



Yucaipa Valley Water District

12770 Second Street, Yucaipa, California 92399 Phone: (909) 797-5117

Notice and Agenda of a Regular Meeting of the Board of Directors

Tuesday, October 4, 2016 at 6:00 p.m.

- I. **CALL TO ORDER** - Pledge of Allegiance
- II. **ROLL CALL**
- III. **PUBLIC COMMENTS** - At this time, members of the public may address the Board of Directors on matters within its jurisdiction. To provide comments on specific agenda items, please complete a speaker's request form and provide the completed form to the Board Secretary prior to the board meeting.
- IV. **CONSENT CALENDAR** - All matters listed under the Consent Calendar are considered by the Board of Directors to be routine and will be enacted in one motion. There will be no discussion of these items prior to the time the board considers the motion unless members of the board, the administrative staff, or the public request specific items to be discussed and/or removed from the Consent Calendar.
 - A. Minutes of Meetings
 - 1. Regular Board Meeting - September 20, 2016
 - 2. Board Workshop - September 27, 2016
- V. **STAFF REPORT**
- VI. **DISCUSSION ITEMS**
 - A. Consideration of a Joint Infrastructure Agreement with the City of Yucaipa for Uptown Water System Improvements [[Director Memorandum No. 16-093 - Page 11 of 30](#)]
 - RECOMMENDED ACTION: That the Board authorizes the General Manager to execute the attached agreement.
 - B. Consideration of a Joint Infrastructure Agreement with the City of Yucaipa for Sewer System Improvements on Yucaipa Boulevard [[Director Memorandum No. 16-094 - Page 15 of 30](#)]
 - RECOMMENDED ACTION: That the Board authorizes the General Manager to execute the attached agreement.

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

Materials that are provided to the Board of Directors after the workshop 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

- C. Consideration of Resolution No. 2016-24 Establishing Recycled Water Rates and Fees for the Irrigation of Golf Courses [[Director Memorandum No. 16-095 - Page 18 of 30](#)]

RECOMMENDED ACTION: That the Board adopts Resolution No. 2016-24.

VII. BOARD REPORTS

VIII. DIRECTOR COMMENTS

IX. ANNOUNCEMENTS

- A. October 11, 2016 at 4:00 p.m. - Board Workshop
- B. October 18, 2016 at 6:00 p.m. - Regular Board Meeting
- C. October 25, 2016 at 4:00 p.m. - Board Workshop
- D. November 1, 2016 at 6:00 p.m. - Regular Board Meeting
- E. November 8, 2016 at 4:00 p.m. - Board Workshop
- F. November 15, 2016 at 6:00 p.m. - Regular Board Meeting
- G. November 29, 2016 at 4:00 p.m. - Board Workshop
- H. December 6, 2016 at 6:00 p.m. - Regular Board Meeting
- I. December 13, 2016 at 4:00 p.m. - Board Workshop
- J. December 20, 2016 at 6:00 p.m. - Regular Board Meeting
- K. January 10, 2017 at 4:00 p.m. - Board Workshop
- L. January 17, 2017 at 6:00 p.m. - Regular Board Meeting
- M. January 31, 2017 at 4:00 p.m. - Board Workshop

X. ADJOURNMENT

Consent Calendar



Yucaipa Valley Water District

MINUTES OF A REGULAR BOARD MEETING

September 20, 2016 at 6:00 P.M.

Directors Present:

Lonni Granlund, President
Jay Bogh, Vice President
Bruce Granlund, Director
Tom Shalhoub, Director

Staff Present:

Joseph Zoba, General Manager
John Hull, Public Works Manager
Vicky Elisalda, Controller
Mike Kostelecky, Operations Manager

Directors Absent:

Ken Munoz, Director

Consulting Staff Present:

David Wysocki, Legal Counsel

Registered Guests and Others Present:

Linda Shelton, Customer
Janet Zimmerman, CV Strategies
Leonard Stephenson, San Gorgonio Pass Water Agency

The regular meeting of the Board of Directors of the Yucaipa Valley Water District was called to order by Director Lonni Granlund at 6:00 p.m. at the Administrative Office Building, 12770 Second Street, Yucaipa, California.

CALL TO ORDER

Director Bruce Granlund led the pledge of allegiance.

FLAG SALUTE

At the time roll was called, Director Jay Bogh, Director Lonni Granlund, Director Bruce Granlund, and Director Tom Shalhoub were present. Director Ken Munoz was absent.

ROLL CALL

There were no public comments.

PUBLIC COMMENTS

Director Jay Bogh moved to approve the consent calendar and Director Bruce Granlund seconded the motion.

CONSENT CALENDAR

A. Minutes of Meetings

1. Regular Board Meeting – September 7, 2016
2. Board Workshop - September 13, 2016

B. Payment of Bills

1. Approve/Ratify Invoices for Board Awarded Contracts
2. Ratify General Expenses for August 2016

The motion was approved by the following vote:

Director Jay Bogh - Yes
Director Bruce Granlund - Yes
Director Lonni Granlund - Yes
Director Ken Munoz - Absent
Director Tom Shalhoub - Yes

General Manager Joseph Zoba discussed the following items:

- The District staff has added the results of bids to the online portal. Information will typically be added twenty-four hours after the bid opening.
- The District was featured on KPPC public radio regarding the 20% water conservation standard for our service area.

STAFF REPORT

DISCUSSION ITEMS:

Following a staff presentation by Controller Vicky Elisalda, Director Jay Bogh moved and Director Bruce Granlund seconded a motion to receive and file the unaudited financial report as presented.

DM 16-089
UNAUDITED
FINANCIAL REPORT
FOR THE PERIOD
ENDING ON AUGUST
31, 2016

The motion was approved by the following vote:

- Director Jay Bogh - Yes
- Director Bruce Granlund - Yes
- Director Lonni Granlund - Yes
- Director Ken Munoz - Absent
- Director Tom Shalhoub - Yes

Following a staff presentation by General Manager Joseph Zoba, Director Tom Shalhoub moved and Director Jay Bogh seconded a motion to issue and execute Permit No. CP-003-03.

DM 16-090
ISSUANCE OF A
CLASS II NON-
SIGNIFICANT
INDUSTRIAL USER
DISCHARGE PERMIT
TO SKAT-TRAK
PERFORMANCE
PRODUCTS - PERMIT
NO. CP-003-03

The motion was approved by the following vote:

- Director Jay Bogh - Yes
- Director Bruce Granlund - Yes
- Director Lonni Granlund - Yes
- Director Ken Munoz - Absent
- Director Tom Shalhoub - Yes

Following a staff presentation by General Manager Joseph Zoba, Director Jay Bogh moved and Director Bruce Granlund seconded a motion to authorize the General Manager to execute a contract with CV Strategies for a sum not to exceed \$15,000.

DM 16-091
CONSIDERATION OF A
CONTRACT WITH CV
STRATEGIES FOR
WATER
CONSERVATION
MESSAGING

The motion was approved by the following vote:

- Director Jay Bogh - Yes
- Director Bruce Granlund - Yes
- Director Lonni Granlund - Yes
- Director Ken Munoz - Absent
- Director Tom Shalhoub - Yes

Following a staff presentation by General Manager Joseph Zoba, Director Jay Bogh moved and Director Tom Shalhoub seconded a motion to authorize the General Manager to participate in the regional iEfficient Water Conservation Campaign for a sum not to exceed \$16,195.

DM 16-092
CONSIDERATION TO
CONTINUE THE
YUCAIPA VALLEY
WATER DISTRICT'S
PARTICIPATION IN
THE IEFFICIENT
WATER

The motion was approved by the following vote:

- Director Jay Bogh - Yes

Director Bruce Granlund - Yes
Director Lonni Granlund - Yes
Director Ken Munoz - Absent
Director Tom Shalhoub - Yes

CONSERVATION
CAMPAIGN

Reports by Board Members

BOARD REPORTS

- Director Jay Bogh, Director Bruce Granlund, and Director Lonni Granlund reported on the Association of San Bernardino County Special Districts meeting held on September 19, 2016.
- Director Tom Shalhoub reported on the San Bernardino Valley Municipal Water District meeting held on September 20, 2016.
- Director Tom Shalhoub reported on the West Valley Water District meeting held on September 15, 2016.

Director Comments

DIRECTOR
COMMENTS

- Director Lonni Granlund asked for information about the use of shade balls at the Crafton Hills Reservoir to reduce the algae buildup.
- Director Tom Shalhoub announced the planned activities on Veterans Day which will be held at the Yucaipa Community Park on November 11, 2016.

Director Lonni Granlund called attention to the announcements listed on the agenda.

ANNOUNCEMENTS

Director Jay Bogh, Director Bruce Granlund, Director Lonni Granlund, Director Tom Shalhoub were present in closed session with Legal Counsel David Wysocki, and General Manager Joseph Zoba concerning the following item:

CLOSED SESSION

- A. Conference with Legal Counsel - Anticipated Litigation (Government Code 54956.9) - One Case

The Board of Directors and District staff reconvened out of closed session into open session and Legal Counsel David Wysocki reported that direction was provided to the General Manager but no reportable action was taken in closed session.

The meeting was adjourned at 6:42 p.m.

ADJOURNMENT

Respectfully submitted,

Joseph B. Zoba, Secretary

(Seal)

MINUTES OF A BOARD WORKSHOP

September 27, 2016 at 4:00 P.M.

Directors Present:

Lonni Granlund, President
Jay Bogh, Vice President
Ken Munoz, Director
Tom Shalhoub, Director

Staff Present:

Joseph Zoba, General Manager
Brent Anton, Engineering Manager
Jennifer Ares, Water Resource Manager
Mike Kostelecky, Operations Manager
John Wrobel, Regulatory & Environmental Control
Manager
Vicky Elisalda, Controller
Kevin King, Operations Manager

Directors Absent:

Bruce Granlund, Director

Consulting Staff Present:

David Wysocki, Legal Counsel

Registered Guests and Others Present:

Linda Shelton, Customer
Kevin Garcia, Customer
Leonard Stephenson, San Gorgonio Pass Water Agency
Jan Leja, Representation of Congressman Paul Cook

- I. Call to Order - 4:00 p.m.
- II. Public Comments - The following comments were provided by individuals in the audience:
 - None.
- III. Staff Report - General Manager Joseph Zoba discussed the following topics:
 - Future meetings and events for the board members and public to attend include:
 - The San Gorgonio Pass Regional Water Alliance will be meeting on Wednesday, September 28, 2016.
 - The San Gorgonio Pass Water Agency State of the Supply Event on September 30, 2016.
 - A Recycled Water Training Session on October 8, 2016.
 - The recorded levels of methylisoborneol (MIB) and geosmin which are indicators of taste and odor issues from the State Water Project are now starting to decrease. Updates will be provided as more laboratory data is available.
- IV. Presentations
 - A. Overview of the California Drought and Yucaipa Valley Water District's Action Plan Related to the State Water Resources Control Board Water Conservation Restrictions [Workshop Memorandum No. 16-136] - General Manager Joseph Zoba provided an overview of the water conservation goals for the community.
 - B. Overview of the Yucaipa Valley Water District's Strategic Plan for a Sustainable Future, the Sustainable Groundwater Management Act and Related Water Resource Issues [Workshop Memorandum No. 16-137] - General Manager Joseph Zoba provided an overview of the District's Sustainability Plan, the

Sustainable Groundwater Management Act and the next steps needed to secure a reliable water supply for the District in the future.

- V. Capital Improvement Projects
 - A. Status Report on the Construction of a 6.0 Million Gallon Drinking Water Reservoir R-12.4 - Calimesa [Workshop Memorandum No. 16-138] - Engineering Manager Brent Anton provided an overview of the drinking water reservoir construction project.
 - B. Status Report on the Digester Cleaning and Cover Replacement Project at the Wochholz Regional Water Recycling Facility [Workshop Memorandum No. 16-139] - Operations Manager Kevin King provided an overview of the digester cover project and change orders that will be presented at the next workshop.
- VI. Policy Issues
 - A. Discussion Regarding Potential On-Bill Financing for Recycled Water Connection Improvements to Ridgeview Elementary School [Workshop Memorandum No. 16-140] - General Manager Joseph Zoba presented the concept of on-bill financing for the conversion of drinking water to recycled water at properties owned by the City of Yucaipa, City of Calimesa, and Yucaipa-Calimesa Joint Unified School District. The specific details will be presented at a future board workshop for further discussion.
- VII. Administrative Issues
 - A. Overview of a Joint Infrastructure Agreement with the City of Yucaipa for Uptown Water System Improvements [Workshop Memorandum No. 16-141] - Engineering Manager Brent Anton provided information about the Joint Infrastructure Agreement for water system improvements in Downtown Yucaipa.
 - B. Overview of a Joint Infrastructure Agreement with the City of Yucaipa for Sewer System Improvements on Lower Yucaipa Boulevard [Workshop Memorandum No. 16-142] - Engineering Manager Brent Anton provided information about the Joint Infrastructure Agreement for sewer system improvements on Yucaipa Boulevard near Interstate 10.
 - C. Discussion Regarding the Appointment of an Alternative Representative to the San Bernardino Valley Municipal Water District's Advisory Commission [Workshop Memorandum No. 16-143] - The Board of Directors continued this item until a future board workshop when all of the board members are present.
- VIII. Director Comments
 - Director Tom Shalhoub provided an overview of the Calimesa State of the City meeting.
- IX. Adjournment - The meeting was adjourned at 4:55 p.m.

Respectfully submitted,

Joseph B. Zoba, Secretary

Staff Report



Yucaipa Valley Water District

Discussion Items



Yucaipa Valley Water District



Date: October 4, 2016

Prepared By: Brent Anton, Engineering Manager

Subject: Consideration of a Joint Infrastructure Agreement with the City of Yucaipa for Uptown Water System Improvements

Recommendation: That the Board authorizes the General Manager to execute the attached agreement.

The Yucaipa Valley Water District staff has been coordinating roadway and water system improvements with the City of Yucaipa for the construction of the proposed Performing Arts Center on Yucaipa Boulevard near California Street. The attached agreement provides a coordinated and effective approach to efficiently complete the planned drinking water and roadway improvements.

**1ST STREET, ACACIA AVENUE AND
MIDBLOCK ALLEY WATER AND SEWER UTILITIES
AGREEMENT BY AND BETWEEN
THE CITY OF YUCAIPA AND THE YUCAIPA VALLEY WATER DISTRICT**

The City of Yucaipa, a Municipal Corporation, hereinafter referred to as "City", and Yucaipa Valley Water District, a Special District, hereinafter referred to as "District", hereby mutually agree as follows:

I. Purpose of Agreement:

The City is preparing to construct a 13,500 square foot "Performing Arts Center" on a group of vacant parcels located at the southwest corner of California Street and Acacia Avenue in the City of Yucaipa. The District has existing pipelines and easements within the limits of the project that need to be relocated. In support of the project, the District will be relocating and/or replacing the interfering pipelines by means of a separate District construction project. Said project will consist of the installation of approximately 200 linear feet of 8-inch waterline in 1st Street from the alley way to Acacia Ave, the installation of approximately 810 linear feet of 8-inch waterline in Acacia Ave from 1st Street to the alley way east of California Street, and the installation of approximately 330 linear feet of 8-inch waterline in the alley between 1st Street and the future Yucaipa Performing Arts Center site, . In addition, and as part of the same construction contract, the District will be installing approximately 1,000 linear feet of 30-inch waterline in 1st Street and Acacia Ave (from 2nd Street to 1st Street). The attached Exhibit "A" shows the proposed pipelines.

With the cooperation of the City, upon completion of the pipeline project, the City will pave portions of 1st Street, Acacia Avenue and the alley between 1st Street and the future Yucaipa Performing Arts Center site as part of its Pavement Management Program. The limits of paving are also shown on attached Exhibit "A".

II. Scope of Agreement:

In exchange for:

- The City's paving on 1st Street, Acacia Avenue (from 2nd Street to the alley way 200' east of California Street), and the alley between 1st Street and the future Yucaipa Performing Arts Center.
- The City providing a 20 foot wide utility/waterline easement to YVWD under, over and across the City owned properties along the alley between 1st Street and the future Yucaipa Performing Arts Center.
- The City reimbursing the District for the cost of the water service(s) and fire service(s) required for the new development (said services will be included in the District's construction contract as separate bid items).
- The City removing the existing 8-inch waterline located within the boundaries of the Performing Arts Center Project after the waterline is abandoned by the

District.

- The City abandoning the existing sewer laterals installed for APN's 0303-253-22 and 0303-252-26, 5 laterals total) in accordance with District standards.
- The City paying the Development Capacity Charges for water and sewer service.

The District will:


- A. Maintain existing temporary paving for a maximum of sixty (60) days or until start of the City Pavement Management Program for the affected streets, whichever occurs sooner.
- B. Lower all existing manholes and water valves in the work zone and compensate the City for reasonable costs associated with adjusting manholes and water valves to new street grade.
- C. Remove, cap and abandon the existing waterline from the east end of the alley between 1st Street and the future Yucaipa Performing Arts Center to Acacia Avenue, and replace same with a new 8" waterline.
- D. Install the 1,010 linear feet of 8-inch waterline in 1st Street from the alley to Acacia Street and in Acacia Avenue from 1st Street to the alley just east of California Street.
- E. Vacate their 15' wide easement from the alleyway to Acacia Ave.

IN WITNESS WHEREOF, the City of Yucaipa and the Yucaipa Valley Water District have executed this Agreement the day and year written below.

The City and District hereby agree to the full performance of the covenants and conditions contained herein.

City of Yucaipa

Yucaipa Valley Water District

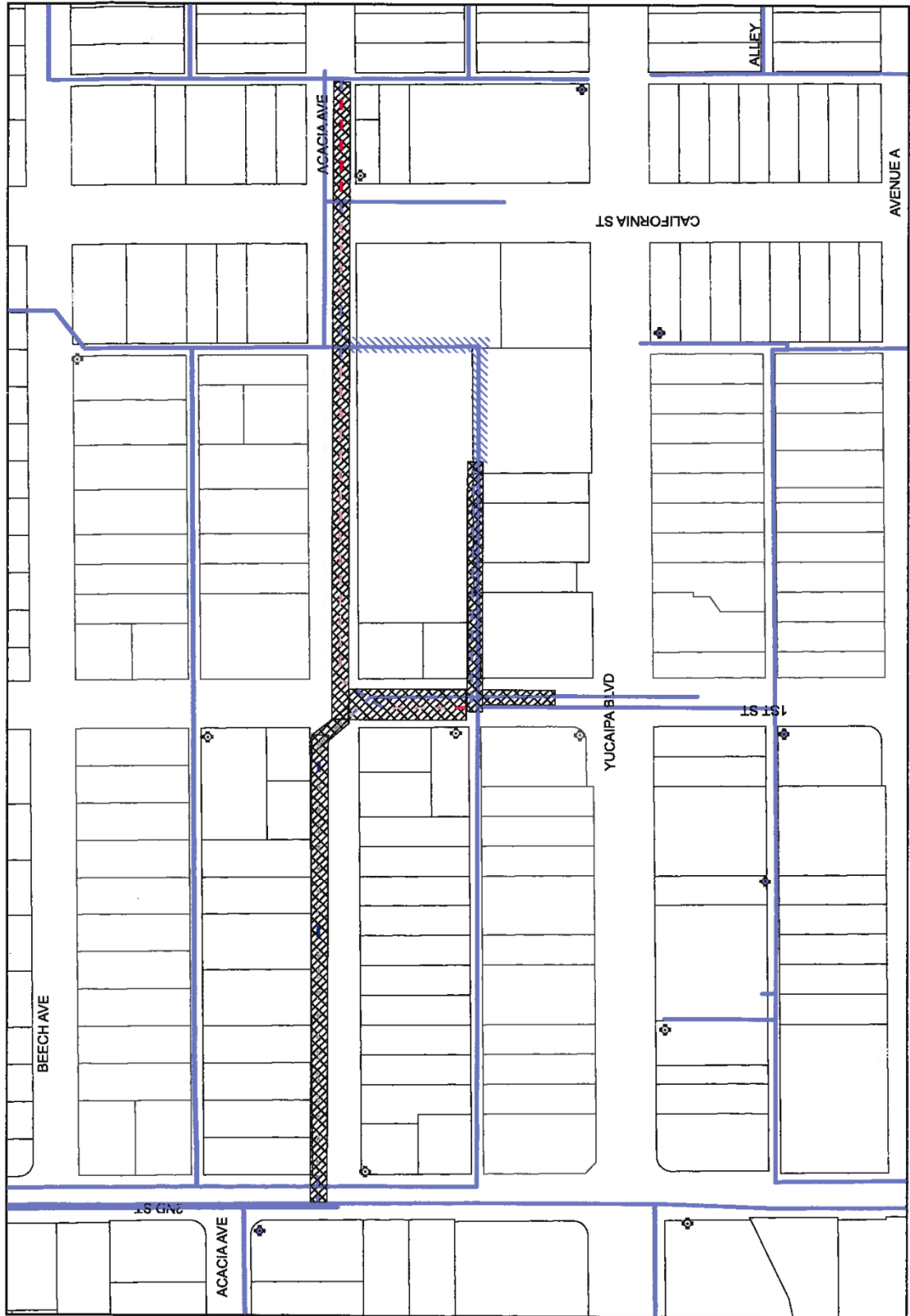


 Raymond Casey, City Manager

 Joseph Zoba, General Manager

Dated: 9/15/16

Dated: _____



August 2016



YPAC Proposed Paving

	30-Inch
	8-Inch
	Paving



Date: October 4, 2016

Prepared By: Brent Anton, Engineering Manager

Subject: Consideration of a Joint Infrastructure Agreement with the City of Yucaipa for Sewer System Improvements on Yucaipa Boulevard

Recommendation: That the Board authorizes the General Manager to execute the attached agreement.

The Yucaipa Valley Water District staff has been coordinating roadway and sewer system improvements with the City of Yucaipa for the construction of the Yucaipa Boulevard Widening Project near Interstate 10. The attached agreement provides a coordinated and effective approach to efficiently complete the planned sewer and roadway improvements.

**YUCAIPA BOULEVARD SEWER UTILITY
AGREEMENT BY AND BETWEEN
THE CITY OF YUCAIPA AND THE YUCAIPA VALLEY WATER DISTRICT**

The City of Yucaipa, a Municipal Corporation, hereinafter referred to as "City", and Yucaipa Valley Water District, a Special District, hereinafter referred to as "District", hereby mutually agree as follows:

I. Purpose of Agreement:

The City of the Yucaipa is preparing to proceed with the widening and reconstruction of Yucaipa Blvd from 18th Street to Ave E/Hampton Road (Yucaipa Blvd Widening Project). In conjunction with this project, the District is a preparing to proceed with a sewer installation project to install approximately 2,400 linear feet of 8-inch sewer in Yucaipa Boulevard between 18th Street and Avenue E/Hampton Road; and on Ridgecrest Drive from Yucaipa Boulevard to Sierra Linda Street.

With the cooperation of the City, upon completion of the sewer installation project, the City will pave Yucaipa Boulevard as part of its Yucaipa Boulevard Widening Project.

II. Scope of Agreement:

In exchange for:

- The City's paving on Yucaipa Boulevard between 18th Street and Avenue E/Hampton Road.
- The City providing the paving and removals on Yucaipa Boulevard between 18th Street and Avenue E/Hampton Road for the proposed sewer.
- The City providing the preparation and implementation of the storm water pollution prevention plan, temporary traffic control plan, and construction staging plan for Yucaipa Boulevard between 18th Street and Avenue E/Hampton Road.
- The City providing construction management for the Yucaipa Blvd Widening Project during the time period when the District's contractor is constructing the new sewer pipeline.
- The City paying sewer capacity charges (connection fees) and front footage fees for those properties that have septic tanks removed and connections to the sewer pipeline installed due to interferences with the City's Yucaipa Blvd Widening Project. Sewer capacity charges will be based on the total number of equivalent dwelling units (EDU's) located on the property being connected.

The District will:

- A. Install the proposed sewer on Yucaipa Boulevard and Ridgecrest Drive.
- B. Work with the City to disconnect/remove/abandon existing septic systems on properties affected by the Yucaipa Boulevard Widening Project and provide

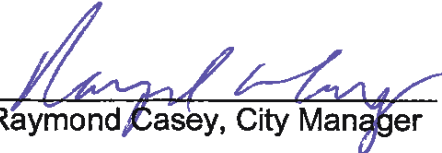
connection to the new sewer on Yucaipa Boulevard.

IN WITNESS WHEREOF, the City of Yucaipa and the Yucaipa Valley Water District have executed this Agreement the day and year written below.

The City and District hereby agree to the full performance of the covenants and conditions contained herein.

City of Yucaipa

Yucaipa Valley Water District



Raymond Casey, City Manager

Joseph Zoba, General Manager

Dated: 9/15/16

Dated: _____



Date: October 4, 2016

Prepared By: Joseph Zoba, General Manager

Subject: Consideration of Resolution No. 2016-24 Establishing Recycled Water Rates and Fees for the Irrigation of Golf Courses

Recommendation: That the Board adopts Resolution No. 2016-24.

The Yucaipa Valley Water District staff has been working together with the local golf courses to maximize the amount of recycled water used in our community. Based on the discussions with the local golf courses, the District staff has prepared the attached resolution to establish competitive recycled water rates for this specific classification of user.

RESOLUTION NO. 2016-24**RESOLUTION OF THE BOARD OF DIRECTORS OF THE
YUCAIPA VALLEY WATER DISTRICT ESTABLISHING
RECYCLED WATER RATES AND FEES FOR THE
IRRIGATION OF GOLF COURSES**

WHEREAS, the Yucaipa Valley Water District (the "District") is a public agency of the State of California organized and existing pursuant to the provisions of the County Water District Law of this State (Section 30000, et seq. of the Water Code); and

WHEREAS, the Calimesa Country Club Golf Course and the Yucaipa Valley Golf Course currently use or intend to use drinking water from groundwater wells or from the District to irrigate their respective golf courses; and

WHEREAS, the use of drinking water to irrigate golf courses when the District's recycled water is available for irrigation is an unreasonable use and a waste of drinking water contrary to the conservation and beneficial use mandate of Article X, Section 2 of the California Constitution; and

WHEREAS, during the current drought conditions and state-declared drought emergency it would be in the best interest of the District and its ratepayers to conserve drinking water that might otherwise be used for irrigation purposes at the two golf courses named above; and

WHEREAS, the District desires to provide an incentivize the two golf courses named above to use the District's recycled water and to conserve drinking water supplies for the community by reducing the recycled water rates for those golf courses.

NOW, THEREFORE, the Board of Directors of Yucaipa Valley Water District, based on the foregoing Recitals, do hereby RESOLVE, DETERMINE, AND ORDER as follows:

1. Purpose of Resolution. The District's recycled water rate for the irrigation of the golf courses identified herein shall be \$145.00 per acre foot for recycled water service delivered to any recycled water meter located within or at an elevation below Recycled Water Pressure Zone 12. The District's recycled water rate shall be \$180.00 per acre foot for recycled water service delivered to recycled water meters at any elevation above Recycled Water Pressure Zone 12. All other typical and fixed meter charges shall apply as set forth by the Board of Directors
2. Effective Date. This Resolution shall be effective on January 1, 2017 and shall remain in effect until such time as it is rescinded or superseded. This resolution shall not affect the District's rates, fees and charges, including its recycled water rates, currently in effect for all other users and customers.

PASSED, APPROVED and ADOPTED this 4th day of October 2016.

YUCAIPA VALLEY WATER DISTRICT

Lonni Granlund, President Board of Directors

ATTEST:

Joseph B. Zoba, General Manager

Board Reports



Yucaipa Valley Water District

Director Comments



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

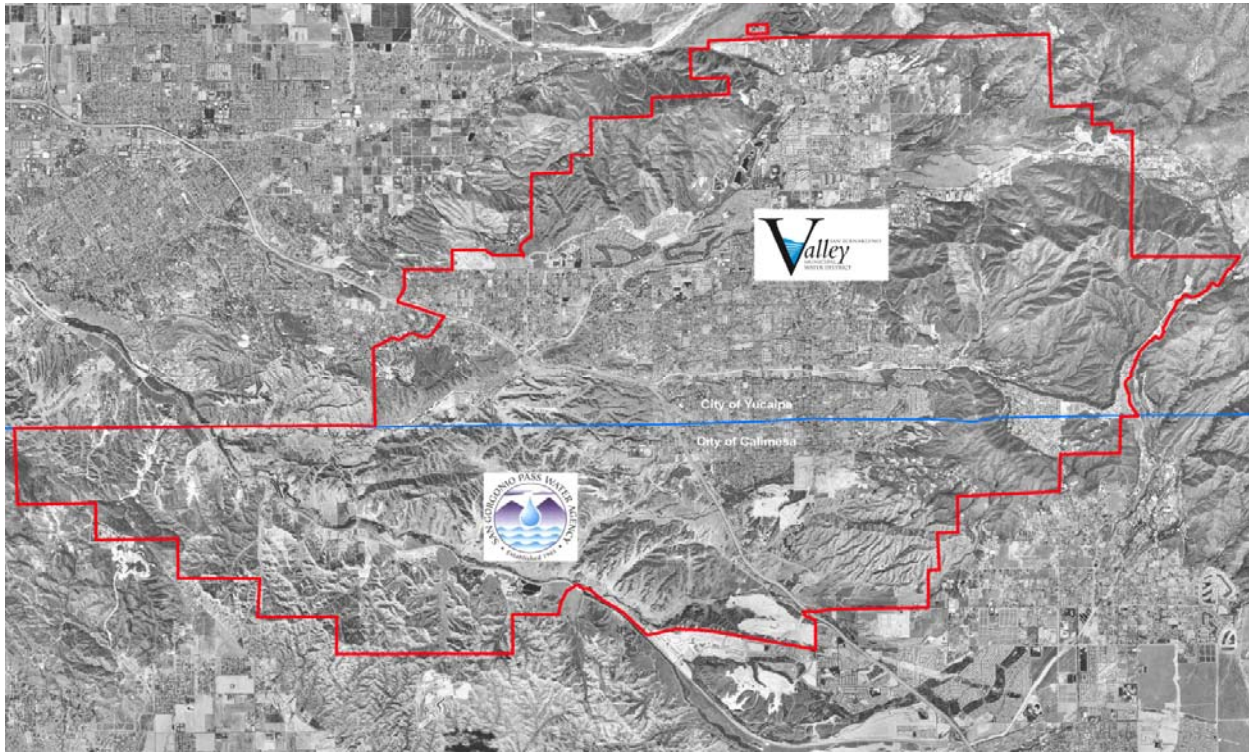
Water System: 215 miles of drinking water pipelines
27 reservoirs - 34 million gallons of storage capacity
18 pressure zones
12,000 ac-ft annual water demand (3.9 billion gallons)
Two water filtration facilities:
- 1 mgd at Oak Glen Surface Water Filtration Facility
- 12 mgd at Yucaipa Valley Regional 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)

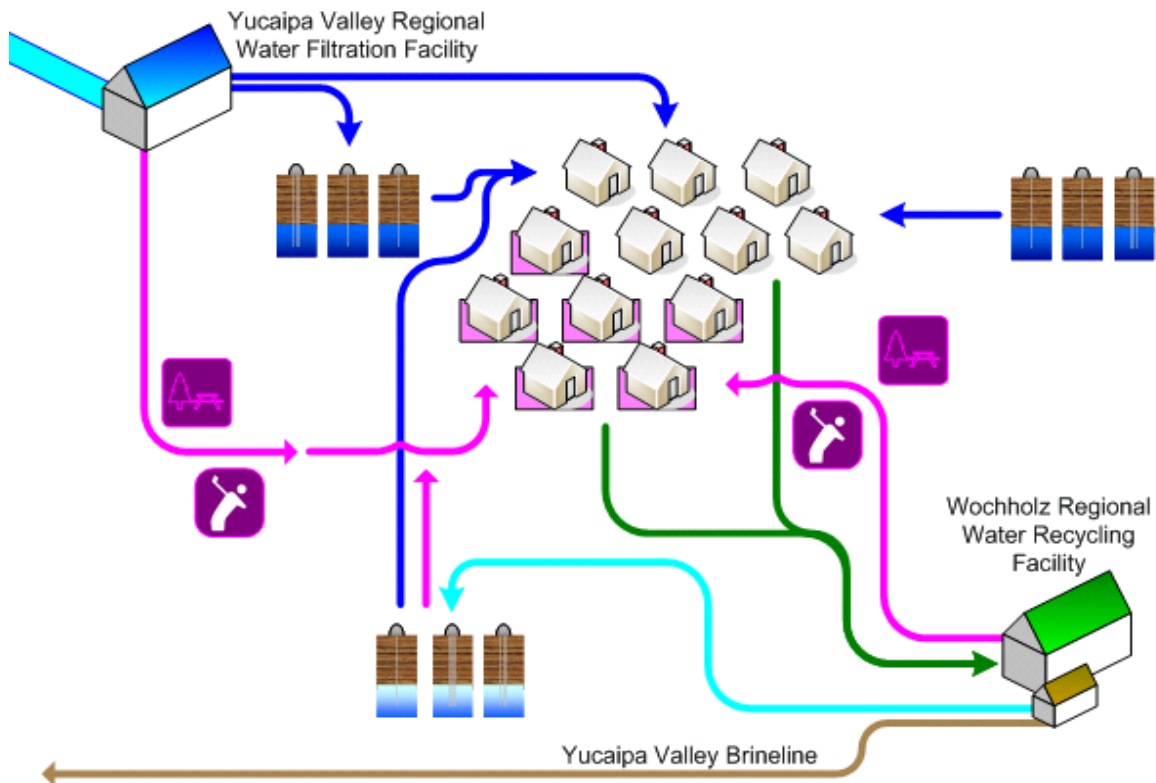
Recycled Water: 22 miles of recycled water pipelines
5 reservoirs - 12 million gallons of storage
1,200 ac-ft annual recycled demand (0.4 billion gallons)

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 Geronimo Pass Water Agency



Sustainability Plan: A Strategic Plan for a Sustainable Future: The Integration and Preservation of Resources, adopted on August 20, 2008.





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).





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.





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