2			17.6
Well No. 43 Pressure Gauge: reads in psi			5			5			5			5			5			5
Well No. 44 (Horizontal) Elev 3040' Depth 465'			7.9			5.9			15.5			7.8			8.4			7.8
Well No. 45 (Horizontal) Elev 2900' Depth 845'																		
Well No. 46 (Horizontal) Elev 3050' Depth 870'			15.7			13.8			25.3			14.5			11.2			11.1
Well No. 47 (Horizontal) Elev 3050' Depth 1007'			4.8			4.3			6.3			4.2			5.5			2.8
Well No. 48 (Horizontal) Elev 3160' Depth 785'			33.3			25.3			39.0			35.6			21.6			23.9
Well No. 49 (Horizontal) Elev 3160' Depth 905'			10.4			7.7			9.6			7.2			6.9			9.4
Well No. 50 (Horizontal) Elev 3120' Depth 1215'			11.8			9.8			22.9			12.4			25.5			13.3
Well No. 51													124.0					
Schoepe No. 2 (River) Elev 700' Depth 253'		192	21	152.0	193.0	17.0		192.0	18.0		191.3	18.0				130.8		
Schoepe No. 3 (River) Elev 700' Depth 265'	154.9			159.0	169.1	43.0		169.4	51.0		169.4	40.0				155.7		
Schoepe No. 3-R (River) Elev 700' Depth 200'	151.3			157.0	185.3	24.0		185.8	25.0		185.1	25.0				154.2		
Schoepe No. 4 (River) Elev 700' Depth 185'	125.3			129.0			129.3			131.0						129.0		
Schoepe No. 5 (River) Elev 700' Depth 1000'	122			123.0			124.0			136.0						133.0		

RAINFALL RECORD 2019/2020 YUIMA SHOP

Location: 34928 Valley Center Road, Pauma Valley @ 1050' elevation

	JULY	AUGUST	SEPT.	OCT.	NOV.	DEC.	JAN.	FEB.	MARCH	APRIL	MAY	JUNE	
1													
2													
3													
4													
5													
6													
7													
8													
9													
10													
11													
12													
13													
14													
15													
16													
17													
18													
19													
20													
21													
22													
23													
24													
25													
26			0.03										
27			0.02										
28			0.24										
29			0.01										
30													
31													
TOTALS	0.00	0.00	0.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	TOTAL YEAR 0.30
1987/88 (B)	0.00	0.00	0.00	2.60	4.17	1.20	2.97	2.23	0.97	6.95	0.40	0.00	21.49
1988/89 (B)	0.00	1.25	0.00	0.00	1.36	4.78	1.38	3.25	0.60	0.25	0.43	0.00	13.30
1989/90 (B)	0.00	0.00	1.03	0.50	0.00	0.55	4.45	2.65	0.92	3.22	0.95	1.10	15.37
1990/91	0.32	0.93	0.00	0.16	0.83	0.85	1.30	2.60	13.10	0.20	0.00	0.00	20.29
1991/92	0.70	0.00	0.40	0.85	0.30	1.90	3.25	5.60	5.30	0.15	0.50	0.00	18.95
1992/93	0.00	1.75	0.00	1.55	0.00	5.10	17.25	8.60	1.55	0.00	0.00	0.70	36.50
1993/94	0.00	0.00	0.00	0.25	2.35	0.90	1.20	4.60	5.30	2.00	0.20	0.00	16.80
1994/95	0.00	0.00	0.00	0.40	0.80	0.75	9.35	3.00	9.40	2.00	0.75	1.10	27.55
1995/96	0.10	0.00	0.00	0.00	0.20	0.85	1.50	3.50	2.30	0.50	0.00	0.00	8.95
1996/97	0.00	0.00	0.00	0.00	4.55	2.40	6.35	0.75	0.00	0.00	0.00	0.00	14.05
1997/98	0.00	0.00	2.10	0.10	2.45	2.10	3.70	10.95	4.05	3.30	3.05	0.15	31.95
1998/99	0.00	0.00	1.15	0.00	2.45	1.36	1.93	1.00	0.80	2.32	0.05	0.50	11.56
1999/2000	0.25	0.00	0.10	0.00	0.10	0.25	0.60	5.20	1.55	0.95	0.45	0.00	9.45
2000/2001	0.00	0.00	0.05	0.98	0.45	0.00	2.80	6.20	1.70	1.70	0.50	0.00	14.38
2001/2002	0.00	0.00	0.00	0.00	1.35	1.90	0.60	0.15	1.80	0.65	0.00	0.00	6.45
2002/2003	0.00	0.00	0.20	0.00	2.85	3.60	0.25	6.40	3.45	2.10	0.65	0.00	19.50
2003/2004	0.00	0.40	0.00	0.00	1.55	1.55	0.70	4.25	0.75	1.05	0.00	0.00	10.25
2004/2005	0.00	0.40	0.00	7.20	1.55	4.55	8.70	6.60	1.75	1.05	0.10	0.00	31.90
2005/2006	0.50	0.00	0.10	1.85	0.00	0.50	1.75	2.45	3.55	2.65	0.50	0.00	13.85
2006/2007	0.00	0.20	0.30	0.40	0.05	1.40	0.50	2.70	0.30	0.80	0.10	0.00	6.75
2007/2008	0.00	0.25	0.00	0.20	0.50	5.30	5.80	3.80	0.60	0.00	1.00	0.00	17.45
2008/2009	0.00	0.00	0.00	0.00	1.60	4.95	0.05	4.45	0.30	0.75	0.00	0.00	12.10
2009/2010	0.00	0.00	0.00	0.00	1.10	3.65	7.45	4.00	0.55	2.60	0.00	0.00	19.35
2010/2011	0.20	0.00	0.00	3.15	1.45	8.60	1.25	4.40	2.65	0.30	0.40	0.05	22.45
2011/2012	0.00	0.00	0.15	0.65	2.65	1.20	1.15	2.05	2.25	3.15	0.10	0.00	13.35
2012/2013	0.00	0.00	1.50	0.40	0.45	2.70	1.50	1.25	1.70	0.10	0.40	0.00	10.00
2013/2014	0.28	0.00	0.00	1.48	0.15	0.40	0.25	0.95	2.95	0.80	0.00	0.00	7.26
2014/2015	0.00	0.20	1.00	0.00	1.00	4.90	0.70	0.90	1.60	0.75	1.20	0.50	12.75
2015/2016	1.90	0.30	1.70	0.35	0.90	2.65	3.40	1.15	1.50	0.75	0.40	0.00	15.00
2016/2017	0.00	0.00	1.00	0.16	1.75	4.37	7.17	6.05	0.20	0.00	1.34	0.00	22.04
2017/2018	0.07	0.12	0.13	0.00	0.00	0.00	3.18	0.88	2.55	0.01	0.12	0.00	7.06
2018/2019	0.00	0.00	0.00	1.27	2.51	1.63	2.34	7.98	1.68	0.40	1.83	0.12	19.76
Average/32	0.14	0.18	0.34	0.77	1.29	2.40	3.27	3.77	2.43	1.30	0.48	0.12	#FIELD! #FIELD!

RAINFALL RECORD 2019/2020 YUIMA SHOP

Location: 34928 Valley Center Road, Pauma Valley @ 1050' elevation

	JULY	AUGUST	SEPT.	OCT.	NOV.	DEC.	JAN.	FEB.	MARCH	APRIL	MAY	JUNE	
1													
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14													
15													
16													
17													
18													
19					1.54								
20					1.50								
21													
22													
23													
24													
25													
26			0.03										
27			0.02		0.27								
28			0.24		0.60								
29			0.01		0.24								
30					0.02								
31													TOTAL YEAR
TOTALS	0.00	0.00	0.30	0.00	4.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.47
1987/88 (B)	0.00	0.00	0.00	2.60	4.17	1.20	2.97	2.23	0.97	6.95	0.40	0.00	21.49
1988/89 (B)	0.00	1.25	0.00	0.00	1.36	4.78	1.38	3.25	0.60	0.25	0.43	0.00	13.30
1989/90 (B)	0.00	0.00	1.03	0.50	0.00	0.55	4.45	2.65	0.92	3.22	0.95	1.10	15.37
1990/91	0.32	0.93	0.00	0.16	0.83	0.85	1.30	2.60	13.10	0.20	0.00	0.00	20.29
1991/92	0.70	0.00	0.40	0.85	0.30	1.90	3.25	5.60	5.30	0.15	0.50	0.00	18.95
1992/93	0.00	1.75	0.00	1.55	0.00	5.10	17.25	8.60	1.55	0.00	0.00	0.70	36.50
1993/94	0.00	0.00	0.00	0.25	2.35	0.90	1.20	4.60	5.30	2.00	0.20	0.00	16.80
1994/95	0.00	0.00	0.00	0.40	0.80	0.75	9.35	3.00	9.40	2.00	0.75	1.10	27.55
1995/96	0.10	0.00	0.00	0.00	0.20	0.85	1.50	3.50	2.30	0.50	0.00	0.00	8.95
1996/97	0.00	0.00	0.00	0.00	4.55	2.40	6.35	0.75	0.00	0.00	0.00	0.00	14.05
1997/98	0.00	0.00	2.10	0.10	2.45	2.10	3.70	10.95	4.05	3.30	3.05	0.15	31.95
1998/99	0.00	0.00	1.15	0.00	2.45	1.36	1.93	1.00	0.80	2.32	0.05	0.50	11.56
1999/2000	0.25	0.00	0.10	0.00	0.10	0.25	0.60	5.20	1.55	0.95	0.45	0.00	9.45
2000/2001	0.00	0.00	0.05	0.98	0.45	0.00	2.80	6.20	1.70	1.70	0.50	0.00	14.38
2001/2002	0.00	0.00	0.00	0.00	1.35	1.90	0.60	0.15	1.80	0.65	0.00	0.00	6.45
2002/2003	0.00	0.00	0.20	0.00	2.85	3.60	0.25	6.40	3.45	2.10	0.65	0.00	19.50
2003/2004	0.00	0.40	0.00	0.00	1.55	1.55	0.70	4.25	0.75	1.05	0.00	0.00	10.25
2004/2005	0.00	0.40	0.00	7.20	1.55	4.55	8.70	6.60	1.75	1.05	0.10	0.00	31.90
2005/2006	0.50	0.00	0.10	1.85	0.00	0.50	1.75	2.45	3.55	2.65	0.50	0.00	13.85
2006/2007	0.00	0.20	0.30	0.40	0.05	1.40	0.50	2.70	0.30	0.80	0.10	0.00	6.75
2007/2008	0.00	0.25	0.00	0.20	0.50	5.30	5.80	3.80	0.60	0.00	1.00	0.00	17.45
2008/2009	0.00	0.00	0.00	0.00	1.60	4.95	0.05	4.45	0.30	0.75	0.00	0.00	12.10
2009/2010	0.00	0.00	0.00	0.00	1.10	3.65	7.45	4.00	0.55	2.60	0.00	0.00	19.35
2010/2011	0.20	0.00	0.00	3.15	1.45	8.60	1.25	4.40	2.65	0.30	0.40	0.05	22.45
2011/2012	0.00	0.00	0.15	0.65	2.65	1.20	1.15	2.05	2.25	3.15	0.10	0.00	13.35
2012/2013	0.00	0.00	1.50	0.40	0.45	2.70	1.50	1.25	1.70	0.10	0.40	0.00	10.00
2013/2014	0.28	0.00	0.00	1.48	0.15	0.40	0.25	0.95	2.95	0.80	0.00	0.00	7.26
2014/2015	0.00	0.20	1.00	0.00	1.00	4.90	0.70	0.90	1.60	0.75	1.20	0.50	12.75
2015/2016	1.90	0.30	1.70	0.35	0.90	2.65	3.40	1.15	1.50	0.75	0.40	0.00	15.00
2016/2017	0.00	0.00	1.00	0.16	1.75	4.37	7.17	6.05	0.20	0.00	1.34	0.00	22.04
2017/2018	0.07	0.12	0.13	0.00	0.00	0.00	3.18	0.88	2.55	0.01	0.12	0.00	7.06
2018/2019	0.00	0.00	0.00	1.27	2.51	1.63	2.34	7.98	1.68	0.40	1.83	0.12	19.76
Average/32	0.14	0.18	0.34	0.77	1.29	2.40	3.27	3.77	2.43	1.30	0.48	0.12	#FIELD!

RAINFALL RECORD 2019/2020 JOHNSON

Location: 32000 block of Rincon Ranch Road, Pauma Valley @ 2055' elevation

Al Barretts record until 2009-10

	JULY	AUGUST	SEPT.	OCT.	NOV.	DEC.	JAN.	FEB.	MARCH	APRIL	MAY	JUNE	
1													
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4													
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22													
23													
24													
25													
26													
27													
28			0.45										
29													
30													
31													
TOTALS	0.00	0.00	0.45	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	TOTAL YEAR 0.45
1987/1988	0.00	0.00	0.00	2.60	4.17	1.20	2.97	2.23	0.97	6.95	0.40	0.00	21.49
1988/1989	0.00	1.25	0.00	0.00	1.36	4.78	1.38	3.25	0.60	0.25	0.43	0.00	13.30
1989/1990	0.00	0.00	1.03	0.50	0.00	0.55	4.45	2.65	0.92	3.22	0.95	1.10	15.37
1990/1991	0.32	0.93	0.00	0.16	1.40	0.77	1.86	2.70	13.36	0.34	0.00	0.00	21.84
1991/1992	1.00	0.00	0.20	1.00	0.00	1.96	3.55	6.06	5.81	0.49	0.80	0.00	20.87
1992/1993	0.33	0.70	0.00	1.45	0.00	5.43	20.09	10.21	1.26	0.00	0.00	1.17	40.64
1993/1994	0.00	0.00	0.50	0.30	2.84	1.10	1.22	5.50	4.62	2.00	0.40	0.00	18.48
1994/1995	0.00	0.00	0.00	0.56	1.34	1.22	11.63	4.10	13.72	2.33	1.57	1.41	37.88
1995/1996	0.21	0.00	0.00	0.00	0.40	1.28	1.53	5.47	3.03	0.77	0.00	0.00	12.69
1996/1997	0.00	0.00	0.00	1.16	4.40	3.26	7.25	1.02	0.32	0.00	0.17	0.00	17.58
1997/1998	0.00	0.00	3.05	0.25	3.40	2.93	5.84	13.52	5.21	3.42	4.32	0.27	42.21
1998/1999	0.00	0.20	0.94	0.18	2.68	1.73	2.54	1.18	1.04	4.18	0.10	0.17	14.94
1999/2000	0.22	0.00	0.00	0.00	0.20	0.44	1.28	5.64	1.83	1.61	0.15	0.00	11.37
2000/2001	0.00	0.00	0.25	1.35	0.44	0.00	3.33	6.99	2.88	2.60	0.82	0.00	18.66
2001/2002	0.00	0.00	0.00	0.00	1.62	2.24	0.61	0.30	2.16	0.84	0.00	0.00	7.77
2002/2003	0.00	0.00	0.20	0.15	4.90	4.08	0.25	7.62	4.25	3.27	1.48	0.00	26.20
2003/2004	0.00	0.69	0.00	0.00	1.88	1.93	0.78	5.24	0.66	1.23	0.50	0.12	13.03
2004/2005	0.00	0.50	0.00	8.70	1.80	5.20	11.58	8.45	2.93	1.71	0.20	0.40	41.47
2005/2006	0.00	0.00	0.01	2.52	0.00	0.67	2.32	2.91	4.02	3.25	0.77	0.00	16.47
2006/2007	0.35	0.19	0.75	0.38	0.15	1.86	0.28	2.87	0.91	1.35	0.18	0.00	9.27
2007/2008	0.00	0.00	0.35	0.25	3.50	3.10	8.28	4.45	1.00	0.00	1.58	0.00	22.51
2008/2009	0.00	0.00	0.00	0.00	2.25	5.85	0.65	5.61	0.35	1.00	0.00	0.00	15.71
2009/2010	0.00	0.00	0.00	0.20	0.75	5.00	8.60	5.00	0.90	3.40	0.10	0.02	23.97
2010/2011	0.00	0.00	0.08	3.10	1.95	9.75	1.10	4.95	3.05	0.64	1.05	0.05	25.72
2011/2012	0.00	0.50	0.10	1.00	3.05	1.30	1.60	2.10	3.30	3.90	0.35	0.00	17.20
2012/2013	0.00	0.50	0.60	2.15	0.30	4.40	2.25	0.66	2.00	0.15	0.50	0.00	13.51
2013-2014	0.00	0.00	0.00	1.59	0.10	0.95	0.50	0.65	3.90	0.30	0.20	0.00	8.19
2014-2015	0.00	0.60	0.80	0.00	1.00	5.40	0.65	1.15	1.55	1.56	1.35	0.55	14.61
2015-2016	2.10	0.08	1.50	0.70	1.20	3.70	5.50	0.07	2.40	1.40	0.85	0.00	19.50
2016-2017	0.00	0.00	1.80	0.00	2.25	5.85	8.95	8.10	0.25	0.00	2.00	0.00	29.20
2017-2018	0.05	0.10	0.01	0.00	0.00	0.00	3.50	0.85	3.50	0.00	0.45	0.00	8.46
2018-2019	0.00	0.00	0.00	1.60	2.90	1.90	4.75	9.75	2.10	0.60	3.50	0.25	27.35
Average/32	0.14	0.20	0.38	1.00	1.63	2.81	4.10	4.41	2.96	1.65	0.79	0.17	20.23

RAINFALL RECORD 2019/2020 JOHNSON

Location: 32000 block of Rincon Ranch Road, Pauma Valley @ 2055' elevation

Al Barretts record until 2009-10

	JULY	AUGUST	SEPT.	OCT.	NOV.	DEC.	JAN.	FEB.	MARCH	APRIL	MAY	JUNE	
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23													
24													
25													
26													
27													
28			0.45										
29					2.50								
30													
31													
TOTALS	0.00	0.00	0.45	0.00	6.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	TOTAL YEAR 7.05
1987/1988	0.00	0.00	0.00	2.60	4.17	1.20	2.97	2.23	0.97	6.95	0.40	0.00	21.49
1988/1989	0.00	1.25	0.00	0.00	1.36	4.78	1.38	3.25	0.60	0.25	0.43	0.00	13.30
1989/1990	0.00	0.00	1.03	0.50	0.00	0.55	4.45	2.65	0.92	3.22	0.95	1.10	15.37
1990/1991	0.32	0.93	0.00	0.16	1.40	0.77	1.86	2.70	13.36	0.34	0.00	0.00	21.84
1991/1992	1.00	0.00	0.20	1.00	0.00	1.96	3.55	6.06	5.81	0.49	0.80	0.00	20.87
1992/1993	0.33	0.70	0.00	1.45	0.00	5.43	20.09	10.21	1.26	0.00	0.00	1.17	40.64
1993/1994	0.00	0.00	0.50	0.30	2.84	1.10	1.22	5.50	4.62	2.00	0.40	0.00	18.48
1994/1995	0.00	0.00	0.00	0.56	1.34	1.22	11.63	4.10	13.72	2.33	1.57	1.41	37.88
1995/1996	0.21	0.00	0.00	0.00	0.40	1.28	1.53	5.47	3.03	0.77	0.00	0.00	12.69
1996/1997	0.00	0.00	0.00	1.16	4.40	3.26	7.25	1.02	0.32	0.00	0.17	0.00	17.58
1997/1998	0.00	0.00	3.05	0.25	3.40	2.93	5.84	13.52	5.21	3.42	4.32	0.27	42.21
1998/1999	0.00	0.20	0.94	0.18	2.68	1.73	2.54	1.18	1.04	4.18	0.10	0.17	14.94
1999/2000	0.22	0.00	0.00	0.00	0.20	0.44	1.28	5.64	1.83	1.61	0.15	0.00	11.37
2000/2001	0.00	0.00	0.25	1.35	0.44	0.00	3.33	6.99	2.88	2.60	0.82	0.00	18.66
2001/2002	0.00	0.00	0.00	0.00	1.62	2.24	0.61	0.30	2.16	0.84	0.00	0.00	7.77
2002/2003	0.00	0.00	0.20	0.15	4.90	4.08	0.25	7.62	4.25	3.27	1.48	0.00	26.20
2003/2004	0.00	0.69	0.00	0.00	1.88	1.93	0.78	5.24	0.66	1.23	0.50	0.12	13.03
2004/2005	0.00	0.50	0.00	8.70	1.80	5.20	11.58	8.45	2.93	1.71	0.20	0.40	41.47
2005/2006	0.00	0.00	0.01	2.52	0.00	0.67	2.32	2.91	4.02	3.25	0.77	0.00	16.47
2006/2007	0.35	0.19	0.75	0.38	0.15	1.86	0.28	2.87	0.91	1.35	0.18	0.00	9.27
2007/2008	0.00	0.00	0.35	0.25	3.50	3.10	8.28	4.45	1.00	0.00	1.58	0.00	22.51
2008/2009	0.00	0.00	0.00	0.00	2.25	5.85	0.65	5.61	0.35	1.00	0.00	0.00	15.71
2009/2010	0.00	0.00	0.00	0.20	0.75	5.00	8.60	5.00	0.90	3.40	0.10	0.02	23.97
2010/2011	0.00	0.00	0.08	3.10	1.95	9.75	1.10	4.95	3.05	0.64	1.05	0.05	25.72
2011/2012	0.00	0.50	0.10	1.00	3.05	1.30	1.60	2.10	3.30	3.90	0.35	0.00	17.20
2012/2013	0.00	0.50	0.60	2.15	0.30	4.40	2.25	0.66	2.00	0.15	0.50	0.00	13.51
2013-2014	0.00	0.00	0.00	1.59	0.10	0.95	0.50	0.65	3.90	0.30	0.20	0.00	8.19
2014-2015	0.00	0.60	0.80	0.00	1.00	5.40	0.65	1.15	1.55	1.56	1.35	0.55	14.61
2015-2016	2.10	0.08	1.50	0.70	1.20	3.70	5.50	0.07	2.40	1.40	0.85	0.00	19.50
2016-2017	0.00	0.00	1.80	0.00	2.25	5.85	8.95	8.10	0.25	0.00	2.00	0.00	29.20
2017-2018	0.05	0.10	0.01	0.00	0.00	0.00	3.50	0.85	3.50	0.00	0.45	0.00	8.46
2018-2019	0.00	0.00	0.00	1.60	2.90	1.90	4.75	9.75	2.10	0.60	3.50	0.25	27.35
Average/32	0.14	0.20	0.38	1.00	1.63	2.81	4.10	4.41	2.96	1.65	0.79	0.17	20.23

YUIMA MUNICIPAL WATER DISTRICT DELINQUENT ACCOUNTS LISTING

November, 2019

YUIMA

<u>ACCOUNT NUMBER</u>	<u>PAST DUE AMOUNT</u>	<u>ACTION</u>
01-1052-05	499.28	Locked Off
01-1054-08	62.29	Notice
01-1059-03	68.06	Notice
01-1065-07	63.24	Notice
01-1079-00	117.11	Notice
01-1503-05	115.28	Notice
01-1531-01	139.19	Notice
01-2007-01	86.88	Notice

<u><u>\$</u></u>	<u><u>1,151.33</u></u>
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IDA

<u>ACCOUNT NUMBER</u>	<u>PAST DUE AMOUNT</u>	<u>ACTION</u>
02-2984-09	87.69	Notice
02-3354-02	368.39	Notice
02-4181-00	254.68	Notice
02-4185-01	94.55	Notice
02-4190-03	160.21	Notice
02-5330-09	3,566.84	Locked Off
02-6500-00	2,336.12	Notice
02-6657-00	228.29	Notice
02-7125-00	248.23	Notice
02-7248-02	195.92	Notice
02-7249-01	205.73	Notice
02-7948-03	85.80	Notice
02-8445-00	60.83	Notice

<u><u>\$</u></u>	<u><u>7,087.97</u></u>
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LIENS FILED

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LIENS FILED / TRANSFERRED TO TAX ROLL

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VI.
OTHER BUSINESS