



Yucaipa Valley Water District

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

Notice and Agenda of a Meeting of the Board of Directors

Tuesday, August 11, 2020 at 4:00 p.m.

Due to the spread of COVID-19 and in accordance with the Governor's Executive Order N-29-20 (a copy of which is attached to this agenda), the Yucaipa Valley Water District will be conducting this meeting by teleconference only. Public comments on matters listed on the agenda or on any matter within the District's jurisdiction will be received during Public Comments, Agenda Item No. III.

**This meeting is available by calling
(888) 475-4499 using passcode 676-950-731#**

**View live presentation material at
<https://zoom.us/j/676950731> ([Click here](#))**

There will be no public physical location for attending this meeting in person. The District's Board meeting room will be closed to the public until further notice.

If you are unable to participate by telephone, you may submit comments and/or questions in writing for the Board's consideration by sending them to inquiry@yvwd.us. Submit your written inquiry prior to the start of the meeting. All public comments received prior to the start of the meeting will be provided to the Board and may be read into the record or compiled as part of the record.

- I. CALL TO ORDER**
- II. ROLL CALL**
- III. PUBLIC COMMENTS** - At this time, members of the public may briefly address the Board of Directors on matters within its jurisdiction or on any matter listed on this agenda.

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

- IV. CONSENT CALENDAR** - All consent calendar matters are routine and will be acted upon in one motion. There will be no discussion of these items unless board members, administrative staff, or members of the public request specific items to be discussed and/or removed prior to the vote for approval.
- A. Minutes of Meetings
1. Board Meeting - July 21, 2020
 2. Board Meeting - August 4, 2020
- V. STAFF REPORT**
- VI. DISCUSSION ITEMS**
- A. Presentation of an Automatic Conductivity Profiling Tool Used at the Wochholz Regional Water Recycling Facility to Test the Integrity of Reverse Osmosis Membranes [\[Director Memorandum No. 20-120 - Page _ of _\]](#)
- RECOMMENDED ACTION: Presentation by Jim Vickers, President of Separation Processes - No Action Required.
- B. Notice of Completion for the Installation of Security Window Film at District Facilities [\[Director Memorandum No. 20-121 - Page _ of _\]](#)
- RECOMMENDED ACTION: That the Board authorize the General Manager to execute a Notice of Completion for the security film project.
- C. Consideration of Releasing a Request for Proposals for the Demolition of Structures at 12816 Second Street, Yucaipa and 12834 2nd Street, Yucaipa [\[Director Memorandum No. 20-122 - Page _ of _\]](#)
- RECOMMENDED ACTION: That the Board authorize the General Manager to release the Request for Proposals.
- D. Ratification of the Purchase of a New Computer Fileserver and Related Equipment [\[Director Memorandum No. 20-123 - Page _ of _\]](#)
- RECOMMENDED ACTION: That the Board ratify the purchase of a new fileserver and related equipment for a sum not to exceed \$48,405.61 and adopt Resolution No. 2020-36.
- VII. BOARD REPORTS & DIRECTOR COMMENTS**
- VIII. ANNOUNCEMENTS**
- A. August 18, 2020 at 4:00 p.m. - Board Meeting - **Teleconference Only**
- B. August 25, 2020 at 4:00 p.m. - Board Meeting - **Teleconference Only**
- C. September 1, 2020 at 4:00 p.m. - Board Meeting - **Teleconference Only**
- D. September 8, 2020 at 4:00 p.m. - Board Meeting - **Teleconference Only**
- E. September 15, 2020 at 4:00 p.m. - Board Meeting - **Teleconference Only**
- F. September 22, 2020 at 4:00 p.m. - Board Meeting - **Teleconference Only**
- G. September 29, 2020 at 4:00 p.m. - Board Meeting - **Teleconference Only**
- H. October 6, 2020 at 4:00 p.m. - Board Meeting - **Teleconference Only**
- IX. CLOSED SESSION**
- A. Conference with Legal Counsel - Anticipated Litigation (Government Code 54956.9) - Two Cases
- B. Conference with Labor Negotiator (Government Code 54957.6)
District Negotiator: Joseph Zoba, General Manager
Employee Organization: YVWD Management Employees (Exempt)
- X. ADJOURNMENT**

**EXECUTIVE DEPARTMENT
STATE OF CALIFORNIA**

EXECUTIVE ORDER N-29-20

WHEREAS on March 4, 2020, I proclaimed a State of Emergency to exist in California as a result of the threat of COVID-19; and

WHEREAS despite sustained efforts, the virus continues to spread and is impacting nearly all sectors of California; and

WHEREAS the threat of COVID-19 has resulted in serious and ongoing economic harms, in particular to some of the most vulnerable Californians; and

WHEREAS time bound eligibility redeterminations are required for Medi-Cal, CalFresh, CalWORKs, Cash Assistance Program for Immigrants, California Food Assistance Program, and In Home Supportive Services beneficiaries to continue their benefits, in accordance with processes established by the Department of Social Services, the Department of Health Care Services, and the Federal Government; and

WHEREAS social distancing recommendations or Orders as well as a statewide imperative for critical employees to focus on health needs may prevent Medi-Cal, CalFresh, CalWORKs, Cash Assistance Program for Immigrants, California Food Assistance Program, and In Home Supportive Services beneficiaries from obtaining in-person eligibility redeterminations; and

WHEREAS under the provisions of Government Code section 8571, I find that strict compliance with various statutes and regulations specified in this order would prevent, hinder, or delay appropriate actions to prevent and mitigate the effects of the COVID-19 pandemic.

NOW, THEREFORE, I, GAVIN NEWSOM, Governor of the State of California, in accordance with the authority vested in me by the State Constitution and statutes of the State of California, and in particular, Government Code sections 8567 and 8571, do hereby issue the following order to become effective immediately:

IT IS HEREBY ORDERED THAT:

1. As to individuals currently eligible for benefits under Medi-Cal, CalFresh, CalWORKs, the Cash Assistance Program for Immigrants, the California Food Assistance Program, or In Home Supportive Services benefits, and to the extent necessary to allow such individuals to maintain eligibility for such benefits, any state law, including but not limited to California Code of Regulations, Title 22, section 50189(a) and Welfare and Institutions Code sections 18940 and 11265, that would require redetermination of such benefits is suspended for a period of 90 days from the date of this Order. This Order shall be construed to be consistent with applicable federal laws, including but not limited to Code of Federal Regulations, Title 42, section 435.912, subdivision (e), as interpreted by the Centers for Medicare and Medicaid Services (in guidance issued on January 30, 2018) to permit the extension of

otherwise-applicable Medicaid time limits in emergency situations.

2. Through June 17, 2020, any month or partial month in which California Work Opportunity and Responsibility to Kids (CalWORKs) aid or services are received pursuant to Welfare and Institutions Code Section 11200 et seq. shall not be counted for purposes of the 48-month time limit set forth in Welfare and Institutions Code Section 11454. Any waiver of this time limit shall not be applied if it will exceed the federal time limits set forth in Code of Federal Regulations, Title 45, section 264.1.
3. Paragraph 11 of Executive Order N-25-20 (March 12, 2020) is withdrawn and superseded by the following text:

Notwithstanding any other provision of state or local law (including, but not limited to, the Bagley-Keene Act or the Brown Act), and subject to the notice and accessibility requirements set forth below, a local legislative body or state body is authorized to hold public meetings via teleconferencing and to make public meetings accessible telephonically or otherwise electronically to all members of the public seeking to observe and to address the local legislative body or state body. All requirements in both the Bagley-Keene Act and the Brown Act expressly or impliedly requiring the physical presence of members, the clerk or other personnel of the body, or of the public as a condition of participation in or quorum for a public meeting are hereby waived.

In particular, any otherwise-applicable requirements that

- (i) state and local bodies notice each teleconference location from which a member will be participating in a public meeting;
- (ii) each teleconference location be accessible to the public;
- (iii) members of the public may address the body at each teleconference conference location;
- (iv) state and local bodies post agendas at all teleconference locations;
- (v) at least one member of the state body be physically present at the location specified in the notice of the meeting; and
- (vi) during teleconference meetings, at least a quorum of the members of the local body participate from locations within the boundaries of the territory over which the local body exercises jurisdiction

are hereby suspended.

A local legislative body or state body that holds a meeting via teleconferencing and allows members of the public to observe and address the meeting telephonically or otherwise electronically, consistent with the notice and accessibility requirements set forth below, shall have satisfied any requirement that the body allow

members of the public to attend the meeting and offer public comment. Such a body need not make available any physical location from which members of the public may observe the meeting and offer public comment.

Accessibility Requirements: If a local legislative body or state body holds a meeting via teleconferencing and allows members of the public to observe and address the meeting telephonically or otherwise electronically, the body shall also:

- (i) Implement a procedure for receiving and swiftly resolving requests for reasonable modification or accommodation from individuals with disabilities, consistent with the Americans with Disabilities Act and resolving any doubt whatsoever in favor of accessibility; and
- (ii) Advertise that procedure each time notice is given of the means by which members of the public may observe the meeting and offer public comment, pursuant to subparagraph (ii) of the Notice Requirements below.

Notice Requirements: Except to the extent this Order expressly provides otherwise, each local legislative body and state body shall:

- (i) Give advance notice of the time of, and post the agenda for, each public meeting according to the timeframes otherwise prescribed by the Bagley-Keene Act or the Brown Act, and using the means otherwise prescribed by the Bagley-Keene Act or the Brown Act, as applicable; and
- (ii) In each instance in which notice of the time of the meeting is otherwise given or the agenda for the meeting is otherwise posted, also give notice of the means by which members of the public may observe the meeting and offer public comment. As to any instance in which there is a change in such means of public observation and comment, or any instance prior to the issuance of this Order in which the time of the meeting has been noticed or the agenda for the meeting has been posted without also including notice of such means, a body may satisfy this requirement by advertising such means using "the most rapid means of communication available at the time" within the meaning of Government Code, section 54954, subdivision (e); this shall include, but need not be limited to, posting such means on the body's Internet website.

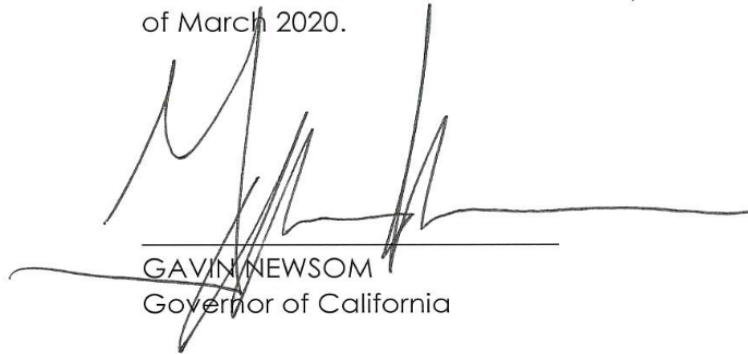
All of the foregoing provisions concerning the conduct of public meetings shall apply only during the period in which state or local public health officials have imposed or recommended social distancing measures.

All state and local bodies are urged to use sound discretion and to make reasonable efforts to adhere as closely as reasonably possible to the provisions of the Bagley-Keene Act and the Brown Act, and other applicable local laws regulating the conduct of public meetings, in order to maximize transparency and provide the public access to their meetings.

IT IS FURTHER ORDERED that as soon as hereafter possible, this Order be filed in the Office of the Secretary of State and that widespread publicity and notice be given of this Order.

This Order is not intended to, and does not, create any rights or benefits, substantive or procedural, enforceable at law or in equity, against the State of California, its agencies, departments, entities, officers, employees, or any other person.

IN WITNESS WHEREOF I have
hereunto set my hand and caused
the Great Seal of the State of
California to be affixed this 17th day
of March 2020.



GAVIN NEWSOM
Governor of California

Consent Calendar



Yucaipa Valley Water District

MINUTES OF A BOARD MEETING - TELECONFERENCE

July 21, 2020 at 4:00 P.M.

Directors Present:

Chris Mann, President
Lonni Granlund, Vice President
Jay Bogh, Director
Joyce McIntire, Director
Dennis Miller, Director

Staff Present:

Jennifer Ares, Water Resource Manager
Madeline Blua, Water Resource Specialist
Allison Edmisten, Chief Financial Officer
Chelsie Fogus, Administrative Assistant I
Ashley Gibson, Regulatory Compliance Manager
Kathryn Hallberg, Implementation Manager
Matthew Porras, Implementation Manager
Mike Rivera, Public Works Supervisor
Charles Thomas, Operations Manager
John Wrobel, Public Works Manager
Joseph Zoba, General Manager

Directors Absent:

None

Consulting Staff Present:

David Wysocki, Legal Counsel

Registered Guests and Others Present:

Lance Eckhart, San Gorgonio Pass Water Agency
Leonard Stephenson, San Gorgonio Pass Water Agency

Due to the spread of COVID-19 and in accordance with the Governor's Executive Order N-29-20 (a copy of which was attached to the meeting agenda), the Yucaipa Valley Water District conducted this meeting by teleconference.

The meeting was available to the public by calling (888) 475-4499 using passcode 676-950-731 and live presentation material was available at <https://zoom.us/j/676950731>.

CALL TO ORDER

The regular meeting of the Board of Directors of the Yucaipa Valley Water District was called to order by Chris Mann at 4:00 p.m.

ROLL CALL

The roll was called with Director Jay Bogh, Director Lonni Granlund, Director Chris Mann, Director Joyce McIntire and Director Dennis Miller were present.

PUBLIC COMMENTS

Lance Eckhart introduced himself as the new General Manager of the San Gorgonio Pass Water Agency and stated that he is looking forward to working with the retail water agencies in the area.

CONSENT CALENDAR

Director Jay Bogh moved to approve the consent calendar and Director Dennis Miller seconded the motion.

- A. Minutes of Meetings
 - 1. Board Meeting - July 14, 2020
- B. Payment of Bills
 - 1. Approve/Ratify Invoices for Board Awarded Contracts
 - 2. Ratify General Expenses for June 2020

The motion was approved by the following vote:

Director Jay Bogh - Yes
Director Lonni Granlund - Yes
Director Chris Mann - Yes
Director Joyce McIntire - Yes
Director Dennis Miller - Yes

STAFF REPORT

General Manager Joseph Zoba provided information on the following item(s):

- The next Yucaipa Sustainable Groundwater Management Agency meeting will be held on Wednesday, July 22, 2020 at 10:00 am.
- The District staff will be arranging site tours of Reservoir R-16.6; Reservoir R-18.4; and Reservoir R-16.2 over the next couple of weeks.

DISCUSSION ITEMS:

DM 20-115

PRESENTATION OF THE
UNAUDITED FINANCIAL
REPORT FOR THE
PERIOD ENDING ON
JUNE 30, 2020

Chief Financial Officer Allison Edmisten presented the Unaudited Financial Report and discussed current financial trends.

Director Lonni Granlund moved that the Board receive and file the unaudited financial report.

Director Joyce McIntire seconded the motion.

The motion was approved by the following vote:

Director Jay Bogh - Yes
Director Lonni Granlund - Yes
Director Chris Mann - Yes
Director Joyce McIntire - Yes
Director Dennis Miller - Yes

DM 20-116

CONSIDERATION TO
CONDUCT AN
EPIDEMIOLOGICAL
STUDY OF COVID-19 AT
THE WOCHHOLZ
REGIONAL WATER
RECYCLING FACILITY

General Manager Joseph Zoba provided an overview of an epidemiological testing plan for COVID-19 at the Wochholz Regional Water Recycling Facility. The testing would provide additional information about the tools available to monitor the overall public health of the community.

Director Lonni Granlund moved that the Board authorize the General Manager to execute a contract with Biobot Analytics for Fiscal Year 20-21 for a sum not to exceed \$97,920 and adopt Resolution No. 2020-36.

Director Joyce McIntire seconded the motion.

The motion was approved by the following vote:

Director Jay Bogh - No
Director Lonni Granlund - Yes
Director Chris Mann - No
Director Joyce McIntire - Yes
Director Dennis Miller - No

DM 20-117

CONSIDERATION TO
SELL 37.67 SHARES OF
NORTH FORK WATER
COMPANY SHARES TO
EAST VALLEY WATER
DISTRICT

General Manager Joseph Zoba provided a request from East Valley Water District for the purchase of the Yucaipa Valley Water District's 37.67 shares of North Fork Water Company.

Director Joyce McIntire moved that the Board authorize the General Manager to sell 37.67 shares of North Fork Water Company shares to East Valley Water District for \$21,434.23.

Director Jay Bogh seconded the motion.

The motion was approved by the following vote:

Director Jay Bogh - Yes
Director Lonni Granlund - Yes
Director Chris Mann - Yes
Director Joyce McIntire - Yes
Director Dennis Miller - Yes

DM 20-118

CONSIDERATION OF
CHANGE ORDER NO. 1
AND FILING OF A
NOTICE OF
COMPLETION FOR THE
REPLACEMENT OF THE
DRINKING WATER
RESERVOIR R-16.6 -
CALIMESA

Implementation Manager Mathew Porras provided an overview and time-lapse video of the demolition and reconstruction of Reservoir R-16.6.

Director Joyce McIntire moved that the Board authorize the General Manager to execute Change Order No.1 and file the Notice of Completion for the Replacement of the Drinking Water Reservoir R-16.6 Project.

Director Dennis Miller seconded the motion.

The motion was approved by the following vote:

Director Jay Bogh - Yes
Director Lonni Granlund - Yes
Director Chris Mann - Yes
Director Joyce McIntire - Yes
Director Dennis Miller - Yes

DM 20-119

General Manager Joseph Zoba provided a recommendation to cancel the next two board meetings.

DISCUSSION
REGARDING THE
CANCELLATION OF
TWO CONSECUTIVELY
SCHEDULED BOARD
MEETINGS

Director Dennis Miller moved that the Board cancel the board meetings on July 28, 2020 and August 4, 2020.

Director Lonni Granlund seconded the motion.

The motion was approved by the following vote:

Director Jay Bogh - Yes
Director Lonni Granlund - Yes
Director Chris Mann - Yes
Director Joyce McIntire - Yes
Director Dennis Miller - Yes

BOARD REPORTS AND
DIRECTOR COMMENTS

Director Lonni Granlund and Director Joyce McIntire reported on the San Gorgonio Pass Water Agency board meeting held on July 20, 2020.

ANNOUNCEMENTS

Director Chris Mann called attention to the announcements listed on the agenda.

ADJOURNMENT

The meeting was adjourned at 4:55 p.m.

Respectfully submitted,

Joseph B. Zoba, Secretary

(Seal)

MINUTES OF A BOARD MEETING - TELECONFERENCE

August 4, 2020 at 4:00 P.M.

Directors Present:

Chris Mann, President
Lonni Granlund, Vice President
Jay Bogh, Director
Joyce McIntire, Director
Dennis Miller, Director

Staff Present:

Allison Edmisten, Chief Financial Officer
Ashley Gibson, Regulatory Compliance Manager
Tim Mackamul, Operations Manager
James Nicholson, Senior Integrated Operator
Charles Thomas, Operations Manager
Joseph Zoba, General Manager

Directors Absent:

None

Consulting Staff Present:

David Wysocki, Legal Counsel

Registered Guests and Others Present:

Bruce Granlund
George Ruiz

Due to the spread of COVID-19 and in accordance with the Governor's Executive Order N-29-20 (a copy of which was attached to the meeting agenda), the Yucaipa Valley Water District conducted this meeting by teleconference.

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CALL TO ORDER

The regular meeting of the Board of Directors of the Yucaipa Valley Water District was called to order by Chris Mann at 4:00 p.m.

ROLL CALL

The roll was called with Director Jay Bogh, Director Lonni Granlund, Director Chris Mann, Director Joyce McIntire and Director Dennis Miller were present.

PUBLIC COMMENTS

None

**BOARD REPORTS AND
DIRECTOR COMMENTS**

Director Joyce McIntire reported on the San Gorgonio Pass Water Agency board meeting held on August 3, 2020.

ANNOUNCEMENTS

Director Chris Mann called attention to the announcements listed on the agenda.

CLOSED SESSION

Director Jay Bogh, Director Lonni Granlund, Director Chris Mann, Director Joyce McIntire, and Director Dennis Miller were present in closed session with Legal Counsel David Wysocki, Chief Financial Officer Allison Edmisten, and General Manager Joseph Zoba to discuss the following items.

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

After reconvening out of closed session, Legal Counsel David Wysocki reported that direction was provided and that there were no reportable actions taken.

ADJOURNMENT

The meeting was adjourned at 4:25 p.m.

Respectfully submitted,

Joseph B. Zoba, Secretary

(Seal)

Staff Report



Yucaipa Valley Water District



An Assessment of Urban Water Demand Forecasts in California

Sonali Abraham, Sarah Diringer, and Heather Cooley



August 2020

An Assessment of Urban Water Demand Forecasts in California

August 2020

Authors

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ABOUT THE PACIFIC INSTITUTE

The Pacific Institute envisions a world in which society, the economy, and the environment have the water they need to thrive now and in the future. In pursuit of this vision, the Institute creates and advances solutions to the world's most pressing water challenges, such as unsustainable water management and use; climate change; environmental degradation; food, fiber, and energy production for a growing population; and lack of access to freshwater and sanitation. Since 1987, the Pacific Institute has cut across traditional areas of study and actively collaborated with a diverse set of stakeholders, including policymakers, scientists, corporate leaders, international organizations such as the United Nations, advocacy groups, and local communities. This interdisciplinary and nonpartisan approach helps bring diverse interests together to forge effective real-world solutions. Since 2009, the Pacific Institute has also acted as co-secretariat for the UN Global Compact CEO Water Mandate, a global commitment platform that mobilizes a critical mass of business leaders to address global water challenges through corporate water stewardship.

More information about the Pacific Institute and our staff, directors, and funders can be found at www.pacinst.org.

ABOUT THE AUTHORS

SONALI ABRAHAM

Sonali Abraham is a Research Associate at the Pacific Institute. Sonali is currently pursuing a doctorate in Environmental Science and Engineering at the University of California, Los Angeles, where she conducts research on strategies to improve water resource sustainability with a focus on outdoor urban water efficiency. Sonali holds a Bachelor of Science in Chemistry from St. Stephen's College in New Delhi, India and a Master of Science in Environmental Engineering from Johns Hopkins University.

SARAH DIRINGER

Dr. Sarah Diringer is a Senior Researcher at the Pacific Institute, where her work focuses on long-range water supply planning and sustainable water systems. Sarah has conducted research both domestically and abroad on watershed management and environmental health. Prior to joining the Institute, Sarah was a doctoral researcher at Duke University, conducting field work and lab research focused on the environmental and community impacts of mercury released from artisanal and small-scale gold mining in Peru. Sarah holds a Bachelor of Science in Environmental Science from the University of California, Los Angeles and a doctorate in Civil and Environmental Engineering from Duke University.

HEATHER COOLEY

Heather Cooley is Director of Research at the Pacific Institute. Heather holds a Bachelor of Science in Molecular Environmental Biology and a Master of Science in Energy and Resources and from the

University of California, Berkeley. She received the US Environmental Protection Agency's Award for Outstanding Achievement for her work on agricultural water conservation and efficiency and has testified before the US Congress on the impacts of climate change on agriculture and innovative approaches to solving water problems in the Sacramento-San Joaquin Delta. Heather has served on several state task forces and working groups, including the California Commercial, Industrial, and Institutional Task Force and the California Urban Stakeholder Committee, as well as the board of the California Urban Water Conservation Council.

ACKNOWLEDGEMENTS

We would like to thank all those who provided their time and data, including staff at the California Department of Water Resources, the City of Fresno, the City of Long Beach, and San Jose Water Company. We would also like to thank all those who offered ideas and comments on the report, including Martha Davis, Charlotte Ely (State Water Resources Control Board), Maureen Hodgins (Water Research Foundation), Cynthia Koehler (WaterNow Alliance), and Bob Wilkinson (University of California at Santa Barbara). Finally, we would like to thank the Water Foundation and the Water Efficiency Trust for generously supporting this work. All errors and opinions are, of course, our own.

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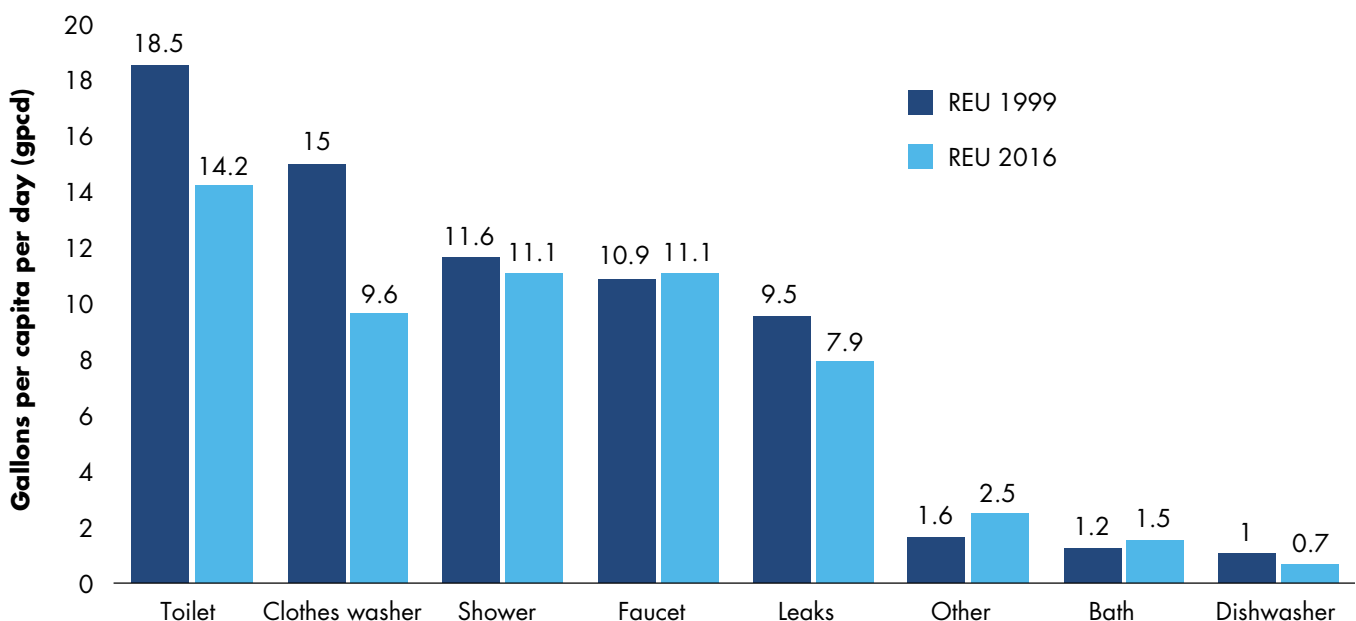
INTRODUCTION

WATER DEMAND IN URBAN AREAS changes over time in response to a variety of factors, including population, economic activity, demographics, weather, and the implementation of conservation and efficiency measures. In California, urban per capita water demand has declined dramatically over the past several decades ([Cooley 2020](#)). Several studies have demonstrated that greater uptake of water-efficient devices, primarily in the residential sector, has been a key driver in reducing per capita water demand. For example, DeOreo et al. ([2016](#)) demonstrated that market penetration of high-efficiency clothes washers between 1998 and 2015 accounted for the largest reduction in per capita

water use, from 15.0 to 9.6 gallons per capita per day (gpcd), followed by toilets, from 18.5 to 14.2 gpcd (Figure 1). Fewer studies have examined the non-residential sector, but there is an indication that efficient devices are playing a role in reducing water usage there as well (e.g., [Frost et al. 2016](#)).

Reductions in per capita demand have important implications for estimating future water demand. Water utilities develop long-range water-demand forecasts to inform capital planning and major financial expenditures, such as investments in additional water supplies and treatment facilities ([Billings and Jones 2008](#)). Previous studies suggest that water suppliers routinely overestimate future

Figure 1. Per Capita Residential Water Demand Between 1998 and 2015, as Described by the Residential End Uses of Water Studies in 1999 and 2016 🔍



Source: [DeOreo et al. 2016](#)

water demand due, in part, to a failure to account for the long-term trend of declining per capita water demand (e.g., [Heberger, Donnelly, and Cooley 2016](#); [Diringer et al. 2018](#)). This can lead to unnecessary and costly investment in unneeded infrastructure and new sources of supply, increased water utility bills, and adverse impacts on water quality and local economies.

In this report, we examine the accuracy of long-range demand forecasts for California's 10 largest urban water suppliers using data and information provided by each water supplier in their Urban Water Management Plans (UWMPs). In 2015, these 10 suppliers served 25 percent of the state's population. We found that per capita water demand declined for all water suppliers between 2000 and 2015. In most cases, reductions in per capita water demand were so large that total water demand declined during this period. Further, we found that all water suppliers overestimated demand. This was largely driven by inflated estimates of per capita water demand, although overestimates of population growth were also factors. On average, water suppliers projected that per capita demand would decline by less than one percent per year; actual per capita demand declined twice as fast. Greater effort is needed to improve the accuracy of long-range demand forecasts, and we offer recommendations for these improvements.

METHODS

For this assessment, we evaluated water demand forecasts submitted by urban water suppliers in their Urban Water Management Plans (UWMPs). In California, water suppliers that provide more than 3,000 acre-feet of water annually or serve more than 3,000 customers (referred to as urban water suppliers) are required to prepare a UWMP

every five years and submit those plans to the California Department of Water Resources (DWR). The first UWMPs were published in 1990, and the most recent plans provide data and information for the year 2015.¹ The UWMPs contain past and projected future water demand for the supplier's service area. While utilities may develop and publish demand forecasts in other documents, the projections in the UWMPs allow for a consistent evaluation across California's urban water suppliers.

Historically, data and information from UWMPs were only available as individual portable document format (pdf) files. Given that there are more than 400 urban water suppliers in California, this has made it difficult to evaluate regional and statewide trends. Beginning in 2015, key data from the UWMPs were aggregated and made available electronically, which will make it easier to conduct these assessments in the future. Given our interest in evaluating pre-2015 UWMPs and the limited data available, we evaluated actual and projected water demand for the 10 largest urban water suppliers in California (Table 1). In 2015, these suppliers provided water to a total of nearly 11 million Californians, or about 25 percent of the state's population. Given their size and available resources, we would expect that their demand forecasts would be among the most sophisticated in the state. Future work should assess demand forecasts for small and mid-sized water suppliers.

For this analysis, we rely on data and information from four UWMPs (2000, 2005, 2010, and 2015) for each of the 10 urban water suppliers. While the UWMPs for 2005, 2010, and 2015 were available online, we received UWMPs for each of the 10 water suppliers for the year 2000 through a public

¹ UWMPs for 2020 are under development and will be submitted to DWR in 2021.

records request.² We were unable to obtain UWMPs for 1990 and 1995 for all suppliers, and therefore excluded those years from this assessment.

Table 1. Ten Selected Urban Water Suppliers and their Populations in 2015

Water Supplier	2015 Population
East Bay Municipal Utilities District	1,390,000
Eastern Municipal Water District	540,895
City of Fresno	520,159
Irvine Ranch Water District	387,501
City of Long Beach	483,371
Los Angeles Department of Water and Power	4,008,954
City of Sacramento	480,155
City of San Diego	1,314,290
San Francisco Public Utilities Commission	846,601
San Jose Water Company	990,000
Total	10,961,926

Source: Conservation Portal, State Water Resources Control Board

We extracted data from UWMPs for current and projected population and demand for potable, raw, and recycled water (Table 2). Each UWMP contained water demand projections for at least the subsequent 20-year period in five-year increments. We found that water demand is reported inconsistently in the UWMPs.

For example, some include the use of recycled water in their estimates of actual demand, others report it in a separate table, and for some, it is unclear how it is reported. Likewise, some report water losses, and others do not. Moreover, the categories reported have changed over time. For each supplier, we carefully selected end-use categories that were consistently reported across

each of the UWMPs. Data reporting is improving, but additional effort is needed to clarify definitions and ensure consistent reporting across water suppliers and over time.

“

Data reporting is improving, but additional effort is needed to clarify definitions and ensure consistent reporting across water suppliers and over time.

Table 2. Data Collected from Urban Water Management Plans

Category	Data Collected
Service Area	Current population
	Population projections
Water Demand	Current total demand, summed across consistent end-use categories as applicable
	Total demand projections, summed across consistent end-use categories as applicable
Recycled Water	Current recycled water demand, summed across consistent end-use categories as applicable
	Recycled water demand projections, summed across consistent end-use categories as applicable

Note: In some cases, the total water demand reported in the UWMPs only included demand for potable water, and the use of recycled water was accounted for in a separate table. We included recycled water in both the actual and projected water demand and took every effort to avoid double counting it.

Source: Based on information contained in UWMPs submitted to DWR by each water supplier in 2000, 2005, 2010, and 2015

² UWMPs for 2005, 2010, and 2015 can be found online at <https://wuedata.water.ca.gov/>.

KEY FINDINGS

TOTAL AND PER CAPITA WATER USE

All water suppliers experienced dramatic reductions in per capita demand between 2000 and 2015, ranging from 14 percent to 47 percent. During this period, per capita demand declined by an average of 25 percent across all water suppliers (Table 3). For eight of the 10 suppliers, per capita demand peaked in 2000 and declined in every subsequent five-year period. For the remaining two suppliers, per capita demand peaked for one in 2005 and the other in 2010 and declined thereafter.

For most water suppliers, the reduction in per capita water demand was substantial enough to offset population growth such that total demand declined. Between 2000 and 2015, total demand declined by an average of 18 percent across all water suppliers. During this period, total demand

declined for nine of the 10 water suppliers despite continued population growth (Table 3). Despite large reductions in per capita demand, Eastern Municipal Water District experienced an 84 percent increase in population and was the only water supplier whose water demand increased during this period.

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For most water suppliers, the reduction in per capita water demand was substantial enough to offset population growth such that total demand declined.

Table 3. Percent Change in Total Demand, Per Capita Demand, and Population Between 2000 and 2015

Water Supplier	Per Capita Demand	Population	Total Demand
East Bay Municipal Utilities District	-17%	9%	-9%
Eastern Municipal Water District	-39%	84%	12%
City of Fresno*	-22%	11%	-14%
Irvine Ranch Water District	-33%	43%	-3%
City of Long Beach	-25%	4%	-22%
Los Angeles Department of Water and Power	-25%	4%	-22%
City of Sacramento	-47%	18%	-38%
City of San Diego	-16%	3%	-14%
San Francisco Public Utilities Commission	-30%	8%	-25%
San Jose Water Company	-31%	1%	-30%
All Water Suppliers	-25%	9%	-18%

Note: The UWMP for the year 2000 was not available for the City of Fresno. The values here are therefore calculated as the change between 2005 and 2015. The per capita change across all suppliers was calculated accounting for population differences.

Source: Based on data provided in UWMPs submitted to DWR by each water supplier for 2000 and 2015

Statewide data are not yet available to evaluate water use since the most recent drought ended. However, monthly reports to the California State Water Resources Control Board (State Water Board) suggest that urban water use increased slightly after the drought ended but remains lower than before the drought.

FUTURE DEMAND

For all of the water suppliers examined, the demand forecasts dramatically overestimated future water demand. Figure 2 shows actual and projected water demand for each of the 10 urban water suppliers. For this analysis, we examined a total of 39 UWMPs: four UWMPs for nine suppliers and three UWMPs for one supplier.³ Each UWMP contained four to six estimates of future demand, although some earlier UWMPs did not include demand projections.⁴ This resulted in a total of 177 data points. We found that the forecasts overestimated demand in 98 percent of the cases examined. The projections in UWMPs for the years 2000, 2005, and 2010 overestimated actual demand by 23 percent, 26 percent, and 26 percent, respectively. For nine of the 10 water suppliers, the overestimates were so large that their future water demand was projected to rise while actual water demand declined.

Future demand was overestimated largely due to inflated estimates of per capita demand. While the UWMPs provide insufficient detail on all the factors contributing to such large overestimates of demand, several inferences can be drawn for the information provided. For example, we find that population was overestimated in 80 percent of the

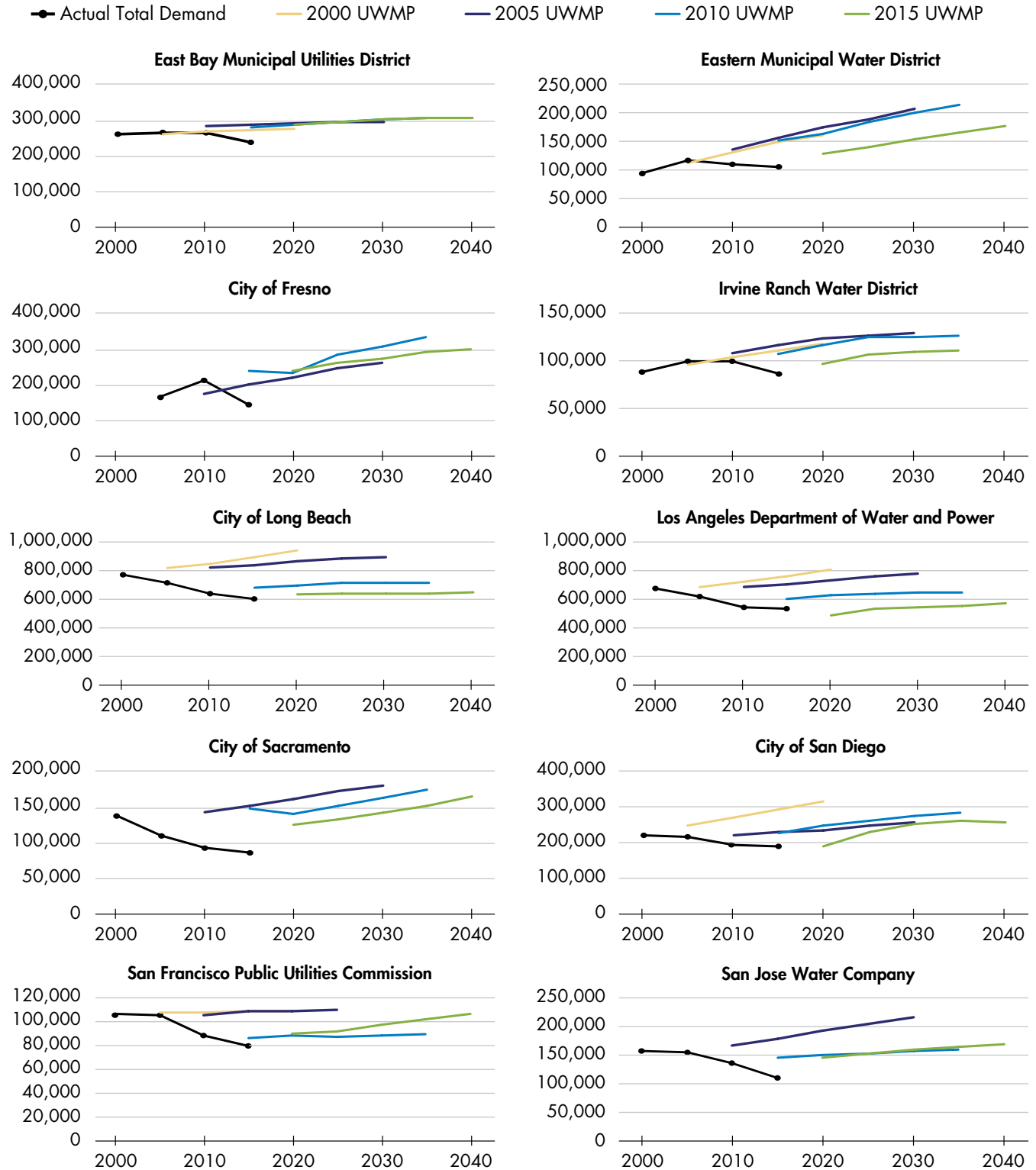
cases examined; across all suppliers, population was overestimated by an average of five percent. While this contributed to overestimates of future demand, we find that the difference between actual and projected per capita demand was a much larger factor. Some water suppliers projected per capita demand would increase, whereas others projected it would remain flat or decline modestly (Figure 3). On average, water suppliers projected that per capita demand would decline by less than one percent per year; actual per capita demand declined twice as fast.

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On average, water suppliers projected that per capita demand would decline by less than one percent per year; actual per capita demand declined twice as fast.

³ The 2000 UWMP was not available for the City of Fresno.

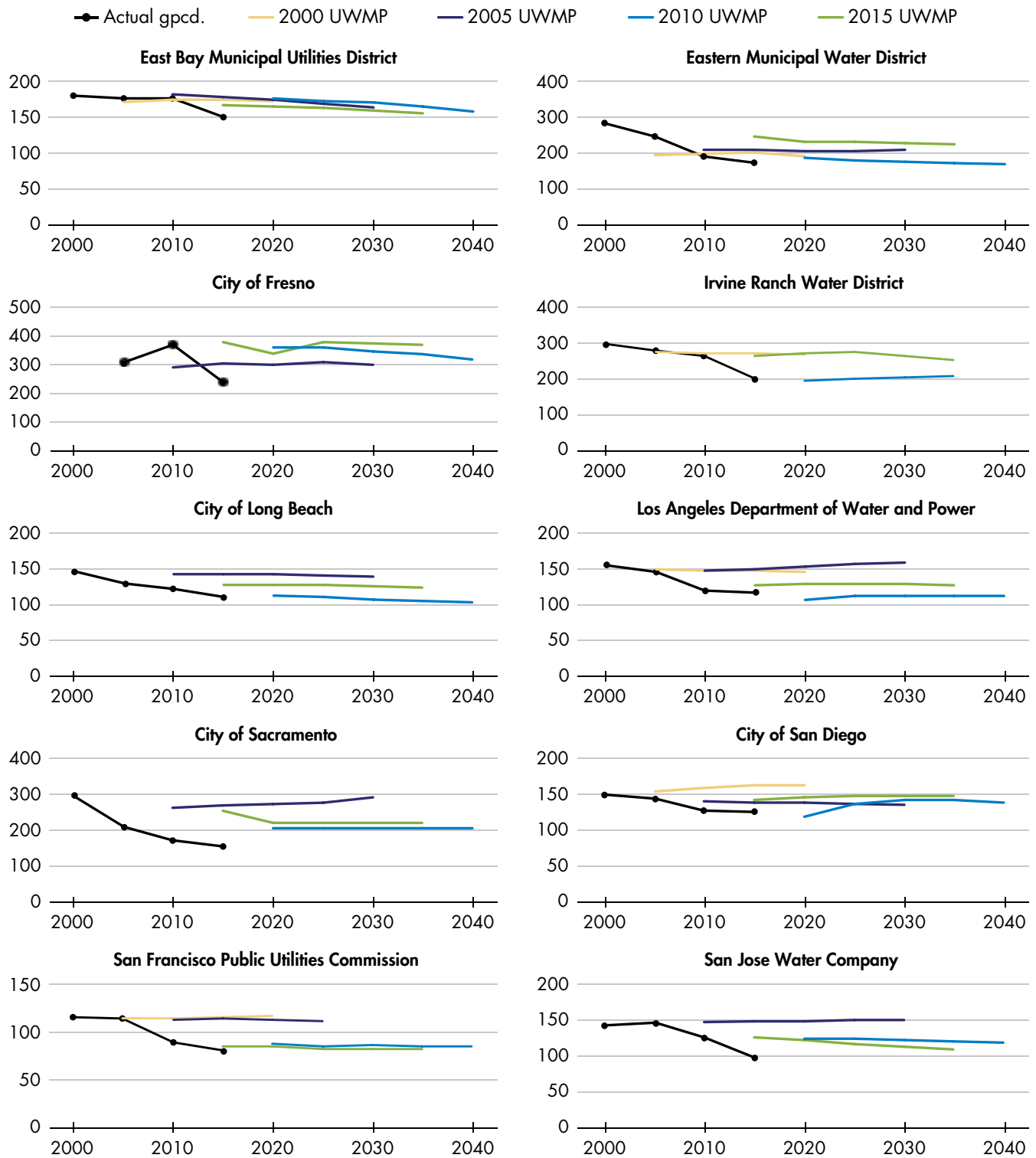
⁴ The City of Sacramento and San Jose Water Company did not provide total demand projections in their 2000 UWMPs. The City of Sacramento provided five demand estimates (2020, 2025, 2030, 2035, and 2040) in their 2015 UWMP.

Figure 2. Actual and Projected Total Demand Trends for the Ten Selected Water Suppliers (in Acre-Feet) 🔍

Source: Urban Water Management Plans, DWR, 2000-2015

Note: The 2000 UWMP was not available for the City of Fresno; the 2000 UWMPs for the City of Sacramento and San Jose Water Company did not contain total demand projections.

Figure 3. Actual and Projected per Capita Trends for the Ten Selected Water Suppliers (in Gallons per Capita per Day)



Source: Urban Water Management Plans, DWR, 2000-2015

Note: The 2000 UWMP was not available for the City of Fresno; the 2000 UWMPs for the City of Sacramento and San Jose Water Company did not contain total demand projections; the 2000 UWMP for the City of Long Beach did not contain population projections; the 2005 UWMP for Irvine Ranch Water District did not contain population projections.

CONCLUSIONS AND RECOMMENDATIONS

Over the last two decades, urban water demand in California has changed dramatically. For many urban water suppliers, total water demand has declined despite continued population and economic growth. Even for the one supplier whose demand increased, the increase was far less than anticipated. Moreover, for each of the 10 agencies examined, actual per capita water use was far below UWMP estimates. Unfortunately, long-range demand forecasting has been slow to keep pace with these trends. Urban water suppliers routinely overestimated future water demand, projecting increases in water demand even as actual demand declined. This is largely due to inflated estimates of future per capita demand, although overestimates of population are also a contributing factor. Overestimates of future water demands have important implications for local communities and the state. Specifically, they can result in unneeded water supply and treatment infrastructure, higher costs to ratepayers, and unnecessary adverse environmental impacts. We offer three recommendations to improve long-range demand forecasts.

EVALUATE WATER USE TRENDS AND THE ACCURACY OF DEMAND FORECASTS

California's largest urban water suppliers consistently overestimate future water demand. Through interviews with water experts and practitioners, Diringer et al. (2018) found that water suppliers and consultants regularly update the input data for their forecasts but do not typically examine the underlying assumptions and the degree to which projections match actual demand. Rather than simply updating input data, forecasters should examine the underlying trends, assumptions within the models, and accuracy of past projections.

DEVELOP STANDARDS AND GUIDELINES FOR URBAN WATER DEMAND FORECASTS

The state should convene stakeholders—including the Department of Water Resources, State Water Board, Strategic Growth Council, California Energy Commission, land use planning agencies, water utilities, data specialists, and non-governmental organizations—to develop standards and guidelines for improving the accuracy of urban water demand forecasts. One key issue that needs to be addressed is how to adequately incorporate efficiency improvements, denser developments, economic changes, and uncertainty into forecasts. Standards and guidelines are also needed for integrating climate change into these forecasts, as temperatures can have a major influence on water demand, especially in regions with high outdoor use. Finally, the state should require retail and wholesale water suppliers to include regular assessments of the accuracy of past demand forecasts in their urban water management plans.

ADVANCE TOOLS AND RESOURCES FOR SMALL AND MEDIUM-SIZED WATER SUPPLIERS

This research focused on demand forecasts from the largest water suppliers in the state. Additional work is needed to evaluate demand forecasts for small and medium-sized water suppliers. These communities may be growing faster and could see even bigger reductions in per capita demand. If, as was found in this paper, demand forecasts assume that future per capita demand remains unchanged, then overestimates may be even larger. Moreover, smaller communities typically have fewer resources to invest in developing demand forecasts.

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Discussion Items



Yucaipa Valley Water District



Date: August 11, 2020

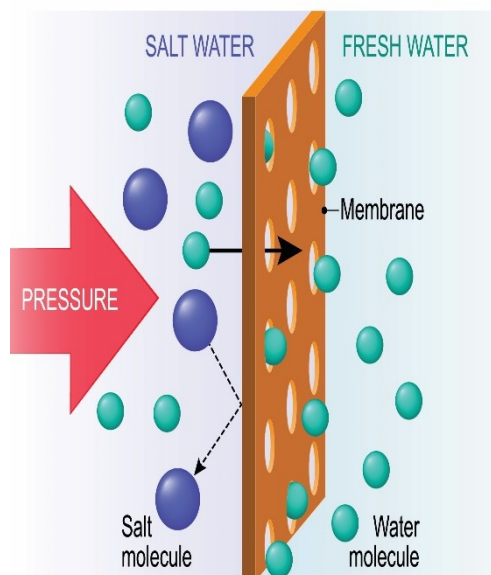
Prepared By: Joseph B. Zoba, General Manager

Subject: Presentation of an Automatic Conductivity Profiling Tool Used at the Wochholz Regional Water Recycling Facility to Test the Integrity of Reverse Osmosis Membranes

Recommendation: Presentation by Jim Vickers, President of Separation Processes - No Action Required.

The Wochholz Regional Water Recycling Facility is one of the few wastewater treatment plants in the nation that creates exceptionally pure recycled water with the use of reverse osmosis equipment.

The operation and maintenance of the reverse osmosis process requires a highly trained staff to constantly ensure the upstream wastewater treatment processes is functioning properly to protect the membrane elements used to remove various molecules from the recycled water supply.



In order to operate equipment at a molecular level, it becomes critical to develop procedures and tests to validate the molecular removal capabilities of the reverse osmosis membranes.

The District has been working closely with Jim Vickers, President of Separation Processes over the past decade. Over this time, Mr. Vickers has been heavily involved in the design, construction and operation of the Yucaipa Valley Regional Water Filtration Facility as well as the Wochholz Regional Water Recycling Facility.

The purpose of this item is to discuss the automatic conductivity profiling used by the District to evaluate the performance of the reverse osmosis system at the Wochholz Regional Water Recycling Facility.



Date: August 11, 2020

Prepared By: Matthew Porras, Implementation Manager

Subject: Notice of Completion for the Installation of Security Window Film at District Facilities

Recommendation: That the Board authorize the General Manager to execute a Notice of Completion for the security film project.

On June 23, 2020, the Board of Directors approved the installation of security film at various District facilities [Director Memorandum 20-108].

Staff directed the contractor to not install the security film on a select few locations and this is reflected in the reduction of the actual costs associated with this project, shown in the table below.

The installations are now complete; therefore the attached Notice of Completion has been prepared for your review and consideration.

	Changes	Bid Amount	Percentage Change from Original Bid Amount	Reference
Original Bid Amount		\$39,654	- -	DM 20-108
Owner Directed Changes	(\$1,203)	\$38,451	(3.03%)	DM 20-121

Financial Impact:

Funding for this purchase was from the Water and Sewer Infrastructure Reserves [GL Accounts #02-000-10311 and 03-000-10311]. Resolution No. 2020-34 approved the transfer of funds from the District Reserve Funds to the Water Fund and Sewer Funds for the purchase of this security film.

Record Without Fee
Per Govt. Code 6103

Recording Requested By:
Yucaipa Valley Water District

And When Recorded Mail To:
Yucaipa Valley Water District
P.O. Box 730
Yucaipa, CA 92399

SPACE ABOVE THIS LINE FOR RECORDERS USE

NOTICE OF COMPLETION

Project Number/CMMS Number: 88485, 88993, 88809
Director Memorandum Number for Authorization: DM 20-108
Director Memorandum Number for Notice of Completion: DM 20-

Notice pursuant to Civil Code Section 3093, must be filed within 10 days after completion.

Notice is hereby given that:

1. The undersigned is owner or corporate officer of the owner of the interest in the property hereinafter described:
2. The full name of the owner is Yucaipa Valley Water District
3. The full address of the owner is 12770 Second Street, Yucaipa, CA 92399
4. The Nature of the Interest or Estate of the Undersigned is: In Fee
5. A work performed hereinafter described was completed on July 24, 2020. The work done was: Installation of 3 ply (14 mil) security laminate film on the windows and glass doors at various District facilities.
6. The name of the contractor for such work was: ArmorCentric.

June 23, 2020

(Date of Contract)

7. The property on which said work was complete in the City of Yucaipa
County of San Bernardino, State of CA, and is described as APN: N/A
8. The street address of said property is N/A

(if no street address has been assigned, insert "none")

Dated August 5, 2020

Matthew Porras

Matthew Porras, Implementation Manager
Yucaipa Valley Water District

Verification

I, the undersigned, say: I am the General Manager of the Declarant of the foregoing Notice of Completion; I have read said Notice of Completion and know the comments thereof; the same is true to my knowledge. I declare under penalty of perjury that the foregoing is true and correct.

Executed on August 11, 2020 at Yucaipa, CA.

Joseph B. Zoba, General Manager
Yucaipa Valley Water District



Date: August 11, 2020

Prepared By: Joseph B. Zoba, General Manager

Subject: Consideration of Releasing a Request for Proposals for the Demolition of Structures at 12816 Second Street, Yucaipa and 12834 2nd Street, Yucaipa

Recommendation: That the Board authorize the General Manager to release the Request for Proposals.

The Yucaipa Valley Water District recently acquired property located at 12816 Second Street, and 12834 Second Street, Yucaipa. The District staff has cleared most of the property, but recommends releasing the attached RFP to select a contractor to demolish the existing garage pads, houses, and other structures on-site and to remove any remaining debris.



A draft Request for Proposal has been prepared for your review and future consideration.



Demolition of Structures Located at 12816 2nd Street and 12834 2nd Street, Yucaipa

Proposal No. 200811

Response Due and Public Bid Opening

Tuesday, August 25, 2020 at 2:00 p.m.

Yucaipa Valley Water District
12770 Second Street
Yucaipa, California 92399

Contact Information:

John Wrobel, Public Works Manager
Phone: (909) 790-7597
Email: jwrobel@yvwd.us

Matt Porras, Implementation Manager
Phone: (909) 790-3300
Email: mporras@yvwd.us

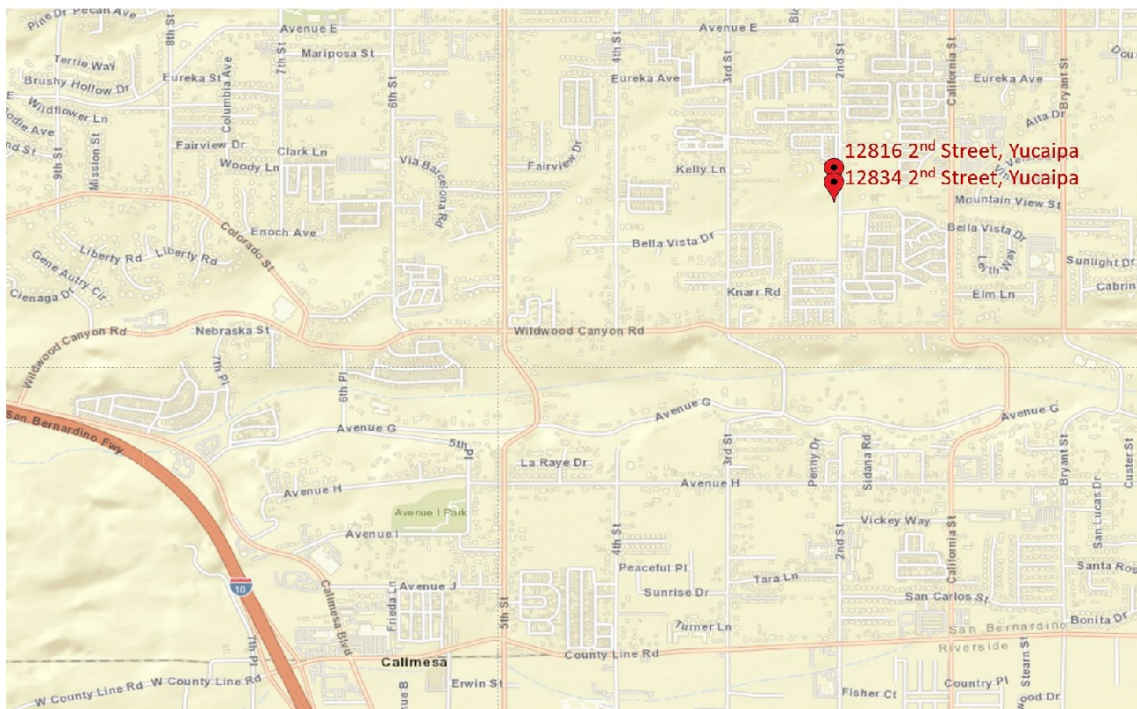
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Introduction

This Request for Proposals ("RFP") is being issued by the Yucaipa Valley Water District ("District") to solicit a cost for the demolition of a residential structure located at 12816 2nd Street, Yucaipa. Demolition is defined as the demolition and removal of the building, removal of the basement and foundation.

Contractors with demonstrated experience in demolition and with an interest in making their services available to the District are invited to respond to this RFP. "Respondents" means the Contractors that submit proposals in response to this RFP. It is understood that the selected Respondent acting as an individual, partnership, corporation, or other legal entity, is licensed and capable of providing the specified services. The Respondent shall be financially solvent and each of its members if a joint venture, its employees, agents, or sub-consultants of any tier shall be competent to perform the services required under this RFP.



Nothing in this RFP shall be construed to create any legal obligation on the part of the District or any respondents. The District reserves the right, in its sole discretion, to amend, suspend, terminate, or reissue this RFP in whole or in part, at any stage.

In no event shall the District be liable to Respondents for any cost or damages incurred in connection with the RFP process, including but not limited to, any and all costs of preparing a response to this RFP or any other costs incurred in reliance on this RFP. No respondent shall be entitled to repayment from the District for any costs, expenses or fees related to this RFP. All supporting documentation submitted in response to this RFP will become the property of the District and available for public review without limitations. Respondents may also withdraw their interest in the RFP, in writing, at any point in time as more information becomes known.

Response Due Date

Due Date: Tuesday, August 25, 2020 at 2:00 p.m.

Mailing Address / Bid Opening Location: Yucaipa Valley Water District
Attn: John Wrobel, Public Works Manager
12770 Second Street
Yucaipa, California 92399

Project Description

The Yucaipa Valley Water District ("District") owns two adjoining parcels: 12816 2nd Street, Yucaipa, and 12834 2nd Street, Yucaipa. This project involves the demolition of the unused residential structures. The proposed demolition does not include the existing fences surrounding the property.



Demolition is defined as the destruction and removal of entire buildings, removal of the concrete basements and garage foundations (garages have been demolished and removed), as well as, the demolition and removal of all trees within the Perimeter of Demolition and Removal as shown below.



General Obligations of Contractor

1. The selected Contractor will be required to sign the attached Standard Agreement in Appendix A. There will be no negotiation on the language of the attached Standard Agreement.
2. The Contractor shall be licensed by the California Contractors State License Board or other required agencies.
3. The Contractor and Subcontractor must be registered with the Department of Industrial Relations pursuant to Labor Code section 1725.5
4. The Contractor shall perform all services as expeditiously as is consistent with skill and care and shall complete the services within each and all of the time periods.
5. The Contractor shall comply with the California Fair Employment and Housing Act and all other State, Federal and local laws including, but not limited to, those prohibiting discrimination, on account of race, color, national origin, sexual orientation, religion, age, marital status, gender or disability.
6. The Contractor shall obtain all permits necessary to complete the Project at no additional cost.
7. The Contractor shall provide all supervision, labor, equipment, technical expertise, safety equipment, and service operations to complete the project. All work shall be performed under the supervision of a qualified superintendent or foreman.
8. The designated District Representative shall have sole authority to approve all phases of the project including the quality of work and shall not authorize payment until in his or her opinion the work has been satisfactorily completed.

9. The Contractor shall ensure that employees comply with all California State Industrial regulations and practices.
10. The Contractors' personnel shall conduct themselves in a professional manner at all times. Personnel shall be courteous, neat in appearance, and wear visible Contractor identification including all personal protection equipment. All equipment shall display their company identification, including any Subcontractors.
11. The Contractor shall ensure all Contractor personnel comply with all relevant OSHA, Cal/OSHA, and Labor and Industries work safety regulations at all times they are on the project site. Contractor is responsible for implementing confined space entry procedures in accordance with all relevant laws and regulations.

Scope of Work and Requirements

1. CONSTRUCTION PERIOD AND REQUIREMENT - The Contract Work shall be complete within 28 calendar days after date of approval by the District's Board of Directors. Contractor is advised that "Liquidated Damages" of \$250 per calendar day may be assessed for each calendar day that the Work remains incomplete following the date established by the Contract Completion Schedule, as adjusted for due cause by Change Order.
2. DEMOLITION SPECIFICATIONS - The Scope of Work and Requirements includes the following:
 - a. Demolition and removal of buildings, basements, foundations, and vegetation within the identified Perimeter of Demolition and Removal.
3. DEFINITIONS
 - a. Remove: Remove and legally dispose of items except those indicated to be reinstalled, salvaged, or to remain on the District's property.
 - b. Existing to Remain: Protect items indicated to remain against damage during demolition.
4. MATERIALS OWNERSHIP: Except for items or materials indicated to be reused, salvaged, or otherwise indicated to remain the District's property, demolished materials shall become the Contractor's property and shall be removed from the site with further disposition at the Contractor's option.
5. SUBMITTALS - Submit each item for information only, unless otherwise indicated.
 - a. Schedule of demolition activities indicating the detailed sequence of demolition and removal work, with starting and ending dates for each activity.
 - b. Inventory of items to be removed and salvaged.
 - c. Landfill records.
6. PROJECT CONDITIONS
 - a. Contractor is responsible to comply with any/all required demolition permits required by local authorities and ordinances.
 - b. Buildings to be demolished will be vacated and their use discontinued before start of Work.

- c. Conditions existing at time of inspection for bidding purpose will be maintained by the District as far as practical.
- d. Storage or sale of removed items or materials on-site will not be permitted.
- e. Landfill Disposal - Contractor shall supply District with a copy of landfill and disposal receipts.

7. EXAMINATION

- a. Survey existing conditions and correlate with requirements indicated to determine extent of demolition required.
- b. Survey the condition of the buildings to determine whether removing any element might result in a structural deficiency or unplanned collapse of any portion of the structure or adjacent structures during demolition.
- c. Perform surveys as the Work progress to detect hazards resulting from demolition activities.

8. PREPARATION

- a. Drain, purge, or otherwise remove, collect, and dispose of chemicals, gases, explosives, acids, flammables, or other dangerous materials before proceeding with demolition operations.
- b. Conduct demolition operations and remove debris to ensure minimum interference with roads, streets, walks, and other adjacent occupied and used facilities.
- c. Do not close or obstruct streets, walks, or other adjacent occupied or used facilities without permission from authorities having jurisdiction. Provide alternate routes around closed or obstructed traffic ways if required by governing regulations.
- d. Conduct demolition operations to prevent injury to people and damage to adjacent buildings and facilities to remain. Ensure safe passage of people around demolition area.
- e. Erect temporary protection such as walks, fences, railings, canopies, and covered passageways, where required by authorities having jurisdiction.
- f. Protect existing site improvements, appurtenances, and landscaping to remain.
- g. Use of explosives will not be permitted.
- h. Pollution Controls - Under the authority of Section 112 of the Clean Air Act, as amended, 42 U.S. C. 1857 (C-7), the Administrator of the United States Environmental Protection Agency (EPA) promulgated National Emission Standards for Hazardous Air Pollutants on April 6, 1973, (38 F.R. 8820) Asbestos was designated a hazardous air pollutant, and standards were set for its use, and to control asbestos emissions. It was determined that one significant source of asbestos emissions was the demolition of certain buildings and structures.
- i. Use water mist, temporary enclosures, and other suitable methods to limit the spread of dust and dirt. Comply with governing environmental protection regulations.
- i. Do not create hazardous or objectionable conditions, such as flooding and pollution when using water.

- j. Remove and transport debris in a manner that will prevent spillage on adjacent surfaces and areas.
- k. Clean adjacent buildings and improvements of dust, dirt and debris caused by demolition operations. Return adjacent areas to condition existing before start of demolition.
- l. Contractor shall limit hours of operation to Monday through Friday during the hours of 8:00 a.m. to 3:00 p.m. Special hours of operation outside the normal hours must be approved by the District. Contractor shall limit noise pollution at all times to prevent objectionable conditions.

9. DEMOLITION

- a. Building Demolition: Demolish buildings, structures, facilities, and other debris including brush and trees or logs, and completely remove from the site. Use methods required to complete Work within limitations of governing regulations.
- b. Locate demolition equipment in and around buildings and remove debris and materials so as not to impose excessive loads on supporting walls, floors, or framing.
- c. Dispose of demolished items and materials promptly. On-site storage or sale of removed items is prohibited.
- d. Break up and remove concrete slabs.
- e. Remove structural framing members to ground to avoid free fall and to prevent ground impact and dust generation.
- f. Below-Grade Construction: Demolish and remove all foundation walls and all below-grade construction.
- g. Basement Excavation - Below grade structures foundation/basement floor shall be totally removed.
- h. Completely fill below-grade areas and voids resulting from demolition of buildings and removal of building basement and garage foundation with soil materials and sufficient compaction to ensure there is proper drainage and no ponding of water on the site for a minimum period of one year.
- i. Damages: Promptly repair damages to adjacent facilities caused by demolition operations.
- j. Special Conditions - The Contractor shall preserve all surrounding buildings and property. Contractor should note the proximity of surrounding buildings. *Any* damage to surrounding buildings or property will be repaired by the Contractor at his expense.

10. DISPOSAL OF DEMOLISHED MATERIALS

- a. Promptly dispose of demolished materials. Do not allow demolished materials to accumulate on-site.
- b. Burning: Do not burn demolished materials.
- c. Transport demolished materials and legally dispose of them.

11. FILL MATERIAL AND COMPACTION - Contractor to provide clean fill material where needed to achieve a consistent grade matching area not included within the Perimeter

of Proposed Demolition such that there is no ponding, depressions, or swales. Contractor to provide a compaction report indicating that all fill areas for below-grade demolition results in a minimum 90% compaction for bottom, center and top of filled areas at a location determined by the District staff.

12. MEASUREMENT AND PAYMENT - The work of Building Demolition shall not be paid for separately but shall be included in the lump sum project cost payable within 30 days of receipt of invoice for the completion of the project and following a post-demolition job walk.
13. COORDINATION - Contractor shall accommodate District representative who will be monitoring Contractors activities.
14. WORK HOURS - Generally standard work hours shall occur between the hours of 8:00 am to 3:00 pm, Monday through Friday unless authorized by a District representative.
15. HEALTH AND SAFETY - All work shall be done in a safe, workmanlike manner. Work performed, methods, and equipment used shall be in conformance with the prevailing State and Federal Occupational Safety and Health Act. Costs from delays and losses due to Contractor operations not in conformance to these acts, or stoppages by OSHA inspectors or the designated representative, as a result of non-conformance, shall be solely borne by the Contractor.

All Cal-OSHA and Title 8 requirements shall be followed for access to confined spaces. Confined space entry procedures shall be submitted prior to contract award.

16. LICENSES - Contractor must possess the following Contractor licenses:
 - a. Class A General Engineering
17. TRAFFIC CONTROL - The Contractor shall be responsible, during all phases of the work to provide for public safety and convenience. Operations shall be conducted in such a manner as to cause as little inconvenience as possible to the abutting property owners.
18. STORMWATER POLLUTION CONTROL - The Contractor shall exercise every reasonable precaution to prevent the discharge of any material which is not solely stormwater to the storm drain system. Non-allowable discharges include, but are not limited to, eroded soil from stockpiles or disturbed earth on-site, concrete, and concrete washout water, saw cut slurry, fuel, oil, and other vehicle fluids, solid wastes, and construction chemicals.

The Contractor will be responsible for the complete cleanup of all material that is discharged from the project(s) in violation of the Discharge Rules. Should the Contractor fail to promptly and effectively clean up such discharges, District may cause the cleanup to be performed by others, the costs to be deducted from any monies due or to become due the Contractor.

19. SUBCONTRACTORS - The Contractor may utilize the services of specialty Subcontractors on those parts of the work that, under normal contracting practices, are performed by a specialty Subcontractor. It is understood that at least 50% of the work to be performed shall be performed by the Contractor. Any Subcontractor used must adhere to the same terms as the Contractor. The Contractor shall be fully responsible to the District for the performance of their Subcontractor, and of person either directly or indirectly employed by them.
20. INSURANCE REQUIREMENTS - The Contractor shall procure and maintain for the

duration of the contract, insurance against claims for injuries to persons or damages to property, which may arise from or in connection with the performance of the work hereunder by the Contractor, his agents, representatives, employees or sub-Contractors. All sub-Contractors shall be required to comply with the applicable insurance provisions. The maintenance of proper coverage is a material element of the contract and failure to maintain or renew coverage or to provide evidence of renewal may be treated by the District as a material breach of contract.

The Contractor will be required to provide insurance in accordance with the attached Agreement included in Appendix A.

21. MAINTENANCE OF RECORDS AND ACCOUNTING - The Contractor shall maintain, during the Project implementation time and for a period of three (3) years after completion of the Project, accurate and organized records of all costs of any type and all services performed for the Project. District will have the right at any time, including during the performance of all Phases of the Project to audit and copy all such records.
22. RESPONSE REQUIREMENTS - All Contractors are required to follow the format specified below. The content of the proposal must be clear, concise, and complete. Each section of the proposal shall be presented according to the outline shown below to aid in expedient information retrieval.

Four (4) copies of the proposal shall be delivered no later than 2:00 P.M. on Tuesday, August 25, 2020 to:

**Location: Yucaipa Valley Water District
12770 Second Street
Yucaipa, California 92399**

Please note that faxed copies will not be accepted. Also note that incomplete proposals, incorrect information, or late submittals may be cause for immediate disqualification. The District reserves the right to amend the Project Information prior to the date that proposals are due. Amendments to the Project Information shall be emailed to all potential Contractors and posted online. The District reserves the right to extend the date by which the proposals are due.

General Response Requirements - Sealed proposals submitted in response to this Project Information shall conform and consist of the information included in Attachment "B".

23. PUBLIC DISCLOSURE - All proposals submitted in response to this Project Information become the property of the District and public records, and as such may be subject to public review. Under the California Public Records Act (California Government Code Section 6250 et seq.) records in the custody of a public entity generally have to be disclosed unless the information being sought falls into one or more of the exemptions to disclosure set out in Government Code Sections 6254 through 6255. The cover letter of the proposal should contain a paragraph that states whether or not Contractor believes that its proposal does or does not contain information that falls into one of the exemptions of Government Code Sections 6254 through 6255 and whether or not Contractor considers such information to be confidential.

In the absence of a declaration, District may be obligated to disclose proposal to any party that requests it. Regardless of assertions of confidentiality, proposal contents may still be disclosed if District, or a court with jurisdiction, determines that such

proposal is a public record requiring disclosure.

24. PROPOSAL SCHEDULE - The solicitation receipt and evaluation of proposals and the selection of the Contractor will conform to the following schedule (Note: Dates are subject to change):
- Distribution of Project Information: Wednesday, August 12, 2020.
 - Bids Due / Bid Opening: Tuesday, August 25, 2020 at 2:00 p.m.
 - Approval of Agreement and Authorization to Proceed: September 2, 2020.
 - Completion of Project: September 30, 2020.
25. PROPOSAL SELECTION PROCESS - Award will be based on best value not lowest responsible respondent. Proposals will be considered only in their entirety. The District reserves the right to reject any or all proposals without qualifications, to select a Contractor based on proposals received without interview, and to negotiate specific requirements and costs using the selected proposal as a basis. District reserves the right to discuss and negotiate scope, costs, and schedule as needed. At any time prior to the District executing a Contract with the selected Contractor, if that Contractor cannot meet any of the RFP conditions, the District has the option of selecting another Contractor. The District reserves the right to enter into contracts with multiple Contractors.
26. PROPOSAL EVALUATION CRITERIA - Selection of the Contractor will be based on best ability to respond quickly with appropriate capabilities. Proposals will be evaluated based on best value as determined multiple factors including but not limited to location, staffing, equipment, past experience, reputation, safety rating, and bond rating.
27. CONTRACT TERMS AND CONDITIONS - Issuance of this Project Information does not commit District to award a contract, or to pay any costs incurred in the preparation of a response to this request. District retains the right to reject any or all submittals. Selection is dependent upon the negotiation of a mutually acceptable contract with the successful Contractor. No modifications to the standard contract language will be granted.

Each submittal shall be valid for not less than one hundred and twenty (120) days from the date of receipt.

All insurance shall be provided at the sole cost and expense of the firm selected unless the requirement is modified or waived by the District. District reserves the right to modify the insurance limits or to substitute project insurance during contract negotiations.

The Yucaipa Valley Water District looks forward to receiving a proposal from your company. If you have any questions regarding this information, please contact:

John Wrobel, Public Works Manager
Phone: (909) 790-7597
Email: jwrobel@yvwd.us

or

Matt Porras, Implementation Manager
Phone: (909) 790-3300
Email: mporras@yvwd.us

APPENDIX A

Standard Agreement

**CONTRACT SERVICES AGREEMENT
FOR
CONTRACTOR SERVICES RELATED TO THE
[____ Insert Name of Project ____]**

THIS CONTRACT SERVICES AGREEMENT ("Agreement") is made this ____ day of ____, 2020, by and between the YUCAIPA VALLEY WATER DISTRICT a special district ("District") and ____ ("Contractor").

NOW THEREFORE, the parties hereto agree as follows:

1.0 SERVICES OF CONTRACTOR

1.1 Scope of Services. In compliance with all of the terms and conditions of this Agreement, the Contractor shall perform all the work set forth in the Scope of Services attached hereto as Exhibit "A" and incorporated herein by reference. Contractor warrants that all work and services set forth in the Scope of Services will be performed in a competent, professional, and satisfactory manner.

1.2 Compliance with Law. All work and services rendered hereunder shall be provided in accordance with all ordinances, resolutions, statutes, rules, and regulations of the District and any Federal, State, or local governmental agency of competent jurisdiction.

1.3 Licenses, Permits, Fees and Assessments. Contractor shall obtain at its sole cost and expense such licenses, permits and approvals as may be required by law for the performance of the services required by this Agreement.

2.0 COMPENSATION

2.1 Contract Sum. Upon completion of all work and services rendered pursuant to this Agreement, the Contractor shall be paid in accordance with the "Schedule of Compensation" attached hereto as Exhibit "B" and incorporated herein by reference, but not to exceed the maximum contract amount of ____ (\$____) ("Contract Sum").

2.2 Method of Payment. Provided that Contractor is not in default under the terms of the Agreement, the Contractor shall submit progress payments by the 5th of each month for approval by the Board of Directors at the regular meeting, generally held on the third Wednesday of every month. A 10% retention will be held from each progress payment. Upon completion of the work [and acceptance of final field measurements] the Yucaipa Valley Water District will file a Board authorized Notice of Completion. The 10% retention will be released (35) days after the filing of the Notice of Completion.

3.0 COORDINATION OF WORK

3.1 Representative of Contractor. [Name and Title] is hereby designated as being the principal representative of the Contractor, authorized to act in its behalf with respect to the work and services specified herein and to make all decisions in connection therewith.

3.2 Contract Officer. Matt Porras, Implementation Manager of the Yucaipa Valley Water District is hereby designated as the representative of the District, authorized to act in its

behalf with respect to the work and services specified herein and make all decisions in connection therewith ("Contract Officer"). The General Manager of the District shall have the right to designate another Contract Officer by providing notice to the Contractor.

3.3 Prohibition Against Subcontracting or Assignment. Contractor shall not contract with any entity to perform in whole or in part the work and services required hereunder without the express written approval of the District. Neither this Agreement nor any interest herein may be assigned or transferred, voluntarily or by operation of law, without the prior written approval of the District. Any such prohibited assignment or transfer shall be void.

3.4 Independent Contractor. Contractor shall perform all work and services required herein as an independent contractor of the District and shall remain under only such obligations as are consistent with that role. Contractor shall not at any time or in any manner represent that it or any of its agents or employees are agents or employees of the District.

4.0 INSURANCE AND INDEMNIFICATION

4.1 The Contractor shall procure and maintain for the duration of the work and services, insurance against claims for injuries to persons or damage to property which may arise from or in connection with the performance of the work hereunder by the Contractor, its agents, representatives or employees. The Contractor shall purchase and maintain insurance, in amounts equal to the requirements in the form and manner provided for in the Contract Documents. Nothing contained in these insurance requirements is to be construed as limiting the liability of the Contractor or the Contractor's sureties.

Certificates of commercial general liability, automobile liability, and workers compensation insurance, also pollution liability coverage, if requested by the District, to the satisfaction of the District is required.

4.2 Minimum Limits of Insurance. Contractor shall maintain limits no less than:

(a) Commercial General Liability. \$1,000,000 combined single limit per occurrence for bodily injury, personal injury, and property damage.

(b) Automobile Liability. \$1,000,000 combined single limit per accident for bodily injury and property damage.

(c) Workers' Compensation and Employer's Liability Insurance. Workers' Compensation limits as required by the Labor Code of the State of California and Employer's Liability in the amount of, at least, \$1,000,000 per accident, for bodily injury and disease.

4.3 Deductibles and Self-insured Retention. Any deductibles of self-insured retention must be declared to and approved by the District. At the option of the District either; the insurer shall reduce or eliminate such deductibles or self-insured retention as respects the District, its officers, officials, employees, agents or volunteers; or the Contractor shall procure a bond guaranteeing payment of losses and related investigations, claims administration and defense expense.

4.4 Other Insurance Provisions. All of the above policies of insurance shall be primary insurance and shall name the District, its officers, officials, employees, agents, or volunteers as additional insured. The insurer shall waive all rights of subrogation and contribution it may have against the District, its officers, officials, employees, agents or volunteers and their respective insurers. All or said policies of insurance shall provide that said insurance may not be amended or canceled without prior written notice by registered mail to the District. In the event any of said policies of insurance are canceled, the Contractor shall prior to the cancellation date, submit new evidence of insurance in conformance with Section 4.1 to the Contract Officer. No work or services under this Agreement shall commence until the Contractor has provided the District with Certificates of Insurance or appropriate insurance binders evidencing the above insurance coverages and said Certificates of Insurance or binders are approved by the District.

The Contractor agrees that the provisions of this section shall not be construed as limiting in any way the extent to which the Contractor may be held responsible for the payment of damages to any persons or property resulting from the Contractor's activities or the activities of any person or persons for which the Contractor is otherwise responsible.

The insurance required by Agreement shall be satisfactory only if issued by companies to do business in California, rated "A" or better in the most recent edition of Best Rating Guide, the Key Rating Guide or in the Federal Register, and only if they are of a financial category Class VII or better, unless such requirements are waived by the District due to unique circumstance.

4.5 Indemnification. Contractor agrees to indemnify the District, its officers, officials, employees, agents or volunteers against, and will hold and save them and each of them harmless from, any and all actions, suits, claims damages to persons or property, losses, costs, penalties, obligations, errors, omissions or liabilities, (herein "claims or liabilities") that may be asserted or claimed by any person, firm or entity arising out of or in connection with the negligent performance of the work or services of the Contractor, its agents, employees, or invitees, provided for herein, or arising from the negligent acts or omissions of the Contractor hereunder, or arising from Contractor's negligent performance of or failure to perform any term, provision covenant or condition of this Agreement, whether or not there is concurrent passive or active negligence on the part of the District, its officers, officials, employees, agents or volunteers but excluding such claims or liabilities arising from the sole negligence or willful misconduct of the District, its officers, officials, employees, agents or volunteers, who are directly responsible to the District, and its connection therewith:

(a) Contractor will defend any action or actions filed in connection with any of said claims or liabilities and will pay all costs and expenses, including legal costs and attorney's fees incurred in connection therewith;

(b) Contractor will promptly pay any judgment rendered against the District, its officers, officials, employees, agents or volunteers for any such claims or liabilities arising out of or in connection with the negligent performance of or failure to perform such work or services of the Contractor hereunder; and Contractor, agrees to save and hold the District, its officers, officials, employees, agents or volunteers harmless therefrom:

(c) In the event the District, its officers, officials, employees, agents or volunteers is made a party to any action or proceeding filed or prosecuted against the Contractor for such damages or other claims arising out of or in connection with negligent performance of or failure to perform the work or services of the Contractor hereunder, Contractor agrees to pay to the District, its officers, officials, employees, agents or volunteers, any and all costs and expenses incurred by the District, its officers, officials, employees, agents or volunteers in such action or proceeding, including but not limited to legal costs and attorneys' fees.

5.0 TERM OF AGREEMENT

5.1 Term. This Agreement shall be effective from and after the date it is signed on behalf of the District. The Agreement shall continue in full force and effect until completion of the work and services described hereunder. After final inspection, a Notice of Completion will be duly accepted by the Board of Directors and filed by the Yucaipa Valley Water District.

6.0 MISCELLANEOUS

6.1 Covenant Against Discrimination. Contractor covenants that, by and for itself, its heirs, executors, assigns and all persons claiming under or through them, that there shall be no discrimination against or segregation of, any person or group of persons on account of race, color, creed, religion, sex, marital status, nation origin, or ancestry in the performance of this Agreement. Contractor shall take affirmative action to ensure that applicants are employed and that employees are treated during employment without regard to their race, color, creed, religion, sex, marital status, nation origin, or ancestry.

6.2 Non-liability of District Officers and Employees. No officer or employee of the District shall be personally liable to the Contractor, or any successor in interest, in the event of any default or breach by the District or for any amount which may become due to the Contractor or to its successor, or for breach of any obligation of the terms of this agreement.

6.3 Conflict of Interest. No officer or employee of the District shall have any financial interest, direct or indirect, in this Agreement nor shall any such officer or employee participate in any decision relating to the Agreement which effects his financial interest or the financial interest of any corporation, partnership or association in which he is, directly or indirectly, interested, in violation of any State statute or regulation. The Contractor warrants that it has not paid or given and will not pay or give any third party any money or other consideration for obtaining this Agreement.

6.4 Notice. Any notice, demand, request, document, consent, approval, or communication either party desires or is required to give to the other party or any other person shall be in writing and either served personally or sent by prepaid, first-class mail, in the case of the District, to the General Manager and to the attention of the Contract Officer, Yucaipa Valley Water District, P.O. Box 730, Yucaipa, CA 92399, and in the case of the Contractor, to the person at the address designated on the execution page of this Agreement.

6.5 Interpretation. The terms of this Agreement shall be construed in accordance with the meaning of the language used and shall not be construed for or against either party

by reason of the authorship of this Agreement or any other rule of construction which might otherwise apply.

6.6 Integration: Amendment. It is understood that there are no oral agreements between the parties hereto affecting this Agreement and this Agreement supersedes and cancels any and all previous negotiations, arrangements and understandings, if any, between the parties, and none shall be sued to interpret this Agreement. This Agreement may be amended at any time by the mutual consent of the parties by an instrument in writing.

6.7 Severability. In the event that part of this Agreement shall be declared invalid or unenforceable by a valid judgment or decree of a court of competent jurisdiction, such invalidity or unenforceability shall not affect any of the remaining portions of this Agreement which are hereby declared as severable and be interpreted to carry out the intent of the parties hereunder unless the invalid provision is so material that its invalidity deprives either party of the basic benefit or their bargain or renders this Agreement meaningless.

6.8 Waiver. No delay or omission in the exercise of any right or remedy by a nondefaulting party on any default shall impair such right or remedy or be construed as a waiver. A party's consent to or approval of any act by the other party requiring the party's consent or approval shall not be deemed to waive or render unnecessary the other party's consent to or approval of any subsequent act. Any waiver by either party of any default must be in writing and shall not be a waiver of any other default concerning the same or any other provision of this Agreement.

6.9 Attorney's Fees. If either party to this Agreement is required to initiate or defend or made a party to any action or proceeding in any way connected with this Agreement, the prevailing party in such action or proceeding, in addition to any other relief which may be granted, whether legal or equitable, shall be entitled to reasonable attorney's fees.

6.10 Corporate Authority. The persons executing this Agreement on behalf of the parties hereto warrant that (i) such party is duly organized and existing, (ii) they are duly authorized to execute and deliver this Agreement on behalf of said party, (iii) by so executing this Agreement, such party is formally bound to the provisions of this Agreement, and (iv) the entering into this Agreement does not violate any provision of any other Agreement to which said party is bound.

IN WITNESS WHEREOF, the parties have executed and entered into this Agreement as of the date first written above.

YUCAIPA VALLEY WATER DISTRICT

By: _____

CONTRACTOR

By: _____

Address:

SCOPE OF SERVICES

Attach Scope of Services

APPENDIX B

Bid Proposal

The undersigned bidder hereby proposes to furnish all labor, materials, equipment, tools, methods, and services necessary to perform all work proposed herein and the undersigned also acknowledges that all bid prices include sales tax and all other applicable taxes and fees, including any amounts payable by the District for taxes which may result from this proposal.

Said bidder fully understands the scope of the work and has checked carefully all words and figures inserted in the Bid and he/she further understands that the Owner will in no way be responsible for any errors or omissions in the preparation of this Bid.

The undersigned is licensed in accordance with the Laws of the State of California:

License: _____ Number: _____ Class: _____

Said bidder further agrees to complete all work required under the contract within the time stipulated in the Contract Completion Schedule set forth below, and to accept in full payment therefore the price as follows:

**Demolition of Structures Located at 12816 2nd Street, Yucaipa
and 12834 2nd Street, Yucaipa**

Total Bid in Figures: \$ _____

Total Bid in Words: _____

The Contract Work shall be complete within 20 business days after date of Notice to Proceed is issued by the Yucaipa Valley Water District.

Dated: _____
(Bidder - Print Name / Title)

(Signature)

Contractor Name: _____

Address: _____

Contact Name: _____

Contact Phone: _____

Contact Email: _____

APPENDIX C

Additional Documentation



Magnolia Environmental, LLC

Project:

Limited Asbestos Survey Report

12816 2nd St.

Yucaipa, CA 92399

Project Number: 1481

Local Office:

Magnolia Environmental, LLC

885 Mango St.

Brea, CA 92821

Office: 562-922-3144

Client:

Yucaipa Valley Water District

Date Report Issued:

December 26, 2019

Property Address: 12816 2nd St. Yucaipa, CA 92399
Date of Survey: December 18, 2019
Project Number: 1481

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Appendices

Appendix A.....	Asbestos Laboratory Analytical Results, Chain of Custody
Appendix B	Site Photographs
Appendix C	Site Map/Sketch
Appendix D	Accreditations and Certification



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www.MagnoliaEnvironmental.com

Property Address: 12816 2nd St. Yucaipa, CA 92399
Date of Survey: December 18, 2019
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INTRODUCTION

The client referenced above retained Magnolia Environmental to perform an asbestos-containing material (ACM) to investigate the property referenced above prior a demolition of the subject property. The survey included the sampling of suspect asbestos containing materials, and a visual assessment of the interior spaces at the subject property. Cal- OSHA Certified Asbestos Consultant (CAC) No. 17-5929, performed the on-site survey on December 18, 2019

Magnolia Environmental report is for the exclusive use of our client referenced above and applies only to the structures referenced above or portion thereof. No one other than our client or those contracted by our client may utilize, reference, or otherwise rely on this report without prior written consent from Magnolia Environmental.

PURPOSE AND SCOPE

The purpose of this investigation is to perform a hazardous asbestos materials survey in order to aid our client referenced above in investigating the subject property prior to demolition. Magnolia Environmental scope of work included:

- A visual reconnaissance of the impacted area on property to evaluate the possible presence of ACM.
- Collection of bulk samples of suspect ACM and submittal of samples to a NVLAP accredited laboratory for analysis.
- Assessment of the condition of potential ACM.
- Preparation of this report, which presents our data and summarizes the assessed materials.



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METHODS

A. ASBESTOS

Suspect asbestos materials are sampled and later identified using the Polarized Light Microscopy (PLM) method in accordance with the EPA Interim method of the Determination of Asbestos in Bulk Samples (EPA/600/ R-93/116, July 1993). Sampling was performed in accordance with 40 CFR 763.86. Homogeneous areas were based on the total functional space. Number of samples per homogeneous area was taken as recommended under said section "Sampling Procedures".

The PLM Method is the most commonly used method to analyze building materials for the presence of asbestos. This method utilizes the optical properties of minerals to identify the selected constituent. The use of this method enables identification of the type and the percentage of asbestos in each sample. The detection limit of the PLM method for asbestos identification is about one (1) percent asbestos. Because the State of California recognizes asbestos-containing building material (ACBM) as any material, which contains greater than or equal to one tenth of one percent (.1) asbestos, materials containing "trace" amounts of asbestos are reported as ACBM in the State of California.

Documentation of the laboratory results should be retained as a reference for general building safety and maintenance, and for any future renovation/ demolition activities.

INSPECTION PROCEDURE (763.85)

Areas Inspected: The inspector performed a preliminary walk-through to designate the functional spaces. She also noted which areas had homogeneous materials.

The inspector then visually inspected each accessible room being impacted prior to demolition. The inspector touched suspect materials to determine if they were friable. For each suspect material, the inspector noted its condition and the potential for disturbance.

Quantities: Suspect asbestos-containing materials identified at the site were quantified. For general functional space measurements were used. Such measurements provide "approximate square or linear footage" (763.93 (d)(2)(ii)). Suspect Asbestos-Containing Materials: were sampled for laboratory analysis or were visually identified as ACM. Magnolia Environmental collected a total of Fifteen (15) bulk samples of suspect ACM. The samples were transferred following proper chain of custody protocol to Ecologics Laboratories, located at 1012 Segovia Circle Placentia, CA 92870, for analysis. Ecologics Laboratories is an accredited laboratory for bulk asbestos analysis under the National Institute of Standards and Technology, National Voluntary Laboratory Accreditation Program (Certification Number 600190-0).



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RESULT

A. ASBESTOS

Fifteen (15) bulk samples were taken using polarized light microscopy (PLM). The following table summarizes the results of the sample analysis and of the visual assessment. A complete list of sample results can be found in the laboratory sheets at the end of this report.

TABLE I: ACM RESULTS

MTL #	Material Description	Sample Location	F/NF ¹	Cond. ²	%ACM ³	# Samples	Est. Quantity
01	Wall System	Wall system throughout the living room, kitchen and bedroom 3	NF	G	0%	3	1,200 SF
02	Joint Compound	In-between wall systems throughout the kitchen, bath 2 and bedroom 3	NF	G	0%	3	30 SF
03	Black Flooring	Flooring throughout closet	NF	G	0%	3	14 SF
04	Roofing	Roof of property	NF	G	0%	3	2,000 SF
05	HVAC Duct Wrap	Around HVAC ducts in attic	NF	G	15%	3	145 SF
06	6" Transit Pipe	Pipe running through home	NF	G	Assumed	0	25 SF

¹ -F=Friable; NF= Non-Friable

² -Cond = condition of Materials. Either good (G), damaged (D), or significantly damaged (SD)

³ - <1% = Calif. Code of Regulation, Title 8, Section 1529. "asbestos-containing construction" material means any manufactured construction material which contains more than one-tenth of 1 percent asbestos by weight. This material will be abated as asbestos containing material; however, it may be disposed of as construction debris.

*See the laboratory report and chain custodies for the complete list materials tested and the sampling locations.

**Should the demolition/renovation process reveal any additional suspect asbestos-containing materials; work must stop until the suspect materials are tested for asbestos content.



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RECOMMENDATIONS

A. ASBESTOS

The Environmental protection Agency (EPA) and California OSHA (Cal/OSHA) define materials which contain more than one percent asbestos to be asbestos containing materials (ACM). In addition, Cal/OSHA defines any manufactured construction material more than 0.1% asbestos as asbestos- containing construction materials (ACCMs). Cal/OSHA also requires notification and registration of the contractor when disturbing materials with more than one-tenth of one percent asbestos and regulates worker protection whenever materials containing any detectable levels of asbestos are disturbed. According to bulk sampling and visual inspection of impacted areas, asbestos-containing materials were present in the following materials sampled:

- HVAC duct wrapping in the attic
- Assumed ACM 6" Transite Pipe running through home

Abatement by a licensed abatement contractor is required prior to disturbance of asbestos-containing materials. It is always necessary to comply with the pertinent provisions of EPA, OSHA and AQMD regulations during any removal or repair activities that may disturb the asbestos- containing materials that may have been inaccessible and or untested during the survey. Not all areas of the home were tested, only impacted areas. Caution should be taken when inaccessible and untested areas are disturbed.



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LIMITATIONS

Magnolia Environmental prepared this asbestos survey for the client referenced above. No warranties expressed or implied, are made by Magnolia Environmental or its employees as to the use of any information, apparatus, product or process disclosed in this report. Though reasonable efforts have been made to assure correctness, if a Contractor is employed, he should bring any discrepancies to the immediate attention of Magnolia Environmental.

We have employed state-of-the-art practices to perform this analysis of risk and identification, but this evaluation is severely limited in scope to areas accessible to a visual inspection or through reasonable means of the areas evaluated. No demolition or product review was performed in attempts to reveal material compositions. Our services consist of professional opinions and recommendations made in accordance with generally accepted engineering principles and practices and are designed to provide an analytical tool to assist the client. Magnolia Environmental or those representing Magnolia Environmental bear no responsibility for the actual condition of the structure or safety of a site pertaining to asbestos and/or asbestos contamination regardless of the actions taken by the client.

Magnolia Environmental appreciated having the opportunity to inspect your property. If you have any questions regarding this survey or other environmental hazards, please don't hesitate to contact us at (562) 922-3144 or at Office@Magnoliaenvironmental.com.



Andrea Pulsipher
Project Consultant
CAC No. 17-5929



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APPENDIX A

ASBESTOS LABORATORY ANALYTICAL RESULTS AND CHAIN OF CUSTODY



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Ecologics Laboratories
 1012 Segovia Circle, Placentia, CA 92870
 Phone (714)632-8118 Fax (714)632-8111
 NVLAP Lab Code:600190-0

PLM Bulk Asbestos Report

Client : Magnolia Environmental
 Address: 885 Mango St. Brea, CA 92821
 Project #: 1481
 Project Location : 12816 2nd St Yucaipa

Date Collected: 12/18/2019 LAB Job # : 19121904
 Date Received: 12/19/2019 Project Name: N/A
 Date Analysis : 12/21/2019 No of Samples: 15
 Date Reported: 12/21/2019 Collected By: A. Pulsipher

Client ID	Layer #	Lab ID	Asbestos Present	Total Est.% of Asbestos
WS-1	19121904.01.A	19121904.01	No	None Detected
Location	: Living Room			
Analyst Description / Color	: Drywall,Firm,Non-Homogenous/White			
Asbestos % Type	: NON			
Other Material Type	: 15% Cellulose,85%Non-Fibrous Material			
WS-2	19121904.02.A	19121904.02	No	None Detected
Location	: Kitchen			
Analyst Description / Color	: Drywall,Firm,Non-Homogenous/White			
Asbestos % Type	: NON			
Other Material Type	: 10% Cellulose,90%Non-Fibrous Material			
WS-3	19121904.03.A	19121904.03	No	None Detected
Location	: Bedroom 3			
Analyst Description / Color	: Drywall,Firm,Non-Homogenous/White			
Asbestos % Type	: NON			
Other Material Type	: 10% Cellulose,90%Non-Fibrous Material			
JC-1	19121904.04.A	19121904.04	No	None Detected
Location	: Kitchen			
Analyst Description / Color	: Joint Compound,Firm,Homogenous/White			
Asbestos % Type	: NON			
Other Material Type	: ,90%Non-Fibrous Material,10%CaCo			


 Jhair Gonzalez - Analyst


 Armando Ducoing - Approved By

The analyses of the samples in this report were performed and analyzed in accordance with the procedure outlined in the US Federal Register 40 CFR 763, Subpart F, Appendix A, EPA 500/R-93/116 (Method for Determination of Asbestos in Building Materials), and EPA 600/M-82-020 (US EPA Interim Method for the Determination of Asbestos in Bulk Insulation Samples). Total percentage of sample constituents may total greater than 100 due to trace amounts. The limit of detection for this analytical method is less than one percent. Samples were analyzed using Calibrated Visual Estimations (CVESE); therefore, results may not be reliable for samples of low asbestos concentration levels. In multilayer samples, unless otherwise specified, the asbestos concentration is reported for the layer where asbestos is found. These results lie within the statistical limits of variability calculated for standard reference samples routinely analyzed in the laboratory. On a per sample basis, the accuracy and precision of the results depend on the type of sample and its asbestos content. Ecologics Lab is accredited under the NIST/NVLAP program for asbestos in bulk material for asbestos analysis. Ecologics Lab and its personnel shall not be liable for any misinformation provided to us by the client regarding these samples or for any misuse or interpretation of information supplied by us. Liability shall extend to providing replicate analyses only. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the Federal Government. Ecologics Lab will retain samples for a period of three months unless otherwise specified. This report relates only to samples submitted and analyzed. This report may not be reproduced except for in full, without the written approval of this laboratory. Analyst of Optical Microscopy
 Samples analyzed by Ecologics Lab, CA, NVLAP Lab Code 600190-0.

Page 1 of 5



Ecologics Laboratories
 1012 Scgovia Circle, Placentia, CA 92870
 Phone (714)632-8118 Fax (714)632-8111
 NVLAP Lab Code:600190-0


PLM Bulk Asbestos Report

Client :Magnolia Environmental
 Address:885 Mango St. Brea, CA 92821
 Project #:1481
 Project Location :12816 2nd St Yucaipa

Date Collected: 12/18/2019 LAB Job # : 19121904
 Date Received: 12/19/2019 Project Name:N/A
 Date Analysis : 12/21/2019 No of Samples: 15
 Date Reported: 12/21/2019 Collected By: A. Pulsipher

Client ID	Layer #	Lab ID	Asbestos Present	Total Est.% of Asbestos
JC-2	19121904.05.A	19121904.05	No	None Detected
Location	: Bath 2			
Analyst Description / Color	: Joint Compound,Firm,Homogenous/White			
Asbestos % Type	: NON			
Other Material Type	: ,85%Non-Fibrous Material,15%CaCo			
JC-3	19121904.06.A	19121904.06	No	None Detected
Location	: Bedroom 3			
Analyst Description / Color	: Joint Compound,Firm,IIomogenous/White			
Asbestos % Type	: NON			
Other Material Type	: ,85%Non-Fibrous Material,15%CaCo			
F-1	19121904.07.A	19121904.07	No	None Detected
Location	: Closet.			
Analyst Description / Color	: Flooring,Firm,IIomogenous/Black			
Asbestos % Type	: NON			
Other Material Type	: 5% Cellulose,70%Non-Fibrous Material,25%Binders			
F-1	19121904.07.B	19121904.07	No	None Detected
Location	: Closet.			
Analyst Description / Color	: Mastic,Firm,Homogenous/Brown			
Asbestos % Type	: NON			
Other Material Type	: ,55%Non-Fibrous Material,45%Adhesive			


 Jhair Gonzalez - Analyst


 Armando Ducoing - Approved By

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Ecologics Laboratories
 1012 Scgovia Circle, Placentia, CA 92870
 Phone (714)632-8118 Fax (714)632-8111
 NVLAP Lab Code:600190-0

PLM Bulk Asbestos Report

Client :Magnolia Environmental
 Address:885 Mango St. Brea, CA 92821
 Project #:1481
 Project Location :12816 2nd St Yucaipa

Date Collected: 12/18/2019 LAB Job # : 19121904
 Date Received: 12/19/2019 Project Name: N/A
 Date Analysis : 12/21/2019 No of Samples: 15
 Date Reported: 12/21/2019 Collected By: A. Pulsipher

Client ID	Layer #	Lab ID	Asbestos Present	Total Est. % of Asbestos
F-2	19121904.08.A	19121904.08	No	None Detected
Location : Closet.				
Analyst Description / Color : Flooring,Firm,Homogenous/Black				
Asbestos % Type : NON				
Other Material Type : 5% Cellulose,60%Non-Fibrous Material,35%Binders				
F-2	19121904.08.B	19121904.08	No	None Detected
Location : Closet.				
Analyst Description / Color : Mastic,Firm,Homogenous/Brown				
Asbestos % Type : NON				
Other Material Type : ,60%Non-Fibrous Material,40%Adhesive				
F-3	19121904.09.A	19121904.09	No	None Detected
Location : Closet.				
Analyst Description / Color : Flooring,Firm,Homogenous/Black				
Asbestos % Type : NON				
Other Material Type : 5% Cellulose,60%Non-Fibrous Material,35%Binders				
F-3	19121904.09.B	19121904.09	No	None Detected
Location : Closet.				
Analyst Description / Color : Mastic,Firm,Homogenous/Brown				
Asbestos % Type : NON				
Other Material Type : ,60%Non-Fibrous Material,40%Adhesive				


 Jhahir Gonzalez – Analyst


 Armando Ducoing – Approved By

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Ecologics Laboratories
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 Phone (714)632-8118 Fax (714)632-8111
 NVLAP Lab Code:600190-0


PLM Bulk Asbestos Report

Client :Magnolia Environmental
 Address:885 Mango St. Brea, CA 92821
 Project #:1481
 Project Location :12816 2nd St Yucaipa

Date Collected: 12/18/2019 LAB Job # : 19121904
 Date Received: 12/19/2019 Project Name:N/A
 Date Analysis : 12/21/2019 No of Samples: 15
 Date Reported: 12/21/2019 Collected By: A. Pulsipher

Client ID	Layer #	Lab ID	Asbestos Present	Total Est.% of Asbestos
R-1	19121904.10.A	19121904.10	No	None Detected
Location	: Roof			
Analyst Description / Color	: Roof Material,Fibrous,Granular,Non-Homogeneous/Black			
Asbestos % Type	: NON			
Other Material Type	: 30% Fiberglass,60%Non-Fibrous Material,10%Asphaltic Matrix			
R-2	19121904.11.A	19121904.11	No	None Detected
Location	: Roof			
Analyst Description / Color	: Roof Material,Fibrous,Granular,Non-Homogeneous/Black			
Asbestos % Type	: NON			
Other Material Type	: 35% Fiberglass,55%Non-Fibrous Material,10%Asphaltic Matrix			
R-3	19121904.12.A	19121904.12	No	None Detected
Location	: Roof			
Analyst Description / Color	: Roof Material,Fibrous,Granular,Non-Homogeneous/Black			
Asbestos % Type	: NON			
Other Material Type	: 35% Fiberglass,55%Non-Fibrous Material,10%Asphaltic Matrix			
DI-1	19121904.13.A	19121904.13	Yes	15% Chrysotile
Location	: Attic			
Analyst Description / Color	: HVAC Duct,Fibrous,Non-Homogenous/Gray,Silver			
Asbestos % Type	: Chrysotile			
Other Material Type	: 20% Cellulose,65%Non-Fibrous Material			


 Jhair Gonzalez – Analyst


 Armando Ducoing – Approved By

The analyses of the samples in this report were performed and analyzed in accordance with the procedure outlined in the US Federal Register 40 CFR 763, Subpart F, Appendix A, EPA 600/R-93/116 (Method for Determination of Asbestos in Building Materials), and EPA 600/M-82-020 (US EPA Interim Method for the Determination of Asbestos in Bulk Insulation Samples). Total percentage of sample constituents may total greater than 100 due to trace amounts. The limit of detection for this analytical method is less than one percent. Samples were analyzed using Calibrated Visual Estimations (CVEs); therefore, results may not be reliable for samples of low asbestos concentration levels. In multilayer samples, unless otherwise specified, the asbestos concentration is reported for the layer where asbestos is found. These results lie within the statistical limits of variability calculated for standard reference samples routinely analyzed in the laboratory. On a per sample basis, the accuracy and precision of the results depend on the type of sample and its asbestos content. Ecologics Lab is accredited under the NIST/NVLAP program for asbestos in bulk material for asbestos analysis. Ecologics Lab and its personnel shall not be liable for any information provided to us by the client regarding these samples or for any misuse or interpretation of information supplied by us. Liability shall extend to providing replicate analyses only. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the Federal Government. Ecologics Lab will retain samples for a period of three months unless otherwise specified. This report relates only to samples submitted and analyzed. This report may not be reproduced except in full, without the written approval of this laboratory. Analyst of Optical Microscopy.

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 Samples analyzed by Ecologics Lab, CA. NVLAP Lab Code 600190-0.



Ecologics Laboratories
 1012 Segovia Circle, Placentia, CA 92870
 Phone (714)632-8118 Fax (714)632-8111
 NVLAP Lab Code:600190-0


PLM Bulk Asbestos Report

Client :Magnolia Environmental
 Address:885 Mango St. Brea, CA 92821
 Project #:1481
 Project Location :12816 2nd St Yucaipa

Date Collected: 12/18/2019 LAB Job # : 19121904
 Date Received: 12/19/2019 Project Name: N/A
 Date Analysis : 12/21/2019 No of Samples: 15
 Date Reported: 12/21/2019 Collected By: A. Pulsipher

Client ID	Layer #	Lab ID	Asbestos Present	Total Est.% of Asbestos
DI-2	19121904.14.A	19121904.14	Yes	15% Chrysotile
Location	: Attic			
Analyst Description / Color	: HVAC Duct,Fibrous,Non-Homogenous/Gray,Silver			
Asbestos % Type	: Chrysotile			
Other Material Type	: 25% Cellulose,60%Non-Fibrous Material			
DI-3	19121904.15.A	19121904.15	Yes	15% Chrysotile
Location	: Attic			
Analyst Description / Color	: HVAC Duct,Fibrous,Non-Homogenous/Gray,Silver			
Asbestos % Type	: Chrysotile			
Other Material Type	: 20% Cellulose,65%Non-Fibrous Material			


 Jhair Gonzalez – Analyst


 Armando Ducoing – Approved By

The analyses of the samples in this report were performed and analyzed in accordance with the procedure outlined in the US Federal Register 40 CFR 763, Subpart F, Appendix A, EPA 600/R-93/116 (Method for Determination of Asbestos in Building Materials), and EPA 600/M-82-020 (US EPA Interim Method for the Determination of Asbestos in Bulk Insulation Samples). Total percentage of sample constituents may total greater than 100 due to trace amounts. The limit of detection for this analytical method is less than one percent. Samples were analyzed using Calibrated Visual Estimations (CVES); therefore, results may not be reliable for samples of low asbestos concentration levels. In multilayer samples, unless otherwise specified, the asbestos concentration is reported for the layer where asbestos is found. These results lie within the statistical limits of variability calculated for standard reference samples routinely analyzed in the laboratory. On a per sample basis, the accuracy and precision of the results depend on the type of sample and its asbestos content. Ecologics Lab is accredited under the NIST/NVLAP program for asbestos in bulk material for asbestos analysis. Ecologics Lab and its personnel shall not be liable for any misinformation provided to us by the client regarding these samples or for any misuse or interpretation of information supplied by us. Liability shall extend to providing replicate analyses only. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the Federal Government. Ecologics Lab will retain samples for a period of three months unless otherwise specified. This report relates only to samples submitted and analyzed. This report may not be reproduced except in full, without the written approval of this laboratory. Analyst of Optical Microscopy

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CHAIN OF CUSTODY

1012 Segovia Circle, Placentia, CA 92870
Ph. (714) 632 8100 Fx. (714) 632 8111

Job ID: 19121904



CONTACT INFORMATION *				PROJECT INFORMATION *								
Company: Magnolia Environmental, LLC				Project #: 1481								
Address: 885 Mango St. Brea, CA				Project name:								
Phone: 562-922-3144				Project location: 12816 2nd St, Yucaipa								
Contact: Andrea Pulsipher				Date sampled: A. Pulsipher 12/18/19								
Email results to: Maglabresults@gmail.com				Sampled by: ↓								
ASBESTOS				MICROBIOLOGY								
<input checked="" type="checkbox"/> PLM Bulk Analysis (EPA 600/R-93/116) <input type="checkbox"/> PLM 1,000 Point Count (<0.1%) <input type="checkbox"/> PLM 400 Point Count (<0.25%) <input type="checkbox"/> Gravimetric Point Count (<0.1%) <input type="checkbox"/> PCM Airborne Fiber Count (NIOSH 7400) <input type="checkbox"/> PCM Airborne Fiber Count with TWA <input type="checkbox"/> Other:				<input type="checkbox"/> Fungi: Non Viable Mold (ST) <input type="checkbox"/> Fungi: Non Viable Mold (TL, B, Sw) <input type="checkbox"/> Fungi: Quantitative Spore Count Direct Exam (TL, B, Sw) <input type="checkbox"/> Bacteria: Total Coliform, E. coli (P/A) <input type="checkbox"/> Bacteria: Total Coliform, E. coli, Enterococcus (P/A) <input type="checkbox"/> Carbon Black & Material Science Analysis								
Turnaround time (TAT) *: <input type="checkbox"/> 3-4 Hrs <input type="checkbox"/> 6-8 Hrs <input type="checkbox"/> 24 Hrs <input checked="" type="checkbox"/> 48 Hrs <input type="checkbox"/> 72 Hrs <input type="checkbox"/> Other:												
Additional information/ Special instructions:												
<input type="checkbox"/> Stop at 1st positive on samples great 1%, EXCEPT for:												
<input type="checkbox"/> Composite 1 wall system sample if found to be great than or equal 1%.												
<input type="checkbox"/> Other:												
SAMPLE ID	LOCATION *	DESCRIPTION *	ASBESTOS		MICROBIOLOGY/PCM							
			COND	QTY SF/LF	FRIABLE Y/N	TIME START STOP		FLOW START STOP		TOTAL		
W6-1	Living Room	Wall System	G	1,200						1,200		
↓-2	Kitchen	↓		↓						↓		
↓-3	Bedroom 3	↓		↓						↓		
JC-1	Kitchen	Joint Compound		30						30		
↓-2	Bath 2	↓		↓						↓		
↓-3	Bedroom 3	↓		↓						↓		
F-1	Closest	Black Flooring		14						14		
↓-2	↓	↓		↓						↓		
↓-3	↓	↓		↓						↓		
Weather			Fog	Rain	Snow	Wind	Clear	TIME *		DATE *	RELINQUISHED BY *	RECEIVED BY
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	7:50 AM		12-19-19	A. Pulsipher	
								10:00		12-19-19		

* Necessary information for processing.

ST: Spore Trap, TL: Tape Lift, B: Bulk, Sw: Swab, P/A: Presence/ Absence, QTY: Quantity, SF: Square Foot, LF: Length Foot,

COND: Conditions: G = Good; D = Damage; SD = Significantly Damage.

Page 1 of 2



CHAIN OF CUSTODY

1012 Segovia Circle, Placentia, CA 92870

Ph. (714) 632 8100 Fx. (714) 632 8111

For Laboratory use only

Lab ID:

Company: Magnolia Environmental

Project #: 1481

[illegible]

* Necessary information for processing.

ST: Spore Trap, TL: Tape Lift, B: Bulk, Sw: Swab, P/A: Presence/ Absence, QTY: Quantity, SF: Square Foot, LF: Length Foot,

COND: Conditions: **G** = Good; **D** = Damage; **SD** = Significantly Damage.

Property Address: 12816 2nd St. Yucaipa, CA 92399
Date of Survey: December 18, 2019
Project Number: 1481

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APPENDIX B

SITE PHOTOGRAPHS



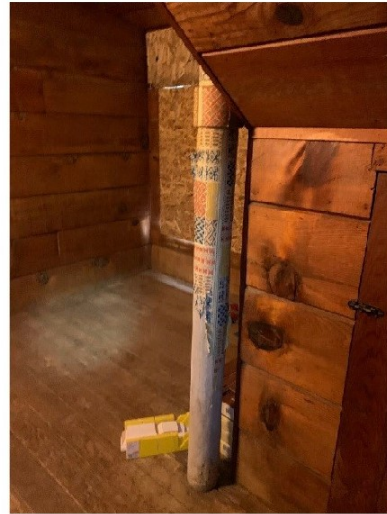
885 Mango St. Brea, CA 92821 * TEL. 562-922-3144
www.MagnoliaEnvironmental.com

Property Address: 12816 2nd St. Yucaipa, CA 92399
Date of Survey: December 18, 2019
Project Number: 1481

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Picture 1: HVAC Duct wrapping in the attic was found to be ACM



Picture 2: Assumed ACM 6" Transite Pipe running through home



Picture 3: Wall system sampled was found to not contain asbestos



Picture 4: Black flooring sampled in closet was found to not contain asbestos



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Property Address: 12816 2nd St. Yucaipa, CA 92399
Date of Survey: December 18, 2019
Project Number: 1481

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APPENDIX C

SITE MAPS/SKETCH



885 Mango St. Brea, CA 92821 * TEL. 562-922-3144
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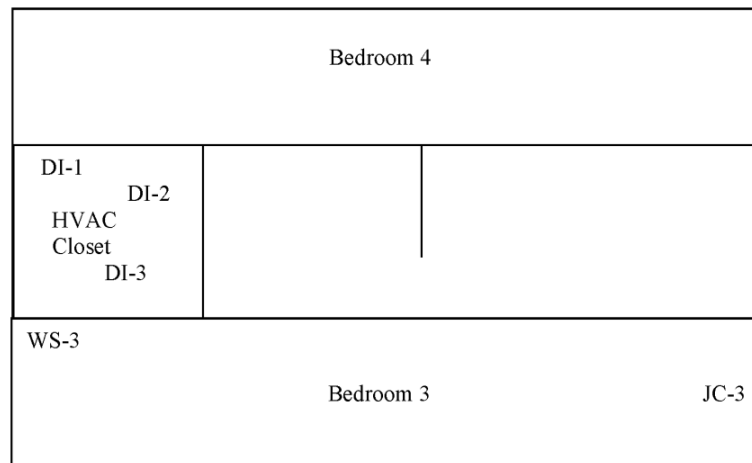
Property Address: 12816 2nd St. Yucaipa, CA 92399
 Date of Survey: December 18, 2019
 Project Number: 1481

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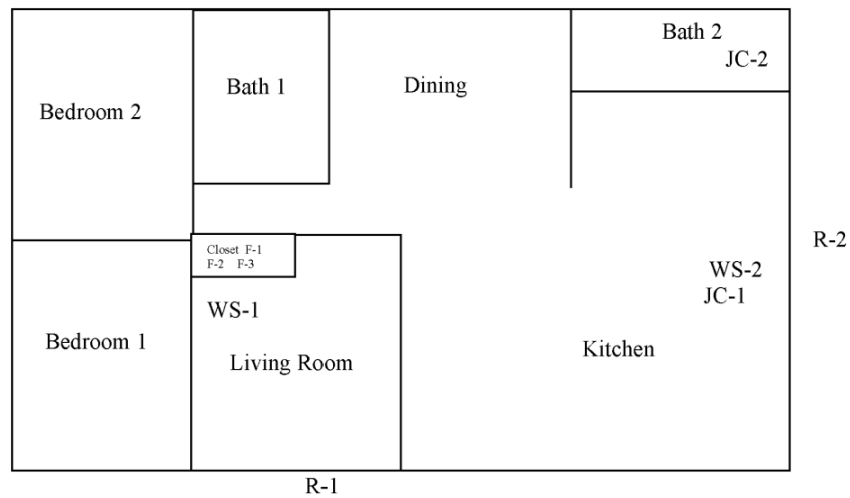
Sketch not to scale.

Sample ID indicates location of sampling.

2nd Floor



1st Floor



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Property Address: 12816 2nd St. Yucaipa, CA 92399
Date of Survey: December 18, 2019
Project Number: 1481

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APPENDIX D

ACCREDITATION AND CERTIFICATION



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www.MagnoliaEnvironmental.com



Magnolia Environmental, LLC

Project:

Asbestos Survey Report

12834 2nd St.

Yucaipa, CA 92399

Project Number: 1975

Local Office:

Magnolia Environmental, LLC

885 Mango St.

Brea, CA 92821

Office: 562-922-3144

Client:

Yucaipa Valley Water District

Date Report Issued:

June 22, 2020



885 Mango St. Brea, CA 92821 * TEL 562-922-3144
www.MagnoliaEnvironmental.com

Property Address: 12834 2nd St. Yucaipa, CA 92399
Date of Survey: June 17, 2020
Project Number: 1975

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Conclusion/Recommendations	7
A. Asbestos	7

Appendices

Appendix A.....	Asbestos Laboratory Analytical Results, Chain of Custody
Appendix B.....	Site Photographs
Appendix C.....	Site Map/Sketch
Appendix D.....	Accreditations and Certification



885 Mango St. Brea, CA 92821 * TEL 562-922-3144
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Property Address: 12834 2nd St. Yucaipa, CA 92399
Date of Survey: June 17, 2020
Project Number: 1975

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INTRODUCTION

The client referenced above retained Magnolia Environmental to perform an asbestos-containing material (ACM) survey to investigate the subject property prior to demolition. The survey included the sampling of suspect asbestos containing materials, and a visual assessment of the interior spaces at the subject property. Cal- OSHA Certified Asbestos Consultant (CAC) No. 17- 5929, performed the on-site survey on June 17, 2020.

Magnolia Environmental report is for the exclusive use of our client referenced above and applies only to the structures referenced above or portion thereof. No one other than our client or those contracted by our client may utilize, reference, or otherwise rely on this report without prior written consent from Magnolia Environmental.

PURPOSE AND SCOPE

The purpose of this investigation is to perform a hazardous asbestos materials survey in order to aid our client referenced above in investigating the subject property prior to demolition. Magnolia Environmental scope of work included:

- A visual reconnaissance of the impacted area on property to evaluate the possible presence of ACM.
- Collection of bulk samples of suspect ACM and submittal of samples to a NVLAP accredited laboratory for analysis.
- Assessment of the condition of potential ACM.
- Preparation of this report, which presents our data and summarizes the assessed materials.



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Property Address: 12834 2nd St. Yucaipa, CA 92399
Date of Survey: June 17, 2020
Project Number: 1975

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METHODS

A. ASBESTOS

Suspect asbestos materials are sampled and later identified using the Polarized Light Microscopy (PLM) method in accordance with the EPA Interim method of the Determination of Asbestos in Bulk Samples (EPA/600/ R-93/116, July 1993). Sampling was performed in accordance with 40 CFR 763.86. Homogeneous areas were based on the total functional space. Number of samples per homogeneous area was taken as recommended under said section "Sampling Procedures".

The PLM Method is the most commonly used method to analyze building materials for the presence of asbestos. This method utilizes the optical properties of minerals to identify the selected constituent. The use of this method enables identification of the type and the percentage of asbestos in each sample. The detection limit of the PLM method for asbestos identification is about one (1) percent asbestos. Because the State of California recognizes asbestos-containing building material (ACBM) as any material, which contains greater than or equal to one tenth of one percent (.1) asbestos, materials containing "trace" amounts of asbestos are reported as ACBM in the State of California.

Documentation of the laboratory results should be retained as a reference for general building safety and maintenance, and for any future renovation/ demolition activities.

INSPECTION PROCEDURE (763.85)

Areas Inspected: The inspector performed a preliminary walk-through to designate the functional spaces. She also noted which areas had homogeneous materials.

The inspector then visually inspected each accessible room being impacted in the demolition. The inspector touched suspect materials to determine if they were friable. For each suspect material, the inspector noted its condition and the potential for disturbance.

Quantities: Suspect asbestos-containing materials identified at the site were quantified. For general functional space measurements were used. Such measurements provide "approximate square or linear footage" (763.93 (d)(2)(ii)). Suspect Asbestos-Containing Materials: were sampled for laboratory analysis or were visually identified as ACM. Magnolia Environmental collected a total of Forty Five (45) bulk samples of suspect ACM. The samples were transferred following proper chain of custody protocol to Ecologics Laboratories, located at 1012 Segovia Circle Placentia, CA 92870, for analysis. Ecologics Laboratories is an accredited laboratory for bulk asbestos analysis under the National Institute of Standards and Technology, National Voluntary Laboratory Accreditation Program (Certification Number 600190-0).



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Property Address: 12834 2nd St. Yucaipa, CA 92399
 Date of Survey: June 17, 2020
 Project Number: 1975

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RESULT

A. ASBESTOS

Forty Five (45) bulk samples were taken using polarized light microscopy (PLM). The following table summarizes the results of the sample analysis and of the visual assessment. A complete list of sample results can be found in the laboratory sheets at the end of this report.

TABLE I: ACM RESULTS

MTL #	Material Description	Sample Location	F/NF ¹	Cond. ²	%ACM ³	# Samples	Est. Quantity
01	Wall System	Wall system sampled in the basement	NF	G	0%	3	320 SF
02	Joint Compound	In-between wall systems sampled in the basement	NF	G	0%	3	100 SF
03	Plaster	Plaster sampled in the hallway, bedroom 1, and living room	NF	G	0%	3	720 SF
04	Layered Sheet Flooring	Layered sheet flooring sampled in the kitchen and side room	NF	G	30%	3	378 SF
05	Stucco	Exterior stucco sampled from outside of the basement bathroom	NF	D	0%	3	20 SF
06	Window Putty	Window putty sampled from the exterior windows	F	D	0%	3	25 SF
07	Thermal System Insulation	Thermal system insulation sampled around the boiler duct	NF	G	30%	3	5 SF
08	12x12 Ceiling Tile	12x12 Ceiling tile sampled in the side room and the small room near the kitchen	F	D	0%	3	200 SF
09	12x24 Green Ceiling Tile	12x24 green ceiling tile sampled in the living room	NF	G	0%	3	247 SF
10	Shingled Roofing	Shingled roofing sampled from the roof of the subject property	NF	G	0%	3	1,000 SF
11	Insulation	Insulation sampled from the side room and the small room near the kitchen	NF	G	0%	3	400 SF
12	9x9 Floor Tile and mastic	9x9 Floor tile and mastic sampled in the small room near the kitchen	NF	G	7%	3	50 SF



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www.MagnoliaEnvironmental.com

Property Address: 12834 2nd St. Yucaipa, CA 92399
 Date of Survey: June 17, 2020
 Project Number: 1975

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ACM RESULTS CONTINUED

MTL #	Material Description	Sample Location	F/NF ¹	Cond. ²	%ACM ³	# Samples	Est. Quantity
13	Penetration Mastic	Penetration mastic sampled from the roof of the subject property	NF	G	0%	3	15 SF
14	Rolled Roofing	Rolled roofing sampled from the roof of the subject property	NF	G	0%	3	300 SF
15	Particle Board	Particle board sampled from the basement	NF	G	40%	3	25 SF
16	6 inch Transite Pipe	6 inch transite pipe	NF	G	Assumed	0	25 SF

¹-F=Friable; NF= Non-Friable

²-Cond = condition of Materials. Either good (G), damaged (D), or significantly damaged (SD)

³- <1% = Calif. Code of Regulation, Title 8, Section 1529. "asbestos-containing construction" material means any manufactured construction material which contains more than one-tenth of 1 percent asbestos by weight. This material will be abated as asbestos containing material; however, it may be disposed of as construction debris.

*See the laboratory report and chain custodies for the complete list materials tested and the sampling locations.

**Should the demolition/renovation process reveal any additional suspect asbestos-containing materials; work must stop until the suspect materials are tested for asbestos content.



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Property Address: 12834 2nd St. Yucaipa, CA 92399
Date of Survey: June 17, 2020
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CONCLUSION / RECOMMENDATIONS

A. ASBESTOS

According to bulk sampling and visual inspection of impacted areas, asbestos-containing materials were present in the following materials sampled:

- Layered sheet flooring
- Thermal system insulation
- 9x9 Floor tile and mastic
- Particle board

A 6-inch Transite Pipe was observed at the subject property. Although no samples of the transite pipe were collected, the transite pipe is assumed to be asbestos-containing by Andrea Pulsipher, Cal- OSHA Certified Asbestos Consultant (CAC) No. 17- 5929

Abatement by a licensed abatement contractor is required prior to disturbance of asbestos-containing materials.

It is always necessary to comply with the pertinent provisions of EPA, OSHA and AQMD regulations during any removal or repair activities that may disturb the asbestos- containing materials that may have been inaccessible and or untested during the survey. Not all areas of the home were tested, only impacted areas. Caution should be taken when inaccessible and untested areas are disturbed.

The Environmental protection Agency (EPA) and California OSHA (Cal/OSHA) define materials which contain more than one percent asbestos to be asbestos containing materials (ACM). In addition, Cal/OSHA defines any manufactured construction material more than 0.1% asbestos as asbestos- containing construction materials (ACCMs). Cal/OSHA also requires notification and registration of the contractor when disturbing materials with more than one-tenth of one percent asbestos and regulates worker protection whenever materials containing any detectable levels of asbestos are disturbed.



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LIMITATIONS

Magnolia Environmental prepared this asbestos survey for the client referenced above. No warranties expressed or implied, are made by Magnolia Environmental or its employees as to the use of any information, apparatus, product or process disclosed in this report. Though reasonable efforts have been made to assure correctness, if a Contractor is employed, he should bring any discrepancies to the immediate attention of Magnolia Environmental.

We have employed state-of-the-art practices to perform this analysis of risk and identification, but this evaluation is severely limited in scope to areas accessible to a visual inspection or through reasonable means of the areas evaluated. No demolition or product review was performed in attempts to reveal material compositions. Our services consist of professional opinions and recommendations made in accordance with generally accepted engineering principles and practices and are designed to provide an analytical tool to assist the client. Magnolia Environmental or those representing Magnolia Environmental bear no responsibility for the actual condition of the structure or safety of a site pertaining to asbestos and/or asbestos contamination regardless of the actions taken by the client.

Magnolia Environmental appreciated having the opportunity to inspect your property. If you have any questions regarding this survey or other environmental hazards, please don't hesitate to contact us at (562) 922-3144 or at Office@Magnoliaenvironmental.com.



Andrea Pulsipher
Project Consultant
CAC No. 17-5929



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APPENDIX A
ASBESTOS LABORATORY ANALYTICAL RESULTS
AND CHAIN OF CUSTODY



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Ecologics Laboratories

1012 Segovia Circle, Placentia, CA 92870

Phone (714)632-8118 Fax (714)632-8111

NVLAP Lab Code:600190-0

PLM Bulk Asbestos Report

Client : Magnolia Environmental
 Address : 885 Mango St. Brea, CA 92821
 Project # : 1975
 Project Location : 12834 2nd St, Yucaipa, CA 92399

Date Collected: 06/17/2020 LAB Job #: 20061713
 Date Received: 06/17/2020 Project Name: N/A
 Date Analysis : 06/20/2020 No of Samples: 45
 Date Reported: 06/20/2020 Collected By: A. Pulsipher

Client ID	Layer #	Lab ID	Asbestos Present	Total Est.% of Asbestos
WS-1	20061713.01.A	20061713.01	No	None Detected
Location : Basement				
Analyst Description / Color : Wall Material,Firm,Homogenous/White				
Asbestos % Type : NON				
Other Material Type : 12% Cellulose,88%Non-Fibrous Material				
WS-2	20061713.02.A	20061713.02	No	None Detected
Location : Basement				
Analyst Description / Color : Wall Material,Firm,Homogenous/White				
Asbestos % Type : NON				
Other Material Type : 12% Cellulose,88%Non-Fibrous Material				
WS-3	20061713.03.A	20061713.03	No	None Detected
Location : Basement				
Analyst Description / Color : Wall Material,Firm,Homogenous/White				
Asbestos % Type : NON				
Other Material Type : 12% Cellulose,88%Non-Fibrous Material				
JC-1	20061713.04.A	20061713.04	No	None Detected
Location : Basement				
Analyst Description / Color : Joint Compound,Firm,Homogenous/White				
Asbestos % Type : NON				
Other Material Type : 12% Cellulose,73%Non-Fibrous Material,15%CaCo				
JC-2	20061713.05.A	20061713.05	No	None Detected
Location : Basement				
Analyst Description / Color : Joint Compound,Firm,Homogenous/White,Beige				
Asbestos % Type : NON				
Other Material Type : 12% Cellulose,73%Non-Fibrous Material,15%CaCo				

Lorena Padilla - Analyst

Armando Ducoing - Approved By

The analysis of the samples in this report were performed and analyzed in accordance with the procedure outlined in the US Federal Register 40 CFR 763, Subpart F, Appendix A; EPA-600/R-93/110 (Method for Determination of Asbestos in Building Materials) and EPA - 40 CFR Appendix E to Subpart E of Part 763, (Interim Method of the Determination of Asbestos in Bulk Insulation Samples). Total percentage of sample constituents may total greater than 100 due to trace amounts. The limit of detection for this analytical method is less than one percent. Samples were analyzed using Calibrated Visual Estimations (CVES); therefore, results may not be reliable for samples of low asbestos concentration levels. In multilayer samples, unless otherwise specified, the asbestos concentration is reported for the layer where asbestos is found. These results lie within the statistical limits of variability calculated for standard reference samples routinely analyzed in the laboratory. On a per sample basis, the accuracy and precision of the results depend on the type of sample and its asbestos content. Ecologics Lab is accredited under the NIST/NVLA² program for asbestos in bulk material for asbestos analysis. Ecologics Lab and its personnel shall not be liable for any misinformation provided to us by the client regarding these samples or for any misuse or interpretation of information supplied by us. Liability shall extend to providing replicate analysis only. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the Federal Government. Ecologics Lab will retain samples for a period of three months unless otherwise specified. This report relates only to samples submitted and analyzed. This report may not be reproduced except for in full, without the written approval of this laboratory.

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 Phone (714)632-8118 Fax (714)632-8111
 NVLAP Lab Code:600190-0

PLM Bulk Asbestos Report

Client : Magnolia Environmental
 Address : 885 Mango St. Brea, CA 92821
 Project # : 1975
 Project Location : 12834 2nd St, Yucaipa, CA 92399

Date Collected: 06/17/2020 LAB Job #: 20061713
 Date Received: 06/17/2020 Project Name: N/A
 Date Analysis : 06/20/2020 No of Samples: 45
 Date Reported: 06/20/2020 Collected By: A. Pulsipher

Client ID	Layer #	Lab ID	Asbestos Present	Total Est.% of Asbestos
JC-3	20061713.06.A	20061713.06	No	None Detected
Location : Basement				
Analyst Description / Color : Joint Compound,Firm,Homogenous/White,Beige				
Asbestos % Type : NON				
Other Material Type : 12% Cellulose,73%Non-Fibrous Material,15%CaCo				
P-1	20061713.07.A	20061713.07	No	None Detected
Location : Hall				
Analyst Description / Color : Plaster,Granular,Homogenous/Beige				
Asbestos % Type : NON				
Other Material Type : 15% Cellulose,72%Non-Fibrous Material,13%Quartz				
P-2	20061713.08.A	20061713.08	No	None Detected
Location : Bed 1				
Analyst Description / Color : Plaster,Granular,Homogenous/Beige				
Asbestos % Type : NON				
Other Material Type : 15% Cellulose,72%Non-Fibrous Material,13%Quartz				
P-3	20061713.09.A	20061713.09	No	None Detected
Location : Living Room				
Analyst Description / Color : Plaster,Granular,Homogenous/Beige				
Asbestos % Type : NON				
Other Material Type : 15% Cellulose,72%Non-Fibrous Material,13%Quartz				
F-1	20061713.10.A	20061713.10	Yes	30% Chrysotile
Location : Kitchen				
Analyst Description / Color : Floor Tile,Homogenous,Flexible/Tan				
Asbestos % Type : Chrysotile				
Other Material Type : 15% Cellulose,43%Non-Fibrous Material,12%Binders				

Lorena Padilla - Analyst

Armando Ducuing - Approved By

The analysis of the samples in this report were performed and analyzed in accordance with the procedure outlined in the US Federal Register 40 CFR 763, Subpart F, Appendix A. EPA-600/R-53/115 (Method for Determination of Asbestos in Building Materials) and EPA - 40 CFR Appendix E to Subpart E of Part 763, (Interim Method of the Determination of Asbestos in Bulk Insulation Samples). "Total percentage of sample constituents may total greater than 100 due to trace amounts. The limit of detection for this analytical method is less than one percent). Samples were analyzed using Calibrated Visual Estimations (CVIS); therefore, results may not be reliable for samples of low asbestos concentration levels. In multilayer samples, unless otherwise specified, the asbestos concentration is reported for the layer where asbestos is found. These results lie within the statistical limits of variability calculated for standard reference samples routinely analyzed in the laboratory. On a per sample basis, the accuracy and precision of the results depend on the type of sample and its asbestos content. Ecologics Lab is accredited under the NIST/NVLAP program for asbestos in bulk material for asbestos analysis. Ecologics Lab and its personnel shall not be liable for any misinformation provided to us by the client regarding these samples or for any misuse or interpretation of information supplied by us. Liability shall extend to providing replicate analysis only. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the Federal Government. Ecologics Lab will retain samples for a period of three months unless otherwise specified. This report relates only to samples submitted and analyzed. This report may not be reproduced except for in full, without the written approval of this laboratory.

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 NVLAP Lab Code:600190-0

PLM Bulk Asbestos Report

Client : Magnolia Environmental
 Address : 885 Mango St. Brea, CA 92821
 Project # : 1975
 Project Location : 12834 2nd St, Yucaipa, CA 92399

Date Collected: 06/17/2020 LAB Job #: 20061713
 Date Received: 06/17/2020 Project Name: N/A
 Date Analysis : 06/20/2020 No of Samples: 45
 Date Reported: 06/20/2020 Collected By: A. Pulsipher

Client ID	Layer #	Lab ID	Asbestos Present	Total Est.% of Asbestos
F-1	20061713.10.B	20061713.10	No	None Detected
Location : Kitchen Analyst Description / Color : Felt Flooring, Fibrous, Homogenous/Black, Green Asbestos % Type : NON Other Material Type : 13% Cellulose, 15% Fiberglass, 72% Non-Fibrous Material				
F-2	20061713.11.A	20061713.11	Yes	30% Chrysotile
Location : Kitchen Analyst Description / Color : Floor Tile, Homogenous, Flexible/Tan Asbestos % Type : Chrysotile Other Material Type : 15% Cellulose, 43% Non-Fibrous Material, 12% Binders				
F-3	20061713.12.A	20061713.12	Yes	30% Chrysotile
Location : Side Room Analyst Description / Color : Floor Tile, Homogenous, Flexible/Tan Asbestos % Type : Chrysotile Other Material Type : 15% Cellulose, 43% Non-Fibrous Material, 12% Binders				
S-1	20061713.13.A	20061713.13	No	None Detected
Location : Basement Bath Analyst Description / Color : Stucco, Granular, Homogenous/Gray Asbestos % Type : NON Other Material Type : 15% Cellulose, 72% Non-Fibrous Material, 13% Quartz				
S-2	20061713.14.A	20061713.14	No	None Detected
Location : Basement Bath Analyst Description / Color : Stucco, Granular, Homogenous/Gray Asbestos % Type : NON Other Material Type : 15% Cellulose, 72% Non-Fibrous Material, 13% Quartz				


 Lorena Padilla - Analyst


 Armando Ducoing - Approved By

The analysis of the samples in this report were performed and analyzed in accordance with the procedure outlined in the US Federal Register 40 CFR 763, Subpart F, Appendix A, EPA-600/R-93/116 (Method for Determination of Asbestos in Building Materials) and EPA - 40 CFR Appendix E to Subpart E of Part 763, (Interim Method of the Determination of Asbestos in Bulk Insulation Samples). Total percentage of sample constituents may total greater than 100 due to trace amounts. The limit of detection for this analytical method is less than one percent. Samples were analyzed using Calibrated Visual Estimations (CVES); therefore, results may not be reliable for samples of low asbestos concentration levels. In multilayer samples, unless otherwise specified, the asbestos concentration is reported for the layer where asbestos is found. These results lie within the statistical limits of variability calculated for standard reference samples routinely analyzed in the laboratory. On a per sample basis, the accuracy and precision of the results depend on the type of sample and its asbestos content. Ecologics Lab is accredited under the NIST/NVLAP program for asbestos in bulk material for asbestos analysis. Ecologics Lab and its personnel shall not be liable for any misinformation provided to us by the client regarding these samples or for any misuse or interpretation of information supplied by us. Liability shall extend to providing replicate analysis only. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the Federal Government. Ecologics Lab will retain samples for a period of three months unless otherwise specified. This report relates only to samples submitted and analyzed. This report may not be reproduced except for in full, without the written approval of this laboratory.
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 Phone (714)632-8118 Fax (714)632-8111
 NVLAP Lab Code:600190-0

PLM Bulk Asbestos Report

Client : Magnolia Environmental
 Address : 885 Mango St. Brea, CA 92821
 Project # : 1975
 Project Location : 12834 2nd St, Yucaipa, CA 92399

Date Collected: 06/17/2020 LAB Job #: 20061713
 Date Received: 06/17/2020 Project Name: N/A
 Date Analysis : 06/20/2020 No of Samples: 45
 Date Reported: 06/20/2020 Collected By: A. Pulsipher

Client ID	Layer #	Lab ID	Asbestos Present	Total Est.% of Asbestos
S-3	20061713.15.A	20061713.15	No	None Detected
Location : Basement Bath				
Analyst Description / Color : Stucco,Granular,Homogenous/Gray				
Asbestos % Type : NON				
Other Material Type : 15% Cellulose,72%Non-Fibrous Material,13%Quartz				
WP-1	20061713.16.A	20061713.16	No	None Detected
Location : Exterior Windows				
Analyst Description / Color : Wall Putty,Firm,Homogenous/Gray,White				
Asbestos % Type : NON				
Other Material Type : 15% Cellulose,65%Non-Fibrous Material,20%Adhesive				
WP-2	20061713.17.A	20061713.17	No	None Detected
Location : Exterior Windows				
Analyst Description / Color : Wall Putty,Firm,Homogenous/Gray,White				
Asbestos % Type : NON				
Other Material Type : 15% Cellulose,65%Non-Fibrous Material,20%Adhesive				
WP-3	20061713.18.A	20061713.18	No	None Detected
Location : Exterior Windows				
Analyst Description / Color : Wall Putty,Firm,Homogenous/Gray,White				
Asbestos % Type : NON				
Other Material Type : 15% Cellulose,65%Non-Fibrous Material,20%Adhesive				
TSI-1	20061713.19.A	20061713.19	Yes	30% Chrysotile
Location : Around Boiler Duct				
Analyst Description / Color : Thermal systems insulation,Fibrous,Homogenous/Beige				
Asbestos % Type : Chrysotile				
Other Material Type : 20% Cellulose,15% Fiberglass,35%Non-Fibrous Material				


 Lorena Padilla - Analyst


 Armando Ducoing - Approved By

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 Phone (714)632-8118 Fax (714)632-8111
 NVLAP Lab Code:600190-0

PLM Bulk Asbestos Report

Client : Magnolia Environmental
 Address : 885 Mango St. Brea, CA 92821
 Project # : 1975
 Project Location : 12834 2nd St, Yucaipa, CA 92399

Date Collected: 06/17/2020 LAB Job #: 20061713
 Date Received: 06/17/2020 Project Name: N/A
 Date Analysis : 06/20/2020 No of Samples: 45
 Date Reported: 06/20/2020 Collected By: A. Pulsipher

Client ID	Layer #	Lab ID	Asbestos Present	Total Est.% of Asbestos
TSI-2	20061713.20.A	20061713.20	Yes	30% Chrysotile
Location : Around Boiler Duct				
Analyst Description / Color : Thermal systems insulation, Fibrous, Homogenous/Beige				
Asbestos % Type : Chrysotile				
Other Material Type : 20% Cellulose, 15% Fiberglass, 35% Non-Fibrous Material				
TSI-3	20061713.21.A	20061713.21	Yes	30% Chrysotile
Location : Around Boiler Duct				
Analyst Description / Color : Thermal systems insulation, Fibrous, Homogenous/Beige				
Asbestos % Type : Chrysotile				
Other Material Type : 20% Cellulose, 15% Fiberglass, 35% Non-Fibrous Material				
CT-1	20061713.22.A	20061713.22	No	None Detected
Location : Side Room				
Analyst Description / Color : Ceiling Tile, Firm, Homogenous/Brown, White				
Asbestos % Type : NON				
Other Material Type : 15% Cellulose, 40% Non-Fibrous Material, 45% Wood Pulp				
CT-2	20061713.23.A	20061713.23	No	None Detected
Location : Side Room				
Analyst Description / Color : Ceiling Tile, Firm, Homogenous/Brown, White				
Asbestos % Type : NON				
Other Material Type : 15% Cellulose, 40% Non-Fibrous Material, 45% Wood Pulp				
CT-3	20061713.24.A	20061713.24	No	None Detected
Location : Small Room Near Kitchen				
Analyst Description / Color : Ceiling Tile, Firm, Homogenous/Brown, White				
Asbestos % Type : NON				
Other Material Type : 15% Cellulose, 40% Non-Fibrous Material, 45% Wood Pulp				


 Lorena Padilla - Analyst


 Armando Duceing - Approved By

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PLM Bulk Asbestos Report

Client : Magnolia Environmental
 Address : 885 Mango St. Brea, CA 92821
 Project # : 1975
 Project Location : 12834 2nd St, Yucaipa, CA 92399

Date Collected: 06/17/2020 LAB Job #: 20061713
 Date Received: 06/17/2020 Project Name: N/A
 Date Analysis : 06/20/2020 No of Samples: 15
 Date Reported: 06/20/2020 Collected By: A. Pulsipher

Client ID	Layer #	Lab ID	Asbestos Present	Total Est.% of Asbestos
CT2-1	20061713.25.A	20061713.25	No	None Detected
Location : Living Room Analyst Description / Color : Ceiling Tile,Firm,Homogenous/Brown,White Asbestos % Type : NON Other Material Type : 15% Cellulose,40%Non-Fibrous Material,45%Wood Pulp			No	None Detected
CT2-2	20061713.26.A	20061713.26	No	None Detected
Location : Living Room Analyst Description / Color : Ceiling Tile,Firm,Homogenous/Brown,White Asbestos % Type : NON Other Material Type : 15% Cellulose,40%Non-Fibrous Material,45%Wood Pulp			No	None Detected
CT2-3	20061713.27.A	20061713.27	No	None Detected
Location : Living Room Analyst Description / Color : Ceiling Tile,Firm,Homogenous/Brown,White Asbestos % Type : NON Other Material Type : 15% Cellulose,40%Non-Fibrous Material,45%Wood Pulp			No	None Detected
R-1	20061713.28.A	20061713.28	No	None Detected
Location : Roof Analyst Description / Color : Roofing Shingle,Firm,Granular,Non-Homogenous/Gray,White Asbestos % Type : NON Other Material Type : 15% Cellulose,73%Non-Fibrous Material,12%Quartz			No	None Detected
R-2	20061713.29.A	20061713.29	No	None Detected
Location : Roof Analyst Description / Color : Roofing Shingle,Firm,Granular,Non-Homogenous/Gray,White Asbestos % Type : NON Other Material Type : 15% Cellulose,73%Non-Fibrous Material,12%Quartz			No	None Detected


 Lorena Padilla - Analyst


 Armando Duque - Approved By

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PLM Bulk Asbestos Report

Client : Magnolia Environmental
 Address : 885 Mango St. Brea, CA 92821
 Project # : 1975
 Project Location : 12834 2nd St, Yucaipa, CA 92399

Date Collected: 06/17/2020 LAB Job #: 20061713
 Date Received: 06/17/2020 Project Name: N/A
 Date Analysis : 06/20/2020 No of Samples: 45
 Date Reported: 06/20/2020 Collected By: A. Pulsipher

Client ID	Layer #	Lab ID	Asbestos Present	Total Est.% of Asbestos
R-3	20061713.30.A	20061713.30	No	None Detected
Location : Roof				
Analyst Description / Color : Roofing Shingle, Firm, Granular, Non-Homogenous/Gray, White				
Asbestos % Type : NON				
Other Material Type : 15% Cellulose, 73% Non-Fibrous Material, 12% Quartz				
I-1	20061713.31.A	20061713.31	No	None Detected
Location : Side Room				
Analyst Description / Color : Insulation, Fibrous, Homogenous/White				
Asbestos % Type : NON				
Other Material Type : 10% Cellulose, 60% Fiberglass, 30% Non-Fibrous Material				
I-2	20061713.32.A	20061713.32	No	None Detected
Location : Side Room				
Analyst Description / Color : Insulation, Fibrous, Homogenous/White				
Asbestos % Type : NON				
Other Material Type : 10% Cellulose, 60% Fiberglass, 30% Non-Fibrous Material				
I-3	20061713.33.A	20061713.33	No	None Detected
Location : Small Room Near Kitchen				
Analyst Description / Color : Insulation, Fibrous, Homogenous/White				
Asbestos % Type : NON				
Other Material Type : 10% Cellulose, 60% Fiberglass, 30% Non-Fibrous Material				
F2-1	20061713.34.A	20061713.34	Yes	2% Chrysotile
Location : Small Room Near Kitchen				
Analyst Description / Color : Floor Tile, Firm, Homogenous/Brown				
Asbestos % Type : Chrysotile				
Other Material Type : 15% Cellulose, 63% Non-Fibrous Material, 20% Binders				


 Lorena Padilla - Analyst


 Armando Duque - Approved By

The analysis of the samples in this report were performed and analyzed in accordance with the procedure outlined in the US Federal Register 40 CFR 763, Subpart F, Appendix A, EPA-600/R-93/116 (Method for Determination of Asbestos in Building Materials) and EPA - 40 CFR Appendix E to Subpart E of Part 763, (Interim Method of the Determination of Asbestos in Bulk Insulation Samples). "Total percentage of sample constituents may total greater than 100 due to trace amounts. The limit of detection for this analytical method is less than one percent. Samples were analyzed using Calibrated Visual Estimations (CVES); therefore, results may not be reliable for samples of low asbestos concentration levels. In multilayer samples, unless otherwise specified, the asbestos concentration is reported for the layer where asbestos is found. These results lie within the statistical limits of variability calculated for standard reference samples routinely analyzed in the laboratory. On a per sample basis, the accuracy and precision of the results depend on the type of sample and its asbestos content. Ecologics Lab is accredited under the NIST/NVLAP program for asbestos in bulk material for asbestos analysis. Ecologics Lab and its personnel shall not be liable for any misinformation provided to us by the client regarding these samples or for any misuse or interpretation of information supplied by us. Liability shall extend to providing replicate analysis only. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the Federal Government. Ecologics Lab will retain samples for a period of three months unless otherwise specified. This report relates only to samples submitted and analyzed. This report may not be reproduced except in full, without the written approval of this laboratory.
 Samples analyzed by Ecologics Lab, CA, NVLAP Lab Code 600190-0.



Ecologics Laboratories
 1012 Segovia Circle, Placentia, CA 92870
 Phone (714)632-8118 Fax (714)632-8111
 NVLAP Lab Code:600190-0

PLM Bulk Asbestos Report

Client : Magnolia Environmental
 Address : 885 Mango St. Brea, CA 92821
 Project # : 1975
 Project Location : 12834 2nd St, Yucaipa, CA 92399

Date Collected: 06/17/2020 LAB Job #: 20061713
 Date Received: 06/17/2020 Project Name: N/A
 Date Analysis : 06/20/2020 No of Samples: 45
 Date Reported: 06/20/2020 Collected By: A. Pulsipher

Client ID	Layer #	Lab ID	Asbestos Present	Total Est. % of Asbestos
F2-1	20061713.34.B	20061713.34	Yes	5% Chrysotile
Location : Small Room Near Kitchen				
Analyst Description / Color : Mastic,Soft,Homogenous/Black				
Asbestos % Type : Chrysotile				
Other Material Type : 12% Cellulose,63%Non-Fibrous Material,20%Asphaltic Matrix				
F2-2	20061713.35.A	20061713.35	Yes	2% Chrysotile
Location : Small Room Near Kitchen				
Analyst Description / Color : Floor Tile,Firm,Homogenous/Brown				
Asbestos % Type : Chrysotile				
Other Material Type : 15% Cellulose,63%Non-Fibrous Material,20%Binders				
F2-3	20061713.36.A	20061713.36	Yes	2% Chrysotile
Location : Small Room Near Kitchen				
Analyst Description / Color : Floor Tile,Firm,Homogenous/Brown				
Asbestos % Type : Chrysotile				
Other Material Type : 15% Cellulose,63%Non-Fibrous Material,20%Binders				
PM-1	20061713.37.A	20061713.37	No	None Detected
Location : Roof				
Analyst Description / Color : Roof Mastic,Firm,Homogenous/Black				
Asbestos % Type : NON				
Other Material Type : 12% Cellulose,73%Non-Fibrous Material,15%Asphaltic Matrix				
PM-2	20061713.38.A	20061713.38	No	None Detected
Location : Roof				
Analyst Description / Color : Roof Mastic,Firm,Homogenous/Black				
Asbestos % Type : NON				
Other Material Type : 12% Cellulose,73%Non-Fibrous Material,15%Asphaltic Matrix				


 Lorena Padilla - Analyst


 Armando Duceing - Approved By

The analysis of the samples in this report were performed and analyzed in accordance with the procedure outlined in the US Federal Register 40 CFR 763, Subpart F, Appendix A, EPA-600/R-93/115 (Method for Determination of Asbestos in Building Materials) and EPA - 40 CFR Appendix E to Subpart E of Part 763, (Interim Method of the Determination of Asbestos in Bulk Insulation Samples). Total percentage of sample constituents may total greater than 100 due to trace amounts. The limit of detection for this analytical method is less than one percent. Samples were analyzed using Calibrated Visual Estimations (CVES); therefore, results may not be reliable for samples of low asbestos concentration levels. In multilayer samples, unless otherwise specified, the asbestos concentration is reported for the layer where asbestos is found. These results lie within the statistical limits of variability calculated for standard reference samples routinely analyzed in the laboratory. On a per sample basis, the accuracy and precision of the results depend on the type of sample and its asbestos content. Ecologics Lab is accredited under the NIST/NVLAP program for asbestos in bulk material for asbestos analysis. Ecologics Lab and its personnel shall not be liable for any misinformation provided to us by the client regarding these samples or for any misuse or interpretation of information supplied by us. Liability shall extend to providing replicate analysis only. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the Federal Government. Ecologics Lab will retain samples for a period of three months unless otherwise specified. This report relates only to samples submitted and analyzed. This report may not be reproduced except for in full, without the written approval of this laboratory.
 Samples analyzed by Ecologics Lab, CA, NVLAP Lab Code 600190-0.



Ecologics Laboratories
 1012 Segovia Circle, Placentia, CA 92870
 Phone (714)632-8118 Fax (714)632-8111
 NVLAP Lab Code:600190-0

PLM Bulk Asbestos Report

Client : Magnolia Environmental
 Address : 885 Mango St. Brea, CA 92821
 Project # : 1975
 Project Location : 12834 2nd St, Yucaipa, CA 92399

Date Collected: 06/17/2020 LAB Job #: 20061713
 Date Received: 06/17/2020 Project Name: N/A
 Date Analysis : 06/20/2020 No of Samples: 45
 Date Reported: 06/20/2020 Collected By: A. Pulsipher

Client ID	Layer #	Lab ID	Asbestos Present	Total Fsr.% of Asbestos
PM-3	20061713.39.A	20061713.39	No	None Detected
Location	: Roof			
Analyst Description / Color	: Roof Mastic,Firm,Homogenous/Black			
Asbestos % Type	: NON			
Other Material Type	: 12% Cellulose,73%Non-Fibrous Material,15%Asphaltic Matrix			
R2-1	20061713.40.A	20061713.40	No	None Detected
Location	: Roof			
Analyst Description / Color	: Roofing,Granular,Homogenous/Black			
Asbestos % Type	: NON			
Other Material Type	: 12% Cellulose,73%Non-Fibrous Material,15%Quartz			
R2-2	20061713.41.A	20061713.41	No	None Detected
Location	: Roof			
Analyst Description / Color	: Roofing,Granular,Homogenous/Black			
Asbestos % Type	: NON			
Other Material Type	: 12% Cellulose,73%Non-Fibrous Material,15%Quartz			
R2-3	20061713.42.A	20061713.42	No	None Detected
Location	: Roof			
Analyst Description / Color	: Roofing,Granular,Homogenous/Black			
Asbestos % Type	: NON			
Other Material Type	: 12% Cellulose,73%Non-Fibrous Material,15%Quartz			
PB-1	20061713.43.A	20061713.43	Yes	40% Chrysotile
Location	: Basement			
Analyst Description / Color	: Particle Board,Fibrous,Homogenous/Gray			
Asbestos % Type	: Chrysotile			
Other Material Type	: 15% Cellulose,12% Fiberglass,33%Non-Fibrous Material			

Lorena Padilla - Analyst

Armando Duque - Approved By

The analysis of the samples in this report were performed and analyzed in accordance with the procedure outlined in the US Federal Register 40 CFR 763, Subpart F, Appendix A, EPA-600/R-93/115 (Method for Determination of Asbestos in Building Materials) and EPA - 40 CFR Appendix E to Subpart E of Part 763, (Interim Method of the Determination of Asbestos in Bulk Insulation Samples). Total percentage of sample constituents may total greater than 100 due to trace amounts. The limit of detection for this analytical method is less than one percent. Samples were analyzed using Calibrated Visual Estimation (CVES); therefore, results may not be reliable for samples of low asbestos concentration levels. In multilayer samples, unless otherwise specified, the asbestos concentration is reported for the layer where asbestos is found. These results lie within the statistical limits of variability calculated for standard reference samples routinely analyzed in the laboratory. On a per sample basis, the accuracy and precision of the results depend on the type of sample and its asbestos content. Ecologics Lab is accredited under the NIST/NVLAP program for asbestos in bulk material for asbestos analysis. Ecologics Lab and its personnel shall not be liable for any misinformation provided to us by the client regarding these samples or for any misuse or interpretation of information supplied by us. Liability shall extend to providing replicate analysis only. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the Federal Government. Ecologics Lab will retain samples for a period of three months unless otherwise specified. This report relates only to samples submitted and analyzed. This report may not be reproduced except in full, without the written approval of this laboratory.

Samples analyzed by Ecologics Lab, CA, NVLAP Lab Code 600190-0.



Ecologics Laboratories
 1012 Segovia Circle, Placentia, CA 92870
 Phone (714)632-8118 Fax (714)632-8111
 NVLAP Lab Code:600190-0

PLM Bulk Asbestos Report

Client : Magnolia Environmental
 Address : 885 Mango St. Brea, CA 92821
 Project # : 1975
 Project Location : 12834 2nd St, Yucaipa, CA 92399

Date Collected: 06/17/2020 LAB Job #: 20061713
 Date Received: 06/17/2020 Project Name: N/A
 Date Analysis : 06/20/2020 No of Samples: 45
 Date Reported: 06/20/2020 Collected By: A. Pulsipher

Client ID		Layer #	Lab ID	Asbestos Present	Total Est.% of Asbestos
PB-2		20061713.44.A	20061713.44	Yes	40% Chrysotile
Location		: Basement			
Analyst Description / Color		: Particle Board,Fibrous,Homogenous/Gray			
Asbestos % Type		: Chrysotile			
Other Material Type		: 15% Cellulose,12% Fiberglass,33%Non-Fibrous Material			
PB-3		20061713.45.A	20061713.45	Yes	40% Chrysotile
Location		: Basement			
Analyst Description / Color		: Particle Board,Fibrous,Homogenous/Gray			
Asbestos % Type		: Chrysotile			
Other Material Type		: 15% Cellulose,12% Fiberglass,33%Non-Fibrous Material			

Lorena Padilla - Analyst

Armando Ducoing - Approved By

The analysis of the samples in this report were performed and analyzed in accordance with the procedure outlined in the US Federal Register 40 CFR 763, Subpart F, Appendix A, EPA-600/R-93/116 (Method for Determination of Asbestos in Building Materials) and EPA - 40 CFR Appendix E to Subpart E of Part 763, (Interim Method of the Determination of Asbestos in Bulk Insulation Samples). Total percentage of sample constituents may total greater than 100 due to trace amounts. The limit of detection for this analytical method is less than one percent. Samples were analyzed using Calibrated Visual Estimations (CVES); therefore, results may not be reliable for samples of low asbestos concentration levels. In multilayer samples, unless otherwise specified, the asbestos concentration is reported for the layer where asbestos is found. These results lie within the statistical limits of variability calculated for standard reference samples routinely analyzed in the laboratory. On a per sample basis, the accuracy and precision of the results depend on the type of sample and its asbestos content. Ecologics Lab is accredited under the NIST/NVLAP program for asbestos in bulk material for asbestos analysis. Ecologics Lab and its personnel shall not be liable for any misinformation provided to us by the client regarding these samples or for any misuse or interpretation of information supplied by us. Liability shall extend to providing replicate analysis only. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the Federal Government. Ecologics Lab will retain samples for a period of three months unless otherwise specified. This report relates only to samples submitted and analyzed. This report may not be reproduced except for in full, without the written approval of this laboratory.
 Samples analyzed by Ecologics Lab, CA, NVLAP Lab Code C03-90-0.



CHAIN OF CUSTODY
1012 Segovia Circle, Placentia, CA 92870
Ph. (714) 632 8100 Fx. (714) 632 8111

Job ID: 20061713



CONTACT INFORMATION *				PROJECT INFORMATION *						
Company: Magnolia Environmental, LLC				Project #: 1975						
Address: 885 Mango St. Brea, CA				Project name:						
Phone: 562-922-3144				Project location: 12834 2nd St.						
Contact: Andrea Pulsipher				Yucaipa, CA 92394						
Email results to: Maglabresults@gmail.com				Date sampled: 6/17/20						
				Sampled by: A. Pulsipher						
ASBESTOS				MICROBIOLOGY						
<input checked="" type="checkbox"/> PLM Bulk Analysis (EPA 600/R-93/116) <input type="checkbox"/> PLM 1,000 Point Count (<0.1%) <input type="checkbox"/> PLM 400 Point Count (<0.25%) <input type="checkbox"/> Gravimetric Point Count (<0.1%) <input type="checkbox"/> PCM Airborne Fiber Count (NIOSH 7400) <input type="checkbox"/> PCM Airborne Fiber Count with TWA <input type="checkbox"/> Other:				<input type="checkbox"/> Fungi: Non Viable Mold (ST) <input type="checkbox"/> Fungi: Non Viable Mold (TL, B, Sw) <input type="checkbox"/> Fungi: Quantitative Spore Count Direct Exam (TL, B, Sw) <input type="checkbox"/> Bacteria: Total Coliform, E. coli (P/A) <input type="checkbox"/> Bacteria: Total Coliform, E. coli, Enterococcus (P/A) <input type="checkbox"/> Carbon Black & Material Science Analysis						
Turnaround time (TAT) *: <input type="checkbox"/> 3-4 Hrs <input type="checkbox"/> 6-8 Hrs <input type="checkbox"/> 24 Hrs <input type="checkbox"/> 48 Hrs <input checked="" type="checkbox"/> 72 Hrs <input type="checkbox"/> Other:										
Additional information/ Special instructions:										
<input checked="" type="checkbox"/> Stop at 1st positive on samples great 1%, EXCEPT for: _____ <input type="checkbox"/> Composite 1 wall system sample if found to be great than or equal 1%. <input type="checkbox"/> Other:										
SAMPLE ID	LOCATION *	DESCRIPTION *	ASBESTOS			MICROBIOLOGY/PCM				
			COND	QTY SF/LF	FRIABLE Y/N	TIME STAR	TIME STOP	FLOW STAR	FLOW STOP	TOTAL
WS-1	base ment	Wall system	G	320	N					
WS-2		↓	↓	↓	↓					
WS-3		↓	↓	↓	↓					
Jc-1		Joint compound	G	100	N					
Jc-2		↓	↓	↓	↓					
Jc-3		↓	↓	↓	↓					
P-1	Hall	Plaster	G	720	N					
P-2	Bed 1	↓	↓	↓	↓					
P-3	Liv room	↓	↓	↓	↓					
Weather		Fog	Rain	Snow	Wind	Clear	TIME *	DATE *	RELINQUISHED BY *	RECEIVED BY
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	2:13	6-17-20	A. Pulsipher	
							2:13	6-17-20		Jhair

* Necessary information for processing.

ST: Spore Trap, TL: Tape Lift, B: Bulk, Sw: Swab, P/A: Presence/ Absence, QTY: Quantity, SF: Square Foot, LF: Length Foot,

COND: Conditions: G = Good; D = Damage; SD = Significantly Damage.

Page 1 of 3



CHAIN OF CUSTODY

1012 Segovia Circle, Placentia, CA 92870
Ph. (714) 632 8100 Ex. (714) 632 8111

Job ID: 20061713



Magna Environmental

Company: MagnaProject #: 1975

SAMPLE ID	LOCATION *	DESCRIPTION *	ASBESTOS			MICROBIOLOGY/PCM				
			COND	QTY	FRIABLE	TIME		FLOW		TOTAL
				SF/LF	Y/N	STAR	STOP	STAR	STOP	
F-1	Kitchen	Layered sheet flooring	G	378	N					
F-2	↓	↓	↓	↓	↓					
F-3	Side room	↓	↓	↓	↓					
S-1	Basement Bath	Stucco	D	20	N					
S-2	↓	↓	↓	↓	↓					
S-3	↓	↓	↓	↓	↓					
WP-1	Exterior windows	Window entry	D	25	Y					
WP-2	↓	↓	↓	↓	↓					
WP-3	↓	↓	↓	↓	↓					
TSI-1	Around boiler duct	Thermal system insulation	G	405	N					
TSI-2	↓	↓	↓	↓	↓					
TSI-3	↓	↓	↓	↓	↓					
CT-1	Side room	12x12 cels tile	D	200	Y					
CT-2	↓	↓	↓	↓	↓					
CT-3	Small room near kitchen	↓	↓	↓	↓					
CT2-1	Living room	12x24 smooth ceiling tile	G	247	N					
CT2-2	↓	↓	↓	↓	↓					
CT2-3	↓	↓	↓	↓	↓					

* Necessary information for processing.

ST: Spore Trap, TL: Tape Lift, B: Bulk, Sw: Swab, P/A: Presence/Absence, QTY: Quantity, SF: Square Foot, LF: Length Foot,

COND: Conditions: G = Good; D = Damage; SD = Significantly Damage.

Page 2 of 3



CHAIN OF CUSTODY

1012 Segovia Circle, Placentia, CA 92870
Ph. (714) 632 8100 Fx. (714) 632 8111

Job ID: 20061713



Magnolia Environmental

Company: MagnoliaProject #: 1975

SAMPLE ID	LOCATION *	DESCRIPTION *	ASBESTOS			MICROBIOLOGY/PCM				
			COND	QTY	FRIABLE	TIME		FLOW		TOTAL
				SF/LF	Y/N	STAR	STOP	STAR	STOP	
R-1	Roof	Shingled Roofing	G	1000	N					
R-2	↓	↓	↓	↓	↓					
R-3	↓	↓	↓	↓	↓					
I-1	Side Room	Insulation	G	400	N					
I-2	↓	↓	↓	↓	↓					
I-3	Small Room near kitchen	↓	↓	↓	↓					
F2-1	Small Room near kitchen	1x1 Floor tile	G	50	N					
F2-2	↓	↓	↓	↓	↓					
F2-3	↓	↓	↓	↓	↓					
PM-1	Roof	Penetrating material	G	15	N					
PM-2	↓	↓	↓	↓	↓					
PM-3	↓	↓	↓	↓	↓					
R2-1	Roof	Rollled Roofs	G	300	N					
R2-2	↓	↓	↓	↓	↓					
R2-3	↓	↓	↓	↓	↓					
PD-1	Basement	Particle Board	G	25	N					
PD-2	↓	↓	↓	↓	↓					
PD-3	↓	↓	↓	↓	↓					

* Necessary information for processing.

ST: Spore Trap, TL: Tape Lift, B: Bulk, Sw: Swab, P/A: Presence/ Absence, QTY: Quantity, SF: Square Foot, LF: Length Foot,

COND: Conditions: G = Good; D = Damage; SD = Significantly Damage.

Page 3 of 3

Property Address: 12834 2nd St. Yucaipa, CA 92399
Date of Survey: June 17, 2020
Project Number: 1975

Page 23 of 30

APPENDIX B

SITE PHOTOGRAPHS



885 Mango St. Brea, CA 92821 * TEL 562-922-3144
www.MagnoliaEnvironmental.com

Property Address: 12834 2nd St. Yucaipa, CA 92399
Date of Survey: June 17, 2020
Project Number: 1975

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Picture 1: Roofing of the subject property was found to not contain asbestos



Picture 2: Penetration mastic sampled from the roof



Picture 3: Thermal system insulation around the boiler duct was found to be ACM



Picture 4: Insulation was found to not contain asbestos



885 Mango St. Brea, CA 92821 * TEL 562-922-3144
www.MagnoliaEnvironmental.com

Property Address: 12834 2nd St. Yucaipa, CA 92399
Date of Survey: June 17, 2020
Project Number: 1975

Page 25 of 30



Picture 5: Exterior stucco was found to not contain asbestos



Picture 6: Wall system was found to not contain asbestos



Picture 7: Joint compound was found to not contain asbestos



Picture 8: Damaged ceiling tile was found to not contain asbestos



885 Mango St. Brea, CA 92821 * TEL 562-922-3144
www.MagnoliaEnvironmental.com

Property Address: 12834 2nd St. Yucaipa, CA 92399
Date of Survey: June 17, 2020
Project Number: 1975

Page 26 of 30



Picture 9: Layered sheet flooring sampled from the kitchen was found to be ACM



Picture 10: Particle board sampled was found to be ACM



Picture 11: Plaster sampled was found to not contain asbestos



885 Mango St. Brea, CA 92821 * TEL 562-922-3144
www.MagnoliaEnvironmental.com

Property Address: 12834 2nd St. Yucaipa, CA 92399
Date of Survey: June 17, 2020
Project Number: 1975

Page 27 of 30

APPENDIX C

SITE MAPS/SKETCH



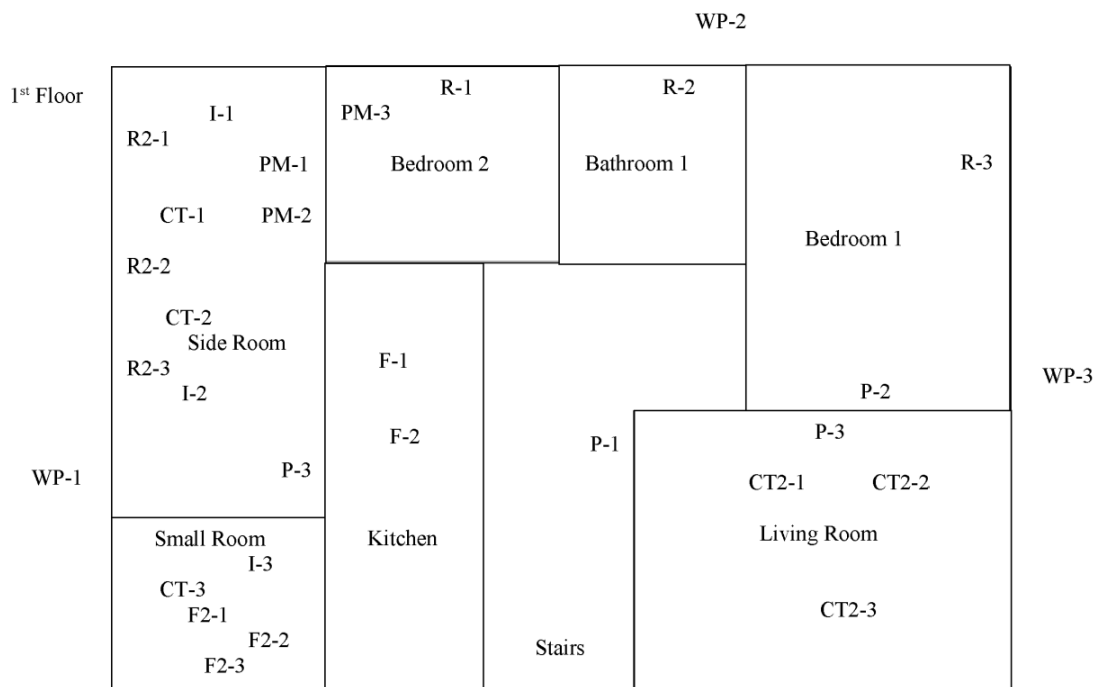
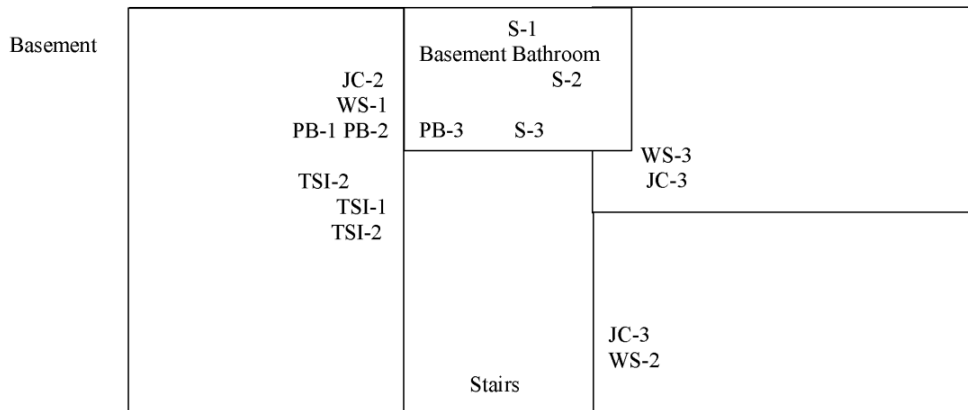
885 Mango St. Brea, CA 92821 * TEL 562-922-3144
www.MagnoliaEnvironmental.com

Property Address: 12834 2nd St. Yucaipa, CA 92399
 Date of Survey: June 17, 2020
 Project Number: 1975

Page 28 of 30

Sketch not to scale.

Sample ID indicates location of sampling.



885 Mango St. Brea, CA 92821 * TEL 562-922-3144
www.MagnoliaEnvironmental.com

Property Address: 12834 2nd St. Yucaipa, CA 92399
Date of Survey: June 17, 2020
Project Number: 1975

Page 29 of 30

APPENDIX D

ACCREDITATION AND CERTIFICATION



885 Mango St. Brea, CA 92821 * TEL 562-922-3144
www.MagnoliaEnvironmental.com



Date: August 11, 2020

Prepared By: Allison M. Edmisten, Chief Financial Officer

Subject: Ratification of the Purchase of New Computer Servers

Recommendation: That the Board ratify the purchase of a new fileserver for a sum not to exceed \$48,405.61 and adopt Resolution No. 2020-36.

The District currently utilizes a 2003 Windows server for a portion of the District's computer processing. This fileserver is the main server that stores user files and is heavily utilized for documents, videos, and photos.

The purchase of a new server will speed up routine access to the computer files. The new server will be a Windows 2019 server and includes solid state hard drives, network cables, as well as UPS backups.

General Manager Joseph Zoba authorized the purchase as this is not an "off the shelf" item and it takes weeks to receive.

The purpose of this memorandum is to request Board ratification of this fileserver purchase as well as transfer funds from the water and sewer reserve accounts to pay for the purchase of this asset.

Financial Impact

Funding for this purchase will be from the Water (45%), Sewer (45%) and Recycled Water (10%) Reserve Funds [G/L Accounts #02-000-10311, 03-000-10311 and 04-000-10311 respectively]. Resolution 2020-36 would document the transfer of funds from the District Reserve Funds to the Water, Sewer and Recycled Water Funds for the purchase of this fileserver.

RESOLUTION NO. 2020-36

RESOLUTION OF THE YUCAIPA VALLEY WATER DISTRICT TRANSFERRING FUNDS WITHIN THE WATER FUND AS TRANSFER NO. 1, THE SEWER FUND AS TRANSFER NO. 2, AND THE RECYCLED WATER FUND AS TRANSFER NO. 3 FOR FISCAL YEAR 2021

WHEREAS, the Yucaipa Valley Water District recognizes the importance of funding projects and programs within the District with funds set aside for this purpose, and

WHEREAS, the Board of Directors has ratified the purchase of a Windows 2019 filesaver for a sum not to exceed \$48,405.61.

NOW, THEREFORE, the Board of Directors of the Yucaipa Valley Water District hereby RESOLVE, DETERMINE, and ORDER as follows:

- Section 1: Fund Transfer No. 1 in the amount of \$21,782.52 from the Water Fund Infrastructure Reserves (02-000-10311) to fund 45% of the purchase of the filesaver.
- Section 2: Fund Transfer No. 2 in the amount of \$21,782.52 from the Sewer Fund Infrastructure Reserves (03-000-10311) to fund 45% of the purchase of the filesaver.
- Section 3: Fund Transfer No. 3 in the amount of \$4,840.57 from the Recycled Water Fund Infrastructure Reserves (04-000-10311) to fund 10% of the purchase of the filesaver.

PASSED, APPROVED and ADOPTED this 11th day of August 2020.

		YUCAIPA VALLEY WATER DISTRICT
		Chris Mann, President Board of Directors
ATTEST:		
Joseph B. Zoba, General Manager		

Board Reports and 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
72 full time employees

FY 2019-20 Operating Budget: Water Division - \$14,455,500
Sewer Division - \$12,217,712
Recycled Water Division - \$1,301,447

Number of Services: 13,794 drinking water connections serving 19,243 units
14,104 sewer connections serving 22,774 units
111 recycled water connections serving 460 units

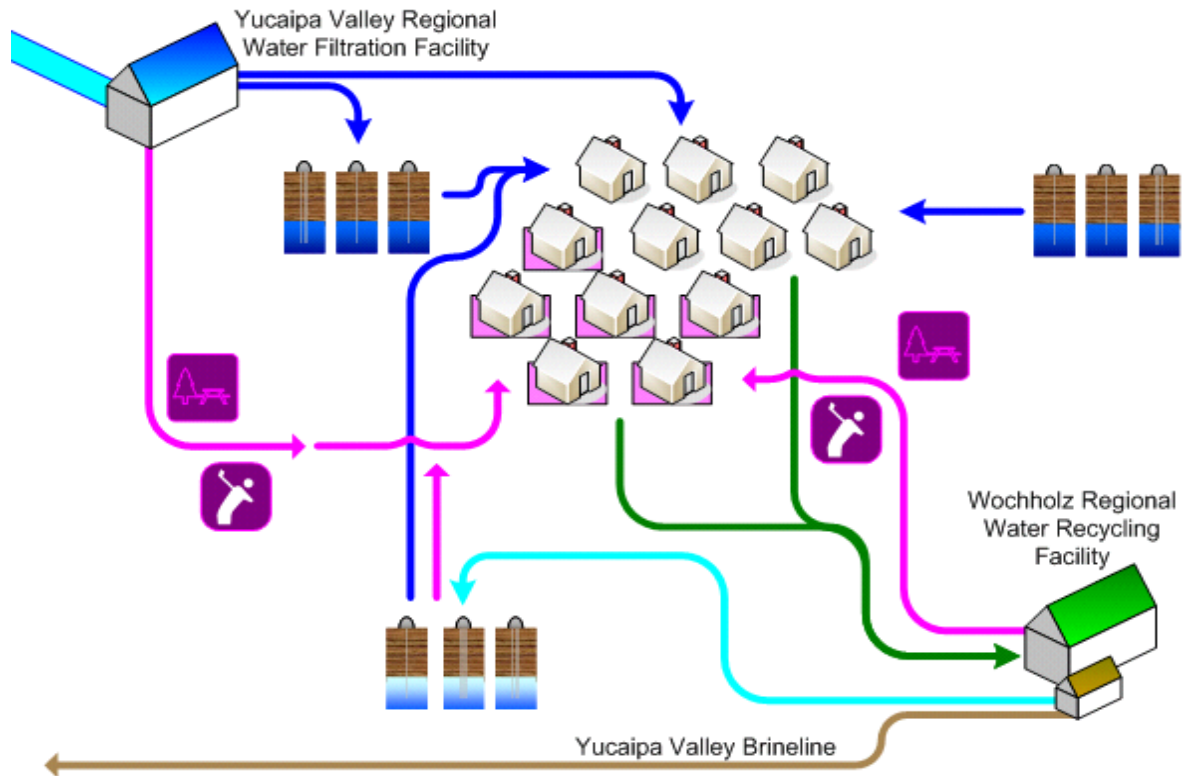
Water System: 223 miles of drinking water pipelines
2,033 fire hydrants
27 reservoirs - 34 million gallons of storage capacity
18 pressure zones
2.958 billion gallon annual drinking water demand
Two water filtration facilities:
- 1 mgd at Oak Glen Surface Water Filtration Facility
- 12 mgd at Yucaipa Valley Regional Water Filtration Facility

Sewer System: 8.0 million gallon treatment capacity - current flow at 3.5 mgd
213 miles of sewer mainlines
4,504 sewer manholes
5 sewer lift stations
1.27 billion gallons of recycled water produced per year

Recycled Water: 22 miles of recycled water pipelines
5 reservoirs - 12 million gallons of storage
0.681 billion gallon annual recycled water demand

Brine Disposal: 2.2 million gallon desalination facility at sewer treatment plant
1.756 million gallons of Inland Empire Brine Line capacity
0.595 million gallons of treatment capacity in Orange County

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



Typical Rates, Fees and Charges:

- **Drinking Water Commodity Charge:**

1,000 gallons to 15,000 gallons	\$1.429 per each 1,000 gallons
16,000 gallons to 60,000 gallons	\$1.919 per each 1,000 gallons
61,000 gallons to 100,000 gallons	\$2.099 per each 1,000 gallons
101,000 gallons or more	\$2.429 per each 1,000 gallons
- **Recycled Water Commodity Charge:**

1,000 gallons or more	\$1.425 per each 1,000 gallons
-----------------------	--------------------------------
- **Water Meter Service Charge (Drinking Water or Recycled Water):**

5/8" x 3/4" Water Meter	\$14.00 per month
1" Water Meter	\$23.38 per month
1-1/2" Water Meter	\$46.62 per month
- **Sewer Collection and Treatment Charge:**

Typical Residential Charge	\$42.43 per month
----------------------------	-------------------

State Water Contractors: San Bernardino Valley Municipal Water District
San Gorgonio Pass Water Agency



	San Bernardino Valley Municipal Water District	San Gorgonio Pass Water Agency
Service Area Size	353 square miles	222 square miles
Table "A" Water Entitlement	102,600 acre feet	17,300 acre feet
Imported Water Rate	\$125.80 / acre foot	\$399 / acre foot
Tax Rates for FY 2019-20	\$0.1425 per \$100	\$0.1775 per \$100
Number of Board Members	Five (5)	Seven (7)
Operating Budget FY 2019-20	\$58,372,000	\$9,551,000

Imported Water Charges (Pass-through State Water Project Charge)

- San Bernardino Valley Municipal Water District - Customers in San Bernardino County or City of Yucaipa pay a pass-through amount of \$0.270 per 1,000 gallons.
- San Gorgonio Pass Water Agency - Customers in Riverside County or City of Calimesa pay a pass-through amount of \$0.660 per 1,000 gallons. A proposed rate change to \$0.857 per 1,000 gallons is pending future consideration by YVWD.





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 wastewater 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 wastewater treatment process. This high-quality product can be recycled as a soil amendment on farmland or further processed as an earth-like product for commercial and home gardens to improve and maintain fertile soil and stimulate plant growth.

Capital Improvement Program (CIP) - Projects for repair, rehabilitation, and replacement of assets. Also includes treatment improvements, additional capacity, and projects for the support facilities.

Certificate of Participation (COP) - A type of financing where an investor purchases a share of the lease revenues of a program rather than the bond being secured by those revenues.

Coliform Bacteria - A group of bacteria found in the intestines of humans and other animals, but also occasionally found elsewhere used as indicators of sewage pollution. E. coli are the most common bacteria in wastewater.

Collections System - In wastewater, it is the system of typically underground pipes that receive and convey sanitary wastewater or storm water.

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.

Contaminants of Potential Concern (CPC) - Pharmaceuticals, hormones, and other organic wastewater contaminants.

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.

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.

Levels of Service (LOS) - Goals to support environmental and public expectations for performance.

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.

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.

Santa Ana River Interceptor (SARI) Line - A regional brine line designed to convey 30 million gallons per day (MGD) of non-reclaimable wastewater from the upper Santa Ana River basin to Orange County Sanitation District for treatment, use and/or disposal.

Secondary treatment - Biological wastewater treatment, particularly the activated-sludge process, where bacteria and other microorganisms consume dissolved nutrients in wastewater.

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 wastewater.

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.

South Coast Air Quality Management District (SCAQMD) - Regional regulatory agency that develops plans and regulations designed to achieve public health standards by reducing emissions from business and industry.

Special district - A form of local government created by a local community to meet a specific need. Yucaipa Valley Water District is a County Water District formed pursuant to Section 30000 of the California Water Code

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.

Surface Water - Water found in lakes, streams, rivers, oceans, or reservoirs behind dams. In addition to using groundwater, Yucaipa Valley Water District receives surface water from the Oak Glen area.

Sustainable Groundwater Management Act (SGMA) - Pursuant to legislation signed by Governor Jerry Brown in 2014, the Sustainable Groundwater Management Act requires water agencies to manage groundwater extractions to not cause undesirable results from over production.

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 wastewater as it trickles over them.

Underground Service Alert (USA) - A free service (<https://www.digalert.org>) 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 carry 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.

Water Pressure - Water pressure is created by the weight and elevation of water and/or generated by pumps that deliver water to customers.

Water Service Line - A water service line is used to deliver water from the Yucaipa Valley Water District's mainline distribution system.

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.

Watershed - A watershed is the region or land area that contributes to the drainage or catchment area above a specific point on a stream or river.

Water-Wise House Call - a service which provides a custom evaluation of a customer's indoor and outdoor water use and landscape watering requirements.

Well - a hole drilled into the ground to tap an underground aquifer.

Wetlands - lands which are fully saturated or under water at least part of the year, like seasonal vernal pools or swamps.





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
SGMA	Sustainable Groundwater Management Act
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