Yucaipa Valley Water District

Notice and Agenda of a Board Workshop

Tuesday, January 30, 2018 at 4:00 p.m.

MEETING LOCATION:	District Administration Building 12770 Second Street, Yucaipa
MEMBERS OF THE BOARD:	Director Chris Mann, Division 1 Director Bruce Granlund, Division 2 Director Jay Bogh, Division 3 Director Lonni Granlund, Division 4 Director Tom Shalhoub, Division 5

I. Call to Order

II. Public Comments At this time, members of the public may address the Board of Directors on matters within its jurisdiction; however, no action or significant discussion may take place on any item not on the meeting agenda.

III. Staff Report

IV. Presentations

A. Overview of the Leaders Innovation Forum for Technology (LIFT) [Workshop Memorandum No. 18-030 - Page 6 of 210]

B. Overview of a New Methodology for Achieving Future Water Conservation Goals [Workshop Memorandum No. 18-031 - Page 10 of 210]

V. Operational Updates

A. Overview of Recent Telemetry and Communication Issues [Workshop Memorandum No. 18-032 - Page 16 of 210]

B. Overview of Water Mainline Breaks and Associated Issues [Workshop Memorandum No. 18-033 - Page 17 of 210]

C. Investigations Related to the Biological Treatment Systems at the Wochholz Regional Water Recycling Facility [Workshop Memorandum No. 18-034 - Page 18 of 210]

D. Overview of Yucaipa Valley Water District's Lead Sampling Program for K-12 Schools and compliance with the 2017 Permit Amendment and Assembly Bill 746 [Workshop Memorandum No. 18-035 - Page 19 of 210]

E. Evaluation of Existing Belt Press Equipment at the Wochholz Regional Water Recycling Facility [Workshop Memorandum No. 18-036 - Page 53 of 210]

Any person who requires accommodation to participate in this meeting should contact the District office at (909) 797-5117, at least 48 hours prior to the meeting to request a disability-related modification or accommodation.

Materials that are provided to the Board of Directors after the meeting packet is compiled and distributed will be made available for public review during normal business hours at the District office located at 12770 Second Street, Yucaipa. Meeting materials are also available on the District's website at www.yvwd.dst.ca.us

VI. Capital Improvement Projects

A. Status Report on the Emergency Coating Repairs for Drinking Water Reservoir 17.1.1 [Workshop Memorandum No. 18-037 - Page 59 of 210]

B. Status Report on the Slope Repairs at Drinking Water Reservoir 15.1 [Workshop Memorandum No. 18-038 - Page 60 of 210]

C. Status Report on the Replacement of Primary Clarifier Equipment at the Wochholz Regional Water Recycling Facility [Workshop Memorandum No. 18-039 - Page 62 of 210]

D. Status Report on the Construction of a Replacement Public Works Building [Workshop Memorandum No. 18-040 - Page 67 of 210]

E. Status Report on the Construction of an 8-Inch Sewer Mainline in Yucaipa Boulevard [Workshop Memorandum No. 18-041 - Page 71 of 210]

F. Status Report on the Implementation of Advanced Metering Infrastructure [Workshop Memorandum No. 18-042 - Page 75 of 210]

VII. Policy Issues

A. Discussion Regarding Suggested Updates to the District's Standard Specifications Regarding the Use of 50" Water Meter Boxes [Workshop Memorandum No. 18-043 - Page 79 of 210]

B. Discussion Regarding the Annual Collection of Sewer Fees on Property Taxes for New Development and Delinquent Payments [Workshop Memorandum No. 18-044 - Page 81 of 210]

C. Discussion Regarding the Development of Policies Related to Accessory Dwelling Units [Workshop Memorandum No. 18-045 - Page 84 of 210]

VIII. Development Issues

A. Review of a Development Agreement to Provide Drinking Water Service to Tract No. 14429 - McDougal Bros. [Workshop Memorandum No. 18-046 - Page 128 of 210]

B. Discussion Regarding the Requirement for Sewer Connection for Two Parcels within Tentative Parcel Map No. 19822 - Mike Moran [Workshop Memorandum No. 18-047 - Page 152 of 210]

C. Discussion Regarding the Flow Requirements and a Draft Development Agreement for Tract 14297 [Workshop Memorandum No. 18-048 - Page 153 of 210]

D. Discussion Regarding a Development Agreement for Sewer Service to Property Located on Avenue H, Yucaipa as Tract No. 18167 - MBTK Homes [Workshop Memorandum No. 18-049 - Page 156 of 210]

IX. Administrative Issues

A. Discussion Regarding Annexation of Various Properties to the Yucaipa Valley Water District Service Area [Workshop Memorandum No. 18-050 - Page 158 of 210]

B. Discussion Regarding the San Bernardino Basin Groundwater Council Framework Agreement [Workshop Memorandum No. 18-051 - Page 161 of 210]

C. Review of Proposed Meter Installation Costs for 2018 [Workshop Memorandum No. 18-052 - Page 183 of 210]

D. Review of the Santa Ana Watershed Project Authority Resolution No. 2017-11 for Local Limits and Best Management Practices for the Inland Empire Brineline [Workshop Memorandum No. 18-053 - Page 184 of 210]

E. Discussion Regarding the Potential Land Sale, Lot Line Adjustment, and Easement Allowance Associated with Well 28 [Workshop Memorandum No. 18-054 - Page 189 of 210]

F. Overview of Claim Related to Car Repair as a Result of Asphalt Repair on Colorado Street and 8th Street [Workshop Memorandum No. 18-055 - Page 191 of 210]

X. Director Comments

XI. Closed Session

A. Conference with Legal Counsel Existing Litigation Government Code, Section 54956.9(d) - Robinson Ranch v. Yucaipa Valley Water District;
San Bernardino Superior Court Case No. CIVDS 1712116

B. Conference with Legal Counsel Existing Litigation Government Code, Section 54956.9(d) - San Gorgonio Pass Water Agency v. Beaumont Basin Watermaster;
Riverside Superior Court Case No. RIC 1716346

C. Conference with Real Property Negotiator(s)
Conference with Real Property negotiator(s) (Government Code 54956.8)
Property: Assessor's Parcel Number: 301-201-20
Agency Negotiator: Joseph Zoba, General Manager
Negotiating Parties: Abraham Issa
Under Negotiation: Terms of Payment and Price

D. Conference with Real Property Negotiator(s)
Property: Assessor's Parcel Numbers: 0301-211-020 and 0301-201-030
Agency Negotiator: Joseph Zoba, General Manager
Negotiating Parties: Mesa Verde Ventures LLC c/o Betek Corporation Under Negotiation: Terms of Payment and Price

E. Conference with Labor Negotiator (Government Code 54957.6)
District Negotiator: Joseph Zoba, General Manager, and Allison Edmisten, Chief Financial Officer
Employee Organization: IBEW Local Union 1436-YVWD Employees Association

XII. Adjournment

Staff Report

Yucaipa Valley Water District

Presentations

Yucaipa Valley Water District

Yucaipa Valley Water District

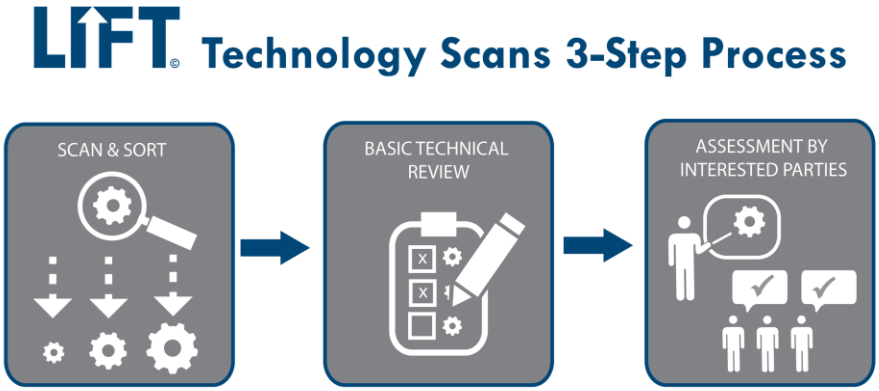
Workshop Memorandum 18-030

Date: January 30, 2018

From: Joseph Zoba, General Manager

Subject: Overview of the Leaders Innovation Forum for Technology (LIFT)

The Leaders Innovation Forum for Technology (LIFT) is a multi-pronged initiative undertaken by Water Environment and Reuse Foundation (WE&RF) and the Water Environment Federation (WEF) to help bring new water technology to the water and sewer industry quickly and efficiently.



LIFT includes the following components:

- **Technology Evaluations** – Facility and industry end users share the cost of conducting demonstrations to accelerate adoption of innovative technologies.
- **People and Policy** – Benchmarking how individual utilities accomplish research and development and identification of resources and policies needed to implement effective R&D.
- **Communication** – Training, education, and outreach.
- **Informal Forum for R&D** – Managers and individuals responsible for technology identification and deployment share experiences, activities, and interests.


LIFT
7 STRATEGIC
AREAS OF FOCUS
ACCELERATE INNOVATION
INFORM INNOVATION
FUND INNOVATION
CONNECT INNOVATORS
CREATE INNOVATION ENVIRONMENT
GROW INNOVATORS
PROMOTE INNOVATION

LEADERS INNOVATION FORUM FOR TECHNOLOGY (LIFT)

LIFT brings together the best scientific minds and industry specialists to accelerate adoption of innovative technologies.

WE&RF SUBSCRIBER BENEFITS

- A credible, well-documented vetting system to screen new technologies and processes.
- Ability to more rapidly deploy new technologies and remove existing impediments.
- Peer-reviewed information about emerging technologies.
- Mitigation of the risk and cost of innovative technology deployment through partnerships.
- Facilitation of collaboration among facilities for the evaluation and testing of new technologies.

LIFT'S TECHNOLOGICAL, SOCIAL, AND REGULATORY/POLICY ASPECTS

LIFT PARTICIPANTS

- **Working Group:** WE&RF subscriber municipal and industrial facility owners, includes more than 300 facility owner representatives.
- **Volunteer Expert Pool:** Representatives from consulting firms, academia, regulatory agencies, non-profits, industry, municipalities, and other organizations.

> "LIFT provides a great opportunity for all stakeholders in the water sector to work together collaboratively for quick diffusion of new technologies. LIFT will serve as an adaptive model for targeted technology evaluation and adoption, by sharing costs, risks, and insights."

AMIT KALDATE
MANAGER, BIOLOGY GROUP, INFILCO DEGREMONT

HOW TO GET INVOLVED

To learn more about how your organization can get involved and participate in LIFT, contact Jeff Moeller at jmoeller@werf.org.

Visit www.werf.org and www.wef.org to learn more.

WATER ENVIRONMENT & REUSE FOUNDATION WE&RF

Water Environment Federation
the water quality people®

LIFT'S TWO-PRONGED INNOVATION APPROACH

Because innovation is derived from both needs and solutions – technology demand and supply – LIFT uses the following approach.

1 LIFT FOCUS AREAS (TECHNOLOGY DEMAND):

Technology focus areas are priority topics identified by the LIFT Working Group. Activities include:

- Technology reviews and screening
- Information sharing on pilots
- Technology provider forums
- Utility and expert presentations
- Operation and design guidance
- Testing and demo collaboration

Each LIFT focus area has a complementary WE&RF research program area. Focus areas extend research to include innovative technology testing and demonstrations. Focus areas include:

- Shortcut Nitrogen Removal
- Phosphorus Recovery
- Digestion Enhancement
- Biosolids to Energy
- Energy from Wastewater
- Collection Systems
- Water Reuse
- Intelligent Water Systems
- Green Infrastructure
- Small Facilities
- Odor Control
- Disinfection

2 LIFT TECHNOLOGY SCANS (TECHNOLOGY SUPPLY):

Technology scans examine the marketplace for innovations and facilitate collaboration on testing and demonstrations between technology providers and interested parties (e.g., facility owners, consultants, financiers).

LIFT RESOURCES

LIFT LINK

LIFT Link is an online platform that allows users to discover new water technologies and research needs; connect with others with similar needs, technology interests, and desired expertise; and collaborate on ideas, projects, demonstrations, and implementation. **LIFTLink.werf.org**

TEST BED NETWORK

The National Water Resource Recovery Test Bed Facility Network and Directory connects researchers, new technology providers, and other innovators in the water resource recovery industry with test facilities appropriate for their needs. **www.werf.org/TestBedNetwork**

SEE IT SCHOLARSHIPS

The SEE IT program provides scholarships to help utilities get a first-hand look at new technologies by visiting peer facilities. Seeing these technologies in action allows visiting representatives to learn about, gain confidence in, and share their experience with others for quicker adoption.

ACADEMIC & UTILITY CONNECTIONS

LIFT's network and program to better connect universities and utilities helps provide guidance and opportunities for educational outreach, experiences, and utility-relevant research that will ultimately result in well-equipped future leaders.

MA TOOLBOX

The MA Toolbox outlines opportunities for WEF Member Associations (MAs) to connect with LIFT and to help expedite new technology adoption in their region. **www.werf.org/LIFT/MAToolbox**

Yucaipa Valley Water District

Workshop Memorandum 18-031

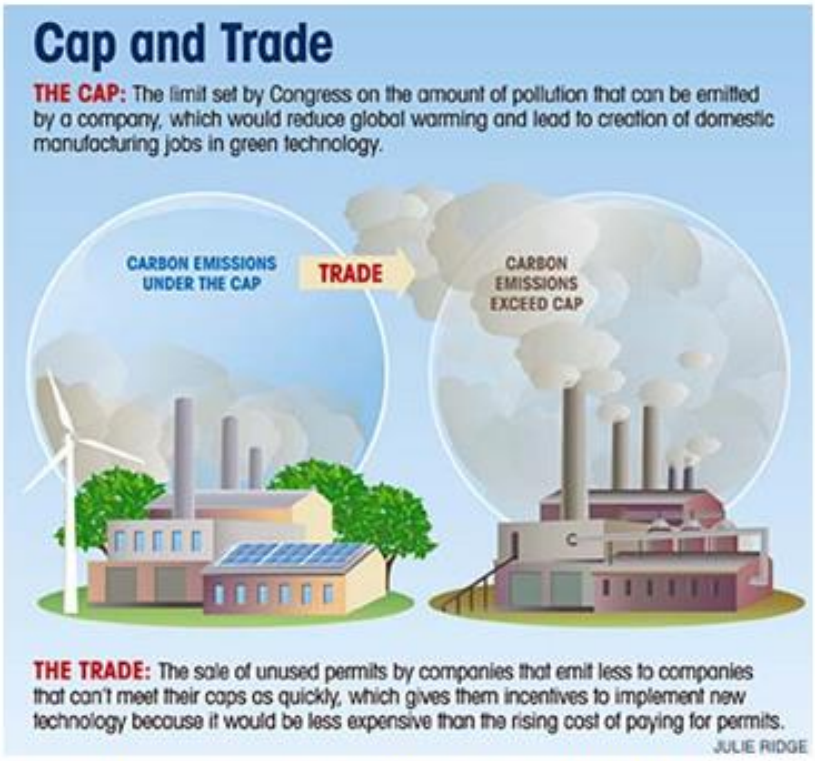
Date: January 30, 2018

From: Joseph Zoba, General Manager

Subject: Overview of a New Methodology for Achieving Future Water Conservation Goals

To control pollution, government regulators: (1) limit the amount of pollution that can be emitted; and (2) set a penalty for violating the pollution limit.

Recently, government regulators have implemented trading systems that are intended to establish a market price for emissions. This system is commonly referred to as a Cap and Trade system.



Source: https://www.tes.com/lessons/XwdqJMO5ghOdTA/dublin-housing

While some believe this system fairly distributes the costs for polluting, others argue that the flaw of the Cap and Trade system is whether the government has set the correct pollution limit, or Cap. In some cases, achieving the "ideal" pollution cap requires government regulators to tighten pollution limits until a perceived social optimization has been achieved between the cost of polluting and the cost for implementing pollution reduction methods.

The methodology described above for controlling pollution is now being considered for achieving water conservation goals. If this policy were to advance, the District should be prepared to participate in the discussions to ensure the poorly devised implementation strategy that resulted in a 36% conservation goal for Yucaipa Valley Water District during the last drought is not replicated under this new methodology.

Stanford | Water in the West

Share the Wealth: A Cap-And-Trade System of Water Conservation and Resiliency?

January 24, 2018 | Water in the West | News

By **Sarah Derouin**

Source: http://waterinthewest.stanford.edu/news-events/news-insights/share-wealth-cap-and-trade-system-water-conservation-and-resiliency

California has struggled with drought for most of the last decade. From 2011-2015, the state experienced the driest four-year stretch in recorded history, leading to unprecedented water restrictions for residents, including a state mandate to reduce water use by 25 percent.

Heavy precipitation last winter relieved much of California, but dry conditions linger. Wildfires raged during the fall and early winter months, ravaging towns and hillsides from Los Angeles to Santa Rosa. A delayed start to this year's rainy season has made 44 percent of the state "abnormally dry," and fueled worries of a return to drought.

At the drought's height, water conservation was a hot topic, but conservation levels varied widely as California utilities worked independently towards their state-mandated goals. Now Stanford researchers are considering a different approach to water management, taking a page from energy and climate playbooks. Patricia Gonzales, a doctoral student at Stanford's Civil and Environmental Engineering Department and Newsha Ajami, director of Urban Water Policy at Stanford's Water in the West and NSF-ReNUWIt initiatives, have proposed a cap and trade approach to water conservation based on local supply and demand realities. Papers detailing their approach have been published in *Water Resources Research* and *Wiley Interdisciplinary Reviews: Water*.

Supply and Demand

Safe water for drinking and irrigation has grown increasingly scarce around the globe and is expected to dwindle further as the climate changes. California's water system is no exception. In order to meet the state's future water needs, the researchers stress that understanding people's water-use behavior is key.

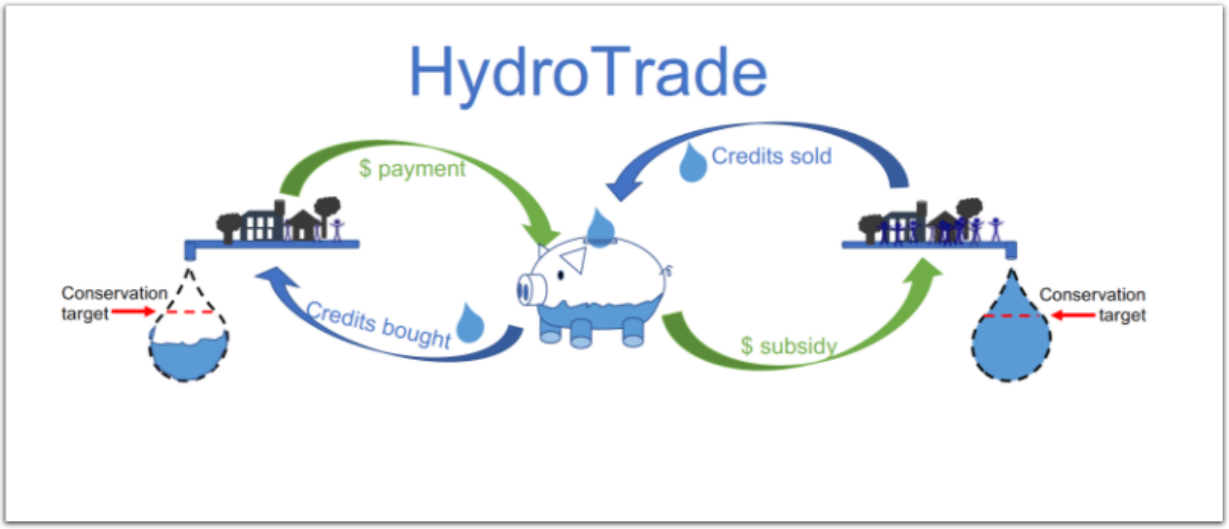
"People are a really big part of the water system, and they're also a really big source of uncertainty," says Gonzales, explaining that knowing more about how people use - and conserve - water and changing water supply and demand dynamics can result in better projections of demand going forward. Not always tied to population growth, demand can be impacted by socio-economic and demographic factors as well as shifting social norms. For example, wealthier communities with larger lot sizes may use more water than more populated and/or lower-income areas. Messaging about water scarcity can also help the public become more water conscious across socio-economic realities.

Water supply varies greatly year to year with snowpack, rain and other factors. Utilities are further constrained by where they get their water from. Some utilities rely on just one source for almost all of their water leaving little flexibility if it's compromised. For example, the San Francisco Regional Water System gets 85 percent of its water from the Tuolumne River alone, serving 27 different water utilities with a combined population of 2.4 million. The researchers argue this challenge is an opportunity for water managers and planners to embrace innovative strategies, including integrating more diverse water supply portfolios, and promoting a more collaborative governance approach to water management.

Trading a Resource

Looking at 26 communities in the Bay Area served by the San Francisco Regional Water System, the researchers explore how a system of tradable credits might allow

utilities to meet their conservation goals more effectively. This market-based program approach has been used in energy, pollution emissions and water quality trading systems around the world. But until now, it has not been applied to water conservation efforts.



Conceptual diagram of a water conservation trading scheme.
Figure Credit: Patricia Gonzales

During a drought where the government mandates water conservation targets, each utility is tasked with figuring out how to meet those goals. However, some communities that haven't been as forward on water efficiency strategies over the years may be able to conserve water in low-cost ways with relatively small investments, while others would have to invest in bigger projects to meet the same goals.

"What if instead you gave the region a target, and then you allow utilities to figure out the best way to achieve that target collectively?" says Gonzales. She and Ajami are proposing that communities, like the San Francisco Bay Area, band together and collaborate to see the smartest and most beneficial way to meet the targets.

Ajami explains that if a community has already done 'low-hanging fruit', such as replacing toilets and showers with low-water versions, they have to move to more expensive options, like paying residents to replace lawns, which may or may not be enough to achieve their target.

Instead of this expensive option, the community would contribute to the overall conservation funding pool, essentially buying conservation credits from other areas.

"For example, they can either invest $1500/acre-feet to replace lawns, or they can use the trading platform to purchase conservation credits for a lower price, which can ultimately contribute to help another community replace their toilets," says Ajami.

"The basic idea of cap and trade is to incentivize people to do things that are cost effective for them, but also potentially invest in the community and system as a whole."

Watering the Future

The team is expanding the current platform, which they have labeled HydroTrade, to allow communities to not only share conservation credits but also develop and share other water supply sources in order to enhance regional resiliency.

"We did this proof-of-concept for conservation, but our ultimate goal is to enable water portfolio diversification and reduce reliance on a single supply source or imported water," says Gonzales. Supplementing water sources by adding alternative water - like recycling water or capturing storm water - can help bolster supplies. Gonzales says, "You can use this kind of collaborative approach, not only for drought or emergency conditions, but also in terms of long-term planning and adaptation."

By taking a closer look at efficiency and conservation trends and opportunities, as well as long-term water demand patterns at the regional scale, Ajami says utilities might be able to increase reliability and resiliency of their existing water supply despite population growth by smaller and smarter investments.

"Most of our current water infrastructure was built under a different climatic reality, and is now reaching the end of its design life. Hence it is losing its operational effectiveness. As communities are debating on how to meet their future water needs it is important to take a hard look at where our demand is going. We have an opportunity to add flexibility into our existing water infrastructure system by introducing innovative operational strategies while also promoting alternative, distributed and decentralized water sources, 21st century solutions for 21st century challenges" she says.

With more climate extremes expected in the future, freeing up water for users requires smarter thinking, says Ajami. "We need to encourage regional thinking and collaboration in order to meet our future water demand more effectively while avoiding unnecessary investment in large capital-intensive infrastructure, which belongs to the previous century and is not very adaptable to future climatic and social realities."

Contact

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Operational Updates

Yucaipa Valley Water District

Yucaipa Valley Water District

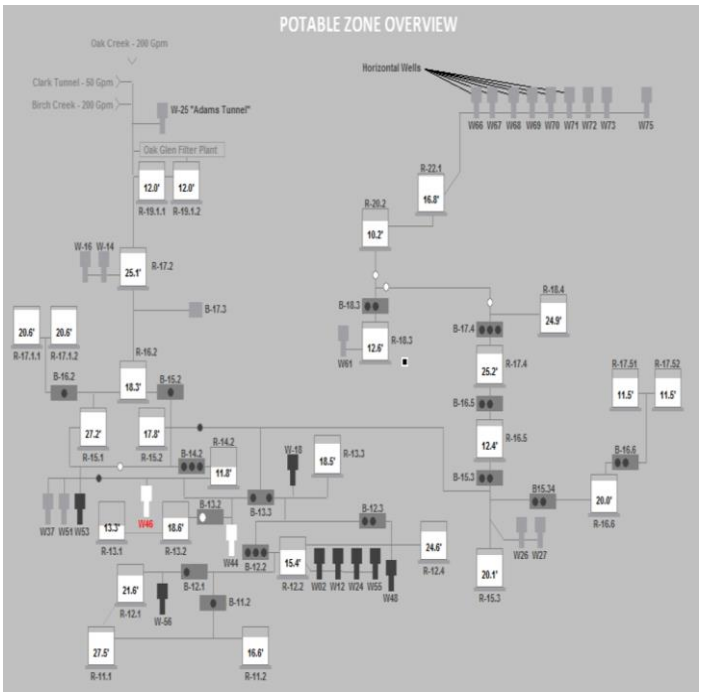
Workshop Memorandum 18-032

Date: January 30, 2018

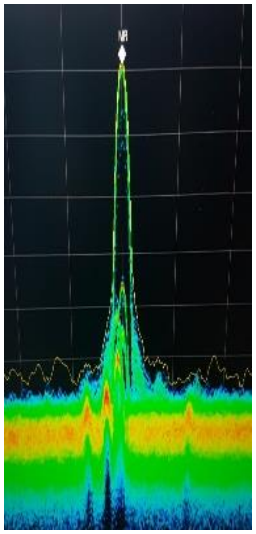
From: Mike Kostelecky, Operations Manager

Subject: Overview of Recent Telemetry and Communication Issues

The District's Distribution System is operated through Supervisory Control and Data Acquisition (SCADA), and the use of Programmable Logic Controllers (PLC). The SCADA serves as the compiler to gather information from PLCs located at District facilities. The entire distribution system is aggregated through SCADA communications as shown on the right.



The week of December 18, 2017, the District endured severe interference on the District's radio frequency resulting in a complete loss of communications. The Distribution system was manually operated twenty-four hours per day due to not having computer feedback of the operational status from District sites. The interference was due to a spurious transmitter operating at an excessive amount of power. The District is coordinating with other entities that are also impacted to find the source of the interference.



The District staff shifted to a different frequency. The data communications have significantly improved and will be continuously tuned as needed.

From December 18, 2017 through January 16, 2018, Operations staff were significantly impacted by continuous alarms throughout the evenings and nights due to the loss of communications. Diligent site inspections and "hands-on" equipment operation was required and resulted in 439 overtime hours being logged as a result of this event.

Yucaipa Valley Water District

Workshop Memorandum 18-033

Date: January 30, 2018

From: Joseph Zoba, General Manager

Subject: Overview of Water Mainline Breaks and Associated Issues

The Yucaipa Valley Water District constantly strives to improve the water and sewer infrastructure within our community. An important aspect of the ongoing maintenance activity is to identify reoccurring pipeline breaks to prioritize pipelines for replacement.

The purpose of this workshop presentation is to provide an overview of the most recent leak history of the drinking water system.

Yucaipa Valley Water District

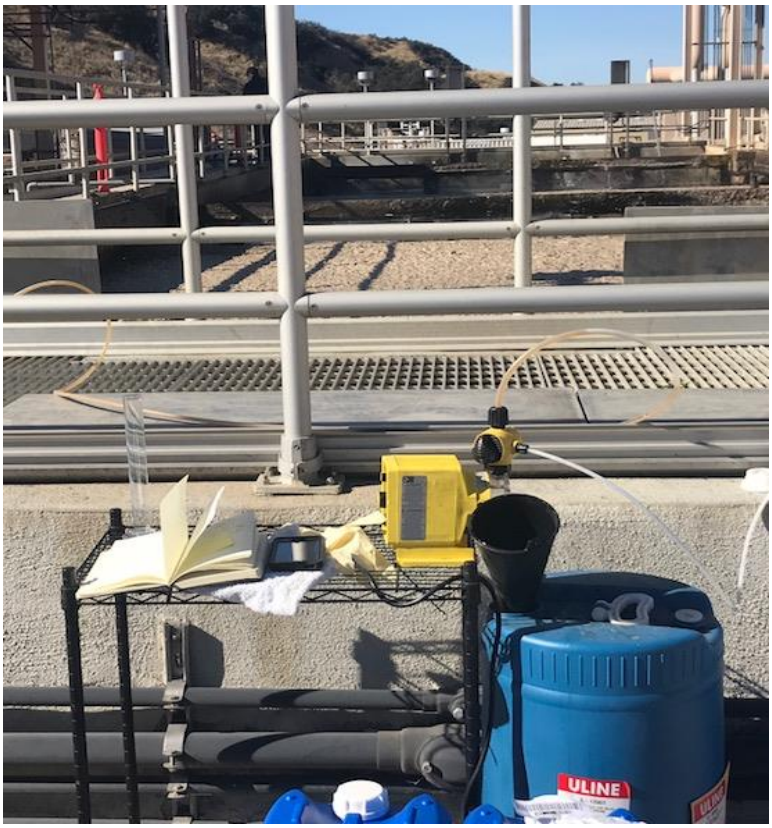
Workshop Memorandum 18-034

Date: January 30, 2018

From: Kathryn Hallberg, Management Analyst

Subject: Investigations Related to the Biological Treatment Systems at the Wochholz Regional Water Recycling Facility

Novozymes is a company that engages in the research, development, and provision of biotechnology solutions to a wide variety of industries. Novozymes' Senior Staff Scientist Steve Leach has been working closely with District staff members to conduct an enzyme study at the Wochholz Regional Water Recycling Facility (WRWRF).



While significant technological advancements have been made to the physical treatment processes at the WRWRF, the District staff recognizes that it is equally important to understand and maintain the biological health and activity in the plant.

The District staff will be scheduling a presentation at a future board meeting or workshop to provide an opportunity for Mr. Leach to discuss the overall biological systems at the WRWRF.

Yucaipa Valley Water District

Workshop Memorandum 18-035

Date: January 30, 2018

From: Mike Kostelecky, Operations Manager
Tim Mackamul, Integrated Senior Plant Operator

Subject: Overview of Yucaipa Valley Water District's Lead Sampling Program for K-12 Schools and compliance with the 2017 Permit Amendment and Assembly Bill 746

In early 2017, the State Water Resources Control Board's Division of Drinking Water (DDW) issued amendments to the domestic water supply permits of approximately 1,200 community water systems so that schools that are served by a public water system could request assistance to conduct water sampling for lead and receive technical assistance if an elevated lead sample is found.

To be proactive, District staff reached out to local school officials, initiated, and completed a lead sampling program for all schools in our service area by the end of the 2016-17 school year. More than 45 samples from 9 schools were collected by District staff and analyzed by a certified laboratory in accordance with the 2017 Permit Amendment. All results and recommendations based on those results were compiled into reports for each school and provided to school representatives, as well as submitted to DDW.

As of January 1, 2018, only 2,160 out of 13,000 schools in California have requested lead sampling under the 2017 Permit Amendment. Recognizing that participation in the voluntary school lead testing is not good enough, California lawmakers introduced California Assembly Bill 746 (AB 746), published on October 12, 2017, effective January 1, 2018. AB 746 requires community water systems to test lead levels by July 1, 2019, in drinking water at all California public, K-12 school sites that were constructed before January 1, 2010.

Although there is significant overlap between AB 746 and the 2017 Permit Amendment, DDW plans to continue enforcing the Permit Amendment requirements. The 2017 Permit Amendment requires testing only when a school superintendent or other authorized school official requests testing. In addition, the Permit Amendment applies to private as well as public schools. In contrast, AB 746 imposes statutory requirements for water providers to test, but at public school sites only.

Compliance Status

AB 746 specifies four situations that exempt a public school site from the lead testing requirements. One of these circumstances exempts any school that has already been tested in accordance with the 2017 Permit Amendment. Because of the proactive efforts of District staff as well as school district last year, all schools within the Yucaipa Valley Water District service area have been tested for lead in accordance with the 2017 Permit Amendment, thus the District is in full compliance with both the 2017 Permit Amendment and the AB 746 requirements.

Lead Concentration Results

Ridgeview Elementary School Lead Concentration (ppb)			
Sample Location	**First Sample**	**Second Sample**	**Recommended Actions**
#1	ND	ND	No detections / No recommended actions
#2	ND	ND	
#3	ND	ND	
#4	ND	ND	
#5	ND	ND	

Mesa View Middle School Lead Concentration (ppb)			
Sample Location	**First Sample**	**Second Sample**	**Recommended Actions**
#1	ND	ND	No detections / No recommended actions
#2	ND	ND	
#3	ND	ND	
#4	ND	ND	
#5	ND	ND	

Chapman Heights Elementary School Lead Concentration (ppb)			
Sample Location	**First Sample**	**Second Sample**	**Recommended Actions**
#1	ND	ND	No detections / No recommended actions
#2	ND	ND	
#3	ND	ND	
#4	ND	ND	
#5	ND	ND	

Valley Elementary School Lead Concentration (ppb)			
Sample Location	**First Sample**	**Second Sample**	**Recommended Actions**
#1	ND	ND	No detections / No recommended actions
#2	ND	ND	
#3	ND	ND	
#4	ND	ND	
#5	ND	ND	

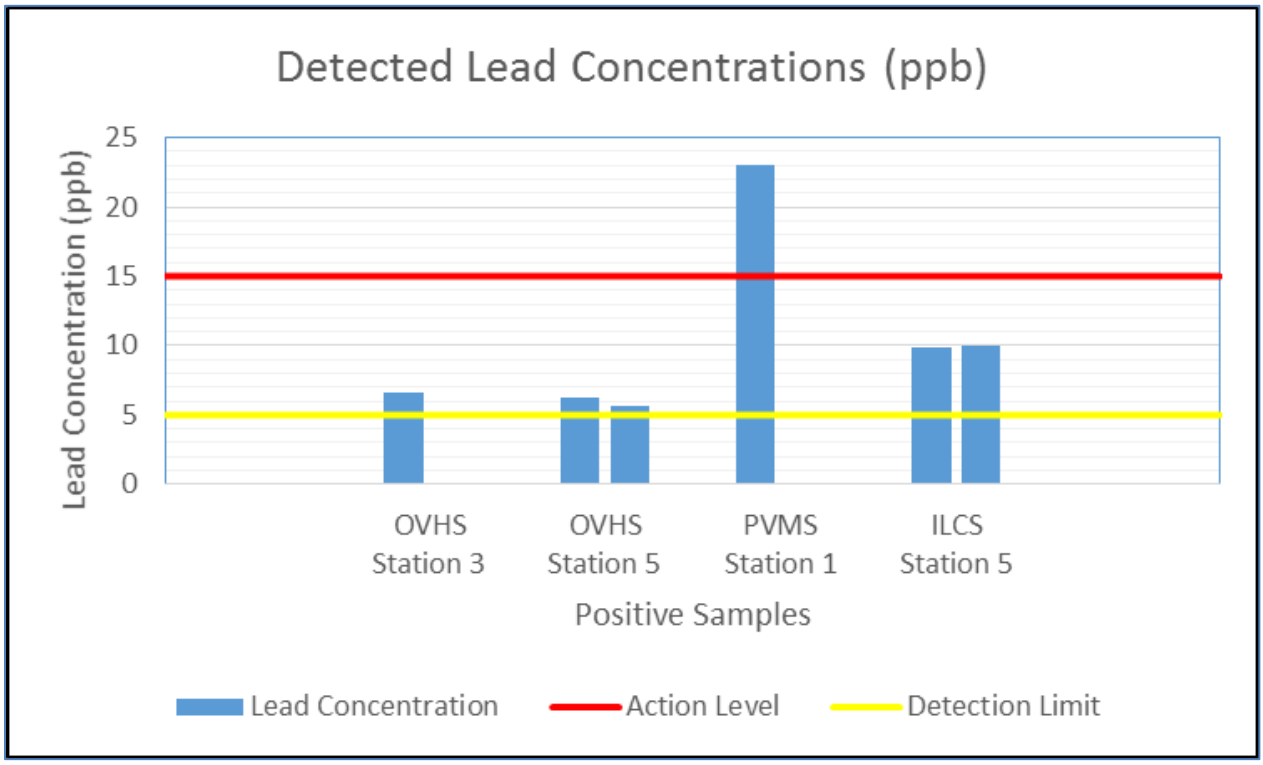
CECA - Competitive Edge Charter Academy Lead Concentration (ppb)			
Sample Location	**First Sample**	**Second Sample**	**Recommended Actions**
#1	ND	ND	No detections / No recommended actions
#2	ND	ND	
#3	ND	ND	
#4	ND	ND	
#5	ND	ND	

ILCA - Inland Leaders Charter Academy Lead Concentration (ppb)			
Sample Location	**First Sample**	**Second Sample**	**Recommended Actions**
#1	ND	ND	Results below DDW action level of 15 ppb. YVWD recommends replacement of water fixture and resample after replacement
#2	ND	ND	
#3	ND	ND	
#4	ND	ND	
#5	9.9	10	

Oak View High School Lead Concentration (ppb)			
Sample Location	**First Sample**	**Second Sample**	**Recommended Actions**
#1	ND	ND	Results below DDW action level of 15 ppb. YVWD recommends replacement of water fixtures and resample after replacement
#2	ND	ND	
#3	6.6	ND	
#4	ND	ND	
#5	6.2	5.6	

Park View Middle School Lead Concentration (ppb)					
Sample Location	**First Sample**	**Second Sample**	**Third Sample**	**Fourth Sample**	**Recommended Actions**
#1	ND	23	ND	ND	District was advised by DDW to conduct two follow-up samples. After two non-detections the source was determined to be safe. Replacement of water fixture was recommended by YVWD.
#2	ND	ND			
#3	ND	ND			
#4	ND	ND			
#5	ND	ND			

Wildwood Christian Academy Lead Concentration (ppb)			
Sample Location	**First Sample**	**Second Sample**	**Recommended Actions**
#1	**ND**	**ND**	No detections / No recommended actions
#2	**ND**	**ND**	
#3	**ND**	**ND**	
#4	**ND**	**ND**	
#5	**ND**	**ND**	



ppb parts per billion (or µg/L)

ND Not detected (≤5 ppb)

Action Level > 15 ppb as defined by SWRCB

Detection Limit 5 ppb

Summary of Sampling and Procedures for Lead Testing in Schools

To ensure that exposure to lead by students and staff is below the Action Level of 15 ppb at the drinking water locations sampled at the school, and that the water system and school complete all required steps before students and staff are notified of the lead testing results, corrective actions, and educational materials, the Sampling Instructions and Sampling Guidance should be followed completely. The steps necessary to be completed by the water system and/or school and to properly and fully complete the lead testing process are summarized below.

1. Water system and school should read the Initial, Repeat and Confirmation, and Corrective Action Check Sampling Instructions, and the Sampling Guidance Documents.
2. School selects up to five of the busiest drinking water outlets for sampling and testing. DDW database can accept up to 26 locations (25 sample sites and 1 distribution source site) to be sampled for testing.
3. Each location selected for testing should be assigned a Sample ID. Each Sample ID should use the following format: <Water System No.>-<School ID>-<Sample ID> i.e. 1710001-AAC-A. All repeat, confirmation, and corrective actions samples collected at a location are to be assigned the same Sample ID.
4. Water system and school complete the Lead Sampling Plan, Chain of Custody, and sample bottle labels to include the Sample IDs.
5. Water system trained sampler performs initial sampling. Water system may train school personal to conduct the sampling if necessary.
6. Water system and school coordinate in reviewing initial sample test results within 10 days of receipt of results from laboratory, determine any Action Level exceedances or plan any repeat sampling.
7. AB 746 requires after an Action Level is exceeded, the school "shall take immediate steps to make inoperable and shut down from use all fountains and faucets where the excess lead levels may exist." If a school wishes to resample the initial sample location, the school should complete the sampling as soon as possible, post the fountain or faucet "do not use for drinking", and continue to use the fountain or faucet for non-drinking purposes until the repeat sample is collected, maintain regular usage.
8. Water system trained sampler performs repeat sampling.
9. Water system and school coordinate in reviewing repeat sample test results within 10 days of receipt of results from laboratory, determine any Action Level exceedances, plan confirmation sampling (if needed), and select corrective actions.
10. If no corrective actions will be implemented the school needs to remove from service the drinking water outlets with repeat lead sampling results confirming greater than 15 ppb.
11. Investigate whether other drinking water locations that were not tested but can be reasonably expected to have similar (greater than 15 ppb) lead levels based on the age, material, location, and/or plumbing configuration and should be removed from service permanently or until addressed using the EPA 3Ts recommendations for corrective actions.
12. A drinking water location with an Action Level exceedance requires that a sample be collected at the service connection to the school to determine the lead level of water

entering the school from the distribution system. The service connection sample location should be flushed before sampling (this is not a first draw sample) to ensure that the sample is representative of distribution system water quality.

13. In preparation for corrective actions school removes from service all drinking water outlets with a confirmed (from repeat sampling) Action Level exceedance.
14. Water system trained sampler performs confirmation sampling (if needed).
15. Water system and school coordinate in reviewing confirmation sample test results within 10 days of receipt of results from laboratory, determine any Action Level exceedance, and select corrective actions.
16. If no corrective actions will be implemented the school needs to remove from service the drinking water outlets with confirmation lead sampling results greater than 15 ppb.
17. In preparation for corrective actions school removes from service all drinking water outlets with a confirmed (from confirmation sampling) Action Level exceedance.
18. It is recommended that the school complete a Corrective Action Plan describing the selected corrective actions to be implemented at each drinking water locations with lead levels above 15 ppb.
19. Water system and school may coordinate in the release of lead testing results, educational information, and planned corrective actions to students, staff, and water system customers. The water system shall not release school lead sampling results to the public until at least 60 days after receipt of the results of the initial round of lead sampling and only after the water system has first discussed the results with the school.
20. School implements corrective actions.
21. Water system trained sampler performs corrective action check sampling.
22. Drinking water locations with check sample results less than or equal to 15 ppb have lead levels less than the Action Level, are suitable for consumption, and need no further testing.
23. The water system may discontinue lead sampling at the sample site if the lead sample collected after completing some corrective action is at or below 15 ppb.
24. Drinking water locations with check sample results greater than 15 ppb have lead levels that exceed the Action Level and require additional corrective actions and check sampling and need to be removed from service.
25. If necessary the school may select problem drinking water outlets to be permanently removed from service.
26. Water system and school maintain all test results, guidance documents, corrective action information, and lead testing correspondence in permanent file for future reference.

Summary of Repeat Monitoring At Each Sample Site

DDW AND CDE PRESS RELEASE CORRECTION: 2 DAY REPORTING OF RESULTS IS FOR ACTION LEVEL EXCEEDANCES ONLY (SEE BELOW)

Route	**Initial Sample** Collected within 90 days of request or per alternative sampling plan.	**First Repeat** Collected within 10 business days of receipt of Initial sample results	**Second (Confirmation) Repeat** Collected within 10 business days of receipt of First Repeat sample results	**Corrective Action Sample** Collect Corrective Action sample after any corrective action
1	Lead is less than or equal to 15 ppb. Monitoring is complete.	No action	No action	No action
2A	Lead is greater than 15 ppb AND the sample site remains in service. Proceed to first repeat.	First Repeat lead sample is greater than 15 ppb. Repeat monitoring is complete. Remove sample site from service.	No action	Corrective action lead sample is greater than 15 ppb. Continue with corrective actions. (School is responsible for additional samples.) OR Corrective action lead sample is less than or equal to 15 ppb. Monitoring is complete.
2B1	Lead is greater than 15 ppb AND the sample site remains in service. Proceed to first repeat.	First Repeat lead sample is less than or equal to 15 ppb. Collect second repeat sample	Second Repeat lead sample is greater than 15 ppb. Repeat monitoring is complete. Remove sample site from service.	
2B2	Lead is greater than 15 ppb AND the sample site remains in service. Proceed to first repeat.	First Repeat lead sample is less than or equal to 15 ppb. Collect second repeat sample	Second Repeat lead sample is less than or equal to 15 ppb. Repeat monitoring is complete.	No action
3	Lead is greater than 15 ppb AND the school removes the sample site from service within 10 business days of the receipt of the sample analysis.	No action	No action	No action

Time Requirements for Reporting Results

- Within 90 days following receipt of a written request for sampling from a school, the water system must either 1) finalize a sampling plan with the school and complete initial sampling, or 2) develop an alternative schedule with the school for preparation of the sampling plan and completing sample collection. An alternative plan must be submitted to DDW for approval within 90 days of receipt of the written request.
- The water system must provide and discuss the sample results (initial, first repeat, second repeat, and corrective action) with the school within 10 days of receipt of the sample results from the testing laboratory, and within 2 business days of receipt when the sample results include an Action Level exceedance.
- First repeat samples must be collected within 10 business days of receipt of the initial sample results; second repeat samples must be collected within 10 business days of receipt of the first repeat results. At least one Corrective Action sample should be collected immediately following installation of the corrective action.
- The water system should request to the laboratory that testing and reporting for all repeat samples be completed in 10 days.
- The water system must not release the sampling results to the public for 60 days following the receipt of the initial sample results unless the water system releases the data in compliance with a Public Records Act (PRA) request for the specific results.
- All lead sample results should be reported electronically by EDT to DDW using the School Lead Sampling and Reporting Tool at https://drinc.ca.gov/lsics/. It is recommended but not required that a public water system notify DDW of an action level exceedance at the same time they notify the school. (via email to DDW-PLU@waterboards.ca.gov)

Updated 12/8/2017

Frequently Asked Questions about Lead Testing of Drinking Water in California Schools

DISCLAIMER: This document is intended to provide answers to questions that may arise regarding lead testing of drinking water in California schools. Nothing in this document supersedes any statutory or regulatory requirements or permit provisions for public water systems.

Contents

Purpose and Requirements of Permit Amendment Requiring Public Water Systems to Assist Schools in Lead Testing of Drinking Water

1. What are the new requirements for lead testing of drinking water in California schools? Why was this action taken?

As a result of a permit action by the State Water Resources Control Board Division of Drinking Water (DDW) on January 17, 2017, all community water systems are required to collect and analyze up to five water samples from drinking water fountains and regularly used drinking water faucets at a school, if the testing is requested by a superintendent or designee of a school, governing board or designee of a charter school, or administrator or designee of a private school.

Recent events in cities across the United States have shown that lead in drinking water remains an ongoing public health challenge and an important concern for children's health. DDW is taking action to allow schools (Kindergarten through 12th grade) to perform lead testing on water from regularly used drinking water faucets used for drinking or cooking, and requiring community water systems to assist schools in this effort.

2. Are schools required to test their drinking water for lead?

There are approximately 500 schools in California that are permitted as a public water system because they have their own water supply, such as a well. Those schools are already required to test their taps for lead (and copper), and have been performing this testing for many years. The DDW permit action does *not* apply to schools that are already regulated as public water systems.

However, most schools in California are served by community water systems which have not been required to test their water for lead under the current Lead and Copper Rule.

3. Why did our water system receive a permit amendment requiring lead testing of drinking water in schools when there are no schools in our distribution system?

DDW issued the permit action requiring lead testing of drinking water in California schools to all community water systems in California. If your water system does not serve potable water to at least one K-12 school listed in the California School Directory, the permit amendment does not apply to your water system and no further action is necessary.

4. Our water system is regulated by a Local Primacy Agency (LPA), not DDW. How do the lead testing requirements apply to our system?

The permit provisions and testing requirements apply to all community water systems that serve water to a school, regardless of water system size. The LPA should be consulted as needed and required by the permit amendment. Sampling results should be reported to the DDW database.

Requests for Lead Sampling in Schools

5. I am a school administrator. How can I have the drinking water at my school tested for lead?

The superintendent or designee of a school, governing board or designee of a charter school, or administrator or designee of a private school must submit a written request to the public water system that serves water to the school. DDW has created a template to request sampling. The designee is any authorized school personnel designated in writing by the superintendent, charter school governing board, or private school administrator, such as an environmental health manager or principal. The superintendent, charter school governing board, or private school administrator must provide written authorization to the water system for a designee to request lead testing. Water systems are not required to proceed with lead sampling at a school if a written request has not been made by authorized personnel.

You can visit the DDW website to determine which community water system serves your school. You can also contact your local DDW office and we can assist you in determining which community water system serves your school.

6. When can lead testing be requested?

The superintendent or designee of a school, governing board or designee of a charter school, or administrator or designee of a private school can submit a written request for lead testing to their community water system any time before November 1, 2019.

7. Which schools can request lead testing of their drinking water?

The DDW permit action requires community water systems to assist any school in their service area that is listed in the California School Directory. This directory includes schools for grades K-12, including private, charter, magnet and non-public schools. The directory does *not* include preschools, daycare centers, or postsecondary schools.

Collecting Samples in Schools

8. How will the lead testing be performed?

A water system representative will make an appointment to come to the school, develop a sampling plan, and collect up to five water samples. Samples may be collected from regularly used drinking fountains, cafeteria/food preparation areas, or reusable water bottle filling stations. Samples may be taken at sites where drinking water receives additional treatment, such as water softening. Sampling sites should be selected according to the sampling guidance prepared by DDW.

The samples will be sent to a laboratory for analysis. Laboratories used for sample analysis must be certified for lead testing of drinking water by the state Environmental Laboratory Accreditation Program (ELAP).

9. When will the sampling be conducted?

Within 90 days of receiving the sampling request, the water system must meet with school officials, finalize a sampling plan, and collect water samples, or develop an alternate schedule that is approved by DDW.

The samples will be collected while school is in session in order to get the most representative results. Samples will be collected by a water system representative who is adequately trained to collect lead samples. The water system will receive the results of the sample analyses from the laboratory and meet with school officials to discuss the sampling results.

10. What size sample bottle should be used? How should the sample be preserved? Should aerators be removed? Can samples be invalidated?

DDW has prepared a sampling protocol for lead testing of drinking water in California schools, which includes information on sample bottle size, preservation and chain of custody requirements, reporting requirements, and sample invalidation procedures. It should be noted that the DDW sampling protocol has different requirements than the USEPA's *3Ts (Training, Testing and Telling) Program for Schools*, including sample size and lead action level. Water systems should adhere to the DDW sampling protocol when conducting lead sampling in California schools.

11. Who pays for lead testing of drinking water in California schools?

The community water system that serves the school is responsible for all costs associated with collecting, analyzing, and reporting drinking water samples for lead testing at up to five locations at each school, and is required to meet with the authorized school representative to develop a sampling plan and review the sampling results. The community water system will *not* pay for any maintenance or corrections needed at the school if elevated lead levels are found in the drinking

water, but is required to conduct repeat sampling at the school to confirm elevated lead levels and the effectiveness of any corrective action taken by the school.

12. Can a school take drinking water samples at more than five locations?

The DDW permit action requires that water systems assist schools in sampling up to five locations at each school. If the school district wishes to sample additional locations, the water system is not required to assist in the collection or analysis of those samples. Only five samples per school will be reported to the DDW database.

Reporting Results

13. Who will get the results of lead testing of drinking water performed at California schools?

The lab results from the sampling are reported directly to the community water system. The water system will then provide the results to the school and meet with the school staff to assist with interpretation of the sample results.

Water systems are required to include a summary of the number of schools requesting lead sampling in their annual Consumer Confidence Report (CCR).

14. When taking the school samples, my water system would like to take a distribution system sample at the same time. How do I report this sample result?

A distribution system sample, such as from a routine Total Coliform Rule (TCR) monitoring location near the school, may be taken at the same time as the school sampling is performed to determine water quality before it enters the school's plumbing. This is a routine practice at some water systems; however, these distribution samples are not required by the DDW permit action and should not be reported to the DDW database, because the database is only designed to accept sample results from school tap locations.

Interpreting and Responding to Sample Results

15. What is the action level for lead in drinking water at schools?

The DDW sampling protocol and permit action have established 15 parts per billion (ppb) as the action level for lead sampling in schools. This is the same concentration as the action level for residential tap sampling conducted by water systems for the Lead and Copper Rule. One part per billion is equivalent to about one drop in an Olympic-sized swimming pool.

The USEPA's *3Ts (Training, Testing and Telling) Program for Schools* currently uses 20 ppb in a 250 milliliter (mL) sample as the trigger level for follow-up testing; however, the California lead sampling of drinking water in schools sampling protocol was developed to align more closely with the tap sampling already performed by community water systems under the Lead and Copper Rule.

16. The Lead and Copper Rule uses a 90th percentile value to determine compliance with the action level. Does that apply to the lead sampling in schools program?

Each sample location at a school is compared individually to the 15 ppb action level. There is no 90th percentile calculation.

17. What happens if lead is detected in the drinking water at a school?

The USEPA's *3Ts (Training, Testing and Telling) Program for Schools* and the American Water Works Association's *Assisting Schools and Child Care Facilities in Addressing Lead in Drinking Water* contain detailed information on routine, interim, and long-term remedies if lead is detected in drinking water at a school.

In addition, the community water system will notify school officials within two school business days of receiving any sample results that exceed the lead action level of 15 parts per billion (ppb), and will then meet with the school staff to assist with interpretation of the sample results and provide information regarding potential corrective actions. The water system will conduct repeat sampling at any locations that exceed 15 ppb and obtain the results from the laboratory within 10 business day, as well as after any corrective action is taken. Repeat sampling will not be conducted at a sample site if the school chooses to remove the tap from service.

The community water system that serves the school is responsible for all costs associated with collecting, analyzing, and reporting drinking water samples for lead testing at California schools required by the January 17, 2017 permit action and the water system is also required to meet with the authorized school representative to develop a sampling plan and review the sampling results. The community water system will *not* pay for any maintenance or corrections needed at the school.

To assist schools in providing access to, and the quality of, drinking water in public schools pursuant to Senate Bill 828 (2016), the State Water Board is establishing a new grant program. Approximately $9.5 million will be available later in 2017 for schools to install water bottle filling stations, install or replace drinking water fountains, and for the installation of treatment devices at these locations that are capable of removing contaminants from drinking water.

It should be noted that DDW has no regulatory authority over schools served by public water systems and cannot require any specific action be taken by the school or school district in the event of a lead action level exceedance at a school.

18. If elevated lead levels are found in a school's drinking water, will other drinking water tap locations be sampled for lead?

If elevated lead levels are found in a school, the school district may choose to sample additional drinking water tap locations; however, the community water system that serves the school is not required to conduct sampling at any locations other than the five locations chosen for initial sampling.

19. If elevated lead levels are found in a school's drinking water, will the community water system that serves the school receive a citation or fines?

Community water system compliance with the Lead and Copper Rule will continue to be determined by the results of residential sampling done according to the water system's Lead and Copper Rule tap sampling plan. Elevated lead levels found during a special sampling event at a school will not cause a water system to be out of compliance with the Lead and Copper Rule.

Information about Lead Sources and Health Effects

20. What are other environmental sources of lead exposure for children?

According to the USEPA's 3Ts (Training, Testing and Telling) Program for Schools, the most common source of lead exposure for children is chips and particles of deteriorated lead paint, especially if they are exposed to house dust or soil contaminated by leaded paint. Other potential sources include lead in the air from industrial emissions, lead deposits in soils near streets from past emissions by automobiles using leaded gas, and lead in consumer products and food, such as imported candies, medicines, dishes, toys, jewelry, and plastics.

21. Where does lead in drinking water come from?

According to the USEPA's *3Ts (Training, Testing and Telling) Program for Schools*: "Most lead gets into drinking water after the water leaves the local well or treatment plant and comes into contact with plumbing materials containing lead. These include lead pipe and lead solder (commonly used until 1986), as well as faucets, valves, and other components made of brass. The physical/chemical interaction that occurs between the water and plumbing is referred to as corrosion. The extent to which corrosion occurs contributes to the amount of lead that can be released into the drinking water."

22. What are the health risks of lead in drinking water?

Lead can affect almost every organ and system in your body. The most sensitive is the central nervous system (brain), particularly in children. Lead also damages kidneys and the reproductive system. The effects are the same whether it is breathed or swallowed. Lead in children's blood has been associated with reduced IQ and attention span, learning disabilities, poor classroom performance, hyperactivity, behavioral problems, impaired growth, and hearing loss.

Infants and children who drink water containing lead in excess of the lead action level may experience delays in their physical or mental development. Children may show slight deficits in attention span and learning abilities. Adults who drink this water over many years may develop kidney problems or high blood pressure.

Information about Lead Testing of Drinking Water in Other Locations

23. How can I find out what my community water system's Lead and Copper Rule sampling results are?

Lead and copper sampling results, as well as other water quality data, are reported in your community water system's annual Consumer Confidence Report (CCR), which is sent or emailed to customers around July 1 of every year. You can obtain a copy of the most recent CCR by contacting your community water system by phone or checking their website. You can also search the USEPA website for the CCR.

24. How can I have the drinking water at my home tested for lead?

USEPA has recommendations for testing drinking water in the home. You can also find information on lead sampling in drinking water for individual homeowners and homes on a private well on the State Water Board website. State-certified, commercial labs that can analyze drinking water for lead and other inorganics can be found by searching the Geographic Information System map on the ELAP website. Customers can also contact their community water system and volunteer to participate in the residential tap sampling program for the Lead and Copper Rule.

Sources of Additional Information about Lead Testing of Drinking Water in California Schools

25. Whom can I contact for more information about lead testing of drinking water in California schools?

If you have additional questions about any aspect of lead testing of drinking water in California schools, send an email to DDW-PLU@waterboards.ca.gov, or call (916) 449-5646.

26. Can I get information about lead testing of drinking water in California schools in Spanish?

En español:

- Preguntas Frecuentes (FAQs) sobre las Pruebas para Detectar Plomo en el Agua Potable de Escuelas de CA
- USEPA El plomo del agua potable en las escuelas y los centros de cuidado infantil: https://espanol.epa.gov/espanol/el-plomo-del-agua-potable-en-las-escuelas-y-los-centros-de-cuidado-infantil

Links to Resources Cited in this Document

Title	Author	Link
DDW Lead Sampling in Schools Website	**DDW**	http://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/leadsamplinginschools.shtml
3Ts for Reducing Lead in Drinking Water in Child Care Facilities	USEPA	http://nepis.epa.gov/Exe/ZyPDF.cgi?Dockey=20017JVA.txt
3Ts for Reducing Lead in Drinking Water in Schools	USEPA	https://www.epa.gov/sites/production/files/2015-09/documents/toolkit_leadschools_guide_3ts_leadschools.pdf
Assisting Schools and Child Care Facilities in Addressing Lead in Drinking Water	AWWA	http://www.awwa.org/portals/0/files/legreg/documents/assistingschoolslead2005.pdf
California School Directory	CDE	http://www.cde.ca.gov/re/sd/index.asp
Centers for Disease Control Healthy Schools	CDC	**http://www.cdc.gov/healthyschools/nutrition/schoolnutrition.htm**
Certified Environmental Laboratories in California	ELAP	http://www.waterboards.ca.gov/drinking_water/certlic/labs/index.shtml
Consumer Confidence Report Search Tool	USEPA	https://ofmpub.epa.gov/apex/safewater/f?p=136:102
DDW District Office Contact Information	DDW	http://www.waterboards.ca.gov/drinking_water/programs/documents/ddwem/DDWdistrictofficesmap.pdf
DDW Lead Sampling in Schools Sampling Protocol	DDW	http://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/leadsamplinginschools.shtml
DDW Supply Service Area Lookup Tool	DDW	http://www.waterboards.ca.gov/waterrights/water_issues/programs/drought/water_supplier.shtml
Home Water Testing	USEPA	https://www.epa.gov/sites/production/files/2015-11/documents/2005_09_14_faq_fs_homewatertesting.pdf
National Drinking Water Alliance	UC	**http://www.drinkingwateralliance.org**
School Water Quality Improvement Funding Program	DFA	http://www.waterboards.ca.gov/water_issues/programs/grants_loans/
Water Quality Funding Sources for Schools	USEPA	https://www.epa.gov/dwreginfo/water-quality-funding-sources-schools-resource-k-12-schools-and-child-care-facilities

CALIFORNIA Water Boards

Frequently Asked Questions about Lead Testing of Drinking Water in California Schools: Updated for Assembly Bill 746/Health & Safety Code §116277

DISCLAIMER: This document is intended to provide answers to questions that may arise regarding lead testing of drinking water in California schools based on the newest legislation, AB 746, which goes into effect January 1, 2018. Nothing in this document supersedes any statutory or regulatory requirements or permit provisions for public water systems.

Contents

General Requirements Health & Safety Code (HSC) Sec. 116277/Assembly Bill (AB) 746

Questions 1-19 address frequently asked questions (FAQs) that may arise in conjunction with HSC 116277 (discussed in Question 1). Questions 20-34 are adapted from the FAQs that were developed in conjunction with the 2017 Permit Amendments, but the responses have been modified to address the requirements of both HSC 116277 and the 2017 Permit Amendments.

Private schools that wish to request testing in accordance with the 2017 Permit Amendments should refer to the full version of the original FAQs that was provided for 2017 Permit Amendments.

1. What is AB 746, and how is it related to the 2017 Permit Amendments issued by the California Division of Drinking Water (DDW)?

California Assembly Bill 746 (AB 746) adding Section 116277 to the Health and Safety Code (HSC 116277), effective on January 1, 2018. AB 746 was written, revised, voted on, and approved by the California legislature and then signed into law by the Governor on October 13, 2017. AB 746 contains statutory requirements for community water systems to test the lead levels of drinking water at *all* California public, K-12 schools and preschools and child day care facilities located on public school property by July 1, 2019.

In contrast, pursuant to its regulatory authority under the Safe Drinking Water Act (Health & Safety Code §116270 et seq.), the DDW issued amendments to the drinking water supply permits of more than 1,200 individual public water systems in January 2017 to require testing of the lead levels of drinking water at any California, K-12 school that requests testing, including private, public, and charter schools (referred to collectively as the "2017 Permit Amendments"). Under the 2017 Permit Amendments, schools were not required to have their potable water systems tested, but had the option of making that request. Requests for sampling in accordance with the 2017 Permit Amendments must be made by November 1, 2019.

HSC 116277 did not invalidate or otherwise make ineffective the 2017 Permit Amendments, and where a school makes a request pursuant to the community water system's permit amendment, DDW plans to enforce the permit amendment requirements. HSC 116277 implicitly recognizes the requirements for testing under the permit amendments, and exempts from testing school sites for which testing for lead has already been requested pursuant to the community water system's permit amendment. If a school site is *not* exempt (see Question 5), and a request has *not* been made by the local education agency (LEA) for a school site, HSC 116277 would control the requirements placed on the public water system.

Recognizing that HSC 116277 is silent on many details related to the sampling of drinking water in public schools, DDW encourages community water systems to follow the guidance in their 2017 Permit Amendments. For example, because the statute does not specify how or when to gather samples, community water systems and schools are encouraged to use

the sampling guidance developed for the 2017 Permit Amendments to meet the sampling plan requirements of HSC 116277.

DDW is making available the DRINC portal for the School Lead Sampling and Reporting Tool for community water systems to demonstrate compliance with the statute, enabling community water systems to report electronically sampling results of lead levels of potable water systems in schools, as is already being required under the permit.

See the table below for a comparison of the requirements of HSC 116277 and the 2017 Permit Amendments.

2. Did the State Water Board rescind the Permit Amendments in its response to a petition to the Office of Administrative Law (OAL)?

No, the Permit Amendments issued to individual public water systems have not been rescinded and are in full effect. The State Water Board issued a certification, as authorized under OAL regulations, in response to a complaint alleging that a template posted on the State Water Board website was an underground regulation. In its certification to OAL the State Water Board stated that it "will not issue, use, enforce or attempt to enforce the template identified as the underground regulation in the petition." (emphasis added.) The certification noted that the template had been made available on the State Water Board's website in order to provide schools with a simplified explanation about what was being required in separate orders issued to public water systems. The petition to OAL challenged the template as being an underground regulation, and in response the State Water Board removed the template from its website, and updated its website to clarify that the State Water Board's actions to require testing for lead in school drinking water involved issuance of separate permit amendments for each of the affected public water systems, not a general permit or other action of general applicability.

Frequently Asked Questions
HSC 116277/AB 746: Lead Testing of Drinking Water in California Schools Page **5** of **17**

Requirements	HSC §116277	2017 Permit Amendments
Audience	Community Water Systems (CWS) serving a schoolsite of a local education agency (LEA*) w/ building constructed before 1/1/2010. Includes K-12, preschools and child daycare located on public school property.	Public Water System serving K-12 school for which sampling request is made prior to 11/1/2019.
Number of Initial Samples	N/A. DDW will continue to reference DDW guidance and 3Ts to CWS/LEAs.	One to five samples from regularly used sinks, faucets, and fill stations.
Sampling Time	Anytime, but must be completed before 7/1/2019. Note that DDW guidance prescribes sampling while school is in session and not immediately following weekends or holidays.	During school year, on Tues/Wed/Thurs/Fri. when in session and in session for one day prior, within 90 days after receiving request.
PWS Reporting to School	Report findings to schoolsite within 10 business days after receiving results from lab.	Provide/discuss sample results with school within 10 days of receiving results from lab.
PWS Reporting to State	N/A. DDW is providing access to Lead In Schools (LIS) website.	Require lab to submit data to DDW's LIS website.
Action Level (AL)	15 ppb	15 ppb
AL Exceedance (ALE) Response by PWS	Report to school within 2 business days. Collect sample at the service connection between CWS and schoolsite. DDW encourages sampling following any corrective action taken by the school.	Notify school within 2 business days. Collect resample within 10 business days if sample site remains in service. Collect third sample within 10 business days after notification that resample is ≤ 15 ppb. Following corrective action, collect resample.
ALE Response by LEAs	Notify parents and guardians when ALE found. Take immediate steps to make fountains/faucets inoperable (shut down) where ALE found. Investigation required to determine if additional fountains/faucets require shut down; may require additional tap sampling. Enforced by DDW and CDE; tracked by DDW.	N/A. School corrective actions are not enforceable by DDW.
Sampling Plan	CWS, in cooperation with LEA, prepare a sampling plan for each schoolsite where sampling is required. CWS/LEA may request assistance from DDW or LPA.	CWS rRespond in writing within 60 days of receiving the school's sampling request, and schedule meeting with school to develop sampling plan (3Ts referenced). Finalize within 90 days of request.
Laboratory Cert.	N/A. Note that DDW guidance prescribes USEPA's 3Ts and ELAP-certified laboratories.	ELAP-certified
PWS Data Disclosure	N/A	Do not release data to public for 60 days following receipt of initial results unless complying with PRA. Discuss results with school prior to release.

3. What are the general requirements of HSC 116277?

HSC 116277 requires the following:

- WHO: Community water systems
- WHAT: Test potable water systems* for lead
- WHERE: All schoolsites of a local educational agency (LEA)** constructed before January 1, 2010
- WHEN: On or before July 1, 2019

*Potable water systems at LEAs are defined in HSC 116277 as "water fountains and faucets used for drinking or preparing food." This definition does not require that all water fountains and faucets at the school be sampled.

**LEA is defined in HSC 116277 as a "school district, county office of education, or charter school located in a public facility." An LEA's schoolsite may be exempt from the requirements of HSC 116277 if it meets the conditions discussed in Question 5 below.

If lead levels exceed the action level of 15 parts per billion (ppb), HSC 116277 contains notification and response measures discussed in Questions 13, 14, and 17 below.

4. Who is required to comply with HSC 116277?

Community water systems that serve any schoolsite of an LEA must test for lead in the school's potable water system.

(LEAs, which are defined as a "school district, county office of education, or charter school located in a public facility", must give community water systems access to conduct testing at each required schoolsite.

5. Which schools are *not* affected by HSC 116277?

Private schools are not required to have their potable water systems tested for lead under HSC 116277. Private schools are still eligible, but are not required, to request testing under the 2017 Permit Amendments. The 2017 Permit Amendments require community water systems to assist any school in their service area. Schools are identified in the California School Directory, published by the California Department of Education (CDE).

6. Which schools are exempt from testing under HSC 116277?

HSC 116277 specifies four situations that exempt a public schoolsite from the lead testing requirement:

1) The school was constructed or modernized after January 1, 2010.
   a) "Modernized" refers to the plumbing system of the schoolsite being replaced after January 1, 2010.
   b) At this time, there is no statewide database of school construction dates, so new or modernized schools must submit a letter or email to the community water system stating that they are exempt from testing.
2) The LEA for the school is a regulated community water system that tests its potable water system in compliance with the Lead and Copper Rule.

3) The LEA tested the schoolsite's potable water system for lead after January 1, 2009 and posted information about the testing on the LEA's public website.
   a) The LEA sampling program should be similar to the initial sample collection requirements provided in Appendix A, Sampling Guidance for Collecting Drinking Water Samples for Lead Testing at K-12 Schools on the DDW website or the USEPA's *3Ts (Training, Testing and Telling) Program for Schools.*
   b) Lead analyses should be performed at a laboratory accredited by the State Environmental Laboratory Accreditation Program (ELAP) using test methods EPA 200.5, EPA 200.8, EPA 200.9, and/or SM 3113B and able to achieve a Practical Quantitation Level of 5 ug/l (ppb).
   c) At a minimum, the LEA must identify on their website any schoolsite where the lead level in drinking water exceeded 15 ppb.
4) The LEA has already requested testing from the community water system in accordance with the community water system's 2017 Permit Amendment.

7. Who pays for lead testing of drinking water in California schools?

When a community water system contacts an LEA to conduct sampling under HSC 116277, the community water system is required to pay for the initial sampling. In addition, 116277 requires the community water systems to test a water sample from the point in which the schoolsite connects to the community water system's supply network to determine the lead level of water entering the schoolsite from the community water system's water supply network. Although HSC 116277 does not require the community water systems to perform any other follow-up, confirmation or additional investigative sampling, additional sampling may be needed to determine which fountains and faucets should be removed from service after initial sample results at a schoolsite exceeds the action level of 15 ppb. DDW encourages community water systems to conduct testing in accordance with the requirements of the 2017 Permit Amendments, and DDW encourages community water systems to assist LEAs with follow-up, confirmation, or additional investigative sampling.

If the LEA contacts the community water system to request testing in accordance with the 2017 Permit Amendments, the community water system that serves the school is responsible for all costs associated with collecting, analyzing, and reporting drinking water samples for lead testing at up to five locations at each school, and is required to meet with the authorized school representative to develop a sampling plan and review the sampling results. Confirmation and follow-up sampling after any maintenance or corrections are made to ensure lead levels are below the action level of 15 ppb is also the responsibility of the community water system under the 2017 Permit Amendments, but the community water system will *not* pay for any maintenance or corrections needed at the school if elevated lead levels are found in the drinking water.

Whether the LEA or the community water system initiates the request for potable water system sampling, community water systems should make reasonable, good faith efforts to conduct and pay for the testing needed to determine the true extent of any elevated lead levels in potable water systems at an LEA's schoolsites and to ensure that any corrective actions taken by the LEA result in a reliable reduction of lead in schoolsite potable water

systems to below the action level of 15 ppb. Most school officials are not familiar with sampling drinking water, interpreting water quality data, and implementing corrective actions, whereas water systems have decades of experience implementing the Lead and Copper Rule and are better suited to evaluate water quality at a school site. If the community water system and LEA cannot agree on a sampling plan, they may request assistance from DDW or the local primacy agency (LPA) to develop a plan.

Requests for Lead Sampling of Public School Drinking Water

8. Can a school request lead testing of their potable water system using the processes specified in the 2017 Permit Amendments?

Yes, all sampling requests, results, and reporting performed in accordance with the 2017 Permit Amendments satisfy the requirements of HSC 116277.

9. Do the timelines specified in the 2017 Permit Amendments apply to the HSC 116277 requirements?

Community water systems should follow the schedule specified in the 2017 Permit Amendments, regardless of whether a request is made by the LEA or the community water system has to reach out to the LEA to make arrangements for the testing. The 2017 Permit Amendments specify that within 90 days of receiving the sampling request, the water system must meet with school officials, finalize a sampling plan, and collect water samples, or develop an alternate schedule that is approved by DDW. HSC 116277 does not specify a schedule for community water systems and only contains a final deadline of July 1, 2019 to complete the testing.

Community Water System Requirements

10. What information does the community water system need to provide to DDW per HSC 116277?

In order to demonstrate compliance, the community water system must collect the following information from all public schoolsites and provide it to DDW:

- Sampling results, which can be reported electronically at the DRINC portal for the School Lead Sampling and Reporting Tool
- A list of schools that provide proof of new construction or a complete plumbing replacement after January 1, 2010.
- A list of schools that refuse to provide access to community water systems for potable water system testing.
- For schools with lead testing results that exceed 15 ppb, the community water system should inform DDW the results of any retesting, including testing required by HSC 116277 at the point where the school site connects to the community water system's supply network. In addition, the community water system should report if the LEA shut down any drinking fountains or faucets, performed additional testing on its own,

performed the required notifications, and/or provided replacement water or water treatment. See Questions 13, 14 and 17 for more details on these requirements.

11. What are the sampling requirements for community water systems?

The 2017 Permit Amendments and HSC 116277 require that in consultation with the LEA, the community water system must prepare a sampling plan for each schoolsite. Sampling plans prepared in accordance with the guidance provided in conjunction with the 2017 Permit Amendments also meet the requirements of HSC 116277.

12. How many sample locations are required at a schoolsite?

HSC 116277 does not specify the number of sample locations that must be tested for lead at a school's potable water system. The 2017 Permit Amendments require up to five sample locations at each schoolsite. The community water system and LEA should assess schoolsites on a case-by-case basis to determine the appropriate number of sample locations. If the community water system and LEA cannot agree on a sampling plan, they may request assistance from DDW or the local primacy agency (LPA) to develop a plan.

In contrast with the guidance previously provided with the 2017 Permit Amendments, samples taken at up to 25 locations at the schoolsite may now be reported electronically to DDW through the DRINC portal for the School Lead Sampling and Reporting Tool, provided that the samples meet the sampling and reporting requirements of Appendix A, Sampling Guidance for Collecting Drinking Water Samples for Lead Testing at K-12 Schools, on the DDW website.

13. What are the reporting requirements for community water systems?

Community water systems must report the results of lead testing to the schoolsite as follows:

- Within 10 business days after receiving the results from the laboratory, if the result is less than or equal to 15 ppb.
- Within 2 business days after receiving the results from the laboratory, if the result is greater than 15 ppb.

Sampling results for all testing of lead levels of potable water systems in schools should be reported electronically to DDW through the DRINC portal for the School Lead Sampling and Reporting Tool to demonstrate compliance with the statue.

14. What are the *requirements* for community water systems if the lead level in a sample exceeds 15 ppb?

HSC 116277 requires community water systems to take a sample at the schoolsite's service connection if a sample result exceeds 15 ppb. The purpose of this requirement is to determine the lead level of water entering the schoolsite from the distribution system. Unlike the schoolsite samples, the service connection sample location should be flushed before sampling to ensure that the sample is representative of distribution system water quality. To simplify the sampling process, community water systems may choose to collect

the service connection sample at the same time that initial sampling of the schoolsite is performed.

Unlike the 2017 Permit Amendments, HSC 116277 does not require that community water systems conduct repeat sampling after an initial sample exceeds 15 ppb. However, community water systems should work with the LEA and perform the repeat sampling protocol described in the 2017 Permit Amendments if requested by the LEA.

In contrast with the guidance provided with the 2017 Permit Amendments, samples taken at service connections must be reported electronically to DDW through the DRINC portal for the School Lead Sampling and Reporting Tool. Samples collected at a connection point to a water system (i.e., at or just before a schoolsite meter) should be labeled "-Z". For more detailed instructions, see the DDW Guidance for Electronic Submittal of School Lead Sample Results.

15. What are the *recommendations* for community water systems if the lead level in a sample exceeds 15 ppb?

As discussed in Question 17, the HSC 116277 requires LEAs shut down and make inoperable all fountains or faucets where lead levels exceeding 15 ppb may exist. In addition to the original sample location, this may include shutting down other fountains or faucets at the schoolsite that were not tested but can be reasonably expected to have similar lead levels based on the age, material, location, and/or plumbing configuration of the fountains and faucets. Community water systems are encouraged to assist LEAs in interpreting the testing results and determining which faucets and fountains should be shut down or tested.

HSC 116277 does not require community water systems to perform follow up testing at fountains or faucets after an initial sample result exceeds 15 ppb for lead. However, community water systems are encouraged to work with the LEA and perform the repeat sampling protocol described in the 2017 Permit Amendments if requested by the LEA. Note that lead sampling performed in accordance with the 2017 Permit Amendments (i.e., in response to a request from the LEA) still necessitates the repeat sampling required in the 2017 Permit Amendments.

16. If an LEA does not comply with HSC 116277, will the community water system that serves the school receive a citation or fines?

Community water systems will not receive a citation or fines if an LEA does not comply with HSC 116277 and provide access to public schoolsites. To enable DDW to determine compliance by the LEAs, DDW requests that community water systems keep records of which LEAs are claiming an exemption based on one of the four criteria (discussed in Question 5).

It is also strongly recommended that community water systems keep detailed records of attempts to contact LEAs and schoolsites about developing a sampling plan, conducting sampling, and reporting sample results. If an LEA or schoolsite is unwilling or unable to respond in a timely manner, the community water system should contact DDW or the LPA for assistance.

Local Educational Agency (LEA) Requirements

17. What information does the LEA need to provide to the community water system?

The LEA should provide the following information to the community water system:

- Whether any schoolsites are exempt from lead testing of its potable water system under HSC 116277 because they meet one of the conditions discussed in Question 5.
- The personnel responsible for meeting with the community water system to develop a sampling plan and schedule for any schoolsites that require testing.
- The notification and response at any schoolsite where a fountain or faucet is found to have lead levels exceeding 15 ppb.

18. What are the notification and response requirements for LEAs if the lead level in a sample exceeds 15 ppb?

HSC 116277 requires LEAs to take the following actions if a schoolsite sample has a lead level greater than 15 ppb:

- Take immediate steps to shut down and make inoperable all fountains or faucets where lead levels exceeding 15 ppb may exist. In addition to the original sample location, the LEA should investigate whether it should shut down other fountains or faucets at the schoolsite that were not tested but can be reasonably expected to have similar lead levels based on the age, material, location, and/or plumbing configuration of the fountains and faucets. Additional sampling and testing of the potable water system for lead may be needed to evaluate the situation. As discussed in Questions 13 and 14, community water systems are encouraged to assist LEAs in interpreting the testing results and determining which faucets and fountains should be shut down or retested.
- Notify the parents and guardians of students who attend the schoolsite of the findings. Although not required by HSC 116277, LEAs are encouraged to share all sampling results with parents, guardians, and other stakeholders, not just when the sampling results exceed 15 ppb.
- Ensure that potable drinking water is provided for students at any schoolsite where fountains and faucets have been shut down because of elevated lead levels. This may include replacing portions of the plumbing that are contributing to elevated lead levels, providing onsite water filtration to remove lead or providing bottled water as a short-term remedy.

19. What are the access requirements for LEAs?

LEAs must provide community water systems access to all schoolsites that require testing under HSC 116277. To meet the stagnation requirements that ensure representative results, testing of the school's potable water system will typically need to occur early in the morning, before school starts, and after a stagnation period of no water usage (including irrigation) of at least 6 hours. Sampling should also occur after a normal school day, not after weekends or holidays, so will typically take place on a Tuesday, Wednesday, Thursday, or Friday of a normal school week.

LEAs that do not provide timely and reasonable access to community water systems to perform potable water system sampling are subject to receipt of a compliance order from DDW.

20. Are potable water systems at preschools required to be tested?

Preschools co-located on a schoolsite that is under the jurisdiction of an LEA must be tested.

Collecting Samples in Schools

21. How will the lead testing be performed?

HSC 116277 does not set out requirements for how the testing is to be performed, and so DDW encourages community water systems to follow the guidance set out in the 2017 Permit Amendments. Under the requirements of the 2017 Permit Amendments, a water system representative will make an appointment to come to the school, develop a sampling plan, and collect up to five water samples. Samples may be collected from regularly used drinking fountains, cafeteria/food preparation areas, or reusable water bottle filling stations. Samples may be taken at sites where drinking water receives additional treatment, such as water softening. Sampling sites should be selected according to the sampling guidance prepared by DDW, which is referenced in the permit amendments.

The samples will be sent to a laboratory for analysis. Laboratories used for sample analysis must be certified for lead testing of drinking water by the state Environmental Laboratory Accreditation Program (ELAP).

22. When will the sampling be conducted?

If a request for testing of a schoolsite is made by the LEA to the public water system, the 2017 Permit Amendment provides the requirements for when the sampling is to be conducted. It includes requirements intended to ensure that the most representative results are obtained, including that samples must be collected while school is in session. If a request is not made for a schoolsite, the community water systems will still have to conduct sampling pursuant to HSC 116277. However, because HSC 116277 does not set out requirements for when the testing is to be performed, community water systems should follow the guidance set out in the 2017 Permit Amendments in order to obtain the best results. Under the requirements of the 2017 Permit Amendments, the water system must meet with school officials, finalize a sampling plan, and collect water samples, or develop an alternate schedule that is approved by DDW within 90 days of receiving the sampling request. HSC 116277 requires that all sampling be completed by July 1, 2019.

Samples should be collected on a Tuesday, Wednesday, Thursday or Friday morning during periods of normal school operations (school is in session) and not during summer school, summer or winter breaks, or other extended breaks. Do not collect the samples on the first day back to school following a vacation, holidays, or weekends.

Samples need to be collected by a water system representative who is adequately trained to collect lead samples. A representative may be an employee of the school, but it is the responsibility of the water system to ensure the sample is properly taken. The water system

will receive the results of the sample analyses from the laboratory and meet with school officials to discuss the sampling results.

23. What size sample bottle should be used? How should the sample be preserved? Should aerators be removed? Can samples be invalidated?

DDW has prepared a sampling protocol for lead testing of drinking water in California schools, which includes information on sample bottle size, preservation and chain of custody requirements, reporting requirements, and sample invalidation procedures. It should be noted that the DDW sampling protocol has different requirements than the USEPA's *3Ts (Training, Testing and Telling) Program for Schools*, including sample size and lead action level. Water systems should adhere to the DDW sampling protocol when conducting lead sampling in California schools.

Reporting Results

24. Who will receive the results of lead testing of drinking water performed at California schools?

HSC 116277 does not set out requirements for how the testing results are to be administered, DDW expects community water systems will follow the guidance set out in the 2017 Permit Amendments. Under the requirements of the 2017 Permit Amendments, the lab results from the sampling must be reported directly to the community water system. The water system will then provide the results to the school and meet with the school staff to assist with interpretation of the sample results.

Under the 2017 Permit Amendments, water systems are required to include a summary of the number of schools requesting lead sampling in their annual Consumer Confidence Report (CCR). For compliance with 116277, DDW suggests that water systems keep track of not only which schoolsites were tested, but also for which schoolsites the LEAs claimed an exemption.

Interpreting and Responding to Sample Results

25. What is the action level for lead in drinking water at schools?

The HSC 116277, the 2017 Permit Amendments, and the sampling protocol referenced in the 2017 Permit Amendments have established 15 parts per billion (ppb) as the action level for lead sampling in schools. This is the same concentration as the action level for residential tap sampling conducted by water systems for the Lead and Copper Rule. One part per billion is equivalent to about one drop in an Olympic-sized swimming pool.

The USEPA's *3Ts (Training, Testing and Telling) Program for Schools* currently uses 20 ppb in a 250 milliliter (mL) sample as the trigger level for follow-up testing; however, the California lead sampling of drinking water in schools sampling protocol was developed to align more closely with the tap sampling already performed by community water systems under the Lead and Copper Rule and uses 15 ppb as the action level and a 1-liter sample.

26. The Lead and Copper Rule uses a 90th percentile value to determine compliance with the action level. Does that apply to the lead sampling in schools program?

Each sample location at a school is compared individually to the 15 ppb action level. There is no 90th percentile calculation.

27. What can a school do if lead is detected in the drinking water?

The USEPA's *3Ts (Training, Testing and Telling) Program for Schools* and the American Water Works Association's *Assisting Schools and Child Care Facilities in Addressing Lead in Drinking Water* contain detailed information on routine, interim, and long-term remedies if lead is detected in drinking water at a school.

To assist schools in providing access to, and improving the quality of, drinking water in public schools, pursuant to Senate Bill 828 (2016), the State Water Board established the "Drinking Water for Schools Grant Program." Approximately $9.5 million is available for schools to install water bottle filling stations, install or replace drinking water fountains, and for the installation of treatment devices at these locations that are capable of removing contaminants from drinking water. Applications for funding can be submitted using the Financial Assistance Application Submittal Tool (FAAST).

28. If elevated lead levels are found in a school's drinking water, will the community water system that serves the school receive a citation or fines?

Community water system compliance with the Lead and Copper Rule will continue to be determined by the results of residential sampling done according to the water system's Lead and Copper Rule tap sampling plan. Elevated lead levels found during a special sampling event at a school will not cause a water system to be out of compliance with the Lead and Copper Rule.

Information about Lead Sources and Health Effects

29. What are other environmental sources of lead exposure for children?

According to the USEPA's *3Ts (Training, Testing and Telling) Program for Schools*, the most common source of lead exposure for children is chips and particles of deteriorated lead paint, especially if they are exposed to house dust or soil contaminated by leaded paint. Other potential sources include lead in the air from industrial emissions, lead deposits in soils near streets from past emissions by automobiles using leaded gas, and lead in consumer products and food, such as imported candies, medicines, dishes, toys, jewelry, and plastics.

30. Where does lead in drinking water come from?

According to the USEPA's *3Ts (Training, Testing and Telling) Program for Schools*: "Most lead gets into drinking water after the water leaves the local well or treatment plant and comes into contact with plumbing materials containing lead. These include lead pipe and lead solder (commonly used until 1986), as well as faucets, valves, and other components made of brass. The physical/chemical interaction that occurs between the water and

plumbing is referred to as corrosion. The extent to which corrosion occurs contributes to the amount of lead that can be released into the drinking water."

31. What are the health risks of lead in drinking water?

Lead can affect almost every organ and system in your body. The most sensitive is the central nervous system (brain), particularly in children. Lead also damages kidneys and the reproductive system. The effects are the same whether it is breathed or swallowed. Lead in children's blood has been associated with reduced IQ and attention span, learning disabilities, poor classroom performance, hyperactivity, behavioral problems, impaired growth, and hearing loss.

Infants and children who drink water containing lead in excess of the lead action level may experience delays in their physical or mental development. Children may show slight deficits in attention span and learning abilities. Adults who drink this water over many years may develop kidney problems or high blood pressure.

Information about Lead Testing of Drinking Water in Other Locations

32. How can I find out what my community water system's Lead and Copper Rule sampling results are?

Lead and copper sampling results, as well as other water quality data, are reported in your community water system's annual Consumer Confidence Report (CCR), which is sent or emailed to customers around July 1 of every year. You can obtain a copy of the most recent CCR by contacting your community water system by phone or checking their website. You can also search the USEPA website for the CCR.

33. How can I have the drinking water at my home tested for lead?

USEPA has recommendations for testing drinking water in the home. You can also find information on lead sampling in drinking water for individual homeowners and homes on a private well on the State Water Board website. State-certified, commercial labs that can analyze drinking water for lead and other inorganics can be found by searching the Geographic Information System map on the ELAP website. Customers can also contact their community water system and volunteer to participate in the residential tap sampling program for the Lead and Copper Rule.

Additional Information about Lead Testing of Drinking Water in California Schools

34. Whom can I contact for more information about lead testing of drinking water in California schools?

If you have additional questions about any aspect of lead testing of drinking water in California schools, send an email to DDW-PLU@waterboards.ca.gov, or call (916) 322-9602 and (916) 322-9601.

35. Can I get information in Spanish about lead testing of drinking water in schools?

En español: USEPA El plomo del agua potable en las escuelas y los centros de cuidado infantil: https://espanol.epa.gov/espanol/el-plomo-del-agua-potable-en-las-escuelas-y-los-centros-de-cuidado-infantil

Links to Resources Cited in this Document

Title	Author	Link
DDW Lead Sampling in Schools Website	DDW	http://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/leadsamplinginschools.shtml
AB 746 Text: Public Health: Potable Water Systems: Lead Testing: Schoolsites	CA LegInfo	http://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201720180AB746
3Ts for Reducing Lead in Drinking Water in Child Care Facilities	USEPA	http://nepis.epa.gov/Exe/ZyPDF.cgi?Dockey=20017JVA.txt
3Ts for Reducing Lead in Drinking Water in Schools	USEPA	https://www.epa.gov/sites/production/files/2015-09/documents/toolkit_leadschools_guide_3ts_leadschools.pdf
Assisting Schools and Child Care Facilities in Addressing Lead in Drinking Water	AWWA	http://www.awwa.org/portals/0/files/legreg/documents/assistingschoolslead2005.pdf
California School Directory	CDE	http://www.cde.ca.gov/re/sd/index.asp
Centers for Disease Control Healthy Schools	CDC	http://www.cdc.gov/healthyschools/nutrition/schoolnutrition.htm
Certified Environmental Laboratories in California	ELAP	http://www.waterboards.ca.gov/drinking_water/certlic/labs/index.shtml
Consumer Confidence Report Search Tool	USEPA	https://ofmpub.epa.gov/apex/safewater/f?p=136:102
DDW District Office Contact Information	DDW	http://www.waterboards.ca.gov/drinking_water/programs/documents/ddwem/DDWdistrictofficesmap.pdf
DDW Lead Sampling in Schools Sampling Protocol	DDW	http://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/leadsamplinginschools.shtml
DDW Supply Service Area Lookup Tool	DDW	http://www.waterboards.ca.gov/waterrights/water_issues/programs/drought/water_supplier.shtml
Home Water Testing	USEPA	https://www.epa.gov/sites/production/files/2015-11/documents/2005_09_14_faq_fs_homewatertesting.pdf
National Drinking Water Alliance	UC	http://www.drinkingwateralliance.org
Drinking Water for Schools Grant Program	DFA	https://www.waterboards.ca.gov/water_issues/programs/grants_loans/schools/
Financial Assistance Application Submittal Tool (FAAST)	DFA	http://faast.waterboards.ca.gov/
Water Quality Funding Sources for Schools	USEPA	https://www.epa.gov/dwreginfo/water-quality-funding-sources-schools-resource-k-12-schools-and-child-care-facilities

Yucaipa Valley Water District

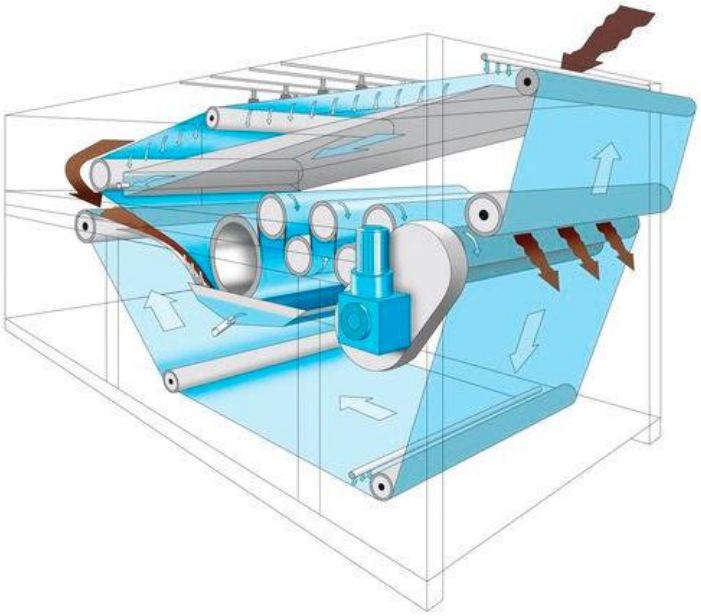
Workshop Memorandum 18-036

Date: January 30, 2018

From: Joseph Zoba, General Manager

Subject: Evaluation of Existing Belt Press Equipment at the Wochholz Regional Water Recycling Facility

The Wochholz Regional Water Recycling Facility uses belt filters to remove liquids from the biosolids collected throughout the sewer treatment process. The belt filter technology has been in use at the sewer treatment plant for over twenty years and have proven to be a simple and reliable technology that has been easy to maintain with a long life.



As this equipment has surpassed its useful life the District staff has noticed signs of metal fatigue and stress cracks in the equipment. Therefore, we have started to process to evaluate other available technology to plan for the replacement of the existing belt presses.

However, prior to initiating the construction of the alternative dewatering equipment to further reduce maintenance, energy and hauling costs, maintenance on the existing equipment will be needed to be completed.

December 12, 2017

Kevin Lee
Senior Plant Operator
Yucaipa Valley Water District
Ph. (909) 795-2491
Fax (909) 795-0402
Email: klee@yvwd.dst.ca.us

Subject: Ashbrook / Alfa Laval Field Service Inspection

Field Service
Alfa Laval Inc.
10470 Deer Trail Drive
Houston,Texas 77038
Tel: +1 281-449-0322
Fax: +1 281-449-1234
www.alfalaval.com

Kevin,
Please find our field service proposal based on **(1)** field service technician(s) traveling to your site for (3) three days onsite and (2) two days travel to inspect and make recommendations for any parts and maintenance that may be needed on your 2 - Winklepresses. The Inspection will consist of checking for anomalies on the following BFP components.

Frame:
- Coating, Anchors, Visible Damage

Rollers
- Coating, Visible Damage or Wear

Bearings
- Housings, Fittings, Seals, and Splash Guards

Feed Assembly
- Proper Distribution, Seals

Gravity Section
- Chicanes, Plows, Upper and Lower Grid Strips, Upper and Lower Sludge Restrainers, drain Trays and Piping

Control Panel
- Electrical Sensors

Hydraulic System
- Lines, Fittings, Leaks

Steering System
- Cylinders, Bellows

Drive Unit
- Vibration

Polymer System
- Injection Lines

Upper and Lower Wash boxes
- Visible Condition and Seals

Field service Labor & Expenses:

Total Labor and Expenses: $7500.00 (Includes hotel, food, car rental and mileage)

Parts $0.00

Grand Total = $7500.00

This estimate is based on the following:

- Access to hoisting equipment and operator if needed.
- Your staff will work with our technician for lock out / tag out and isolating systems
- A safe clean work environment.

This quote is valid for thirty (30) days and subject to Alfa Laval's standard terms and conditions.

COMMENTS AND EXCEPTIONS:

To schedule this service please provide a formal purchase order to danny.grant@alfalaval.com or melanie.arnett@alfalaval.com . The purchase order should include the following:

- Clear statement of scope of service
- Accurate billing and shipping site address
- Contact information of site contact, including phone number, email or fax
- Contact information of your accounts payable department
- Contact information for the buyer associated with this project

Thank you for considering Ashbrook/ Alfa Laval for your service needs. If you have any questions regarding the above estimate, please do not hesitate to contact me at (281) 985-4429

Best Regards,
Danny Grant

Capital Improvement Projects

Yucaipa Valley Water District

Yucaipa Valley Water District

Workshop Memorandum 18-037

Date: January 30, 2018

From: Mike Kostelecky, Operations Manager

Subject: Status Report on the Emergency Coating Repairs for Drinking Water Reservoir 17.1.1

On November 21, 2017, the Board of Directors authorized emergency coating repairs for drinking water reservoir R-17.1.1 with Superior Tank Solutions [Director Memorandum No. 17-108].

On Monday, January 29, 2018, Superior Tank Solutions are scheduled to begin repairs on Reservoir R-17.1.1. The repairs are anticipated to take two to three days and then they will begin the recoating process. Total completion time for the work is anticipated to be two weeks.

The customers in zone 17.1 are currently served from Reservoir R-17.1.2.

Upon completion of the repairs, water quality samples will be collected and analyzed prior to reconnecting this storage facility to the drinking water system.

Yucaipa Valley Water District

Workshop Memorandum 18-038

Date: January 30, 2018

From: Mike Kostelecky, Operations Manager
Matthew Porras, Management Analyst

Subject: Status Report on the Slope Repairs at Drinking Water Reservoir 15.1

On October 17, 2017, the Board of Directors authorized the District staff to contract with Rock Structures Construction Company to assist with the slope repair at the R-15.1 Reservoir site [Director Memorandum No. 17-094].

The purpose of this memorandum is to provide an update on the status of the repairs.

Yucaipa Valley Water District

Workshop Memorandum 18-039

Date: January 30, 2018

From: Joseph Zoba, General Manager

Subject: Status Report on the Replacement of Primary Clarifier Equipment at the Wochholz Regional Water Recycling Facility

The District staff has been preparing for the replacement of primary clarifier equipment at the Wochholz Regional Water Recycling Facility. The equipment is needed to replace the existing system currently in operation.

In order for the new equipment to be compatible with the existing system, the Board of Directors will need to approve sole source justification which will be included in the bid documents. A copy of the draft justification is attached for your review.

EXHIBIT __
YUCAIPA VALLEY WATER DISTRICT
SINGLE/SOLE SOURCE JUSTIFICATION

When a request is made for a non-competitive purchase and the specifications limit the bidding to one source and/or brand or trade name, this form shall be completed and authorized by the requesting Department Manager and approved by the General Manager or his/her designee.

Item:	Rectangular Chain and Flight Sludge Collection Equipment	Vendor/Brand Name:	Brentwood Industries/ Polychem Systems
Requisition No.	_____	Estimated Total Dollar Amount:	$160,000

Please check all applicable categories below and provide additional information where indicated:

1. ☐ The requested product has unique design and/or performance specifications or quality requirements that have not been found in similar products.

   Identify unique features and why they are <u>required</u> (not merely preferred).

   Have you contacted other suppliers to evaluate items/services with similar features and capabilities? If no, explain why not. If yes, list suppliers and explain why their products do not meet the department's needs.

2. ☒ The requested product is an integral repair part or accessory compatible with existing equipment, or is necessary for compatibility with existing components.

   List the quantity, manufacturer, brand, and model number of the existing equipment, and why the matching equipment is required.

Quantity:	Three (3)
Manufacturer:	Brentwood Industries
Brand:	Polychem Systems (formerly Polychem Division of The Budd Company)
Model:	N/A
Matching Required:	Proposed replacement equipment needs to be compatible with existing equipment components that will be re-used, as follows:

   The three (3) existing rectangular chain and flight sludge collection mechanisms (mechanisms) for the Primary Sedimentation Tanks at the Henry N. Wochholz Wastewater Treatment Facility (WTF) are proposed to be replaced due to normal wear from moving parts. All three (3) existing mechanisms are manufactured by The Budd Company, Polychem Division. Since installation of the original mechanisms, Polychem Division was acquired by Brentwood Industries. Brentwood Industries now manufactures the Polychem Division mechanisms under the brand name Polychem Systems. The Polychem Systems mechanisms currently manufactured by Brentwood Industries are identical to the existing Budd Company/Polychem Division mechanisms that are in operation at the WTF.

The existing mechanism components that are mounted to the existing tank concrete walls, including the idler stub shafts (6 per tank, 18 total), head shaft spindles (2 per tank, 6 total), and return track support wall bracket assemblies (34 per tank, 102 total), are in good condition and do not require replacement. In addition, it is desired to leave the existing wall-mounted components in place for re-use with the proposed equipment to avoid the potential for costly and timely structural repairs to the existing concrete walls in the event that the walls are damaged during removal and replacement of the components and associated wall anchors. The proposed replacement equipment will need to perfectly mate with the existing wall-mounted components proposed to be re-used to ensure proper and reliable operation of the mechanisms, including location of the existing idler stub shafts, location of the existing head shaft spindles, connection of the proposed idler sprockets and shaft bearings to the existing idler stub shafts, connection of the proposed head shaft to the existing head shaft spindles, and connection of the proposed return wear strips to the existing return tracks and support wall bracket assemblies. Requiring the mechanisms to be manufactured by Brentwood Industries/Polychem Systems will guarantee that the proposed equipment will perfectly mate with the existing wall-mounted components to be re-used.

3. ☐ The requested product is one with which I and/or my staff have specialized training and/or extensive expertise. Retraining would incur substantial cost in time and/or funding.

   Estimated cost for retraining.

4. ☐ I have standardized the requested product and the use of another brand/model would require considerable time and funding to evaluate.

   Identify reasons for standardizing.

5. ☐ Repair/maintenance service is available only from manufacturer or designated service representative.

6. ☐ Upgrade to or enhancement of existing software is available only from manufacturer.

7. ☐ Service proposed by vendor is unique; therefore, competitive bids are not available or applicable.

   Describe the unique qualifications, rights, licenses, etc. this vendor possesses and the distinctive service to be provided.

8. ☐ Competitive purchase is not feasible.

   Explain the reasons, circumstances or conditions that prevent this purchase from competitive solicitation.

9. ☐ This product is requested in order that a field test or experiment may be made to determine the product's suitability for future use.

10. ☐ This product is requested in order to respond to an emergency declared by the District.

11. ☐ This product is requested in order to respond to an emergency declared by the state, a state agency, or political subdivision of the state and the reasons for the finding of the emergency are contained in the public records of the District.

==========

I am aware of the YVWD policy for competitive purchasing and certify that the above information is accurate to the best of my knowledge.

Department Manager: _____ Date: _____

General Manager: _____ Date: _____

Yucaipa Valley Water District

Workshop Memorandum 18-040

Date: January 30, 2018

From: Matthew Porras, Management Analyst

Subject: Status Report on the Construction of a Replacement Public Works Building

On December 5, 2017, the Board of Directors approved Change Order No. 1 to the contract with Forbes Steel Buildings for the Erection of a replacement public works building at the District office [Director Memorandum No. 17-109].

The purpose of this memorandum is to provide an update on the status of the repairs.


GEHL

Yucaipa Valley Water District

Workshop Memorandum 18-041

Date: January 30, 2018

From: Kathryn Hallberg, Management Analyst
Matt Porras, Management Analyst

Subject: Status Report on the Construction of an 8-Inch Sewer Mainline in Yucaipa Boulevard

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The City of Yucaipa is preparing to proceed with the Yucaipa Boulevard Widening Project that involves the widening and reconstruction of Yucaipa Boulevard from 18th Street to Avenue E/Hampton Road. In conjunction with this project, the District is preparing to proceed with sewer construction consisting of approximately 2,400 linear feet of 8-inch main line in Yucaipa Boulevard between 18th Street and Avenue E/Hampton Road as well as Ridgecrest Drive between Yucaipa Boulevard and Sierra Linda Street.

The sewer main project is categorically exempt from environmental review in accordance with the California Environmental Quality Act Guidelines Section 15301(C).

NOTICE INVITING BIDS

RECEIPT OF PROPOSALS. Sealed proposals will be received only at Yucaipa Valley Water District (Owner), 12770 Second Street, Yucaipa, California, Telephone (909) 797-5117 until 11:00 a.m. on Tuesday, February 13, 2018, for the construction of the Work entitled:

YUCAIPA BOULEVARD SEWER -
HAMPTON ROAD TO 18TH STREET

DESCRIPTION OF WORK: The Work includes the provision of all equipment, labor, and materials necessary to complete the construction of the following, as specified and shown in the Construction Documents:

- Approximately 2,550 Linear Feet of 8" VCP sewer pipe, including manholes, laterals, and appurtenances.

The site of work is located in the City of Yucaipa, County of San Bernardino, California.

COMPLETION OF WORK. All work must be completed within 60 calendar days from Mobilization Date (currently anticipated to be March 12, 2018). Certain construction activities must be complete within specific calendar time frames and in a particular sequence. The Specification Special Conditions and Specification Section 01014, Work Restrictions clearly defines these calendar restrictions. The Contractor shall provide services necessary to complete all construction within these areas within the allowable calendar restrictions and in the sequence so defined.

OPENING OF PROPOSALS. Proposals will be publicly opened and read aloud at the place and time of receipt stated above.

OBTAINING CONTRACT DOCUMENTS. Bidders may examine the Contract Documents at the office of the Yucaipa Valley Water District (YVWD), 12770 Second Street, Yucaipa, California 92399. Copies of said Contract Documents (plans and specifications) are available online. Prospective bidders shall contact Chelsie Fogus at (909) 797-5118 and register the name of the company as an interested bidder for the project. The District will provide a URL for the prospective bidder to obtain the plans and specifications. No time extensions or other consideration will be given for non-receipt or other circumstance associated with the review or acquisition of bidding documents.

NOTICE TO BIDDERS REGARDING ELECTRONIC DOCUMENTS. The Contract Documents are provided in Adobe PDF format. Prospective bidders shall review the documents using the most current version of Adobe Reader, which may be downloaded for free at www.adobe.com. The District disclaims any use of any other PDF file compatible software or versions of Adobe Reader that are not the most current. In the event of a question or interpretation, the printed copy at the District's office shall take precedence.

PROPOSAL GUARANTEE. Each proposal shall be accompanied by a certified or cashier's check or bid bond in the amount of not less than ten (10) percent of the total amount named in the proposal. Said check or bond shall be made payable to the Owner and shall be given as a guarantee that the bidder, if awarded the work, will enter into a contract and will furnish the necessary insurance certificates, faithful performance bond, and labor and material bond, within ten (10) working days after receipt of the contract and/or Notice of Award from the Owner. Each of said

bonds to be in the amount of one-hundred (100) percent of the total bid price. In case of refusal or failure to enter into said contract, the check or bid bond, as the case may be, shall be forfeited to the Owner. If the bidder elects to furnish a bid bond as his proposal guarantee, he shall use the bid form found herein, or one conforming substantially to it in form.

PERIOD FOR AWARD. A period of sixty (60) calendar days from the time of bid opening to award may be required. No bidder may withdraw his proposal or proposal guarantee for this period. Bidders shall assume full responsibility for their bid price during this period and shall make certain that such delay does not restrict the proposal guarantee.

WAGE RATES. The Director of the Department of Industrial Relations has ascertained the general prevailing rate of per diem wages and the general rate of holiday and over-time work in the locality in which the work is to be performed for each craft or type of workmen needed to execute the Contract or Work as hereinafter set forth (see Labor Code 1770 et.seq.). Copies of rates are on file at the office of the Owner, which copies shall be made available to any interested party on request. The successful Bidder shall post a copy of such determinations at each job site. Attention is called to the fact that not less than the minimum salaries and all Contractors and Subcontractors shall pay prevailing wages on this Project.

PUBLIC WORKS CONTRACTOR REGISTRATION. This project is subject to compliance monitoring and enforcement by the Department of Industrial Relations. Pursuant to Labor Code sections 1725.5 and 1771.1, all contractors and subcontractors that wish to bid on, be listed in a bid proposal for, or enter into a contract to perform public work must be registered with the Department of Industrial Relations. No bid will be accepted nor any contract entered into without proof of Bidder's and subbidders' current Public Works Contractor Registration with the Department of Industrial Relations. If awarded the Contract, Bidder and subbidders of every tier shall maintain active Public Works Contractor Registration with the Department of Industrial Relations for the duration of the Project. It shall be Bidder's sole responsibility to evaluate and include in his bid the cost of complying with all labor compliance requirements.

Bidders shall be licensed under the classification of GENERAL ENGINEERING CONTRACTOR, CLASS A or PIPELINE CONTRACTOR (CLASS C-34) as of the date of submittal of the bid documents and shall maintain such license until final acceptance of the work.

The District cannot award a public works contract to any contractor or subcontractor whose company appears on the ineligible contractor's list published by the Labor Commission, per Labor Code, Section 1777.1.

PROJECT ADMINISTRATION. All questions relative to this project prior to the opening of bids shall be directed to:

Sinisa Saric
Krieger & Stewart, Incorporated
3602 University Avenue
Riverside, CA 92501
Telephone: (951) 684-6900
Fax: (951) 684-6986

Request for interpretations of the Contract Documents shall be submitted to the Owner not later than the fifth day preceding the date set for the receipt of proposals.

The Owner reserves the right to reject any or all Bids, to waive any informality or irregularity in any Bid and to make awards in the interest of the Owner, including award to other than the lowest bidder. The Owner reserves the right to have performed the entire Work defined by the Contract Documents or such parts of said Work as the Owner may elect, to combine various alternative bids and bid items within a Bid, and to accept or reject one or more separately scheduled bid items within a Bid. The Owner further reserves the right to withhold issuance of the Notice to Proceed, after execution of the Contract Agreement, for the period not to exceed sixty (60) days after the date the Contract Agreement is executed. No additional payment will be made to the successful Bidder on account of such withholding.

MANDATORY PRE-BID CONFERENCE. A **mandatory** pre-bid conference with representatives of prospective bidders will be held at the Yucaipa Valley Water District offices, 12770 Second Street, Yucaipa, California at **11:00 a.m.** on **Wednesday, January 31, 2018**. Prospective bidders are invited to present any relevant questions at the pre-bid conference, but insofar as practicable, questions should be prepared in written form and sent to Yucaipa Valley Water District so as to arrive not later than three (3) days prior to the mandatory pre-bid conference.

Yucaipa Valley Water District

Workshop Memorandum 18-042

Date: January 30, 2018

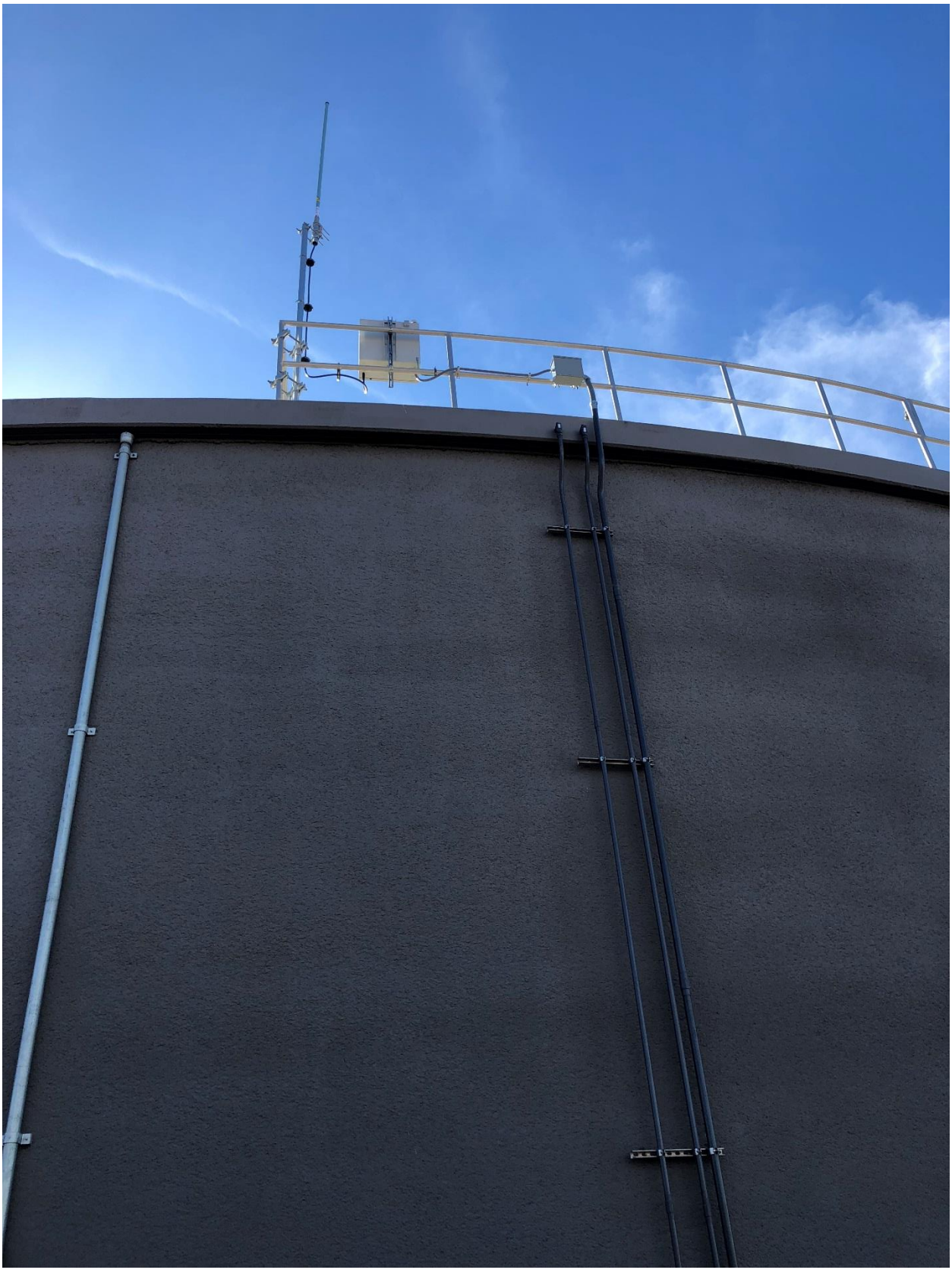
From: Matt Porras, Management Analyst

Subject: Status Report on the Implementation of the Sensus Advanced Metering Infrastructure Project

On September 5, 2017, the Board of Directors authorized the General Manager to execute a contract with Sensus for the implementation of an Advanced Metering Infrastructure (AMI) project [Director Memorandum No. 17-081].

The Automated Meter Infrastructure (AMI) system will be able to collect data from existing and future water meters. The major components of an Automated Meter Infrastructure include the smart meter with transceiver (Smart Point), the tower gateway base stations (TGB), and the regional network interface (RNI). Utilizing these components, water meter data is conveyed via radio frequency and cellular communication back to the database (RNI) where the information is used for billing and consumption reports. The advantages of transmitting the customer meter data with an Automated Meter Infrastructure are far reaching and include hourly meter reads, detailed water consumption analysis, leak detection and backflow alarms, as well as the elimination of manual meter reading.

The purpose of this workshop agenda item is to provide a status report on the implementation of the AMI.



Policy Issues

Yucaipa Valley Water District

Yucaipa Valley Water District

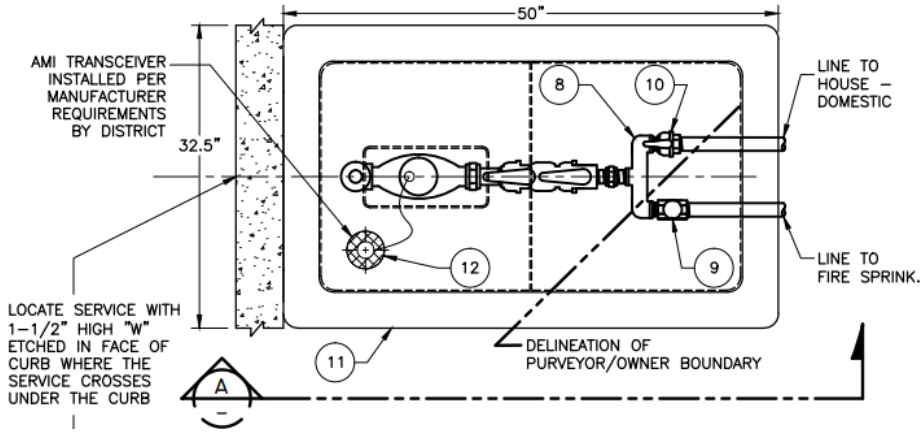
Workshop Memorandum 18-043

Date: January 30, 2018

From: Joseph Zoba, General Manager

Subject: Discussion Regarding Suggested Updates to the District's Standard Specifications Regarding the Use of 50" Water Meter Boxes

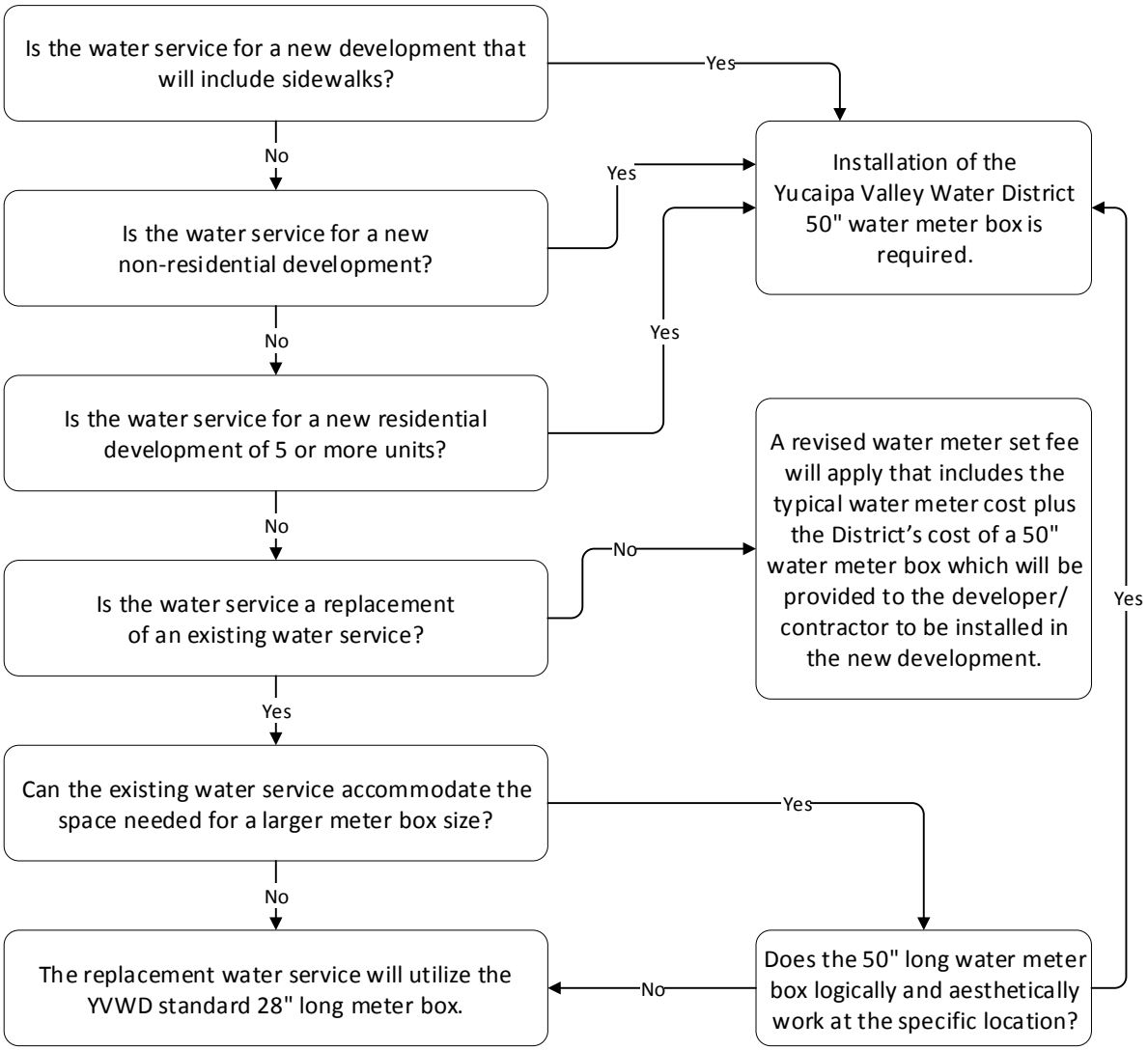
At the board workshop on December 12, 2017, the Board of Directors discussed the installation of the 50" long water meter boxes for new development. These larger water meter boxes are useful to protect the Advance Meter Infrastructure (AMI) equipment as well as provide ample space to meet the fire sprinkler requirements for new construction.



YVWD standard meter boxes for dual-plumbed communities.

YVWD meter box without a sidewalk for a large-lot, rural application.

To facilitate the discussion about the use of specific water meter box sizes, the following process evaluation was prepared for review and discussion at the board workshop.



Yucaipa Valley Water District

Workshop Memorandum 18-044

Date: January 30, 2018

From: Joseph Zoba, General Manager
Kathryn Hallberg, Management Analyst

Subject: Discussion Regarding the Annual Collection of Sewer Fees on Property Taxes for New Development and Delinquent Payments

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The District staff has started to draft a policy for the collection of sewer fees on new development that does not receive water service, and for delinquent payments received from existing property owners that do not receive water service from the District.

The following document will be reviewed and discussed at the board workshop.

DRAFT ORDINANCE NO. XX

AN ORDINANCE OF THE YUCAIPA VALLEY WATER DISTRICT ESTABLISHING COLLECTION OF SEWER SERVICE CHARGES ON THE TAX ROLL OF RIVERSIDE AND SAN BERNARDINO COUNTIES.

WHEREAS, pursuant to Health and Safety Code section 5471, the Board of Directors is authorized to prescribe, revise, and collect fees or other charges for services furnished by the District in connection with its sewage system; and

WHEREAS, pursuant to Health and Safety Code sections 4766 and 5473, the Board of Directors is authorized to elect to have the proposed sewer service charges collected on the tax roll in the same manner, by the same persons, and at the same time as, together with and not separately from, its general taxes; and

WHEREAS, the provisions of this ordinance shall apply to new developments receiving sewer services only from the District, these developments will be eligible for sewer service charges collected on the tax roll in their respective counties; and

WHEREAS, the provisions of this ordinance shall apply to existing properties receiving sewer services only from the District, and become delinquent such that a lien is required to collect the unpaid sewer service charges collected on the tax roll in their respective counties.

NOW, THEREFORE, BE IT ORDAINED by the Board of Directors of the Yucaipa Valley Water District as follows:

This Ordinance is to establish the methodology of sewer service charges required to be paid by a property owner with only sewer services provided from Yucaipa Valley Water District in connection with its sanitation treatment works and sewage collection system.

1. New Development. New development with sewer service charges added to the tax roll will automatically be enrolled on June 30th following the approval of a development agreement with the District. Any prior sewer service charges, plus the following 6 months of that calendar year (July to December) will be charged together with the next calendar year of sewer charges. Thereafter, each calendar year will be added to the tax roll. Any sewer charges added to the tax roll prior to the completion of the development will be reimbursed on a quarterly basis until such time as the development is complete.

2. Delinquent Accounts. Any delinquent accounts will be added to the tax roll, included all prior accumulated fees, charges, penalties and interest. Any property receiving only sewer service that is scheduled to be liened for delinquent payment will be automatically be enrolled annually for the collection of all future sewer charges.

3. Property Owner Request for Sewer Charge Collection on Property Taxes. Commencing with the effective date of this Ordinance, an owner of real property located within the District, which only receives sewer services from the District for residential use and which, at the property owner completion and approval of the application “Sewer Service Charges to Tax Roll”, will be eligible for sewer service charges collected on the tax roll in their respective counties. The application must be received and approved by June 30th, at that

time sewer service charges for the remaining 6 months of the current year and the upcoming 12 months will be added to the next calendar year tax roll.

4. General Provisions.

A. Regarding the sale of property within the current tax year the sewer service balance will be refunded to the property owner from the time the property was sold to the time the sewer service charges were paid through the tax roll.

B. If requested in writing by the new owner to continue sewer service charges on the tax roll, the remaining additional sewer service charges will be billed monthly until the next fiscal year and the tax roll for the next tax year can be added.

C. In the event the District determines that, due to billing or payment error, or to inequity in the amount billed, a property owner has underpaid annual sewer service charges payable to the District, within four (4) years after the date of mailing of the tax bill, may:
   i. Collect the amount of any deficiency directly on the County Tax Roll;
   ii. Offset the amount of any deficiency against any amounts that District determines is owing, by District, to the property owner, as a rebate or refund under this Ordinance; or
   iii. Submit, directly to the property owner, a bill for the amount of any deficiency, which shall be due and payable within thirty (30) days of the invoice date and which, if not paid, shall become a lien on said property.

Adopted and enacted this __ day of Month 2018.

YUCAIPA VALLEY WATER DISTRICT

By _____
JAY BOGH, President of the
Board of Directors

ATTESTED:

_____
JOSEPH B. ZOBA, General Manager
and Secretary of the Board

Yucaipa Valley Water District

Workshop Memorandum 18-045

Date: January 30, 2018

From: Joseph Zoba, General Manager

Subject: Discussion Regarding the Development of Policies Related to Accessory Dwelling Units

The District staff is in the process of developing a policy for Accessory Dwelling Units (ADUs). The general concepts will be presented and discussed at the board workshop to further develop the overall business process for the construction of ADUs in the District's service area.

NEXT CITY Inspiring Better Cities

California ADU Applications Skyrocket After Regulatory Reform

BY JOSH COHEN | JANUARY 4, 2018

Nonprofit urban design organization LA-Más designed this 1,000-square-foot ADU as part of a Los Angeles pilot to show "how an ADU can be both affordable and contextual." This ADU, in Los Angeles's historic Highland Park, is under construction. (Credit: LA-Más)

In 2016 and 2017, the California state legislature passed a slew of reforms reducing regulations on accessory dwelling units (ADU) such as basement apartments, garage conversions and backyard cottages. The reforms address ADU parking requirements, the permitting process, design requirements, fees and more. The state sees ADUs as a small part of a broad effort to address its housing crisis as demand outpaces housing supply and housing costs rocket ever higher.

It's too early to see the impacts of the ADU reforms on the ground, but there's already been a massive uptick in ADU permit applications in many California cities. In December, researchers at University of California Berkley's Terner Center for Housing Innovation released a report looking at ADU applications from 2015 through 2017 to understand how the regulatory changes are spurring ADU construction.

"I expected to see a jump, given the recent legislation, but I didn't expect to see such a dramatic jump," says report author David Garcia, Terner Center's policy director. "California basically legalized ADUs throughout the state on January 1, 2017. It turned out, there was quite a pent-up demand from homeowners."

Los Angeles saw the most dramatic jump, from 90 applications in 2015 and 80 in 2016 to a whopping 1,970 applications as of November 2017. Oakland, which had 33 and 99 applications in 2015 and 2016, jumped to 247 in 2017. Long Beach had zero applications in 2015 and just one in 2016. In 2017, it had 42. San Francisco has been experimenting with looser ADU regulations since 2013, but still saw applications increase from 384 in 2016 to 593 in 2017.

The legislation did several important things to encourage ADU construction. For one, it made ADUs legal in all California cities. It also established design standards that, when met, allow ADU development to receive "ministerial approval" instead of discretionary approval. In other words, ADU builders can apply for and receive construction permits over the counter at their city planning office, instead of seeking approval from a design commission or city council. When the proposed ADU is located within a half-mile of transit, is in a designated historic district, is attached to the existing unit and in several other instances, homeowners are not required to build an off-street parking space for the ADU. The 2016 legislation also creates a path for illegal ADUs to become official. In Los Angeles, for example, there may be as many as 50,000 unpermitted ADUs.

Garcia says it's two reforms—easier permitting and reduced parking requirements—that have had the biggest impact on the increased ADU applications. Time is money in housing construction, and complicated permitting delays the process. Similarly, the parking requirement adds construction cost and complexity to projects. For would-be ADU builders, that can be a dealbreaker, Garcia explains. "ADUs are not driven by big real estate companies. They're driven by homeowners."

Though ADUs are just a small part of the housing crisis solution, some housing advocates such as Stuart Cohen are excited to see an easier path to their construction. Cohen is executive director of TransForm, a nonprofit focused on transportation, housing and sustainability issue in California. He says, "I think they fit a very important niche [in the housing market]. ADUs are naturally on the lower end of the cost spectrum, so part of solving the affordability crisis is having more ADU construction."

Still, Cohen says it's important to remember, "there's no substitute for having a massive infusion of funding and construction of dedicated affordable housing. ADUs are a great complement to, not a replacement for that funding."

ADUs are rarely used as subsidized affordable housing. But because of their size, cost of construction and the fact that they're usually built by individual homeowners instead of development companies, ADUs are often rented at below market rate. Another Terner Center report from 2017 found that 58 percent of ADU owners rent their units at below-market rates.

According to a recent *New York Times* report on California housing, more than half the land in both San Francisco and Los Angeles is filled by neighborhoods in which 90 percent of the housing is single family homes. Most California cities have similarly prevalent single-family zoning. ADUs could greatly increase the housing stock in those zones.

Though there are fewer barriers to ADU construction now, Garcia and Cohen still want to see future reforms. They say size and setback requirements for detached ADUs need to be clarified. Because the rules are still "fuzzy," Cohen says it can still be difficult for builders to get that over-the-counter approval.

In some cities, detached ADUs are still subject to many of the same fees as a much larger, single family home, such as impact fees, utility fees and school district fees. Garcia says adjusting fees and building codes to account for the fact that ADUs are far smaller and often have fewer people living in them than typical single family homes will further bolster the ADU boom.

Finally, Garcia wants to see a change to owner-occupancy rules. Currently, California requires homeowners to live on site in the main dwelling in order to build an ADU. He points out that there are many single-family homes on the rental market already on lots that could also house an ADU. But under current law they cannot.

According to the Terner Center report, it takes 18 months or less to take the majority of ADUs from design to completion. Though some cities such as San Francisco that loosened ADU regulations before the state are already seeing the uptick in finished ADUs, the wave of new units spurred on by the change in state law should begin midway through 2018.

Josh Cohen is a freelance writer in Seattle. His work has also appeared in The Guardian, The Nation, Pacific Standard and Vice.

FOLLOW JOSH EMAIL JOSH

Source: https://nextcity.org/daily/entry/california-adu-applications-skyrocket-after-regulatory-reform

California Department of Housing and Community Development
Where Foundations Begin

Accessory Dwelling Unit Memorandum

December 2016

Table of Contents

Understanding Accessory Dwelling Units and Their Importance

Courtesy of Karen Chapple, UC Berkeley

California's housing production is not keeping pace with demand. In the last decade less than half of the needed housing was built. This lack of housing is impacting affordability with average housing costs in California exceeding the rest of the nation. As affordability becomes more problematic, people drive longer distances between a home that is affordable and where they work, or double up to share space, both of which reduces quality of life and produces negative environmental impacts.

Beyond traditional market-rate construction and government subsidized production and preservation there are alternative housing models and emerging trends that can contribute to addressing home supply and affordability in California. One such example gaining popularity are Accessory Dwelling Units (ADUs) (also referred to as second units, in-law units, or granny flats).

What is an ADU

An ADU is a secondary dwelling unit with complete independent living facilities for one or more persons and generally takes three forms:

- *Detached*: The unit is separated from the primary structure
- *Attached*: The unit is attached to the primary structure
- *Repurposed Existing Space*: Space (e.g., master bedroom) within the primary residence is converted into an independent living unit
- *Junior Accessory Dwelling Units*: Similar to repurposed space with various streamlining measures

ADUs offer benefits that address common development barriers such as affordability and environmental quality. ADUs are an affordable type of home to construct in California because they do not require paying for land, major new infrastructure, structured parking, or elevators. ADUs are built with cost-effective one- or two-story wood frame construction, which is significantly less costly than homes in new multifamily infill buildings. ADUs can provide as much living space as the new apartments and condominiums being built in new infill buildings and serve very well for couples, small families, friends, young people, and seniors.

ADUs are a different form of housing that can help California meet its diverse housing needs. Young professionals and students desire to live in areas close to jobs, amenities, and schools. The problem with high-opportunity areas is that space is limited. There is a shortage of affordable units and the units that are available can be out of reach for many people. To address the needs of individuals or small families seeking living quarters in high opportunity areas, homeowners can construct an ADU on their lot or convert an underutilized part of their home like a garage

into a junior ADU. This flexibility benefits not just people renting the space, but the homeowner as well, who can receive an extra monthly rent income.

ADUs give homeowners the flexibility to share independent living areas with family members and others, allowing seniors to age in place as they require more care and helping extended families to be near one another while maintaining privacy.

Relaxed regulations and the cost to build an ADU make it a very feasible affordable housing option. A UC Berkeley study noted that one unit of affordable housing in the Bay Area costs about $500,000 to develop whereas an ADU can range anywhere up to $200,000 on the expensive end in high housing cost areas.

ADUs are a critical form of infill-development that can be affordable and offer important housing choices within existing neighborhoods. ADUs are a powerful type of housing unit because they allow for different uses, and serve different populations ranging from students and young professionals to young families, people with disabilities and senior citizens. By design, ADUs are more affordable and can provide additional income to homeowners. Local governments can encourage the development of ADUs and improve access to jobs, education and services for many Californians.

Summary of Recent Changes to ADU Laws

Courtesy of Karen Chapple, UC Berkeley

The California legislature found and declared that, among other things, allowing accessory dwelling units (ADUs) in single family and multifamily zones provides additional rental housing and are an essential component in addressing housing needs in California. Over the years, ADU law has been revised to improve its effectiveness such as recent changes in 2003 to require ministerial approval. In 2017, changes to ADU laws will further reduce barriers, better streamline approval and expand capacity to accommodate the development of ADUs.

ADUs are a unique opportunity to address a variety of housing needs and provide affordable housing options for family members, friends, students, the elderly, in-home health care providers, the disabled, and others. Further, ADUs offer an opportunity to maximize and integrate housing choices within existing neighborhoods.

Within this context, the Department has prepared this guidance to assist local governments in encouraging the development of ADUs. Please see Attachment 1 for the complete statutory changes. The following is a brief summary of the changes for each bill.

SB 1069 (Wieckowski)

S.B. 1069 (Chapter 720, Statutes of 2016) made several changes to address barriers to the development of ADUs and expanded capacity for their development. The following is a brief summary of provisions that go into effect January 1, 2017.

Parking

SB 1069 reduces parking requirements to one space per bedroom or unit. The legislation authorizes off street parking to be tandem or in setback areas unless specific findings such as fire and life safety conditions are made. SB 1069 also prohibits parking requirements if the ADU meets any of the following:

- Is within a half mile from public transit.
- Is within an architecturally and historically significant historic district.
- Is part of an existing primary residence or an existing accessory structure.
- Is in an area where on-street parking permits are required, but not offered to the occupant of the ADU.
- Is located within one block of a car share area.

Fees

SB 1069 provides that ADUs shall not be considered new residential uses for the purpose of calculating utility connection fees or capacity charges, including water and sewer service. The bill prohibits a local agency from requiring an ADU applicant to install a new or separate utility connection or impose a related connection fee or capacity charge for ADUs that are contained within an existing residence or accessory structure. For attached and detached ADUs, this fee or charge must be proportionate to the burden of the unit on the water or sewer system and may not exceed the reasonable cost of providing the service.

Fire Requirements

SB 1069 provides that fire sprinklers shall not be required in an accessory unit if they are not required in the primary residence.

ADUs within Existing Space

Local governments must ministerially approve an application to create within a single family residential zone one ADU per single family lot if the unit is:

- contained within an existing residence or accessory structure.
- has independent exterior access from the existing residence.
- has side and rear setbacks that are sufficient for fire safety.

These provisions apply within all single family residential zones and ADUs within existing space must be allowed in all of these zones. No additional parking or other development standards can be applied except for building code requirements.

No Total Prohibition

SB 1069 prohibits a local government from adopting an ordinance that precludes ADUs.

AB 2299 (Bloom)

Generally, AB 2299 (Chapter 735, Statutes of 2016) requires a local government (beginning January 1, 2017) to ministerially approve ADUs if the unit complies with certain parking requirements, the maximum allowable size of an attached ADU, and setback requirements, as follows:

- The unit is not intended for sale separate from the primary residence and may be rented.
- The lot is zoned for single-family or multifamily use and contains an existing, single-family dwelling.
- The unit is either attached to an existing dwelling or located within the living area of the existing dwelling or detached and on the same lot.
- The increased floor area of the unit does not exceed 50% of the existing living area, with a maximum increase in floor area of 1,200 square feet.
- The total area of floorspace for a detached accessory dwelling unit does not exceed 1,200 square feet.
- No passageway can be required.
- No setback can be required from an existing garage that is converted to an ADU.

- Compliance with local building code requirements.
- Approval by the local health officer where private sewage disposal system is being used.

Impact on Existing Accessory Dwelling Unit Ordinances

AB 2299 provides that any existing ADU ordinance that does not meet the bill's requirements is null and void upon the date the bill becomes effective. In such cases, a jurisdiction must approve accessory dwelling units based on Government Code Section 65852.2 until the jurisdiction adopts a compliant ordinance.

AB 2406 (Thurmond)

AB 2406 (Chapter 755, Statutes of 2016) creates more flexibility for housing options by authorizing local governments to permit junior accessory dwelling units (JADU) through an ordinance. The bill defines JADUs to be a unit that cannot exceed 500 square feet and must be completely contained within the space of an existing residential structure. In addition, the bill requires specified components for a local JADU ordinance. Adoption of a JADU ordinance is optional.

Required Components

The ordinance authorized by AB 2406 must include the following requirements:

- Limit to one JADU per residential lot zoned for single-family residences with a single-family residence already built on the lot.
- The single-family residence in which the JADU is created or JADU must be occupied by the owner of the residence.
- The owner must record a deed restriction stating that the JADU cannot be sold separately from the single-family residence and restricting the JADU to the size limitations and other requirements of the JADU ordinance.
- The JADU must be located entirely within the existing structure of the single-family residence and JADU have its own separate entrance.
- The JADU must include an efficiency kitchen which includes a sink, cooking appliance, counter surface, and storage cabinets that meet minimum building code standards. No gas or 220V circuits are allowed.
- The JADU may share a bath with the primary residence or have its own bath.

Prohibited Components

This bill prohibits a local JADU ordinance from requiring:

- Additional parking as a condition to grant a permit.
- Applying additional water, sewer and power connection fees. No connections are needed as these utilities have already been accounted for in the original permit for the home.

Fire Safety Requirements

AB 2406 clarifies that a JADU is to be considered part of the single-family residence for the purposes of fire and life protections ordinances and regulations, such as sprinklers and smoke alarms. The bill also requires life and protection ordinances that affect single-family residences to be applied uniformly to all single-family residences, regardless of the presence of a JADU.

JADUs and the RHNA

As part of the housing element portion of their general plan, local governments are required to identify sites with appropriate zoning that will accommodate projected housing needs in their regional housing need allocation (RHNA) and report on their progress pursuant to Government Code Section 65400. To credit a JADU toward the RHNA, HCD and the Department of Finance (DOF) utilize the census definition of a housing unit which is fairly flexible. Local government count units as part of reporting to DOF. JADUs meet these definitions and this bill would allow cities and counties to earn credit toward meeting their RHNA allocations by permitting residents to create less costly accessory units. See additional discussion under JADU frequently asked questions.

Frequently Asked Questions: Accessory Dwelling Units

Should an Ordinance Encourage the Development of ADUs?

Yes, ADU law and recent changes intend to address barriers, streamline approval and expand potential capacity for ADUs recognizing their unique importance in addressing California's housing needs. The preparation, adoption, amendment and implementation of local ADU ordinances must be carried out consistent with Government Code Section 65852.150:

(a) The Legislature finds and declares all of the following:

(1) Accessory dwelling units are a valuable form of housing in California.

(2) Accessory dwelling units provide housing for family members, students, the elderly, in-home health care providers, the disabled, and others, at below market prices within existing neighborhoods.

(3) Homeowners who create accessory dwelling units benefit from added income, and an increased sense of security.

(4) Allowing accessory dwelling units in single-family or multifamily residential zones provides additional rental housing stock in California.

(5) California faces a severe housing crisis.

(6) The state is falling far short of meeting current and future housing demand with serious consequences for the state's economy, our ability to build green infill consistent with state greenhouse gas reduction goals, and the well-being of our citizens, particularly lower and middle-income earners.

(7) Accessory dwelling units offer lower cost housing to meet the needs of existing and future residents within existing neighborhoods, while respecting architectural character.

(8) Accessory dwelling units are, therefore, an essential component of California's housing supply.

(b) It is the intent of the Legislature that an accessory dwelling unit ordinance adopted by a local agency has the effect of providing for the creation of accessory dwelling units and that provisions in this ordinance relating to matters including unit size, parking, fees, and other requirements, are not so arbitrary, excessive, or burdensome so as to unreasonably restrict the ability of homeowners to create accessory dwelling units in zones in which they are authorized by local ordinance.

Are Existing Ordinances Null and Void?


Courtesy of Karen Chapple, UC Berkeley

Yes, any local ordinance adopted prior to January 1, 2017 that is not in compliance with the changes to ADU law will be null and void. Until an ordinance is adopted, local governments must apply "state standards" (See Attachment 4 for State Standards checklist). In the absence of a local ordinance complying with ADU law, local review must be limited to "state standards" and cannot include additional requirements such as those in an existing ordinance.

Are Local Governments Required to Adopt an Ordinance?

No, a local government **is not required** to adopt an ordinance. ADUs built within a jurisdiction that lacks a local ordinance must comply with state standards (See Attachment 4). Adopting an ordinance can occur through different forms such as a new ordinance, amendment to an existing ordinance, separate section or special regulations within the zoning code or integrated into the zoning code by district. However, the ordinance should be established legislatively through a public process and meeting and not through internal administrative actions such as memos or zoning interpretations.

Can a Local Government Preclude ADUs?

No local government cannot preclude ADUs.

Can a Local Government Apply Development Standards and Designate Areas?

Yes, local governments may apply development standards and may designate where ADUs are permitted (GC Sections 65852.2(a)(1)(A) and (B)). However, ADUs within existing structures must be allowed in all single family residential zones.

For ADUs that require an addition or a new accessory structure, development standards such as parking, height, lot coverage, lot size and maximum unit size can be established with certain limitations. ADUs can be avoided or allowed through an ancillary and separate discretionary process in areas with health and safety risks such as high fire hazard areas. However, standards and allowable areas must not be designed or applied in a manner that burdens the development of ADUs and should maximize the potential for ADU development. Designating areas where ADUs are allowed should be approached primarily on health and safety issues including water, sewer, traffic flow and public safety. Utilizing approaches such as restrictive overlays, limiting ADUs to larger lot sizes, burdensome lot coverage and setbacks and particularly concentration or distance requirements (e.g., no less than 500 feet between ADUs) may unreasonably restrict the ability of the homeowners to create ADUs, contrary to the intent of the Legislature.

Requiring large minimum lot sizes and not allowing smaller lot sizes for ADUs can severely restrict their potential development. For example, large minimum lot sizes for ADUs may constrict capacity throughout most of the community. Minimum lot sizes cannot be applied to ADUs within existing structures and could be considered relative to health and safety concerns such as areas on septic systems. While larger lot sizes might be targeted for various reasons such as ease of compatibility, many tools are available (e.g., maximum unit size, maximum lot coverage, minimum setbacks, architectural and landscape requirements) that allows ADUs to fit well within the built environment.

Can a Local Government Adopt Less Restrictive Requirements?

Yes, ADU law is a minimum requirement and its purpose is to encourage the development of ADUs. Local governments can take a variety of actions beyond the statute that promote ADUs such as reductions in fees, less restrictive parking or unit sizes or amending general plan policies.

Santa Cruz has confronted a shortage of housing for many years, considering its growth in population from incoming students at UC Santa Cruz and its proximity to Silicon Valley. The city promoted the development of ADUs as critical infill-housing opportunity through various strategies such as creating a manual to promote ADUs. The manual showcases prototypes of ADUs and outlines city zoning laws and requirements to make it more convenient for homeowners to get information. The City found that homeowners will take time to develop an ADU only if information is easy to find, the process is simple, and there is sufficient guidance on what options they have in regards to design and planning.

The city set the minimum lot size requirement at 4,500 sq. ft. to develop an ADU in order to encourage more homes to build an ADU. This allowed for a majority of single-family homes in Santa Cruz to develop an ADU. For more information, see http://www.cityofsantacruz.com/departments/planning-and-community-development/programs/accessory-dwelling-unit-development-program.

Can Local Governments Establish Minimum and Maximum Unit Sizes?

Yes, a local government may establish minimum and maximum unit sizes (GC Section 65852.2(c). However, like all development standards (e.g., height, lot coverage, lot size), unit sizes should not burden the development of ADUs. For example, setting a minimum unit size that substantially increases costs or a maximum unit size that unreasonably restricts opportunities would be inconsistent with the intent of the statute. Typical maximum unit sizes range from 800 square feet to 1,200 square feet. Minimum unit size must at least allow for an efficiency unit as defined in Health and Safety Code Section 17958.1.

ADU law requires local government approval if meeting various requirements (GC Section 65852.2(a)(1)(D)), including unit size requirements. Specifically, attached ADUs shall not exceed 50 percent of the existing living area or 1,200 square feet and detached ADUs shall not exceed 1,200 square feet. A local government may choose a maximum unit size less than 1,200 square feet as long as the requirement is not burdensome on the creation of ADUs.

Can ADUs Exceed General Plan and Zoning Densities?

An ADU is an accessory use for the purposes of calculating allowable density under the general plan and zoning. For example, if a zoning district allows one unit per 7,500 square feet, then an ADU would not be counted as an additional unit. Minimum lot sizes must not be doubled (e.g., 15,000 square feet) to account for an ADU. Further, local governments could elect to allow more than one ADU on a lot.

New developments can increase the total number of affordable units in their project plans by integrating ADUs. Aside from increasing the total number of affordable units, integrating ADUs also promotes housing choices within a development. One such example is the Cannery project in Davis, CA. The Cannery project includes 547 residential units with up to 60 integrated ADUs. ADUs within the Cannery blend in with surrounding architecture, maintaining compatibility with neighborhoods and enhancing community character. ADUs are constructed at the same time as the primary single-family unit to ensure the affordable rental unit is available in the housing supply concurrent with the availability of market rate housing.

How Are Fees Charged to ADUs?

All impact fees, including water, sewer, park and traffic fees must be charged in accordance with the Fee Mitigation Act, which requires fees to be proportional to the actual impact (e.g., significantly less than a single family home).

Fees on ADUs, must proportionately account for impact on services based on the size of the ADU or number of plumbing fixtures. For example, a 700 square foot new ADU with one bathroom that results in less landscaping should be charged much less than a 2,000 square foot home with three bathrooms and an entirely new landscaped parcel which must be irrigated. Fees for ADUs should be significantly less and should account for a lesser impact such as lower sewer or traffic impacts.

What Utility Fee Requirements Apply to ADUs?

Cities and counties cannot consider ADUs as new residential uses when calculating connection fees and capacity charges.

Where ADUs are being created within an existing structure (primary or accessory), the city or county cannot require a new or separate utility connections for the ADU and cannot charge any connection fee or capacity charge.

For other ADUs, a local agency may require separate utility connections between the primary dwelling and the ADU, but any connection fee or capacity charge must be proportionate to the impact of the ADU based on either its size or the number of plumbing fixtures.

What Utility Fee Requirements Apply to Non-City and County Service Districts?

All local agencies must charge impact fees in accordance with the Mitigation Fee Act (commencing with Government Code Section 66000), including in particular Section 66013, which requires the connection fees and capacity charges to be proportionate to the burden posed by the ADU. Special districts and non-city and county service districts must account for the lesser impact related to an ADU and should base fees on unit size or number of plumbing fixtures. Providers should consider a proportionate or sliding scale fee structures that address the smaller size and lesser impact of ADUs (e.g., fees per square foot or fees per fixture). Fee waivers or deferrals could be considered to better promote the development of ADUs.

Do Utility Fee Requirements Apply to ADUs within Existing Space?

No, where ADUs are being created within an existing structure (primary or accessory), new or separate utility connections and fees (connection and capacity) must not be required.

Does “Public Transit” Include within One-half Mile of a Bus Stop and Train Station?

Yes, “public transit” may include a bus stop, train station and paratransit if appropriate for the applicant. “Public transit” includes areas where transit is available and can be considered regardless of tighter headways (e.g., 15 minute intervals). Local governments could consider a broader definition of “public transit” such as distance to a bus route.

Can Parking Be Required Where a Car Share Is Available?

No, ADU law does not allow parking to be required when there is a car share located within a block of the ADU. A car share location includes a designated pick up and drop off location. Local governments can measure a block from a pick up and drop off location and can decide to adopt broader distance requirements such as two to three blocks.

Is Off Street Parking Permitted in Setback Areas or through Tandem Parking?

Yes, ADU law deliberately reduces parking requirements. Local governments may make specific findings that tandem parking and parking in setbacks are infeasible based on specific site, regional topographical or fire and life safety conditions or that tandem parking or parking in setbacks is not permitted anywhere else in the jurisdiction. However, these determinations should be applied in a manner that does not unnecessarily restrict the creation of ADUs.

Local governments must provide reasonable accommodation to persons with disabilities to promote equal access housing and comply with fair housing laws and housing element law. The reasonable accommodation procedure must provide exception to zoning and land use regulations which includes an ADU ordinance. Potential exceptions are not limited and may include development standards such as setbacks and parking requirements and permitted uses that further the housing opportunities of individuals with disabilities.

Is Covered Parking Required?

No, off street parking must be permitted through tandem parking on an existing driveway, unless specific findings are made.

Is Replacement Parking Required When the Parking Area for the Primary Structure Is Used for an ADU?

Yes, but only if the local government requires off-street parking to be replaced in which case flexible arrangements such as tandem, including existing driveways and uncovered parking are allowed. Local governments have an opportunity to be flexible and promote ADUs that are being created on existing parking space and can consider not requiring replacement parking.

Are Setbacks Required When an Existing Garage Is Converted to an ADU?

No, setbacks must not be required when a garage is converted or when existing space (e.g., game room or office) above a garage is converted. Rear and side yard setbacks of no more than five feet are required when new space is added above a garage for an ADU. In this case, the setbacks only apply to the added space above the garage, not the existing garage and the ADU can be constructed wholly or partly above the garage, including extending beyond the garage walls.

Also, when a garage, carport or covered parking structure is demolished or where the parking area ceases to exist so an ADU can be created, the replacement parking must be allowed in any "configuration" on the lot, "…including, but not limited to, covered spaces, uncovered spaces, or tandem spaces, or…." Configuration can be applied in a flexible manner to not burden the creation of ADUs. For example, spatial configurations like tandem on existing driveways in setback areas or not requiring excessive distances from the street would be appropriate.

Are ADUs Permitted in Existing Residence or Accessory Space?

Yes, ADUs located in single family residential zones and existing space of a single family residence or accessory structure must be approved regardless of zoning standards (Section 65852.2(a)(1)(B)) for ADUs, including locational requirements (Section 65852.2(a)(1)(A)), subject to usual non-appealable ministerial building permit requirements. For example, ADUs in existing space does not necessitate a zoning clearance and must not be limited to certain zones or areas or subject to height, lot size, lot coverage, unit size, architectural review, landscape or parking requirements. Simply, where a single family residence or accessory structure exists in any single family residential zone, so can an ADU. The purpose is to streamline and expand potential for ADUs where impact is minimal and the existing footprint is not being increased.

Zoning requirements are not a basis for denying a ministerial building permit for an ADU, including non-conforming lots or structures. The phrase, "within the existing space" includes areas within a primary home or within an attached or detached accessory structure such as a garage, a carriage house, a pool house, a rear yard studio and similar enclosed structures.

Are Owner Occupants Required?

No, however, a local government can require an applicant to be an owner occupant. The owner may reside in the primary or accessory structure. Local governments can also require the ADU to not be used for short term rentals (terms lesser than 30 days). Both owner occupant use and prohibition on short term rentals can be required on the same property. Local agencies which impose this requirement should require recordation of a deed restriction regarding owner occupancy to comply with GC Section 27281.5

Are Fire Sprinklers Required for ADUs?

Depends, ADUs shall not be required to provide fire sprinklers if they are not or were not required of the primary residence. However, sprinklers can be required for an ADU if required in the primary structure. For example, if the primary residence has sprinklers as a result of an existing ordinance, then sprinklers could be required in the ADU. Alternative methods for fire protection could be provided.

If the ADU is detached from the main structure or new space above a detached garage, applicants can be encouraged to contact the local fire jurisdiction for information regarding fire sprinklers. Since ADUs are a unique opportunity to address a variety of housing needs and provide affordable housing options for family members, students, the elderly, in-home health care providers, the disabled, and others, the fire departments want to ensure the safety of these populations as well as the safety of those living in the primary structure. Fire Departments can help educate property owners on the benefits of sprinklers, potential resources and how they can be installed cost effectively. For example, insurance rates are typically 5 to 10 percent lower where the unit is sprinklered. Finally, other methods exist to provide additional fire protection. Some options may include additional exits, emergency escape and rescue openings, 1 hour or greater fire-rated assemblies, roofing materials and setbacks from property lines or other structures.

Is Manufactured Housing Permitted as an ADU?

Yes, an ADU is any residential dwelling unit with independent facilities and permanent provisions for living, sleeping, eating, cooking and sanitation. An ADU includes an efficiency unit (Health and Safety Code Section 17958.1) and a manufactured home (Health and Safety Code Section 18007).

Health and Safety Code Section 18007(a) **"Manufactured home,"** for the purposes of this part, means a structure that was constructed on or after June 15, 1976, is transportable in one or more sections, is eight body feet or more in width, or 40 body feet or more in length, in the traveling mode, or, when erected on site, is 320 or more square feet, is built on a permanent chassis and designed to be used as a single-family dwelling with or without a foundation when connected to the required utilities, and includes the plumbing, heating, air conditioning, and electrical systems contained therein. "Manufactured home" includes any structure that meets all the requirements of this paragraph except the size requirements and with respect to which the manufacturer voluntarily files a certification and complies with the standards established under the National Manufactured Housing Construction and Safety Act of 1974 (42 U.S.C., Sec. 5401, and following).

Can an Efficiency Unit Be Smaller than 220 Square Feet?

Yes, an efficiency unit for occupancy by no more than two persons, by statute (Health and Safety Code Section 17958.1), can have a minimum floor area of 150 square feet and can also have partial kitchen or bathroom facilities, as specified by ordinance or can have the same meaning specified in the Uniform Building Code, referenced in the Title 24 of the California Code of Regulations.

The 2015 International Residential Code adopted by reference into the 2016 California Residential Code (CRC) allows residential dwelling units to be built considerably smaller than an Efficiency Dwelling Unit (EDU). Prior to this code change an EDU was required to have a minimum floor area not less than 220 sq. ft unless modified by local ordinance in accordance with the California Health and Safety Code which could allow an EDU to be built no less than 150 sq. ft. For more information, see HCD's Information Bulletin at http://www.hcd.ca.gov/codes/manufactured-housing/docs/ib2016-06.pdf .

Does ADU Law Apply to Charter Cities and Counties?

Yes. ADU law explicitly applies to "local agencies" which are defined as a city, county, or city and county whether general law or chartered (Section 65852.2(i)(2)).

Do ADUs Count toward the Regional Housing Need Allocation?

Yes, local governments may report ADUs as progress toward Regional Housing Need Allocation pursuant to Government Code Section 65400 based on the actual or anticipated affordability. See below frequently asked questions for JADUs for additional discussion.

Must ADU Ordinances Be Submitted to the Department of Housing and Community Development?

Yes, ADU ordinances must be submitted to the State Department of Housing and Community Development within 60 days after adoption, including amendments to existing ordinances. However, upon submittal, the ordinance is not subject to a Department review and findings process similar to housing element law (GC Section 65585)

Frequently Asked Questions: Junior Accessory Dwelling Units

Is There a Difference between ADU and JADU?

Courtesy of Lilypad Homes and Photo Credit to Jocelyn Knight

Yes, AB 2406 added Government Code Section 65852.22, providing a unique option for Junior ADUs. The bill allows local governments to adopt ordinances for JADUs, which are no more than 500 square feet and are typically bedrooms in a single-family home that have an entrance into the unit from the main home and an entrance to the outside from the JADU. The JADU must have cooking facilities, including a sink, but is not required to have a private bathroom. Current law does not prohibit local governments from adopting an ordinance for a JADU, and this bill explicitly allows, not requires, a local agency to do so. If the ordinance requires a permit, the local agency shall not require additional parking or charge a fee for a water or sewer connection as a condition of granting a permit for a JADU. For more information, see below.

ADUs and JADUs

REQUIREMENTS	ADU	JADU
Maximum Unit Size	Yes, generally up to 1,200 Square Feet or 50% of living area	Yes, 500 Square Foot Maximum
Kitchen	Yes	Yes
Bathroom	Yes	No, Common Sanitation is Allowed
Separate Entrance	Depends	Yes
Parking	Depends, Parking May Be Eliminated and Cannot Be Required Under Specified Conditions	No, Parking Cannot Be Required
Owner Occupancy	Depends, Owner Occupancy *May* Be Required	Yes, Owner Occupancy Is Required
Ministerial Approval Process	Yes	Yes
Prohibition on Sale of ADU	Yes	Yes

Why Adopt a JADU Ordinance?

JADUs offer the simplest and most affordable housing option. They bridge the gap between a roommate and a tenant by offering an interior connection between the unit and main living area. The doors between the two spaces can be secured from both sides, allowing them to be easily privatized or incorporated back into the main living area. These units share central systems, require no fire separation, and have a basic kitchen, utilizing small plug in appliances, reducing development costs. This provides flexibility and an insurance policy in homes in case additional income or housing is needed. They present no additional stress on utility services or infrastructure because they simply repurpose spare bedrooms that do not expand the homes planned occupancy. No additional address is required on the property because an interior connection remains. By adopting a JADU ordinance, local governments can offer homeowners additional options to take advantage of underutilized space and better address its housing needs.

Can JADUs Count towards the RHNA?

Yes, as part of the housing element portion of their general plan, local governments are required to identify sites with appropriate zoning that will accommodate projected housing needs in their regional housing need allocation (RHNA) and report on their progress pursuant to Government Code Section 65400. To credit a unit toward the RHNA, HCD and the Department of Finance (DOF) utilize the census definition of a housing unit. Generally, a JADU, including with shared sanitation facilities, that meets the census definition and is reported to the Department of Finance as part of the DOF annual City and County Housing Unit Change Survey can be credited toward the RHNA based on the appropriate income level. Local governments can track actual or anticipated affordability to assure the JADU is counted to the appropriate income category. For example, some local governments request and track information such as anticipated affordability as part of the building permit application.

> A housing unit is a house, an apartment, a mobile home or trailer, a group of rooms, or a single room that is occupied, or, if vacant, is intended for occupancy as separate living quarters. Separate living quarters are those in which the occupants live separately from any other persons in the building and which have direct access from the outside of the building or through a common hall.

Can the JADU Be Sold Independent of the Primary Dwelling?

No, the JADU cannot be sold separate from the primary dwelling.

Are JADUs Subject to Connection and Capacity Fees?

No, JADUs shall not be considered a separate or new dwelling unit for the purposes of fees and as a result should not be charged a fee for providing water, sewer or power, including a connection fee. These requirements apply to all providers of water, sewer and power, including non-municipal providers.

Local governments may adopt requirements for fees related to parking, other service or connection for water, sewer or power, however, these requirements must be uniform for all single family residences and JADUs are not considered a new or separate unit.

Are There Requirements for Fire Separation and Fire Sprinklers?

Yes, a local government may adopt requirements related to fire and life protection requirements. However, a JADU shall not be considered a new or separate unit. In other words, if the primary unit is not subject to fire or life protection requirements, then the JADU must be treated the same.

Resources

Courtesy of Karen Chapple, UC Berkeley

Attachment 1: Statutory Changes (Strikeout/Underline)

Government Code Section 65852.2

(a) (1) ~~Any~~ *A* local agency may, by ordinance, provide for the creation of ~~second~~ *accessory dwelling* units in single-family and multifamily residential zones. The ordinance ~~may~~ *shall* do ~~any~~ *all* of the following:

(A) Designate areas within the jurisdiction of the local agency where ~~second~~ *accessory dwelling* units may be permitted. The designation of areas may be based on criteria, that may include, but are not limited to, the adequacy of water and sewer services and the impact of ~~second~~ *accessory dwelling* units on traffic ~~flow.~~ *flow and public safety*.

(B) *(i)* Impose standards on ~~second~~ *accessory dwelling* units that include, but are not limited to, parking, height, setback, lot coverage, *landscape,* architectural review, maximum size of a unit, and standards that prevent adverse impacts on any real property that is listed in the California Register of Historic Places.

(ii) Notwithstanding clause (i), a local agency may reduce or eliminate parking requirements for any accessory dwelling unit located within its jurisdiction.

(C) Provide that ~~second~~ *accessory dwelling* units do not exceed the allowable density for the lot upon which the ~~second~~ *accessory dwelling* unit is located, and that ~~second~~ *accessory dwelling* units are a residential use that is consistent with the existing general plan and zoning designation for the lot.

(D) Require the accessory dwelling units to comply with all of the following:

(i) The unit is not intended for sale separate from the primary residence and may be rented.

(ii) The lot is zoned for single-family or multifamily use and contains an existing, single-family dwelling.

(iii) The accessory dwelling unit is either attached to the existing dwelling or located within the living area of the existing dwelling or detached from the existing dwelling and located on the same lot as the existing dwelling.

(iv) The increased floor area of an attached accessory dwelling unit shall not exceed 50 percent of the existing living area, with a maximum increase in floor area of 1,200 square feet.

(v) The total area of floorspace for a detached accessory dwelling unit shall not exceed 1,200 square feet.

(vi) No passageway shall be required in conjunction with the construction of an accessory dwelling unit.

(vii) No setback shall be required for an existing garage that is converted to a accessory dwelling unit, and a setback of no more than five feet from the side and rear lot lines shall be required for an accessory dwelling unit that is constructed above a garage.

(viii) Local building code requirements that apply to detached dwellings, as appropriate.

(ix) Approval by the local health officer where a private sewage disposal system is being used, if required.

(x) (I) Parking requirements for accessory dwelling units shall not exceed one parking space per unit or per bedroom. These spaces may be provided as tandem parking on an existing driveway.

(II) Offstreet parking shall be permitted in setback areas in locations determined by the local agency or through tandem parking, unless specific findings are made that parking in setback areas or tandem parking is not feasible based upon specific site or regional topographical or fire and life safety conditions, or that it is not permitted anywhere else in the jurisdiction.

(III) This clause shall not apply to a unit that is described in subdivision (d).

(xi) When a garage, carport, or covered parking structure is demolished in conjunction with the construction of an accessory dwelling unit, and the local agency requires that those offstreet parking spaces be replaced, the replacement spaces may be located in any configuration on the same lot as the accessory dwelling unit, including, but not limited to, as covered spaces, uncovered spaces, or tandem spaces, or by the use of mechanical automobile parking lifts. This clause shall not apply to a unit that is described in subdivision (d).

(2) The ordinance shall not be considered in the application of any local ordinance, policy, or program to limit residential growth.

(3) When a local agency receives its first application on or after July 1, 2003, for a permit pursuant to this subdivision, the application shall be considered ministerially without discretionary review or a hearing, notwithstanding Section 65901 or 65906 or any local ordinance regulating the issuance of variances or special use ~~permits. Nothing in this paragraph may be construed to require a local government to adopt or amend an ordinance for the creation of ADUs.~~ *permits, within 120 days after receiving the application.* A local agency may charge a fee to reimburse it for costs that it incurs as a result of amendments to this paragraph enacted during the 2001–02 Regular Session of the Legislature, including the costs of adopting or amending any ordinance that provides for the creation of ~~ADUs.~~ *an accessory dwelling unit.*

~~(b)~~ *(4)* ~~(1)~~ *An* ~~When~~ *existing ordinance governing the creation of an accessory dwelling unit by* a local agency ~~which has not adopted an ordinance governing ADUs in accordance with subdivision (a) or (c) receives its first application on or after July 1, 1983, for a permit pursuant to this subdivision, the local agency shall accept the application and approve or disapprove the application ministerially without discretionary review pursuant to this subdivision unless it~~ *or an accessory dwelling ordinance adopted by a local agency subsequent to the effective date of the act adding this paragraph shall provide an approval process that includes only ministerial provisions for the approval of accessory dwelling units and shall not include any discretionary processes, provisions, or requirements for those units, except as otherwise provided in this subdivision. In the event that a local agency has an existing accessory dwelling unit ordinance that fails to meet the requirements of this subdivision, that ordinance shall be null and void upon the effective date of the act adding this paragraph and that agency shall thereafter apply the standards established in this subdivision for the approval of accessory dwelling units, unless and until the agency* adopts an ordinance ~~in accordance with subdivision (a) or (c) within 120 days after receiving the application. Notwithstanding Section 65901 or 65906, every local agency shall grant a variance or special use permit for the creation of a ADU if the ADU complies with all of the following:~~ *that complies with this section.*

~~(A) The unit is not intended for sale and may be rented.~~

~~(B) The lot is zoned for single-family or multifamily use.~~

~~(C) The lot contains an existing single-family dwelling.~~

~~(D) The ADU is either attached to the existing dwelling and located within the living area of the existing dwelling or detached from the existing dwelling and located on the same lot as the existing dwelling.~~

~~(E) The increased floor area of an attached ADU shall not exceed 30 percent of the existing living area.~~

~~(F) The total area of floorspace for a detached ADU shall not exceed 1,200 square feet.~~

~~(G) Requirements relating to height, setback, lot coverage, architectural review, site plan review, fees, charges, and other zoning requirements generally applicable to residential construction in the zone in which the property is located.~~

~~(H) Local building code requirements which apply to detached dwellings, as appropriate.~~

~~(I) Approval by the local health officer where a private sewage disposal system is being used, if required.~~

~~(2)~~ *(5)* No other local ordinance, policy, or regulation shall be the basis for the denial of a building permit or a use permit under this subdivision.

~~(3)~~ *(6)* This subdivision establishes the maximum standards that local agencies shall use to evaluate ~~proposed ADUs on lots~~ *a proposed accessory dwelling unit on a lot* zoned for residential use ~~which contain~~ *that contains* an existing single-family dwelling. No additional standards, other than those provided in this~~subdivision or subdivision (a),~~ *subdivision,* shall be utilized or imposed, except that a local agency may require an applicant for a permit issued pursuant to this subdivision to be an ~~owner-occupant.~~ *owner-occupant or that the property be used for rentals of terms longer than 30 days*.

~~(4)~~ *(7)* ~~No changes in zoning ordinances or other ordinances or any changes in the general plan shall be required to implement this subdivision. Any~~ *A* local agency may amend its zoning ordinance or general plan to incorporate the policies, procedures, or other provisions applicable to the creation of ADUs *an accessory dwelling unit* if these provisions are consistent with the limitations of this subdivision.

~~(5)~~ *(8)* ~~A ADU which conforms to the requirements of~~ *An accessory dwelling unit that conforms to* this subdivision shall *be deemed to be an accessory use or an accessory building and shall* not be considered to exceed the allowable density for the lot upon which it is located, and shall be deemed to be a residential use~~which~~ *that* is consistent with the existing general plan and zoning designations for the lot. The ~~ADUs~~ *accessory dwelling unit* shall not be considered in the application of any local ordinance, policy, or program to limit residential growth.

~~(c)~~ *(b)* ~~No~~ *When a* local agency ~~shall adopt an ordinance which totally precludes ADUs within single-family or multifamily zoned areas unless the ordinance contains findings acknowledging that the ordinance may limit housing opportunities of the region and further contains findings that specific adverse impacts on the public health, safety, and welfare that would result from allowing ADUs within single-family and multifamily zoned areas justify adopting the ordinance.~~ *that has not adopted an ordinance governing accessory dwelling units in accordance with subdivision (a) receives its first application on or after July 1, 1983, for a permit to create an accessory dwelling unit pursuant to this subdivision, the local agency shall accept the application and approve or disapprove the application ministerially without discretionary review pursuant to subdivision (a) within 120 days after receiving the application*.

~~(d)~~ *(c)* A local agency may establish minimum and maximum unit size requirements for both attached and detached ~~second~~ *accessory dwelling* units. No minimum or maximum size for ~~a second~~ *an accessory dwelling* unit, or size based upon a percentage of the existing dwelling, shall be established by ordinance for either attached or detached dwellings ~~which~~ *that* does not permit at least an efficiency unit to be constructed in compliance with local development standards. *Accessory dwelling units shall not be required to provide fire sprinklers if they are not required for the primary residence.*

(d) Notwithstanding any other law, a local agency, whether or not it has adopted an ordinance governing accessory dwelling units in accordance with subdivision (a), shall not impose parking standards for an accessory dwelling unit in any of the following instances:

(1) The accessory dwelling unit is located within one-half mile of public transit.

(2) The accessory dwelling unit is located within an architecturally and historically significant historic district.

(3) The accessory dwelling unit is part of the existing primary residence or an existing accessory structure.

(4) When on-street parking permits are required but not offered to the occupant of the accessory dwelling unit.

(5) When there is a car share vehicle located within one block of the accessory dwelling unit.

(e) ~~Parking requirements for ADUs shall not exceed one parking space per unit or per bedroom. Additional parking may be required provided that a finding is made that the additional parking requirements are directly related to the~~

~~use of the ADU and are consistent with existing neighborhood standards applicable to existing dwellings. Off-street parking shall be permitted in setback areas in locations determined by the local agency or through tandem parking, unless specific findings are made that parking in setback areas or tandem parking is not feasible based upon specific site or regional topographical or fire and life safety conditions, or that it is not permitted anywhere else in the jurisdiction.~~ *Notwithstanding subdivisions (a) to (d), inclusive, a local agency shall ministerially approve an application for a building permit to create within a single-family residential zone one accessory dwelling unit per single-family lot if the unit is contained within the existing space of a single-family residence or accessory structure, has independent exterior access from the existing residence, and the side and rear setbacks are sufficient for fire safety. Accessory dwelling units shall not be required to provide fire sprinklers if they are not required for the primary residence.*

(f) *(1)* Fees charged for the construction of ~~second~~ *accessory dwelling* units shall be determined in accordance with Chapter 5 (commencing with Section~~66000~~). *66000) and Chapter 7 (commencing with Section 66012).*

(2) Accessory dwelling units shall not be considered new residential uses for the purposes of calculating local agency connection fees or capacity charges for utilities, including water and sewer service.

(A) For an accessory dwelling unit described in subdivision (e), a local agency shall not require the applicant to install a new or separate utility connection directly between the accessory dwelling unit and the utility or impose a related connection fee or capacity charge.

(B) For an accessory dwelling unit that is not described in subdivision (e), a local agency may require a new or separate utility connection directly between the accessory dwelling unit and the utility. Consistent with Section 66013, the connection may be subject to a connection fee or capacity charge that shall be proportionate to the burden of the proposed accessory dwelling unit, based upon either its size or the number of its plumbing fixtures, upon the water or sewer system. This fee or charge shall not exceed the reasonable cost of providing this service.

(g) This section does not limit the authority of local agencies to adopt less restrictive requirements for the creation of ~~ADUs~~. *an accessory dwelling unit*.

(h) Local agencies shall submit a copy of the ~~ordinances~~ *ordinance* adopted pursuant to subdivision (a) ~~or (c)~~ to the Department of Housing and Community Development within 60 days after adoption.

(i) As used in this section, the following terms mean:

(1) "Living ~~area,"~~ *area"* means the interior habitable area of a dwelling unit including basements and attics but does not include a garage or any accessory structure.

(2) "Local agency" means a city, county, or city and county, whether general law or chartered.

(3) For purposes of this section, "neighborhood" has the same meaning as set forth in Section 65589.5.

(4) "~~Second~~ *"Accessory dwelling* unit" means an attached or a detached residential dwelling unit which provides complete independent living facilities for one or more persons. It shall include permanent provisions for living, sleeping, eating, cooking, and sanitation on the same parcel as the single-family dwelling is situated. ~~A second~~ *An accessory dwelling* unit also includes the following:

(A) An efficiency unit, as defined in Section 17958.1 of Health and Safety Code.

(B) A manufactured home, as defined in Section 18007 of the Health and Safety Code.

(5) "Passageway" means a pathway that is unobstructed clear to the sky and extends from a street to one entrance of the accessory dwelling unit.

(j) Nothing in this section shall be construed to supersede or in any way alter or lessen the effect or application of the California Coastal Act (Division 20 (commencing with Section 30000) of the Public Resources Code), except that the local government shall not be required to hold public hearings for coastal development permit applications for ~~second~~ *accessory dwelling* units.

Government Code Section 65852.22.

(a) Notwithstanding Section 65852.2, a local agency may, by ordinance, provide for the creation of junior accessory dwelling units in single-family residential zones. The ordinance may require a permit to be obtained for the creation of a junior accessory dwelling unit, and shall do all of the following:

(1) Limit the number of junior accessory dwelling units to one per residential lot zoned for single-family residences with a single-family residence already built on the lot.

(2) Require owner-occupancy in the single-family residence in which the junior accessory dwelling unit will be permitted. The owner may reside in either the remaining portion of the structure or the newly created junior accessory dwelling unit. Owner-occupancy shall not be required if the owner is another governmental agency, land trust, or housing organization.

(3) Require the recordation of a deed restriction, which shall run with the land, shall be filed with the permitting agency, and shall include both of the following:

(A) A prohibition on the sale of the junior accessory dwelling unit separate from the sale of the single-family residence, including a statement that the deed restriction may be enforced against future purchasers.

(B) A restriction on the size and attributes of the junior accessory dwelling unit that conforms with this section.

(4) Require a permitted junior accessory dwelling unit to be constructed within the existing walls of the structure, and require the inclusion of an existing bedroom.

(5) Require a permitted junior accessory dwelling to include a separate entrance from the main entrance to the structure, with an interior entry to the main living area. A permitted junior accessory dwelling may include a second interior doorway for sound attenuation.

(6) Require the permitted junior accessory dwelling unit to include an efficiency kitchen, which shall include all of the following:

(A) A sink with a maximum waste line diameter of 1.5 inches.

(B) A cooking facility with appliances that do not require electrical service greater than 120 volts, or natural or propane gas.

(C) A food preparation counter and storage cabinets that are of reasonable size in relation to the size of the junior accessory dwelling unit.

(b) (1) An ordinance shall not require additional parking as a condition to grant a permit.

(2) This subdivision shall not be interpreted to prohibit the requirement of an inspection, including the imposition of a fee for that inspection, to determine whether the junior accessory dwelling unit is in compliance with applicable building standards.

(c) An application for a permit pursuant to this section shall, notwithstanding Section 65901 or 65906 or any local ordinance regulating the issuance of variances or special use permits, be considered ministerially, without discretionary review or a hearing. A permit shall be issued within 120 days of submission of an application for a

permit pursuant to this section. A local agency may charge a fee to reimburse the local agency for costs incurred in connection with the issuance of a permit pursuant to this section.

(d) For the purposes of any fire or life protection ordinance or regulation, a junior accessory dwelling unit shall not be considered a separate or new dwelling unit. This section shall not be construed to prohibit a city, county, city and county, or other local public entity from adopting an ordinance or regulation relating to fire and life protection requirements within a single-family residence that contains a junior accessory dwelling unit so long as the ordinance or regulation applies uniformly to all single-family residences within the zone regardless of whether the single-family residence includes a junior accessory dwelling unit or not.

(e) For the purposes of providing service for water, sewer, or power, including a connection fee, a junior accessory dwelling unit shall not be considered a separate or new dwelling unit.

(f) This section shall not be construed to prohibit a local agency from adopting an ordinance or regulation, related to parking or a service or a connection fee for water, sewer, or power, that applies to a single-family residence that contains a junior accessory dwelling unit, so long as that ordinance or regulation applies uniformly to all single-family residences regardless of whether the single-family residence includes a junior accessory dwelling unit.

(g) For purposes of this section, the following terms have the following meanings:

(1) "Junior accessory dwelling unit" means a unit that is no more than 500 square feet in size and contained entirely within an existing single-family structure. A junior accessory dwelling unit may include separate sanitation facilities, or may share sanitation facilities with the existing structure.

(2) "Local agency" means a city, county, or city and county, whether general law or chartered.

Attachment 2: Sample ADU Ordinance

Section XXX1XXX: Purpose

This Chapter provides for accessory dwelling units on lots developed or proposed to be developed with single-family dwellings. Such accessory dwellings contribute needed housing to the community's housing stock. Thus, accessory dwelling units are a residential use which is consistent with the General Plan objectives and zoning regulations and which enhances housing opportunities, including near transit on single family lots.

Section XXX2XXX: Applicability

The provisions of this Chapter apply to all lots that are occupied with a single family dwelling unit and zoned residential. Accessory dwelling units do exceed the allowable density for the lot upon which the accessory dwelling unit is located, and are a residential use that is consistent with the existing general plan and zoning designation for the lot.

Section XXX3XXX: Development Standards

Accessory Structures within Existing Space

An accessory dwelling unit within an existing space including the primary structure, attached or detached garage or other accessory structure shall be permitted ministerially with a building permit regardless of all other standards within the Chapter if complying with:

1. Building and safety codes
2. Independent exterior access from the existing residence
3. Sufficient side and rear setbacks for fire safety.

Accessory Structures (Attached and Detached)

General:

1. The unit is not intended for sale separate from the primary residence and may be rented.
2. The lot is zoned for residential and contains an existing, single-family dwelling.
3. The accessory dwelling unit is either attached to the existing dwelling or detached from the existing dwelling and located on the same lot as the existing dwelling.
4. The increased floor area of an attached accessory dwelling unit shall not exceed 50 percent of the existing living area, with a maximum increase in floor area of 1,200 square feet.
5. The total area of floor space for a detached accessory dwelling unit shall not exceed 1,200 square feet.
6. Local building code requirements that apply to detached dwellings, as appropriate.
7. No passageway shall be required in conjunction with the construction of an accessory dwelling unit.
8. No setback shall be required for an existing garage that is converted to a accessory dwelling unit, and a setback of no more than five feet from the side and rear lot lines shall be required for an accessory dwelling unit that is constructed above a garage.
9. Accessory dwelling units shall not be required to provide fire sprinklers if they are not required for the primary residence and may employ alternative methods for fire protection.

Parking:

1. Parking requirements for accessory dwelling units shall not exceed one parking space per unit or per bedroom. These spaces may be provided as tandem parking, including on an existing driveway or in setback areas, excluding the non-driveway front yard setback.
2. Parking is not required in the following instances:
    - The accessory dwelling unit is located within one-half mile of public transit, including transit stations and bus stations.

- The accessory dwelling unit is located in the WWWW Downtown, XXX Area, YYY Corridor and ZZZ Opportunity Area.
- The accessory dwelling unit is located within an architecturally and historically significant historic district.
- When on-street parking permits are required but not offered to the occupant of the accessory dwelling unit.
- When there is a car share vehicle located within one block of the accessory dwelling unit.

3. Replacement Parking: When a garage, carport, or covered parking structure is demolished or converted in conjunction with the construction of an accessory dwelling unit, replacement parking shall not be required and may be located in any configuration on the same lot as the accessory dwelling unit.

Section XXX4XXX: Permit Requirements

ADUs shall be permitted ministerially, in compliance with this Chapter within 120 days of application. The Community Development Director shall issue a building permit or zoning certificate to establish an accessory dwelling unit in compliance with this Chapter if all applicable requirements are met in Section XXX3XXXXX, as appropriate. The Community Development Director may approve an accessory dwelling unit that is not in compliance with Section XXX3XXXX as set forth in Section XXX5XXXX. The XXXX Health Officer shall approve an application in conformance with XXXXXX where a private sewage disposal system is being used.

Section XXX5XXX: Review Process for Accessory Structure Not Complying with Development Standards

An accessory dwelling unit that does not comply with standards in Section XXX3XX may permitted with a zoning certificate or an administrative use permit at the discretion of the Community Development Director subject to findings in Section XXX6XX

Section XXX6XXX: Findings

A. In order to deny an administrative use permit under Section XXX5XXX, the Community Development Director shall find that the Accessory Dwelling Unit would be detrimental to the public health and safety or would introduce unreasonable privacy impacts to the immediate neighbors.

B. In order to approve an administrative use permit under Section XXX5XXX to waive required accessory dwelling unit parking, the Community Development Director shall find that additional or new on-site parking would be detrimental, and that granting the waiver will meet the purposes of this Chapter.

Section XXX7XXX: Definitions

(1) “Living area means the interior habitable area of a dwelling unit including basements and attics but does not include a garage or any accessory structure.

(2) “Accessory dwelling unit” means an attached or a detached residential dwelling unit which provides complete independent living facilities for one or more persons. It shall include permanent provisions for living, sleeping, eating, cooking, and sanitation on the same parcel as the single-family dwelling is situated. An accessory dwelling unit also includes the following:

(A) An efficiency unit, as defined in Section 17958.1 of Health and Safety Code.

(B) A manufactured home, as defined in Section 18007 of the Health and Safety Code.

(3) “Passageway” means a pathway that is unobstructed clear to the sky and extends from a street to one entrance of the accessory dwelling unit.

(4) (1) "Existing Structure" for the purposes of defining an allowable space that can be converted to an ADU means within the four walls and roofline of any structure existing on or after January 1, 2017 that can be made safely habitable under local building codes at the determination of the building official regardless of any non-compliance with zoning standards.

Attachment 3: Sample JADU Ordinance

(Lilypad Homes at http://lilypadhomes.org/)

Draft Junior Accessory Dwelling Units (JADU) – Flexible Housing

Findings:

1. Causation: Critical need for housing for lower income families and individuals given the high cost of living and low supply of affordable homes for rent or purchase, and the difficulty, given the current social and economic environment, in building more affordable housing
2. Mitigation: Create a simple and inexpensive permitting track for the development of junior accessory dwelling units that allows spare bedrooms in homes to serve as a flexible form of infill housing
3. Endangerment: Provisions currently required under agency ordinances are so arbitrary, excessive, or burdensome as to restrict the ability of homeowners to legally develop these units therefore encouraging homeowners to bypass safety standards and procedures that make the creation of these units a benefit to the whole of the community
4. Co-Benefits: Homeowners (particularly retired seniors and young families, groups that tend to have the lowest incomes) – generating extra revenue, allowing people facing unexpected financial obstacles to remain in their homes, housing parents, children or caregivers; Homebuyers - providing rental income which aids in mortgage qualification under new government guidelines; Renters – creating more low-cost housing options in the community where they work, go to school or have family, also reducing commute time and expenses; Municipalities – helping to meet RHNA goals, increasing property and sales tax revenue, insuring safety standard code compliance, providing an abundant source of affordable housing with no additional infrastructure needed; Community - housing vital workers, decreasing traffic, creating economic growth both in the remodeling sector and new customers for local businesses; Planet - reducing carbon emissions, using resources more efficiently;
5. Benefits of Junior ADUs: offer a more affordable housing option to both homeowners and renters, creating economically healthy, diverse, multi-generational communities;

Therefore, the following ordinance is hereby enacted:

This Section provides standards for the establishment of junior accessory dwelling units, an alternative to the standard accessory dwelling unit, permitted as set forth under State Law AB 1866 (Chapter 1062, Statutes of 2002) Sections 65852.150 and 65852.2 and subject to different provisions under fire safety codes based on the fact that junior accessory dwelling units do not qualify as "complete independent living facilities" given that the interior connection from the junior accessory dwelling unit to the main living area remains, therefore not redefining the single-family home status of the dwelling unit.

A) *Development Standards.* Junior accessory dwelling units shall comply with the following standards, including the standards in Table below:

   1) *Number of Units Allowed.* Only one accessory dwelling unit or, junior accessory dwelling unit, may be located on any residentially zoned lot that permits a single-family dwelling except as otherwise regulated or restricted by an adopted Master Plan or Precise Development Plan. A junior accessory dwelling unit may only be located on a lot which already contains one legal single-family dwelling.

   2) *Owner Occupancy:* The owner of a parcel proposed for a junior accessory dwelling unit shall occupy as a principal residence either the primary dwelling or the accessory dwelling, except when the home is held by an agency such as a land trust or housing organization in an effort to create affordable housing.

   3) *Sale Prohibited:* A junior accessory dwelling unit shall not be sold independently of the primary dwelling on the parcel.

4) *Deed Restriction:* A deed restriction shall be completed and recorded, in compliance with Section B below.
5) *Location of Junior Accessory Dwelling Unit:* A junior accessory dwelling unit must be created within the existing walls of an existing primary dwelling, and must include conversion of an existing bedroom.
6) *Separate Entry Required:* A separate exterior entry shall be provided to serve a junior accessory dwelling unit.
7) *Interior Entry Remains:* The interior connection to the main living area must be maintained, but a second door may be added for sound attenuation.
8) *Kitchen Requirements:* The junior accessory dwelling unit shall include an efficiency kitchen, requiring and limited to the following components:
    a) A sink with a maximum waste line diameter of one-and-a-half (1.5) inches,
    b) A cooking facility with appliance which do not require electrical service greater than one-hundred-and-twenty (120) volts or natural or propane gas, and
    c) A food preparation counter and storage cabinets that are reasonable to size of the unit.
9) Parking: No additional parking is required beyond that required when the existing primary dwelling was constructed.

Development Standards for Junior Accessory Dwelling Units

SITE OR DESIGN FEATURE	SITE AND DESIGN STANDARDS
Maximum unit size	500 square feet
Setbacks	As required for the primary dwelling unit
Parking	No additional parking required

B) *Deed Restriction:* Prior to obtaining a building permit for a junior accessory dwelling unit, a deed restriction, approved by the City Attorney, shall be recorded with the County Recorder's office, which shall include the pertinent restrictions and limitations of a junior accessory dwelling unit identified in this Section. Said deed restriction shall run with the land, and shall be binding upon any future owners, heirs, or assigns. A copy of the recorded deed restriction shall be filed with the Department stating that:
    1) The junior accessory dwelling unit shall not be sold separately from the primary dwelling unit;
    2) The junior accessory dwelling unit is restricted to the maximum size allowed per the development standards;
    3) The junior accessory dwelling unit shall be considered legal only so long as either the primary residence, or the accessory dwelling unit, is occupied by the owner of record of the property, except when the home is owned by an agency such as a land trust or housing organization in an effort to create affordable housing;
    4) The restrictions shall be binding upon any successor in ownership of the property and lack of compliance with this provision may result in legal action against the property owner, including revocation of any right to maintain a junior accessory dwelling unit on the property.
C) *No Water Connection Fees:* No agency should require a water connection fee for the development of a junior accessory dwelling unit. An inspection fee to confirm that the dwelling unit complies with development standard may be assessed.

D) *No Sewer Connection Fees:* No agency should require a sewer connection fee for the development of a junior accessory dwelling unit. An inspection fee to confirm that the dwelling unit complies with development standard may be assessed.

E) *No Fire Sprinklers and Fire Attenuation:* No agency should require fire sprinkler or fire attenuation specifications for the development of a junior accessory dwelling unit. An inspection fee to confirm that the dwelling unit complies with development standard may be assessed.

Definitions of Specialized Terms and Phrases.

"Accessory dwelling unit" means an attached or a detached residential dwelling unit which provides complete independent living facilities for one or more persons. It shall include permanent provisions for living, sleeping, eating, cooking, and sanitation on the same parcel as the single-family dwelling is situated. An accessory dwelling unit also includes the following:

(1) An efficiency unit, as defined in Section 17958.1 of Health and Safety Code.

(2) A manufactured home, as defined in Section 18007 of the Health and Safety Code.

"Junior accessory dwelling unit" means a unit that is no more than 500 square feet in size and contained entirely within an existing single-family structure. A junior accessory dwelling unit may include separate sanitation facilities, or may share sanitation facilities with the existing structure.

Attachment 4: State Standards Checklist (As of January 1, 2017)

YES/NO	STATE STANDARD*	GOVERNMENT CODE SECTION
	Unit is not intended for sale separate from the primary residence and may be rented.	65852.2(a)(1)(D)(i)
	Lot is zoned for single-family or multifamily use and contains an existing, single-family dwelling.	65852.2(a)(1)(D))ii)
	Accessory dwelling unit is either attached to the existing dwelling or located within the living area of the existing dwelling or detached from the existing dwelling and located on the same lot as the existing dwelling.	65852.2(a)(1)(D)(iii)
	Increased floor area of an attached accessory dwelling unit does not exceed 50 percent of the existing living area, with a maximum increase in floor area of 1,200 square feet.	65852.2(a)(1)(D)(iv)
	Total area of floor space for a detached accessory dwelling unit dies not exceed 1,200 square feet.	65852.2(a)(1)(D)(v)
	Passageways are not required in conjunction with the construction of an accessory dwelling unit.	65852.2(a)(1)(D)(vi)
	Setbacks are not required for an existing garage that is converted to an accessory dwelling unit, and a setback of no more than five feet from the side and rear lot lines are not required for an accessory dwelling unit that is constructed above a garage.	65852.2(a)(1)(D)(vii)
	(Local building code requirements that apply to detached dwellings are met, as appropriate.	65852.2(a)(1)(D)(viii)
	Local health officer approval where a private sewage disposal system is being used, if required.	65852.2(a)(1)(D)(ix)
	Parking requirements do not exceed one parking space per unit or per bedroom. These spaces may be provided as tandem parking on an existing driveway.	65852.2(a)(1)(D)(x)

* Other requirements may apply. See Government Code Section 65852.2

Attachment 5: Bibliography

Reports

ACCESSORY DWELLING UNITS: CASE STUDY (26 pp.)

By United States Department of Housing and Urban Development, Office of Policy Development and Research. (2008)

Introduction: Accessory dwelling units (ADUs) — also referred to as accessory apartments, ADUs, or granny flats — are additional living quarters on single-family lots that are independent of the primary dwelling unit. The separate living spaces are equipped with kitchen and bathroom facilities, and can be either attached or detached from the main residence. This case study explores how the adoption of ordinances, with reduced regulatory restrictions to encourage ADUs, can be advantageous for communities. Following an explanation of the various types of ADUs and their benefits, this case study provides examples of municipalities with successful ADU legislation and programs. Section titles include: History of ADUs; Types of Accessory Dwelling Units; Benefits of Accessory Dwelling Units; and Examples of ADU Ordinances and Programs.

THE MACRO VIEW ON MICRO UNITS (46 pp.)

By Bill Whitlow, et al. – Urban Land Institute (2014)
Library Call #: H43 4.21 M33 2014

The Urban Land Institute Multifamily Housing Councils were awarded a ULI Foundation research grant in fall 2013 to evaluate from multiple perspectives the market performance and market acceptance of micro and small units.

RESPONDING TO CHANGING HOUSEHOLDS: Regulatory Challenges for Micro-units and Accessory Dwelling Units (76 pp.)

By Vicki Been, Benjamin Gross, and John Infranca (2014)
New York University: Furman Center for Real Estate & Urban Policy
Library Call # D55 3 I47 2014

This White Paper fills two gaps in the discussion regarding compact units. First, we provide a detailed analysis of the regulatory and other challenges to developing both ADUs and micro-units, focusing on five cities: New York; Washington, DC; Austin; Denver; and Seattle. That analysis will be helpful not only to the specific jurisdictions we study, but also can serve as a model for those who what to catalogue regulations that might get in the way of the development of compact units in their own jurisdictions. Second, as more local governments permit or encourage compact units, researchers will need to evaluate how well the units built serve the goals proponents claim they will.

SCALING UP SECONDARY UNIT PRODUCTION IN THE EAST BAY: Impacts and Policy Implications (25 pp.)

By Jake Webmann, Alison Nemirow, and Karen Chapple (2012)
UC Berkeley: Institute of Urban and Regional Development (IURD)
Library Call # H44 1.1 S33 2012

This paper begins by analyzing how many secondary units of one particular type, detached backyard cottages, might be built in the East Bay, focusing on the Flatlands portions of Berkeley, El Cerrito, and Oakland. We then investigate the potential impacts of scaling up the strategy with regard to housing affordability, smart growth, alternative transportation, the economy, and city budgets. A final section details policy recommendations, focusing on regulatory reforms and other actions cities can take to encourage secondary unit construction, such as promoting carsharing programs, educating residents, and providing access to finance.

SECONDARY UNITS AND URBAN INFILL: A literature Review (12 pp.)

By Jake Wegmann and Alison Nemirow (2011)
UC Berkeley: IURD
Library Call # D44 4.21 S43 2011

This literature review examines the research on both infill development in general, and secondary units in particular, with an eye towards understanding the similarities and differences between infill as it is more traditionally understood – i.e., the development or redevelopment of entire parcels of land in an already urbanized area – and the incremental type of infill that secondary unit development constitutes.

YES, BUT WILL THEY LET US BUILD? The Feasibility of Secondary Units in the East Bay (17 pp.)

By Alison Nemirow and Karen Chapple (2012)
UC Berkeley: IURD
Library Call # H44.5 1.1 Y47 2012

This paper begins with a discussion of how to determine the development potential for secondary units, and then provides an overview of how many secondary units can be built in the East Bay of San Francisco Bay Area under current regulations. The next two sections examine key regulatory barriers in detail for the five cities in the study (Albany, Berkeley, El Cerrito, Oakland, and Richmond), looking at lot size, setbacks, parking requirements, and procedural barriers. A sensitivity analysis then determines how many units could be built were the regulations to be relaxed.

YES IN MY BACKYARD: Mobilizing the Market for Secondary Units (20 pp.)

By Karen Chapple, J. Weigmann, A. Nemirow, and C. Dentel-Post (2011)
UC Berkeley: Center for Community Innovation.
Library Call # B92 1.1 Y47 2011

This study examines two puzzles that must be solved in order to scale up a secondary unit strategy: first, how can city regulations best enable their construction? And second, what is the market for secondary units? Because parking is such an important issue, we also examine the potential for secondary unit residents to rely on alternative transportation modes, particular car share programs. The study looks at five adjacent cities in the East Bay of the San Francisco Bay Area (Figure 1) -- Oakland, Berkeley, Albany, El Cerrito, and Richmond -- focusing on the areas within ½ mile of five Bay Area Rapid Transit (BART) stations.

Journal Articles and Working Papers:

BACKYARD HOMES LA (17 pp.)

By Dana Cuff, Tim Higgins, and Per-Johan Dahl, Eds. (2010)
Regents of the University of California, Los Angeles.
City Lab Project Book.

DEVELOPING PRIVATE ACCESSORY DWELLINGS (6 pp.)

By William P. Macht. Urbanland online. (June 26, 2015)
Library Location: Urbanland 74 (3/4) March/April 2015, pp. 154-161.

GRANNY FLATS GAINING GROUND (2 pp.)

By Brian Barth. Planning Magazine: pp. 16-17. (April 2016)
Library Location: Serials

"HIDDEN" DENSITY: THE POTENTIAL OF SMALL-SCALE INFILL DEVELOPMENT (2 pp.)

By Karen Chapple (2011)
UC Berkeley: IURD Policy Brief.
Library Call # D44 1.2 H53 2011

California's implementation of SB 375, the Sustainable Communities and Climate Protection Act of 2008, is putting new pressure on communities to support infill development. As metropolitan planning organizations struggle to communicate the need for density, they should take note of strategies that make increasing density an attractive choice for neighborhoods and regions.

HIDDEN DENSITY IN SINGLE-FAMILY NEIGHBORHOODS: Backyard cottages as an equitable smart growth strategy (22 pp.)

By Jake Wegmann and Karen Chapple. Journal of Urbanism 7(3): pp. 307-329. (2014)

Abstract (not available in full text): Secondary units, or separate small dwellings embedded within single-family residential properties, constitute a frequently overlooked strategy for urban infill in high-cost metropolitan areas in the United States. This study, which is situated within California's San Francisco Bay Area, draws upon data collected from a homeowners' survey and a Rental Market Analysis to provide evidence that a scaled-up strategy emphasizing one type of secondary unit – the backyard cottage – could yield substantial infill growth with minimal public subsidy. In addition, it is found that this strategy compares favorably in terms of affordability with infill of the sort traditionally favored in the 'smart growth' literature, i.e. the construction of dense multifamily housing developments.

RETHINKING PRIVATE ACCESSORY DWELLINGS (5 pp.)

By William P. Macht. Urbanland online. (March 6, 2015)
Library Location: Urbanland 74 (1/2) January/February 2015, pp. 87-91.

ADUS AND LOS ANGELES' BROKEN PLANNING SYSTEM (4 pp.)

By CARLYLE W. Hall. The Planning Report. (April 26, 2016).
Land-use attorney Carlyle W. Hall comments on building permits for accessory dwelling units.

News:

HOW ONE COLORADO CITY INSTANTLY CREATED AFFORDABLE HOUSING

By Anthony Flint. The Atlantic-CityLab. (May 17, 2016).

In Durango, Colorado, zoning rules were changed to allow, for instance, non-family members as residents in already-existing accessory dwelling units.

NEW HAMPSHIRE WINS PROTECTIONS FOR ACCESSORY DWELLING UNITS (1 p.)

NLIHC (March 28, 2016)

Affordable housing advocates in New Hampshire celebrated a significant victory this month when Governor Maggie Hassan (D) signed Senate Bill 146, legislation that allows single-family homeowners to add an accessory

dwelling unit as a matter of right through a conditional use permit or by special exception as determined by their municipalities. The bill removes a significant regulatory barrier to increasing rental homes at no cost to taxpayers.

NEW IN-LAW SUITE RULES BOOST AFFORDABLE HOUSING IN SAN FRANCISCO. (3 pp.)

By Rob Poole. Shareable. (June 10, 2014).

The San Francisco Board of Supervisors recently approved two significant pieces of legislation that support accessory dwelling units (ADUs), also known as "in-law" or secondary units, in the city…

USING ACCESSORY DWELLING UNITS TO BOLSTER AFFORDABLE HOUSING (3 pp.)

By Michael Ryan. Smart Growth America. (December 12, 2014).

Development Projects

Yucaipa Valley Water District

Yucaipa Valley Water District

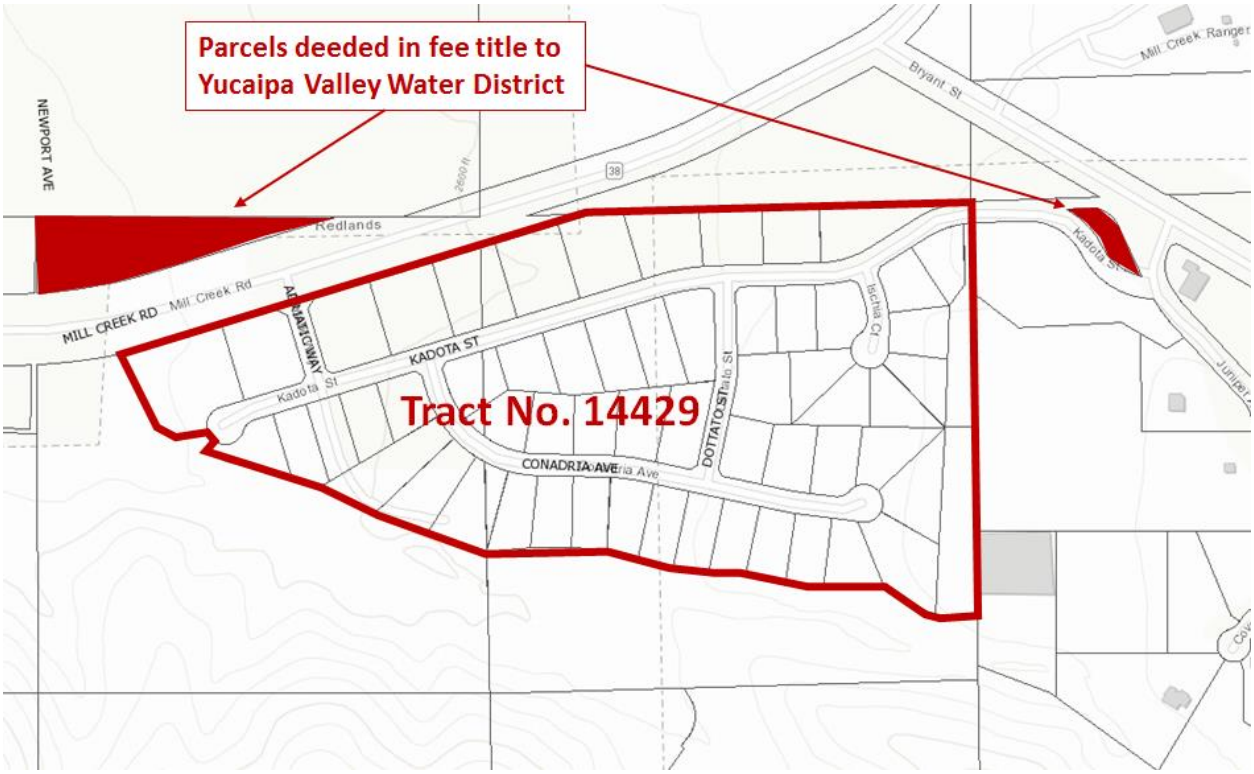
Workshop Memorandum 18-046

Date: January 30, 2018

From: Joseph Zoba, General Manager

Subject: Review of a Development Agreement to Provide Drinking Water Service to Tract No. 14429 - McDougal Bros.

Over the past several years, the District staff has been working with representatives from McDougal Bros for the development of Tract No. 14429 located near Bryant Street and Highway 38.



While the drinking water infrastructure for the Project is essentially complete, the District staff is validating the ownership and county records of APN 0302-221-01. This parcel will need to be deeded to the District prior to occupancy of homes since this property will be used for the pressure reducing station necessary to provide drinking water to the Project.

AGREEMENT TO PROVIDE DRINKING WATER SERVICE TO TRACT NUMBER 14429 IN THE CITY OF YUCAIPA, COUNTY OF SAN BERNARDINO

This Agreement is made and effective this 16th day of January 2018, by and between the Yucaipa Valley Water District, a public agency ("District") and McDougal Bros., and Oregon Limited Partnership, ("Developer"). Each is sometimes referred to herein as a "Party" and jointly as the "Parties".

Project File	Work Order
P-65-34	#___-_____

For contractual issues, the Parties are represented by the following responsible individuals authorized to execute this Agreement:

District	**Developer**
Yucaipa Valley Water District	McDougal Bros.
12770 Second Street	83293 Dale Kuni Road
Post Office Box 730	Post Office Box 518
Yucaipa, California 92399	Cresell, Oregon 97426
Attention: Joseph Zoba, General Manager	Attention: Philip L. Velie
Telephone: (909) 797-5119 x2	Telephone: (541) 895-8788
Email: jzoba@yvwd.us	Email: philvelie@aol.com

The Developer has represented to the District that they are the owner of the following parcel(s) which is/are the subject of this Agreement and described herein as the “Property”:

Assessor Parcel Numbers	County
0302-191-26*, **0302-221-01***, 0302-441-01, 0302-441-02, 0302-441-03, 0302-441-04, 0302-441-05, 0302-441-06, 0302-441-07, 0302-441-08, 0302-441-09, 0302-441-10, 0302-441-11, 0302-441-12, 0302-441-21, 0302-441-22, 0302-441-23, 0302-441-24, 0302-441-25, 0302-441-26 0302-441-27, 0302-451-01, 0302-451-02, 0302-451-03, 0302-451-04, 0302-451-05, 0302-451-06, 0302-451-07, 0302-451-08, 0302-451-09, 0302-451-10, 0302-451-11, 0302-451-12, 0302-451-13, 0302-451-14, 0302-451-15, 0302-451-16, 0302-461-01, 0302-461-02, 0302-461-03, 0302-461-04, 0302-461-05, 0302-461-06, 0302-461-07, 0302-461-08, 0302-461-09, 0302-461-10, 0302-461-11, 0302-461-12, 0302-461-13, and 0302-461-16. * Parcels to be deeded to Yucaipa Valley Water District.	San Bernardino

RECITALS

WHEREAS, the Developer desires to develop its Property situated within the service area of the District as shown on Exhibit A attached hereto with 52 lots; and

WHEREAS, the Developer has provided plans, drawings, and/or concepts to the District to construct the proposed "Project" as shown on Exhibit B attached hereto; and

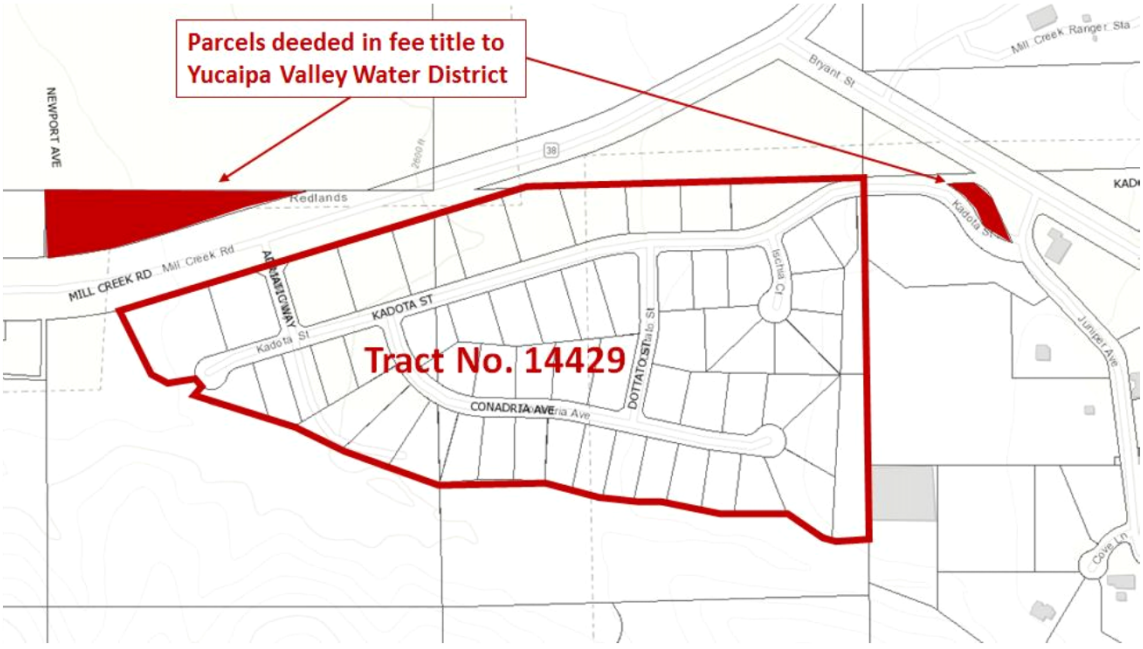
WHEREAS, the Developer desires to obtain drinking water service from the District for the Project in accordance with the current Rules, Regulations, and Policies of the District; and General Construction Conditions as provided in Exhibit C attached hereto; and

WHEREAS, it is the purpose of this Agreement to set forth the terms and conditions by which the District will provide service to the Project.

AGREEMENT

NOW, THEREFORE, in consideration of the mutual promises and covenants contained herein, the Developer and the District agree as follows:

A. **Project Overview.** The Proposed development consists of 52 residential lots and two parcels dedicated in fee title to the Yucaipa Valley Water District.



B. **Special Conditions.** The following conditions, being contained herein, will be required by the District to receive sewer service for the Project.

1. Project Specific Drinking Water Conditions: The Project will be served drinking water from the Yucaipa Valley Water District.

   a. This development is served by a sub-pressure zone of Pressure Zone 15. The Developer shall construct off-site and on-site Facilities to provide drinking water service to the Project as determined by the District.

   b. A pressure reducing station shall be constructed at the sole cost of the Developer and dedicated to the District upon completion. The pressure reducing station shall be located on Assessor Parcel Number 0302-221-01 as further described in Exhibit D and herein.

      i. The Developer shall record a *Notice of Mechanically Reduced Water Pressure* on each parcel as provided in Exhibit E. Proof of said recordation shall be provided to the District upon completion.

   c. Since the drinking water infrastructure is mostly complete, the District will reduce the bonding requirements for this project to the warranty/maintenance bonds for a period of one year following the acceptance of all drinking water related Facilities.

2. Project Specific Recycled Water Conditions: The Project will not be served recycled water. Recycled water infrastructure constructed as part of earlier development agreements are the sole property and responsibility of the Yucaipa Valley Water District.

3. Project Specific Stormwater Conditions. The City of Yucaipa and/or the County of San Bernardino will retain responsibilities and authority for stormwater issues related to the Project. The Developer will provide approved plans, specifications, and construction drawings to Yucaipa Valley Water District for review and identification of onsite stormwater collection facilities and retention basins. In some cases, special construction will be required to protect District Facilities from interference with the infrastructure and/or operations of the stormwater facilities.

4. Project Specific Sewer Conditions. The Project will not be served with sewer service. In lieu of sewer service and as a sewer offset, the Developer shall dedicate Assessor Parcel Number 0302-191-26, and Assessor Parcel Number 0302-221-01 to the District. The District will pursue, and the Developer will support the transfer of Assessor Parcel Number 0302-221-01 (previously dedicated to the City of Yucaipa) to the Yucaipa Valley Water District as provided in Exhibit D. Sewer infrastructure constructed as part of earlier development agreements are the sole property and responsibility of the Yucaipa Valley Water District.

5. Rates, Fees and Charges. The most current rates, fees and charges shall be payable pursuant to the Resolution/Ordinance in effect at the time connection to the sewer system is completed and service is provided.

6. Project Related Invoices. The Developer agrees to deposit funds with the District, as required herein, within 10 business days following the District's approval of this Agreement. The Developer acknowledges and hereby agrees that the District is

authorized, from time-to-time, to reimburse itself from the funds on deposit for Project costs incurred and that the District will not release any structure for occupancy unless there is a minimum balance in the Project Cash Account.

7. Ownership; Operation and Maintenance. Once constructed and accepted by the District, title to the Facilities shall be conveyed by the Developer to the District, and the District shall operate and maintain the Facilities and shall provide service to the Developer's Property in accordance with the District's Rules, Regulations and Policies and the provisions of this Agreement.

8. Easements, Dedications, and Recorded Documentation: Easements, dedications and recorded documentation will be provided by the Developer to the District in a timely manner as required by the District.

9. Annexation. This project is located within the service area of the District, so an annexation is not required.

10. Annual Review of Construction Drawings. The District requires an annual review of approved construction drawings related to this Project. The District will not charge the Developer for the annual construction drawing review. However, the Developer will be required to update and resubmit construction drawings based on comments provided by the District at the sole cost and expense of the Developer prior to the start of construction.

11. Amendment. This Agreement may be amended, from time-to-time, by mutual agreement, in writing signed by both Parties. The District and the Developer further agree that to the extent this Agreement does not address all aspects of the Developer's Property and/or Project, the Parties shall meet and confer and negotiate in good faith, and execute a written amendment or supplement to this Agreement.

12. Assignment. This Agreement shall not be assigned, whether in whole or in part.

13. Term and Termination of Agreement. Unless extended by mutual agreement of the parties in writing, this Agreement shall terminate at 5:00 p.m., on the day before the sixth (6^{th}) anniversary date of this Agreement; provided, however, that this Agreement shall automatically terminate, without further liability to either party, as follows:

    a. Immediately, upon abandonment by the Developer of the Developer's Property and/or the work hereunder. "Abandonment" is defined as the act of bankruptcy or to fail to improve the Property in a manner consistent with the proposed development plan; and/or

    b. Within 45 days of the date of the issuance of a Notice of Default by the District to the Developer in the event the Developer fails or refuses to perform, keep or observe any of the terms, conditions or covenants set forth in this Agreement.

Yucaipa Valley Water District
Development Agreement No. 2018-02
Page 6 of 24

IN WITNESS WHEREOF, the parties have executed is Agreement to be effective on the day and year first above written.

YUCAIPA VALLEY WATER DISTRICT

Dated: _____ By: _____
Jay Bogh, Board President

DEVELOPER

Dated: _____ By: _____

Print Name: _____

Print Title: _____

Exhibit A - Project Location and District Boundary

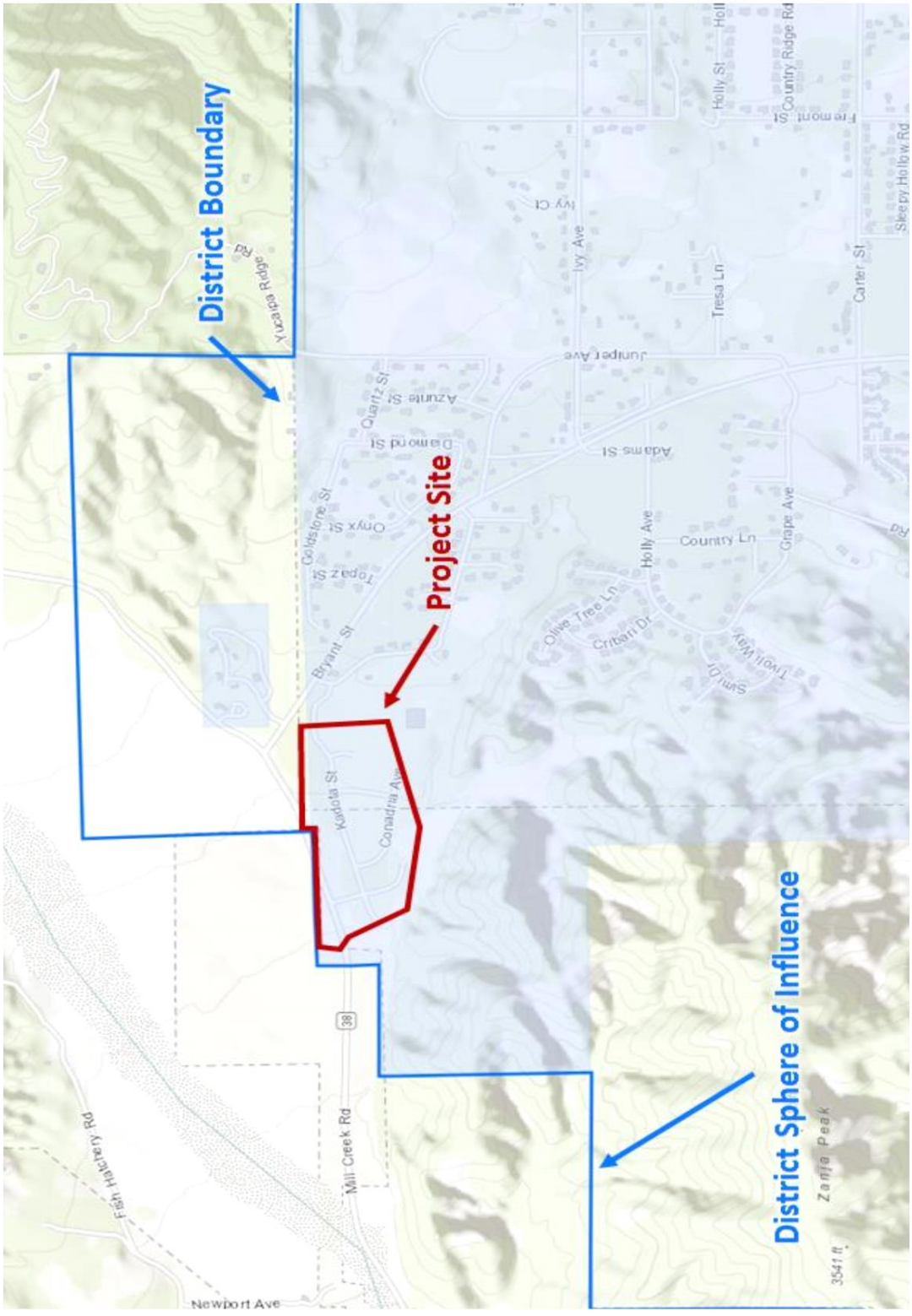


Exhibit B - Proposed Development Concept

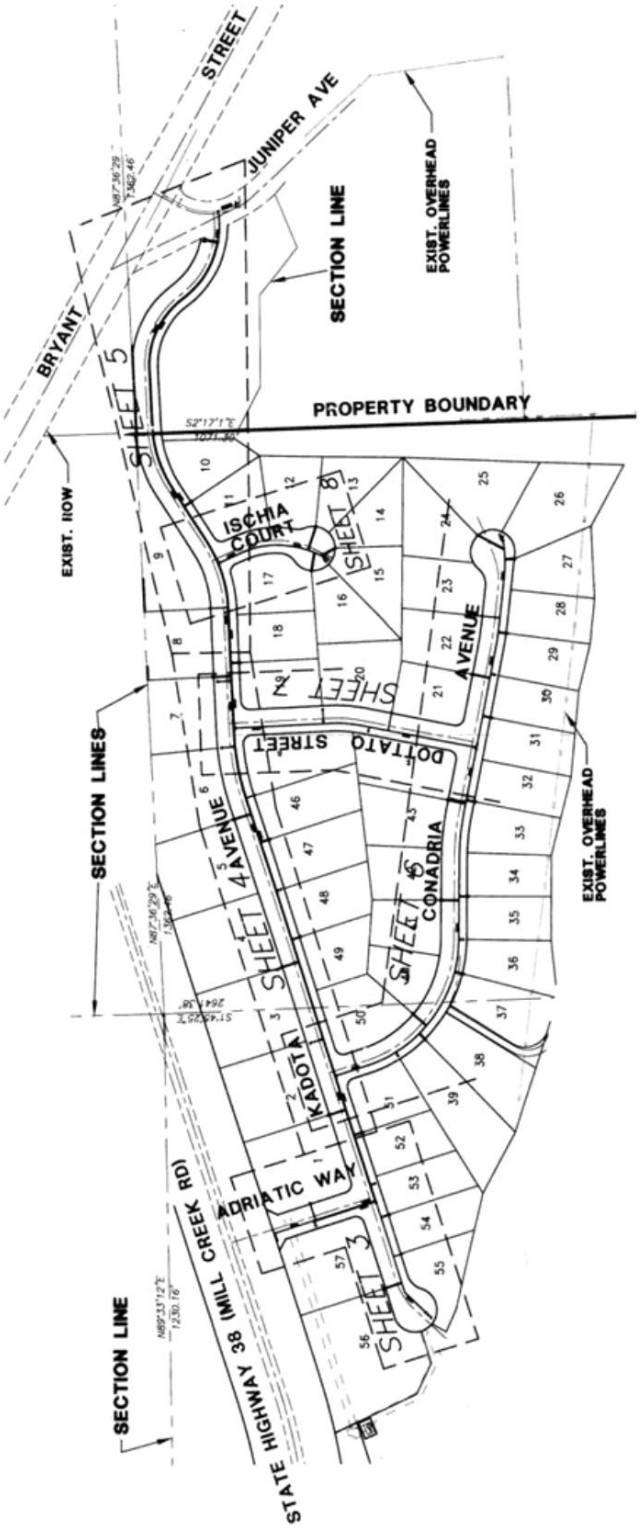


Exhibit C - General Construction Conditions

DESIGN AND CONSTRUCTION

A. Licensed Professionals. All work, labor and services performed and provided in connection with, for example, the preparation of surveys and descriptions of real property and rights-of-way, the preparation of construction specifications, plans and drawings, and the construction of all Facilities shall be performed by or under the direction of professionals appropriately licensed by the State of California and in good standing.

B. Plan Acceptance; Facility Acceptance. Upon its final review and approval of the plans and specifications ("Plans"), the District shall sign the construction drawings ("Approved Plans") indicating such approval ("Plan Acceptance"). Plans are subject to an annual review by the District and modifications will be required by the District to conform to revised construction standards and policies as part of the Plan Acceptance. The Developer shall update and resubmit the Plans for final approval by the District.

1. The Developer shall not permit, or suffer to permit, the construction of any Facility without having first obtained Plan Acceptance or completed modifications required by annual updates. In the event the Developer fails or refuses to obtain the District's Plan Acceptance, the District may refuse, in its sole discretion and without liability to the Developer, to issue its Facility Acceptance (as that term is defined below) as to such Facility when completed.

2. The Developer shall not deviate from any Approved Plans and/or specifications without the District's prior written approval.

C. Facility Inspection. All construction work shall be inspected on a timely basis by District personnel and/or by District's consultants at the sole cost of the Developer. The Developer acknowledges that the inspector(s) shall have the authority to require that any and all unacceptable materials, workmanship, construction and/or installation not in conformance with either (i) the Approved Plans, or (ii) standard practices, qualities and standards in the industry, as reasonably determined by the District, shall be replaced, repaired or corrected at Developer's sole cost and expense.

1. In the event the Developer's contractor proposes to work overtime and beyond normal business hours, the Developer shall obtain the District's approval at least 24 hours in advance so that inspection services may be appropriately scheduled. The Developer shall be solely responsible for paying all costs and expenses associated with such inspection services.

2. The District shall promptly upon request of Developer cause the final inspection of a Facility which Developer indicates is completed. If the District finds such Facilities to have been completed in conformance with the Approved Plans for which a Plan Acceptance has been issued, then District shall issue to Developer its letter ("Facility Acceptance") indicating satisfactory completion of the Facility and District's acceptance thereof. Neither inspection nor issuance of the Facility Acceptance shall constitute a waiver by District of any claims it might have against

Developer for any defects in the work performed, the materials provided, or the Facility constructed arising during the one-year warranty period.

D. Project Coordination and Designation of Developer's Representative. The Developer shall be solely responsible for coordinating the provision of all work, labor, material and services associated with the planning, design and construction of the Facilities required for the Project.

1. The Developer shall be solely responsible for compliance with all applicable federal, state and local safety rules and regulations, and shall conduct periodic safety conferences as required by law and common sense.

2. Prior to proceeding with any Facility construction, the Developer shall schedule and conduct a preconstruction conference with the District. In the event the Developer fails or refuses to conduct any such conference, the District may refuse, in its sole discretion, to accept the Facilities constructed by the Developer.

3. The District and the Developer hereby designate the individual identified on page 1 of this Agreement as the person who shall have the authority to represent the District and Developer in matters concerning this Agreement. In order to ensure maximum continuity and coordination, the District and Developer agree not to arbitrarily remove or replace the authorized representative, but in the event of a substitution, the substituting Party shall promptly advise the other Party of such substitution, in writing.

E. District's Right to Complete Facilities. The District is hereby granted the unqualified right to complete, construct or repair all or any portion of the water and/or sewer Facilities, at Developer's sole cost and expense in the event there is a threat to the public's health, safety or welfare.

F. Construction of Connections to District Facilities. Unless otherwise agreed to in writing by the District, the District shall furnish all labor, materials and equipment necessary to construct and install connections between the Developer's Facilities and the District's water, recycled water, and sewer systems. All costs and expenses associated therewith shall be paid by the Developer.

G. Compliance with Law and District Regulations. The Developer hereby agrees that all Facilities shall be planned, designed and constructed in accordance with all applicable laws, and the District's Rules, Regulations and Policies in effect at the time of construction. The Developer shall keep fully informed of and obey all laws, rules and regulations, and shall indemnify the District against any liability arising from Developer's violation of any such law, rule or regulation.

H. Developer's Warranties. The Developer shall unconditionally guaranty, for a period of one year following the District's Facility Acceptance thereof, any and all materials and workmanship, at the Developer's sole cost and expense. The provision of temporary water service through any of the Developer's Facilities, prior to District's acceptance of same, shall not nullify nor diminish the Developer's warranty obligation, nor shall the Developer's warranty obligation be voided if the District determines, in its sole discretion, to make any emergency repairs necessary to protect the public's health, safety or welfare or to ensure

continuity of water or sewer service. The District shall notify Developer of such emergency repairs.

I. Testing and Disinfection. Upon approval by the District, the Developer, at its sole cost and expense, shall undertake and satisfactorily complete a testing program, including without limitation, compaction, cleaning, video and air testing, and pressurized and disinfection testing (drinking water Facilities), for all Facilities prior to acceptance by the District.

J. Bond Requirements. The Developer shall provide to the District, in a form satisfactory to the District, the following bonds:

1. Performance and Warranty Bond. A performance bond issued by a corporate surety or sureties licensed and permitted to do business by and within the State of California in an amount representing not less than one hundred percent (100%) of any and all construction work to be conducted or performed under this Agreement. A warranty bond issued by a corporate surety or sureties licensed and permitted to do business by and within the State of California in an amount representing not less than fifty percent (50%) of the total cost of any and all construction performed hereunder, insuring against any and all defects in the Facilities constructed hereunder, for a period of not less than one full year after the date of acceptance thereof by the District.

2. Labor and Materials Payment Bond. A labor and materials payment bond issued by a corporate surety or sureties licensed and permitted to do business by and within the State of California in an amount representing not less than one hundred percent (100%) of the total cost of any and all construction performed hereunder per California Civil Code Sections 9550 and following.

3. Miscellaneous Bond Requirements. All bonds required by this section are subject to the approval as to form and content by the General Manager and District's Legal Counsel. All bonds required by this section shall be provided by a surety that is an "admitted" surety insurer authorized to transact surety insurance in California, with assets exceeding its liabilities in the amount equal to or in excess of the amount of the bonds, and each bond shall not be in excess of ten percent (10%) of the surety insurer's assets. The bond shall be duly executed and shall meet all of the requirements of Section 995.660 of the Code of Civil Procedure.

K. Title to Facilities and Right-of-Way. Provided that the Developer's Facilities are designed and constructed as required hereunder and the District proposes to issue its Facility Acceptance, the Developer shall, concurrently with the District's Facility Acceptance, convey ownership title to all Facilities (and right-of-way, if applicable) to the District, free and clear of any and all liens and encumbrances except those that are expressly agreed to by the District. The District may require fee title or an easement, depending upon the location of the Facility through action by the Board of Directors. Upon conveyance of title, the District shall assume the responsibility of operating and maintaining the Facilities, subject to the Developer's warranty as provided herein. The Developer acknowledges and agrees that the District shall not be obligated to operate and maintain the Facilities and to provide service to and through them until all applicable conditions imposed by this

Agreement hereunder are satisfied and title to the Facilities has been conveyed and delivered to the District in recordable form.

L. Risk of Loss. Until such time as acceptance thereof by the District, and until good and marketable title to the easements, rights-of-way and Facilities are conveyed and delivered to the District in recordable form, the Developer shall be solely and completely responsible for any and all losses and/or damage of every kind or nature to the easements, rights-of-way and Facilities. In the event Developer believes the loss and/or damages arose from or are related to acts performed by the District, this provision does not preclude Developer's insurance carrier from seeking indemnity and/or reimbursement from the District.

M. Conditions Precedent to the Provision of Water and Sewer Service. Unless the District otherwise agrees in writing, the District shall not be obligated to provide any water and/or sewer service to the Developer's Property or any part thereof, including model homes, until Facility Acceptance by the District and Developer conveys to the District the right-of-way and Facilities associated with the requested service. Upon acceptance of the right-of-way and appurtenant Facilities, the District shall provide the service requested and assume the responsibility for operating and maintaining the affected Facilities. Service provided by the District shall be in accordance with its Rules, Regulations and Policies and shall be comparable in quality of service to that provided all similarly situated customers.

FEES AND CREDITS

N. Developer Fees, Charges, Costs and Expenses. The Developer shall be solely responsible for the payment to the District of all fees, charges, costs and expenses related to this Project.

O. Developer Cash Account Deposit. The Developer acknowledges and hereby agrees that the District is authorized, from time-to-time, to reimburse itself from the funds on deposit for Project costs incurred.

1. The Developer shall provide the initial deposit to the District, and maintain the minimum balance in the Cash Account for the Project as provided below:

    a. An initial deposit of $2,500 and a minimum balance of $1,000 for a Project that involves the construction of 1 to 2 proposed structures;

    b. An initial deposit of $5,000 and a minimum balance of $2,000 for a Project that involves the construction of 3 to 5 proposed structures;

    c. An initial deposit of $10,000 and a minimum balance of $3,000 for a Project that involves the construction of 6 to 20 proposed structures;

    d. An initial deposit of $25,000 and a minimum balance of $5,000 for all other Projects.

2. The initial deposit shall be received by the District within 10 business days following the District's approval of this Agreement.

3. The District shall provide a monthly accounting of how funds were disbursed.

4. The Developer agrees to deposit funds with the District within 30 calendar days upon the date an invoice is issued by the District or a Notice of Default will be issued by the District.

5. The District will not release any structure for occupancy unless the minimum balance is available to the District in the Project Cash Account.

6. Should any unexpended funds remain in the Cash Account upon completion of the Project or termination of this Agreement, then such funds shall be reimbursed to the Developer within 60 days.

P. Current Fees and Charges. In the event of a change in the District's schedule of fees and charges, such change shall automatically be incorporated into this Agreement as though set forth in full. Unless otherwise agreed to in writing by the District, the Developer shall pay, when due, the then-current amount of the applicable fee or charge.

Q. Sustainability Water. The Developer shall pay for the purchase of a quantity of imported water pursuant to the Sustainability Policy adopted by the Board of Directors as a Resolution No. 11-2008 on August 20, 2008, or the latest version with a revised quantity or fee structure. The imported water rate shall be the rate in effect at the time water is secured from the San Bernardino Valley Municipal Water District. Imported water for compliance with the Yucaipa Valley Water District's Sustainability Policy may be pre-paid to lock in the Development Sustainability fee or purchased prior to the issuance of building permits and pay the fee in effect at that time.

R. San Gorgonio Pass Water Agency Facility Capacity Charges. If the Project is within the service area of the San Gorgonio Pass Water Agency, the Developer will be required to pay the latest San Gorgonio Pass Water Agency Facility Capacity Charge as set forth by District resolution.

S. District Financial Participation; Credits. The District may agree to participate in certain Facilities for this Project. Any participation or financial contribution to construct the water and/or sewer infrastructure associated with this Project is identified in the Special Conditions at the beginning of the Agreement.

PERMITS AND DOCUMENTATION

T. Permits, Licenses and CEQA Documentation. The Developer shall be solely responsible for securing and paying for all permits and licenses necessary to develop its project. The Developer shall be solely responsible for complying with the California Environmental Quality Act under the auspices of the City and/or County within which the Property is situated. However, upon request, the Developer shall furnish to the District all relevant environmental documentation and information.

1. The Developer, at its sole cost and expense, shall be solely responsible for defending against any and all legal challenges, including but not limited to permits, licenses and CEQA documentation.

U. Documents Furnished by the Developer. The Developer shall furnish to the District documentation as required by the District specified below, within the time periods specified. Each and every document submittal shall consist of a fully executed original or certified copy (in recordable form, if applicable) and two copies.

Document(s)	Due Date
Certification of Streets to Rough Grade	Prior to Construction
City/County Encroachment Permits and Conditions	Prior to Construction
Field Engineering Surveys ("Cut Sheets")	Prior to Construction
Grant of Easements and Rights-of-Way	Prior to Construction
Labor and Materials Bond	Prior to Construction
Liability Insurance Certificate(s)	Prior to Construction
Performance Bond	Prior to Construction
Soil Compaction Tests	Prior to Acceptance
Warranty Bond	Prior to Acceptance
List of Approved Street Addresses and Assessor Parcel Numbers	Prior to Setting Meter
Notice of High/Low Water Pressure	Prior to Setting Meter
Notice of Water Pumping Facility	Prior to Construction
Mechanic's Lien Releases	Upon Request of District

NOTE: The DEVELOPER hereby acknowledges and agrees that the foregoing list is not intended to be exclusive; therefore, the DISTRICT reserves the right to request, from time-to-time, additional documents or documentation.

INSURANCE AND INDEMNIFICATION

V. Indemnification and Hold Harmless. The Developer and the District agree that the District should, to the extent permitted by law, be fully protected from any loss, injury, damage, claim, lawsuit, cost, expense, attorneys' fees, litigation costs, defense costs, court costs or any other costs arising out of or in any way related to the performance by Developer of this Agreement. Accordingly, the provisions of this indemnity provision are intended by the Parties to be interpreted and construed to provide the fullest protection possible under the law to the District, except for liability attributable to the District's intentional and/or negligent acts. Developer acknowledges that the District would not enter into this Agreement in the absence of this commitment from the Developer to indemnify and protect the District as set forth here.

Therefore, the Developer shall defend, indemnify and hold harmless the District, its employees, agents and officials, from any liability, claims, suits, actions, arbitration proceedings, administrative proceedings, regulatory proceedings, losses, expenses or costs of any kind, whether actual, alleged or threatened, actual attorneys' fees incurred by the District, court costs, interest, defense costs including expert witness fees and any other costs or expenses of any kind whatsoever without restriction or limitation incurred in relation to, as a consequence of or arising out of or in any way attributable actually, allegedly or impliedly, in whole or in part in the performance by Developer of this

Agreement. All obligations under this provision are to be paid by the Developer as incurred by the District. Notwithstanding the foregoing, the Developer shall have no obligation to defend, indemnify or hold harmless the District, its employees, agents or officials from any liability arising, in whole or in part, from the District's intentional and/or negligent acts.

W. Insurance. The Developer agrees to provide insurance in accordance with the requirements set forth here throughout the term of this Agreement. If the Developer uses existing coverage to comply with these requirements and that coverage does not meet the requirements set forth herein, the Developer agrees to amend, supplement or endorse the existing coverage to do so. The following coverages will be provided by the Developer and maintained on behalf of the District and in accordance with the requirements set forth herein.

1. Commercial General Liability Insurance (Primary) shall be provided on ISO-CGL Form No. CG 00 01 10 93. Policy limits shall be no less than $1,000,000 per occurrence for all coverages and $2,000,000 general aggregate. The District and its officials, employees and agents shall be added as additional insureds using ISO Form CG 20 10 10 93. Coverage shall apply on a primary non-contributing basis in relation to any other insurance or self-insurance, primary or excess, available to the District or any employee or agent of the District. Coverage shall not be limited to the vicarious liability or supervisory role of any additional insured. Coverage shall contain no contractors' limitation endorsement. There shall be no endorsement or modification limiting the scope of coverage for liability arising from explosion, collapse, or underground property damage.

2. Umbrella Liability Insurance (over Primary) shall apply to bodily injury/property damage, personal injury/advertising injury, at a minimum, and shall include a "drop down" provision providing primary coverage above a maximum $25,000 self-insured retention for liability not covered by primary policies but covered by the umbrella policy. Coverage shall be following form to any underlying coverage. Coverage shall be provided on a "pay on behalf" basis, with defense costs payable in addition to policy limits. There shall be no cross-liability exclusion and no contractor's limitation endorsement. Policy limits shall be not less than $1,000,000 per occurrence and $1,000,000 in the aggregate, above any limits required in the underlying policies. The policy shall have starting and ending dates concurrent with the underlying coverages.

3. Workers' Compensation/Employer's Liability shall provide workers' compensation statutory benefits as required by law. Employer's liability limits shall be no less than $1,000,000 per accident or disease. Employer's liability coverage shall be scheduled under any umbrella policy described above. Unless otherwise agreed, this policy shall be endorsed to waive any right of subrogation as respects the District, its employees or agents.

4. The Developer and the District further agree as follows:

   a. All insurance coverage provided pursuant to this Agreement shall not prohibit the Developer, and the Developer's employees or agents, from waiving the right of subrogation prior to a loss. The Developer waives its right of subrogation against the District.

b. Unless otherwise approved by the District in writing, the Developer's insurance shall be written by insurers authorized to do business in the State of California and with a minimum "Best's" Insurance Guide rating of "A:VII". Self-insurance will not be considered to comply with these insurance specifications.

c. The Developer agrees to provide evidence of the insurance required herein, satisfactory to the District, consisting of certificate(s) of insurance evidencing all of the coverages required and an additional insured endorsement to the Developer's general liability and umbrella liability policies. Certificate(s) are to reflect that the insurer will provide 30 days' notice of any cancellation of coverage. The Developer agrees to require its insurer to modify such certificate(s) to delete any exculpatory wording stating that failure of the insurer to mail written notice of cancellation imposes no obligation, and to delete the word "endeavor" with regard to any notice provisions. The Developer agrees to provide complete certified copies of policies to the District within 10 days of the District's request for such copies.

d. In the event of any loss that is not insured due to the failure of the Developer to comply with these requirements, the Developer agrees to be responsible for any all losses, claims, suits, damages, defense obligations and liability of any kind attributed to the District, or the District's officials, employees and agents as a result of such failure.

e. The Developer agrees not to attempt to avoid its defense and indemnity obligations to the District and its employees, agents and officials by using as defense the Developer's statutory immunity under workers' compensation and similar statutes.

MISCELLANEOUS PROVISIONS

X. Status of the Parties. This Agreement is not intended to create, and nothing herein contained shall be construed to create, an association, a trust, a joint venture, a partnership or other entity of any kind, or to constitute either party as the agent, employee or partner of the other.

Y. Force Majeure. If either the District or the Developer is delayed, hindered or prevented from performing any term of this Agreement by any cause beyond either party's control including, without limitation, any strike, walkout, prohibitions imposed by law, rules or regulations, riot, war, act of God or the default of the other party, then such performance may be excused or the time of performance tolled during the period of delay.

Z. Incorporation of Prior Agreements. This Agreement contains all of the agreements of the parties with respect to any matter covered or mentioned in this Agreement, and no prior agreement or understanding pertaining to any such matter shall be effective for any purpose.

AA. Waiver. No waiver by either Party of any provisions of this Agreement shall be deemed to be a waiver of any other provision hereof or of any subsequent breach by either Party of the same or any other provisions.

BB. Severance. If any provision of this Agreement is determined to be void by any court of competent jurisdiction then such determination shall not affect any other provision of this Agreement provided that the purpose of this Agreement is not frustrated.

CC. Disclaimer. Utilizing fees and Facilities provided to the District by the Developer, the District will supply sewer collection and treatment services to the Developer's Property and Project, however, the District shall not be obligated to utilize public funds to subsidize the Project.

DD. Water Supply Availability. The District does not guarantee water supply availability and shall not be required to authorize the issuance of grading, building, or occupancy permits during the period of time that the State of California and/or the Board of Directors have declared a water supply reduction of 20% or greater for a specific portion or all of the District's service area.

EE. Preparation of This Agreement. This Agreement shall not be construed against the Party preparing it, but shall be construed as if both Parties prepared it.

FF. Alternative Dispute Resolution. Any dispute as to the construction, interpretation or implementation of this Agreement, or any rights or obligations hereunder, shall be submitted to mediation. Unless the Parties enter into a written stipulation to the contrary, prior to the filing of any complaint to initiate legal action, all disputes shall first be submitted to non-binding mediation, conducted by the Judicial Arbitration and Mediation Services, Inc./Endispute, or its successor, or any other neutral, impartial mediation service that the Parties mutually agree upon in accordance with its rules for such mediation. Mediation fees shall be shared equally by the DEVELOPER and the DISTRICT.

END OF SECTION

Exhibit D - APN 302-221-01

Recorded in Official Records, County of San Bernardino

LARRY WALKER
Auditor/Controller – Recorder

10/30/2008
2:18 PM
NC

R Regular Mail

Doc#: 2008–0479738

Titles: 1 Pages: 5

Fees	0.00
Taxes	0.00
Other	0.00
PAID	$0.00

RECORDING REQUESTED BY:

YUCAIPA CITY CLERK
34272 YUCAIPA BLVD.
YUCAIPA, CA 92399

AND WHEN RECORDED MAIL TO:

YUCAIPA CITY CLERK
34272 YUCAIPA BLVD.
YUCAIPA, CA. 92399

DOCUMENTARY TRANSFER TAX $ NONE
☐ Computed on full value of property conveyed, or
☐ Computed on full value less liens & encumbrances remaining thereon at time of sale.

Signature of declarant or agent determining tax, firm name

No Recording Fee per Government code 27363
APN 302-221-01

This is to certify that the Deed offered by this instrument is acknowledged and consent given for the recordation hereof by action of the City Council for the City of Yucaipa on 10/23/08 in accordance with Government Code Section 27281.

Date 10/28/08 By _____
City Clerk

GRANT DEED

THE UNDERSIGNED RAFAEL MENDOZA WHO IS ALSO KNOWN AS REFUGIO MENDOZA HERBY IRREVOCABLY OFFER TO GRANT TO THE CITY OF YUCAIPA, A BODY CORPORATE AND POLITIC OF THE STATE OF CALIFORNIA and to the PUBLIC IN GENERAL, the following real property in the County of San Bernardino, State of California:

SEE ATTACHED EXHIBIT "A"

Said property shall be used for utility and landscaping purposes and the privilege and right to plant and maintain grass plants and / or trees on said land for soil erosion protection of same.

Dated 6-29-08 By Rafael Mendoza AKA Refugio Mendoza
RAFAEL MENDOZA AKA REFUGIO MENDOZA

By _____

EXHIBIT "A"

A parcel of land, being a portion of Lot 1A, in the Yucaipa Gateway Colony Subdivision 4, Map Book 21, Page 5 of the records of San Bernardino County, more particularly described in Book 5757, Page 96 recorded in the official records of San Bernardino County, California, said parcel containing all of that portion of Lot 1A lying Northerly of the following described line and its extensions thereof:

Commencing at a 2" iron pipe with a Brass cap marking the Northwest corner of Section 24; thence North 87°36'23" East 1362.46 feet along the North line of said section to a point; thence leaving said north line South 01°26'29" East 30.00 feet to a point on the North line of said Lot 1A, said point being coincident to the southerly right of way line of Kadota Avenue, 60 feet in width as shown on said Yucaipa Gateway Colony Subdivision 4; thence along said north line and southerly right of way North 87°36'23" East 264.70 to the **True Point of Beginning**; thence leaving said North line 106.18 feet along the arc of a 230.00 foot radius curve to the right, whose chord bears South 49°14'09" East 105.24 feet, to a point; thence 131.88 feet along the arc of a 170.00 foot radius curve to the left, whose chord bears South 58°14'05" East 128.60 feet, to this descriptions terminus point, being on the westerly right of way line of Juniper Avenue, 60 feet in width as shown on said Yucaipa Gateway Colony Subdivision 4 , said westerly right of way also being coincident with the easterly property line of said Lot 1A, said terminus point lies South 54°11'09" East 233.13 feet from the true point of beginning.

All lying in the Northwest ¼ of Section 24, Township 1 South, Range 2 West, San Bernardino Base and Meridian, in the city of Yucaipa, County of San Bernardino, State of California, said parcel containing 9941 square feet more or less.

4-16-2018

Leonard Brandon Smith Date

ACKNOWLEDGMENT

State of California)
ss
County of San Bernardino)

On JUNE 29, 2008, before me KAREN D JOHNSEN, NOTARY PUBLIC
(insert name and title of officer)

Personally appeared RAFAEL MENDOZA AKA REFUGIO MENDOZA
Who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

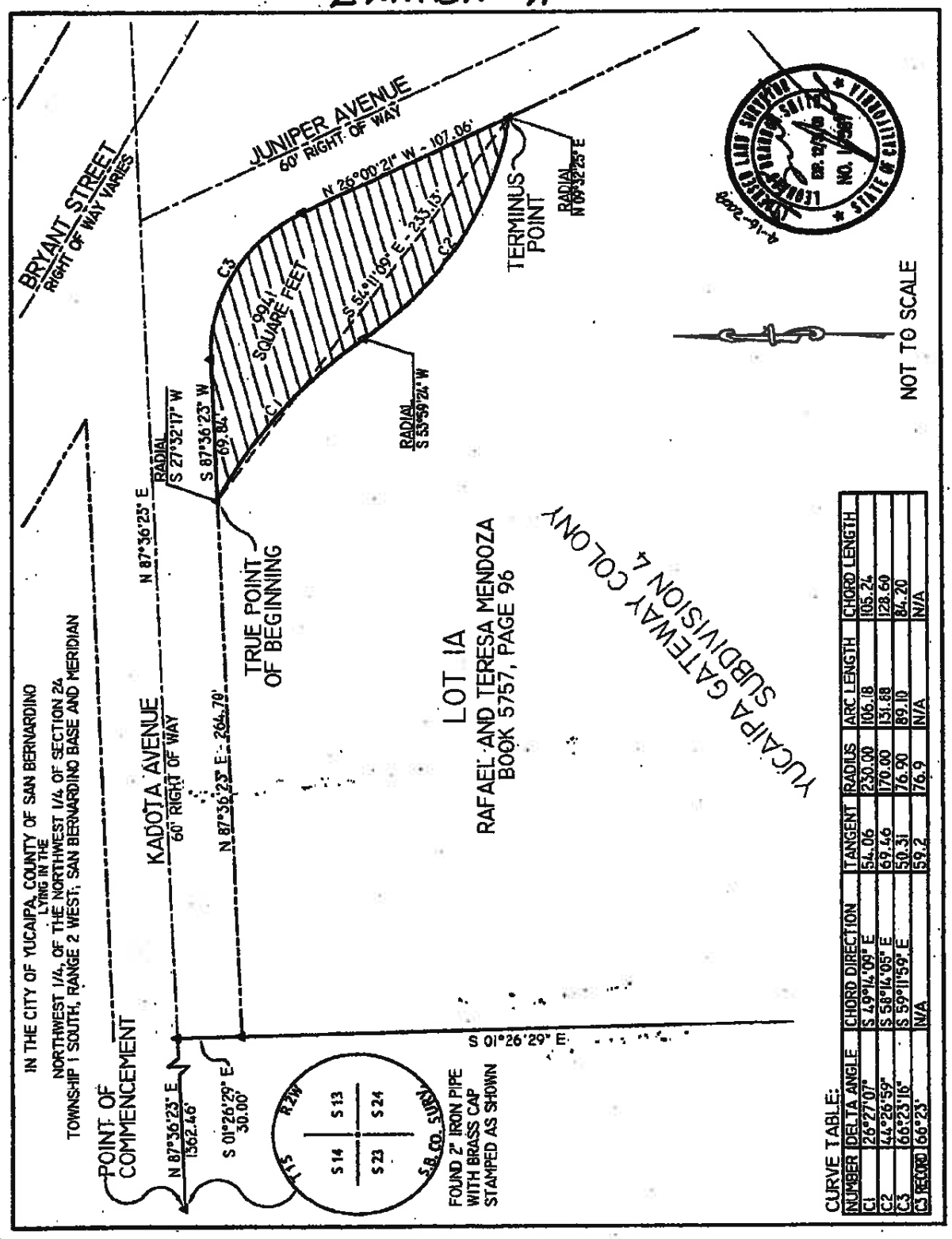
I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

Witness my hand and official seal.

Signature Karen D. Johnsen

KAREN D. JOHNSEN
Commission # 1375845
Notary Public - California
Orange County
My Comm. Expires Sep 21, 2008

EXHIBIT A


IN THE CITY OF YUCAIPA, COUNTY OF SAN BERNARDINO
LYING IN THE
NORTHWEST 1/4, OF THE NORTHWEST 1/4 OF SECTION 24
TOWNSHIP 1 SOUTH, RANGE 2 WEST, SAN BERNARDINO BASE AND MERIDIAN
BRYANT STREET
RIGHT OF WAY VARIES
JUNIPER AVENUE
60' RIGHT OF WAY
KADOTA AVENUE
60' RIGHT OF WAY
POINT OF COMMENCEMENT
N 87°36'23" E
1362.46'
S 01°26'29" E
30.00'
N 87°36'25" E
RADIAL
S 27°32'17" W
S 87°36'23" W
69.84'
N 87°36'23" E - 264.79'
TRUE POINT OF BEGINNING
C1
C3
C2
994± SQUARE FEET
N 26°00'21" W - 107.06'
S 54°11'59" E - 233.15'
RADIAL
S 53°59'24" W
TERMINUS POINT
RADIAL
N 89°32'25" E
LOT 1A
RAFAEL AND TERESA MENDOZA
BOOK 5757, PAGE 96
YUCAIPA GATEWAY COLONY
SUBDIVISION 4
S 01°26'29" E
T1S
R2W
S13
S14
S24
S23
SB CO. SURVEY
FOUND 2" IRON PIPE
WITH BRASS CAP
STAMPED AS SHOWN
NOT TO SCALE
CURVE TABLE:
NUMBER | DELTA ANGLE | CHORD DIRECTION | TANGENT | RADIUS | ARC LENGTH | CHORD LENGTH
C1 | 26°27'07" | S 49°14'09" E | 54.06 | 230.00 | 106.18 | 105.24
C2 | 44°26'59" | S 58°14'05" E | 69.46 | 170.00 | 131.88 | 128.60
C3 | 66°23'16" | S 59°11'59" E | 50.31 | 76.90 | 89.10 | 84.20
C3 RECORD | 66°23' | N/A | 59.2 | 76.9 | N/A | N/A

City of Yucaipa

CERTIFICATE OF ACCEPTANCE

This is to certify that the interest in real property conveyed by **Grant of Easement** dated **June 29, 2008** from **Rafael Mendoza aka Refugio Mendoza,** to the **City of Yucaipa**, a political corporation and/or governmental agency is hereby accepted by order of the **Yucaipa City Council** on **October 13, 2008** and the grantee consents to recordation thereof by its duly authorized officer.

FREE RECORDING IS REQUESTED AND IS ESSENTIAL TO ACQUISITION BY THE CITY OF YUCAIPA (Gov't Code § 6103)

Raymond Casey, City Manager

DATED: October 27, 2008

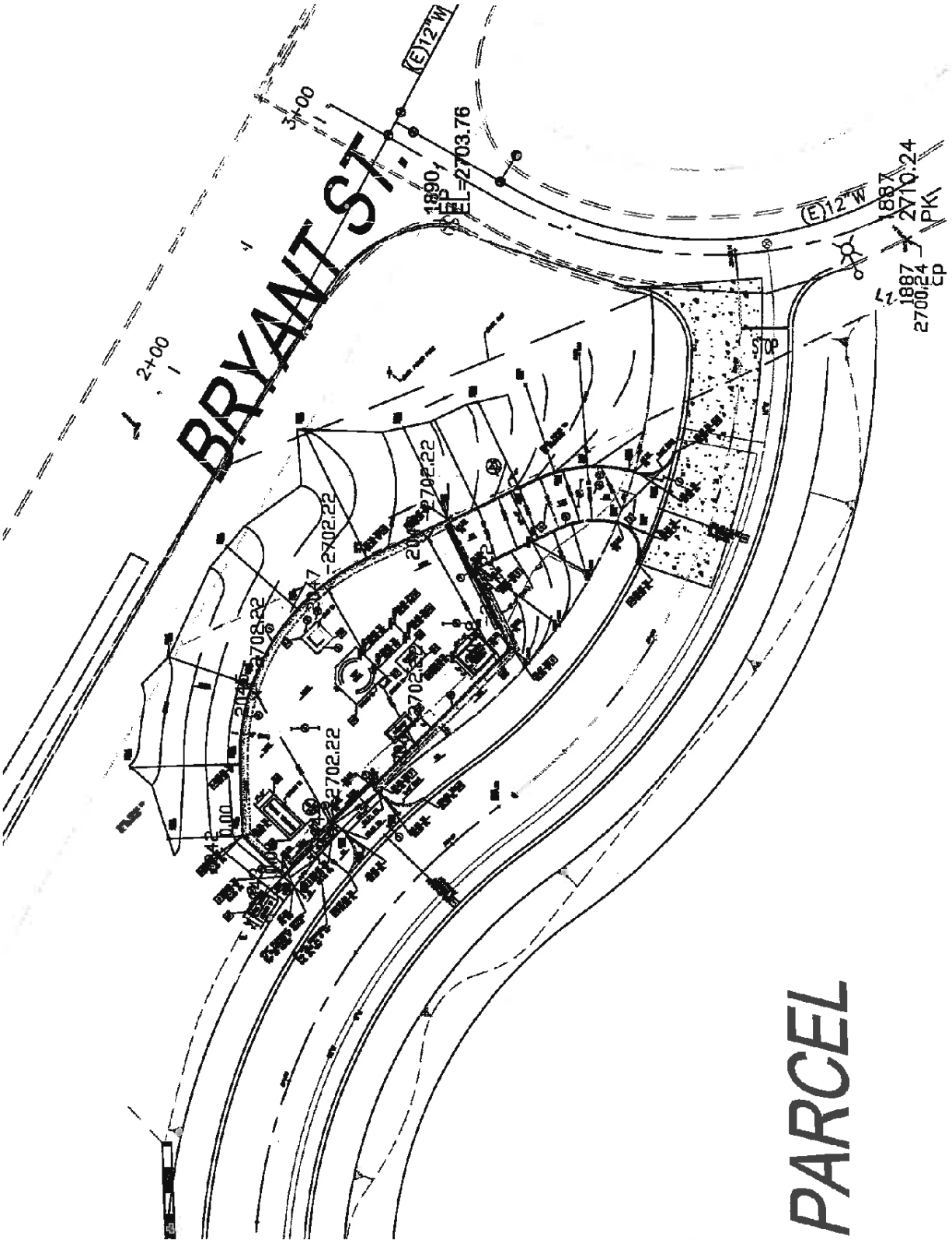

BRYANT ST.
(E)12"W
3+00
2+00
1890
FEL=2703.76
(E)12"W
1887
2710.24
PK
1887
2700.24
EP
STOP
L1
2702.22
2702.22
2702.22
2702.22
PARCEL

Exhibit E - Notice of High Water Pressure Conditions

NOTICE OF HIGH WATER PRESSURE CONDITION
(MECHANICALLY REDUCED WATER PRESSURE)

RECORDING REQUESTED BY:

YUCAIPA VALLEY WATER DISTRICT,
A PUBLIC AGENCY

WHEN RECORDED RETURN TO:

YUCAIPA VALLEY WATER DISTRICT
C/O GENERAL MANAGER
POST OFFICE BOX 730
YUCAIPA, CALIFORNIA 92399-0730

NO RECORDING FEE REQUIRED
PER GOVERNMENT CODE SECTION 27383

NOTICE OF MECHANICALLY REDUCED WATER PRESSURE

This Notice affects all lots and parcels within Tract No. 14429 ("DEVELOPMENT") as shown on Exhibit "A" to this Notice, which Exhibit is provided hereto and incorporated herein by this reference as though set forth in full.

PLEASE TAKE NOTICE that the YUCAIPA VALLEY WATER DISTRICT, a public agency, provides water service to the above described real property. The lots and parcels within Tract No. 14429 receive water service through a water pressure reduction facility constructed to reduce water pressure to the lots and parcels within the DEVELOPMENT. Without this specialized pressure reduction facility, the lots and parcels within the DEVELOPMENT would be served water at a pressure that exceeds 80 pounds per square inch. Therefore, pursuant to DISTRICT Rules and Regulations and the requirements of the Uniform Plumbing Code, the purchasers or owners thereof are obligated to install and maintain a water pressure regulator on the water service line connecting the house to the DISTRICT's water meter.

Furthermore, Owners and/or Occupants of the lots and parcels within this DEVELOPMENT shall assume all responsibility for any and all negative effects resulting from variations in water pressure and shall hold the DISTRICT harmless from any and all damage or injury caused by high water pressure and pressure fluctuations.

Yucaipa Valley Water District

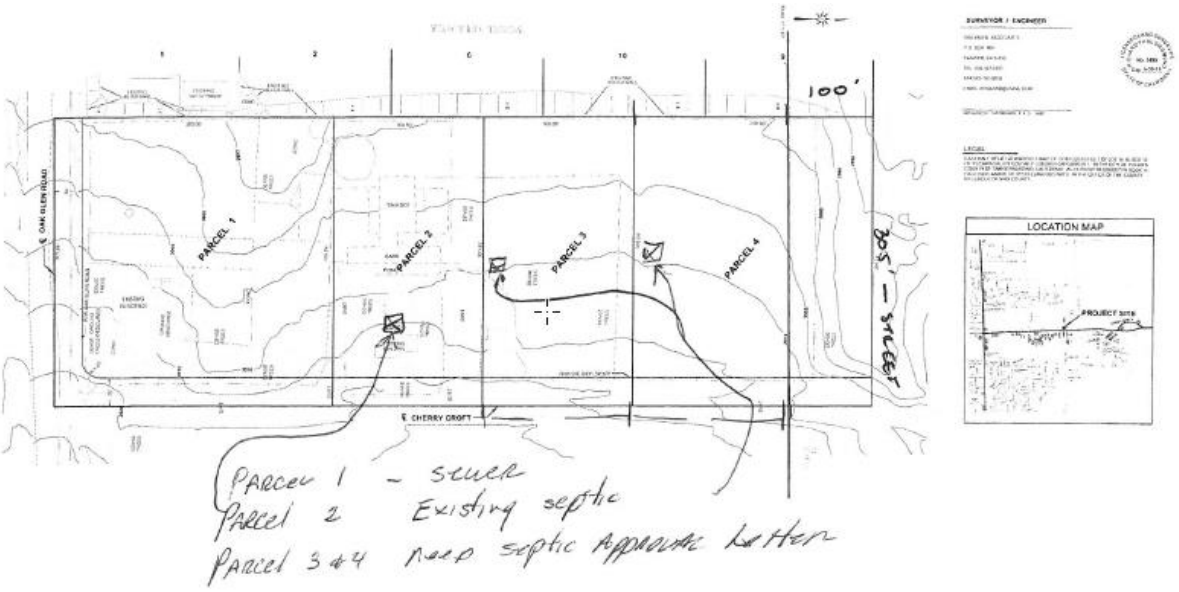
Workshop Memorandum 18-047

Date: January 30, 2018

From: Matthew Porras, Management Analyst
Joseph Zoba, General Manager

Subject: Discussion Regarding the Requirement for Sewer Connection for Two Parcels within Tentative Parcel Map No. 19822 - Mike Moran

A proposed residential development in the City of Yucaipa is requesting the Board of Directors waive the District's requirement for sewer connection of two parcels. The adjacent development was to provide access to the sewer system. However, with the recent transfer of ownership of the adjacent parcels, the ability to connect to the sewer system has been impeded.



The Board of Directors may utilize the sewer offset method for Parcel 3 and 4, or may decide to acquire the adjacent property at the northerly boundary in lieu of requiring the development to meet the requirements of the sewer offset program.

Yucaipa Valley Water District

Workshop Memorandum 18-048

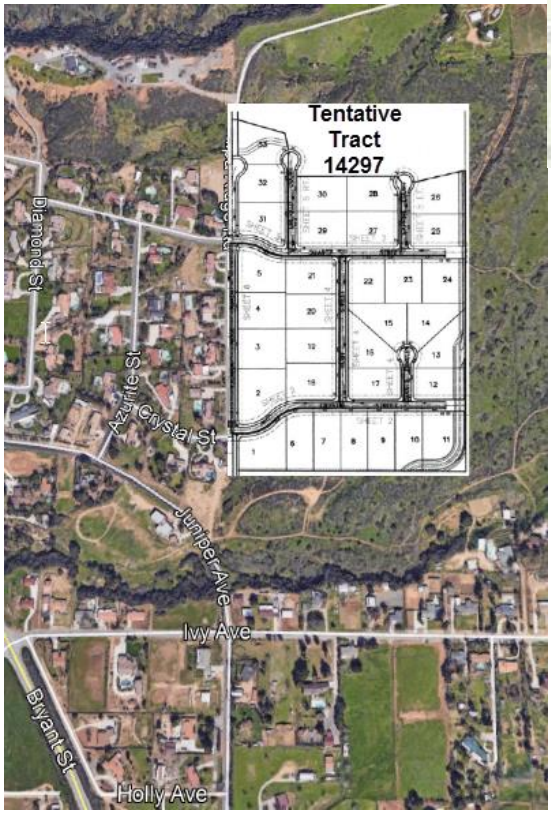
Date: January 30, 2018

From: Matthew Porras, Management Analyst

Subject: Discussion Regarding the Flow Requirements and a Draft Development Agreement for Tract 14297

A proposed residential development in the City of Yucaipa is requesting the Board of Directors waive the Districts detached single family fire flow requirement of 1,500 Gallons Per Minute (GPM) for two hours as stated in Resolution 32-2002, attached herein.

The tentative tract map 14297 has not yet started construction but is proposed to create 33 residential lots of one gross acre or greater in two phases on 39 acres and an approximately 12-acre remainder parcel.



The Fire Marshal for the City of Yucaipa has authorized the fire flow of 1,000 GPM for one hour for this tract. District staff has met with the Developer, Mr. Tom Fitzroy, and he is motivated to proceed with the project with the information provided by the Fire Marshal. If the Board authorizes the waiver of Resolution 32-2002, District staff will bring back a Developers Agreement for Board consideration at a future meeting.

RESOLUTION NO. 32-2002

RESOLUTION OF THE BOARD OF DIRECTORS OF THE
YUCAIPA VALLEY WATER DISTRICT
REVISING WATER SYSTEM DESIGN CRITERIA

WHEREAS, based on the 1994 Water Master Plan, the Board of Directors adopted Resolution No. 04-1998 for the purpose of establishing the water system design criteria for new development; and

WHEREAS, the Board subsequently updated Resolution No. 04-1998 with Resolution No. 32-1999 on September 15, 1999; and

WHEREAS, the 2002 Water Master Plan update recommends a revision to the existing design criteria.

NOW, THEREFORE, the Board of Directors of the Yucaipa Valley Water District does hereby resolve to amend the Water Master Plan as follows:

SECTION 1. CALCULATING WATER DEMAND - DOMESTIC USE

The following definitions shall be used in calculating the water demand for domestic use and consumption:

A. Average Day Demand shall be defined as 700 gallons per day per equivalent dwelling unit (EDU). Based upon 280 gpd per person and 2.5 persons per EDU.
B. Maximum Day Demand shall be defined as 200% of the average day demand.
C. Maximum Hour Demand shall be defined as 400% of the average day demand.

SECTION 2. DESIGN CRITERIA FOR CALCULATING FIRE FLOW

The following recommended fire flows will be used for District planning and design purposes unless the local (approving) fire department stipulates or requires a different fire flow. However, the District shall require a minimum of 1,500 gallons per minute for duration of two hours as a minimum residential or commercial fire flow.

TYPE OF STRUCTURE	FLOW (GPM)	DURATION (Hours)	NUMBER OF FIRE HYDRANTS
Detached Single Family (Residential)	1,500	2	2
Attached Multi-Family (Residential)*	3,000	2	3
Light Commercial/Industrial (including schools)	3,000	3	3
Heavy Commercial/Industrial	5,000	4	4

* Ten or more units per acre

SECTION 3. DESIGN CRITERIA FOR DOMESTIC WATER SUPPLIES

Domestic water supplies shall be designed to produce 125% of the maximum day demand.

SECTION 4. DESIGN CRITERIA FOR PIPE SIZE AND CAPACITY OF TRANSMISSION AND DISTRIBUTION WATER MAINLINES

Domestic water mainlines shall be sized to accommodate the greater of the following while maintaining a minimum pressure as specified below:

A. 1.33 times the Maximum Day Demand plus fire flow with a residual pressure of 20 pounds per square inch and a maximum velocity of 10 feet per second (fps).
B. Maximum Hour Demand with a residual pressure of 40 pounds per square inch and a maximum velocity of 5 feet per second (fps).

The capacity of water mains shall be determined by using the Williams and Hazen Formula with a "C" factor of 140.

SECTION 5. DESIGN CRITERIA FOR WATER STORAGE CAPACITY

Storage capacity shall consist of 33% of Maximum Day Demand as operational storage and 100% of Maximum Day Demand as reserve storage plus fire flow.

SECTION 6. WATER SYSTEM SERVICE PRESSURE

The water distribution system shall be designed to provide customers with an ideal minimum pressure of 50 pounds per square inch (PSI) and an ideal maximum pressure of 125 pounds per square inch (PSI) as measured 15 feet higher than the proposed pad elevation.

SECTION 7. RESCISSION

Resolution No 32-1999 is hereby rescinded in its entirety.

SECTION 8. EFFECTIVE DATE

This Resolution shall take effect immediately and shall apply to all developments without approved construction drawings prior to September 1, 2002.

ADOPTED this 21st day of August 2002.

President of the Board

ATTEST:

Secretary of the Board

(SEAL)

Yucaipa Valley Water District

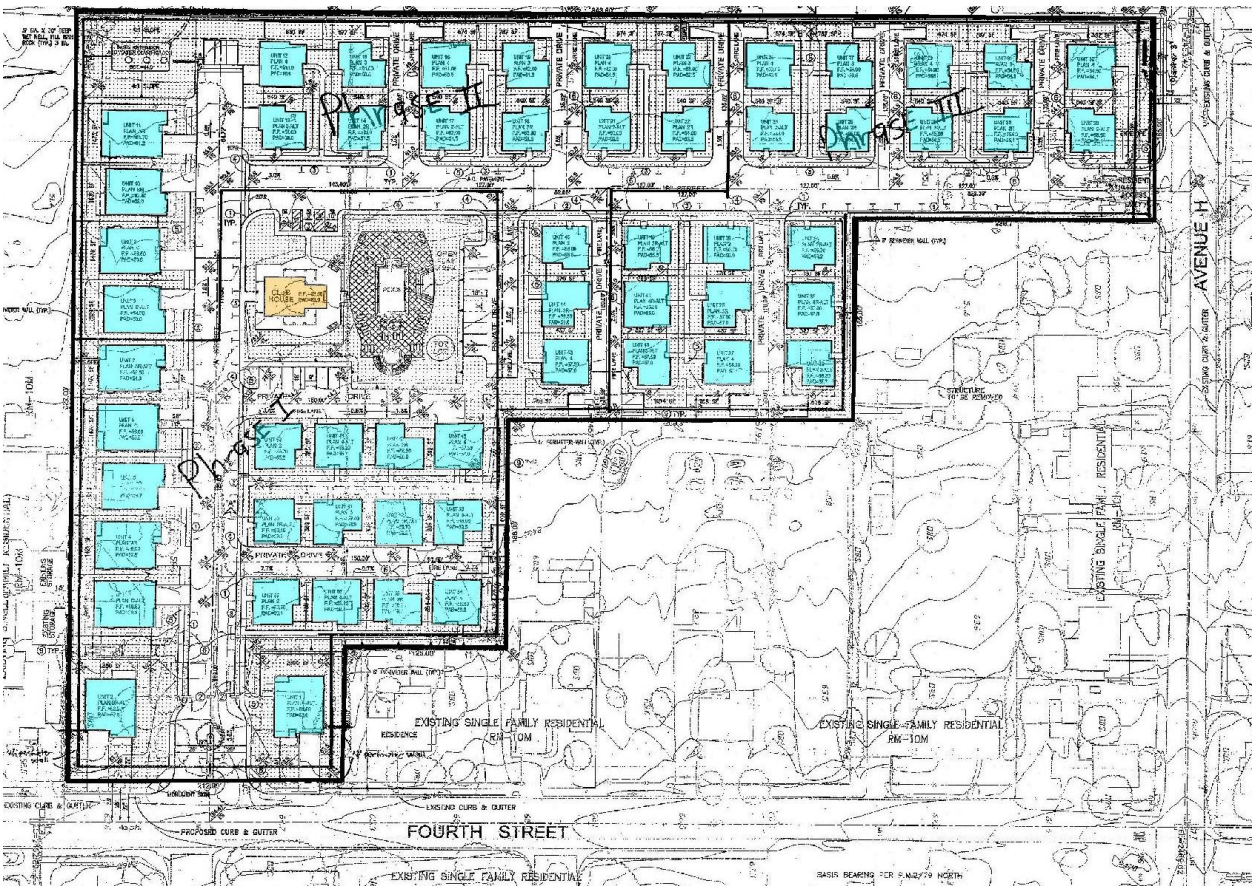
Workshop Memorandum 18-049

Date: January 30, 2018

From: Joseph Zoba, General Manager

Subject: Discussion Regarding a Development Agreement for Sewer Service to Property Located on Avenue H, Yucaipa as Tract No. 18167 - MBTK Homes

The District staff is working together with MBTK Homes for the development of 57 detached condominium units on 7.6 acres near Avenue H and 4th Street. The District staff is in the process of preparing a development agreement to document the terms and conditions for sewer service to this project.



Administrative Issues

Yucaipa Valley Water District

Yucaipa Valley Water District

Workshop Memorandum 18-050

Date: January 30, 2018

From: Joseph Zoba, General Manager

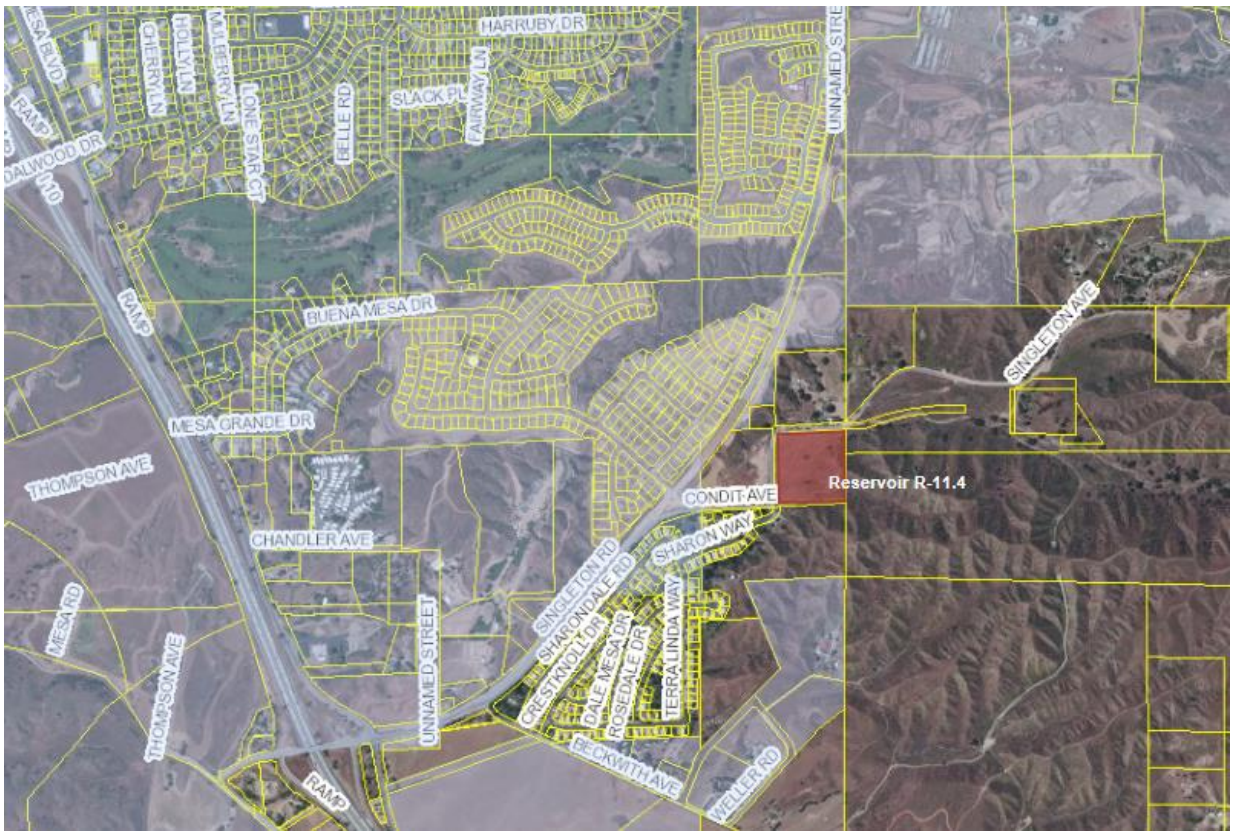
Subject: Discussion Regarding Annexation of Various Properties to the Yucaipa Valley Water District Service Area

At the board workshop on April 8, 2014, the District staff presented three parcels, owned by the Yucaipa Valley Water District, that are currently located outside of the District's service area.

Note: The District's boundary is illustrated in the images below as a light blue transparent shaded area. A map showing the District's boundary (shaded blue area) and sphere of influence (blue line) is provided on page 3 of 3.

Reservoir R-11.4 Property

The Reservoir R-11.4 site consists of 9.1 acres located in Riverside County. Since this property is located outside of our boundary, we pay property taxes on this property.



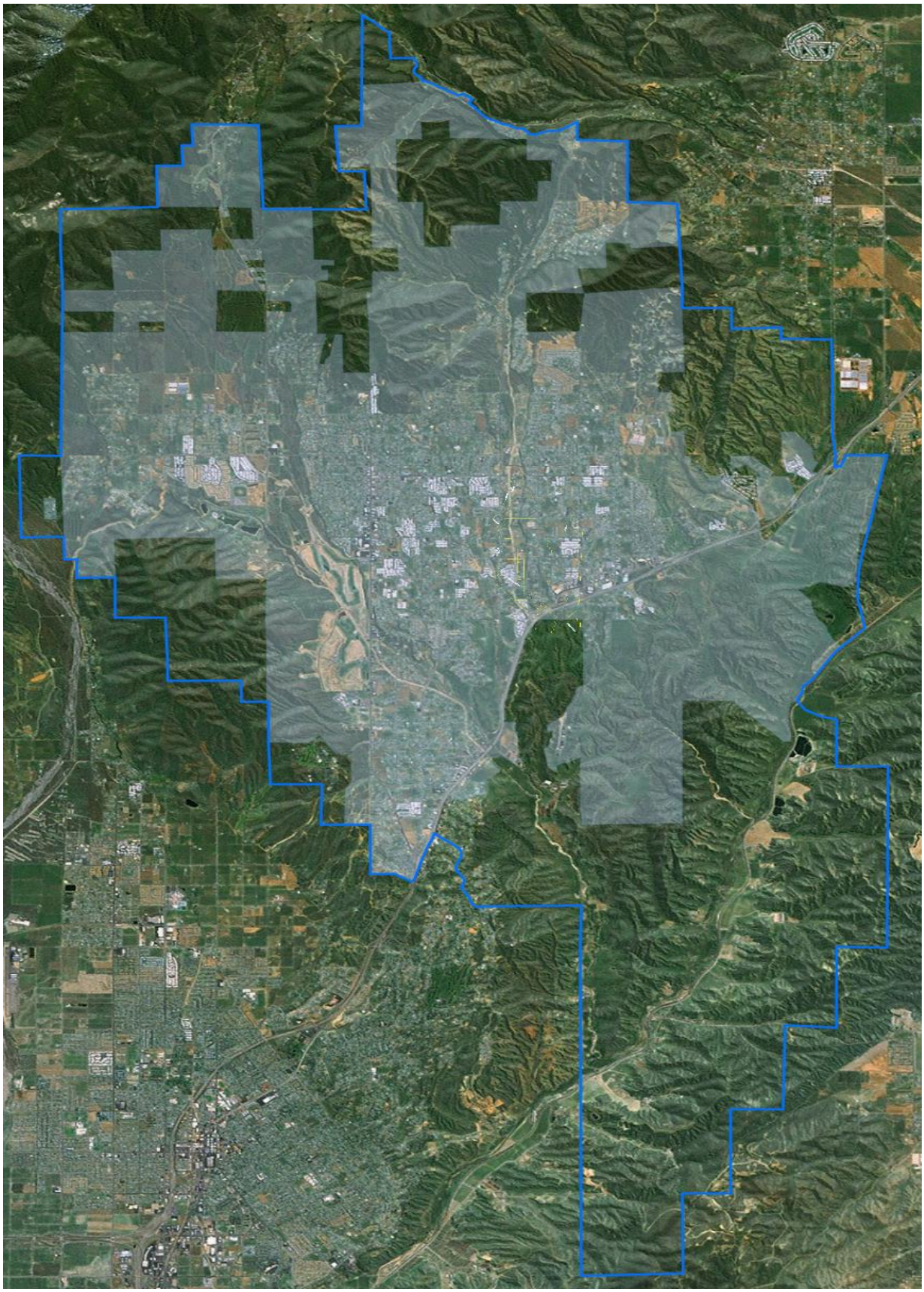
Lift Station No. 1 & Additional Wochholz Wastewater Treatment Plant Property

The District owns Lift Station No. 1 which is about 1/3 of an acre located on Oak Glen Road. The District has purchased approximately 9 acres of property west of the Wochholz Regional Water Recycling Facility property.

The Board of Director should consider initiating annexation proceedings with the Local Agency Formation Commission for the inclusion of these three properties into the District boundary when another annexation is proposed to the District.

Other Parcels

The District staff is in the process of compiling other parcels from property owners interested in annexing to the Yucaipa Valley Water District. These additional parcels will be provided when the final maps are prepared.



Yucaipa Valley Water District

Workshop Memorandum 18-051

Date: January 30, 2018

From: Joseph Zoba, General Manager

Subject: Discussion Regarding the San Bernardino Basin Groundwater Council Framework Agreement

The San Bernardino Valley has experienced historically low rainfall and hot summers, causing a drought of some 20 years, and counting. The groundwater storage levels in the San Bernardino Basin are at an all time low. The *San Bernardino Valley Regional Urban Water Management Plan* shows that the valley does not have enough local water supplies to meet the projected demands into the future. Statewide, this recent drought caused the Governor to declare a state of emergency.

As a result, the California Legislature enacted the Sustainable Groundwater Management Act of 2014 (SGMA), in September 2014. This act established a statewide framework for the sustainable management of groundwater resources, which focuses on granting new authorities and responsibilities to local agencies. Ensuring water supply reliability and long-term groundwater sustainability has become even more important as a result of the long-term drought and the reduced availability of State Project Water from Northern California. While adjudicated basins such as the San Bernardino Basin Area (SBBA), including the Bunker Hill Groundwater Basin, are not subject to most provisions of the act, water managers are expected to manage the SBBA in accordance with the sustainability principals to avoid deleterious impacts on the basin.

In 2015, local water agencies began meeting to identify and develop a Groundwater Sustainability Council for the SBBA, now known as the Groundwater Council (GC). Many agencies and cities approved a Memorandum of Understanding in November, 2015, agreeing to develop this GC. The goals of the GC formation group were to identify the water resources to ensure a sustainable water supply into the future, and to equitably share the cost of those resources amongst the pumpers.

The underlying principles that drove this effort were that the groundwater basin is a shared resource, and we all have a shared responsibility to avoid the classic “tragedy of the commons,” where this responsibility is being shouldered by some but not all groundwater producers. In the dozens of meetings over the past two years, and hundreds of hours invested by the organizers, two primary products were developed: 1) a method to equitably allocate the costs of sustainable basin management, and 2) a five-year agreement (GC Agreement) that lays out an organizational structure to administer the process.

These principles, and the procedures developed to implement them, have been incorporated into a “San Bernardino Basin Groundwater Council Framework Agreement,” which is now submitted for the for review and approval. Signing the GC Agreement represents a commitment to collaboratively develop funding to purchase supplemental water supplies adequate to ensure a sustainable water supply, into the foreseeable future.

The GC Agreement includes an Equitable Allocation Model (EAM) developed by the Basin Technical Advisory Committee (BTAC), the technical collaborative group that for years has been cooperatively analyzing and developing policies for regional water management. The Equitable Allocation Model is a methodology to share costs under the GC Agreement. It seeks to balance historical water rights with current water demands on, and contributions to, basin water supplies. While somewhat technical in expression, the EAM is a result of years of work by stakeholders in the Basin. The EAM proportions the water cost based upon an agency's "gap" between its own supplies and demand. This method recognizes an agency's investment in water conservation and other supplies like surface water and recycled water. It represents a middle ground that copes with the reality of present water use and supply, while recognizing historical efforts and investments in developing water rights.

It also includes an Operations and Maintenance cost component for groundwater recharge facilities. For GC participants, this O&M charge component will replace the San Bernardino Valley Water Conservation District's groundwater charges. The EAM proportions O&M costs based on the most recent groundwater pumping patterns.

Together with the GC Agreement, the EAM represents the joint efforts major Basin producers to fulfill the original principles of the sustainability process. The Groundwater Council formed by the agreement will coordinate supplemental water purchases, primarily from the State Water Project. These purchases will replace the current "ad hoc" method of water purchases, to implement more strategic, long-range sustainability, and assure steady, reliable finding for facilities maintenance.

Participation in the GC is open to groundwater producers in the San Bernardino Basin Area. The pumpers include: City of Colton, City of Redlands, City of Rialto, City of San Bernardino Municipal Water Department, City of Loma Linda, East Valley Water District, West Valley Water District, San Bernardino Valley Municipal Water District, San Bernardino Valley Water Conservation District, Fontana Water Company, Western Municipal Water District, Yucaipa Valley Water District, Bear Valley Mutual Water Company, and Loma Linda University. Membership is secured by signing the Agreement.

The GC formation group intentionally developed the GC Agreement with limited powers. It also defined the responsibilities and protections for the parties. The GC has limited authority and each party's board or council retains control and directs their executive's participation.

Because the GC Agreement is proposed for a limited five (5) year initial term, the parties can revisit the agreement as its workings evolve, and determine if any changes or extensions are warranted. In addition, the GC Agreement, as written, requires an 80 percent (80%) supermajority of weighted votes for budget and critical policy decisions in order to obtain consensus.

The GC Agreement has straightforward provisions for leadership, organization and budget. The GC will develop its budget early in the calendar year so as harmonize with the parties' respective budgeting processes. A table and chart are attached with initial estimated costs and voting weights, assuming full participation.

SAN BERNARDINO BASIN GROUNDWATER COUNCIL FRAMEWORK AGREEMENT

This SAN BERNARDINO BASIN **GROUNDWATER COUNCIL FRAMEWORK AGREEMENT** ("**Agreement**") is entered into and effective this ___ day of _____, 2018 by and among the City of Colton ("**Colton**"), the City of Redlands ("**Redlands**"), the City of Rialto ("**Rialto**"), the City of San Bernardino Municipal Water Department ("**SBMWD**"), City of Loma Linda ("**Loma Linda**"), East Valley Water District ("**East Valley**"), San Bernardino Valley Municipal Water District ("**Valley District**"), San Bernardino Valley Water Conservation District ("**Conservation District**"), Fontana Water Company ("**FWC**"), West Valley Water District ("**WVWD**"), Yucaipa Valley Water District ("**Yucaipa**"), Bear Valley Mutual Water Company **("BVMWC"),** and Loma Linda University **("LLU")** each of which is referred to as a "**Party**," for the purpose of coordinating the development and implementation of groundwater management activities that individually or cumulatively address groundwater management in the Bunker Hill Sub-basin of the Upper Santa Ana Valley Basin ("**Basin**"), and achieving groundwater sustainability throughout the Basin.

RECITALS

WHEREAS, the Parties to this Agreement all overlie, produce water from, or are otherwise interested in the management and long-term sustainability of the groundwater basin identified as the San Bernardino Basin Area; and

WHEREAS, California Department of Water Resources' ("**DWR**") Bulletin 118 defines the Upper Santa Ana Valley Bunker Hill Sub-basin (No. 8-002.06), the boundaries of which, as defined therein and as may be amended in the future, constitute the limits of the Basin covered hereunder. A map depicting that Basin is attached hereto as Exhibit A. DWR Bulletin 118 presently classifies the Bunker Hill Basin as high priority.

WHEREAS, surface water and groundwater supplies in large portions of the Basin are governed by a number of judicial decrees and contracts, including but not limited to the *Orange County Water District v. City of Chino et al.* (Orange County Superior Court, Case No. 117628, April 17, 1969) *Western Municipal Water District of Riverside County v. East San Bernardino County Water District et al.* (Riverside County Superior Court Case No. 78426, April 17, 1969); *Big Bear Municipal Water District v. North Fork Water Company,* San Bernardino Superior Court Case No. SCV 165493, and *City of San Bernardino v. Fontana Water Company*, San Bernardino Superior Court Case No.17030 (January 28, 1924).

WHEREAS, Water Code § 10720.8(a) identifies the San Bernardino Basin Area as an adjudicated area. As such, this area is exempt from the Sustainable Groundwater Management Act (SGMA) passed by the California Legislature in September 2014, other than providing certain kinds of data to DWR per Water Code § 10720.8(f).

WHEREAS, notwithstanding that the Basin is not required to comply with SGMA, the Parties to this Agreement wish to collaborate their efforts to identify their respective access to and application of imported water supplies, and to harmonize use of such supplies with available groundwater in the Basin. The goal is to ensure that the water imported into the Basin, and the

facilities used to apply both imported and native water supplies to productive beneficial use, will all be maintained and managed in a manner that will be sustainable over the long-term. The Parties recognize that the key to success in this effort will be coordination of amounts and areas of recharge in different parts of the Basin, by acting in conjunction with other groundwater management entities active in portions of the Basin.

WHEREAS, the purpose of ensuring water supply reliability and long-term effectiveness and viability of recharge facilities has become even more important as a result of recently experienced low groundwater storage levels and the reduction of imported water supplies, due to environmental and other restrictions. One purpose of this Agreement is to facilitate the cooperation of the Parties to ensure a reliable and conjunctively utilized water supply of replenishment water that can prevent overdraft or other negative impacts from occurring during an extended drought, and for the foreseeable future.

WHEREAS, the Parties, individually and collectively, have the goal of cost effective cooperative groundwater management that considers the interests and concerns of all of the communities and parties that rely upon the Basin for their water supply.

WHEREAS, the Parties hereby enter into this Agreement to establish the San Bernardino Basin Groundwater Council ("**GC**") to undertake the preliminary steps necessary to prepare for and coordinate the management of groundwater supply resources throughout the Basin, and to coordinate maintenance of conveyance and recharge facilities to expedite such management. The GC will coordinate with existing groundwater management agencies in the Basin as well as the individual Ex Oficio participants, as defined below, and will be responsible for ensuring overall coordination and sustainable management of the Basin.

WHEREAS, the Parties have agreed that the preliminary steps of GC formation will include preparation of formation documents and procedures, the possible hiring of needed experts, and the development of a budget for this GC as memorialized in this Agreement.

AGREEMENT

NOW THEREFORE, in consideration of the matters recited and the mutual promises, covenants, and conditions set forth in this Agreement, the Parties hereby agree as follows:

1. DEFINITIONS

1.1 Definitions. In addition to the terms that may be defined elsewhere in this Agreement, the following terms when used in this Agreement shall be defined as follows:

1.1.1 "***Agreement"*** means this Groundwater Council Agreement.

1.1.2 "***Plaintiff***" means any of the following entities: City of Riverside, Riverside Highlands Water Company, Meeks and Daley Water Company, Regents of University of California, or Western Municipal Water District as named in the 1969 Judgment in Case Number 78426, *Western Municipal Water District of Riverside County et al. vs. East San Bernardino County Water District et al.*"

1.1.3 ***"Annual Basin Groundwater Report***" shall mean the annual report prepared by the Groundwater Council, to cover topics including but not limited to the following: annual production, recharge, environmental issues, exchanges, and all other actions and topics material to groundwater conditions in the Basin. In preparing such report, the Groundwater Council may consult with, and draw from, data and information provided by the Watermaster and Conservation District and other reliable sources regarding annual groundwater conditions. The Annual Basin Groundwater Report is not intended to supplement or supplant the annual reports of the various Watermasters operating within the Basin that are filed with the Superior Court or any Watermasters' required reporting under the Sustainable Groundwater Management Act (SGMA).

1.1.4 "***Basin***" shall mean the Upper Santa Ana Valley Bunker Hill Groundwater Basin, Sub-basin 8-002.06, as designated in DWR's Bulletin No. 118, and as its boundaries may be modified from time to time through the procedures described in California Water Code § 10722.2.

1.1.5 "***Groundwater Council***" or "***GC***" or shall mean the Upper Santa Ana Valley Bunker Hill Basin Groundwater Council, the oversight body coordinating the management, replenishment, and preservation of groundwater supply and quality of the Basin. The GC shall be composed of representatives of each Party and should they decide to participate, a representative of any other groundwater management authority over any portion of the Basin, as further provided herein. The GC's duties shall include the integration and coordination of the use of imported water supplies for replenishment of the Basin, facilitation of implementation of GC policies and initiatives through the legal authorities of its members, management of budgeting and funding for the maintenance, development, and management of regional groundwater infrastructure, and dispute resolution that may occur within or between the Parties or Ex Oficio members of the GC.

1.1.6 "***BTAC***" shall mean the Basin Technical Advisory Committee, as originally created under the auspices of the Upper Santa Ana River Watershed Integrated Regional Water Management Plan, as such Committee may be modified from time to allow for the additional participation of one or more Parties to this Agreement. The BTAC may be tasked to undertake specified actions in support of the GC.

1.1.7 "***Effective Date***" shall mean the date that a majority of the Parties approve of and enter into the Agreement.

1.1.8 "***Equitable Allocation***" shall mean the manner of determining the facilities' operations and maintenance ("O&M") costs, and supplemental water cost, for each Party based on the annual approved budget. This allocation will be performed pursuant to the formulas and procedures described in Exhibit B of this Agreement. The allocation shall determine the portion of equitable O&M cost, and the portion of equitable water cost, to be apportioned to each Party or other participant for the applicable GC budget year. These allocations shall also be used to determine the voting weight afforded to each voting member of the GC, under this Agreement and further procedural processes as may be developed by the GC.

1.1.9 "**Ex Oficio participant**" shall mean those entities that participate in the GC by virtue of their status as plaintiffs or successors in interest to plaintiffs in *Western*

Municipal Water District of Riverside County v. East San Bernardino County Water District et al. (Riverside County Superior Court Case No. 78426, April 17, 1969), but which shall not be a considered Parties to this Agreement.

1.1.10 ***"Cost Share"*** shall mean that portion of the overall annual operating costs of the GC, assigned to a Party pursuant to the Equitable Allocation, as determined in the annual budget of the GC.

2. TERM

2.1 This Agreement shall become operative on the Effective Date. If an eligible Party has not executed this Agreement by june 30, 2018, such party may join this GC Agreement only as an additional member of the GC, pursuant to Section 3.5, below.

2.2 This Agreement shall remain in effect for a period of five (5) years following the Effective Date, unless earlier terminated by the unanimous written consent of all then-active Parties, provided, however, that this Agreement shall remain in effect during the term of any contractual obligation or indebtedness of the GC that was previously approved by the GC.

2.3 Any Party shall have the ability to withdraw from this Agreement upon serving written notice of its intention to withdraw on all other Parties at least twelve (12) months before that Party's withdrawal becomes effective. Such notice shall be served on the GC at a regularly scheduled meeting and on each of the Parties to this Agreement separately. The withdrawing Party may withdraw upon eighty percent (80%) approval of the voting members of the GC.

2.4 Any Ex Oficio participant in the GC shall have the ability to withdraw from participation in the GC upon thirty (30) days written notice to the Parties.

3. COUNCIL CREATION AND PURPOSE

3.1 Creation of the GC. There is hereby created the Upper Santa Ana Valley Bunker Hill Basin Groundwater Council. The GC shall be, to the extent permitted by law, the forum within which the Parties shall coordinate the access to and utilization of imported water supplies for application to the recharge and replenishment of the Basin, and for the maintenance, and repair of recharge and conveyance facilities for both native and imported supplies to replenish the Basin, consistent with applicable law and judicial decrees.

3.2 Purpose of the Agreement. The purpose of this Agreement, and the creation of the GC, is to provide for the funding, integration, and coordination of the management of imported water and associated groundwater replenishment facilities of the Basin. The purpose is also the facilitation of implementation of policies and initiatives through the legal authorities of one or more Parties, for the purpose of cooperatively managing certain aspects of the Basin, including but not limited to accessing and applying imported water supplies to augment and complement native water supplies, toward the goal of maintaining the long-term yield of the Basin and ensuring that overdraft or other negative impacts are prevented in the future and eliminated over time; and undertaking imported water replenishment activities that are approved by the GC and included in the annual approved budget.

3.3 Membership of the GC. The GC shall consist of a representative from each Party. One party may serve in multiple representative roles, and this will be accounted for in the Equitable Allocation. GC Members shall be appointed in the manner set forth in Section 3.4 of this Agreement.

3.4 Appointment of Members to the GC. Each Party or other entity entitled to membership on the GC shall appoint one representative member of the GC, who shall be the senior executive management level employee of the Party, or a senior executive management-level employee of other recognized groundwater management entity. Each eligible member may determine its own process for appointing its representative member. Members of the GC shall serve throughout the term of this agreement, provided that such members may be subject to removal and replacement by the appointing Party in the event the representative is no longer in the employ of the appointing Party.

3.5 Additional Members. The GC may permit admission of additional members upon an eighty percent (80%)vote of the Equitable Allocation weighted votes among all then-existing Parties, upon such terms and conditions as the GC in its discretion may impose. Such conditions may include requiring contributions to any GC initiatives for securing imported water supplies, or maintenance and operations expenses of groundwater replenishment facilities, to assure equitable distribution of the costs of such initiatives or facilities to those benefitting from them.

3.6 Ex Oficio Participants. The GC shall include the plaintiff parties or the successors in interest to the plaintiff parties in *Western Municipal Water District of Riverside County v. East San Bernardino County Water District et al.* (Riverside County Superior Court Case No. 78426, April 17, 1969) as "Ex Oficio" participants, unless any Ex-Oficio participant withdraws from the GC pursuant to Section 2.4, above. Such Ex-Oficio participants shall not have the ability to vote on any matters before the GC, but shall be permitted to provide input and other support for GC efforts. Notwithstanding any other provision of this Agreement, and except as otherwise provided in other agreements, judgments or settlements, Ex Oficio participants shall not be liable for any costs or fees associated with the GC or its activities related to importing groundwater into the Basin and shall not be considered "members" of the GC as that term is used in this Agreement. Ex Oficio participants may jointly execute a separate agreement with the Conservation District that will provide for the annual payment of no more than 27.95% of costs associated with the recharge of native waters.

4. COUNCIL MEETINGS AND ACTIONS

4.1 Initial Meeting. The initial meeting of the GC shall be held at a location overlying the Basin within forty-five days (45) days of the Effective Date of this Agreement. At the initial meeting the GC shall select a President to chair its meetings, a Vice President to serve if the President is unavailable, a Secretary to record GC proceedings and actions, and any other officers it deems appropriate to the successful and efficient conduct of its business.

4.2 Regular Meeting Schedule and Rules of Proceeding. The GC shall establish a regular meeting time and place at its initial meeting. The GC may vote to change the regular meeting time and place, provided that the new location remains at a place overlying the

Basin. The GC may adopt, promulgate, repeal, or revise further rules of debate, presentation of motions, voting and proxies, process, or proceedings, as it may deem appropriate.

4.3 Quorum. A quorum of the GC shall consist of majority of the total Equitable Allocation weighted votes among all voting members. In the absence of a quorum, no business may be transacted beyond the adjournment of a meeting by the remaining members. For efficiency, business may be discussed and action recommended for the consent calendar ratification at the next regular meeting. A member shall be deemed present for the determination of a quorum if the member is present at the meeting in person, or if they participate in the meeting telephonically upon such rules and procedures as the GC may promulgate.

4.4 GC Voting Rights. Each voting member of the GC shall have its Equitable Allocation weighted vote, as such may be revised from time to time either (a) pursuant to pre-negotiated mechanisms for the adjustment of the Equitable Allocation, due to fluctuations in the groundwater production or other criteria on which the initial Equitable Allocation is based, or (b) by an eighty percent (80%) vote of the total Equitable Allocation voting weight held by all voting members. Exhibit B indicates the voting rights of each party, and shall be modified periodically as specified in the procedures included in Exhibit B.

4.4.1 Fiscal items, including but not limited to, approval of the annual budget of the GC and any expenditures, shall require an affirmative vote by a supermajority constituting eighty percent (80%) of all Equitable Allocation voting weight. To the extent the GC may form groups which contain less than all members for projects where not all members are participants, such committees will have an additional committee agreement identifying the requirements of committee members, and voting requirements attending fiscal obligations of such committees.

4.4.2 Any change in annual contributions necessary to support the work of the GC shall require an affirmative vote by a supermajority constituting eighty percent (80%) of all of all Equitable Allocation voting weight.

4.5 Minutes. The GC shall cause minutes to be kept of all meetings of the GC and any appointed Standing Committees. The GC shall further cause a copy of draft minutes to be forwarded to each member of the GC and to each Party and Ex Oficio member, which may be done electronically, or by way of posting to a commonly available website or digital portal.

4.6 Annual Budgeting and Expenditure Approval.

4.6.1 The fiscal year of the GC shall be July 1 through June 30. The GC shall develop, circulate, and approve an annual budget for the funding of bringing imported water supply to the Basin, and for the maintenance and repair of groundwater recharge or water conveyance facilities serving replenishment of the Basin. The Budget shall be prepared by a Budget Committee, which shall consist of three (3) member Parties of the GC appointed by a qualifying vote of at least 80% of the weighted Equitable Allocation, no later than January 31 of the fiscal year prior to the one for which the budget is to operate. The Budget Committee shall coordinate with BTAC and Valley District as the State Water Project Contractor, to determine the likely allocation of available State Water Project imported water supplies, and other available non-native sources of imported water, the likely unit cost of such imported water, and the recharge needs of the Basin, in terms of quantities of water, locations where Basin conditions would most benefit from imported recharge, condition and availability of facilities to accomplish such recharge, and cost. From these sources, the Budget Committee shall prepare a budget that recommends all of the following:

(a) the amount of imported water supplies proposed to be bought or otherwise acquired by GC members in the coming year;

(b) the recommended application or distribution of such imported water supplies to various parts of the Basin;

(c) the estimated cost of all ongoing maintenance, repair, and operation costs for then-existing groundwater recharge and conveyance facilities serving to replenish the Basin;

(d) any administrative costs of the GC; and

(e) proposed allocation of all expenditures in the Budget among GC members as their portion of the Cost Share based upon the Equitable Allocation Model.

4.6.2 No later than March 1 prior to the beginning of the year for which the budget is to operate, the Budget Committee shall present and circulate to all GC members the proposed Budget, for review and analysis. The circulated budget shall include the underlying presumptions and worksheets upon which it is based. The Budget Committee, or its designee, shall make itself reasonably available to respond promptly to any inquiries or information requests regarding the proposed budget.

4.6.3 No later than sixty (60) days after presentation of the budget by the Budget Committee, the GC shall meet to deliberate and pass upon the budget. The GC may accept, reject, or modify in any way the budget as proposed by the Budget Committee. Adoption of the budget shall require an eighty percent (80%) vote of the weighted Equitable Allocation, provided, however, that if a segregable portion or portions of the budget can be identified which prevent the overall budget from obtaining an eighty percent (80%) approval vote, the GC shall pass those portions of the budget upon which an eighty percent (80%) majority can be achieved, and shall refer those portions upon which approval cannot be obtained back to the Budget Committee for further recommendation on how such portions might be eliminated, reduced in scope or cost, or

otherwise modified, and represented to the GC for eighty percent (80%) approval. No portion of the GC budget imposing any expenditures on any Party shall be approved or adopted on less than an eighty percent (80%) vote of the Equitable Allocation weighted voting, but the inability to secure an eighty percent (80%) vote on segregable portions of the budget shall not prevent the GC from implementing, and proceeding with, those portions of the budget which secured the required eighty percent (80%) approval.

4.7 The Valley District shall perform the accounting and revenue collection functions of the GC in tracking and securing the funding from the GC members pursuant to the approved annual budget, and consistent with the approved cost allocations among the GC members therein, for all imported water supplies. The Conservation District shall perform the accounting and revenue collection functions of the GC in tracking and securing the funding from the GC members pursuant to the approved annual budget, and consistent with the approved cost allocations among the GC members therein, for all facilities costs. The Conservation District shall credit each Party or Ex Oficio participant otherwise subject to the Conservation District's groundwater charge, in the amounts such Party contributes to the GC budget for facilities costs that would be encompassed in that groundwater charge, in order to prevent double collection of such costs with the Conservation District's groundwater charges. Groundwater charges payable by the Ex Oficio Participants may be suspended as part of the separate funding agreement outlined in Section 4.8. In the event of any delinquency, either Valley District or the Conservation District may request the GC to appoint it, or any other GC member or group of members, to represent the GC in securing collection of unpaid and owing amounts from any delinquent member or members. The reasonably incurred costs of such collection efforts may be reimbursed to the agent the GC authorizes to go forward with them, and may be added as an administrative cost to other members, or as a credit against future amounts owing to the GC from such authorized agent.

4.8 Ex Oficio participants will not be subject to the Conservation District's groundwater charges as long as a separate funding agreement as outlined in this Section 4.8 is in effect. Ex Oficio participants may jointly negotiate and execute a separate agreement with the Conservation District and/or Valley District that will provide for the annual payment of up to 27.95% of costs associated with the recharge of native waters. As of the Effective Date of this Agreement, Ex Oficio participants understood the estimated annual costs associated with water recharge, both native and imported, to be $800,000 for Conservation District activities and $200,000 for activities that may occur in recharge basins outside of the Conservation District's control. Ex Oficio participants, via the separate funding agreement, may agree to collectively pay no more than 27.95% of the cost for recharge of native waters. In any such agreement, in the event that imported water is recharged and the costs for such activity are comingled with the cost for recharge of native water, the Conservation District and/or Valley District will pro-rate the costs associated with recharge to separate the costs for native and imported water recharge. Ex Oficio participants are not intended to be charged for the costs of recharge of imported water or associated capital, the operations and maintenance for imported supplies, or any other costs not expressly agreed to in the separate funding agreement.

4.9 No later than six (6) months into the budget year for which any budget is adopted by the GC, the Budget Committee shall prepare a year-in-process budget review, to assess the validity and accuracy of the presumptions upon which the budget was based, identify any budget savings or additional expenditures, assess any additional opportunities for groundwater replenishment that may have come available since the passing of the budget, and otherwise assess and recommend to the GC any potential amendment to the existing year

budget, or suggestions for the following year's budget, as changing conditions may warrant. *(This section may not be needed based upon finalization of the Equitable Allocation formula.)*

5. COUNCIL POWERS AND DUTIES

5.1 The GC shall exercise the following powers:

5.1.1 To adopt rules, regulations, policies, bylaws and procedures governing the operation of the GC.

5.1.2 To produce an Annual Basin Groundwater Report, using as may be appropriate data regarding groundwater conditions available from the Watermaster, the Conservation District, or other sources.

5.1.3 To monitor groundwater production and extractions in coordination with BTAC and pertinent local groundwater management agencies.

5.1.4 To make, after consultation with BTAC, annual recommendations for the amount of additional artificial recharge for the Basin from imported sources as a complement to native sources, and to plan for the development and application of such additional sources of recharge.

5.1.5 To establish as-needed Ad Hoc and Standing advisory committees for the purpose of making recommendations to the GC. Committees shall exist for the term specified in the action creating the committee, and the GC may dissolve a committee at any time through an eighty percent (80%) majority vote of Equitable Allocation voting weight.

5.1.6 To contract for the services of engineers, attorneys, planners, financial consultants, and separate and apart therefrom, to appoint agents and representatives to employ such other staff persons as necessary. The BTAC will provide technical support for the GC, upon such terms as the GC and BTAC shall agree in writing. Ex Oficio members shall not be responsible for BTAC costs.

5.2 In addition to the above-referenced powers, the GC may, by an eighty percent (80%) vote of the Equitable Allocation, decide to activate and exercise any or all of the following additional powers:

5.2.1 To collect and monitor all data related and beneficial to the development, adoption and implementation of appropriate groundwater level management for the Basin.

5.2.2 To collect charges from GC members as authorized in the approved budget.

5.2.3 To cooperate, act in conjunction, and contract with the United States, the State of California, or any agency thereof, counties, municipalities, public and private corporations of any kind (including without limitation, investor-owned utilities), and individuals,

or any of them, for any and all purposes necessary or convenient for the purposes of this Agreement.

5.2.4 To accumulate operating and reserve funds and invest the same as allowed by law for the purposes of the GC.

5.2.5 As may be permitted by law, to apply for and accept grants, contributions, donations and loans, including under any federal, state or local programs for assistance in developing or implementing any of its projects or programs in connection with any project untaken in the GC's name.

5.2.6 To acquire lease, purchase, construct, hold, manage, maintain, operate and dispose of any buildings, property, water rights, works or improvements within and without the respective boundaries of the Parties necessary to accomplish the purposes described herein, or to assist any Party in doing so.

5.2.7 To implement the Cost Share in a manner that qualifies as a pass through charge under the Constitutional requirements of Proposition 218 and similar revenue-raising requirements.

5.2.8 To exercise any power necessary or incidental to the foregoing powers in the manner and according to the procedures provided for under the law applicable to the Parties to this Agreement.

5.2.9 In addition to the above, and to the extent not directly represented on the GC, the GC shall coordinate its efforts with the agencies that are charged with implementing all applicable judicial decrees governing the Basin.

6. FUNDING GC ACTIVITIES

Funding for GC activities shall be provided pursuant to an expense sharing mechanism described in more detail in Exhibit B hereto. This mechanism is based in part on a regional sharing of Operation and Maintenance costs for San Bernardino Basin Area recharge activities, as those Operation and Maintenance costs shall be determined by the GC in its annual budgeting, in conjunction with BTAC. All Parties shall share in the Operation and Maintenance cost components. Ex Oficio participants shall not share in any costs which are attributable to bringing imported water to the Basin nor its recharge, but all other Parties shall participate in such costs, pursuant to the Equitable Allocation attached as Exhibit B hereto. Ex Officio participants intend to, through separate agreement(s) with the Conservation District and/or Valley District, cooperate in the payment of up to a maximum of 27.95% of costs associated with the recharge of water that results from natural precipitation and run-off in the basin (native water). Each Party shall be contractually responsible hereunder for the annual payment of fees for their assigned portion of the budgeted expenses of the GC, based on that Party's allocation, as determined by the aforementioned allocation formula and the approved GC budget.

7. DISPUTE RESOLUTION

The Parties recognize that there may be disputes regarding the obligations of the Parties or the interpretation of this Agreement. The Parties agree that they may attempt to resolve disputes as follows:

7.1 Statement Describing Alleged Violation of Agreement. A Party or Parties alleging a violation of this Agreement (the "**Initiating Party(ies)**") shall provide a written statement describing all facts that it believes constitute a violation of this Agreement to the Party(ies) alleged to have violated the terms of this Agreement (the "**Responding Party(ies)**").

7.2 Response to Statement of Alleged Violation. The Responding Party(ies) shall have sixty (60) days from the date of the written statement to prepare a written response to the allegation of a violation of this Agreement and serve that response on the Initiating Party(ies) or to cure the alleged violation to the reasonable satisfaction of the Initiating Party(ies). The Initiating Party(ies) and the Responding Party(ies) shall then meet within thirty (30) days of the date of the response to attempt to resolve the dispute amicably.

7.3 Mediation of Dispute. If the Initiating Party(ies) and the Responding Party(ies) cannot resolve the dispute within ninety (90) days of the date of the written response, they shall engage a mediator, experienced in water-related disputes, to attempt to resolve the dispute. Each Party shall ensure that it is represented at the mediation by a Director or Trustee or other representative with authority to settle. These representatives of the Initiating Party(ies) and the Responding Party(ies) may consult with staff and/or technical consultants during the mediation and such staff and/or technical consultants may be present during the mediation. The costs of the mediator shall be divided evenly between the Initiating Party(ies) and the Responding Party(ies). The decision of the mediator shall be non-binding.

7.4 Reservation of Rights. Subject to the above requirements, in the event that mediation fails, each Party retains and may exercise all legal and equitable rights and remedies it may have to enforce the terms of this Agreement; provided, that prior to commencing litigation, a Party shall provide at least five (5) calendar days' written notice of its intent to sue to all Parties.

8. RELATIONSHIP TO WATER RIGHTS AND PRIOR AGREEMENTS

8.1 Water Rights and Existing Agreements. Nothing in this Agreement is intended to modify the water rights of the Parties or the Ex Oficio participants, whether existing under a judgment, proceedings of the State Water Resources Control Board, or the common law. Nothing in this Agreement is intended to modify any existing agreements between and among the Parties, unless expressly stated herein.

8.2 Agreements Among Water Users. Nothing in this Agreement is intended to modify the rights of the signatories of this Agreement among themselves.

8.3 Judgments. Nothing in this Agreement is intended to modify the rights of the Parties under the terms of the judgments in *Orange County Water District v. City of Chino et al.* (Orange County Superior Court, Case No. 117628, April 17, 1969) and *Western Municipal Water District of Riverside County v. East San Bernardino County Water District et al.* (Riverside County Superior Court Case No. 78426, April 17, 1969); *Chino Basin Water District v. City of Chino,* San Bernardino Superior Court Case No. 164327; *Big Bear Municipal Water District v.*

North Fork Water Company, San Bernardino Superior Court Case No. SCV 165493; or *City of San Bernardino v. Fontana Water Company*, San Bernardino Superior Court Case No.17030 (January 28, 1924). It is the intention of the Parties in forming the GC to apply, administer, and conform to the requirements and provisions of each of these judgments. In the event of any conflict between the actions of the GC, and the requirements and provisions of such judgments, the latter shall control.

8.4 No Admissions. Nothing in this Agreement shall be construed as an admission by any Party regarding any subject matter of this Agreement, including but not limited to the water rights or priorities of same of the Parties.

8.5 Preservation of Rights. The Parties agree that this Agreement, to the extent allowed by law, preserves all rights of the Parties as they may exist as of the Effective Date of this Agreement. Nothing in this Agreement is to be construed as altering the priorities or entitlements of water right holders among themselves to water from the Santa Ana River or the Basin.

9. MISCELLANEOUS

9.1 Authority. Each signatory of this Agreement represents that s/he is authorized to execute this Agreement on behalf of the Party for which s/he signs. Each Party represents that it has legal authority to enter into this Agreement and to perform all obligations under this Agreement, and that by doing so, such Party is not in breach or violation of any other agreement or contract.

9.2 Amendment. Except as to fluctuations in the Equitable Allocation as otherwise provided for herein, this Agreement may be amended or modified only by a written instrument approved by an eighty (80)%) vote of the Equitable Allocation

9.3 Jurisdiction and Venue. This Agreement shall be governed by and construed in accordance with the laws of the State of California, except for its conflicts of law rules. Any suit, action, or proceeding brought under the scope of this Agreement shall be brought and maintained to the extent allowed by law in the County of San Bernardino, California.

9.4 Headings. The paragraph headings used in this Agreement are intended for convenience only and shall not be used in interpreting this Agreement or in determining any of the rights or obligations of the Parties to this Agreement.

9.5 Construction and Interpretation. This Agreement has been arrived at through negotiations, and each Party has had a full and fair opportunity to revise the terms of this Agreement. As a result, the normal rule of construction that any ambiguities are to be resolved against the drafting Party shall not apply in the construction or interpretation of this Agreement.

9.6 Entire Agreement. This Agreement constitutes the entire agreement of the Parties with respect to its subject matter, and supersedes any prior oral or written agreement, understanding, or representation relating to the subject matter of this Agreement.

9.7 Partial Invalidity. If, after the date of execution of this Agreement, any provision of this Agreement is held to be illegal, invalid, or unenforceable under present or future laws or adjudicatory decisions effective during the term of this Agreement, such provision shall be fully severable. However, in lieu thereof; there shall be added a provision as similar in terms

to such illegal, invalid or unenforceable provision as may be possible and be legal, valid and enforceable.

9.8 Successors and Assigns. To the extent authorized by law, this Agreement shall be binding on and inure to the benefit of the successors and assigns of the respective Parties to this Agreement. No Party may assign its interests in or obligations under this Agreement without the written consent of the other Parties, which consent shall not be unreasonably withheld or delayed.

9.9 Waivers. Waiver of any breach or default hereunder shall not constitute a continuing waiver or a waiver of any subsequent breach either of the same or of another provision of this Agreement, and forbearance to enforce one or more of the remedies provided in this Agreement shall not be deemed to be a waiver of that remedy.

9.10 Attorneys' Fees and Costs. The prevailing Party in any litigation or other action to enforce or interpret this Agreement shall be entitled to reasonable attorneys' fees, expert witnesses' fees, costs of suit, and other and necessary disbursements, in addition to any other relief deemed appropriate by a court of competent jurisdiction.

9.11 Necessary Actions. Each Party agrees to execute and deliver additional documents and instruments and to take any additional actions as may be reasonably required to carry out the purposes of this Agreement.

9.12 Compliance with Law. In performing their respective obligations under this Agreement, the Parties shall comply with and conform to all applicable laws, rules, regulations and ordinances.

9.13 Third Party Beneficiaries. This Agreement shall not create any right or interest in any non-Party or in any member of the public as a third party beneficiary.

9.14 Notices. All notices, requests, demands or other communications required or permitted under this Agreement shall be in writing unless provided otherwise in this Agreement and shall be deemed to have been duly given and received on: (i) the date of service if served personally or served by facsimile transmission on the Party by delivery to the person(s) at the address(es) designated below, which designation may be changed from time to time by a Party in writing; (ii) on the first day after mailing, if mailed by Federal Express, U.S. Express Mail, or other similar overnight courier service, postage prepaid, and addressed as provided below, or (iii) on the third day after mailing if mailed to the Party to whom notice is to be given by first class mail, registered or certified, postage prepaid, addressed as follows:

To CITY OF COLTON:	CITY OF COLTON Attn: David Kolk, Utilities Director 650 N. La Cadena Drive Colton, CA 92324
To CITY OF REDLANDS:	CITY OF REDLANDS Attn: Paul Toor, Public Works Director 35 Cajon Street Redlands, CA 92373
To CITY OF RIALTO:	CITY OF RIALTO Attn: Thomas J. Crowley, Utilities Manager 150 S. Palm Avenue Rialto, CA 92376
To CITY OF SAN BERNARDINO MUNICIPAL WATER DEPARTMENT:	CITY OF SAN BERNARDINO MUNICIPAL WATER DEPARTMENT Attn: Miguel Guerrero, Director, Water Utility 397 Chandler Place San Bernardino, CA 92408
To CITY OF LOMA LINDA:	CITY OF LOMA LINDA Attn: Bill Walker, Director of Utilities 25541 Barton Road Loma Linda, CA 92354
To EAST VALLEY WATER DISTRICT:	EAST VALLEY WATER DISTRICT Attn: John J. Mura, General Manager 3111 Greenspot Road Highland, CA 92346
To SAN BERNARDINO VALLEY MUNICIPAL WATER DISTRICT:	SAN BERNARDINO VALLEY MUNICIPAL WATER DISTRICT Attn: Doug Headrick, General Manager 380 E. Vanderbilt Way San Bernardino, CA 92408
To SAN BERNARDINO VALLEY WATER CONSERVATION DISTRICT:	SAN BERNARDINO VALLEY WATER CONSERVATION DISTRICT Attn: Daniel Cozad, General Manager 1630 West Redlands Blvd., Suite A Redlands, California 92373
To FONTANA WATER COMPANY:	FONTANA WATER COMPANY

	Attn: Chris Fealy, Water Resources Manager Post Office Box 309 Fontana, CA 92335
To WEST VALLEY WATER DISTRICT:	WEST VALLEY WATER DISTRICT Attn: Greg Gage, Assistant General Manager 855 W Baseline Road Rialto, CA 92376
To YUCAIPA VALLEY WATER DISTRICT:	YUCAIPA VALLEY WATER DISTRICT Attn: Joe Zoba, General Manager 12770 2nd Street Yucaipa, CA 92399
To BEAR VALLEY MUTUAL WATER COMPANY:	BEAR VALLEY MUTUAL WATER COMPANY Attn: Bob Martin 101 E. Olive Avenue Redlands, CA 92373
To LOMA LINDA UNIVERSITY:	LOMA LINDA UNIVERSITY Central Utilities Plant Attn: Bill Walker, Director of Utilities 11100 Anderson Street Loma Linda, CA 92350

9.15 Counterparts. This Agreement may be executed in one or more counterparts, each of which shall be deemed to be an original, but all of which together shall constitute but one and the same instrument.

[SIGNATURE PAGES TO FOLLOW]

EXHIBIT _A

Map of Upper Santa Ana Bunker Hill Basin

(Taken from DWR Bulleting No. 118)

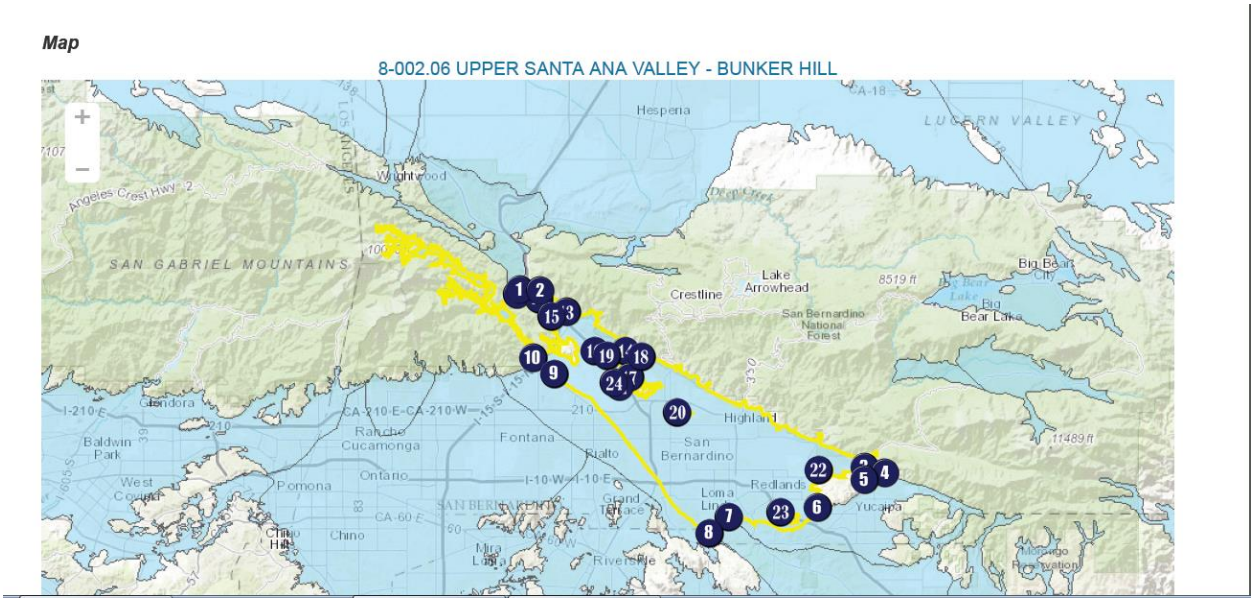


Exhibit B

EQUITABLE ALLOCATION METHOD

The Parties to this agreement have agreed to equitably share costs and establish the voting weight for each Party using the following method, which shall be performed annually after the annual submittal of the Western-San Bernardino Watermaster Report to the Court. The details for this method are included in a Microsoft Excel Spreadsheet titled *BTAC Equitable Allocation Method SBBA 1.18.18.xlsx*, as amended by the GC from time to time, which is incorporated here by reference. Copies of that file have been made available to all parties.

I. Calculation of the Equitable Operations and Maintenance (O&M) Cost.

The equitable distribution of the O&M Costs amongst the Parties shall be calculated from the approved budget, as follows:

$$Equitable\ O\&M\ Cost_{\ Plaintiffs} = 0.2795 \times O\&M\ Costs$$

$$Equitable\ O\&M\ Cost_{\ Non\ Plaintiffs} = Proportion\ of\ Total\ Pumping \times 0.7205 \times O\&M\ Costs$$

where,

O&M Costs = annual budgeted or actual costs to operate and maintain the facilities needed to recharge supplemental water into the SBBA that have been reviewed and approved by the Council

$$\text{Proportion of Total Pumping (\%)} = \frac{\text{Party's total SBBA pumping}}{\text{Non-Plaintiff Total SBBA Pumping}}$$

where,

Party's total SBBA pumping (acre-feet) = the Party's total amount pumped from the SBBA for the previous complete calendar year, as published by the Western-San Bernardino Watermaster, and adjusted for any water pumped by one Party and received by another Party, to coordinate with non-parties still paying the groundwater charge, Parties may be requested to report production to the SBVWCD, as needed.

Non-Plaintiff Total SBBA Pumping (acre-feet) = total Non-Plaintiff pumping of the parties for the previous complete calendar year, as recorded by the Western-San Bernardino Watermaster.

II. Calculation of the Equitable Water Cost.

The equitable distribution of the water cost for sustainability will only be paid by the Non-Plaintiff parties and shall be calculated, as follows:

$$Equitable\ Water\ Cost = Party\ Gap + Sustainability$$

where,

$$\underline{\text{Party Gap (\$)}} = \frac{\left(Gap_{1959-63} + Gap_{Last\ 5\ Years}\right)}{2} * SWP\ Cost$$

where,

$\frac{\left(Gap_{1959-63} + Gap_{Last\ 5\ Years}\right)}{2} < 0$, else Party Gap ($) = $0

Gap $_{1959\text{-}63}$ (acre-feet) = $GWSY_{1959\text{-}63}$ + $SW_{1959\text{-}63}$ - Demand $_{Previous\ Year}$

Gap $_{Last\ 5\ Years}$ (acre-feet) = $GWSY_{Last\ 5\ Years}$ + $SW_{Last\ 5\ Years}$ - Demand $_{Previous\ Year}$ + Net New Recycled $_{Previous\ Year}$

where,

$GWSY_{1959\text{-}63}$ = local groundwater supplies available to a Party as a portion of their base period safe yield.

The **base period safe yield** for the SBBA has been proportioned amongst the Parties as described below:

where,

$GWSY_{1959\text{-}63} = \text{Safe Yield}_{1959\text{-}63} - SW_{1959\text{-}63}$

$SW_{1959\text{-}63}$ = average surface water usage by a party from 1953-1963

Demand $_{Previous\ Year}$ = total water demand calculated for the Party for the previous year using published data, as approved by the Council.

$GWSY_{Last\ 5\ Years}$ = local groundwater supplies available to a Party as a portion of their current Safe Yield.

The **safe yield of the last 5 years** for the SBBA will be proportioned amongst the Parties as described below.

where,

$GWSY_{Last\ 5\ Years} = \text{Safe Yield}_{Last\ 5\ Years} - SW_{Last\ 5\ Years}$

$SW_{Last\ 5\ Years}$ = average surface water usage by a party within the last 5 years.

Net New Recycled $_{Previous\ Year}$ = The amount of recycled water from the previous year minus Recycled $_{1959\text{-}63}$

where,

$Recycled_{1959\text{-}63}$ is the amount of recycled water used in the base period

Sustainability ($) = Water Use x (Total Equitable Water Cost – Total Gap ($))

where,

$$\text{Water Use (\%)} = \frac{\text{Party Water Use (acre-feet)}}{\text{Total Water Use (acre-feet)}}$$

where,

Party Water Use (acre-feet) = the Party's total average water use over the past, complete, 5 year period (surface water, groundwater, recycled water, imported water, etc.)

Total Water Use (acre-feet) = Summation of each individual Party Water Use

Total Equitable Water Cost = Sustainable Amount x SWP Cost

where,

Sustainable Amount (acre-feet) = The amount of SWP water, in acre-feet, needed to achieve long-term sustainability which shall be obtained from the latest edition of the San Bernardino Valley Regional Urban Water Management Plan, Average Scenario for the latest planning year plus the published reliability factor, currently 10%

SWP cost ($/acre-foot) = The cost for recharged SWP water as published in the San Bernardino Valley Municipal Water District Resolution 888, as amended

Total Gap ($) = Summation of each individual Party Gap ($) for all Parties

Proportioning Safe Yield.

The Western-San Bernardino Judgment does not apportion the safe yield by water agency. The Parties agree that, for purposes of this agreement, the Safe Yield will be apportioned, as follows:

Safe Yield$_{1959\text{-}63}$: The safe yield during the Base Period was proportioned as follows:

Agency	Safe Yield$_{1959\text{-}63}$
Bear Valley Mutual Water Company	12,996
City of Colton	3,150
City of Loma Linda	1,855
City of Redlands	26,598
City of Rialto	1,890
City of San Bernardino	19,425
East Valley Water District	13,599
Fontana Union Water Company	14,221
Loma Linda University	1,016
Mountain View Power Co.	1,040
Muscoy Mutual Water Company No. 1	1,767
San Bernardino County - Facility Management	1,532
San Bernardino Valley M.W.D.	-
Terrace Water Company	984
West Valley Water District	11,752
Yucaipa Valley Water District	-

Other Non-Plaintiff Extractions	55,412
Non-Plaintiff Total:	**167,238**

Safe Yield$_{\text{Last 5 years}}$: The safe yield for the previous 5, complete, calendar years shall be proportioned based upon the total water use for each Party, as follows:

Safe Yield$_{\text{Last 5 Years}}$ = Water Use X Safe Yield$_{\text{Non Plaintiffs}}$

Where,

Water Use is a percentage (%) and is defined above

Safe Yield$_{\text{Non Plaintiffs}}$ = defined by the Western-San Bernardino Watermaster from time to time, currently 172,745 acre-feet

Credit for Water. A party can provide a new regional supply for basin benefit and receive monetary credit towards their Equitable water cost.

Credit for Water ($) = water provided for basin benefit x SWP Cost

where,

Water provided for basin benefit = local surface water available to an agency that is controlled by that agency and intentionally delivered for groundwater recharge into the SBBA or new recycled water an agency is using to offset potable water use or is recharging into the SBBA above the amount of recycled water that agency was utilizing during the base period

SWP Cost = defined above

III. Formula for Voting Weight. The voting weight for each Party will be calculated, as follows:

$$\textit{Voting Weight} = \frac{\textit{Total Party Cost}}{\textit{Total Costs}}$$

Where,

Total Party Cost = Equitable O&M Cost $_{\text{Non Plaintiffs}}$ + Equitable Water Cost

Total Costs = 0.7205 x O&M Costs + Total Sustainable Water Cost

The total sum of all of the individual Voting Weight values shall be equal to 1.0.

Yucaipa Valley Water District

Workshop Memorandum 18-052

Date: January 30, 2018

From: Matthew Porras, Management Analyst

Subject: Review of Proposed Meter Installation Costs for 2018

District staff compiled the current actual cost of the parts, labor, and overhead to achieve the 2018 Meter Installation Fee. As shown in the table below, each common meter set either remained the same or decreased.

Meter Installation Fee				
Meter Installation Type	**Actual 2011-16**	**Actual 2017**	**Proposed 2018**	**Increase/ (Decrease) from 2017**
1" Drinking Water Meter set with Fire Sprinklers on Dual Plumbed Residence	$375.00	$1,085.00	$1,030.00	($55.00)
1" Drinking Water Meter set with Fire Sprinklers	$375.00	$910.00	$860.00	($50.00)
3/4" Drinking Water Meter Set	$325.00	$490.00	$490.00	$0.00
1" Recycled Water Meter Set	$375.00	$570.00	$560.00	($10.00)
3/4" Recycled Water Meter Set	$325.00	$490.00	$490.00	$0.00

District staff recommends the update of the Meter Installation Fee to meet the current actual cost reflected in the 2018 Meter Installation Fee.

Yucaipa Valley Water District

Workshop Memorandum 18-053

Date: January 30, 2018

From: John Wrobel, Public Works Manager

Subject: Review of the Santa Ana Watershed Project Authority Resolution No. 2017-11 for Local Limits and Best Management Practices for the Inland Empire Brineline

On October 3, 2017, the District conducted a public hearing and subsequently adopted Ordinance No. 57-2017 *Adopting the Santa Ana Watershed Project Authority Ordinance No. 8 Establishing Regulations for the Use of the Inland Empire Brineline and Santa Ana Watershed Project Authority Resolution No. 2017-11 of the Santa Ana Watershed Establishing Local Limits and Best Management Practices Requirements*.

The District should also adopt the Santa Ana Watershed Project Authority Resolution No. 2017-11 which establishes the local limits and best management practices.

RESOLUTION NO. 2017-11

A RESOLUTION OF THE COMMISSION OF THE SANTA ANA WATERSHED PROJECT AUTHORITY ESTABLISHING LOCAL LIMITS AND BEST MANAGEMENT PRACTICES REQUIREMENTS

WHEREAS, the Commission of the Santa Ana Watershed Project Authority (hereinafter "SAWPA") adopted Ordinance No. 8 (hereinafter “Ordinance”), an Ordinance Establishing Regulations for the Use of the Santa Ana Regional Interceptor, now commonly referred to as the Inland Empire Brine Line (hereinafter “Brine Line”); and

WHEREAS, the Ordinance provides for the establishment and implementation of pollutant limitations that are technically developed as Local Limits by Orange County Sanitation District (hereinafter “OCSD”) pursuant to 40 Code of Federal Regulations 403.5(c) and amendments thereto; and

WHEREAS, Section 101.A.7 and Sections 201.L. and 201.O of SAWPA Ordinance No. 8 requires the prevention of discharges which are detrimental to Brine Line operations and could cause sanitary sewer overflows; and

WHEREAS, high concentrations of Biochemical Oxygen Demand (BOD) and Fats, Oils, and Grease (FOG) have been detrimental to Brine Line operations necessitating limits and standards regarding concentration; and

WHEREAS, BOD is unlikely to cause adverse effects to the Brine Line in small quantities, and a de minimus volume, not to exceed 5,000 gpd is hereby established as an exception to the BOD demonstration value. Said discharges shall still comply with all other adopted limitations including but not limited to mass limitations, prohibited standards and other general and specific limitations; and

WHEREAS, it has been determined that significantly high concentrations of BOD have the potential to cause adverse effects to the Brine Line and that the implementation of effective Best Management Practices (BMPs) should substantially lower the incidence of said discharges; and

WHEREAS, it has been determined the Local Limit previously developed for the parameter of Dissolved Organic Carbon (DOC) is no longer necessary and has been removed; and

WHEREAS, OCSD developed new prohibitions, limitations, and requirements with the establishment of Ordinance No. OCSD-48; and

WHEREAS, limitations and requirements are necessary to assure compliance with OCSD’s National Pollutant Discharge Elimination System (hereafter NPDES) Permit, including the prohibition against pass through of any pollutants that can cause a violation of the NPDES Permit or cause an interference with OCSD’s Publicly Owned Treatment Works (hereafter POTW), to protect OCSD’s POTW and its workers, to reclaim and reuse municipal waters and sludges, and to comply with agreements between SAWPA and OCSD, this resolution establishes the authority, implements provisions and FINDS:

A. That OCSD is required by federal and state law, including the Clean Water Act (33 U.S.C. 1251, et seq.), the General Pretreatment Regulations (40 CFR 403), and the Porter- Cologne Water Quality Control Act (Water Code Sections 13000, et seq.), to implement and enforce a program for the regulation of Wastewater discharges to OCSD's sewers; and
B. That OCSD is required by federal, state, and local law to meet applicable standards of treatment plant effluent quality; and
C. That SAWPA is the Delegated Control Authority (DCA) acting under OCSD, who is the Control Authority (CA); and
D. That the roles and authorities of CA and DCA are also defined to the extent in
    1. Memorandum of Understanding Between Santa Ana Watershed Project Authority and County Sanitation Districts of Orange County Governing Quality Control of Wastewaters Discharged to the Santa Ana Regional Interceptor, effective April 1, 1991 (1991 MOU);
    2. Wastewater Treatment and Disposal Agreement between County Sanitation Districts Nos. 1, 2, 3, 5, 6, 7, 11, 13, and 14 of Orange County, California (collectively "Districts"), each of which is a county sanitation district organized and existing pursuant to California Health & Safety Code section 4700 et seq., effective July 24, 1996 (1996 Agreement);
    3. First Amendment to Wastewater Treatment and Disposal Agreement between the SAWPA and OCSD, effective as of November 21, 2013 (2013 Amendment);
    4. SAWPA Pretreatment Program Side Letter between the Santa Ana Watershed Project Authority and the Orange County Sanitation District, effective on March 13, 2014 (2014 Side Letter);
    5. 1972 Wastewater Interceptor Capacity Agreement between the Santa Ana Watershed Project Authority and the Orange County Sanitation District, effective as of April 12, 1972;
    6. Ordinance No. OCSD-48, An Ordinance of the Board of Directors of the Orange County Sanitation District Amending Wastewater Discharge Regulations, and Repealing Ordinance No. OCSD-39;
E. That the adoption of this resolution is statutorily exempt under the California Environmental Quality Act pursuant to the provisions of Public Resources Code Section 21080(b)(8) and California Code of Regulations Section 15273(a) and categorically exempt pursuant to California Code of Regulations Sections 15307 and 15308.; and

WHEREAS, pollutant limitations and requirements shall be continually developed as necessary and shall be adopted by Resolution;

NOW, THEREFORE, BE IT RESOLVED that the Commission of the Santa Ana Watershed Project Authority hereby establishes, determines, and orders:

Section 1. The Commission hereby establishes the following Local Limits and Best Management Practices (BMP) Requirements:

LOCAL NON-DOMESTIC WASTEWATER LIMITATIONS CONCENTRATION VALUES

Pollutant ([1])	Maximum Daily Limit (mg/L)
1,4-dioxane	1.0
Arsenic	2.0

Cadmium	1.0
Chromium (Total)	20.0
Copper	3.0
Lead	2.0
Mercury	0.03
Nickel	10.0
Selenium	3.9
Silver	15.0
Zinc	10.0
Cyanide (Total)	5.0
Molybdenum	2.3
Polychlorinated biphenyls (PCB)	0.01
Pesticides	0.01
Sulfide (Total)	5.0
Sulfide (Dissolved)	0.5
Oil and Grease (Mineral/Petroleum Oil Origin) ([2])	100.0
Fats, Oil and Grease (FOG)	500.0

([1]) Users subject to Federal Categorical Pretreatment Standards may be required to meet more stringent limits.
([2]) Oil and Grease of mineral or Petroleum Origin is also known as Petroleum Oil and Grease Silica Gel Treated n-Hexane Extractable Material.

MASS (LBS/DAY) LIMITATION

Pollutant	**Maximum Daily Limit (lbs/day)**
Ammonia	Report (**)
Biochemical Oxygen Demand	Report (**)

(**) Users may be required to monitor for and report the analytical results for required parameters at a frequency as specified in a wastewater discharge permit or other control mechanism.

BEST MANAGEMENT PRACTICES (BMP) REQUIREMENTS**

Pollutant	Average Daily Concentration (mg/L) During any Month
Biochemical Oxygen Demand	12,000

*** BMP Requirements apply to permitted users with flow volumes greater than 5,000 gpd (calculated as a seven-day average) which cannot achieve consistent compliance with the BMP demonstration value listed above. Said users shall be required, as a condition of their Waste Discharge Permit, to develop BMPs which include, but are not limited to:*

a. *Identifying and evaluating the source and volumes of pollutants being discharged to the Brine Line;*
b. *Implementing spill prevention and countermeasures plans;*
c. *Evaluating additional treatment or disposal options; and*
d. *Evaluating recycle or reuse opportunities.*

Section 2. pH shall be between 6.0 and 12.0.

Section 3. In those cases where a SAWPA Industrial Non-Process Wastestream is comingled with a SAWPA Industrial Process Wastestream, as defined by Ordinance, prior to a designated monitoring point the SAWPA Wastestream Correction Formula may be used to adjust the Local Limits to account for the presence of SAWPA Industrial Non-Process Wastestreams.

$$C_A = \frac{C_C(\sum_{N=1}^{M} F_N)}{F_T}$$

Where: C_A = Adjusted Local Limit to account for Industrial Non-Process Wastestream(s)
C_C = Local Limit for the pollutant constituent
F_N = Average daily flow for SAWPA Industrial Process Wastestream N
F_T = Average daily flow for all wastestreams through the sample point
M = Total number of SAWPA Industrial Process Wastestreams

Section 4. The Local Limits and BMP Requirements established by this Resolution shall become effective immediately. Industry Specific BMP Requirements will be incorporated as a permit condition that includes a compliance schedule which shall not exceed one (1) year from the effective date of the permit change. All previous Resolutions and Ordinances relating to Local Limits are hereby rescinded in their entirety.

ADOPTED THIS 19th day of September, 2017.

Santa Ana Watershed Project Authority

BY: _____
Chair of the Commission

Yucaipa Valley Water District

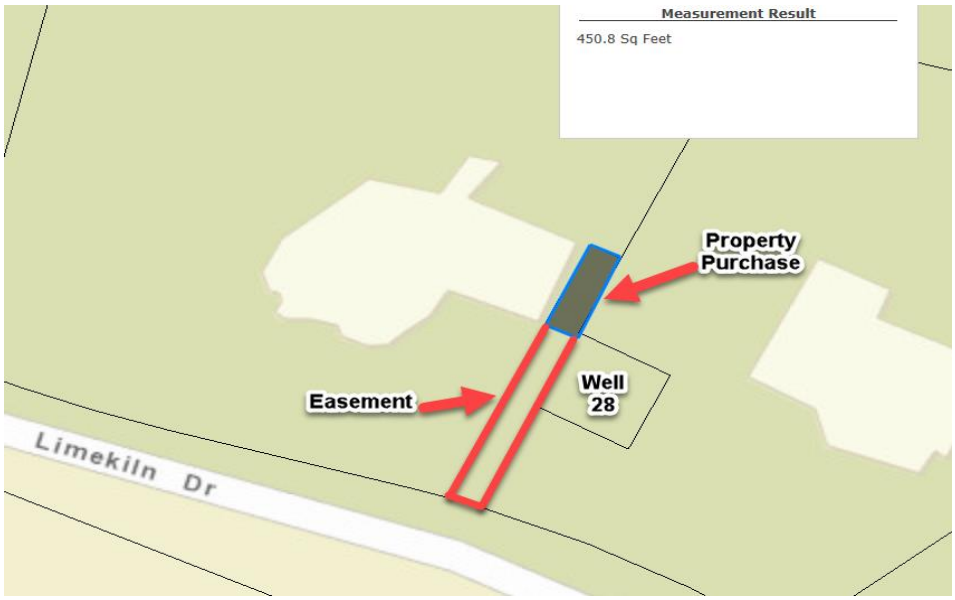
Workshop Memorandum 18-054

Date: January 30, 2018

From: Kathryn Hallberg, Management Analyst

Subject: Discussion Regarding the Potential Land Sale, Lot Line Adjustment, and Easement Allowance Associated with Well 28

The District staff has been working with homeowner Mike Parskima, whose property is located next to Well 28 on Limekin Drive in Yucaipa. In early 2017, Mr. Parskima approached the District about the possibility of purchasing the property of Well 28. Well 28 is not currently being utilized, but is an asset to the District and will be turned into a monitoring well in the future, and therefore is not available for sale.



The structure of Mr. Parskima's home is located within a foot and a half to the property line of Well 28. Mr. Parskima requested the District's consideration to purchase the tail end of the property that the District had previously used for vehicle turnaround, as this is the portion of the property that is near his home. The District no longer accesses the well site with vehicles, and in an effort to be good neighbors the District offered Mr. Parskima the possibility of purchasing the tail end of the property estimated to be 450 square feet, as seen in the attached map.

In addition to the purchase of a portion of the property, Mr. Parskima would be responsible for the cost of a lot line adjustment needed to complete the purchase of the property.

District staff would also recommend providing an easement to Mr. Parskima, at his cost to the portion of the property outlined in the map below. This would allow Mr. Parskima access to the back of his property, and would not interfere with District staff operations.

These options were discussed with Mr. Parskima as a possibility pending Board approval and he was agreeable to these terms.

Financial Consideration

The purchase price for the property was determined using property comparisons within the area at $3.45 per square foot. The square foot estimate of the property is 450 square feet for an estimated total of $1,552.50. This transaction would include the purchase of the property, a lot line adjustment and an easement. Mr. Parskima would cover all costs associated with this transaction.

Yucaipa Valley Water District

Workshop Memorandum 18-055

Date: January 30, 2018

From: Kathryn Hallberg, Management Analyst

Subject: Overview of Claim Related to Car Repair as a Result of Asphalt Repair on Colorado Street and 8th Street

On January 16, 2018, the Yucaipa Valley Water District received a claim from Mr. Kenneth Carter ("Claimant") for automobile repair costs of $1,598.42 incurred as a result of driving over an asphalt repair located on Colorado Street and 8th Street on January 13, 2018.

On January 16, 2018 the Claimant stated via phone conversation with District employee Kathryn Hallberg, that he was traveling east on Colorado Street from the stop sign on 8th Street when he drove through the asphalt repair. The Claimant stated he saw the caution sign but was unable to avoid the asphalt repair area. He drove through the asphalt repair area at 10 m.p.h. and damage occurred to the rear shocks of his 2004 Mazda RX8.

The quote from Spreen Honda dated January 12, 2018 for repairs was delivered to the office on January 17, 2018 and is attached. The Claimant also provided photos of the asphalt repair which are also attached.

The Claimant is requesting to be reimbursed for the quoted cost of the repairs to his 2004 Mazda RX8 in the amount of $1,178.42 for parts and $420.00 for labor.

Options for consideration:

- Option #1 – Deny the claim based on the information that was provided. District staff reviewed the asphalt repair and videoed multiple vehicles going through the repair with no damage.

- Option #2 – Direct District staff to pay the quoted auto repair cost that will be incurred by Mr. Kenneth Carter.

YUCAIPA VALLEY WATER DISTRICT – CLAIM FORM

INSTRUCTIONS

On the reverse side of sheet is a claim form for filing a claim against Yucaipa Valley Water District. The original and one identical copy of this form, together with a copy of all attachments, are to be filed with the Yucaipa Valley Water District. Retain one copy for your records. Please send to this address:

Yucaipa Valley Water District

Attn: Claims Dept.

12770 2nd St

Yucaipa, Ca. 92399

(909) – 797-5937 FAX

RECEIVED
JAN 16 2018
YUCAIPA VALLEY
WATER DISTRICT

Please fill out form completely. Additional sheets may be attached if more space is needed. Missing information may delay the processing of your claim. Please print.

Claims:

Claims for death, injury to person or personal property must be filed not later than six months after the occurrence. (Gov. Code Sec. 911.2)

Claims for damage relating to any other cause of action must be filed not later than 1 year after the occurrence. (Gov. Code Sec. 911.2)

This claim form must be signed and dated.

Who is Responsible for Damages?

No utility is in a position to guarantee 100 percent continuity of water service. However, it is our policy to investigate claims in order to determine if our conduct or inaction was unreasonable under the circumstances, thereby causing injury or damages. YVWD will not be liable for interruption or shortage or insufficiency of supply, or any loss or damage of any kind, if same is caused by inevitable accident, act of God, fire, strikes, riots, war, or any other cause except that arising from its failure to exercise reasonable diligence.

Determination of Responsibility and Payment if YVWD is at fault

YVWD will conduct an investigation based on the information you provide on your claim form and internal YVWD records and interviews with YVWD field personnel. The investigation results will determine weather your claim is accepted or rejected. If your claim is accepted, YVWD's payment with regard to property damage will depend on the extent of damage and value of the property. If the property can be repaired, YVWD will pay the cost of repair. If the property cannot be repaired, YVWD will generally pay reasonable market value for the property at the time it was damaged, or the depreciated cost to replace the property, whichever is less. Payment for bodily injury is determined by several factors including, but not limited to, type and severity of injury, medical bills incurred, loss of wages (if any) and permanent disability sustained (if any).

Claim for Damage

Name Kenneth A Carter	Clerks Date Stamp
Address 33326 Colorado St	
Phone(s) 909 521-2536 Business Home Message/Cell	
E-mail:	
Address at time of loss/Incident: Same	*This box is for Official Use only!

Description of Details: (Describe how the loss/incident occurred) Right Rear left Rear shoucks Blown out Very Bad asstalt water leacke At 8TH in Colorado near Pump house South of 8Th St 3 inch Lip on Far side, the Hot Water Comp. workes are Sloppy in there work it's not accepable, with traffic you are forced to hit pot hole at 15mph lip is 3 inch

(Attach additional pages and supporting documentation as needed)

YVWD's involvement :(If possible, please identify employee and/or department involved) Your forced to Hit During Rush Hours, I have Pacific in this town over 25 years ago. and they are Still Today No Reason to Leave 00 in this order

Witnesses: (please provide address and phone numbers)

1. Hate ass work 2. by Water District work

There is NO Excuse for leaving area in the matter all works If Mine would be looking for new employment

Property Damage (please describe the value and extent of the damage to your home, automobile or personal property: (Attach estimates, bills, or whatever documentation of damages you have) for public Safety Yucaipa Water is 100% Responsible Caring for Public Safety is there Job or Roll to Doe No Question

Make: Mazda Model: RX8 Year: 2004 License # 7NMN819 Insurance Co. _____ Policy #: In-many

Where you Injured?: No: ☒ Yes: ☐ (If yes please complete the following)

Describe your injury (Identity your doctor(s)/Health care provider(s)

Are you still receiving Medical Treatment? No: ☒ Yes: ☐

Employer: Type of Work:

Wage Loss? No: ☒ Yes: ☐ If Yes, rate of pay:

*"I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct"

1/13/18 Yucaipa Ca. (Date and Place (City and State))	Kenneth A Carter Signature

Automobile Accident Report

Date: 1/13/18		
Name of Owner of Your Vehicle: Kenneth Cater		
Model Year: 2004	Make of Car: Mazda	Body Style: RX8
State and License No. Ca. 7MMS18	Mileage: 70,000	IF Leased, by Whom Held Own
Name of Your Insurance Co. In Finity		
Type of Insurance Carried		
Name of Driver: Kenneth	Address: 53396 Colorado	Phone No.: 909 521-2536
Relationship of Driver To Owner:	Driver's Date of Birth: 9/18/65	Driver's License No.:
Date of Accident: 1/13/18	Time: (AM / PM) about 2:00pm	Location: (Address No. And Street) Cherry & Colorado
City- Town: Yucaipa	State: Ca	92399

OCCUPANTS OF VEHICLE:

Name	Address	Approx. Age	Relation to Owner	Your Vehicle	Other Vehicle	Ped.	Injured

Nature of injuries: _____

Where Treated: _____ Name of Treating Physician: _____

DAMAGE TO PROPERTY OF OTHERS

Extent of Damage: Blow Rear Shocks, Mazda, 1,178 Est

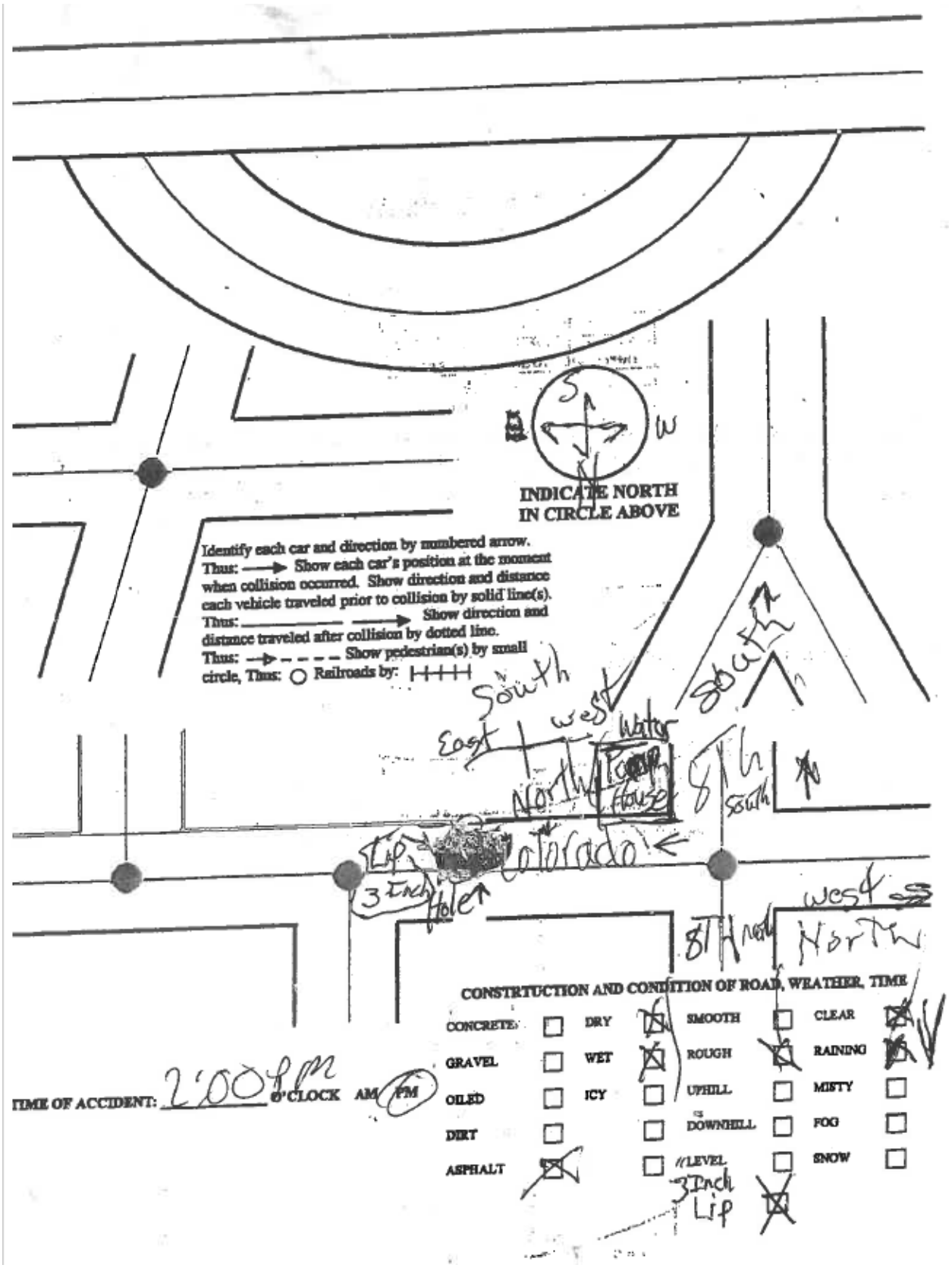
If Auto, Make of Vehicle:	State and License #:	Driver's License #:
Owner's Name	Address:	Phone:
Driver's Name (if different)	Address:	Phone:

Witnesses, (Include occupant's of Vehicle)

Name:	Address:	Phone:

Date: 1/13/18 Signature: Kenneth Cater

*Must Complete Back Page!


INDICATE NORTH
IN CIRCLE ABOVE
Identify each car and direction by numbered arrow.
Thus: ⟶ Show each car's position at the moment when collision occurred. Show direction and distance each vehicle traveled prior to collision by solid line(s).
Thus: _____ ⟶ Show direction and distance traveled after collision by dotted line.
Thus: ⟶ - - - - Show pedestrian(s) by small circle, Thus: ○ Railroads by: ++++
South
East
West
Water
Pump House
South
8th
South
Colorado
3 Inch Hole
West
8th North
North
CONSTRUCTION AND CONDITION OF ROAD, WEATHER, TIME
CONCRETE
GRAVEL
OILED
DIRT
ASPHALT
DRY
WET
ICY
SMOOTH
ROUGH
UPHILL
DOWNHILL
LEVEL
CLEAR
RAINING
MISTY
FOG
SNOW
3 Inch Lip
TIME OF ACCIDENT: 2:00 O'CLOCK AM PM

JAN/17/2018/WED 01:20 PM Kenneth Carter FAX No. P. 002/003

PQ1438

Spreen Honda
25050 Redlands Blvd. Loma Linda, California 92354
(909) 799-7070

Spreen mazda
25140 Redlands Blvd. Loma Linda, California 92354
(909) 363-1000

PQ1438

CUSTOMER	TAX EXEMPT NUMBER	CUST P.O. NO	SHELVES	PAY	SOLD BY	INVOICE DATE	INVOICE NO
103				CASH	DEVIN STEVENSON	01/12/18	PQ1438 MAR

BILL TO RETAIL CUSTOMER

SHIP TO

SHELVES	QTY SOLD	PART NUMBER	DESCRIPTION	BIN	LIST	NET	AMOUNT
2	0	F151-28-003	SHEET,RR D	SOP	4.99	4.99	9.98
2	0	PE02-28-011	SPRING,COI	SOP	112.99	112.99	225.98
2	0	F151-28-012A	LEAF SPRIN	SOP	12.99	12.99	25.98
2	0	F152-28-1A1A	STOPPER,BU	SOP	29.99	29.99	59.98
2	0	PE87-28-700	DAMPER,RR	SOP	285.99	285.99	571.98
2	0	F151-28-771	COLLAR	SOP	10.99	10.99	21.98
2	0	F151-28-773	SPACER	SOP	7.99	7.99	15.98
2	0	F151-28-774	RETAINER,R	SOP	5.99	5.99	11.98
2	0	F151-28-775B	BUSH,RUBBE	SOP	7.99	7.99	15.98
2	0	F151-28-776A	BUSH,RUBBE	SOP	8.99	8.99	17.98
2	0	F151-28-777	CASING,STO	SOP	10.99	10.99	21.98
8	0	H380-34-034A	NUT,FLANGE	SOP	7.99	7.99	63.92
2	0	9YB0-41-012	NUT	SOP	8.99	8.99	17.98
2	0	9079-40-820	BOLT & WAS	SOP	5.99	5.99	11.98

3-5
420 00

CUSTOMER'S SIGNATURE X

ANY WARRANTIES ON THE PARTS AND/OR ACCESSORIES SOLD HEREBY ARE THOSE MADE BY THE MANUFACTURER. THE SELLER, SPREEN HONDA, HEREBY EXPRESSLY DISCLAIMS ALL WARRANTIES, EITHER EXPRESS OR IMPLIED, INCLUDING ALL IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR THE PARTICULAR PURPOSE, AND SPREEN HONDA NEITHER ASSUMES NOR AUTHORIZES ANY OTHER PERSON TO ASSUME FOR IT ANY LIABILITY IN CONNECTION WITH THE SALE OF THE PARTS AND/OR ACCESSORIES.

SUBTOTAL	1093.66
RESTOCK CHARGE	0.00
TAX	84.76
FREIGHT	0.00
PAY THIS AMOUNT	1178.42

ACCOUNTING COPY

** PRICE QUOTE **
15:57:47 PAGE 1 OF 1
NET510

PARTS INVOICE Total: 1,596.42

PARTS INVOICE
PQ1438

PQ1438

CUSTOMER	TAX EXEMPT NUMBER	CUST P.O. NO	SHELVES	PAY	SOLD BY	INVOICE DATE	INVOICE NO
103				CASH	DEVIN STEVENSON	01/12/18	PQ1438 MAR

BILL TO RETAIL CUSTOMER

SHIP TO

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RESTOCK CHARGE	0.00
TAX	84.76
FREIGHT	0.00
PAY THIS AMOUNT	1178.42

FOR YOUR CONVENIENCE WE ACCEPT THE FOLLOWING:
MASTERCARD VISA ATM
DISCOVER AMERICAN EXPRESS

NO GOODS WILL BE ACCEPTED FOR CREDIT OR REFUND AFTER 30 DAYS. ANY RETURNS MUST HAVE OUR PRIOR APPROVAL AND CANNOT BE ACCEPTED IF PACKAGING IS BROKEN OR UNSEALED. 20% HANDLING CHARGE ON RETURNED ITEMS. NO REFUNDS ALLOWED ON ELECTRICAL ITEMS OR SPECIAL ORDER PARTS.

CUSTOMER COPY

** PRICE QUOTE **
PAGE 1 OF 1
NET510

Spreen Honda
25050 Redlands Blvd. Loma Linda, California 92354
(909) 799-7070

Spreen mazda
25140 Redlands Blvd. Loma Linda, California 92354
(909) 363-1000

Director Comments

Yucaipa Valley Water District

Adjournment

Yucaipa Valley Water District

Yucaipa Valley Water District

FACTS ABOUT THE YUCAIPA VALLEY WATER DISTRICT

Service Area Size: 40 square miles (sphere of influence is 68 square miles)

Elevation Change: 3,140 foot elevation change (from 2,044 to 5,184 feet)

Number of Employees:
5 elected board members
62 full time employees

Operating Budget:
Water Division - $13,397,500
Sewer Division - $11,820,000
Recycled Water Division - $537,250
Total Annual Budget - $25,754,750

Number of Services:
12,434 water connections serving 17,179 units
13,559 sewer connections serving 20,519 units
64 recycled water connections

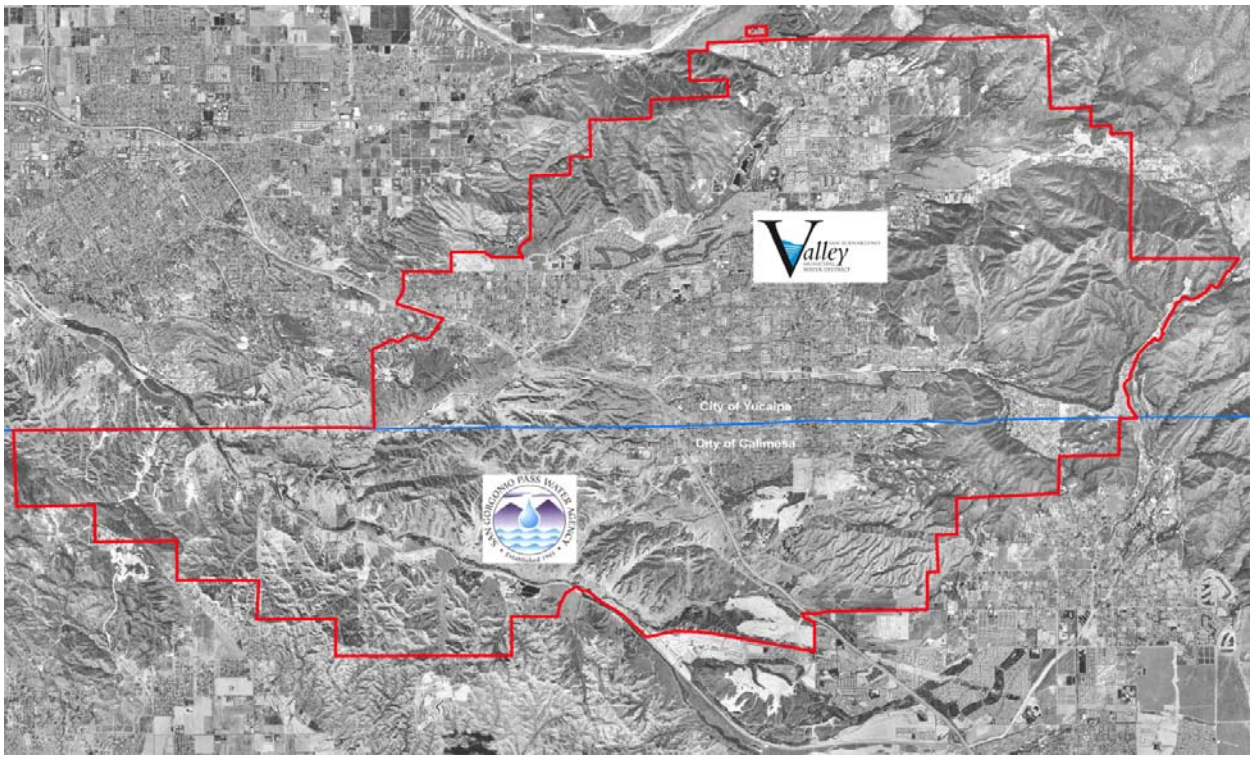
Water System:
215 miles of drinking water pipelines
27 reservoirs - 34 million gallons of storage capacity
18 pressure zones
12,000 ac-ft annual water demand (3.9 billion gallons)
Two water filtration facilities:
- 1 mgd at Oak Glen Surface Water Filtration Facility
- 12 mgd at Yucaipa Valley Regional Water Filtration Facility

Sewer System:
8.0 million gallon treatment capacity - current flow at 4.0 mgd
205 miles of sewer mainlines
5 sewer lift stations
4,500 ac-ft annual recycled water prod. (1.46 billion gallons)

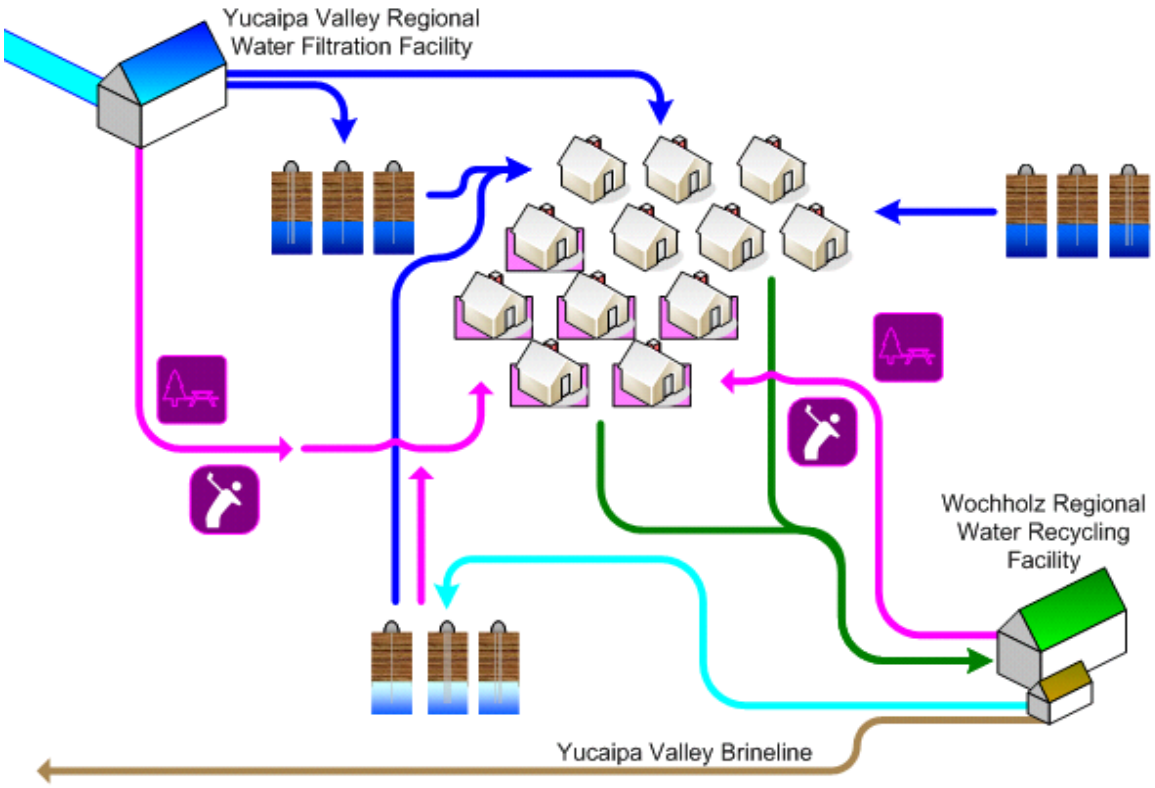
Recycled Water:
22 miles of recycled water pipelines
5 reservoirs - 12 million gallons of storage
1,200 ac-ft annual recycled demand (0.4 billion gallons)

Brine Disposal:
2.2 million gallon desalination facility at sewer treatment plant
1.108 million gallons of Inland Empire Brine Line capacity
0.295 million gallons of treatment capacity in Orange County

State Water Contractors: San Bernardino Valley Municipal Water District
San Gorgonio Pass Water Agency



Sustainability Plan: A Strategic Plan for a Sustainable Future: The Integration and Preservation of Resources, adopted on August 20, 2008.



Yucaipa Valley Water District

THE MEASUREMENT OF WATER PURITY

One part per hundred is generally represented by the percent (%).
This is equivalent to about fifteen minutes out of one day.

One part per thousand denotes one part per 1000 parts.
This is equivalent to about one and a half minutes out of one day.

One part per million (**ppm**) denotes one part per 1,000,000 parts.
This is equivalent to about 32 seconds out of a year.

One part per billion (**ppb**) denotes one part per 1,000,000,000 parts.
This is equivalent to about three seconds out of a century.

One part per trillion (**ppt**) denotes one part per 1,000,000,000,000 parts.
This is equivalent to about three seconds out of every hundred thousand years.

One part per quadrillion (**ppq**) denotes one part per 1,000,000,000,000,000 parts.
This is equivalent to about two and a half minutes out of the age of the Earth (4.5 billion years).

Yucaipa Valley Water District

GLOSSARY OF COMMONLY USED TERMS

Every profession has specialized terms which generally evolve to facilitate communication between individuals. The routine use of these terms tends to exclude those who are unfamiliar with the particular specialized language of the group. Sometimes jargon can create communication cause difficulties where professionals in related fields use different terms for the same phenomena.

Below are commonly used water terms and abbreviations with commonly used definitions. If there is any discrepancy in definitions, the District's Regulations Governing Water Service is the final and binding definition.

Acre Foot of Water - The volume of water (325,850 gallons, or 43,560 cubic feet) that would cover an area of one acre to a depth of 1 foot.

Activated Sludge Process – A secondary biological sewer treatment process where bacteria reproduce at a high rate with the introduction of excess air or oxygen, and consume dissolved nutrients in the wastewater.

Annual Water Quality Report - The document is prepared annually and provides information on water quality, constituents in the water, compliance with drinking water standards and educational material on tap water. It is also referred to as a Consumer Confidence Report (CCR).

Aquifer - The natural underground area with layers of porous, water-bearing materials (sand, gravel) capable of yielding a supply of water; see Groundwater basin.

Backflow - The reversal of water's normal direction of flow. When water passes through a water meter into a home or business it should not reverse flow back into the water mainline.

Best Management Practices (BMPs) - Methods or techniques found to be the most effective and practical means in achieving an objective. Often used in the context of water conservation.

Biochemical Oxygen Demand (BOD) – The amount of oxygen used when organic matter undergoes decomposition by microorganisms. Testing for BOD is done to assess the amount of organic matter in water.

Biosolids – Biosolids are nutrient rich organic and highly treated solid materials produced by the sewer treatment process. This high-quality product can be used as a soil amendment on farm land or further processed as an earth-like product for commercial and home gardens to improve and maintain fertile soil and stimulate plant growth.

Catch Basin – A chamber usually built at the curb line of a street, which conveys surface water for discharge into a storm sewer.

Capital Improvement Program (CIP) – Projects for repair, rehabilitation, and replacement of assets. Also includes treatment improvements, additional capacity, and projects for the support facilities.

Collector Sewer – The first element of a wastewater collection system used to collect and carry wastewater from one or more building sewer laterals to a main sewer.

Coliform Bacteria – A group of bacteria found in the intestines of humans and other animals, but also occasionally found elsewhere and is generally used as an indicator of sewage pollution.

Combined Sewer Overflow – The portion of flow from a combined sewer system, which discharges into a water body from an outfall located upstream of a wastewater treatment plant, usually during wet weather conditions.

Combined Sewer System– Generally older sewer systems designed to convey both sewage and storm water into one pipe to a wastewater treatment plant.

Conjunctive Use - The coordinated management of surface water and groundwater supplies to maximize the yield of the overall water resource. Active conjunctive use uses artificial recharge, where surface water is intentionally percolated or injected into aquifers for later use. Passive conjunctive use is to simply rely on surface water in wet years and use groundwater in dry years.

Consumer Confidence Report (CCR) - see Annual Water Quality Report.

Cross-Connection - The actual or potential connection between a potable water supply and a non-potable source, where it is possible for a contaminant to enter the drinking water supply.

Disinfection By-Products (DBPs) - The category of compounds formed when disinfectants in water systems react with natural organic matter present in the source water supplies. Different disinfectants produce different types or amounts of disinfection byproducts. Disinfection byproducts for which regulations have been established have been identified in drinking water, including trihalomethanes, haloacetic acids, bromate, and chlorite

Drought - a period of below average rainfall causing water supply shortages.

Dry Weather Flow – Flow in a sanitary sewer during periods of dry weather in which the sanitary sewer is under minimum influence of inflow and infiltration.

Fire Flow - The ability to have a sufficient quantity of water available to the distribution system to be delivered through fire hydrants or private fire sprinkler systems.

Gallons per Capita per Day (GPCD) - A measurement of the average number of gallons of water use by the number of people served each day in a water system. The calculation is made by dividing the total gallons of water used each day by the total number of people using the water system.

Groundwater Basin - An underground body of water or aquifer defined by physical boundaries.

Groundwater Recharge - The process of placing water in an aquifer. Can be a naturally occurring process or artificially enhanced.

Hard Water - Water having a high concentration of minerals, typically calcium and magnesium ions.

Hydrologic Cycle - The process of evaporation of water into the air and its return to earth in the form of precipitation (rain or snow). This process also includes transpiration from plants, percolation into the ground, groundwater movement, and runoff into rivers, streams and the ocean; see Water cycle.

Infiltration – Water other than sewage that enters a sewer system and/or building laterals from the ground through defective pipes, pipe joints, connections, or manholes. Infiltration does not include inflow. See *Inflow.*

Inflow - Water other than sewage that enters a sewer system and building sewer from sources such as roof vents, yard drains, area drains, foundation drains, drains from springs and swampy areas, manhole covers, cross connections between storm drains and sanitary sewers, catch basins, cooling towers, storm waters, surface runoff, street wash waters, or drainage. Inflow does not include infiltration. See *Infiltration*.

Inflow / Infiltration (I/I) – The total quantity of water from both inflow and infiltration.

Mains, Distribution - A network of pipelines that delivers water (drinking water or recycled water) from transmission mains to residential and commercial properties, usually pipe diameters of 4" to 16".

Mains, Transmission - A system of pipelines that deliver water (drinking water or recycled water) from a source of supply the distribution mains, usually pipe diameters of greater than 16".

Meter - A device capable of measuring, in either gallons or cubic feet, a quantity of water delivered by the District to a service connection.

Overdraft - The pumping of water from a groundwater basin or aquifer in excess of the supply flowing into the basin. This pumping results in a depletion of the groundwater in the basin which has a net effect of lowering the levels of water in the aquifer.

Peak Flow – The maximum flow that occurs over a specific length of time (e.g., daily, hourly, instantaneously).

Pipeline - Connected piping that carries water, oil or other liquids. See Mains, Distribution and Mains, Transmission.

Point of Responsibility, Metered Service - The connection point at the outlet side of a water meter where a landowner's responsibility for all conditions, maintenance, repairs, use and replacement of water service facilities begins, and the District's responsibility ends.

Potable Water - Water that is used for human consumption and regulated by the California Department of Public Health.

Pressure Reducing Valve - A device used to reduce the pressure in a domestic water system when the water pressure exceeds desirable levels.

Pump Station - A drinking water or recycled water facility where pumps are used to push water up to a higher elevation or different location.

Reservoir - A water storage facility where water is stored to be used at a later time for peak demands or emergencies such as fire suppression. Drinking water and recycled water systems will typically use concrete or steel reservoirs. The State Water Project system considers lakes, such as Shasta Lake and Folsom Lake to be water storage reservoirs.

Runoff - Water that travels downward over the earth's surface due to the force of gravity. It includes water running in streams as well as over land.

Sanitary Sewer System - Sewer collection system designed to carry sewage, consisting of domestic, commercial, and industrial wastewater. This type of system is not designed nor intended to carry water from rainfall, snowmelt, or groundwater sources. See *Combined Sewer System*.

Sanitary Sewer Overflow – Overflow from a sanitary sewer system caused when total wastewater flow exceeds the capacity of the system. See *Combined Sewer Overflow*.

Santa Ana River Interceptor (SARI) Line – A regional brine line designed to convey 30 million gallons per day of non-reclaimable wastewater from the upper Santa Ana River basin to the sewer treatment plant operated by Orange County Sanitation District.

Secondary Treatment – Biological sewer treatment, particularly the activated-sludge process, where bacteria and other microorganisms consume dissolved nutrients in wastewater.

Supervisory Control and Data Acquisition (SCADA) - A computerized system which provides the ability to remotely monitor and control water system facilities such as reservoirs, pumps and other elements of water delivery.

Service Connection - The water piping system connecting a customer's system with a District water main beginning at the outlet side of the point of responsibility, including all plumbing and equipment located on a parcel required for the District's provision of water service to that parcel.

Sludge – Untreated solid material created by the treatment of sewage.

Smart Irrigation Controller - A device that automatically adjusts the time and frequency which water is applied to landscaping based on real-time weather such as rainfall, wind, temperature and humidity.

Special District - A political subdivision of a state established to provide a public services, such as water supply or sanitation, within a specific geographic area.

Surface Water - Water found in lakes, streams, rivers, oceans or reservoirs behind dams.

Total Suspended Solids (TSS) – The amount of solids floating and in suspension in water or sewage.

Transpiration - The process by which water vapor is released into the atmosphere by living plants.

Trickling Filter – A biological secondary treatment process in which bacteria and other microorganisms, growing as slime on the surface of rocks or plastic media, consume nutrients in primary treated sewage as it trickles over them.

Underground Service Alert (USA) - A free service that notifies utilities such as water, telephone, cable and sewer companies of pending excavations within the area (dial 8-1-1 at least 2 working days before you dig).

Urban Runoff - Water from city streets and domestic properties that typically carries pollutants into the storm drains, rivers, lakes, and oceans.

Valve - A device that regulates, directs or controls the flow of water by opening, closing or partially obstructing various passageways.

Wastewater – Any water that enters the sanitary sewer.

Water Banking - The practice of actively storing or exchanging in-lieu surface water supplies in available groundwater basin storage space for later extraction and use by the storing party or for sale or exchange to a third party. Water may be banked as an independent operation or as part of a conjunctive use program.

Water cycle - The continuous movement water from the earth's surface to the atmosphere and back again; see Hydrologic cycle.

Water Pressure - Pressure created by the weight and elevation of water and/or generated by pumps that deliver water to the tap.

Water Service Line - The pipeline that delivers potable water to a residence or business from the District's water system. Typically the water service line is a 1" to 1½" diameter pipe for residential properties.

Watershed - A region or land area that contributes to the drainage or catchment area above a specific point on a stream or river.

Water Table - The upper surface of the zone of saturation of groundwater in an unconfined aquifer.

Water Transfer - A transaction, in which a holder of a water right or entitlement voluntarily sells/exchanges to a willing buyer the right to use all or a portion of the water under that water right or entitlement.

Water Well - A hole drilled into the ground to tap an underground water aquifer.

Wetlands - Lands which are fully saturated or under water at least part of the year, like seasonal vernal pools or swamps.

Wet Weather Flow – Dry weather flow combined with stormwater introduced into a combined sewer system, and dry weather flow combined with infiltration/inflow into a separate sewer system.

Yucaipa Valley Water District

COMMONLY USED ABBREVIATIONS

AQMD	Air Quality Management District
BOD	Biochemical Oxygen Demand
CARB	California Air Resources Board
CCTV	Closed Circuit Television
CWA	Clean Water Act
EIR	Environmental Impact Report
EPA	U.S. Environmental Protection Agency
FOG	Fats, Oils, and Grease
GPD	Gallons per day
MGD	Million gallons per day
O & M	Operations and Maintenance
OSHA	Occupational Safety and Health Administration
POTW	Publicly Owned Treatment Works
PPM	Parts per million
RWQCB	Regional Water Quality Control Board
SARI	Santa Ana River Inceptor
SAWPA	Santa Ana Watershed Project Authority
SBVMWD	San Bernardino Valley Municipal Water District
SCADA	Supervisory Control and Data Acquisition system
SSMP	Sanitary Sewer Management Plan
SSO	Sanitary Sewer Overflow
SWRCB	State Water Resources Control Board
TDS	Total Dissolved Solids
TMDL	Total Maximum Daily Load
TSS	Total Suspended Solids
WDR	Waste Discharge Requirements
YVWD	Yucaipa Valley Water District