

**Application Materials:
LAFCO Application and
Sphere Supplement Forms,
LAFCO Resolution 3248, and
Excerpts from Countywide
Service Review for Water**

Attachment 2

SAN BERNARDINO LAFCO APPLICATION AND PRELIMINARY ENVIRONMENTAL DESCRIPTION FORM

INTRODUCTION: The questions on this form and its supplements are designed to obtain enough data about the application to allow the San Bernardino LAFCO, its staff and others to adequately assess the proposal. By taking the time to fully respond to the questions on the forms, you can reduce the processing time for your proposal. You may also include any additional information which you believe is pertinent. Use additional sheets where necessary, or attach any relevant documents.

GENERAL INFORMATION

1. NAME OF PROPOSAL: LAFCO 3222 - Sphere of Influence Establishment for
the Metropolitan Water District of Southern California
(within San Bernardino County)

2. NAME OF APPLICANT: Local Agency Formation Commission for San Bernardino County
 APPLICANT TYPE: Landowner Local Agency
 Registered Voter Other _____
 MAILING ADDRESS:
1170 W. Third Street, Unit 150, San Bernardino, CA 92415-0490

 PHONE: (909) 388-0480 _____
 FAX: (909) 388-0481 _____
 E-MAIL ADDRESS: lafco@lafco.sbcounty.gov _____

3. GENERAL LOCATION OF PROPOSAL: _____
Coterminous with the sphere of influence of its member agency, Inland Empire Utilities Agency.
Generally including the territory and spheres of influence of the Cities of Chino, Chino Hills,
Montclair, Upland, Rancho Cucamonga, Ontario, and Fontana.

4. Does the application possess 100% written consent of each landowner in the subject territory?
 YES NO If YES, provide written authorization for change.

5. Indicate the reason(s) that the proposed action has been requested.
As a part of its Countywide Service Review for Water (LAFCO 3187), LAFCO at its July 19, 2017 hearing
initiated the establishment of a sphere of influence for Metropolitan within San Bernardino County to be
coterminous with the sphere of influence of its member agency, Inland Empire Utilities Agency.
Resolution No. 3248 for LAFCO 3187 memorialized the Commission's action.

Metropolitan has never had an established sphere of influence within San Bernardino County.
Metropolitan is a special district that is subject to LAFCO purview, therefore LAFCO is obligated to
establish a sphere of influence for the district. Technically, no changes of organization should be processed
for any affected agency overlain by a district lacking a sphere of influence. Metropolitan staff has identified
support for a sphere establishment within San Bernardino County to be coterminous with the sphere of
influence of its member agency, IEUA.

LAND USE AND DEVELOPMENT POTENTIAL

1. Total land area of subject territory (defined in acres):
239 square miles +/-

2. Current dwelling units within area classified by type (single-family residential, multi-family [duplex, four-plex, 10-unit], apartments)
N/A

3. Approximate current population within area:
856,000

4. Indicate the General Plan designation(s) of the affected city (if any) and uses permitted by this designation(s):
The full range from multi-family residenital to industrial, institutional , and open space.

San Bernardino County General Plan designation(s) and uses permitted by this designation(s):

The full range from multi-family residenital to industrial, institutional , and open space.

5. Describe any special land use concerns expressed in the above plans. In addition, for a City Annexation or Reorganization, provide a discussion of the land use plan's consistency with the regional transportation plan as adopted pursuant to Government Code Section 65080 for the subject territory:
N/A

6. Indicate the existing use of the subject territory.
Existing uses include residential, industrial, open space, recreational, etc...

What is the proposed land use?

N/A

7. Will the proposal require public services from any agency or district which is currently operating at or near capacity (including sewer, water, police, fire, or schools)? YES NO If YES, please explain.

A sphere of influence is a planning tool. There will be no service charge occurring as a result of a sphere expansion. The area within the boundaries of Metropolitan and IEUA currently receives services from those agencies. The area outside the boundaries of these agencies (the current IEUA sphere) extends north to the hydrological divide that separates the spheres of the neighboring state water contractors.

8. On the following list, indicate if any portion of the territory contains the following by placing a checkmark next to the item:

- Agricultural Land Uses
- Agricultural Preserve Designation
- Williamson Act Contract
- Area where Special Permits are Required
- Any other unusual features of the area or permits required: _____

9. Provide a narrative response to the following factor of consideration as identified in §56668(p): *The extent to which the proposal will promote environmental justice. As used in this subdivision, "environmental justice" means the fair treatment of people of all races, cultures, and incomes with respect to the location of public facilities and the provision of public services:*

This proposed sphere establishment does not have any environmental justice impact as the area is already within the sphere of IEUA. The area within the boundaries of Metropolitan and IEUA already receives services from those agencies. For the area outside the boundaries of Metropolitan and IEUA (also within the IEUA sphere) such as Mt. Baldy, the inclusion within the Metropolitan sphere will allow for Metropolitan to plan for the provision of future service.

ENVIRONMENTAL INFORMATION

1. Provide general description of topography. _____
varied

2. Describe any existing improvements on the subject territory as % of total area.

Residential _____%	Agricultural _____%
Commercial _____%	Vacant _____%
Industrial _____%	Other _____%

3. Describe the surrounding land uses:

NORTH Mountain, National Forest

EAST Varied, to include residential, industrial, flood control

SOUTH Varied, Riverside and Orange Counties

WEST Varied, Los Angeles County

4. Describe site alterations that will be produced by improvement projects associated with this proposed action (installation of water facilities, sewer facilities, grading, flow channelization, etc.).

none

5. Will service extensions accomplished by this proposal induce growth on this site? YES
NO Adjacent sites? YES NO Unincorporated Incorporated

A sphere of influence is a planning tool. There will be no service charge occurring as a result of a sphere expansion.

6. Are there any existing out-of-agency service contracts/agreements within the area? YES
NO If YES, please identify.

N/A

7. Is this proposal a part of a larger project or series of projects? YES NO If YES, please explain.

Metropolitan lacks a sphere of influence in San Bernardino County and is required to have a sphere pursuant to law. This application proposes to establish a sphere for Metropolitan within San Bernardino County.

NOTICES

Please provide the names and addresses of persons who are to be furnished mailed notice of the hearing(s) and receive copies of the agenda and staff report.

NAME Jeffrey Kightlinger, General Manager TELEPHONE NO. (213) 217-6139

ADDRESS:

Metropolitan Water District of Southern California, P.O. Box 54153, Los Angeles, CA 90054-0153

NAME Ethyl Young, Resource Specialist TELEPHONE NO. 213-217-6000

ADDRESS:

Metropolitan Water District of Southern California, P.O. Box 54153, Los Angeles, CA 90054-0153

NAME Halla Razak, General Manager TELEPHONE NO. (909) 993-1600

ADDRESS:

Inland Empire Utilities Agency, P.O. Box 9020, Chino Hills, CA 91709

CERTIFICATION

As a part of this application, the City/Town of N/A, or the _____
District/Agency, _____ (the applicant) and/or the _____ (real party in
interest - landowner and/or registered voter of the application subject property) agree to defend, indemnify,
hold harmless, promptly reimburse San Bernardino LAFCO for all reasonable expenses and attorney fees,

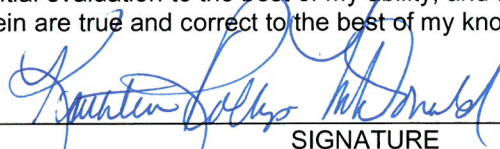
and release San Bernardino LAFCO, its agents, officers, attorneys, and employees from any claim, action, proceeding brought against any of them, the purpose of which is to attack, set aside, void, or annul the approval of this application or adoption of the environmental document which accompanies it.

This indemnification obligation shall include, but not be limited to, damages, penalties, fines and other costs imposed upon or incurred by San Bernardino LAFCO should San Bernardino LAFCO be named as a party in any litigation or administrative proceeding in connection with this application.

As the person signing this application, I will be considered the proponent for the proposed action(s) and will receive all related notices and other communications. I understand that if this application is approved, the Commission will impose a condition requiring the applicant and/or the real party in interest to indemnify, hold harmless and reimburse the Commission for all legal actions that might be initiated as a result of that approval.

I hereby certify that the statements furnished above and in the attached supplements and exhibits present the data and information required for this initial evaluation to the best of my ability, and that the facts, statements, and information presented herein are true and correct to the best of my knowledge and belief.

DATE October 16, 2017



SIGNATURE

Kathleen Rollings McDonald

Printed Name of Applicant or Real Property in Interest
(Landowner/Registered Voter of the Application Subject Property)

LAFCO Executive Officer

Title and Affiliation (if applicable)

PLEASE CHECK SUPPLEMENTAL FORMS ATTACHED:

- ANNEXATION, DETACHMENT, REORGANIZATION SUPPLEMENT
 SPHERE OF INFLUENCE CHANGE SUPPLEMENT
 CITY INCORPORATION SUPPLEMENT
 FORMATION OF A SPECIAL DISTRICT SUPPLEMENT
 ACTIVATION OR DIVESTITURE OF FUNCTIONS AND/OR SERVICES FOR SPECIAL DISTRICTS SUPPLEMENT

SUPPLEMENT SPHERE OF INFLUENCE AMENDMENT

INTRODUCTION: The questions on this form are designed to obtain data about the specific sphere of influence amendment application to allow the Commission, staff and others to adequately assess the application. You may also include any additional information that you believe is pertinent. Use additional sheets where necessary, and/or include any relevant documents.

- 1. Please provide an identification of the agencies involved in the proposed sphere of influence change(s):

SPHERE ~~EXPANSION~~-Establishment
Metropolitan Water District
of Southern California

SPHERE REDUCTION

- 2. Provide a narrative description of the following factors of consideration as outlined in Government Code Section 56425. (If additional room for response is necessary, please attach additional sheets to this form.)

The present and planned land uses in the area, including agricultural and open-space lands.

Refer to LAFCO 3187 (Countywide Service Review for Water) accepted and filed by
San Bernardino LAFCO on July 19, 2017. A copy of LAFCO 3187 is included as a part
of this application package.

The present and probable need for public facilities and services in the area.

Refer to LAFCO 3187 (Countywide Service Review for Water) accepted and filed by
San Bernardino LAFCO on July 19, 2017.

The present capacity of public facilities and adequacy of public services that the agency to be expanded provides or is authorized to provide.

Refer to LAFCO 3187 (Countywide Service Review for Water) accepted and filed by
San Bernardino LAFCO on July 19, 2017.

The existence of any social or economic communities of interest in the area.

Refer to LAFCO 3187 (Countywide Service Review for Water) accepted and filed by San Bernardino LAFCO on July 19, 2017.

The present and probable need for public facilities or services related to sewers, municipal and industrial water, or structural fire protection for any disadvantaged unincorporated community, as defined by Govt. Code Section 56033.5, within the existing sphere of influence.

Refer to LAFCO 3187 (Countywide Service Review for Water) accepted and filed by San Bernardino LAFCO on July 19, 2017.

- 3. If the sphere of influence amendment includes a city sphere of influence change, provide a written statement of whether or not agreement on the sphere change between the city and county was achieved as required by Government Code Section 56425. In addition, provide a written statement of the elements of agreement (such as, development standards, boundaries, zoning agreements, etc.) (See Government Code Section 56425)

N/A

- 4. If the sphere of influence amendment includes a special district sphere of influence change, provide a written statement: (a) specifying the function or classes of service provided by the district(s) and (b) specifying the nature, location and extent of the functions or classes of service provided by the district(s). (See Government Code Section 56425(i))

Refer to LAFCO 3187 (Countywide Service Review for Water) accepted and filed by San Bernardino LAFCO on July 19, 2017

- 5. For any sphere of influence amendment either initiated by an agency or individual, or updated as mandated by Government Code Section 56425, the following service review information is required to be addressed in a narrative discussion, and attached to this supplemental form (See Government Code Section 56430):

- a. Growth and population projections for the affected area.

- b. Location and characteristics of disadvantaged unincorporated communities within or contiguous to the sphere of influence.
- c. Present and planned capacity of public facilities and adequacy of public services, including infrastructure needs or deficiencies, including those associated with a disadvantaged unincorporated community.
- d. Financial ability of agencies to provide services.
- e. Status of, and opportunities for, shared facilities.
- f. Accountability for community service needs, including governmental structure and operational efficiencies.

Refer to LAFCO 3187 (Countywide Service Review for Water) accepted and filed by San Bernardino LAFCO on July 19, 2017.

If additional sheet are submitted or a separate document provided to fulfill Item #5, the narrative description shall be signed and certified by an official of the agency(s) involved with the sphere of influence review as to the accuracy of the information provided. If necessary, attach copies of documents supporting statements.

CERTIFICATION

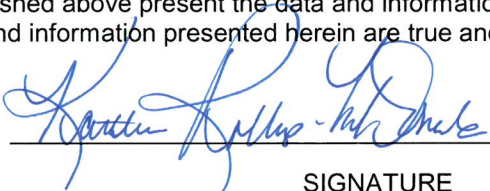
As a part of this application, the City/Town of N/A, or the _____ District/Agency, _____ (the applicant) and/or the _____ (real party in interest - landowner and/or registered voter of the application subject property) agree to defend, indemnify, hold harmless, promptly reimburse San Bernardino LAFCO for all reasonable expenses and attorney fees, and release San Bernardino LAFCO, its agents, officers, attorneys, and employees from any claim, action, proceeding brought against any of them, the purpose of which is to attack, set aside, void, or annul the approval of this application or adoption of the environmental document which accompanies it.

This indemnification obligation shall include, but not be limited to, damages, penalties, fines and other costs, imposed upon or incurred by San Bernardino LAFCO should San Bernardino LAFCO be named as a party in any litigation or administrative proceeding in connection with this application.

As the person signing this application, I will be considered the proponent for the proposed action(s) and will receive all related notices and other communications. I understand that if this application is approved, the Commission will impose a condition requiring the applicant and/or the real party in interest to indemnify, hold harmless and reimburse the Commission for all legal actions that might be initiated as a result of that approval.

I hereby certify that the statements furnished above present the data and information required to the best of my ability, and that the facts, statements, and information presented herein are true and correct to the best of my knowledge and belief.

DATE October 16, 2017



 SIGNATURE

Printed Name of Applicant or Real Property in Interest
 (Landowner/Registered Voter of the Application Subject Property)
Kathleen Rollings McDonald, LAFCO Executive Officer
 Title and Affiliation (if applicable)

LOCAL AGENCY FORMATION COMMISSION FOR SAN BERNARDINO COUNTY

215 North D Street, Suite 204, San Bernardino, CA 92415-0490
(909) 388-0480 • Fax (909) 885-8170
E-MAIL: lafco@lafco.sbcounty.gov
www.sbclafco.org

PROPOSAL NO.: LAFCO 3187

HEARING DATE: JULY 19, 2017

RESOLUTION NO. 3248

A RESOLUTION OF THE LOCAL AGENCY FORMATION COMMISSION FOR SAN BERNARDINO COUNTY MAKING DETERMINATIONS ON LAFCO 3187 – COUNTYWIDE SERVICE REVIEW FOR WATER (RETAIL, WHOLESALE, RECYCLED).

On motion of Commissioner Curatalo, duly seconded by Commissioner Williams, and carried, the Local Agency Formation Commission adopts the following resolution:

WHEREAS, a service review mandated by Government Code 56430 has been conducted by the Local Agency Formation Commission for San Bernardino County (hereinafter referred to as “the Commission”) in accordance with the Cortese-Knox-Hertzberg Local Government Reorganization Act of 2000 (Government Code Sections 56000 et seq.); and,

WHEREAS, at the times and in the form and manner provided by law, the Executive Officer has given notice of the public hearing by the Commission on this matter; and,

WHEREAS, the Executive Officer has reviewed available information and prepared a report including her recommendations thereon, the filings and report and related information having been presented to and considered by this Commission; and,

WHEREAS, a public hearing by this Commission was called for July 19, 2017 at the time and place specified in the notice of public hearing and in any order or orders continuing the hearing; and,

WHEREAS, at the hearing, this Commission heard and received all oral and written support and opposition; the Commission considered all objections and evidence which were made, presented, or filed; and all persons present were given an opportunity to hear and be heard in respect to any matter relating to the service review, in evidence presented at the hearing; and,

WHEREAS, at this hearing, this Commission certified that the service review is statutorily exempt from environmental review pursuant to the provisions of the California Environmental Quality Act (CEQA) and such exemption was adopted by this Commission on July 19, 2017. The Commission directed its Executive Officer to file a Notice of Exemption within five working days of its adoption; and,

WHEREAS, the determinations required by Government Code Section 56430 and local Commission policy are included in the report prepared and submitted to the Commission dated July

RESOLUTION NO. 3248

5, 2017 and is recommended for acceptance and filing by the Commission on July 19, 2017, a complete copy the service review is on file in the LAFCO office.

WHEREAS, the following additional determinations are made in conformance with the Government Code and local Commission policy:

- A stakeholder group was convened within each region (Valley on May 8, 2017; Mountain on June 15, 2017; North Desert on January 31, 2017; and South Desert on May 15, 2017) to provide a peer review of the service review's purpose, objective, and methodology. The stakeholder groups were composed of a variety of public agencies and at least one private system.
- Following the peer review, each water system identified in this review was provided a draft of the report for review and comment. Comments from the water purveyors are included in Appendix A of the service review.
- As required by State Law, notice of the hearing was provided through publication in newspapers of general circulation within the area, the *Big Bear Grizzly*, *Daily Press*, *Desert Dispatch*, *Hi-Desert Star*, *Inland Valley Daily Bulletin*, *Mountain News*, and *San Bernardino Sun*. Individual notice was not provided as allowed under Government Code Section 56157 as such mailing would include more than 1,000 individual notices. As outlined in Commission Policy, in-lieu of individual notice the notice of hearing publication was provided through an eighth page legal ad.
- As required by State law, individual notification of the hearing was provided to affected and interested agencies, County departments, and those agencies and individuals requesting mailed notice.
- Due to the size and scope of the report, the service review document was provided in advance of the staff report to allow additional time for review. The service review document was published July 5, 2017 and a copy was provided to affected and interested agencies and County departments, as well as those agencies and individuals requesting mailed notice. The service review document was also made accessible on the LAFCO website.

NOW, THEREFORE, BE IT RESOLVED by the Local Agency Formation Commission for San Bernardino County, State of California, that this Commission shall:

1. Accept and file the Countywide Service Review (Retail, Wholesale, Recycled), included as Exhibit A to this resolution, which sets forth the written statements for the six determinations outlined in Government Code Section 56430 as presented and as amended at the hearing.
2. Initiate the establishment of a sphere of influence for Metropolitan Water District of Southern California within San Bernardino County to be coterminous with the sphere of influence of its member agency, Inland Empire Utilities Agency.
3. Direct LAFCO staff to continue to monitor County Service Area 70 Zone CG (Cedar Glen) and provide an update to the Commission by February 2018.

RESOLUTION NO. 3248

4. Indicate the Commission's intent to reduce the City of Adelanto's sphere of influence following the completion of the countywide wastewater service review.
5. Indicate the Commission's preference that the Hesperia Water District and County Service Area Zone J implement a mechanism (e.g., joint powers agreement or memorandum of understanding) to provide stability to the water source and boundary challenges within the territory of southwestern Hesperia and Oak Hills communities.
6. Direct LAFCO staff to continue to monitor County Service Area 70 Zone J (Oak Hills) and provide an update to the Commission by February 2018.
7. Reaffirm the Commission's position that the Apple Valley Foothill, Apple Valley Heights, and Mariana Ranchos County Water Districts have a combined sphere of influence signaling the Commission's position that a future consolidation of the agencies is appropriate.
8. Reaffirm the Commission's position that Daggett Community Services District and Yermo Community Services District have a combined sphere of influence signaling the Commission's position that a future consolidation of the agencies is appropriate, and direct LAFCO staff to coordinate with Mojave Water Agency to further assist Daggett Community Services District through its Small Water Assistance Program.

THIS ACTION APPROVED AND ADOPTED by the Local Agency Formation Commission for San Bernardino County by the following vote:

AYES: COMMISSIONERS: Bagley, Cox, Curatalo, Williams

NOES: COMMISSIONERS: None

ABSENT: COMMISSIONERS: Lovingood, McCallon, Ramos

STATE OF CALIFORNIA)
) ss.
COUNTY OF SAN BERNARDINO)

I, KATHLEEN ROLLINGS-McDONALD, Executive Officer of the Local Agency Formation Commission for San Bernardino County, California, do hereby certify this record to be a full, true, and correct copy of the action taken by said Commission, by vote of the members present, as the same appears in the Official Minutes of said Commission at its meeting of July 19, 2017.

DATED: July 24, 2017



KATHLEEN ROLLINGS-McDONALD
Executive Officer

LAFCO 3187

Countywide Service Review for Water (Wholesale, Retail, Recycled)



LAFCO

for San Bernardino County

Kathleen Rollings-McDonald, Executive Officer
Michael Tuerpe, Project Manager

Contributors

Robert Aldrich, Consultant
Jeffrey Lum, GIS Analyst
Samuel Martinez, Assistant Executive Officer

Accepted and Filed July 19, 2017 (as amended)

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List of Acronyms and Abbreviations

AFY	Acre Feet Per Year
APUA	Adelanto Public Utilities Authority
Baker CSD	Baker Community Services District
BAP	Base Annual Production
BBARWA	Big Bear Area Regional Wastewater Agency
BBCCSD	Big Bear City Community Services District
BBMWD	Big Bear Municipal Water District
BDVWA	Bighorn-Desert View Water Agency
BOR	Bureau of Reclamation
Cadiz Project	Cadiz Valley Water Conservation, Recovery and Storage Project
CBA	Colton Basin Area
CGRDA	Cedar Glen Disaster Recovery Redevelopment Project Area
CLAWA	Crestline - Lake Arrowhead Water Agency
Crestline SD	Crestline Sanitation District
CRWA	California Rural Water Association
CSA	County Service Area
CSA 70 W-4	County Service Area 70 Zone W-4
CVWD	Crestline Village Water District
DACs	Disadvantaged Communities
Daggett CSD	Daggett Community Services District
DDW	Division of Drinking Water, State Water Resources Control Board
DUCs	Disadvantaged Unincorporated Communities
DWP	City of Big Bear Lake Department of Water and Power
DWR	Department of Water Resources
EPA	Environmental Protection Agency
ESRI	Environmental Systems Research Institute
Fontana Union	Fontana Union Water Company
FPA	Free Production Allowance
FVWA	Fenner Valley Water Authority
GIS	Geographic Information Systems
GPM	Gallons per Minute
GSAs	Groundwater Sustainability Agencies
GSPs	Groundwater Sustainability Plans
GSWC	Golden State Water Company
GWMP	Groundwater Management Plan
HDWD	Hi-Desert Water District
I-Bank	California Infrastructure Bank
IEUA	Inland Empire Utilities Agency
IWVGA	Indian Wells Valley Groundwater Authority
JBWD	Joshua Basin Water District
JVHI	Johnson Valley Hydrologic Investigation
LACSD	Lake Arrowhead Community Services District
MAF	Million Acre Feet
MCL	Maximum Contaminant Level
MDD	Maximum Daily Demand
Metropolitan	Metropolitan Water District of Southern California

Morongo Area	MWA's Improvement District M
MWA	Mojave Water Agency
PHD	Peak Hourly Demand
PSY	Production Safe Yield
RBA	Riverside Basin Area
RSWD	Running Springs Water District
SAWC	San Antonio Water Company
SAWPA	Santa Ana Watershed Project Authority
SBBA	San Bernardino Basin Area
Searles Water	Searles Domestic Water Company
SGMA	Sustainable Groundwater Management Act of 2014
SGPWA	San Gorgonio Pass Water Agency
SMWD	Santa Margarita Water District
SWP	State Water Project
TCE	trichloroethene
TPWD	Twentynine Palms Water District
UWMP	Urban Water Management Plan
Valley District	San Bernardino Valley Municipal Water District
Veolia	Veolia Water North America
VVWRA	Victor Valley Wastewater Reclamation Authority
Waterworks #8	County Waterworks District #8
WECAN	Water-Energy Community Action Network
West Valley	West Valley Water District
WIRP	Water Infrastructure Restoration Program
WUE	Water Use Efficiency
WVWD	West Valley Water District
WW8	Waterworks District No. 8

Executive Summary

This service review consists of a countywide service review on water (wholesale, retail and recycled) within San Bernardino County. It fulfills the service review requirements identified in the Cortese-Knox-Hertzberg Local Reorganization Act of 2000 (Government Code §56000 et. seq.). The report is organized geographically by the county's four major regions: Valley, Mountain, North Desert and South Desert. A stakeholder group was formed within each region to provide a peer review of the service review's purpose, objectives and methodology. A draft copy was circulated to all water systems reviewed in this report as well as interested parties for review and comment. The final version of this report includes LAFCO staff's responses to the comments. LAFCO may use this report as a basis to initiate agency sphere of influence updates, where warranted, and to help address identified service deficiencies.

Approach

Legislation adopted since 2012 impacting service reviews or the provision of services has been incorporated into the report's analysis. These laws are detailed in the Introduction portion of this report and address:

- Mutual water companies in service reviews
- Disadvantaged unincorporated communities
- Pilot program for San Bernardino LAFCO regarding services outside an agency sphere of influence
- The Sustainable Groundwater Management Act of 2014, and
- Authorization for the State Water Resources Control Board to consolidate water systems that are serving disadvantaged communities with unreliable and unsafe drinking water with other water systems.

The primary goal of this service review is to provide the Commission with recommendations to: (1) update the determinations from previous service reviews, and (2) initiate sphere of influence updates where appropriate. To arrive at these recommendations, the service review focuses on two areas:

- (1) Identification of "hot spots" – Those areas or agencies within the county which have significant water-related issues including, but not limited to, insufficient water supply, water quality related issues, deficient infrastructure, financial constraints, and/or inadequate oversight and monitoring.
- (2) Service review update – Update of water agencies' determinations since the prior service review.

To identify the County's water "hot spots," staff utilized a multi-pronged approach using prior service reviews, audits, budgets, consumer confidence reports, sanitary survey reports, and GIS data to identify future population growth areas, disadvantaged communities, and small community water systems. This Executive Summary summarizes the hot spots identified in the report and staff recommendations. Additionally, staff has identified opportunities for efficiencies for the community at large to consider – these do not have a recommendation for Commission action.

What Did We Learn?

Countywide

- 80% of the land in the county (roughly 16,200 sq. miles) is primarily vacant and outside the governing control of the County's Board of Supervisors and 24 cities.
- Significant opportunities for economies of scale via consolidation exist in the Mountain, North Desert, and South Desert regions.
- San Bernardino County and the broader Inland Empire region are anticipated to see more population growth in the near term than the coastal regions of Southern California. The high cost of housing in the coastal counties of Los Angeles, Orange and San Diego has made the Inland Empire a destination of choice for many residents willing to commute to those areas.
- The Metropolitan Water District of Southern California has never been assigned a sphere of influence in San Bernardino County.
- LAFCO staff has comprehensively digitally mapped all the water systems identified in this report. The following entities requested access to this data which LAFCO has provided: Department of Water Resources, Division of Drinking Water of the State Water Resources Control Board, California Environmental Health Tracking Program of the Department of Public Health, and the County of San Bernardino as a part of its upcoming general plan update.

Legislation/Regulations

- Senate Bill 88 authorizes the State Water Board to order consolidation with a receiving water system where a public water system, or a state small water system within a disadvantaged community, consistently fails to provide an adequate supply of safe drinking water. This authority provides an opportunity for water system improvements by offering inducements or by ordering consolidation of systems.
- Other State agencies, such as the California EPA, use alternative criteria to identify disadvantaged communities for grant funding purposes. The different criteria at the local and state government levels is confusing and complicates implementation of a consistent approach to address our disadvantaged residents. While staff recognizes the difficulty in developing a one-size-fits-all definition, LAFCO staff's position is that additional work needs to be done state-wide to develop a method for identifying disadvantaged communities that is more consistent yet recognizes the diversity of communities and geographies in California.
- Agencies have adopted resolutions to form Groundwater Sustainability Agencies for areas identified as fringe areas – areas outside a local agency boundary.
- There is a systemic lack of understanding and compliance with the California Land Conservation Act of 1965 (known as the Williamson Act) statutes and implementation by the County and cities. Government Code §51243 states that when annexing properties into a city, "...the city shall succeed to all rights, duties, and powers of the county under the contract." As a whole, the data provided to LAFCO by the County and cities is either incomplete, outdated, and/or not in compliance between Agricultural Preserves and Williamson Act parcels. LAFCO staff will continue work on this matter and present a final product to the Commission as a part of the wastewater service review.

Water Systems

- Many systems identified in the first round of service reviews as having experienced significant challenges, remain as having significant challenges.
- There are clusters where challenges are difficult to overcome due to groundwater quality and economic status (being defined as a disadvantaged community).
- There are areas where agencies provide, or plan to provide, service outside of its sphere of influence: (1) City of Colton, (2) City of Big Bear Lake via its Department of Water and Power, and (3) Town of Apple Valley (potential condemnation and purchase of the Liberty Utilities system). This is addressed in the context of Gov't. Code §56133.5 - a pilot program, through 2020, for Napa and San Bernardino LAFCOs to authorize a city or district to extend services outside of a sphere for additional purposes beyond responding to threat to public health or safety.
- During the course of the service review, two areas were identified that warrant identification but are not considered a hot spot as remediation efforts are well underway: (1) Rockets, Fireworks, and Flares Site (Rialto area), and (2) County Service Area 70 CG – Cedar Glen.
- During the drought, many local agencies that self-reported water usage data to the state (which meant that a zero state conservation standard was applied) opted to implement a higher conservation standard.
- On average, the 33 water systems that were required to report to the State their water usage during the drought reported in February 2017 a 16.7% cumulative savings as compared to the same month in 2013.

Successes

The following provides one positive effort for each region:

- *Valley Region* - There is extensive coordination amongst agencies within groundwater basins. Between certain basins conflict is present.
- *Mountain Region* - The County purchased a failing water system in Cedar Glen which is now operated under County Service Area 70 Zone CG. Great progress has been made to improve this once failing system, although challenges remain.
- *North Desert Region* - To assist small water systems within the boundaries of Mojave Water Agency ("MWA"), MWA's Small Water Systems Assistance Program provides resources for disadvantaged and severely disadvantaged small water systems that lack staff, expertise, and funding to meet their individual water reliability, conservation and quality standards. The MWA service area includes 36 small water systems of which 65% meet the criteria of disadvantaged communities.
- *South Desert* – The Twentynine Palms Water District ("TPWD") has become a test district for the EPA's research into an economical method for small, low-income water agencies to remove arsenic. This new method brings the TPWD drinking water into compliance with the new maximum contaminant levels for arsenic and saves the district over \$20,000 annually. Not only does this clean the local water, the results from this test case will support the removal of arsenic in other areas of the country with a lower cost method. Additionally, the District operates a 3MGD Fluoride Removal Plant that removes high levels of naturally occurring fluoride from the Mesquite Lake sub-basin.

Staff Recommendations for Commission Action

The following outlines staff's recommendations for the Commission. The first recommendation concerns the lack of a sphere of influence for the Metropolitan Water District of Southern California within San Bernardino County. The remaining five recommendations stem from the agencies being identified a "hot spot".

Metropolitan Water District of Southern California

- Issue - Metropolitan Water District of Southern California lacks sphere of influence within San Bernardino County. Metropolitan is a special district subject to LAFCO purview. Therefore, San Bernardino LAFCO is obligated to establish a sphere of influence. This issue is detailed in Section III.
- Staff Recommendation - *Initiate the establishment of a sphere of influence for Metropolitan within San Bernardino County to be coterminous with the sphere of its member agency, Inland Empire Utilities Agency.*

County Service Area 70 Zone CG (Cedar Glen)

- Issue - County Service Area 70 Zone CG (Cedar Glen) experiences ongoing challenges due to County's purchase of a failing water system as detailed in Section IV.
- Staff Recommendation - *Direct staff to continue to monitor the Zone CG system and provide an update to the Commission by February 2018.*

City of Adelanto

- Issue - Water operations of the Adelanto Public Utilities Authority, a component of the City, in significant debt to the City; 2014 audit (most recent completed) questions agency's ability to continue given inability to secure financing to address debt payments; City's water system has multiple deficiencies; City under a conservation order from the State Board; City has inadequate water storage facilities to accommodate future growth.
- Hot Spot Identification – The City of Adelanto has been identified in this service review as a hot spot due to the issues identified above and detailed in Section V.
- Staff Recommendation - *Indicate the Commission's intent to initiate a sphere of influence review to reduce the City's sphere of influence following the completion of the wastewater and fire service reviews.*

Apple Valley Foothill County Water District

Apple Valley Heights County Water District

Mariana Ranchos County Water District

- Issue:
 - Apple Valley Foothill County Water District - Lack of audit internal controls; lack of inter-tie with another water system; classified as a disadvantaged community.
 - Apple Valley Heights County Water District - Lack of audit internal controls; lack of inter-tie with another water system. The Sanitary Survey Report identifies that additional source capacity is needed to meet State regulation and for reliability. Additionally, the District is deficient in storage capacity and must develop a plan of action to meet the storage capacity requirements.

Deterioration of its tanks and failure of its existing pipeline resulted in emergency repairs.

- **Hot Spot Identification** – The Apple Valley Foothill CWD and Apple Valley Heights CWD have been identified in this service review as a hot spots due to the issues identified above and detailed in Section V. Mariana Ranchos CWD is not identified as a hot spot but is contiguous to the other two districts.
- **Staff Recommendation** - *Reaffirm the Commission's position that Apple Valley Foothill, Apple Valley Heights, and Mariana Ranchos County Water Districts have a combined sphere of influence signaling the Commission's preference that the three districts consolidate.*

County Service Area 70 Zone J

- **Issue** - All sources have hexavalent chromium above MCL; Zone J is currently working on a hexavalent chromium compliance plan under Senate Bill 385 to achieve compliance; previous service review determined the need to resolve boundary conflicts between the Hesperia Water District and Zone J in the Maple/Topaz strip which is currently a part of the City of Hesperia.
- **Hot Spot Identification** – CSA 70 Zone J has been identified in this service review as a hot spot due to the issues identified above and detailed in Section V.
- **Staff Recommendation** - *Indicate the Commission's preference that the Hesperia Water District and Zone J implement a mechanism (e.g., joint powers agreement or memorandum of understanding) to provide stability to the water source and boundary challenges in the overall Hesperia and Oak Hills communities.*

Although LAFCO staff is working with the Hesperia Water District and CSA 70 Zone J on a mechanism to resolve the boundary conflicts, staff recommends that the Commission direct staff to continue to monitor the Zone J system and provide an update to the Commission by February 2018.

Daggett Community Services District

- **Issue** - Classified as a disadvantaged community; lacks intertie with an adjacent agency; significant deficiencies identified in sanitary survey report; located within the Mojave Basin Baja subarea which is at 45% ramp down; significant financial challenges identified in audits; prior service review identified concerns with the aging pipes; lack of adequate managerial oversight.
- **Hot Spot Identification** – Daggett CSD has been identified in this service review as a hot spot due to the issues identified above and detailed in Section V.
- **Staff Recommendation** - *Reaffirm the Commission's position that Daggett CSD and Yermo CSD have a combined sphere of influence signaling the Commission's position for consolidation.*

Systems Identified as Hot Spots – No Staff Recommendations

The following outlines water systems identified as hot spots but are either not under Commission purview or where no tangible Commission action is recommended. In the Mountain Region, no water systems were identified as hot spots.

In the Valley Region, staff identified one private water purveyor as a “hot spot”:

Hot Spots	Rationale	Summary
San Antonio Canyon Mutual Service Company	Non-compliance with source capacity requirements and interim drought measures.	Not under LAFCO purview. See “Opportunities” below.

In the North Desert, staff identified the following seven public water agencies and three private water purveyors as “hot spots”:

Hot Spots	Rationale	Summary
Baker CSD	Located within a disadvantaged unincorporated community; is an isolated area with no access to another water system; gross alpha and uranium levels exceed the MCL; Well #2 and Well #3 exceed the MCL for hexavalent chromium, Cr (VI), of 10 µg/L; lack of quarterly monitoring of Cr (VI) in violation of state regulations.	System is not eligible for SB 88 grant funds since there are no adjacent systems for potential consolidation.
Bar Len MWC	The sanitary survey report identifies significant deficiencies of the water system; system is under consideration by the State Water Board for potential Water System (SB 88) consolidation with the adjacent Hi Desert Mutual Water Company.	Not under LAFCO purview.
County Service Area 42	Classified as a disadvantaged community; system lacks an inter-tie connection; previous service review determined system did not meet required storage capacity; substantial rate increases have been implemented in order to pay for capital upgrades.	There are no recommendations for the Commission.
Desert Springs MWC	The sanitary survey report identifies issues with system leaks and inadequate storage capacity; 2015 Consumer Confidence Report indicates inadequate water quality testing.	Not under LAFCO purview.
Gordon Acres WC	System not complying with sampling requirements for a community water system; two violations issued by County Public Health in 2017 regarding failure to monitor and test for inorganic chemicals, perchlorate and secondary standards; system is under consideration by the State Water Board for potential Water System (SB 88) consolidation with the adjacent Jubilee Mutual Water Company.	Not under LAFCO purview.

*Countywide Service Review for Water
Executive Summary*

In the South Desert, staff identified the following three public agencies and one private water purveyor as “hot spots”:

Hot Spots	Rationale	Summary
CSA 70 Zone F (Morongo Valley)	2015 Consumer Confidence Report states source water violates gross alpha and uranium MCLs; 2016 Sanitary Survey Report notes water exceeds uranium MCL, and system has aging distribution lines requiring frequent maintenance.	No Commission action because zones do not have spheres of influence. See “Opportunities” below.
CSA 70 Zone W-3 (Hacienda Heights, Morongo Valley)	2015 Consumer Confidence Report notes that source water exceeds uranium MCL; 2016 Sanitary Survey Report reports that distribution lines are old and require frequent maintenance; Well #1 exceeds MCL for gross alpha and uranium; Well #2 is very close to the MCL; system lacks an emergency response plan.	No Commission action because zones do not have spheres of influence. See “Opportunities” below.
CSA 70 Zone W-4 (Pioneertown)	Notice of Violation issued in March 2016 by U.S. EPA indicating water system in violation of Safe Drinking Water Act for exceeding MCL for arsenic, fluoride and uranium; state grant funding provides customers with bottled water supplies every two weeks.	No Commission action because zones do not have spheres of influence. See “Opportunities” below.
Golden State Water Company – Morongo del Norte	2016 Sanitary Survey Report identifies Elm Well exceeding uranium MCL; well will not be placed in service until a uranium treatment system is in place and operational, or district submits a compliance plan; gross alpha and uranium levels are at or near MCL for Bella Vista and Highway Wells.	Not under LAFCO purview.

Opportunities for Future Consideration

The following identifies opportunities for the Commission and the water systems to consider.

Opportunities – Valley Region

Agency	Issue	Opportunity
San Antonio Canyon Mutual Service Company	Insufficient source capacity.	Consolidation of San Antonio Canyon Mutual Service Company with Mt. Baldy HOA would allow eligibility for SB 88 funding to upgrade facilities.

Opportunities – Mountain Region

Agencies	Issue	Opportunity
Crest Forest-Crestline Village Water District and Crestline Sanitation District	Overlapping territory	Consolidation of water and wastewater services under a single agency would benefit the community and likely reduce staffing and admin costs.
CSA 70 Zone CG, Lake Arrowhead Community Services District, and Crestline-Lake Arrowhead Water Agency Improvement Districts	Multiple public agencies overlaying the same area providing the same service.	Consolidate or form a community services district to increase service delivery efficiency through a single agency.
Running Springs Water District, Arrowbear Park County Water District, CSA 79 (sewer only)	Adjacent agencies, which work together and share facilities, providing similar services under the same parent act.	Consolidation of water and wastewater services under a single agency would provide for an efficient delivery pattern.

Opportunities – North Desert Region

Agencies	Issue	Opportunities
Apple Valley Foothill County Water District, Apple Valley Heights County Water District	Lack of financial internal controls; lack of inter-ties with another system; Apple Valley Heights County Water District is deficient in storage capacity and water source capacity.	Districts should consider initiating consolidation and include Mariana Ranchos County Water District – all three share a single sphere of influence; consolidation would open up opportunities for SB 88 grant funding.
Bar Len Mutual Water Company	Sanitary survey report identifies significant deficiencies	Under consideration by State Water Board for potential water system (SB 88) consolidation with Hi-Desert Mutual Water Company.
Gordon Acres Water Company	Non-compliance with water quality monitoring requirements.	Under consideration by State Water Board for potential Water System (SB 88) consolidation with Hi-Desert Mutual Water Company.
Daggett Community Services District and Liberty Utilities Yermo	Significant deficiencies/financial challenges.	Consolidation of Daggett Community Services District and Liberty Utilities Yermo would allow eligibility for SB 88 funding to upgrade facilities.

Opportunities – South Desert Region

Agencies	Issue	Opportunities
CSA 70 Zone F, CSA Zone W-3, Golden State WC Morongo del Norte and Golden State WC Morongo del Sur	High gross alpha, uranium levels; ongoing operation and maintenance issues.	All classified as small water systems; eligible for SB 88 funds if consolidated; all four agencies should consider jointly initiating a consolidation application to the state since additional resources are available when three or more agencies consolidate.
CSA 70 W-4	Water system exceeds MCLs for arsenic, fluoride and uranium.	Classified as a small water system and eligible for SB 88 funds; funding requires consolidation with an adjacent system; CSA 70 W-4 under consideration for potential SB 88 consolidation with Hi-Desert Water District.

SECTION I Introduction

Purpose of Report

This report consists of a countywide service review on water (wholesale, retail, and recycled) within San Bernardino County. The service review fulfills the service review requirements as identified in the Cortese-Knox-Hertzberg Local Government Reorganization Act of 2000 (Government Code §56000 et. seq.) In general, service reviews evaluate how agencies currently provide municipal services within their service area and the impacts on those services that may occur over the long-term due to population growth and other issues. While most reports limit an agency evaluation to its current boundary, LAFCO's service reviews take a broader view and explore, where appropriate, a full range of service provision options that are not limited by existing agency boundaries.

LAFCO may then use this service review as a basis to initiate agency sphere of influence updates, where warranted, to help address identified service deficiencies. "Sphere of influence" means a plan for the probable physical boundaries and service area of a local agency, as determined by the Commission (§56076). Spheres are designed to both proactively guide and respond to the need for the extension of infrastructure and delivery of municipal services to areas of emerging growth and development. The requirement for LAFCOs to conduct service reviews was established as an acknowledgment of the importance of spheres of influence, and recognition that periodic updates of agency spheres should be conducted (§56425(g)) with the benefit of current information available through service reviews (§56430(a)).¹

Service reviews are considered "receive and file" reports, but they do require LAFCO to prepare written statements of six determinations:

- Growth and population projections for the affected area;
- Location and characteristics of any disadvantaged unincorporated communities within or contiguous to the sphere of influence;
- Present and planned capacity of public facilities, adequacy of public services, and infrastructure needs or deficiencies related to ...municipal and industrial water... in any disadvantaged unincorporated communities within or contiguous to the sphere of influence;
- Financial ability of agencies to provide service;
- Status of, and opportunities for, shared services; and,
- Accountability for community service needs, including governmental structure and operational efficiencies.

¹ Five California counties border San Bernardino County – Inyo, Los Angeles, Orange, Riverside and Kern. With the exception of Kern LAFCO, San Bernardino LAFCO has entered into Memorandums of Understanding with its surrounding LAFCOs to transfer sphere of influence jurisdiction for agencies that cross county boundaries to the county where the sphere of influence is located.

Report Objective – Staff Recommendations for Sphere Update and Further Study

A number of water-related reports already exist which address various aspects of water infrastructure and water planning in San Bernardino County. These include, but are not limited to: groundwater plans, adjudicated groundwater basin monitoring reports, integrated regional water management plans, urban water management plans, and other County visioning documents. While the Countywide Water Service Review utilizes and references many of these reports in its analysis, the primary goal of this service review is to provide the Commission with recommendations to: (1) update the determinations from previous service reviews, and (2) initiate sphere of influence updates where appropriate. In our view, such reevaluation through subsequent service reviews is necessary if water production is to be most efficient and its distribution most effective. To arrive at these recommendations, the service review focuses on two areas:

- (1) Identification of “hot spots” – Those areas or agencies within the county which have significant water-related issues including, but not limited to, insufficient water supply, water quality related issues, deficient infrastructure, financial constraints, and/or inadequate oversight and monitoring.
- (2) Service review update - Update of water agencies’ determinations since the prior service review.

This service review approach is unique. Given the countywide nature of this review, and the significant number of water systems within the county, this approach provides value to the Commission, the affected agencies, and the public by focusing on those areas and agencies that face significant water related challenges in the short and long-term. Water agencies that have no significant issues are referenced in the report, but they are not the focus of this service review.

Methodology

San Bernardino LAFCO conducted its initial round of service reviews on a community-by-community basis, consistent with its sphere of influence policies, addressing the full range of public services. In April 2016, in an effort to more efficiently conduct the mandatory service reviews along with the passage of new legislation affecting service reviews (described below), the Commission modified the scope of all of the second round service reviews to address individual services on a countywide basis.

Legislation adopted since 2012 impacting service reviews has been referenced and incorporated into report’s analysis. These laws include:

- AB 54 (effective 2012) - authorizes LAFCOs to include mutual water companies in service reviews; requires mutual water companies to submit a map depicting the boundaries of the area served by the company and, upon request, additional information which may be used in LAFCO-initiated service reviews.
- SB 244 (effective 2012) - requires cities, counties, and LAFCOs to plan for disadvantaged unincorporated communities.

- AB 402 (effective 2016) - establishes a pilot program, until January 2021, for Napa and San Bernardino LAFCOs to authorize a city or district to extend services outside of a sphere for additional purposes beyond responding to threat to public health or safety. This process requires that the Commission make a determination that the proposed service extension was addressed in a service review.

Legislation adopted since the first round of reviews not directly related to service reviews but impacting the provision of services and government organization include:

- SB 88 (effective 2016) - authorizes the State Water Resources Control Board to require water systems that are serving disadvantaged communities with unreliable and unsafe drinking water to consolidate with or receive services from public water systems with safe, reliable, and adequate drinking water.
- The Sustainable Groundwater Management Act of 2014 (“SGMA”) enacted comprehensive legislation aimed at strengthening local control and management of groundwater basins that are prioritized as high or medium. The Act provides a framework for sustainable management of groundwater basins by local authorities. The first step is for local agencies to form local groundwater sustainability agencies (GSAs) by June 30, 2017. The second step is the adoption of groundwater sustainability plans (GSPs) by January 31, 2020 for basins determined by the Department of Water Resources to be in critical overdraft, and by January 31, 2022 for those not in critical overdraft. Once the GSPs are in place, local agencies have 20 years to fully implement the plans and to achieve the sustainability goals.

Senate Bill 13 amended SGMA in 2015 to clarify that local agencies can only impose regulatory requirements within their own boundaries (Water Code §10726.8).

The water agencies addressed in this service review include community water systems (serves 15 or more residential connections): 53 cities or districts under direct LAFCO purview, 28 private water companies, and 31 mutual water companies for a total of 112 community water systems. Select transient and non-transient systems are included due to significance to the community. Table 1-1 includes a listing of the water agencies included in this service review, organized by region (Valley, Mountain, North Desert and South Desert). Additionally, a primary tenet of LAFCO is to encourage the preservation of agricultural land. This service review touches upon the impact of agricultural uses in the county on water, notably the Valley and North Desert Regions. Conversely, available water supply for agricultural use impacts quality of life and the economy. Not included in this review are tribal water systems, which are regulated by the Environmental Protection Agency.

To identify the county’s water “hot spots”, staff utilized a multi-pronged approach. Previous service review reports and determinations, audits and budgets, consumer confidence reports, groundwater basin reporting, and sanitary surveys were reviewed as well as state and county water reports. LAFCO’s geographic information system (“GIS”) was also used to identify future population growth areas, disadvantaged unincorporated communities, and

small community water systems (between 15 and 1,000 connections)² adjacent to another water system (which addresses SB 88)³. GIS data was obtained from the U.S. Census, ESRI, San Bernardino Associated Governments, County of San Bernardino, State Department of Water Resources, State Regional Water Quality Control Board, and the wholesale water agencies.

A stakeholder group was convened within each region to provide a peer review of the service review's purpose, objective, and methodology. The stakeholder groups were composed of a variety of public agencies and at least one private system. Following the peer review, each water system identified in this review was provided a draft of the report for review and comment.

Report Organization

In general, this service review is organized geographically by the county's four major geographic regions: Valley, Mountain, North Desert and South Desert.⁴ Each of the four regions is presented separately and includes an overview of the region, a listing of water agencies within the region under review, and an identification of agency/area hot spots. A detailed analysis of each hot spot follows, along with staff recommendations for future agency sphere of influence updates to address the identified service concerns.

Comments from the public and water purveyors are included in Appendix A of this report. Appendices B through E contain service review updates of cities and districts, by region, including an update of staff's recommendations and identified challenges from the prior service review (with additional review where warranted). A detailed listing of community water systems, wholesale entities, and joint powers authorities is included as a part of Appendix F.

² A community water system is defined as a public water system which serves at least 15 year-round service connections or regularly serves at least 25 year-long residents. A small community water system is more than 15 connections (25 people) but less than 1,000 connections (3,300 people).

³ Senate Bill 88 authorizes the State Water Board to order consolidation with a receiving water system where a public water system, or a state small water system within a disadvantaged community, consistently fails to provide an adequate supply of safe drinking water.

⁴ These regions reflect the San Bernardino County Fire Protection District's regional service zones. The description is general and does not preclude the review from extending beyond the described boundary.

**Table 1-1:
Water Agencies Reviewed – Countywide Water Service Review**

Region	Water Agencies
Valley	<p>Under LAFCO Purview</p> <p><u>STATE WATER CONTRACTORS:</u> Metropolitan Water District of Southern California (via its member Inland Empire Utilities Agency), San Bernardino Valley Municipal Water District, San Geronio Pass Water Agency (Riverside County based, no wholesale presence in SB County)</p> <p><u>RETAIL AGENCIES (San Bernardino County Based):</u> Cities of Chino, Chino Hills, Colton, Loma Linda, Ontario, Redlands, Rialto, San Bernardino Municipal Water Department, Upland</p> <p>Cucamonga Valley Water District, East Valley Water District, Monte Vista Water District, West Valley Water District, Yucaipa Valley Water District</p> <p><u>RETAIL AGENCIES (Riverside County Based):</u> Beaumont-Cherry Valley Water District</p> <p>Not Under LAFCO Purview</p> <p><u>RETAIL AGENCIES (San Bernardino County Based):</u> Devore Water Company, Fontana Water Company, Lytle Creek Springs Water Company, Marygold Mutual Water Company, Muscoy Mutual Water Company, Oak Glen Domestic Water, Riverside Highland Water Company, Rocky Comfort Mutual Water Company, San Antonio Canyon Mutual Service Company, San Antonio Water Company, Terrace Water Company, Tres Lagos Mutual Water Company, Western Heights Water Company</p> <p><u>RETAIL AGENCIES (Los Angeles County Based):</u> Golden State Water Company – Claremont System, Mt. Baldy Homeowners’ Association</p> <p><u>RETAIL AGENCIES (Riverside County Based):</u> South Mesa Water Company</p> <p><u>OTHER:</u> Aqua Mansa Water Company, Chino Basin Desalter Authority, Fontana Union Water Company, Meeks and Daley Water Company, Reche Canyon Mutual Water Company, Rialto/Colton Basin JPA, Santa Ana Watershed Project Authority, Water Facilities Authority, West End Consolidated Water Company; West End Water Development, Treatment, and Conservation JPA</p> <p><u>INSTITUTIONAL:</u> California Institution for Men – Chino, California Institution for Women - Chino</p>

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<p>Mountain</p>	<p><u>Under LAFCO Purview</u> <u>STATE WATER CONTRACTOR:</u> Crestline-Lake Arrowhead Water Agency (portion)</p> <p><u>RETAIL AGENCIES:</u> City of Big Bear Lake Dept. of Water and Power</p> <p>Arrowbear Park County Water District, Big Bear City Community Services District, County Service Area 70 Zone Cedar Glen, Crestline-Lake Arrowhead Water Agency Improvement Districts A-D, Crestline Village Water District, Lake Arrowhead Community Services District, Running Springs Water District</p> <p><u>OTHER:</u> Big Bear Municipal Water District</p> <p><u>Not Under LAFCO Purview</u> <u>RETAIL:</u> Alpine Water Users Association, Arrowhead Villas Mutual Service Company, Big Pine Tract Improvement, Camp Waterman MWC, Cedarpines Park MWC, Dogwood Blue Jay Canyon Improvement Association Inc., Fallsvale Service Company, Forest Park MWC, Glen Martin MWC, Green Valley MWC, Mill Creek Mutual Service Company, North Shore MWC, Sky Forest MWC, Strawberry Lodge MWC, Valley of Enchantment MWC, Valley View Park MWC</p>
<p>North Desert</p>	<p><u>Under LAFCO Purview</u> <u>STATE WATER CONTRACTOR:</u> Mojave Water Agency (portion)</p> <p><u>RETAIL AGENCIES (San Bernardino County based):</u> City of Adelanto (via its Adelanto Public Utilities Authority)</p> <p>Apple Valley Foothill County Water District, Apple Valley Heights County Water District, Baker Community Services District, County Service Area 42, County Service Area 64, County Service Area 70 Zone J, Daggett Community Services District, Helendale Community Services District, Hesperia Water District, Juniper-Riviera County Water District, Mariana Ranchos County Water District, Phelan Pinon Hills Community Services District, Thunderbird County Water District, Victorville Water District</p> <p><u>RETAIL AGENCIES (Kern County Based):</u> Indian Wells Valley Water District, Rand Communities Water District</p> <p><u>Not Under LAFCO Purview</u> <u>RETAIL:</u> Apple Valley View MWC, Bar H MWC, BarLen MWC, Center Water Company, Chamisal MWC, Desert Dawn MWC, Desert Springs MWC, Golden State Water Company Apple Valley North System, Golden State Water Company Apple Valley South System, Golden State Water Company Barstow System, Golden State Water Company Desert View System, Golden State Water Company Lucerne Valley System, Golden State Water Company Wrightwood System, Gordon Acres Water Company, Hi Desert MWC, Jubilee</p>

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	<p>MWC, Liberty Utilities Apple Valley System, Liberty Utilities Yermo System, Lucerne Valley MWC, Lucerne Vista MWC, Navajo MWC, Rancheritos MWC, Searles Domestic Water Company, Sheep Creek Water Company, Stoddard Valley MWC, West End MWC</p> <p><u>INSTITUTIONAL:</u> U.S. Army National Training Center, Fort Irwin U.S. Marine Corps Logistics Base, Barstow: Nebo Annex and Yermo Annex</p>
South Desert	<p>Under LAFCO Purview</p> <p><u>STATE WATER CONTRACTOR:</u> Mojave Water Agency (Improvement District M)</p> <p><u>RETAIL AGENCIES:</u> City of Needles</p> <p>Bighorn-Desert View Water Agency, County Service Area 70 Zone F, County Service Area 70 Zone W-3, County Service Area 70 Zone W-4, Hi-Desert Water District, Joshua Basin Water District, Twentynine Palms Water District</p> <p>Not Under LAFCO Purview</p> <p><u>RETAIL:</u> Golden State Water Company Morongo Del Norte, Golden State Water Company Morongo Del Sur, Havasu Water Company</p> <p><u>OTHER:</u> Fenner Valley Water Authority [(Cadiz Inc., Fenner Valley Mutual Water Company, Santa Margarita Water District (Orange County))]</p> <p><u>INSTITUTIONAL:</u> U.S. Marine Corps Air Ground Combat Center, Twentynine Palms</p>

SECTION II

San Bernardino County Overview

San Bernardino County's diverse geography and extensive natural resources, as well as its proximity to major economic and population centers, provide unique opportunities for varied industry sectors to thrive, including commerce, education, tourism and recreation. The County is the largest in the contiguous United States and covers over 20,000 sq. miles (enough to encompass the states of Connecticut, Delaware, Rhode Island, and Vermont). The County is commonly divided into four distinct areas – the Valley Region, the Mountain Region, the North Desert Region, and the South Desert Region. The Valley Region contains the majority of the County's incorporated areas and is the most populous region. The Mountain Region is primarily comprised of public lands owned and managed by federal and state agencies. The North Desert and South Desert Regions are the largest regions (approximately 94% of the County's land area) and include parts of the Mojave Desert. Table 2-1, below, breaks down the County's population by region.

**Table 2-1:
San Bernardino County Population by Region**

Region	Area (sq. miles)	Population 2016
Valley	665	1,538,716
North Desert	10,778	451,575
South Desert	8,093	77,078
Mountain	571	50,854

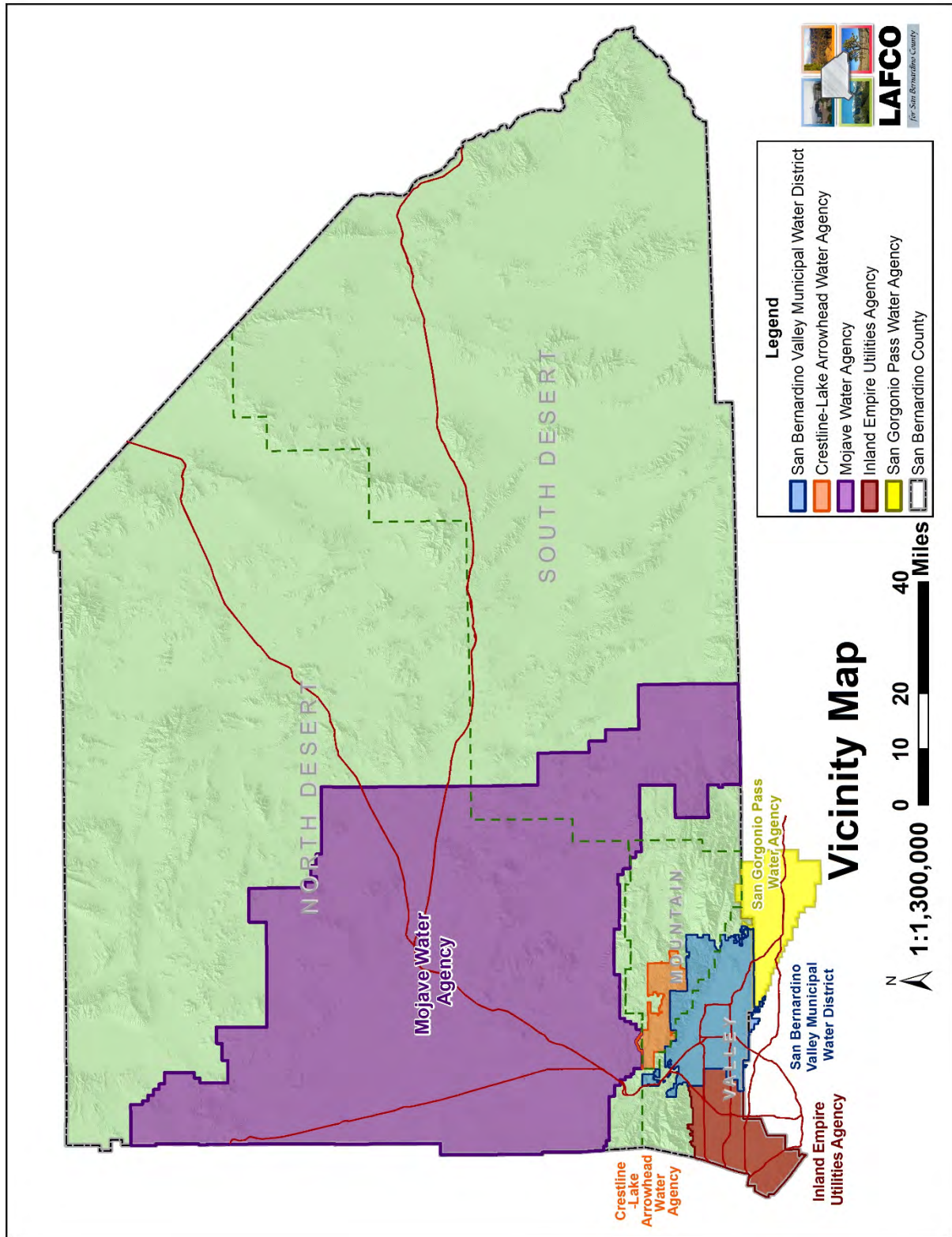
Given its vast land area, the County's overall population density is low, estimated at 105 people per square mile which is lower than neighboring Riverside, San Diego, Orange and Los Angeles Counties. Within the Valley Region, however, population density is 2,313 people per square mile which is on par with Los Angeles and Orange Counties. Figure 2-1, below, includes the county regions overlaid by water wholesalers.

Water Sources

San Bernardino County's water sources are supplied through both local and imported water. On average, 85 percent of the domestic water is supplied by local sources with the balance of 15 percent provided through imported purchased water.¹ Imported water is purchased from State Water Project contractors (the California Aqueduct) as a supplemental source to local water supplies. There are four active State Water Project contractors (Mojave Water Agency, San Bernardino Valley Municipal Water District, Metropolitan Water District of Southern California, Crestline-Lake Arrowhead Water Agency) and one sub-contractor (Inland Empire Utilities Agency) in the County.

¹ County of San Bernardino General Plan, Circulation and Infrastructure Element (2007)

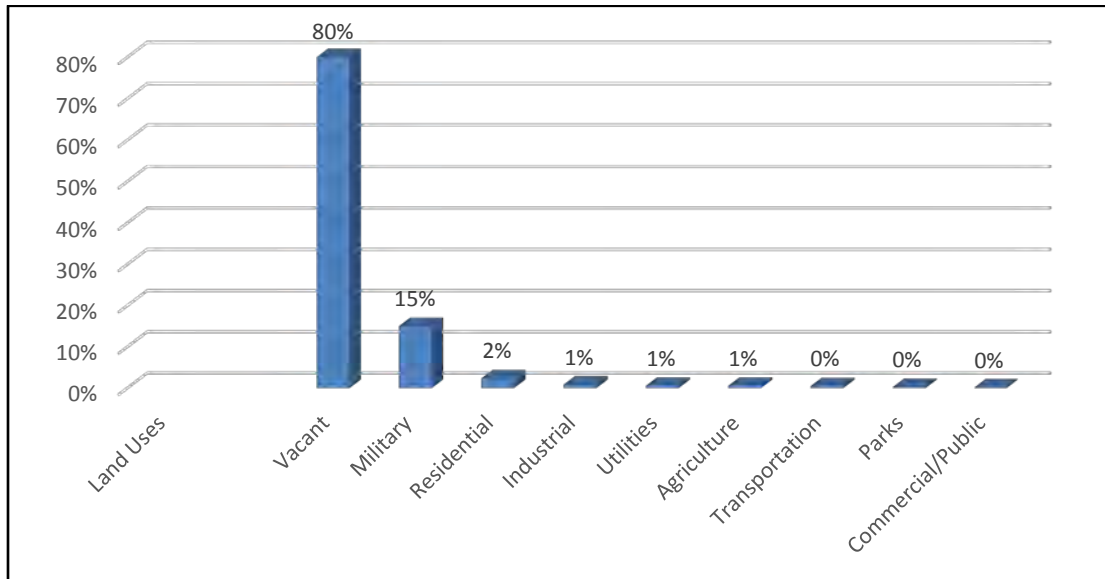
**Figure 2-1:
Vicinity Map - Regions with Wholesale Provider**



County Vacant Land

It is important to note – 80% of the land (roughly 16,200 sq. miles) is primarily vacant (Figure 2-2) and outside the governing control of the County’s Board of Supervisors and 24 cities. This land is largely under federal government ownership and includes forests, wilderness areas, military facilities and national parks/preserves/monuments (Table 2-2). Figure 2-3 on the following page depicts land ownership within the County.

Figure 2-2: Land Uses within San Bernardino County



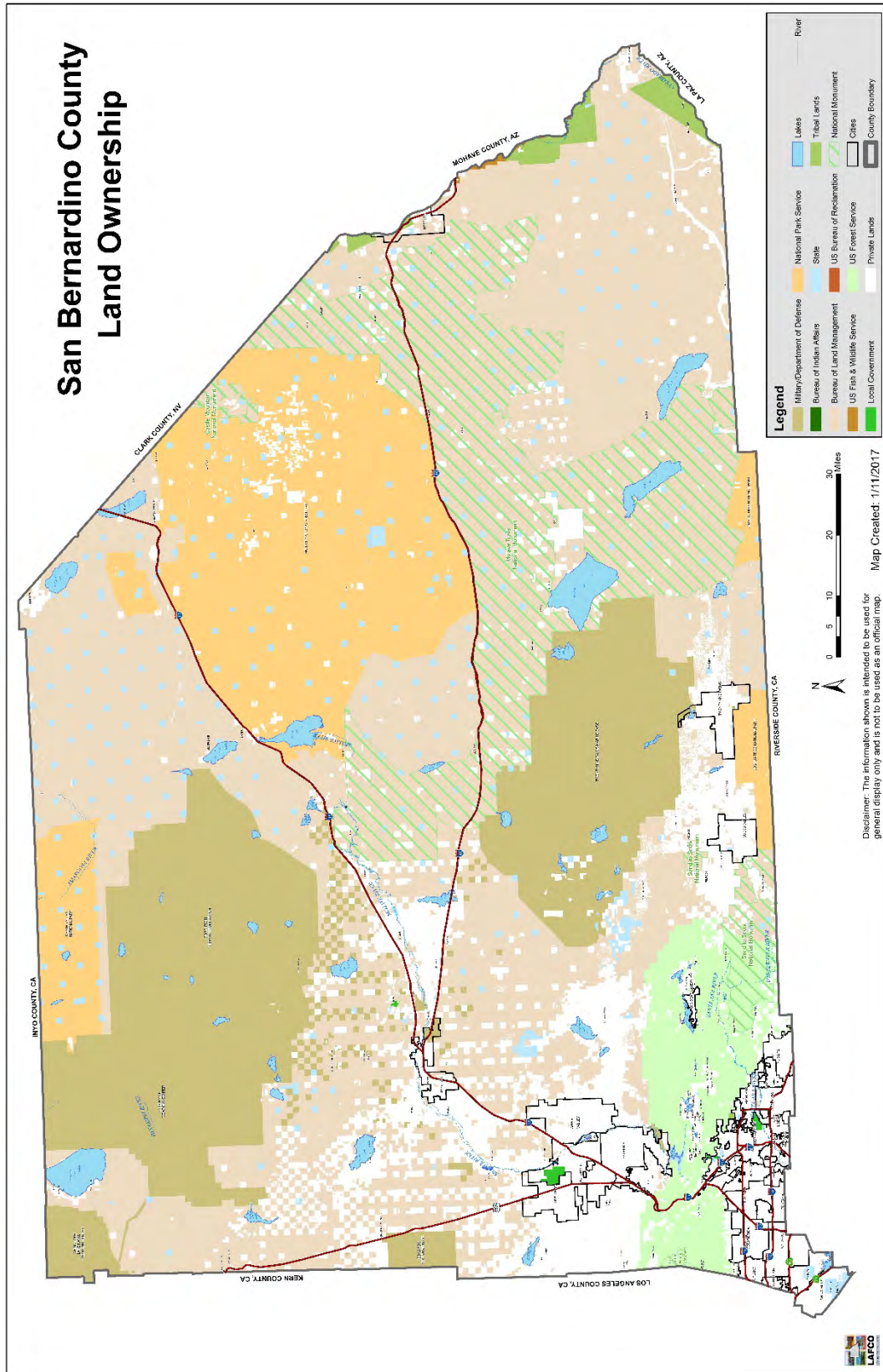
Source: San Bernardino County Community Indicators Report 2015

Table 2-2: Landownership within San Bernardino County

Land Ownership		
Land Owner	Sq. Miles	Percent
Bureau of Land Management	9,158	45.5%
Dept. of Defense	3,522	17.5%
Private Land	3,309	16.5%
National Park Service	2,849	14.2%
US Forest Service	736	3.7%
State of CA	412	2.0%
Bureau of Indian Affairs	99	0.5%
US Fish & Wildlife Service	10	0.0%
US Bureau of Reclamation	9	0.0%
Local Government	2	0.0%
TOTAL	20,106	100.0%
source: SB County		

In the past decade, four notable changes in public land ownership have occurred: (1) private lands along the railways from the Los Angeles County line to Barstow and east to Needles have transferred to the Bureau of Land Management, (2) expansion of Department of Defense lands, (3) increase of the National Parks Service Holdings with the expansion of Death Valley and Joshua Tree National Parks and the creation of the Mojave National Preserve, and (4) designation of four new national monuments in 2016.

Figure 2-3: Land Ownership Map



SECTION III Valley Region

Organization

As detailed in the Introduction, the Countywide Water Agencies Service Review is organized by San Bernardino County's four regions (Valley, Mountain, North Desert, and South Desert), with each region and its respective retail agencies reviewed as a distinct geographic area.

This section of the service review provides a review of the Valley Region, including:

- A. Region Overview
- B. Primer on Senate Bill 88
- C. Hot Spot Identification
- D. Hot Spot Substantiation, Analysis, and Staff Recommendations
- E. Rockets, Fireworks, and Flares Site (East Plume)
- F. Remaining Agencies under LAFCO Purview – Staff Recommendations
- G. Inland Empire Utilities Agency and Metropolitan Water District of Southern California
- H. Addressing Extensions of Service outside a Sphere of Influence – City of Colton

Service Review Updates

In order to fulfill the requirements of Government Code §56430, service review updates are provided for the South Desert Region (Appendix B-1) and each public agency under LAFCO purview as well as the large private retail systems (Appendix B-2). A detailed listing of community water systems¹, wholesale entities, and joint powers authorities is included as a part of Appendix F.

A. VALLEY REGION OVERVIEW

According to the *County of San Bernardino General Plan (2012)*, the Valley covers only 3.3 percent of the total County land but holds approximately 73 percent of the County's population, as shown in Table 3-1, below. Within the Valley Region population density is 2,313 people per square mile which is on par with Los Angeles and Orange Counties.

**Table 3 -1:
County Population by Region**

Region	Area (sq. miles)	Population 2016
Valley	665	1,538,716
North Desert	10,778	451,575
South Desert	8,093	77,078
Mountain	571	50,854
TOTAL	20,107	2,118,223

¹ A community water system is defined as a public water system which serves at least 15 year-round service connections or regularly serves at least 25 year-long residents.

The Valley Region is served by two state water contractors and 29 public and private retail water agencies. The state water contractor for the western portion of the Valley Region “West Valley” is the Metropolitan Water District of Southern California (“Metropolitan”). The Inland Empire Utilities Agency (“IEUA”) is a member agency of Metropolitan and supplies supplemental water purchased from Metropolitan to seven retail agencies covering a 242 square mile service area. *One-third of the water distributed by IEUA’s member agencies is imported water from Metropolitan.* [Amended at the July 19, 2017 LAFCO hearing.]

The state water contractor for the eastern portion of the Valley Region “East Valley” is the San Bernardino Valley Municipal Water District (“Valley District”), with a 325 square mile service area. It spans the eastern two-thirds of the San Bernardino Valley, the Crafton Hills, and a portion of the Yucaipa Valley and includes 18 retail providers. Additionally, Valley District provides service to 28 square miles in Riverside County.

A third state water contractor, the San Gorgonio Pass Water Agency, provides wholesale water to the Beaumont-Cherry Valley Water District, a small portion of which is located in San Bernardino County’s East Valley area and Mountain Region, although there is no wholesale presence in San Bernardino County. Riverside County is the principal county for the San Gorgonio Pass Water Agency.

History

The past, present and future of the San Bernardino Valley are inextricably linked to the availability and management of water. Agriculture was the initial mainstay of the Valley’s economy. Early settlers nourished their crops by diverting water from the Santa Ana River and its primary tributary, Mill Creek. The Valley’s earliest irrigation ditch, the Mill Creek Zanja, was built in 1820 by local Serrano Indians and ultimately stretched 12 miles from what is now Mentone through Redlands to Loma Linda, providing water for the cultivation of fruit, grape vines, pumpkins, squashes and grains. Mormons arrived in the valley in 1851, making camp at the mouth of a canyon of what is now known as Lytle Creek.

Before California became a state, the Mexican government placed settlers in the San Bernardino Valley with a colonizing effort led by Jose del Carmen Lugo in 1839. The Lugos’ originally focused on raising livestock, but had only limited success and sold their Rancho San Bernardino to a group of Mormon settlers in 1851, a year after California became a state. The Mormons were in the Valley only six years when they were recalled to Salt Lake City. During this period, San Bernardino County was created in 1853 from parts of Los Angeles and San Diego counties, and the City of San Bernardino was incorporated in 1854.

According to Valley District’s 2014 publication, *Delivering the Future: 60 Years of Vision and Innovation*, as more settlers moved into the Valley, conflicts over water and water rights intensified in the Valley and across Southern California even as real estate developers promoted the region’s mild climate and growing citrus industry. Despite these early concerns over water rights, entrepreneurs established citrus, wine grapes

and other crops across the Valley, and by the late 1880s, San Bernardino Valley had become a thriving business and farming community. A twenty year drought along with population increases caused local residents and businesses to question the ongoing availability of local water supplies and whether there would be a need to import water. The search for supplemental water supplies was rampant throughout Southern California as a means to fuel the economy, nurture residents, and sustain quality of life.

In the early 1950s, the formation of two new water districts to serve the Valley Region were approved by voters – the Chino Basin Municipal Water District (now the Inland Empire Utilities Agency) and the Valley District – both of which can import supplemental water into their service areas through participation in the State Water Project. IEUA is a current member agency of the Metropolitan Water District of Southern California.

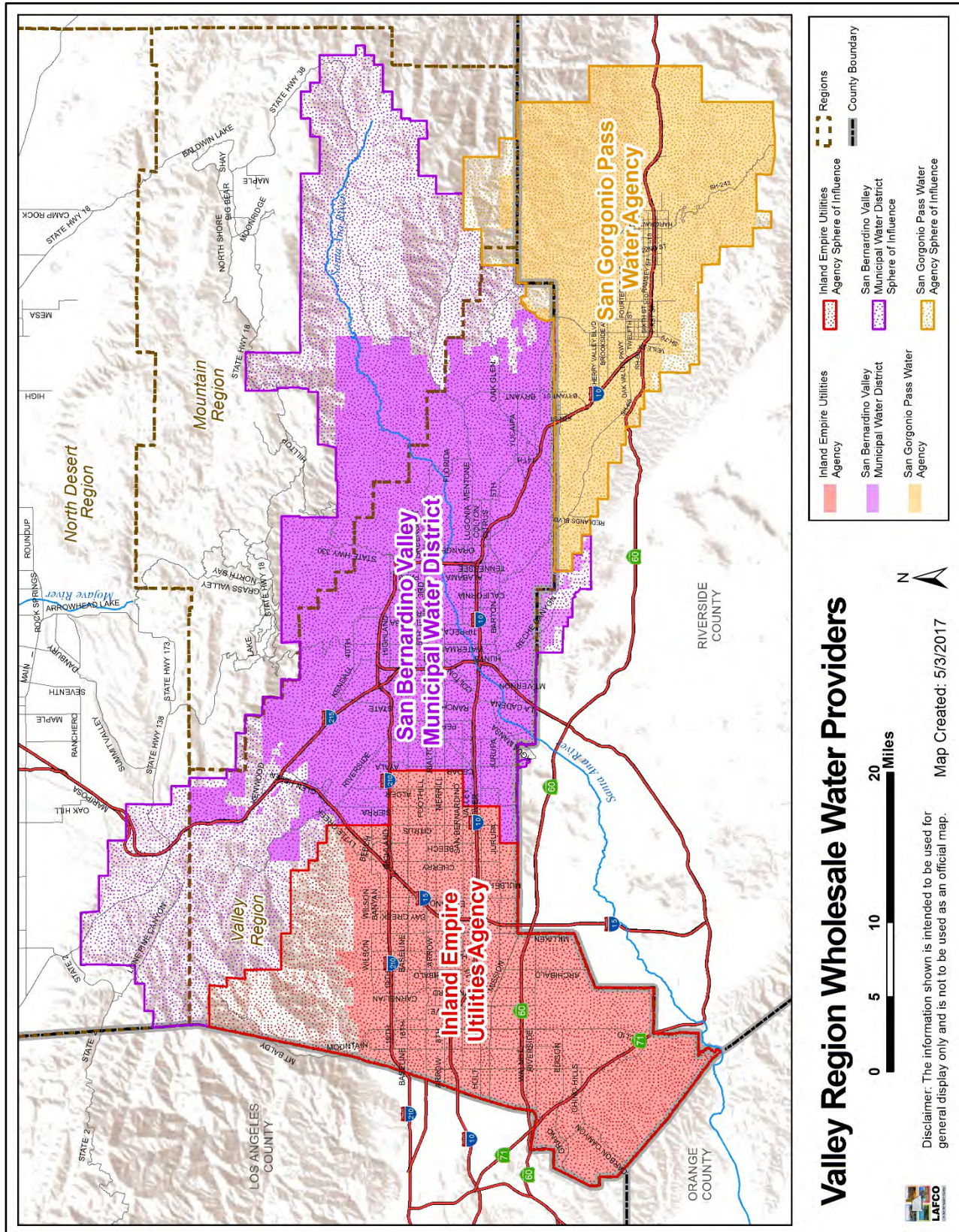
Location and Physical Setting

The Valley Region is generally defined as all the area south and west of the U.S. Forest boundaries. The San Bernardino Range, trending southeast, forms the eastern limit of the Valley, along with the Yucaipa and Crafton Hills. The southern limits of the Valley are marked by alluvial highlands extending south from the San Bernardino and Jurupa Mountains. The Valley Region borders Los Angeles, Orange and Riverside counties. According the *County of San Bernardino General Plan (2012)*, the Valley covers only 2.5 percent of the total County land but holds approximately 73 percent of the County's population. The vast majority of land within the Valley Region consists of incorporated cities. The eastern portion of the Valley includes the Cities of San Bernardino, Colton, Loma Linda, Redlands, Rialto, Highland, Grand Terrace, Yucaipa, and the unincorporated communities of Bloomington, Mentone, Muscoy and Oak Glen. The western portion of the Valley includes the Cities of Chino, Chino Hills, Fontana, Montclair, Ontario, Rancho Cucamonga and Upland, and the unincorporated communities of San Antonio Heights and West Fontana. Figure 3-1 below shows the general Valley Region overlaid by the wholesale providers.

Valley Water Purveyors

In the Valley Region, there are 18 agencies under direct San Bernardino LAFCO purview (two as wholesalers), two districts based in Riverside County which extend into San Bernardino County (one wholesale, one retail), and 15 private water systems. All the retail water agencies supply water to their customers from local groundwater and imported water through IEUA and Valley District. The retail providers are shown in Figure 3-2 below.

Figure 3-1: Valley Region - Wholesale Map



B. PRIMER ON SB 88 – CARROT & STICK

Many small community water systems are disadvantaged and isolated. This can lead to limited access to skilled operators and managers, lack of funding to operate or improve systems, and lack of financial acumen to navigate State funding process.

As the number of failing water systems climbed due in large part to the State's continuing drought conditions, SB 88 authorizes the State Water Board to order consolidation with a receiving water system where a public water system², or a state small water system³ within a disadvantaged community⁴, consistently fails to provide an adequate supply of safe drinking water. This law expedites permanent solutions for failing water systems and those that have run out of water. Consolidation may involve physical consolidation of the participating water systems, management of the participating water systems, or both. Consolidation and extending service from existing public water systems generally reduces costs and improves reliability by extending development costs to a larger ratepayer pool.

The Carrot

As an inducement for consolidation, SB 88 added §116684 to the Health and Safety Code, limiting the liability of water systems, wholesalers, or any other agencies that deliver water to consolidated water systems. This liability relief is available regardless of whether the consolidation occurs through the mandatory consolidation process or through a voluntary act. To date, a number of systems have voluntarily consolidated, and many of these projects were funded by the Drinking Water State Revolving Fund Program, proceeds from the sale of state bonds (Prop. 1 and 84), and monies made available from the emergency drought relief package for consolidation or extension of service, including infrastructure improvements.

The Stick

As a last resort, if voluntary consolidation cannot be negotiated in a reasonable time period, the State Water Board may direct mandatory consolidation or a mandatory extension of service.

² A public water system is a system that supplies water that has 15 or more service connections or regularly serves 25 individuals daily at least 60 days out of the year.

³ A state small water system is a system which provides water to the public that serves 5 to 14 service connections and does not serve more than an average of 25 people for more than 60 days of the year.

⁴ "Disadvantaged community" means a disadvantaged community, as defined in Section 79505.5 of the Water Code, which is located in an unincorporated area or is served by a mutual water company.

C. HOT SPOT IDENTIFICATION

The primary objective of this service review is to provide the Commission with recommendations to: (1) update the determinations from previous service reviews, and (2) initiate sphere of influence updates where appropriate. The identification of “hot spots” is used to arrive at these recommendations - those areas or agencies within the county which have significant water-related issues including, but not limited to, insufficient water supply, water quality related issues, deficient infrastructure, financial challenges and/or inadequate oversight and monitoring.

To identify the county’s water “hot spots”, staff utilized a multi-pronged approach. Previous service review reports and findings, audits and budgets, consumer confidence reports, and sanitary surveys were reviewed as well as state and county water reports. LAFCO’s geographic information system (“GIS”) was also used to identify future population growth areas, disadvantaged unincorporated communities, and small community water systems (between 15 and 1,000 connections)⁵ adjacent to another water system (which addresses SB 88). GIS data was obtained from the U.S. Census, ESRI, San Bernardino County Transportation Authority (formerly San Bernardino Associated Governments), County of San Bernardino, State Department of Water Resources, State Regional Water Quality Control Board, and the wholesale and retail water agencies.

The criteria listed in Table 3-2, below, were used to identify hot spots. Following the table the hotspots are mapped in Figure 3-3.

⁵ A community water system is defined as a public water system which serves at least 15 year-round service connections or regularly serves at least 25 year-long residents. A small community water system is more than 15 connections (25 people) but less than 1,000 connections (3,300 people).

**Table 3-2:
Hot Spot Summary Identification –Valley Region**

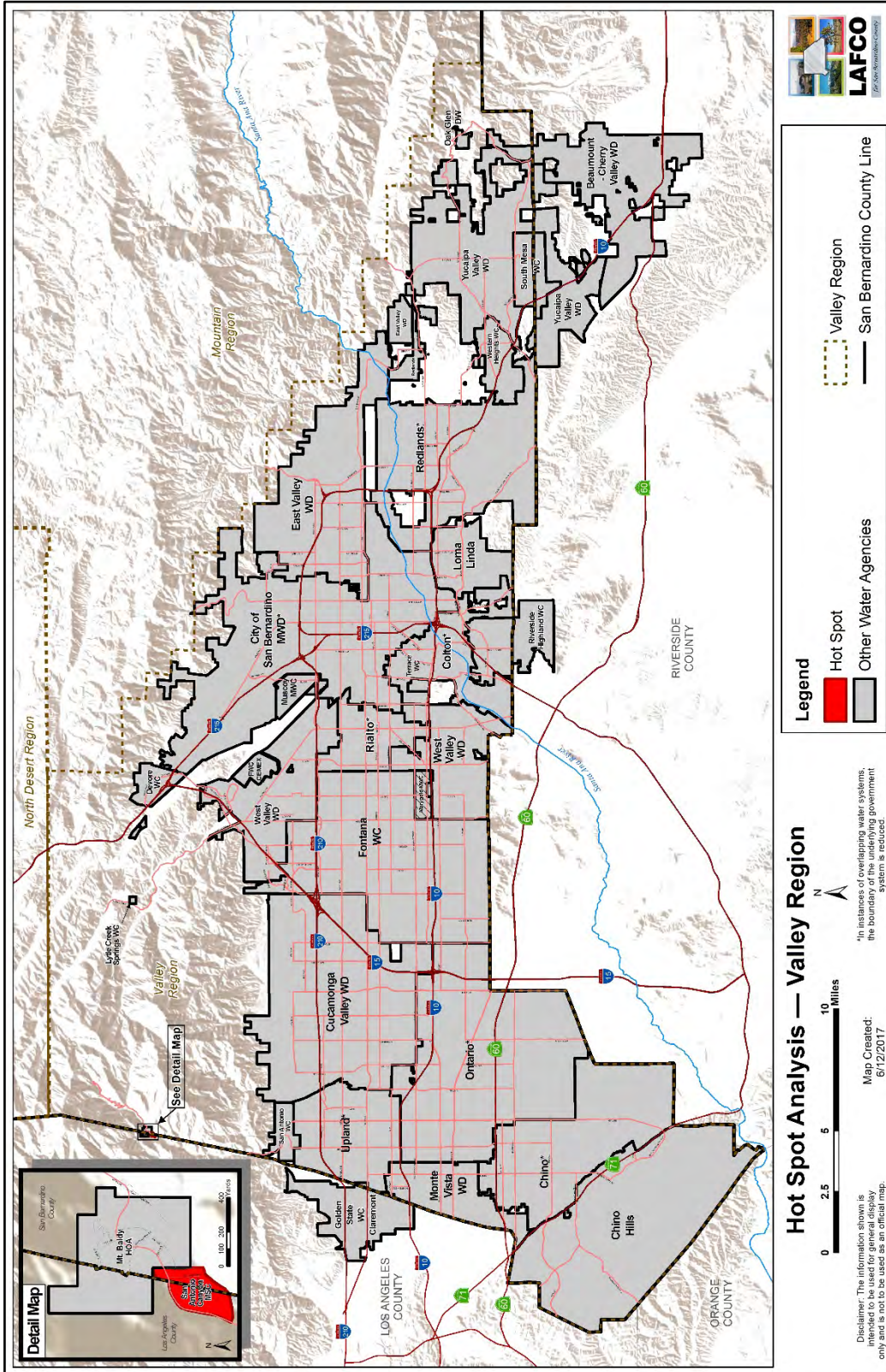
Key Code	●	Yes or High		MWC = Mutual Water Company						
	◐	Portion		WC = Water Company						
	○	No or Low		WD = Water District						
	?	Unknown								
	–	N/A								
Water Purveyor or Site	Within a Disadvantaged Unincorporated Community	Groundwater Basin Priority	Basin Population Growth	Lack of Intertie	Significant Deficiencies identified in Sanitary Survey Report	Financial Challenges per Audit	Small Community Water System (between 15 and 1,000 connections)	Other Matters Identified by LAFCO	Hot Spot	Reference Page in Report
Beaumont-Cherry Valley WD	○	Med	●	○	–	○	○	○		
City of Chino	○	High	◐	○	○	○	○	○		
City of Chino Hills	○	High	◐	○	○	○	○	○		
City of Colton	◐	High	◐	○	○	○	○	○		
		Med								
City of Loma Linda	○	High	◐	○	○	○	○	○		
		Med								
City of Ontario	○	High	◐	○	○	○	○	○		
City of Redlands	◐	High	◐	○	○	○	○	○		
		Med								
City of Rialto	◐	High	◐	○	○	◐	○	●		
		Med								
City of San Bern. Mun. Water Dep	◐	High	◐	○	○	○	○	○		
City of Upland	○	High	◐	○	○	◐	○	○		
Cucamonga Valley WD	○	High	◐	○	○	○	○	○		
		Med								
Devore WC	○	High	◐	?	○	–	●	○		
East Valley WD	◐	High	◐	○	○	○	○	○		
Fontana WC	●	High	◐	○	○	–	○	○		
Golden State WC – Claremont	○	High	◐	?	○	–	○	○		
Lytle Creek Springs WC	○	High	◐	●	?	–	●	○		

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Key Code	●	Yes or High		MWC = Mutual Water Company						
	◐	Portion		WC = Water Company						
	○	No or Low		WD = Water District						
	?	Unknown								
	-	N/A								
Water Purveyor or Site	Within a Disadvantaged Unincorporated Community	Groundwater Basin Priority	Basin Population Growth	Lack of Intertie	Significant Deficiencies identified in Sanitary Survey Report	Financial Challenges per Audit	Small Community Water System (between 15 and 1,000 connections)	Other Matters Identified by LAFCO	Hot Spot	Reference Page in Report
Marygold MWC	●	High	◐	?	○	-	●	○		
Monte Vista WD	◐	High	◐	○	○	○	○	○		
Mt. Baldy HOA	○	--	◐	○	○	-	●	○		
Muscoy MWC	●	High	◐	?	○	-	●	○		
Oak Glen Domestic Water	○	Med	◐	?	○	-	●	○		
Riverside Highland WC	○	High	◐	○	○	-	○	○		
Rockets, Fireworks, Flares Site (East Plume)	◐	High	◐	-	-	-	○	●*		III-13
Rocky Comfort Mutual WC	○	High	◐	○	○	-	●	○		
San Antonio Canyon Mutual Service Comp.	○	--	◐	○	●	-	●	○	●	III-11
San Antonio WC	○	High	◐	?	○	-	○	○		
South Mesa WC	○	Med	◐	?	○	-	●	○		
Terrace WC	◐	Med	◐	?	○	-	●	○		
Tres Lagos MWC	○	High	◐	?	○	-	●	○		
West Valley WD	◐	High Med	◐	○	○	○	○	●		
Western Heights Water Company	○	Med	◐	?	○	-	○	○		
Yucaipa Valley Water District	○	Med	◐	○	○	○	○	○		

*The Rockets, Fireworks, Flares Site (East Plume) is **not** identified as a Hot Spot. Due to the unique circumstance of the migrating plume, information describing the plume and the remediation efforts is included.

**Figure 3-3:
Hot Spot Summary Identification – Valley Region**



D. HOT SPOT SUBSTANTIATION, ANALYSIS, AND STAFF RECOMMENDATIONS

As previously stated, the primary goal of this service review is to provide the Commission with recommendations to: (1) update the determinations from previous service reviews, and (2) initiate sphere of influence updates where appropriate. The remainder of this Section substantiates the hot spots identified in Table 3-1 above and includes staff's recommendations for Commission action.

The following private water retailer identified by LAFCO has been a hot spot. This system is classified as a small water system, and therefore is subject to SB 88 and its potential funds (carrot) and consolidation mandate (stick).

San Antonio Canyon Mutual Service Company (Mt. Baldy)

In November 2014, the State Water Board completed a sanitary survey of the San Antonio Canyon Mutual Service Company. The finding of the survey stated that the Company's immediate attention was needed in securing additional source capacity and implementing interim measures to mitigate the loss of capacity from Spring 1.

Further, the Company was in non-compliance with all requirements for source capacity in Title 22, California Code of Regulations (CCR), Section 64554. Spring 1 essentially went dry in October 2014 leaving Miners Spring as the sole source of water supply for the Company. Capacity at Miners Spring has also appeared to be declining and capacity from the emergency intertie with Mt. Baldy Homeowners Association is not assured. The Division finds that the Company is at risk of water outages and corrective action is needed as soon as possible. The State Water Board requested a plan to address source deficiencies by December 31, 2014.

In April 2015, the Company reported they completed a plan to address source deficiencies, but the State Board stated they did not receive one. The Company's plan was to drill a new well. At first they were looking for drought funding but then considered self-financing after one of their springs dried up. The spring then experienced increased flows, and the Company did not finalize the well drilling. In the April 2015 documents, the Company addressed many of the deficiencies identified by the State. Source capacity and drought interim measures are the two major items that have not been confirmed or corrected by the State Water Board.

The Company provided comments in response to the draft service review requesting that the hot spot identification be removed as both water sources are producing at high capacity. LAFCO staff has followed-up with the Division of Drinking Water ("DDW") on this matter. They state that source capacity for springs is determined as the lowest documented capacity per Title 22, California Code of Regulations, Section 64554(k), and per the Code they will need to look at more than one wet year to determine if the Company can meet ongoing demand. Without a hydrogeologic study to determine a spring's true capacity, DDW cannot make any assumptions that the Company will be able to meet demand at this time. At the Company's next sanitary survey this year, DDW will be able to take another look at the Company's system and evaluate if its historical source capacity can reliably meet demand during dry years or drought

conditions, as the requirement for source capacity is to have that capacity available at all times, not just wet periods. Per said Section, for maximum day demand DDW will look at the past ten years at the time of the next survey.

LAFCO staff acknowledges the Company's source capacity increase as identified in its letter. However, lacking a DDW determination if the Company's sources can meet demand at this time, the Company remains as a hot spot. The Company's comment letter is included in Appendix A.

Should the Company and the abutting Mt. Baldy HOA desire to consolidate systems, either functionally or managerially, it would be eligible for state SB 88 funding to upgrade the systems.

Recommendation

This retailer is not under direct LAFCO purview. Even though this system provides a municipal service, as a private entity it does not have a sphere of influence.

Based upon the hot spot substantiation above, staff recommends that the Commission receive and file this information, as described above.

E. ROCKETS, FIREWORKS, AND FLARES SITE (EAST PLUME)

During the course of the service review, an area was identified that warrants identification but is not considered a hot spot as remediation efforts are well underway.

The Rialto-Colton Sub-basin contains a groundwater contaminant plume called the Rockets, Fireworks, and Flares Site⁶, which is an EPA superfund site. Of the five superfund sites within the County, this site is the only one where the groundwater migration is not under control. The EPA identifies that it, “has reviewed all information on known and reasonably expected groundwater contamination, and the migration of contaminated groundwater is not stabilized.”⁷ In looking at the plume maps provided by West Valley Water District, the overall site does not have a closed boundary at the southern end, indicating the potential for migration.

All active wells located in the Rialto and North Riverside groundwater basins are being treated for perchlorate (except Rialto Well 5). Rialto has adopted a “zero tolerance” policy for perchlorate, meaning that it will not serve water with any perchlorate even if the water meets all of the public health standards.

The cleanup is focused on pollution from the 160-acre Rockets, Fireworks, and Flares Site where toxic chemicals, including perchlorate and trichloroethene (“TCE”), were disposed over many decades. The contamination area has two plumes: the Western Plume which is being addressed by the County of San Bernardino and the Eastern Plume which is under EPA oversight.

The treatment system was constructed to intercept, contain, and treat the impacted groundwater in accordance with Regional Water Quality Control Board Orders RB-2003-0013 and RB-2004-0072. In September 2016 West Valley began using bio-remediation to remove perchlorate and restore water for potable use. The West Bio-Reactor has capacity to provide water to 16,000 customers. The \$23 million dollar treatment plant was paid for largely with grant funding including:

- \$10 million from the State Water Resources Control Board Division of Drinking Water, Proposition 84 funds
- \$2.7 million from the Santa Ana Regional Water Quality Control Board Cleanup and Abatement Account Fund
- \$2.9 million from the US Department of Defense Environmental Security Technology Certification Program
- \$1 million from the Department of Water Resources in cooperation with the Santa Ana Watershed Project Authority
- \$4 million from West Valley
- \$3 million from the City of Rialto

⁶ Former names used for the site are: B.F. Goodrich, GWK, and Rialto-Colton Plume. Source: EPA.

⁷ United States Environmental Protection Agency. Website. “Superfund Site: Rockets, Fireworks, and Flares, Site”. Accessed 15 May 2017. Last update unknown.

<https://cumulis.epa.gov/superpad/SiteProfiles/index.cfm?fuseaction=second.status&id=0905945>

Construction of a second plant is underway, estimated to deliver water in 2019.

Operational cost for the West Bio-Reactor is estimated to be \$900,000 annually. The cost to remediate the site cleanup is being funded by a number of partners including the U.S. Environmental Protection Agency and the Goodrich Corporation. A judicial consent decree required Goodrich, under the EPA's oversight, to fund clean-up facilities. Goodrich has agreed to pay \$700,000 or more annually for the operations and maintenance costs of the removal system for the life of the project. The operational costs of the second plant will also be paid by Goodrich.⁸

There is no LAFCO solution to this circumstance, therefore further LAFCO review is not necessary.

⁸ Steinberg, Jim. "Settlement to help fund microbe treatment of perchlorate in Rialto-Colton groundwater." San Bernardino County Sun. 13 February 2017.

**F. REMAINING AGENCIES UNDER LAFCO PURVIEW –
STAFF RECOMMENDATIONS**

The following agencies under LAFCO purview were not identified as a hot spot.

Beaumont-Cherry Valley Water District (San Bernardino County portion)
City of Chino
City of Chino Hills
City of Colton
City of Loma Linda
City of Ontario
City of Redlands
City of Rialto
City of San Bernardino Municipal Water Department
City of Upland
Cucamonga Valley Water District
East Valley Water District
Inland Empire Utilities Agency (wholesale)
Monte Vista Water District
San Bernardino Valley Municipal Water District (wholesale)
West Valley Water District
Yucaipa Valley Water District

Recommendation

Based upon new information received since the previous service review, staff recommends that the Commission update the previous service review determinations for the agencies listed above to include:

- a. Population and disadvantaged unincorporated communities as described in Appendix B-1.*
- b. Regional and wholesale information from Appendix B-1.*
- c. Information from the Agency's Profile Sheet in Appendix B-2.*

**G. INLAND EMPIRE UTILITIES AGENCY AND
METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA**

1. Lack of Metropolitan Sphere of Influence

Metropolitan has never had an established sphere of influence within San Bernardino County. Metropolitan is a special district that is subject to LAFCO purview, therefore LAFCO is obligated to establish a sphere of influence for the district. Technically, no changes of organization should be processed for any affected agency within a reorganization area lacking a sphere of influence. Metropolitan staff has identified support for a sphere establishment within San Bernardino County to be coterminous with the sphere of influence of its member agency, IEUA.

Recommendation

LAFCO staff recommends that the Commission initiate the establishment of a sphere of influence for Metropolitan within San Bernardino County to be coterminous with the sphere of influence of its member agency, Inland Empire Utilities Agency.

2. IEUA Boundary Discrepancies

There are two areas in which the IEUA and/or Metropolitan boundary are inconsistent with actual service delivery. These areas are shown in Figure 3-4.

- Area A is neither in Metropolitan's or IEUA's boundary. A review of the tax rate area listings do not identify either Metropolitan or IEUA. However, the tax bill for the parcels within the area identify a Metropolitan standby charge but no debt service charge listing for either Metropolitan or IEUA. LAFCO staff understands that Metropolitan and IEUA plan to submit an application to annex the developed area which will include the approximate 17 parcels and roads, and which would be subject to the Metropolitan annexation process.
- Area B has always been in Metropolitan's and IEUA's boundary. A review of the tax rate area listings identify both Metropolitan and IEUA. However, the tax bills for the parcels identify a San Bernardino Valley Municipal Water District ("Valley District") debt service charge with neither Metropolitan nor IEUA identified.

According to Metropolitan staff, a Metropolitan and IEUA detachment & sphere reduction is recommended and is consistent with their boundary & annexation policies. As a part of such a reorganization, an annexation & sphere expansion of the area to Valley District would occur. In essence for Area B, this would be a swap of jurisdiction and spheres.

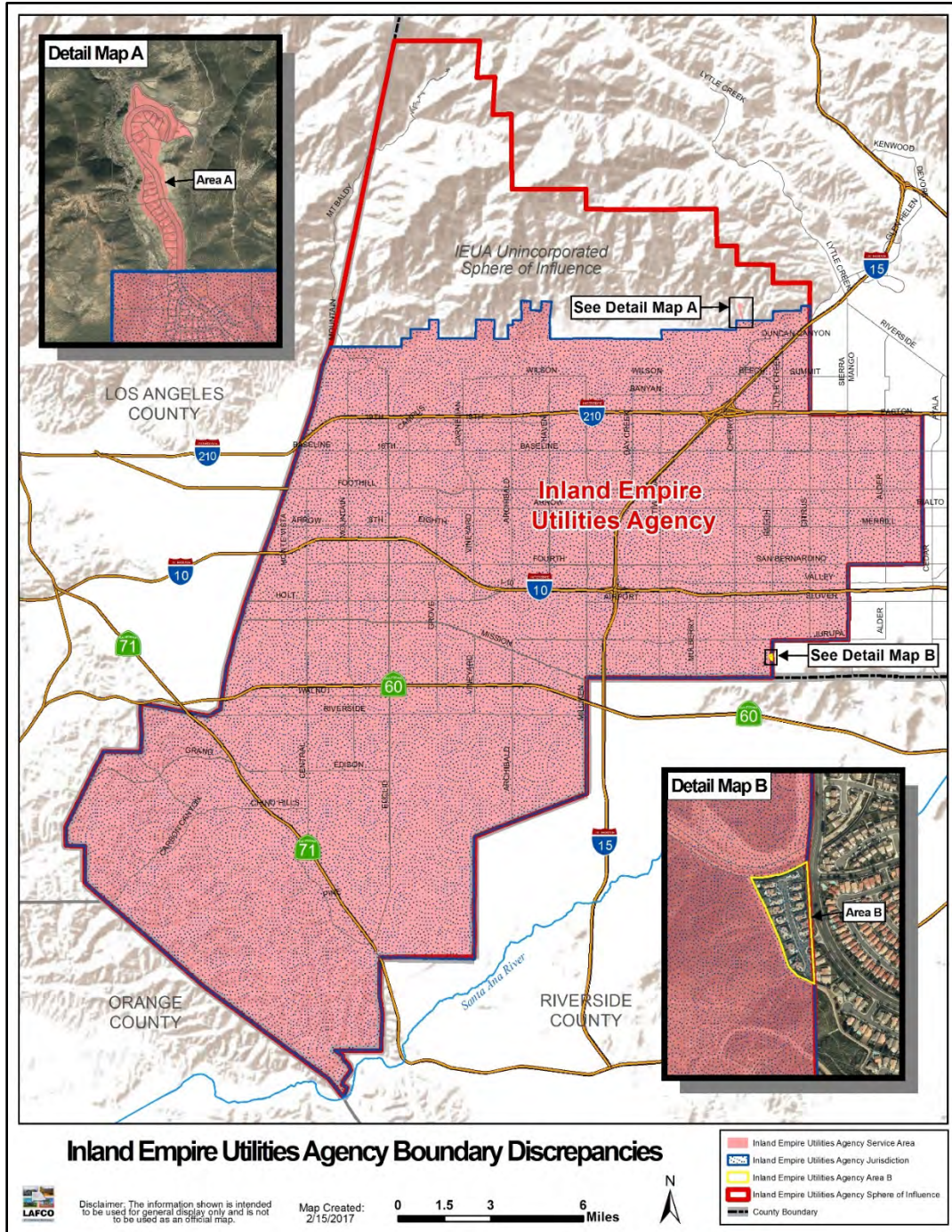
Recommendation

LAFCO has no authority to initiate an annexation or detachment. LAFCO staff recommends:

Area A – An application be initiated to annex this area to Metropolitan and IEUA.

Area B - IEUA or Valley District, or jointly, initiate an application to LAFCO to rectify this circumstance.

Figure 3-4: Inland Empire Utilities Agency Boundary Discrepancies



**H. ADDRESSING EXTENSIONS OF SERVICE OUTSIDE A SPHERE OF INFLUENCE:
CITY OF COLTON**

The City of Colton is in discussion with Riverside Highland Water Company to provide water and sewer service outside of its boundary and sphere (within the Riverside Highland Water Company service area in the City of Grand Terrace). The reason for the potential agreement is that it is more feasible for the City to serve these parcels rather than the Water Company.

Government Code §56133.5 (Assembly Bill 402 effective 2016) establishes a pilot program, through 2020, for Napa and San Bernardino LAFCOs to authorize a city or district to extend services outside of a sphere for additional purposes beyond responding to threat to public health or safety, based upon specific criteria. This process requires that the Commission make the following determinations regarding the area to be served outside the agency's sphere of influence, at a noticed public hearing:

1. That the proposed service extension was identified and evaluated in a service review;
2. That the proposed service extension will not have an adverse impact on open space/agricultural lands and/or is not growth inducing; and,
3. That inclusion of the area to be served into the agency's sphere of influence is not feasible or desirable based on adopted commission policies.

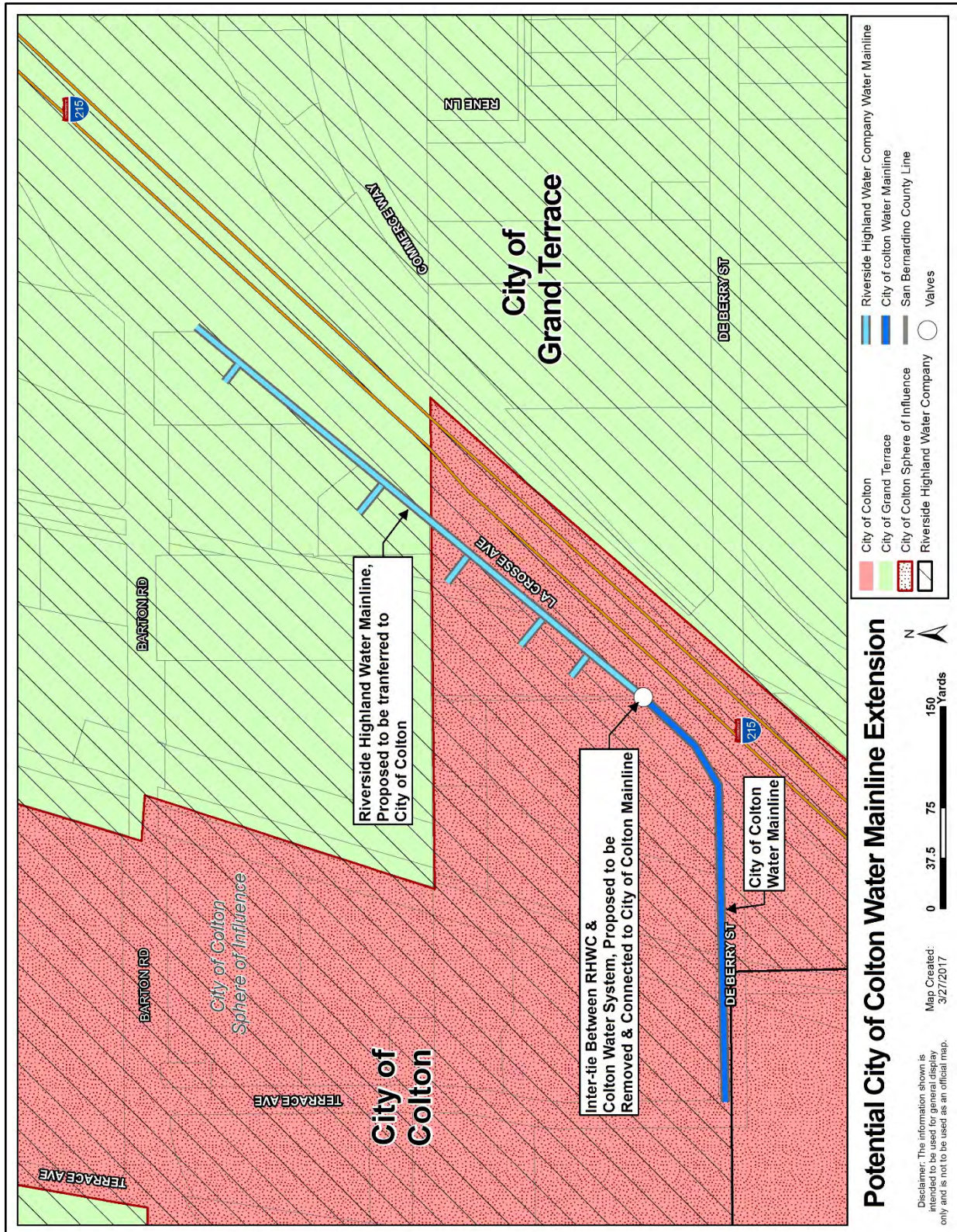
Particular to Item 1 above, this service review identifies the proposed service extension, as outlined above and shown in the map below. To evaluate the proposed service extension, LAFCO staff has reviewed the documentation provided by the City of Colton and the Water Company, on file at the LAFCO office, which identifies that the City is the most logical agency to provide the service. Due to the recently completed Caltrans Bridge/Freeway construction, Riverside Highland Water would like to transfer a water main and five service connections along La Crosse Ave. south of Barton Rd. to the City of Colton. There is already an existing interconnection between Colton and the Water Company. This transfer does not require water main extension since the proposed improvement is to remove the interconnect and cap the end of the water main at Barton road.

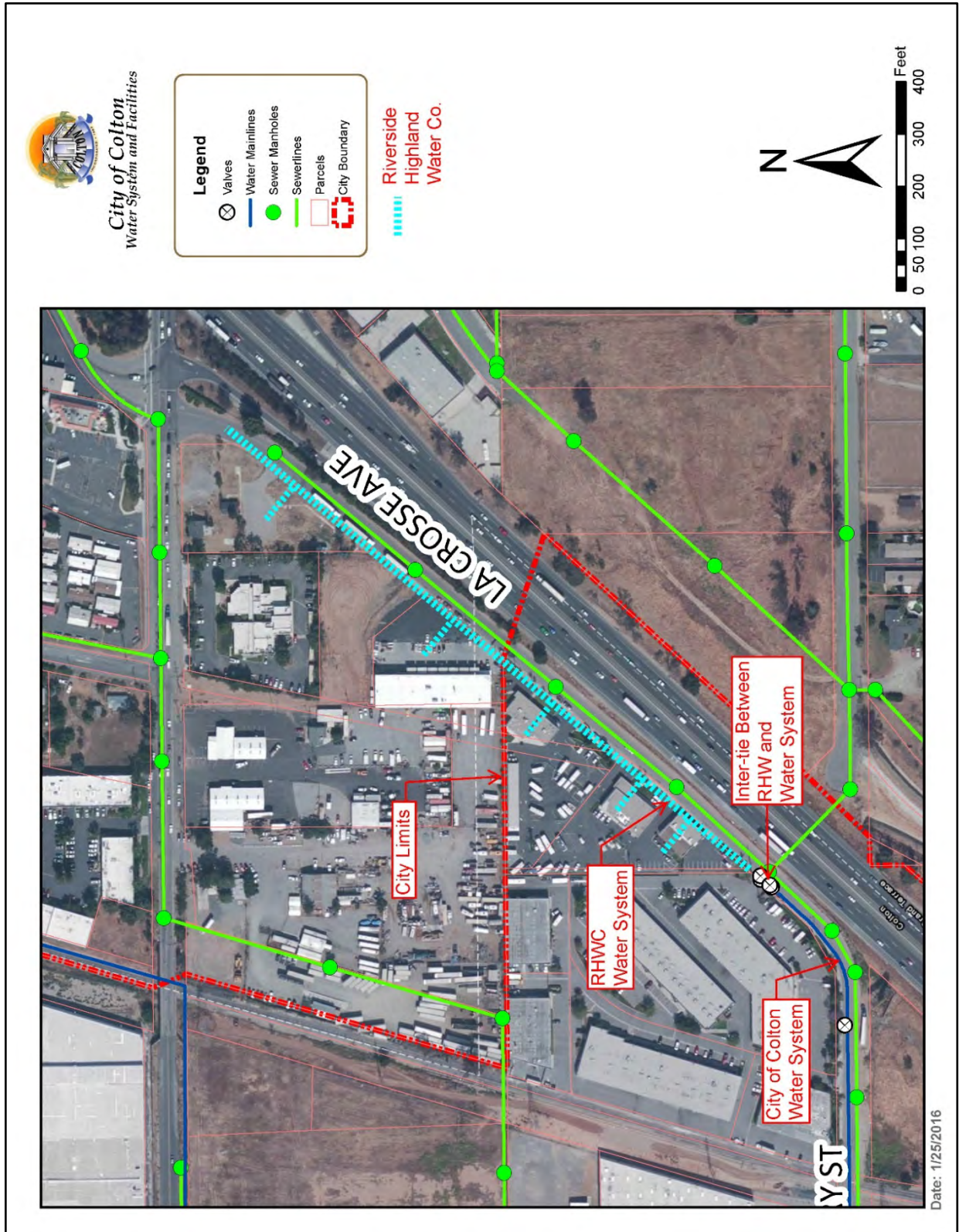
Further, Appendix B-1 provides service review information, on a regional basis, which includes the proposed service extension area.

Should this arrangement be amenable to all parties, then pursuant to LAFCO Policy 3 of Section IV, Chapter 2 of its *Policy and Procedure Manual*:

A proposal by a city or district to provide new or extended services outside the agency's boundaries and outside the agency's sphere of influence would come under the provisions of Government Code Section 56133.5, which will require Commission approval at a noticed public hearing **prior** to the signing of an agreement/contract for the provision of the service.

**Figure 3-5:
Colton/Riverside Highland Proposed Service Extension**





**APPENDIX B
Valley Service Review Update**

B-1. Regional Update

B-2. City, District and Large Agency Updates

APPENDIX B-1

Valley Service Review Update

Regional Update

OVERVIEW

As stated in the Introduction to this report, the focus and primary goal of this service review is to provide the Commission with recommendations to: (1) update the determinations from previous service reviews, and (2) initiate sphere of influence updates where appropriate. In order to fulfill the service review requirements of Government Code §56430, a review of the items, listed below, are included in this Appendix as they pertain to the Valley Region.

- A. Population
- B. Disadvantaged Communities
 - (1) Primer
 - (2) Identification and Characteristics
- C. Groundwater Basins
 - (1) Basin Prioritization by the State
 - (2) Basin Descriptions & Discussion
 - (3) Sustainable Groundwater Management Act of 2014
- D. Inland Empire Utilities Agency Wholesale Area
 - (1) Supply and Demand
 - (2) Recycled Water
 - (3) Water Infrastructure/Planned Improvements
- E. San Bernardino Valley Municipal Water District Wholesale Area
 - (1) Supply and Demand
 - (2) Recycled Water
 - (3) Water Infrastructure/Planned Improvement

Additional information related to each public agency under LAFCO purview as well as the large private retail systems is included in Appendix B-2. A detailed listing of community water systems¹, wholesale entities, and joint powers authorities is included as a part of Appendix F.

A. POPULATION

As previously indicated in this report, the Valley Region is generally divided between two wholesale water agencies – the Inland Empire Utilities Agency (“IEUA”) which generally serves the western portion of the Valley Region, and the San Bernardino Valley Municipal Water District (“Valley District”) which generally serves the eastern portion. Table B-1 below includes population projections for IEUA, Valley District, and the entire Valley Region through 2040.

¹ A community water system is defined as a public water system which serves at least 15 year-round service connections or regularly serves at least 25 year-long residents.

**Table B-1:
Current and Projected Population Estimates – Valley Region**

Agency	2015	2020	2025	2030	2035	2040
IEUA wholesale area	856,168	896,533	955,569	1,009,349	1,067,946	1,125,203
MUNI wholesale area	690,758	721,223	757,015	794,584	834,017	875,407
Remaining areas	27,996	29,278	30,994	32,647	34,421	36,207
Valley Region Total	1,518,930	1,564,409	1,743,578	1,836,580	1,936,384	2,036,817

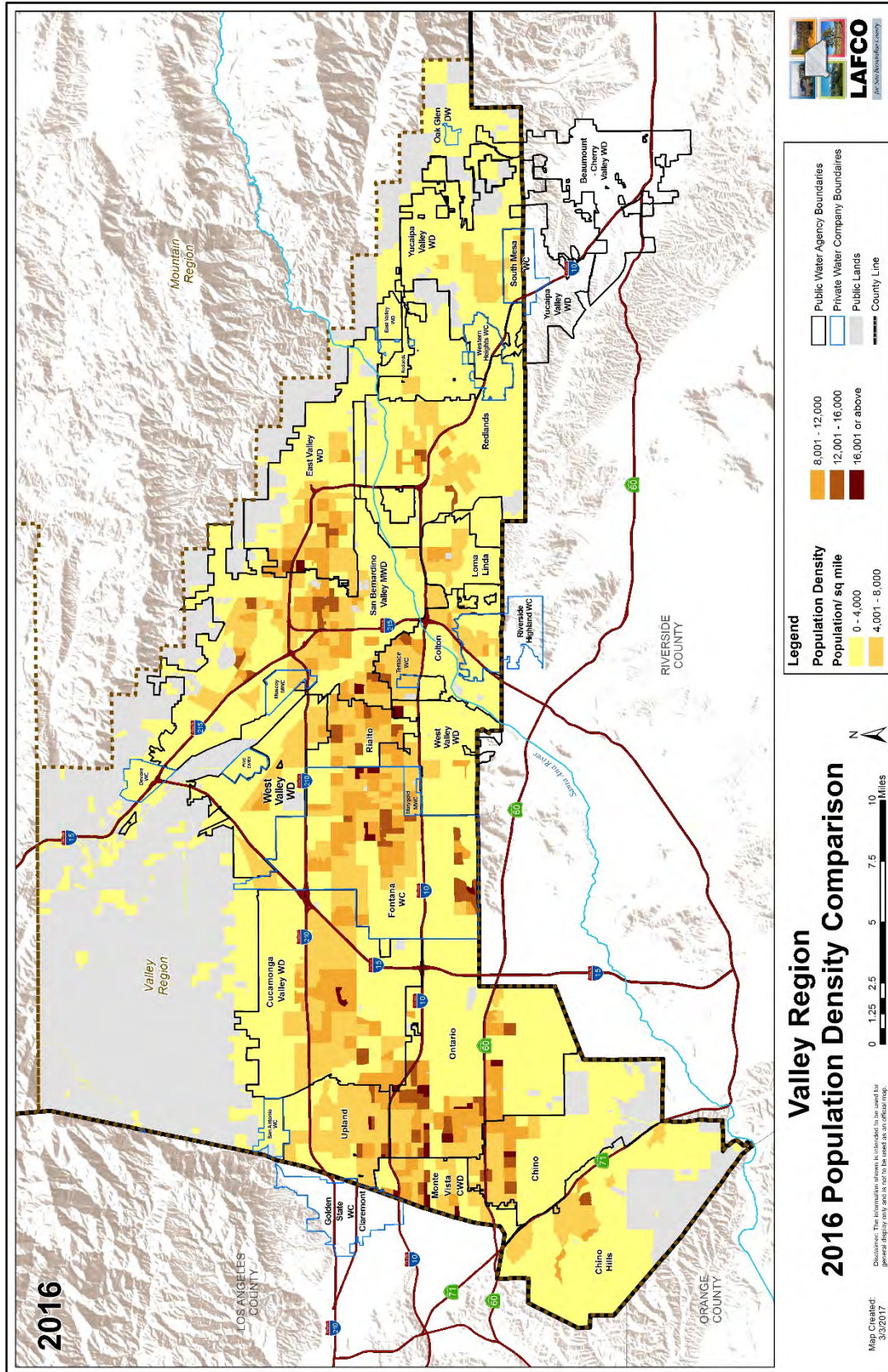
Sources: 2015 IEUA Urban Water Management Plan; 2015 San Bernardino Valley Regional Urban Water Management Plan; ESRI estimates for 2015 and 2020

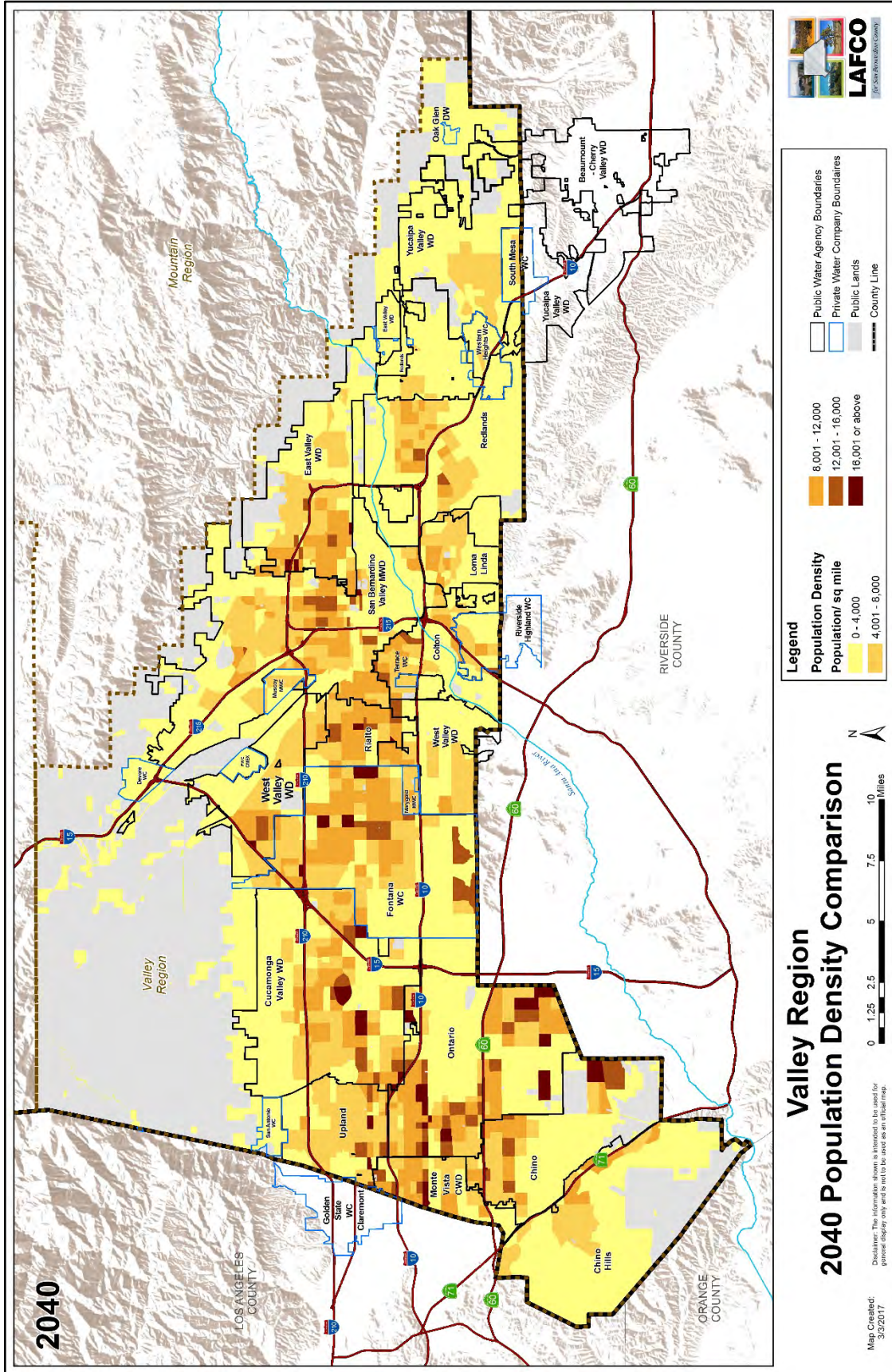
San Bernardino County and the broader Inland Empire region are anticipated to see more population growth in the near term than the coastal regions of Southern California. The high cost of housing in the coastal counties of Los Angeles, Orange and San Diego has made the Inland Empire a destination of choice for many residents willing to commute to those areas. Overall, population for the Valley Region is expected to grow by 34 percent by 2040, which equates to an annual growth rate of 1.2 percent.

Figure B-1, below, compares population density between 2016 and 2040². As the figure illustrates, over the next 24 years, the Valley Region will see pockets of increased population density across the Region. Most notably, sizeable density increases are projected for the areas served by the following retail water agencies: the Cities of Chino, Chino Hills, and Ontario and the Fontana Water Company, Cucamonga Valley Water District, Monte Vista Water District, West Valley Water District, and Yucaipa Valley Water District.

² The data sources are 2010 Census and transportation analysis zones from SCAG’s 2040 Regional Transportation Plan. For this map, public lands are in the name of: United States of America, Government Land, State of California, and County of San Bernardino, as identified by the County Assessor.

Figure B-1: 2016 and 2040 Density Comparison - Valley Region





B. DISADVANTAGED COMMUNITIES

Primer on Disadvantaged Communities – DUCs, DACs & More

Disadvantaged Communities

The State of California adopted a definition of disadvantaged community (or "DAC") through passage of Proposition 50, the Water Security, Clean Drinking Water, Coastal and Beach Protection Act of 2002. This measure added §79505.5(a) to the California Water Code and defines a disadvantaged community as a *"community with an annual median household income that is less than 80 percent of the statewide annual median household income."* For 2016, 80% of the statewide median household income is \$50,043.³ State law requires various entities (i.e. LAFCO, cities and counties, and water agencies) to, in some manner, identify disadvantaged communities which can be located in both incorporated and unincorporated areas.

Disadvantaged Unincorporated Communities

Particular to LAFCOs, the state mandate is to identify the location and characteristics of disadvantaged unincorporated communities (or "DUCs"). §56375 specifically prohibits an annexation to a city of any territory greater than 10 acres where there exists a disadvantaged unincorporated community that is contiguous to the area of proposed annexation unless an application to annex the disadvantaged unincorporated community has also been filed.

DUCs are defined as *territory that constitutes all or a portion of a "disadvantaged community," including 12 or more registered voters or some other standard as determined by the Commission, and have a median household income that is less than 80% of the statewide annual income.* The DAC definition, as defined in Water Code §79505.5(a), differs from the definition of a DUC in two important ways: (1) a DUC must be inhabited, and (2) DUCs comprise unincorporated territory only, not territory within cities. For purposes of further defining a DUC, San Bernardino LAFCO policy defines a community as an *inhabited area comprising no less than 10 dwelling units adjacent or in close proximity to one another.*

Need for Consistency

Other State agencies, such as the California EPA, use alternative criteria to identify disadvantaged communities for grant funding purposes. The different criteria used to identify disadvantaged communities at the local and state government levels is confusing and complicates implementation of a consistent approach to addressing our disadvantaged residents. While staff recognizes the difficulty in developing a one-size-fits-all definition, LAFCO staff's position is that additional work needs to be done State-wide to develop a method for identifying disadvantaged communities that is more consistent yet recognizes the diversity of communities and geographies in California.

³ Environmental Systems Research Institute (ESRI)

Disadvantaged Unincorporated Communities (DUCs)

For LAFCOs, the state requires that service reviews identify and describe the characteristics of disadvantaged communities of *unincorporated* areas only (commonly referred to as “DUCs”). For the purposes of defining a DUC, San Bernardino LAFCO policy defines a community as an inhabited area comprising no less than 10 dwellings adjacent or in close proximity to one another. Uninhabited areas include vacant or government lands. Based upon the criteria identified, Figure D-2 identifies those areas that meet the criteria of a DUC.⁴

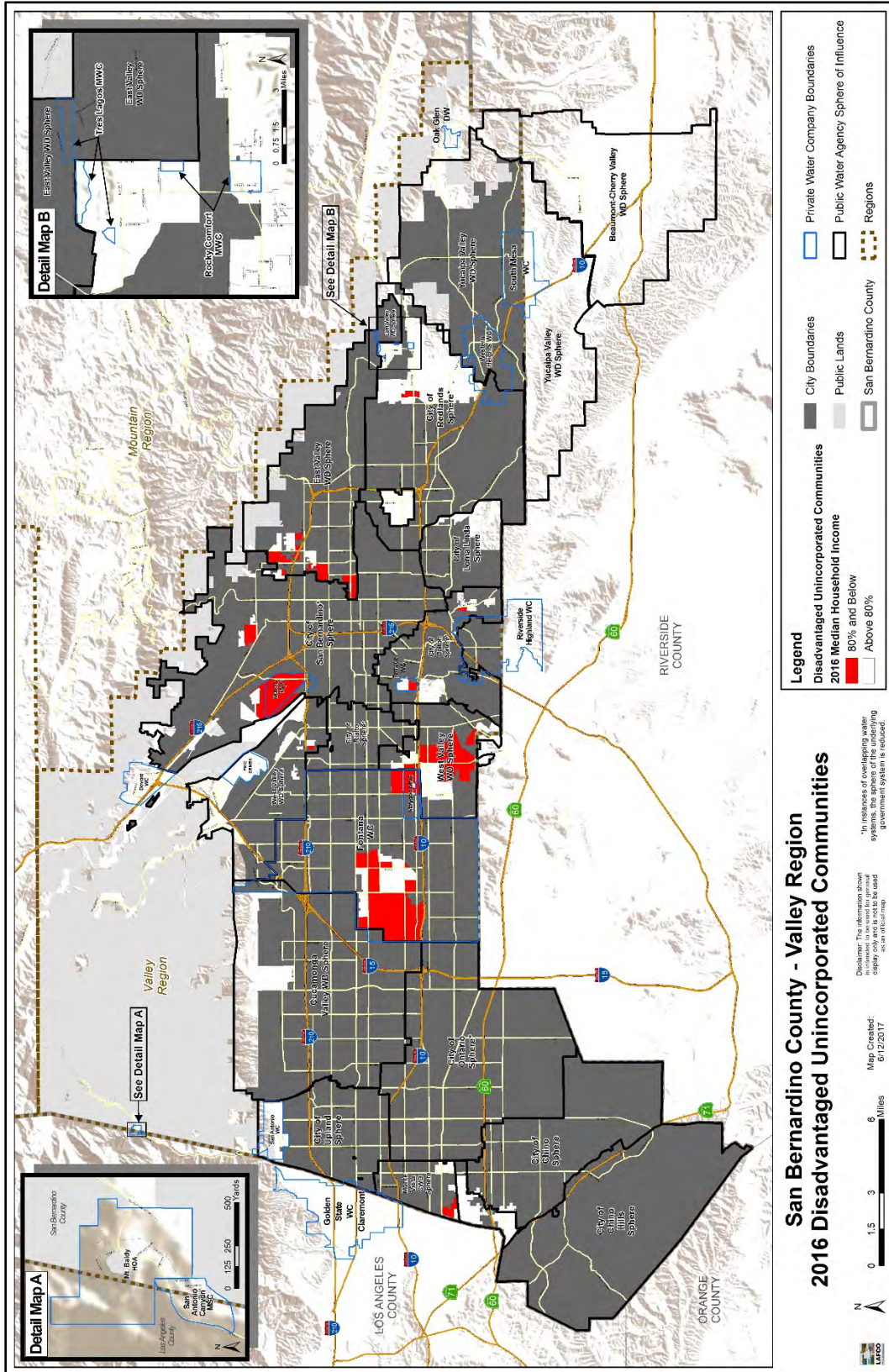
The DUCs identified in the mapping show that the major unincorporated areas in the Valley region meet the criteria of a DUC: Fontana Speedway, Bloomington, Muscoy, and San Bernardino. Characteristics of these areas are as follows⁵:

	West Fontana	Bloomington	Muscoy	San Bernardino
Area, sq. miles	5.64	4.07	2.50	1.44
Pop., 2016	7,517	17,649	9,480	12,872
Households, 2016	1,604	3,938	1,933	3,468
Median Household Income	\$41,833	\$43,923	\$39,472	\$31,038
Characteristics	Single family dwellings, area for former County of SB Speedway Redevelopment Area, industrial, includes the Auto Club Speedway	Rural lifestyle, predominance of large lots, limited commercial development and the prevalence of agricultural and animal raising (Bloomington Community Plan)	Single-family dwellings on large lots that can support small-scale agriculture. Commercial buildings are generally small (Muscoy Community Plan)	Single-family dwellings, lack of significant agricultural

⁴ For this map, non-developable areas include lands in the name of: United States of America, Government Land, State of California, and County of San Bernardino, as identified by the County Assessor.

⁵ ESRI

Figure B-2: Disadvantaged Unincorporated Communities - Valley Region



Disadvantaged Communities (DACs)

Taking the discussion of a DUC a step further, disadvantaged communities (“DACs”) include both unincorporated and incorporated areas. Figure B-3 identifies the disadvantaged communities of the Valley cities and their surrounding areas.

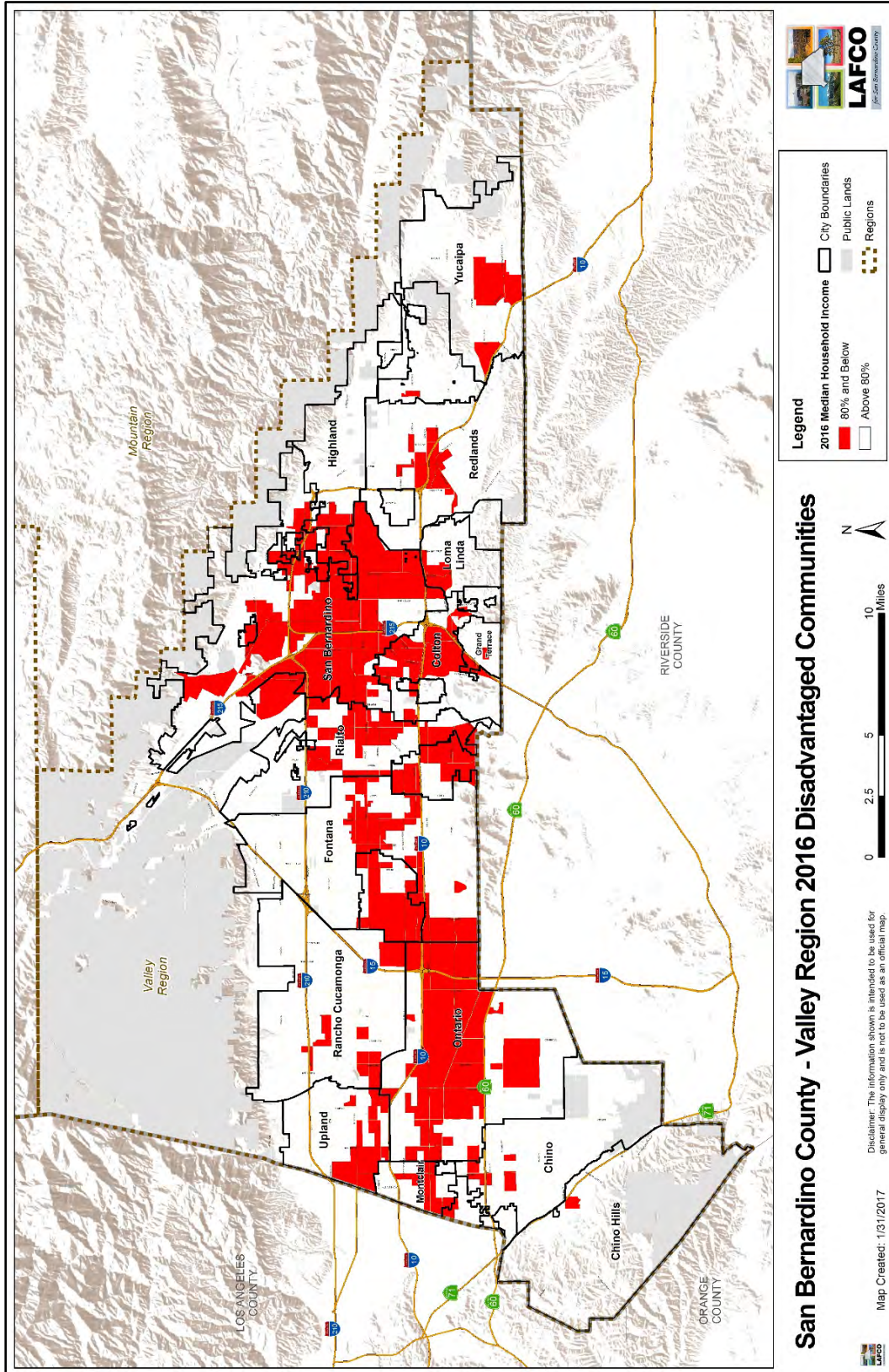
On June 24, 2015, the Department of Water Resources announced the award of the 2014 Water-Energy Grant Program whereby the Santa Ana Watershed Project Authority’s (“SAWPA”) regional project, the Water-Energy Community Action Network (“WECAN”), will receive a total of \$2.3 Million. The funding for this grant is provided by appropriated funds from the Greenhouse Gas Reduction Fund created by AB 32, the Global Warming Solutions Act of 2006. WECAN brings water savings to approximately 260 homes and energy savings to approximately 1,703 homes in DACs in the Santa Ana River Watershed.

In the west valley, cluster areas are identified as well, with a central area for DACs located in the City of Ontario. From this central area, DACs are somewhat scattered outward west (towards Montclair) and east (towards Fontana), especially south of I-10.

In the east valley, a large number of census tracts are classified as DACs. Cluster areas are identified, while a central area for DACs occurs between the east side of the City of San Bernardino and west side of the City of Highland. From this central area, DACs are somewhat scattered outward towards Fontana, Colton, and Bloomington. On the eastern portion, central Redlands and Yucaipa are classified as disadvantaged.

As outlined in the Upper Santa Ana River Watershed Integrated Regional Water Management Plan (January 2015), which generally includes Valley District in San Bernardino County, the 2015 Integrated Regional Water Management Plan process included efforts in 2013 to identify and coordinate outreach with disadvantaged communities to identify potential water resource needs. In this area, the vast majority of DACs receive water supplies that meet all state and federal standards for water quality. Areas with the largest concentrations of DAC residents have developed programs to assist the DAC customers in paying their water related bills while still ensuring their water and wastewater service are meeting all applicable state and federal regulations.

Figure B-3: Disadvantaged Communities - Valley Region



C. GROUNDWATER BASINS

Basin Prioritization by the State

The Valley Region is a part of the overall Upper Santa Ana Valley Groundwater Basin, which is composed of numerous sub-basins. There are generally two basins within the West Valley (Chino and Cucamonga) and five basins, or portions thereof, within the East Valley (Bunker Hill, Rialto-Colton, Riverside-Arlington, San Timoteo and Yucaipa). As part of the California Statewide Groundwater Elevation Monitoring Program and pursuant to the California Water Code §10933, Department of Water Resources (“DWR”) is required to prioritize California groundwater basins⁶ based on their adverse effects to the local habitats and stream flows and to help identify, evaluate and determine the need for additional groundwater level monitoring.⁷ All seven basins are classified as either high (three) or medium (four) priority basins. Figures B-4 and B-5 maps these basins by priority rating, overlaid by adjudicated basins and wholesale agency, respectively. Table B-2 is a summary of key basin characteristics from the DWR. A description of each basin follows.

⁶ “Groundwater basins or sub-basins” refers to basins and sub-basins as defined in DWR Bulletin 118. Department of Water Resources, 2003. California’s Groundwater – Bulletin 118 Update 2003.

⁷ The DWR will reprioritize the basins in 2017.

Figure B-4: Basin Priority with Adjudicated Basin Overlay

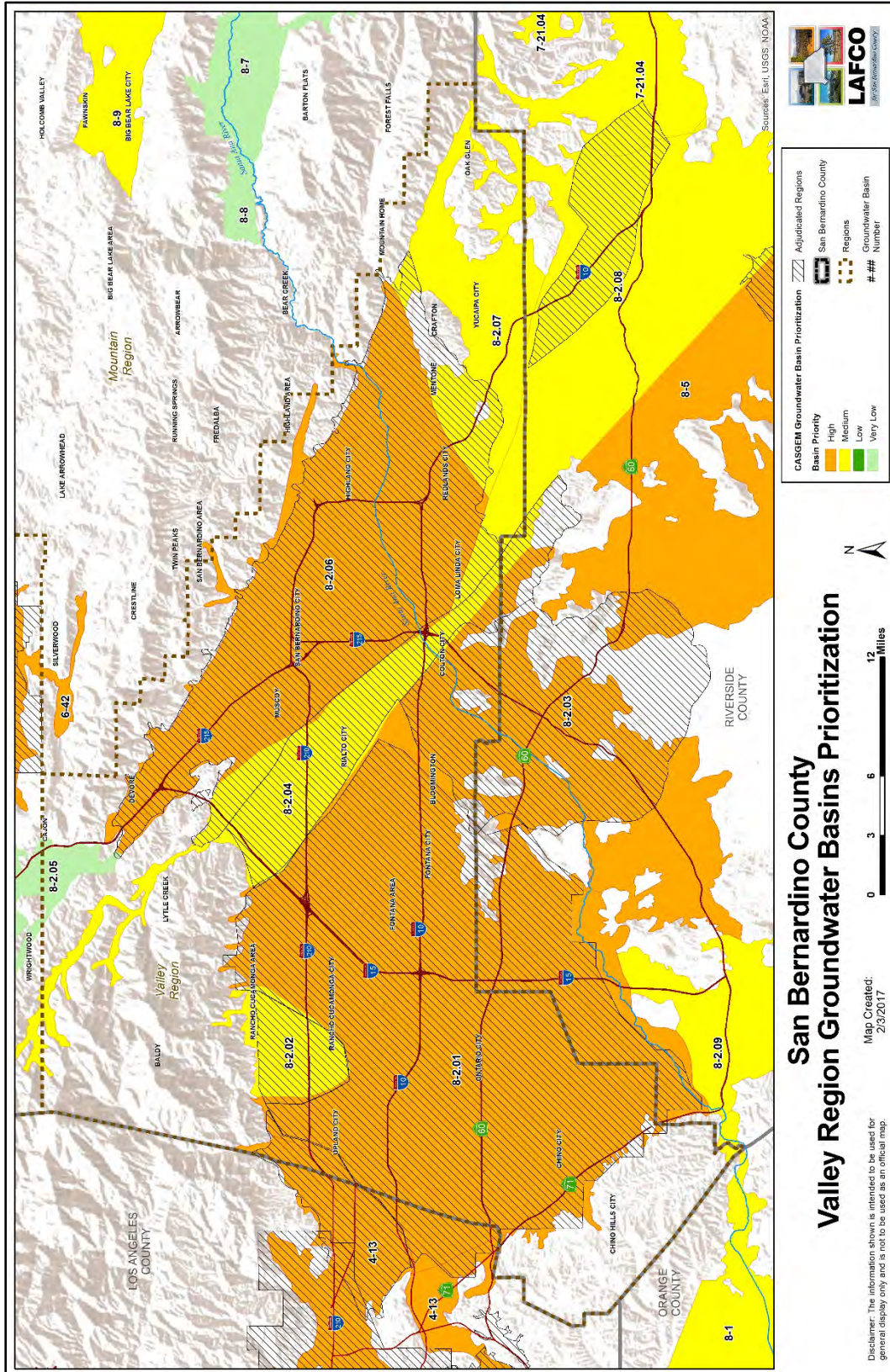


Figure B-5: Basin Priority with Wholesale Agency Overlay

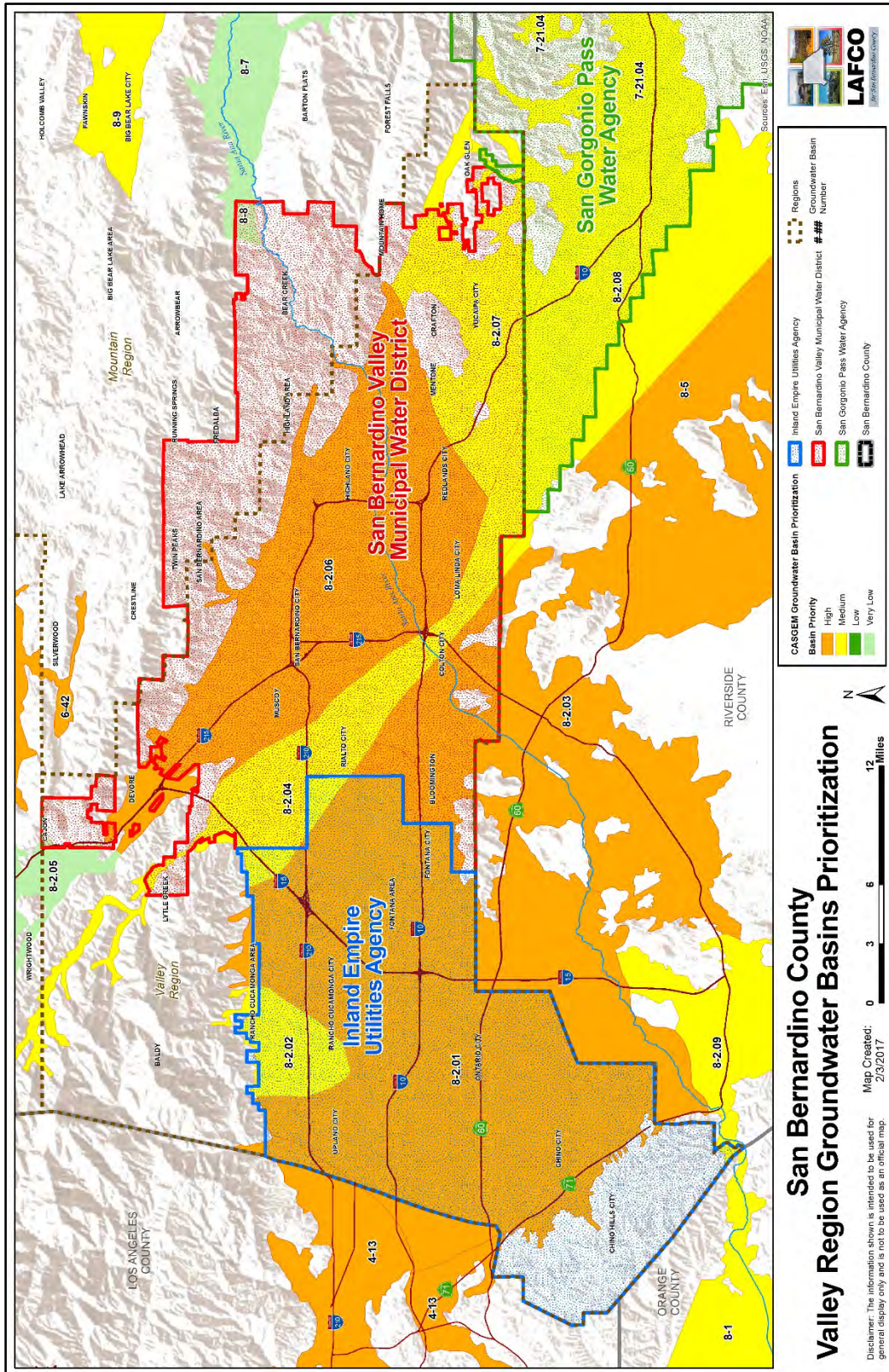


Table B-2: Basin Priority

Basin Number	Basin Name	Sub-Basin Name	Sq. Mile	2010 Population	Data Component Ranking Value							Overall Basin Priority	Impact Comments	Other Information Comments	
					Population	Population Growth	Public Supply Wells	Total Wells *	Irrigated Acreage	GW Use **	Impacts				Other Information
4-13	SAN GABRIEL VALLEY		198.9	1,275,187	5	1	5	2.25	0	4	3	1	High	Superfund sites are present within the basin and other areas with water quality impacts are known. Basin is in overdraft.	Adjudication (aka Six Basins)
7-21.04	COACHELLA VALLEY	SAN GORGONIO PASS	60.7	29,540	2	5	3	0.75	1	4	2	1	Medium		Basin is adjudicated.
8-1	COASTAL PLAIN OF ORANGE COUNTY		348.8	2,309,966	5	2	4	3.75	0	5	1	0	Medium	Saline intrusion issues.	
8-2.01	UPPER SANTA ANA VALLEY	CHINO	241.7	898,653	4	2	4	2.25	3	4	3	1	High	Locally high nitrates and TDS. Pub. Com. to include subsidence, historic overdraft, ground fissuring, problems mitigated with OBMF, reduce from 4 to 3.	Basin is adjudicated. Pub. Com. program of controlled overdraft of 400,000 AF from the Chino Basin though 2030 to control the outflow of poor-quality rising GW
8-2.02	UPPER SANTA ANA VALLEY	CUCAMONGA	15.0	51,001	4	1	5	0.75	1	3.5	3	0	Medium		
8-2.03	UPPER SANTA ANA VALLEY	RIVERSIDE ARLINGTON	92.0	336,884	4	2	4	3	2	4.5	5	0	High	Water quality degradation issues known in several public supply wells.	
8-2.04	UPPER SANTA ANA VALLEY	RIALTO-COLTON	47.2	145,832	4	1	4	2.25	1	3	3	0	Medium	Extensive perchlorate contamination in basin.	
8-2.05	UPPER SANTA ANA VALLEY	CAJON	36.4	520	1	0	1	0.75	1	0.5	0	0	Very Low		
8-2.06	UPPER SANTA ANA VALLEY	BUNKER HILL	126.5	363,394	4	1	5	2.25	2	3	3	1	High	The Bunker Hill sub-basin is impacted with PCE and TCE from the Newmark Superfund site and with perchlorate from the Crafon-Redlands plume.	Adjudication (Western San Bernardino)
8-2.07	UPPER SANTA ANA VALLEY	YUCAIPA	39.7	65,180	3	1	4	2.25	2	3.5	5	0	Medium	Overdraft. Documented impacts of nitrates and sulfates. (B-118)	
8-2.08	UPPER SANTA ANA VALLEY	SAN TIMOTEO	114.9	54,169	2	5	3	1.5	1	2.5	3	1	Medium	Locally high nitrates and salinity (B-118). GAMA reported upper basin water quality issues.	Parts of the subbasin are adjudicated.

NOTE: * Data component values were reduced by 25% due to data confidence, prior to calculating total GW basin ranking value

** Sub-fields that are used to determine the overall GW Reliance Total ((GW Use + GW %)/2)

*** Overall Basin Ranking Score = Population + Population Growth + PSW + (Total Wells x .75) + Irr Acreage + (GW Use + GW %)/2 + Impacts + Other

CHINO BASIN

Chino Basin Snapshot

(Basin 8-2.01)

Adjudicated	<i>Chino Basin Municipal Water District v. City of Chino et al.</i>
Watermaster	Chino Basin Watermaster
Basin Priority, as identified by the State	High
Area	242 sq. miles
2010 population	898,653
Groundwater reliance	Significant
Water quality impacts	Locally high nitrates and total dissolved solids
Other impacts	Historic overdraft, subsidence, ground fissuring

Basin Summary, taken in part from:

“An Evaluation of California’s Adjudicated Groundwater Basins” prepared by the Center for Global, International and Regional Studies at the University of California, Santa Cruz for the State Water Resources Control Board. 2016.

Chino Basin is one of the largest groundwater basins in Southern California. It abuts Los Angeles County, Orange County, and Riverside County.⁸ Over the past few decades, the basin has experienced rapid growth. The southern area was once notable for containing the heaviest concentration of dairy farms in the United States. While there has been some subsidence, most of it is the result of centralized pumping in one area. Although the basin has conflict from time to time it is often looked to as a statewide model of how adjudication can be turned into a success story. Three different stakeholder groups—overlying agricultural, overlying non-agricultural, and appropriators—negotiated a management plan prior to adjudication, and it was adopted in a 1978 stipulated judgment. Stakeholders agreed on water rights for each group of users. There were multiple additional amendments over the last twenty years [*with the latest*] adopted in a 2012 restated judgment.

Watermaster

The Chino Basin Watermaster is progressively and actively implementing the Basin's Optimum Basin Management Program which includes extensive monitoring, further developing recharge capabilities, storage and recovery projects, managing salt loads, developing new yield such as reclaimed and storm water recharge and continuing to work with other agencies and entities to enhance this resource. The Watermaster is not under LAFCO purview; however its public members are. It is composed of three stakeholder groups, called Pools:

- Overlying Agricultural Pool Committee, representing dairymen, farmers, and the State of California;
- Overlying Non-Agricultural Pool Committee, representing area industries;

⁸ Approximately five percent of the Chino Basin is located in Los Angeles County, 15 percent in Riverside County, and 80 percent in San Bernardino County.

- Appropriative Pool Committee, representing local cities, public water districts, and private water companies.

Water Quality

Due to the historical agricultural use, de-salters were installed to address water quality and outflows to the Santa Ana River. The de-salters treat the water it pumps then make it available to retailers without replenishment obligations. The brine is transported from the basin via the “Brine Line”. The City of Ontario provided comments to the draft staff report and states that, “All production by the Desalters is replenished and/or accounted for through basin recharge, replenishment obligations incurred by the parties to the Chino Basin Judgement or court-approved pumping without replacement.” The City’s comments to the draft staff report and LAFCO staff’s response are included as a part of Appendix A.

In Chino Basin, a number of groundwater contaminant plumes have been identified - the result of past industrial operations over many decades. They include: the GE Flatiron Facility, GE Test Cell Facility, Ontario Airport, Kaiser Steel Corporation, Milliken Landfill, California Institute for Men, Upland Landfill and Chino Airport. Most are being treated at on-site remediation facilities.⁹ Specifically, the plume in south Ontario was caused by companies cleaning aircraft parts in what is now Ontario Airport. IEUA is taking the lead in a multi-agency and private business effort to clean the plume.¹⁰ Initial costs for the cleanup are \$12.5 million to be paid from federal and state grant money. Additionally, the effort will leverage a planned expansion of an existing effort by the Chino Basin Desalter Authority to install a well for the water’s extraction to carry the well’s output via a proposed pipeline into Chino Basin Desalter Authority’s Desalter No. 2 in Mira Loma.¹¹

Main water quality problems in the basin have to do with nitrate contamination from agricultural land use. The City of Ontario provided comments to the draft staff report and states that, “The parties to the Chino Basin Judgement have undertaken extensive basin management efforts over the last decades. Currently, groundwater recharge and storage programs area performed without material physical injury to the basin including water quality related impacts.” The City’s comments to the draft staff report and LAFCO staff’s response are included as a part of Appendix A.

Timeline of Significant Events, from the Chino Basin FY 2015-16 39th Annual Report

1970s	Conflicts over water threaten supply reliability, water quality, and the regional economy.
1973	Established a fund and implemented a pump tax to raise money to pay for studies that aid in implementing recharge programs in the Basin.

⁹ Groundwater Basin Reports – Inland Empire Basins (2007)

¹⁰ The agreement and cleanup order involves the Cities of Ontario and Upland, Aerojet, Rocketdyne, Boeing, General Electric, Lockheed Martin, and the U.S. Department of Defense.

¹¹ Steiner, Jim. “Official: To Clean Up Ontario’s Toxic Water on the Cheap(er), Agencies Must Pounce”. *San Bernardino County Sun*. 21 December 2016.

- 1978 Chino Basin is adjudicated and Watermaster is created. Planning and funding are initiated to manage the Basin.
- 1999 Optimum Basin Management Program provides a detailed blueprint to ensure a reliable water supply and protect and enhance water quality.
- 2000 & 2007 Peace (I) and Peace II Agreements make effective collaboration possible, resulting in hundreds of millions of dollars in cost-savings and other benefits.
- 2004 Unique Maximum Benefit Salinity Management Program is adopted. This enabled implementation of a massive Basin-wide recycled water reuse, stormwater and supplemental water recharge program, and expansion of the groundwater desalting program to achieve hydraulic control.
- 2008-2010 The Recharge Master Plan Update is a critical step to ensure long-term water quality and supply.
- 2011 Initiated Safe Yield Reset process.
- 2013-2014 Completed the 2013 Amendment to the 2010 Recharge Master Plan Update, which is the new foundation to cost-effectively recharge stormwater, imported water and recycled water with the goal of improving water quality, and ensuring water supply reliability throughout the Basin into the future.
- 2015 The Watermaster Board adopted Resolution No. 2015-06, endorsing the 2015 Safe Yield Reset Agreement, and directed Watermaster legal counsel to file the Agreement with the Court.

The City of Ontario provided comments to the draft staff report and identifies, "...the conclusion of the Safe Yield Reset by court order in April 2017." The City's comments to the draft staff report and LAFCO staff's response are included as a part of Appendix A.

CUCAMONGA BASIN

Cucamonga Basin Snapshot		(Basin 8-2.02)
Adjudicated	<i>San Antonio Water Company v. Foothill Irrigation Company et al.</i>	
Watermaster	No watermaster appointed by court. Operates with a management committee: Cucamonga Valley Water District, San Antonio Water Company, and West End Consolidated Water Company	
Basin Priority, as identified by the State	Medium	
Area	15 sq. miles	
2010 population	51,001	
Groundwater reliance	Significant	
Water quality impacts	High nitrates reported in 14 of 24 wells tested	
Other impacts	High number of public supply wells per population	

Basin Summary, taken in whole from:

“An Evaluation of California’s Adjudicated Groundwater Basins” prepared by the Center for Global, International and Regional Studies at the University of California, Santa Cruz for the State Water Resources Control Board. 2016.

The Cucamonga Basin is a small groundwater basin located in San Bernardino County. In the 1950s, approximately 25 parties, mostly small local water companies and several individual water users, filed an action to adjudicate the rights to the basin’s groundwater and certain surface waters tributary to the basin. The subsequent adjudication resulted in a 1958 Decree that contains some provisions for the metering and recording of water production, inspection of records, prohibitions against new water production, and potential reductions in water production. The court did not appoint an official Watermaster for the basin, and annual reports are not required.

Since adjudication, water use in the basin has shifted from primarily agricultural use to primarily municipal use. Today there are three main water producers—Cucamonga Valley Water District, San Antonio Water Company, and West End Consolidated Water Company¹²—that hold nearly all of the adjudicated rights in the basin and jointly manage the basin pursuant to the 1958 Decree. Studies differ regarding the condition of the basin. A 2007 Metropolitan Water District review indicates that water levels in key wells have decreased about 120 feet and that the basin is experiencing long-term decline. Basin managers point to production data that also shows water production in the basin can trend below the total allocated rights production data.

Judgement

No groundwater banking, storage, or transfers occur within the Cucamonga Basin. Total storage space in the basin is unknown. Currently, the Chino Basin Watermaster provides

¹² West End Consolidated Water Company has two active shareholders: City of Upland (91.43%) and Golden State Water Company (8.56%). West End has water rights in three basins: Six Basins, Chino, and Cucamonga.

reporting to the state for the basin. The basin’s legal boundary as stipulated in the Judgment is smaller than the geologic boundary of the basin. As defined in the Judgment, the eastern boundary of the basin is not based on geologic features, thus a portion of the geologically defined basin is within the legal boundary of the Chino Basin.

As part of the Judgment, San Antonio Water Company (“SAWC”) is required to recharge a minimum of 2,000 AFY of imported water (mostly runoff) into the basin annually as calculated over a 10-year period. Over this period, 95 percent of any additional water spread may be added to SAWC’s adjudicated right. It is the goal of the Cucamonga Valley Water District to finalize a management plan for the Cucamonga Basin and work with the SAWC to develop a conjunctive use and recharge program to minimize the impacts of overproduction in the Cucamonga Basin.

Water Rights

The original water allocations pursuant to the 1958 adjudication were composed entirely of numerous private entities. Today there are three main water producers—Cucamonga Valley Water District, SAWC, and West End Consolidated Water Company—that hold nearly all of the adjudicated rights in the basin. The water rights of West End Consolidated Water Company and some of the water rights of SAWC are currently pumped by the City of Upland. The Decree allocates groundwater rights and the right to divert water from Cucamonga Creek, approximately 22,721 AFY.¹³

¹³ “An Evaluation of California’s Adjudicated Groundwater Basins”

RIVERSIDE-ARLINGTON BASIN

Riverside-Arlington Basin Snapshot		(Basin 8-2.03)
Adjudicated	<i>Western Municipal Water District of Riverside County v. East San Bernardino County Water District et al.</i> (Western Judgment)	
Watermaster	Western-San Bernardino Watermaster: Western Municipal Water District and San Bernardino Valley Municipal Water District	
Basin Priority, as identified by the State	High	
Area	92 sq. miles	
2010 population	336,884	
Groundwater reliance	Significant	
Water quality impacts	Water quality degradation issues known in several public supply wells	
Other impacts	High number of public wells per population	

Basin Summary, taken in part from:

“An Evaluation of California’s Adjudicated Groundwater Basins” prepared by the Center for Global, International and Regional Studies at the University of California, Santa Cruz for the State Water Resources Control Board. 2016.

The Western Judgment resolved how entities that diverted water above Riverside Narrows (Riverside and San Bernardino interests) would ensure that base flows required by the Orange County Judgment would be available for downstream interests. The Western Judgment, includes three areas—the Colton Basin Area (“CBA”), the Riverside Basin Area (“RBA”), and the San Bernardino Basin Area (“SBBA”)—which all have surface and groundwater interconnections that would affect minimum flow requirements at Riverside Narrows. The adjudication of the three areas was also to determine groundwater extraction rights of the responsible parties and provide for the replenishment of the basins above Riverside Narrows, as needed.

Groundwater rights for the downstream CBA and the RBA under this adjudication were determined based upon a review of pumping values up to 1969 that had never resulted in an overdraft condition. Pumping limits are based on the average index water levels in three wells. The two index wells that are located in Riverside Basin Area are experiencing dropping water levels. A Watermaster assigned by the court performs an annual accounting of water use and publishes annual reports that are available online. Riverside County is highly urbanized and is the fourth-most populous county in California and the tenth-most populous in the nation.

Basin Technical Advisory Committee

The Upper Santa Ana River Watershed Integrated Regional Water Management Plan established the Basin Technical Advisory Committee, which issues a yearly management plan (subject to approval by Valley District and Western Municipal Water District) and

provides technical input. The Committee is composed primarily of retail agencies and the San Bernardino County Flood Control District.

Water Quality

Major groundwater containments in the Riverside basin include plumes of total dissolved solids, nitrate, volatile organic compounds, perchlorate, and dibromochloropropane. Each of the plumes is currently in the process of being remediated¹⁴, and based upon the results of the San Bernardino Valley Regional UWMP has not resulted in a water supply shortage.

Recharge

The Riverside-Arlington Subbasin is replenished by infiltration from Santa Ana River flow, underflow past the Rialto-Colton fault, intermittent underflow from the Chino Subbasin, return irrigation flow, and deep percolation of precipitation.

The City of Riverside, the San Bernardino Valley Municipal Water District and the Western Municipal Water District are presently developing the Riverside North Aquifer Storage and Recovery project that could recharge the basin area with both stormwater and imported water from the State Aqueduct. The project would install a rubber dam that will traverse the Santa Ana River just south of the 10-215 Freeway interchange. The new infrastructure is expected to provide an additional 6,000 acre-feet of water and will help recharge the area's water basin. The project is anticipated to be completed by 2019.

¹⁴ "An Evaluation of California's Adjudicated Groundwater Basins"

RIALTO-COLTON BASIN

Rialto-Colton Basin Snapshot		(Basin 8-2.04)
Groundwater extractions governed by:	1. Rialto Basin Decree (1961), and 2. <i>Western Municipal Water District of Riverside County v. East San Bernardino County Water District, et al.</i> (1969)	
Basin Priority, as identified by the State	Medium	
Area	47 sq. miles	
2010 population	145,832	
Groundwater reliance	Significant	
Water quality impacts	Extensive perchlorate contamination in basin.	
Other impacts	High number of public supply wells per population	

Basin Summary, taken in part from:

“An Evaluation of California’s Adjudicated Groundwater Basins” prepared by the Center for Global, International and Regional Studies at the University of California, Santa Cruz for the State Water Resources Control Board. 2016.

The Western Judgment resolved how entities that diverted water above Riverside Narrows (Riverside and San Bernardino interests) would ensure that base flows required by the Orange County Judgment would be available for downstream interests. The Western Judgment, includes three areas—the Colton Basin Area (“CBA”), the Riverside Basin Area (“RBA”), and the San Bernardino Basin Area (“SBBA”)—which all have surface and groundwater interconnections that would affect minimum flow requirements at Riverside Narrows. The adjudication of the three areas was also to determine groundwater extraction rights of the responsible parties and provide for the replenishment of the basins above Riverside Narrows, as needed.

Groundwater extractions for the CBA under the Western Judgment were determined based upon a review of pumping values up to 1969 that had never resulted in an overdraft condition. The basin had previously been adjudicated in 1961, resulting in the Rialto Decree, which generally established allowable extractions and a method for reducing pumping if water levels drop below specified levels.

Water Quality

The Rialto-Colton Sub-basin contains a groundwater contaminant plume called the Rockets, Fireworks, and Flares Site¹⁵, which is an EPA superfund site. All active wells located in the Rialto and North Riverside basins are being treated for perchlorate (except Rialto Well 5). Rialto has adopted a “zero tolerance” policy for perchlorate, meaning that it will not serve water with any perchlorate even if the water meets all of the public health standards.

The cleanup is focused on pollution from the 160-acre B.F. Goodrich Superfund site where toxic chemicals, including perchlorate and trichloroethene (“TCE”), were disposed over many decades. The treatment system was constructed to intercept, contain, and treat the

¹⁵ Former names used for the site are: B.F. Goodrich, GWK, and Rialto-Colton Plume. Source: EPA.

impacted groundwater in accordance with Regional Water Quality Control Board Orders RB-2003-0013 and RB-2004-0072. In September 2016 West Valley began using bio-remediation to remove perchlorate and restore water for potable use. The plant has capacity to provide water to 16,000 customers. The \$23 million dollar treatment plant was paid for largely with grant funding including:

- \$10 million from the State Water Resources Control Board Division of Drinking Water, Proposition 84 funds
- \$2.7 million from the Santa Ana Regional Water Quality Control Board Cleanup and Abatement Account Fund
- \$2.9 million from the US Department of Defense Environmental Security Technology Certification Program
- \$1 million from the Department of Water Resources in cooperation with the Santa Ana Watershed Project Authority
- \$4 million from West Valley
- \$3 million from the City of Rialto

Operational cost for the West bio-reactor is estimated to be \$900,000 annually. The cost to remediate the site is being funded by a number of partners including the U.S. Environmental Protection Agency and the Goodrich Corporation. A judicial consent decree required Goodrich, under the EPA's oversight, to fund clean-up facilities. Goodrich has agreed to pay \$700,000 or more annually for the operations and maintenance costs of the removal system for the project life. Construction of a second plant is underway, estimated to deliver water in 2019. The operational costs of the second plant will also be paid by Goodrich.¹⁶ Both West Valley WD and the City of Rialto report in the San Bernardino Valley Regional UWMP that irrespective of the cleanup, they have adequate supply to meet demand.

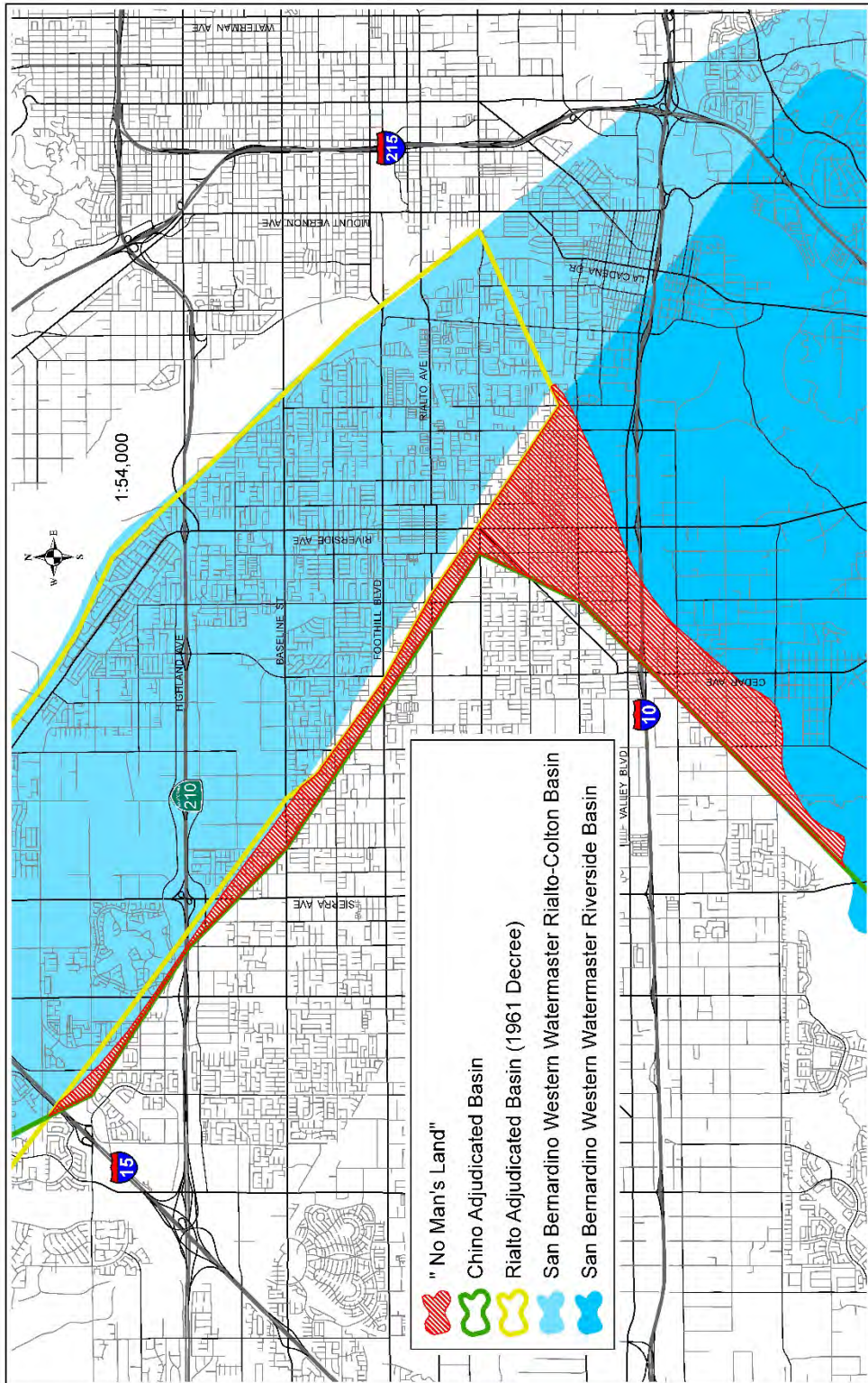
Dispute

The validity and extent of the following water rights in the basin are disputed, and are the subject of a lawsuit currently pending in the Superior Court for the County of San Bernardino. The suit is entitled *San Bernardino Valley Municipal Water District et al. v. San Gabriel Valley Water Co. et al.*, Case No. CVDS1311085.¹⁷ Whether the area referred to as "No Man's Land" is part of the Rialto-Colton Subbasin is disputed and is the subject of a lawsuit currently pending (see figure below). The No Man's Land area (red hatch) is between the Chino Adjudicated Basin (green line) and either of the following: Rialto Adjudicated Basin (yellow line), San Bernardino Western Watermaster Rialto-Colton Basin (light blue color), or San Bernardino Western Watermaster Riverside Basin (dark blue color). It should be noted that the parties have been working to reach a resolution for some time now and the case is close to reaching an amenable end.

¹⁶ Steinberg, Jim. "Settlement to help fund microbe treatment of perchlorate in Rialto-Colton groundwater." San Bernardino County Sun. 13 February 2017.

¹⁷ Upper Santa Ana River Watershed Integrated Regional Water Management Plan (January 2015), Sec. 2.3.

Figure B-6: Map of No Man's Land



Source: Valley District

Retail System	Rialto-Colton Subbasin	Lytle Creek Subbasin	Rialto Basin	Area known as “No Man’s Land”
City of Colton	Dispute	Dispute	Dispute	Dispute
City of Rialto	Dispute	Dispute	Dispute	Dispute
Fontana Water Company ¹⁹	Dispute	Dispute	No	Dispute
West Valley Water District	Dispute	Dispute	Dispute	Dispute

Safe Yield and Projected Extractions

Safe yield for the Rialto-Colton Subbasin was not defined by the Western Judgment or the Rialto Basin decree. As identified on page 2-11 of the UWMP, the safe yield has been estimated based upon the change in groundwater storage and pumping amounts to be 13,623 AFY with 10,242 AFY for the San Bernardino County agencies.

Projected local supply extractions in the Rialto-Colton Subbasin are shown below.

¹⁹ Fontana Water Company is a public utility regulated by the California Public Utilities Commission. Fontana Water Company’s service area covers approximately 52 square miles with boundaries including the San Gabriel Mountains to the north and the Riverside County Line to the south. Fontana Water Company serves most of the City of Fontana and parts of Rancho Cucamonga, Ontario, and Rialto. Fontana Water Company serves a population of approximately 225,300 people with over 45,000 active service connections. Fontana Water Company diverts and produces water pursuant to its rights as Fontana Union Water Company’s agent.

Fontana Union Water Company (“Fontana Union”) is a mutual water company and does not directly deliver water to domestic customers. Fontana Union is owned by Cucamonga Valley Water District (58%), San Gabriel Valley Water Company (40%), City of Rialto (1%), and 13 others (total under ½%).

**Figure: B-7:
Projected Local Supply Extractions in the Rialto-Colton Subbasin**

Water Agencies	2015	2020	2025	2030	2035
Colton, City of	4,515	4,375	4,511	4,778	5,154
Fontana Water Company	7,600	7,600	7,600	7,600	7,600
Rialto, City of	2,000	2,000	2,000	2,000	2,000
Riverside Public Utilities	2,700	2,700	2,700	2,700	2,700
West Valley	4,000	6,000	6,000	6,000	6,000
Reche Canyon Mutual Water Company ²	72	72	72	72	72
Total	20,887	22,747	22,883	23,150	23,526
Historical Average (1996-2005)	17,300	17,300	17,300	17,300	17,300

¹ Extractions from the area referred to as "No Man's Land" are not included in the table. However, whether the area referred to as "No Man's Land" is part of the Rialto-Colton Subbasin is disputed and is the subject of a lawsuit currently pending in the Superior Court for the County of San Bernardino entitled San Bernardino Valley Municipal Water District et al. v. San Gabriel Valley Water Co. et al., Case No. CVDS1311085.

² Projected extraction by Reche Canyon Mutual Water Company is assumed to equal the average extraction from 1996-2005.

Source: Upper Santa Ana River Watershed – Integrated Regional Water Management Plan (2015), p3-9

The Fontana Water Company provided comments to the draft staff report and has identified that its extractions are 2,520 for all years in relation to the chart above. The Company's comments to the draft staff report and LAFCO staff's response are included as a part of Appendix A.

Additional Information

The principal recharge areas are Lytle Creek in the northwestern part of the sub-basin, Reche Canyon in the southeastern part, and the Santa Ana River in the south-central part. The Upper Santa Ana River Watershed Integrated Regional Water Management Plan established the Basin Technical Advisory Committee, which issues a yearly management plan (subject to approval by Valley District and Western Municipal Water District) and provides technical input. The Committee is composed primarily of retail agencies and the San Bernardino County Flood Control District.

CAJON BASIN

Cajon Basin Snapshot

(Basin 8-2.05)

Adjudicated	No
Basin Priority, as identified by the State	Very Low
Area	36 sq. miles
2010 population	520
Groundwater reliance	Low
Water quality impacts	None noted
Other impacts	None noted

Additional Information

The Cajon Basin is anticipated to have very low population growth and has low irrigated acreage.

It is the only basin in the Valley that is not prioritized as high or medium.

BUNKER HILL BASIN

Bunker Hill Basin Snapshot		(Basin 8-2.06)
Adjudicated	<i>Western Municipal Water District of Riverside County v. East San Bernardino County Water District et al.</i> (Western Judgment)	
Watermaster	Western-San Bernardino Watermaster (San Bernardino Basin Area – SBBA) Western Municipal Water District and San Bernardino Valley Municipal Water District	
Basin Priority, as identified by the State	High	
Area	127 sq. miles	
2010 population	363,394	
Groundwater reliance	Significant	
Water quality impacts	PCE and TCE from the Newmark Superfund site and perchlorate from the Crafton-Redlands plume	
Other impacts	High number of public supply wells per population	

In the 1960s, the 20-year drought led to lawsuits between water users in the upper and lower watersheds regarding allocations of both surface water and groundwater. The lawsuits culminated in 1969 in the Orange County and Western Judgments. Under the terms of the judgments, Valley District became responsible for providing a portion of the specified Santa Ana River base flow to Orange County and for replenishing the San Bernardino Basin Area under certain conditions. If the conditions of either judgment are not met by the natural water supply, including new conservation, Valley District is required to deliver supplemental water to offset the deficiency. The judgments resolved the major water rights issues that had prevented the development of long-term, region-wide water supply plans and established specific objectives for the management of the groundwater basins.²⁰ Two Watermasters are given the responsibility for ensuring compliance with the Judgments.

The Bunker Hill Basin and Lytle Creek Basin make up the overall San Bernardino Basin Area (“SBBA”). The Upper Santa Ana River Watershed Integrated Regional Water Management Plan established the Basin Technical Advisory Committee, which issues a yearly management plan (subject to approval by Valley District and Western Municipal Water District) and provides technical input. The Committee is composed primarily of retail agencies and the San Bernardino County Flood Control District.

Basin Summary, taken in part from:

“An Evaluation of California’s Adjudicated Groundwater Basins” prepared by the Center for Global, International and Regional Studies at the University of California, Santa Cruz for the State Water Resources Control Board. 2016.

The Western Judgment resolved how entities that diverted water above Riverside Narrows (Riverside and San Bernardino interests) would ensure that base flows required by the Orange County Judgment would be available for downstream interests. The Western Judgment, includes three areas—the Colton Basin Area (“CBA”), the Riverside Basin Area (“RBA”), and the San Bernardino Basin Area (“SBBA”)—which all have surface and

²⁰ Integrated Regional Water Management Plan, Upper Santa Ana River Watershed, 2015, pg. 2-7.

groundwater interconnections that would affect minimum flow requirements at Riverside Narrows. The adjudication of the three areas was also to determine groundwater extraction rights of the responsible parties and provide for the replenishment of the basins above Riverside Narrows, as needed.

The SBBA is the largest of the three basin areas and includes the Lytle Creek Basin and the Bunker Hill Basin. Specific rights in the Lytle Creek Basin were determined by the 1897 McKinley Decree and the 1924 Lytle Creek Judgment, which are still in force and constitute the governing documents for Lytle Creek and Lytle Basin. Groundwater rights for the SBBA under this adjudication were based on the calculated safe yield for the SBBA. The extended drought since 1998 has affected storage levels in the SBBA, which were at the lowest point in recorded history. However, basin management states that the SBBA basin could refill in a relatively short time based on past experience. Imported water is envisioned as a primary source of outside water to replenish the judgment area.

Water Quality

The groundwater basins in the Western Judgment are mostly replenished by mountain runoff, so the water quality is very good. The Newmark Groundwater Contamination site underlies approximately eight square miles of land and covers part of an essential groundwater aquifer for the City of San Bernardino, and the advancing plumes affected more than 25% of the municipal water supply. However, in 2013, the U.S. Environmental Protection Agency (“EPA”) concluded that the cleanup at the Newmark Site is controlled.²¹

Other contaminant plumes in the Bunker Hill Basin include the Crafton-Redlands plume, Norton Air Force Base plume and the Santa Fe plume. The Crafton-Redlands plume impacted water supply wells for the cities of Riverside, Redlands and Loma Linda. The Lockheed Martin Corporation prepared contingency plans to address impacts of the plume on water supply wells which include blending, treatment and/or providing alternative water supply sources. The Norton Air Force plume impaired 10 wells owned by the City of Riverside and the City of San Bernardino. Cleanup efforts by the Air Force, consisting of soil removal, soil gas extraction, and groundwater treatment, have essentially removed this plume. The Santa Fe groundwater plume is currently being monitored.²² According to the San Bernardino Valley Regional UWMP, local supply remains adequate to meet demand.

Drought

Recharge to the Bunker Hill Sub-basin historically has resulted from infiltration of runoff from the San Gabriel and San Bernardino Mountains. The Santa Ana River, Mill Creek, and Lytle Creek contribute about half of the total recharge to the SBBA. The sub-basin is also replenished by deep percolation from precipitation and resulting runoff, percolation from delivered water, and water spread in streambeds and spreading grounds.

According to Valley District, in 2015 groundwater storage in the SBBA was 650,000 acre-feet lower than it was in the base year, 1934. This new, historic low storage level is about 78,000 AF lower than the previous, historic low storage level recorded in 1965. A review of Valley District’s documents identifies planned projects for water conservation, stormwater capture, conjunctive use, and recycled water projects.²⁵

²¹ “An Evaluation of California’s Adjudicated Groundwater Basins”

²² Upper Santa Ana River Watershed – Integrated Regional Water Management Plan (2015)

²⁵ LAFCO. Service Review for Water Conservation in the Valley Region. 2015. p 54.

Lytle Creek Basin – a part of the San Bernardino Basin Area (SBBA)

The 1897 McKinley Decree and the 1924 Lytle Creek Judgment, which are still in effect, determined specific rights in the Lytle Creek Basin – making Lytle Creek the first adjudicated basin in the state. While safe yield was not defined in the adjudication, Lytle Creek Water Conservation Association meets every two months to monitor groundwater levels. Annual reports were not required by the judgment. The Lytle Creek sub-basin is not listed as an official groundwater basin in the DWR Bulletin 118. The Lytle Creek sub-basin is part of the San Bernardino Basin Area, an adjudicated management area created in the 1969 Western Judgment adjudication.²⁶

The area is in between the two water conservation districts in the Valley (Chino Basin and San Bernardino), and conservation efforts are covered by the Lytle Creek Water Conservation Association.

The validity and extent of the following water rights in the basin are disputed, and are the subject of a lawsuit currently pending in the Superior Court for the County of San Bernardino. The suit is entitled *San Bernardino Valley Municipal Water District et al. v. San Gabriel Valley Water Co. et al.*, Case No. CVDS1311085.²⁷ It should be noted that the parties have been working to reach a resolution for some time now and the case is close to reaching an amenable end.

Retail System	Rialto-Colton Subbasin	Lytle Creek Subbasin	Rialto Basin	Area known as “No Man’s Land”
City of Colton	Dispute	Dispute	Dispute	Dispute
City of Rialto	Dispute	Dispute	Dispute	Dispute
Fontana Water Company	Dispute	Dispute	No	Dispute
West Valley Water District	Dispute	Dispute	Dispute	Dispute

²⁶ An Evaluation of California’s Adjudicated Groundwater Basins”

²⁷ Upper Santa Ana River Watershed Integrated Regional Water Management Plan (January 2015), Sec. 2.3.

YUCAIPA BASIN

Yucaipa Basin Snapshot		(Basin 8-2.07)
Adjudicated	No	
Basin Priority, as identified by the State	Medium	
Area	40 sq. miles	
2010 population	65,180	
Groundwater reliance	Moderate	
Water quality impacts	Overdraft. Documented impacts of nitrates and sulfates	
Other impacts	High number of public supply wells per population	

Additional Information

The following is an excerpt from *Service Review for Water Conservation in the Valley Region*. LAFCO, 2015.

The Yucaipa Sub-basin underlies the southeast part of San Bernardino Valley and comprises 39 square miles. It is bounded on the north by the San Andreas fault, on the west by the Redlands fault and the Crafton Hills, on the south by the Banning fault, and on the east by the Yucaipa Hills. The average annual precipitation ranges from 12 to 28 inches. This part of the San Bernardino Valley is drained by Oak Glen, Wilson, and Yucaipa Creeks south and west into San Timoteo Wash, a tributary to the Santa Ana River. Dominant recharge to the sub-basin is from percolation of precipitation and infiltration within the channels of overlying streams, particularly Yucaipa and Oak Glen Creeks.

Dominant recharge to the sub-basin is from percolation of precipitation and infiltration within the channels of overlying streams, particularly Yucaipa and Oak Glen Creeks, underflow from the fractures within the surrounding bedrock beneath the sub-basin, and artificial recharge at spreading grounds. Four artificial recharge facilities were noted in 1967 by the Department of Water Resources with a total capacity of about 56,500 af/yr. By increasing the spreading acreage along Oak Glen Creek by 25-50 acres, the capability exists to spread 7,000 to 14,000 af of surface water annually to recharge the Yucaipa Sub-basin.

The safe yield of the subbasin is estimated to be roughly 9,000 AFY.²⁸ The figure below lists the projected demands on the Yucaipa sub-basin.

Figure: B-8: Yucaipa Projected Demands

Water Agencies	2015	2020	2025	2030	2035
Redlands, City of – Municipal Utilities and Engineering Department	256	248	265	281	281
South Mesa Water Company	1,720	1,720	1,927	1,672	1,816
YVWD	5,829	5,829	5,829	5,829	5,829
TOTAL	7,805	7,797	8,021	7,782	7,926

Source: Upper Santa Ana River Watershed – Integrated Regional Water Management Plan (2015) p 3-10

²⁸ Geoscience, “Determination of the Useable Capacity and Safe Yield for Each Sub-basin within the Yucaipa Basin Area”, Prepared for San Bernardino Valley Municipal Water District, 17 April 2014.

SAN TIMOTEO BASIN

San Timoteo Basin Snapshot

(Basin 8-2.08)

Adjudicated	No
Basin Priority, as identified by the State	Medium
Area	115 sq. miles
2010 population	54,169
Groundwater reliance	Moderate
Water quality impacts	Locally high nitrates and salinity. Groundwater Ambient Monitoring and Assessment Program reported upper basin water quality issues
Other impacts	Parts of the subbasin are adjudicated

Additional Information

The following is an excerpt from *Service Review for Water Conservation in the Valley Region*. LAFCO, 2015.

The San Timoteo Sub-basin underlies Cherry Valley and the City of Beaumont in southwestern San Bernardino and northwestern Riverside Counties and comprises 115 square miles. The sub-basin is bounded to the north and northeast by the Banning fault and impermeable rocks of the San Bernardino Mountains, Crafton Hills, and Yucaipa Hills, on the south by the San Jacinto fault, on the west by the San Jacinto Mountains, and on the east by a topographic drainage divide with the Colorado River Hydrologic Region. The surface is drained by Little San Gorgonio Creek and San Timoteo Canyon to the Santa Ana River.

Groundwater is replenished by subsurface inflow and percolation of precipitation, runoff, and imported water. Runoff and imported water are delivered to streambeds and spreading grounds for percolation.

Sustainable Groundwater Management Act of 2014

The Sustainable Groundwater Management Act of 2014 enacted comprehensive legislation aimed at strengthening local control and management of groundwater basins throughout the state. The Act provides tools and authority for local agencies to achieve prescribed sustainability goals over a 20-year period. The first step to implement the Act is for local agencies to form local groundwater sustainability agencies (“GSAs”) by June 30, 2017. The second step is adoption of groundwater sustainability plans (“GSPs”) by January 31, 2020 for basins determined by the Department of Water Resources to be in critical overdraft, and by January 31, 2022 for those not in critical overdraft. Once the GSPs are in place, local agencies have 20 years to fully implement their plans and achieve their sustainability goals. There are two exceptions to this requirement:

- Adjudicated basins are exempt from creating a GSA and a GSP, but still requires reporting to the state. In this case, the court-appointed watermaster can fulfill the reporting requirement to the state.
- Local agencies may submit an alternative plan to a GSP for a basin to the state by January 1, 2017, which must be approved by the state and then updated by the local agencies every five years.

Fringe Areas

Conversely, there are areas outside the boundary of a public water provider that are prioritized as high or medium priority basins. In these fringe areas, there is no readily-identifiable agency that can assume the GSA role as the adjudicated boundary or agency boundary does not match that of the basin. The law defaults the GSA responsibility to the County.

On January 10, 2017 and March 7, 2017 the County adopted resolutions that it will not be the GSA for the following groundwater basins/sub-basins that are wholly or partially in the Valley Region along with an explanation on the status of basin within the County:

*Countywide Service Review for Water
Appendix B – Valley Region*

Region	Basin #	Basin-Sub-basin	Priority	GSA Exempt?	Status within County
Basins Subject of Prior Board Actions					
ND, SD	6-40	Lower Mojave River Valley	Medium	Adjudicated with Alternative Plan for fringe	Board opted out on 1/10/17 (Item No. 21)
M, ND	6-42	Upper Mojave River Valley	High	Adjudicated with Alternative Plan for fringe	Board opted out on 1/10/17 (Item No. 21)
ND	6-43	El Mirage Valley	Medium	Adjudicated with Alternative Plan for fringe	Board opted out on 1/10/17 (Item No. 21)
ND	6-44	Antelope Valley	High	Adjudicated with Alternative Plan for fringe	Board opted out on 1/10/17 (Item No. 21)
ND	6-54	Indian Wells Valley	Medium and Critically Overdrafted	No	Board approved five- party Joint Powers Authority to be GSA on 7/12/16 (Item No. 24)
SD	7-12	Warren Valley	Medium	Adjudicated with Alternative Plan for fringe	Board opted out on 1/10/17 (Item No. 21)
Basins Subject of March 2017 Action					
V	4-13	San Gabriel Valley	High	Adjudicated with unmanaged fringe areas	No wells on 194 private acres
M, SD	7-21.02	Mission Creek	Medium	No	Primarily Federal jurisdiction/no wells on 591 private acres
V, M	7-21.04	San Geronio Pass	Medium	No	No wells on four private acres
V	8-1	Coastal Plain Of Orange County	Medium	No	Primarily Chino Hills State Park/No wells on 19 private acres
V	8-2.02	Cucamonga	Medium	Adjudicated with unmanaged fringe areas	Adjudication parties are working to comply
V	8-2.03	Riverside-Arlington	High	Adjudicated with unmanaged fringe areas	San Bernardino Valley Municipal Water District (SBVMWD) will manage fringe area as if it was a part of the adjudication
V	8-2.04	Rialto-Colton	Medium	Adjudicated with unmanaged fringe areas	SBVMWD will manage fringe area as if it was a part of the adjudication
V, M	8-2.06	Bunker Hill	High	Adjudicated with unmanaged fringe areas	SBVMWD will manage fringe area as if it was a part of the adjudication
V	8-2.07	Yucaipa	Medium	No	Local agencies moving to be GSA
V	8-2.08	San Timoteo	Medium	No	Local agencies moving to be GSA
M	8-9	Bear Valley	Medium	No	Local agencies moving to be GSA
Basin Under Continuing Review					
V	8-2.01	Chino	High	Adjudicated with unmanaged fringe areas	SB Watermaster requested County by GSA proxy
source: SB County Board Agenda Item 20, 7 March 2017					
LAFCO staff has inserted the region column.					
V = Valley		M = Mountain		ND = North Desert S = South Desert	

Chino Sub-basin

The vast majority of the Chino Basin is managed under an adjudication that was established in 1978 through a judgment. However, Chino Basin has fringe areas that lie outside of the adjudicated area but within the official basin boundary established by DWR. Within San Bernardino County, these fringe areas are in Chino Hills and north of Rancho Cucamonga.

The Watermaster is not an eligible local agency under SGMA to serve as a GSA. As such, the Watermaster requested that the County, an eligible local agency, consider serving as the GSA for the fringe areas within the county. Under the Agreement, the Watermaster will complete the work necessary to manage the fringe areas under SGMA, reimburse the County for its costs, and indemnify the County against any challenges of the Watermaster's work. As the governing body for the recommended GSA, the County will hold public hearings to adopt a resolution to notify DWR that the County will serve as the GSA for the fringe areas and to adopt a GSP. On May 23, 2017, the County approved the Agreement to serve as the GSA.²⁹ On June 27, 2017, the County adopted a resolution to be the Chino Basin San Bernardino County Fringe Areas GSA.³⁰

Yucaipa Sub-basin

As identified above, the Yucaipa Sub-basin is not adjudicated and is classified as either a high or medium priority basin. Therefore, it is subject to the formation of a GSA. Overlying agencies of the sub-basin are moving towards forming a GSA. As of May 2017, the proposed memorandum of agreement includes:

- Water Retailers: South Mesa Water Company, South Mountain Water Company, Western Heights Water Company, and Yucaipa Valley Water District.
- Cities whose boundaries cover portions of the basin: Calimesa, Redlands, and Yucaipa.
- Regionals: Valley District and San Gorgonio Pass Water Agency.

The draft MOA identifies that the four water purveyors will be responsible for 75% of the costs of administering the GSA. The remaining 25% of the administration costs will be split equally among the 5 remaining parties: the three cities and two regionals.³¹

In support of the new GSA's efforts, on May 23, 2017 the County approved and authorized the submission of a letter of support for this cooperative effort.³²

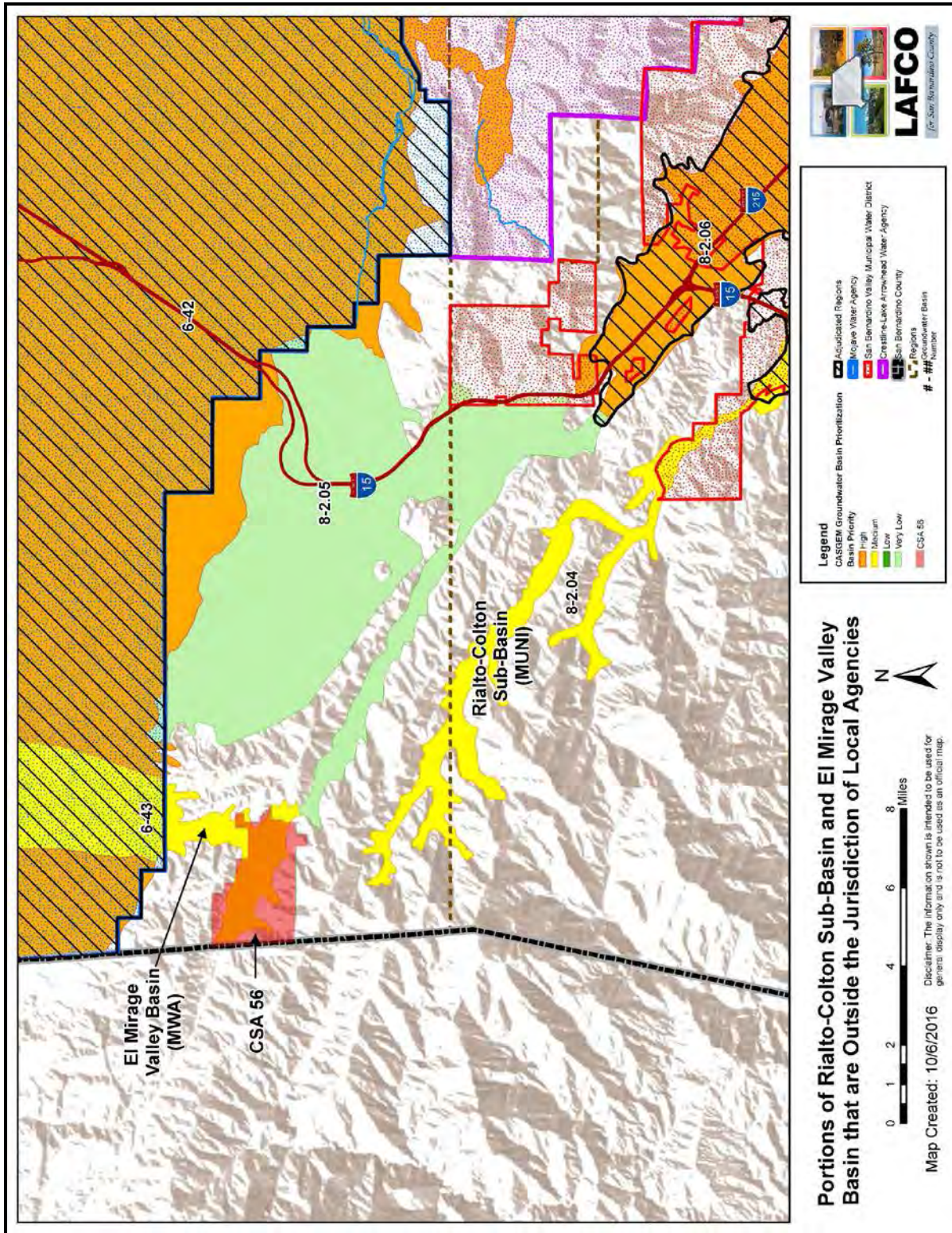
²⁹ County Board Agenda Item 56. May 23, 2017.

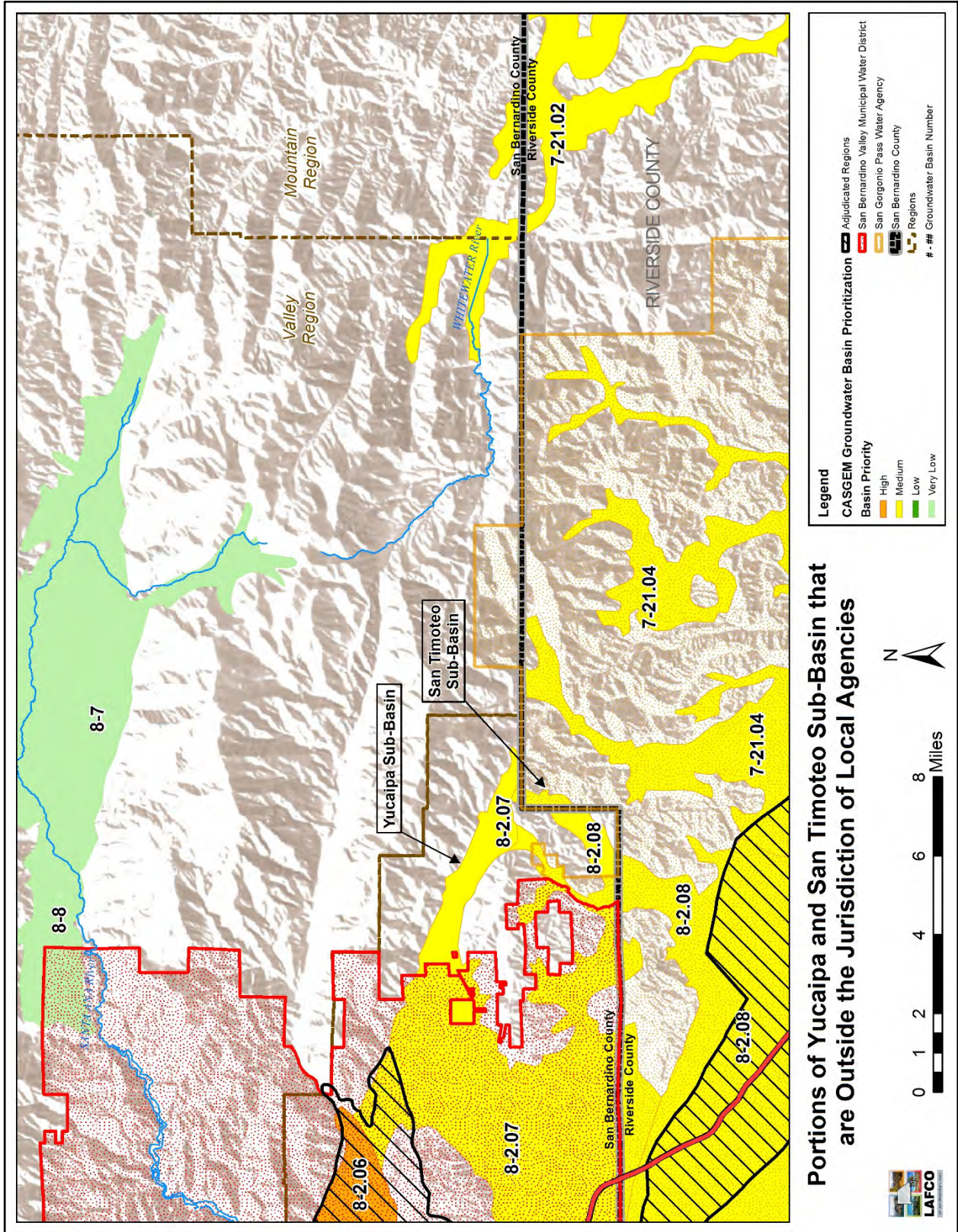
³⁰ County Board Agenda Item 98. June 27, 2017.

³¹ Valley District. Board of Directors Workshop. 9 May 2017. Item 4D.

³² County Board Agenda Item 55. May 23, 2017.

Figure B-9:
Priority Basins outside an Agency in the Valley Region





D. INLAND EMPIRE UTILITIES AGENCY WHOLESALE AREA

The Inland Empire Utilities Agency (“IEUA”) was originally formed as the Chino Basin Municipal Water District on June 6, 1950 to supply supplemental imported water purchased from the Metropolitan Water District of Southern California (“Metropolitan”) to municipalities in the Chino Groundwater Basin. Its official name is “Inland Empire Utilities Agency, a municipal water district”.

IEUA provides wholesale imported water to seven retail agencies including: the Cities of Chino, Chino Hills, Ontario, Upland, the Cucamonga Valley Water District (Rancho Cucamonga), the Fontana Water Company (IEUA portion - Fontana), and the Monte Vista Water District (Montclair, portion of City of Chino and its sphere). In total, IEUA serves approximately 856,000 people over 239 square miles in western San Bernardino County. Additionally, the Monte Vista Water District provides wholesale water to the City of Chino Hills. More information on this arrangement is outlined in Appendix B-2.

One-third of the water distributed by IEUA’s member agencies is imported water from Metropolitan. Recognizing the limitation on imported water supplies caused by drought conditions and environmental restrictions, a key business goal for IEUA is to “drought proof” the region by developing local supplies and maximizing groundwater recharge. IEUA and its member agencies have been able to increase the local supply of water by 33 percent through the construction of recycling plants and piping, new catch basins, and desalting plants. IEUA operates five regional water recycling plants and produces three key “environmentally sustainable” products: recycled water, renewable energy, and high-quality biosolids compost. Protecting the region’s vital groundwater supplies is a core element of the IEUA’s “drought proof” business goal. The more water recharged into the Chino Groundwater Basin, the more self-reliant and less dependent the region becomes on imported water supplies. It does this through 19 groundwater recharge basins.

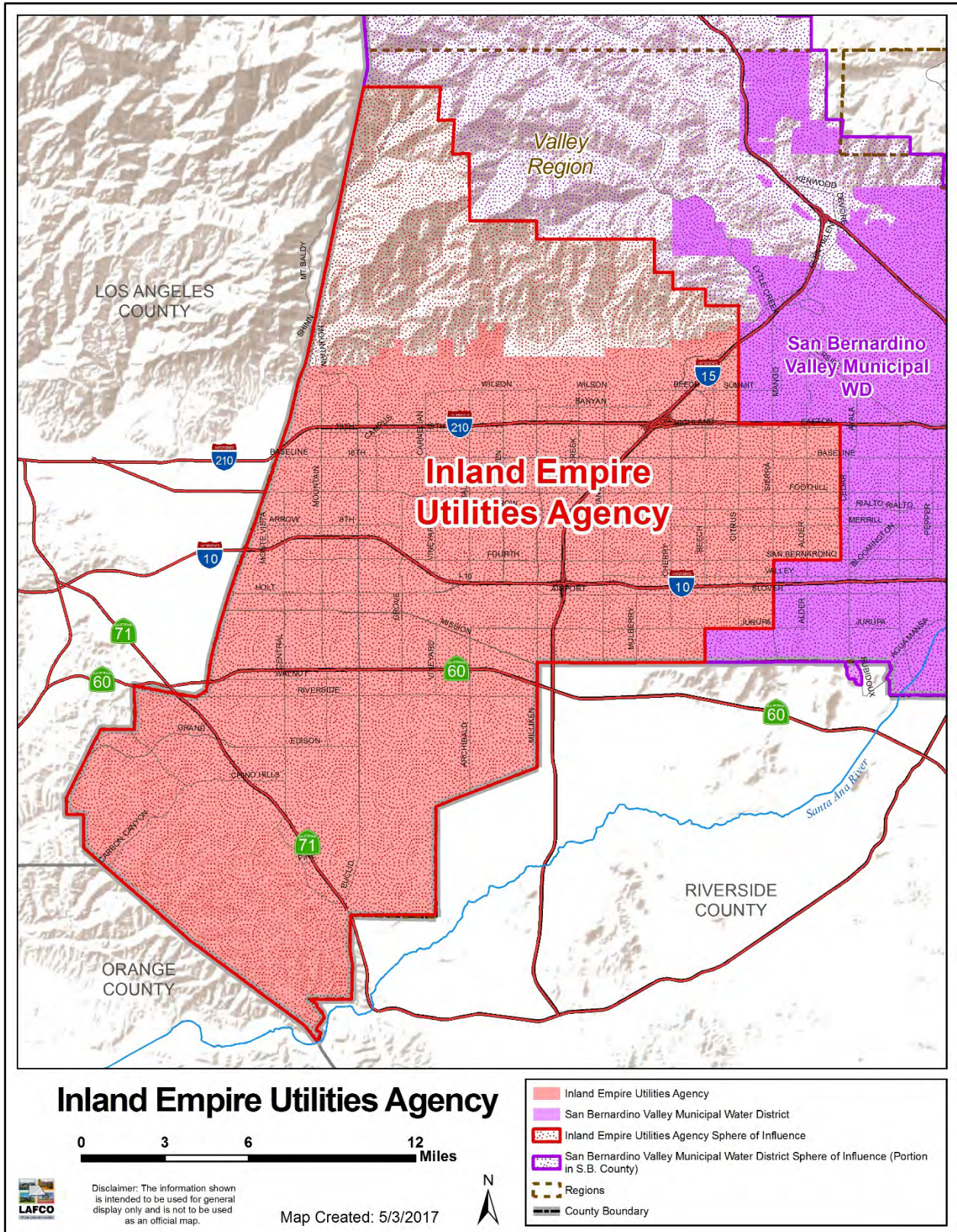
As identified IEUA’s 2014-19 Strategic Plan, three major recharge objectives stand out. As a part of this service review, IEUA has provided updates (shown in italics):

- Identify and protect the best recharge land sites in the service region by June 2016. *This is an ongoing effort for the Agency and is always considered when opportunities arise. Evaluations were completed previously for sites near Declez Basin.*
- Conduct research to find new methods to safely recharge more water into Chino Basin by June 2016. *This is an ongoing effort for the Agency. As regulatory requirements change, IEUA optimizes its treatment facilities or explores projects to improve recharge.*
- Coordinate with the Chino Basin Watermaster on the Recharge Master Plan Update by July 2019. *This is an active project, and is being implemented.*

Areas outside of IEUA Boundary but within its Sphere

The IEUA sphere of influence includes a 52.7 square mile area generally located north of the current IEUA boundary and east of the Los Angeles County boundary. The area is part of the headwaters that serves the Chino Basin. Characterized by rugged, mountainous topography, the area has very limited development potential, and no need for an extension of municipal services is anticipated for the foreseeable future. These areas are shown on Figure B-9 below.

Figure B-10:
Inland Empire Utilities Agency Sphere of Influence



Supply

The “Supply” and “Demand” sections of this report, below, partially include summary information from the IEUA 2015 Urban Water Management Plan.

IEUA and its member agencies have four primary sources of water supply: (1) groundwater from the Chino Basin and other basins (Cucamonga, Rialto, Lytle Creek, Colton, and the Six Basins groundwater basins); (2) local surface water; (3) recycled water; and, (4) imported water, primarily from the SWP. Table B-3 provides the current and projected baseline regional water supply from each water source. A description of each for the four primary water supply sources follows the table below.

**Table B-3:
Current and Projected Regional Water Supply Sources (AFY)**

Water Supply Forecast (AFY)						
Supply Type	2015	2020	2025	2030	2035	2040
Imported Water	65,000	69,752	69,752	69,752	69,752	69,752
Chino Basin Groundwater	90,538	97,666	97,666	97,666	97,666	97,666
Other Groundwater	22,098	22,098	22,098	22,098	22,098	22,098
Surface Water	11,651	11,651	11,651	11,651	11,651	11,651
Recycled Water	16,050	16,050	16,050	16,050	16,050	16,050
Groundwater Replenishment Recycled Water	14,500	16,900	18,700	18,700	18,700	18,700
Chino Basin Desalter	15,000	17,733	17,733	17,733	17,733	17,733
Water Use Efficiency (“WUE”)	1,975	9,788	11,984	17,257	22,570	27,802
Total	236,812	270,524	278,541	283,814	289,127	294,359

NOTES: From IEUA IRP’s baseline supply forecast to 2040 (Appendix E) excluding recycled water for agriculture. Chino Basin Groundwater includes stormwater recharge beginning in 2020. 2015 and 2020 annual WUE from IEUA 2015 WUE Business Plan. 2025-2040 WUE projections based on 10 percent demand reduction by 2040 as per IRP Phase I Goal.

Source: IEUA Urban Water Management Plan (2015)

- Groundwater

Groundwater from Chino Basin, one of the largest groundwater basins in Southern California, accounts for approximately 40 percent of the total water used in the area served by IEUA. According to IEUA’s 2015 Urban Water Management Plan, the Basin contains approximately 5 million acre feet (“MAF”) of water with an unused storage capacity of approximately 1 MAF for a total potential of 6 MAF.

Approximately five percent of the Chino Basin is located in Los Angeles County, 15 percent in Riverside County, and 80 percent in San Bernardino County. Chino Basin is managed by the parties to the Chino Basin Judgement under the oversight of the Chino Basin Watermaster. IEUA does not provide groundwater directly to its retail agencies.

- Local Surface Water

In the IEUA region, surface water runoff originates from rain and snow in the San Gabriel Mountains and moves down through the Santa Ana watershed. In

undeveloped areas, the soil absorbs much of the runoff and helps retain the water within the groundwater basin. In developed areas, storm water runs off roofs, through streets, and into regional storm drains where these flows are diverted into the region’s six major flood control channels: San Sevaine Creek, Day Creek, Cucamonga Creek, West Cucamonga Creek and San Antonio Creek. Located adjacent to the channels are detention basins that maximize the amount of stormwater that can be captured and recharged into the Chino Groundwater Basin. Production from surface supplies varies dramatically depending on climate conditions. However, when available, local surface water is an extremely valuable resource as it is essentially “free,” with the only cost to retail agencies being the operation of necessary facilities to capture, treat and distribute this water.

- Imported Water³³

Metropolitan imports water from the SWP as well as Colorado River. IEUA only receives and allocates SWP water from Metropolitan. IEUA represents 4.1% of Metropolitan’s base firm demand (as defined in §4122 of Metropolitan Water District Administrative Code). Hydrology and environmental regulations are major factors that play into the reliability of imported water supplies from Metropolitan. This results in a high variability in the annual amount of water available to the Southern California region. In FY 2013-14, SWP was only able to supply five percent of its contract allocation in the midst of the current drought. The table below projects IEUA imported water through 2040.

**Table B-4:
IEUA Imported Water Supplies**

Wholesale Imported Water Supplies – Projected (AF)						
Water Supply	2015	2020	2025	2030	2035	2040
	Reasonably Available Volume	Reasonably Available Volume	Reasonably Available Volume	Reasonably Available Volume	Reasonably Available Volume	Reasonably Available Volume
Purchased/Imported Water	58,906	69,752	69,752	69,752	69,752	69,752
Total	58,906	69,752	69,752	69,752	69,752	69,752

NOTES: 2015 imported water volume from Actual FY 2014-15 IEUA Water Use Report/Database.

Source: IEUA Urban Water Management Plan (2015)

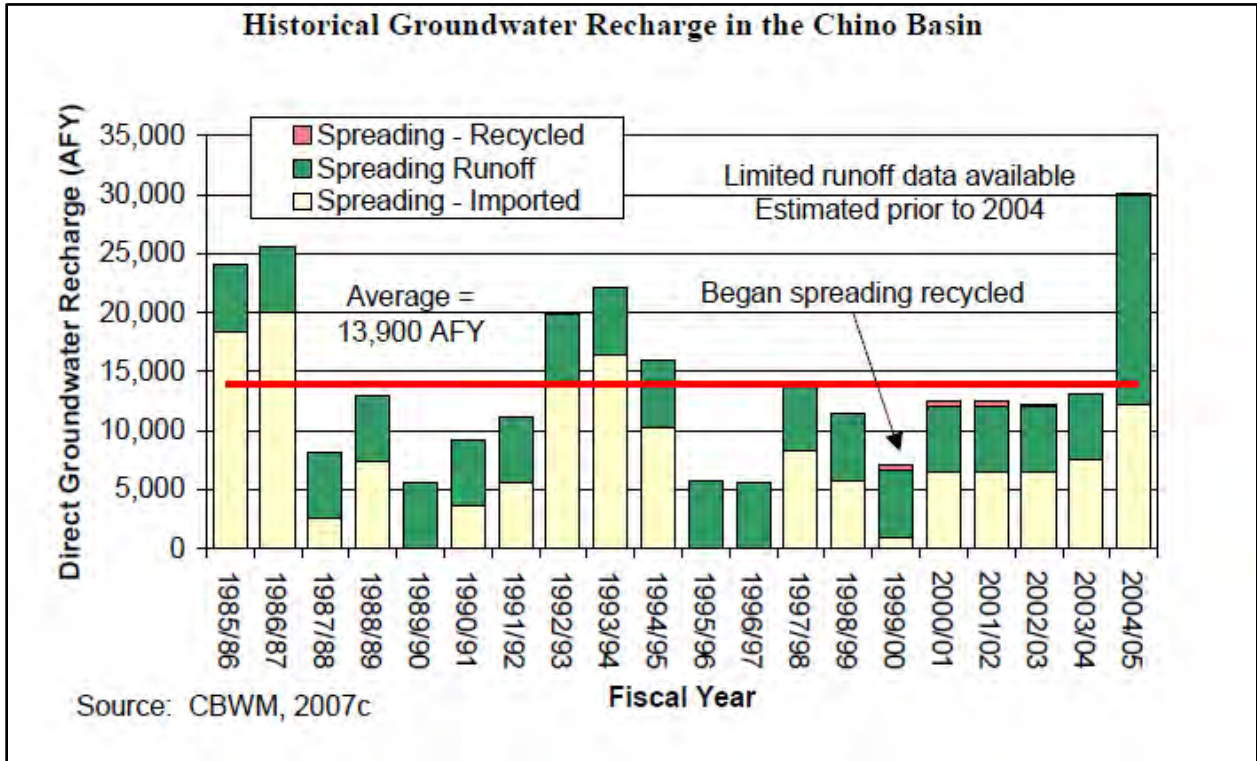
Spreading in the Chino Basin

Imported water, recycled water and runoff (to include surface water) are currently spread in the Chino Basin. As shown in the figure below, an average of about 13,900 AFY has

³³ The mission of IEUA was originally to distribute water imported from the Colorado River. Soon thereafter, that role expanded to include the distribution of water imported to Southern California through the State Water Project. In April 1984, due to high concentrations of total dissolved solids (TDS), otherwise known as high salt concentration, IEUA significantly reduced the importation of the Colorado River water. The final delivery from the Colorado River was received in April 1994. (IEUA 2015 audit).

been spread between fiscal years 1985-86 and 2004-05.³⁴ About 7,700 AFY has been recharged with imported water from Metropolitan during this time. Runoff recharge was not measured prior to 2004; however, the Watermaster estimates that the historical runoff spread was approximately 5,600 AFY. In fiscal year 1999-00, recycled water began to be recharged in the Ely Basins and, an average of about 300 AFY of recycled water has been recharged in the Chino Basin through 2004-05.³⁵

**Figure B-11:
Historical Groundwater Recharge in the Chino Basin (through 2004-05)**



Source: IEUA Recharge Master Plan

Expanding from the above data, on average 26,619 AFY has been spread from FY 2005-06 through FY 2014-15. Below LAFCO staff has created a figure to illustrate the amount of groundwater recharge from all three sources. As shown, storm water recharge has declined significantly since FY 2010-11 (due to the drought), being less than the storm water recharge average during this timeframe. What was first considered a recharge source to reduce reliance on imported water from Metropolitan Water District, due to the current drought, recycled water has now become a necessity for the basin.

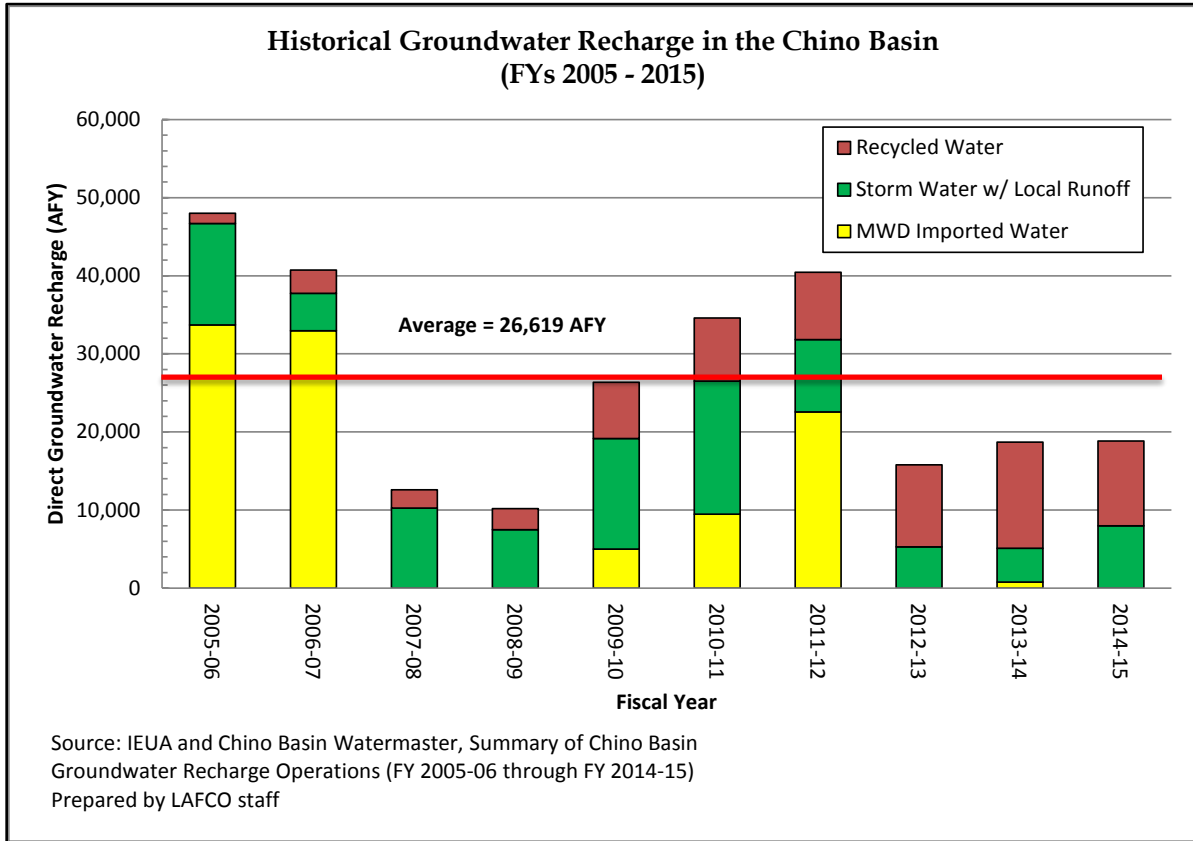
The Monte Vista Water District provided comments to the draft staff report and states that, "This data does not reflect long-term hydrology; however, it does illustrate the

³⁴ Chino Basin Watermaster, 2007. Recharge data provided 3/28/07. As cited in Metropolitan Water District.

³⁵ Metropolitan Water District.

importance of recycled water to maintain groundwater basin recharge during times of drought.” The district’s comments to the draft staff report and LAFCO staff’s response are included as a part of Appendix A.

**Figure B-12:
Historical Groundwater Recharge in the Chino Basin (through 2013-14)**



SUMMARY OF CHINO BASIN GROUNDWATER RECHARGE OPERATIONS										
	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15
Recycled Water	1,304	2,989	2,340	2,684	7,210	8,065	8,634	10,479	13,593	10,840
Storm Water w/ Local Runoff	12,999	4,770	10,243	7,498	14,141	17,051	9,266	5,298	4,299	7,995
MWD Imported Water	33,705	32,968	0	0	5,001	9,465	22,560	0	795	0
TOTAL	48,008	40,727	12,583	10,182	26,352	34,581	40,460	15,777	18,687	18,835
units in acre-feet										
source: IEUA and Chino Basin Watermaster, Summary of Chino Basin Groundwater Recharge Operations (FY 2005-06 through FY 2014-15)										
Average = 26,619 acre feet/year										

City of Ontario

The City of Ontario provided comments to the draft staff report and states that in addition to receiving wholesale water from IEUA, “Ontario holds its own water rights and supply outside of imported water provided by IEUA. These supplies include groundwater, surface water, Desalter water (groundwater), and recycled water, which comes from wastewater generated by Ontario then treated by IEUA under contract and

delivered back to Ontario.” The City’s comments to the draft staff report and LAFCO staff’s response are included as a part of Appendix A.

Demand

Since the 1990s, approximately 90 percent of the IEUA service area water demands have come from residential and industrial users with approximately 10 percent from agricultural users. Overall urban water demand has increased by approximately 20 percent since 1995, despite a regional growth of 30 percent (approximately 200,000 more residents). This reflects improved water use behaviors including more efficient irrigation and indoor fixtures. The effort to reduce water use is also in response to California’s drought (one of the most severe in California’s recorded history), Senate Bill X7-7 requiring most urban retail suppliers³⁶ to reduce consumption by 20 percent, and Governor Brown’s Emergency Drought Mandate issued in April 2015.³⁷

Regional water demands represent the total demand of all agencies within IEUA’s service area over the planning horizon. Total regional demand includes imported water, recycled water, groundwater and local surface water. Table B-5, below, presents the water demands for the IEUA service area for years 2015 through 2040.

**Table B-5:
IEUA Retail Agency Demands, 2015 – 2040**

IEUA Retail Agency Demands – Projected						
	2015	2020	2025	2030	2035	2040
City of Chino	15,744	17,135	18,579	19,951	20,844	23,271
City of Chino Hills	16,592	18,066	19,029	20,171	20,397	22,642
Cucamonga Valley Water District	50,986	54,170	57,150	58,200	59,677	60,930
Fontana Water Company	42,132	42,835	47,590	52,332	57,400	58,512
Monte Vista Water District	10,312	11,085	11,316	11,612	11,904	12,180
City of Ontario	41,796	44,093	48,209	55,402	58,665	73,938
San Antonio Water Company	1,493	1,510	1,597	1,617	1,919	2,267
City of Upland	20,647	21,694	22,453	23,447	23,915	24,277
TOTAL	199,702	210,588	225,923	242,732	254,721	278,017
NOTES: Water demands for 2015 reflect normalized production demands (including system losses), not actual. The simplified normalization methodology used averaged five years of actual demands to smooth annual fluctuations (FY2010-11 to FY2014-15). 2020 to 2040 projections are from land use based model excluding recycled water for agriculture.						

Source: IEUA Urban Water Management Plan (2015)

³⁶ SB X7-7 requires retail urban water suppliers in California serving more than 3,000 acre-feet per year, or 3,000 service connections, to achieve a 20 percent demand reduction from a historical baseline by 2020.

³⁷ Governor Brown’s Emergency Drought Mandate established water conservation targets customized for each supplier which go beyond those targets embodied in SB X7-7.

The Fontana Water Company provided comments to the draft staff report and has identified that its demands in relation to the chart above are as follows: 2015 (33,836), 2020 (36,540), 2025 (43,886), 2030 (47,073), 2035 (49,961), and 2040 (52,762). The Company states that these totals are calculated with Valley District’s customers removed. The Company’s comments to the draft staff report and LAFCO staff’s response are included as a part of Appendix A.

According to IEUA’s 2015 Urban Water Management Plan, as shown in the Table below, the projected urban water supply within IEUA’s area of service will meet projected urban demand for years 2015 through 2040 due to the diversified supply and conservation measures of IEUA and its member agencies.

Table B-6: IEUA Supply/Demand Comparisons

IEUA’s Service Area: Normal Year Supply and Demand Comparison						
	2015	2020	2025	2030	2035	2040
Regional Baseline Supply Totals	236,812	270,524	278,541	283,814	289,127	294,359
Supplemental Supply Opportunities	-	-	-	-	-	283
Demand Totals	199,702	210,588	225,923	242,732	254,721	278,017
Difference	37,110	59,936	52,618	41,082	34,406	16,622

Source: IEUA Urban Water Management Plan (2015)

Recycled Water

Recycled Water

IEUA owns and operates five regional recycled water plants that produce disinfected and filtered tertiary treated recycled water in compliance with California’s Title 22 regulations. The five plants produced approximately 60,200 AF of recycled water during FY 2014-15. The Agency’s regional recycled water supply forecast is expected to increase to approximately 83,000 AFY by 2040.

IEUA began providing recycled water in 1972 for a few large users including the Whispering Lakes Golf Course and Westwind Park in the City of Ontario, and Prado Park and Golf Course in Chino. After construction of the Carbon Canyon Water Recycling Facility in 1992, recycled water was delivered to the cities of Chino and Chino Hills. In 2000, recycled water was identified as a critical regional water supply, and IEUA embarked on a regional recycled program. By 2014, over \$250 million was invested in the program. IEUA’s recycled water and groundwater recharge sales have increased by approximately 30,000 AFY since the early 2000s.

IEUA’s recycled water distribution facilities consist of a pipeline network, booster pump stations, pressure regulating stations and reservoirs. According to IEUA’s *2015 Annual Report*, the Agency currently has more than 800 connections to their recycled water system. In FY 2014-15, IEUA’s recycled water production totaled approximately 33,419

AFY of which 22,579 AF was for non-potable reuse (outdoor irrigation, industrial processes, and agriculture) and 10,840 AF was for groundwater recharge. The remaining 23,365 AF of wastewater not used for recharge or recycling was discharged to the Santa Ana River.

Recycled water holds the greatest potential as a source of reliable supply in the Chino Basin and in Southern California. Recycled water also provides a degree of flexibility and added reliability during drought conditions when imported water supplies are restricted. Recycled water is the most climate resilient water supply available to the region as wastewater flows are generated from indoor use. However, wastewater available in the future may change due to trends toward more efficient indoor water use. Other supply challenges recycled water faces include increasingly strict regulatory and environmental issues for construction and operation of recycled water systems and the high amount of energy consumption required in recycled water treatment.

In December 2007, the IEUA Board of Directors approved an aggressive Three Year Business Plan that calls for 50,000 acre feet of connected demand of recycled water by 2013.³⁸ According to IEUA staff, the plan was last updated in FY 2010-11. Per the updated plan, the goal was to have 50,000 AFY of connected demand by FY 2011-12, with the projected recycled water deliveries of 50,000 AFY by FY 2012-13. Conditions within the region and IEUA's member agencies have been evolving over the past few years, and with the changes, the period at which IEUA estimates to reach the delivery of 50,000 AFY is FY 2019-20. The long-term goal for ultimate beneficial use in the region varies between 65,000 AFY and 78,000 AFY. These numbers are still being revised per IEUA's current planning initiatives.

IEUA Water Infrastructure and Planned Improvements

IEUA's FY 2016-17 Capital Improvements Plan includes recycled water, stormwater, groundwater, and conservation projects to increase local supplies for the service area. These projects provide supply reliability during drought conditions and reduce dependence on imported water. Future projects consist of groundwater recharge basin improvements, improving treatment and distribution of wastewater and recycled water facilities, and increasing conservation and water use efficiency programs. Recycled water is not directly impacted by drought or climate change; investments in these projects help mitigate the impacts of regional and statewide water supply limitations.

Over the next ten years, IEUA plans to invest over \$550 million in infrastructure upgrades and improvements which focus on to primary goals: (1) repair and rehabilitation of existing facilities; and (2) expansion of system capacity. Table B-7 provides a summary of funding allocated by project area in IEUA's FY 2016-17 CIP.

³⁸ Recycled Water Annual Report

Table B-7: IEUA Planned Capital Improvements

Description	FY 16/17	FY 17/18	FY 19-25	Total
Administrative Services	\$ 1.5M	\$ 0.2M	\$ 1.4M	\$ 3.1M
Non-Reclaimable Wastewater	\$ 0.7M	\$ 0.2M	-	\$ 0.9M
Regional Capital Improvements	\$ 15.5M	\$19.1M	\$ 325.4M	\$360.0M
Regional Operations and Maintenance	\$ 13.7M	\$22.5M	\$ 18.9M	\$ 55.1M
Recharge Water	\$ 4.6 M	\$12.7M	\$ 35.8M	\$ 53.1M
Recycled Water	\$ 11.2M	\$26.7M	\$ 33.7M	\$ 71.6M
Water Resources	-	-	-	\$ 0M
Organics Management	\$ 4.5 M	\$ 0.2M	\$ 1.7M	\$ 6.4M
TOTAL	\$ 51.7M	\$81.6M	\$ 416.9M	\$ 550.2M

Source: IEUA Ten-Year Capital Improvement Plan, FY 2016/17

E. SAN BERNARDINO VALLEY MUNICIPAL WATER DISTRICT WHOLESALE AREA

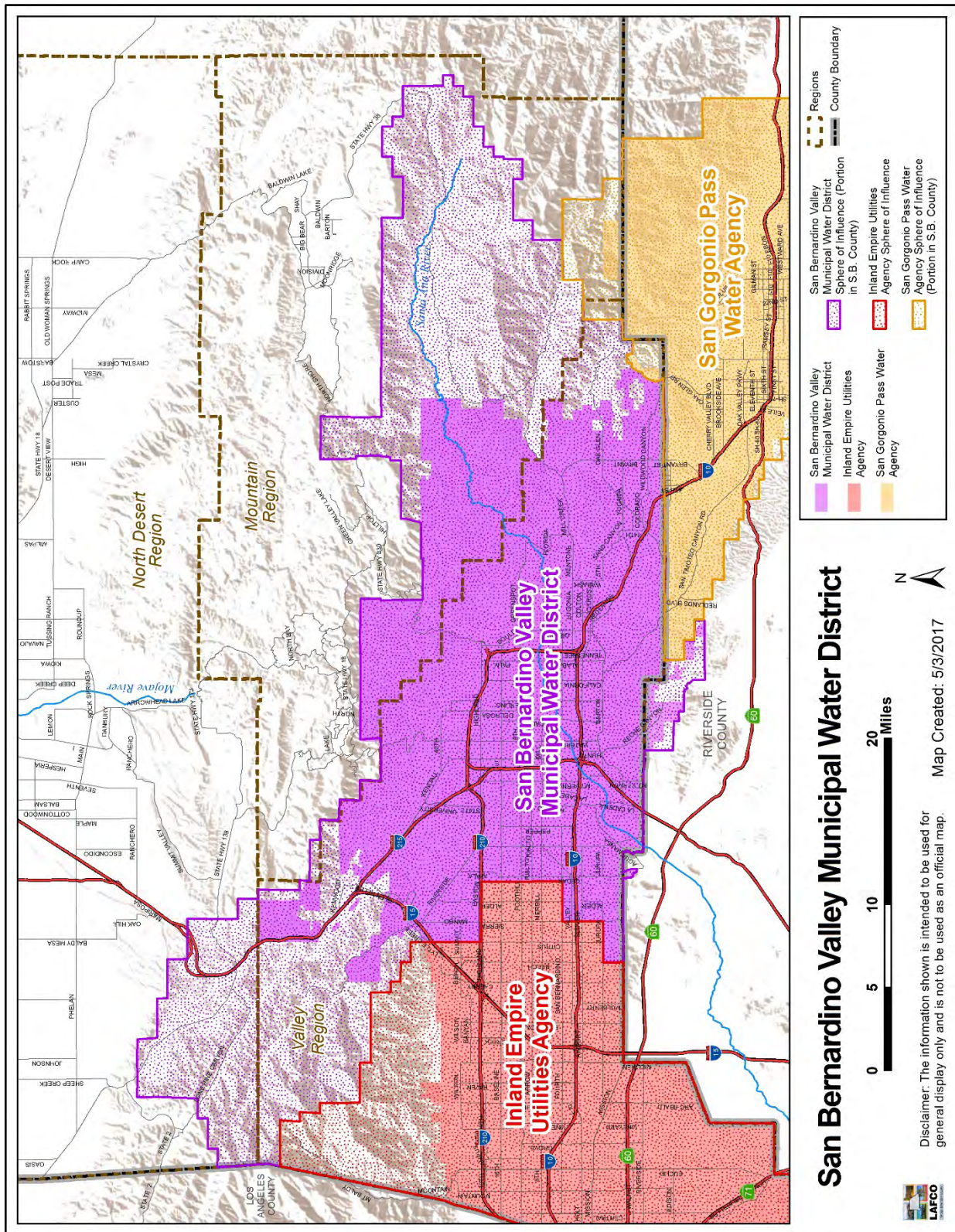
The San Bernardino Valley Municipal Water District (“Valley District”) was formed in 1954 as a regional agency to plan a long-range water supply for the San Bernardino Valley. Formed under the Municipal Water District Act of 1911 (California Water Code Section 71000 et seq., as amended), its enabling act includes a broad range of powers including provision of water, wastewater, storm water disposal, recreation and fire protection services. Valley District covers approximately 325 square miles and spans the eastern two-thirds of the Valley Region, the Crafton Hills, and a portion of the Yucaipa Valley. The District serves a population of approximately 691,000 and includes the cities and communities of San Bernardino, Colton, Loma Linda, Redlands, Rialto, Bloomington, Highland, East Highland, Mentone, Grand Terrace and Yucaipa.

Valley District is responsible for long-range water supply management, including importing supplemental water. The District is also responsible for storage management of most of the groundwater basins within its boundaries and for groundwater extraction over the amount specified in legal judgments. Valley District fulfills its responsibilities in a variety of ways, including importing water through the State Water Project for direct delivery and groundwater recharge and by coordinating water deliveries to retail agencies throughout its area of service. Valley District is also a member of the Santa Ana River Watermaster and the San Bernardino-Western Watermaster.

Areas outside of Valley District Boundary but within its Sphere

Vast areas of Valley District’s sphere of influence extend beyond its boundary. The areas include rugged, mountainous topography with limited development potential, and no need for an extension of municipal services is anticipated for the foreseeable future. These areas are shown on Figure B-11 below.

Figure B-13:
San Bernardino Valley Municipal Water District Sphere of Influence



Supply and Demand

The “Supply” and “Demand” sections of this report, below, are summarized from the San Bernardino Valley Regional Urban Water Management Plan (2015). The Valley District’s primary sources of water are from local water supplies (surface and groundwater), imported water, and recycled water.

Supply

Imported Water Supply

In December 1960, Valley District signed a contract with the State for an imported water supply through the State Water Project (SWP). Valley District received 46,000 acre feet in 1972 which would gradually increase to a total of 98,000 acre feet per year. Later, Valley District acquired an additional 4,600 acre feet per year to establish its annual entitlement to SWP water at 102,600 acre feet. The actual amount of SWP water Valley District receives each year is based upon hydrologic conditions and other factors.

Valley District is the fifth largest of 29 State Water Contractors that receive water from the SWP. Each Contractor pays its proportionate share of the facilities necessary to deliver the water into their service area. This “fixed” cost pays for the infrastructure and is paid annually. In addition to the fixed cost, Valley District also pays “variable” costs (energy and operations) for the actual water delivered each year.

The District takes delivery of SWP water at the Devil Canyon Power Plant Afterbay, which is located just within its northern boundary. The SWP water is conveyed 17 miles east to various spreading grounds and agricultural and wholesale domestic delivery points in the San Bernardino Basin Area. Water is also conveyed westward for direct delivery in the Rialto-Colton Subbasin.

Water Diverted from the Santa Ana River

According to Valley District, in 2010 Valley District and Western Municipal Water District received two permits, 21264 and 21265, from the State Water Resources Control Board (“SWRCB”) that allow the diversion of as much as 200,000 AFY. Water is first diverted by Valley District/Western under Permit 21264 up to 100,000 acre-feet. The permits initiated a “development phase” of Valley District and Western’s right to water from the Santa Ana River. Developing this new water right to its full potential will involve the construction of new diversion, transmission and recharge facilities. These new facilities were outlined in the Environmental Impact Report for the water right process and were estimated to cost up to more than \$200 million, if all facilities were deemed necessary. The Enhanced Recharge in Santa Ana River Basins Project (Enhanced Recharge Project) is the first phase of facilities that will capture and put to use additional stormwater diverted from the Santa Ana River under Permits 21264 and 21265.

One of the permit requirements for both Valley District/Western permits is that construction of any new facilities be completed by October 1, 2020. The permits also require that the two districts prove they can put the water to beneficial use by December 31, 2059. Once Valley District and Western have achieved their maximum diversion amount, the SWRCB will issue a license that replaces the permits.

Local Water Supply

Local precipitation that runs off as surface water and local precipitation that soaks into the ground, called “groundwater”, meets about 60 percent of the Valley District’s regional demand in an average year. Valley District has developed a “cooperative recharge program” that is being successfully implemented to help replenish groundwater using SWP water.

Recycled Water

The recent drought highlighted the advantage of having a drought-proof water supply, such as recycled water, as part of a regional water strategy. This led the Valley District, agencies within its service area, the Western Municipal Water District of Riverside County, and the City of Riverside to prepare a Regional Recycled Water Concept Study to identify recycled water projects to maximize regional benefits to water supply reliability, water quality and habitat sustainability. Additional discussion of Valley District’s efforts in providing recycled water is included later in this Appendix.

The following table summarizes the anticipated regional water supply sources for the Valley District in years 2020 through 2040 (normal year).

Table B-8: Regional Water Supply – Normal Year (AFY)

Water Source	2020	2025	2030	2035	2040
Precipitation (Surface Water)					
SBBA Surface Water	33,620	33,620	33,620	33,620	33,620
SBBA New Conservation Allocation	5,507	5,507	5,507	5,507	5,507
Oak Glen	500	500	500	500	500
Riverside North ASR	2,000	2,000	2,000	2,000	2,000
Active Recharge Program	10,000	10,000	10,000	10,000	10,000
Sub-Total Precip. (Surface Water)	51,627	51,627	51,627	51,627	51,627
Precipitation (Groundwater)					
SBBA Groundwater	133,618	133,618	133,618	133,618	133,618
Rialto-Colton	10,242	10,242	10,242	10,242	10,242
Riverside North	30,100	30,100	30,100	30,100	30,100
Yucaipa	9,600	9,600	9,600	9,600	9,600
Beaumont	2,552	2,552	2,552	2,552	2,552
No Man’s Land	1,000	1,000	1,000	1,000	1,000
Chino	900	900	900	900	900
Sub-Total Precip. (Groundwater)	188,012	188,012	188,012	188,012	188,012
SWP Water					
Expected SWP Allocation	63,000	63,000	63,000	63,000	63,000
Direct Deliveries	36,607	37,388	37,758	38,502	37,858
SWP into Storage	26,393	25,612	25,242	24,498	25,142
Return Flow Direct Deliveries (36% of Direct Deliveries)	13,179	13,460	13,593	13,861	13,629
Sub-Total SWP Water	76,179	76,460	76,593	76,861	76,629
Recycled Water					
City of Redlands, City of San Bernardino, East Valley Water District, Yucaipa Valley Water District	21,951	29,260	36,320	43,280	50,340
Total All Supplies	337,769	345,359	352,552	359,780	366,608

Notes:

- (a) The San Bernardino Basin is managed whereby total safe yield is a combination of Surface Water and Groundwater totaling 239,743 AFY. Per the Western Judgment, supply available to the Valley District service area is 172,745 AFY. A decrease in available surface water in any given year does not change available yield from the basin.
- (b) Assumes SWP Water is stored in wet years so that it can supplement lower deliveries of SWP water in dry years.
- (c) The Watermaster estimates a 36% return from the direct deliveries of SWP in SBBA.
- (d) Does not include SWP water from San Gorgonio Pass Water Agency.
- (e) Estimates of Direct Deliveries and Recycled Water from Chapters 7 through 15 of the 2015 San Bernardino Valley Regional Urban Water Management Plan.

Source: San Bernardino Valley Regional Urban Water Management Plan (2015)

In the Lytle Creek area, the area has experienced low water levels during the current drought which began around 1998. In November 2015, County Department of Public Health and Valley District held a community meeting in Lytle Creek and discussed with residents the water supply challenges. The Lytle Creek Springs Water Company functions adequately in the area, according to the most recent Sanitary Survey Report,

but the issue is with private wells. Natural water supply cannot be increased so the only solution was to drill deeper wells. To alleviate the circumstance, the County is granting variances for wells to be drilled but with a deeper seal.

Demand

Two major factors affect water demand: weather and conservation. Historically, when the weather is hot and dry, water usage increases. The increases vary according to the number of consecutive years of hot, dry weather and the conservation activities imposed. During cool-wet years, historical water usage has decreased to reflect less water usage for external landscaping. Past studies have also indicated that water demand increases 6 to 12 percent during dry periods. Table B-9 presents an estimate of total water demands for agencies within the Valley District for 2020 through 2040.

Table B-9: Total Water Demand by Agency within Valley District (AFY)

	2020	2025	2030	2035	2040
City of Colton	10,458	11,301	11,978	12,698	13,462
East Valley Water District	31,609	32,879	33,943	35,050	36,203
City of Loma Linda	5,200	5,527	5,875	6,245	6,638
City of Rialto	10,583	11,216	11,887	12,597	13,350
City of Redlands	33,138	34,164	34,940	35,715	35,715
Riverside Highland Water Company	4,107	4,294	4,492	4,702	4,923
City of San Bernardino	45,969	49,094	53,339	57,623	59,449
West Valley Water District	20,799	22,256	23,802	25,492	27,311
Yucaipa Valley Water District	12,891	13,751	14,730	15,815	17,009
Fontana Water Company	44,613	45,700	45,700	45,700	45,700
Marygold Mutual Water Company	1,500	1,500	1,500	1,500	1,500
Muscoy Mutual Water Company	2,100	2,100	2,100	2,100	2,100
Terrace Water Company	900	900	900	900	900
Crestline Lake Arrowhead Water Co.	60	60	60	60	60
Big Bear Municipal Water District ³⁹	6,500	6,500	6,500	6,500	6,500
Other/Private	19,600	19,300	19,000	19,000	19,000
Total	250,027	260,542	270,747	281,697	289,821
10% Reliability Margin	25,003	26,054	27,075	28,170	28,982
Total Including Reliability Margin	275,030	286,596	297,821	309,867	318,803

Source: San Bernardino Valley Regional Urban Water Management Plan (2015)

³⁹ In 1996, Big Bear Municipal Water District entered into a water purchase agreement with Valley District. For an annual payment to Valley District, this agreement provides that when Big Bear Lake is at specified levels, no water will be released from the Lake to meet the downstream water needs. Instead, Valley District provides Bear Valley Mutual with in-lieu water from the SWP or any other available sources authorized under the Judgment. This historic agreement helped Big Bear Municipal achieve its mission of Lake stabilization while providing Bear Valley Mutual Water Company with the water it needs for its customers. Under the terms of the Agreement, Bear Valley Mutual may request any amount of delivery for a given year, provided that the total of all their requested deliveries do not exceed 65,000 AF in any ten-year period. Bear Valley Mutual’s typical request each year has been the ten-year average, or 6,500 AFY.

The Fontana Water Company provided comments to the draft staff report and has identified that its demands in relation to the table above are as follows: 2020 (3,600), 2025 (3,650), 2030 (3,700), 2035 (3,750), and 2040 (3,800). The Company states that these totals are calculated as Company customer demands within the Valley District service area. The Company’s comments to the draft staff report and LAFCO staff’s response are included as a part of Appendix A.

According to the San Bernardino Valley Regional Urban Water Management Plan (2015), as shown in the Table below, the projected water supply within Valley District’s area of service will meet projected urban demand for years 2020 through 2040 under normal/average conditions.

**Table B-10:
Normal Year Supply and Demand Comparison (AFY)**

Totals	2020	2025	2030	2035	2040
Supply Totals	337,769	345,359	352,552	359,780	366,608
Demand Totals	250,027	260,542	270,747	281,697	289,821
Difference	87,741	84,817	81,805	78,082	76,787

Source: San Bernardino Valley Regional Urban Water Management Plan (2015)

Recycled Water

Increasing the supply of recycled water within the region is a strategy included in the Upper Santa Ana River Watershed Integrated Regional Water Management Plan (2015) which includes the Valley Region. Although costly, recycled water is also a highly reliable source of water because flows to wastewater plants are generally consistent whether the weather is wet or dry.

The Valley District, other agencies within its area of service, Western Municipal Water District of Riverside County and the City of Riverside have jointly prepared a Regional Recycled Water Concept Study to identify potential recycled water projects. The stakeholders’ goal is to develop between 10,000 and 12,000 AFY of new recycled water supply in the near term, with that volume possibly expanding commensurate with population growth. Table B-11, below, summarizes the anticipated future demand for recycled water by agencies within the Valley District area of service.

**Table B-11:
Estimated Demands for Recycled Water (AFY)**

Agency	2020	2025	2030	2035	2040
City of Redlands	5,152	5,402	5,402	5,402	5,402
City of Rialto	20	20	20	20	20
City of San Bernardino	5,600	7,800	10,300	12,800	12,800
East Valley Water District ⁴⁰	6,700	6,700	6,700	6,700	6,700
Yucaipa Valley Water District	1,651	2,177	2,792	3,490	4,282
Total Recycled Water	19,123	22,099	25,214	28,412	29,204

Source: San Bernardino Valley Regional Urban Water Management Plan (2015), page 3-6.

Valley District Water Infrastructure and Planned Improvements

The Valley District has an extensive future capital improvement plan consisting of many projects including Enhanced Santa Ana River Spreading, Santa Ana River Tributary/Storm Water Capture, Recycled Water Systems and Conjunctive Use Projects. According to the Valley District’s current Capital Improvement Program, \$67.6 million in capital improvements is budgeted for FY 15-16, and over \$82.1 million is budgeted for capital projects in FY 16-17.

Key Valley District capital improvement projects currently underway are described below:

- East Branch Extension Phase II (EBX Phase II) – Valley District is currently in planning, design and environmental documentation for the construction of the East Branch Extension II which consists of approximately three miles of large diameter pipeline to convey SWP water from its Foothill pipeline near Cone Camp Road in the City of Highland to a proposed reservoir located south of the Santa Ana River Wash in the Mentone Area. When complete, the Phase II project will allow for Valley District’s delivery of additional SWP water to the Yucaipa Valley area. The total cost of the EBX Phase II project is estimated to be \$125 million.
- City Creek Turnout – Modifications to the City Creek Turnout will provide additional facilities to allow the Valley District to deliver up to 12 cubic feet/second of SWP water to East Valley Water District’s Water Treatment Plant 134. Converted to a membrane-filtration process for water treatment, Plant 134 currently has a capacity of 8 million gallons per day.

⁴⁰ The San Bernardino Valley UWMP (2015) page 7-12 states that, “The future beneficial use has been estimated using planning documents prepared for the Sterling Natural Resource Center.” Pages 7-12 through 7-14 identify Sterling as a new wastewater reclamation plant, joint project with Valley District, tertiary level treatment for groundwater recharge, with a planned implementation year of 2020.

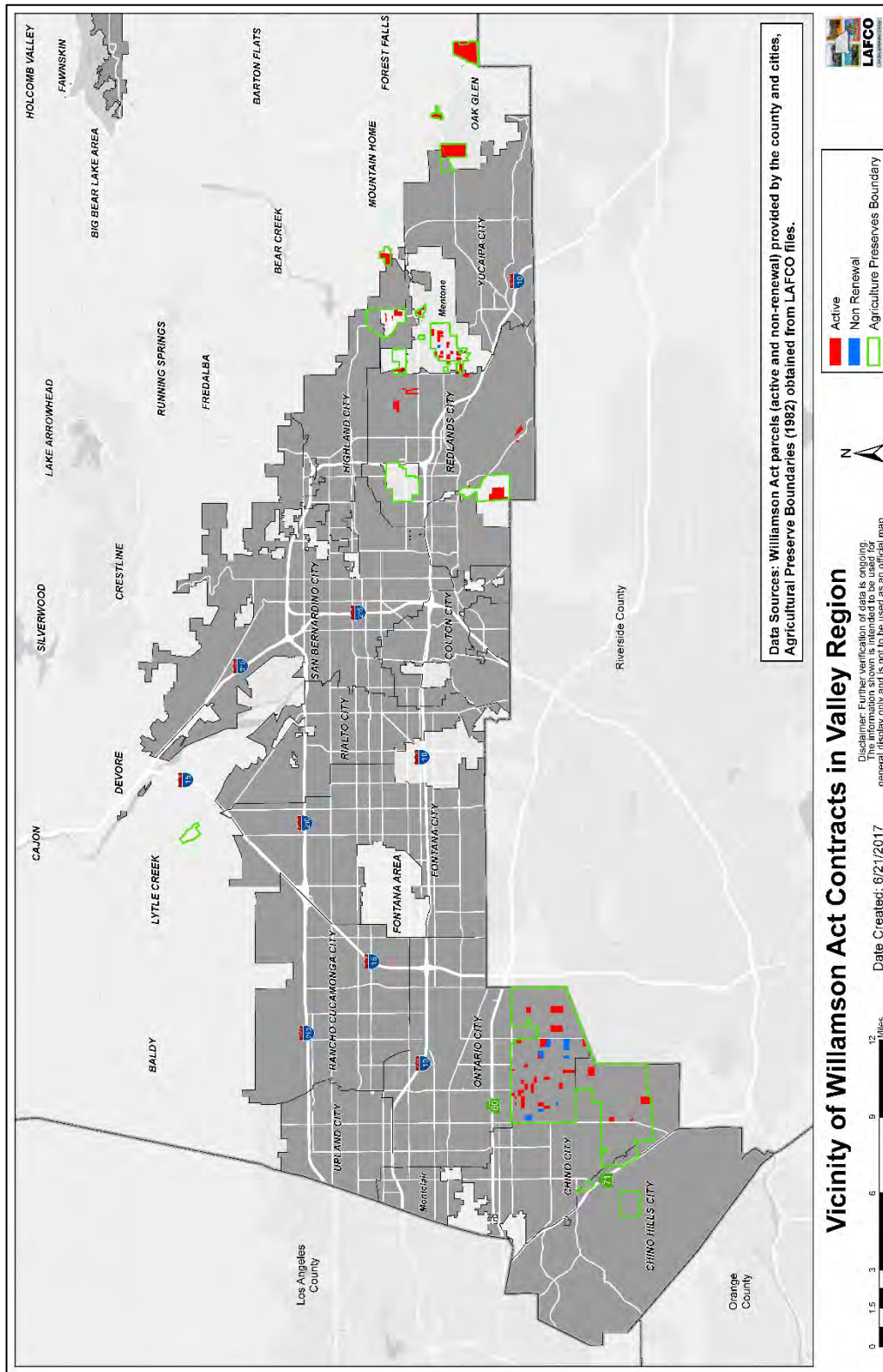
Agricultural

A primary tenet of LAFCO is to encourage the preservation of agricultural land and open spaces, and this service review touches upon the impact of agricultural uses. The figure below identifies Williamson Act contracts as of 2015/16. The California Land Conservation Act of 1965--commonly referred to as the Williamson Act--enables local governments to establish an Agricultural or Open Space Preserve. Once the preserve was established, property owners could contract with the county or city for the purpose of restricting specific parcels of land to agricultural or related open space use. In return, landowners receive property tax assessments which are much lower than normal because they are based upon farming and open space uses as opposed to full market value. Government Code Section 51243 states that when annexing properties into a city, "...the city shall succeed to all rights, duties, and powers of the county under the contract."

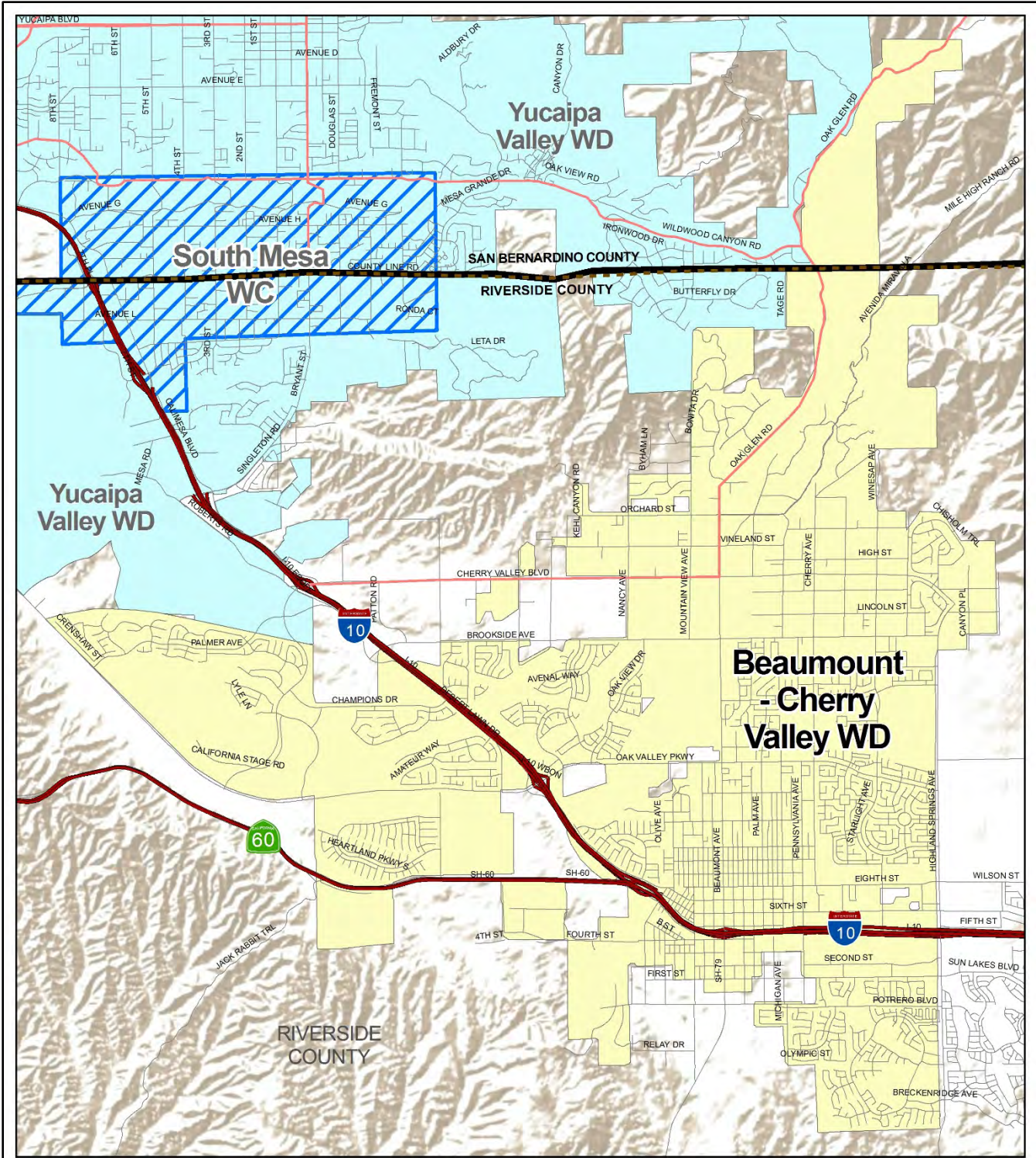
The Government Code specifically states that the Commission shall not approve a sphere of influence change (§56426.6) or annexation (§56856.5) that is subject to a contract entered into pursuant to the Williamson Act if that local government agency provides, or would provide, facilities or services related to sewers, nonagricultural water, or streets and roads to the territory, unless these facilities or services benefit land uses that are allowed under the contract. Additionally, for sphere changes, the landowner consent is required.

The areas identified in red are "Williamson Act-Active". The areas identified in blue are "Williamson Act-Non Renewal" which is defined as enrolled lands for which non-renewal has been filed pursuant to Government Code Section 51245. Upon the filing of non-renewal, the existing contract remains in effect for the balance of the period remaining on the contract. During the non-renewal process, the annual tax assessment gradually increases. At the end of the nine year non-renewal period, the contract expires and the land is no longer enforceably restricted.

**Figure B-14:
Williamson Act Contracts – Valley**



APPENDIX B-2
Valley Service Review Update
City and District Updates



Beaumont-Cherry Valley Water District

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Disclaimer: The information shown is intended to be used for general display only and is not to be used as an official map.

Map Created: 5/8/2017

*In instances of overlapping water systems, the boundary of the underlying government system is reduced.

Beaumont-Cherry Valley Water District	Valley Region
South Mesa Water Company	San Bernardino County Line
Yucaipa Valley Water District	

Beaumont-Cherry Valley Water District

Principal County - Riverside

Agency Information			
Principal Act	Irrigation District Law Water Code Division 11: §20500 et seq	Year Formed	1919 ¹
Governance	5-member Board of Directors, elected by division	Square Miles	28
Website	www.bcvwd.org	2015 Population	46,314 (est.)

LAFCO Authority	
Authorized Functions	Water, Riverside as principal county
Previous Service Review	http://www.sbclafco.org/Proposals/ServiceReviews/ValleyRegion/EastValleyRegion.aspx

Infrastructure	
Supply	24 wells, 11 pressure zones
Storage	14 reservoirs with 22 MG total storage capacity
Distribution	25 miles of pipeline
Connections	0 in San Bernardino County, except its own residences – 16,985 in Riverside County

Supply & Demand, AFY	2010	2015	2020	2025	2030	2035	2040
Supply	--	--	18,112	20,881	24,021	26,843	28,960
Demand	11,023	9,792	17,659	20,450	23,605	26,386	28,432

Per Capita Water Use & Conservation					
Gallons/Capita/Day Residential		Cumulative Savings (compared to 2013)	State Stress Test Summary		
Nov 16	Feb 17		Est. Annual Potable Demand	Est. Annual Total Supply for WY 2019	Current State Cons. Standard
170.7 AF	79.2 AF	15.1%	12,804 AF	24,063 AF	0% ²

Typical Monthly Residential Water Bill (3/4" meter, 15 ccf), as of 1 January 2015			
Meter Charge	Consumption Charge	Surcharge	Total
\$27.02	\$14.40	--	\$41.42

Cash Flows	2011	2012	2013	2014	2015
Increase (Decrease) in Cash & Equivalents	\$1,089,187	\$1,784,541	\$1,127,931	\$6,471,610	\$10,261,724
Cash & Equivalents, End of Year	\$6,776,214	\$8,560,755	\$9,688,686	\$16,160,296	\$26,422,020

Sources: Beaumont-Cherry Valley Water District website, Beaumont-Cherry Valley Water District Urban Water Management Plan 2015; State Water Board Stress Test and Water Conservation Targets, financial statements

¹ Originally formed as the Beaumont Irrigation District in 1919 under the Wright Act of 1897, the district was renamed the Beaumont-Cherry Valley Water District in 1973.

² "BCVWD will continue to enforce water waste prohibitions and impose penalties for repeat offenses in accordance with BCVWD Regulations."

Beaumont-Cherry Valley Water District Additional Information

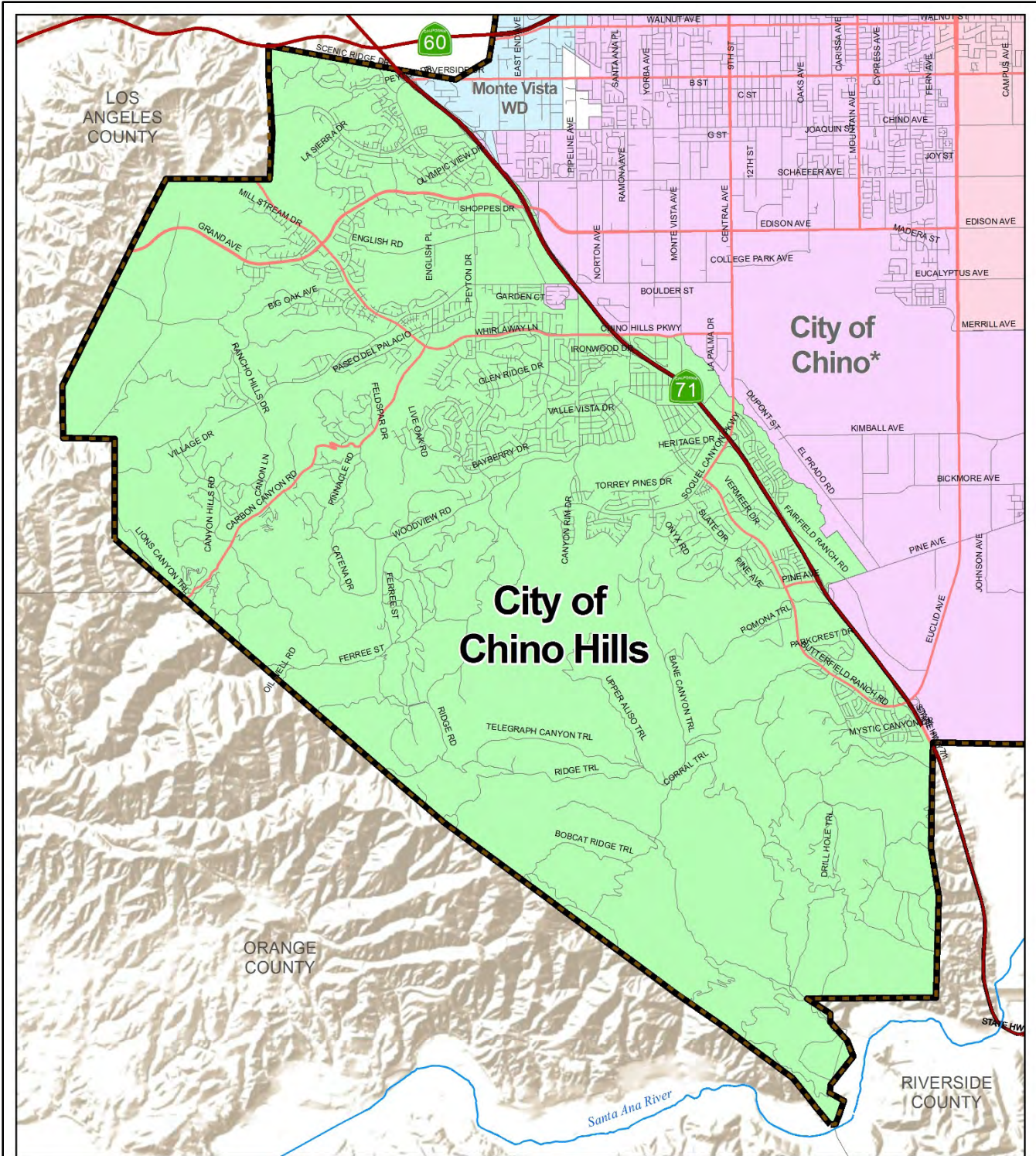
Beaumont-Cherry Valley Water District was formed in 1919 under the Wright Act of 1897 (Water Code Section 20000, et seq.), and serves approximately eight square miles located in Riverside and San Bernardino Counties. Beaumont-Cherry Valley Water District owns approximately 2,800 acres along Little San Gorgonio and Noble Creeks and holds pre-1914 water rights to both streams, which amounts to 3,000 miner's inches of water (approximately 45,000 AF of water). The District has 20 wells in the Beaumont and Edgar Canyon Basins and currently serves about 30,000 consumers through 9,000 metered connections.

The following are excerpts from the Beaumont-Cherry Valley Water District 2015 Urban Water Management Plan as it pertains to San Bernardino County:

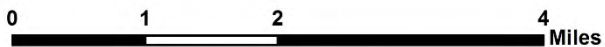
The District owns 1,524 acres of watershed land in Edgar Canyon in San Bernardino County located just north of the Riverside-San Bernardino County line where the District operates a number of wells and several reservoirs.

The District's 24 wells are located in four areas:

- Upper Edgar Canyon (San Bernardino County) - Note that "Edgar Canyon" is synonymous with "Little San Gorgonio Creek".
- Middle Edgar Canyon (San Bernardino County)
- Lower Edgar Canyon (Riverside County)
- Beaumont Storage Unit (Beaumont Basin) (Riverside County)



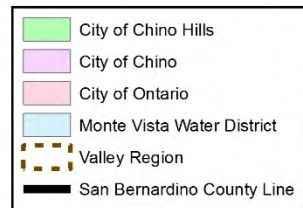
City of Chino Hills



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Map Created: 5/2/2017

*In instances of overlapping water systems, the boundary of the underlying government system is reduced.



City of Chino Hills

Chino Hills

Agency Information			
Principal Act	Government Code Title 4 - §34000	Year Formed	1991
Governance	Chino Hills City Council	Square Miles	46
Website	http://www.chinohills.org	2015 Population	77,596

LAFCO Authority	
Authorized Functions	Contracted police, lighting and landscaping, public improvements, water, sewer, planning and zoning, general administrative services, contracted animal control, building and safety, community services and street and highway maintenance.
Previous service review	http://www.sbclafco.org/Proposals/ServiceReviews/ValleyRegion/WestValleyRegion.aspx

Infrastructure				
Supply	Groundwater (6 active wells with total capacity of 5,666 gpm), purchased State Water Project (via Water Facilities Authority), purchased wholesale (Monte Vista Water District), purchased desalinated ground water (Chino Basin Desalter Authority), purchased recycled water (Inland Empire Utilities Agency). Chino Hills is a member agency of IEUA, and receives imported water supplies from the Water Facilities Authority through a common conveyance system with MVWD.			
Storage	21 tanks with total storage of 33.83 MG			
Distribution	3 transmission mains, 4 pressure zones; 9 booster stations, 20 pressure regulating valves			
Connections	Within Boundary	Outside Boundary/Within Sphere	Outside Sphere	Total
	21,302	189	-	21,491

Supply & Demand, AFY	2010	2015	2020	2025	2030	2035
Supply	--	16,070	33,107	33,107	33,107	33,107
Demand	17,483	15,507	20,770	23,505	23,930	24,807

Per Capita Water Use & Conservation					
Gallons/Capita/Day Residential		Cumulative Savings (compared to 2013)	State Stress Test Summary ¹		
Nov 16	Feb 17		Est. Annual Potable Demand	Est. Annual Total Supply for WY 2019	Current State Cons. Standard
106.5 AF	60.1 AF	20.3%	15,861 AF	16,033 AF	0%

Typical Monthly Residential Water Bill (3/4" meter, 15 ccf), as of 1 July 2015			
Meter Charge	Consumption Charge	Surcharge	Total
\$35.16	\$32.47	--	\$67.63 ²

¹ The Cities of Chino, Chino Hills, Ontario, Upland; and the Monte Vista Water District (collectively, "Member Agencies") are member agencies and joint owners of the Water Facilities Authority. The Water Facility Authority and the Member Agencies have jointly agreed to coordinate to collect relevant data and documentation for submittal of the aggregated conservation standard certification.

² Assumes single family home, located in "Low Zone"

Cash Flows	2011	2012	2013	2014	2015
Increase (Decrease) in Cash & Equivalents	\$754,940	\$2,724,457	\$7,600,930	\$5,593,272	\$6,330,049
Cash & Equivalents, End of Year	\$21,064,968	\$23,789,425	\$31,390,355	\$36,983,627	\$43,313,676

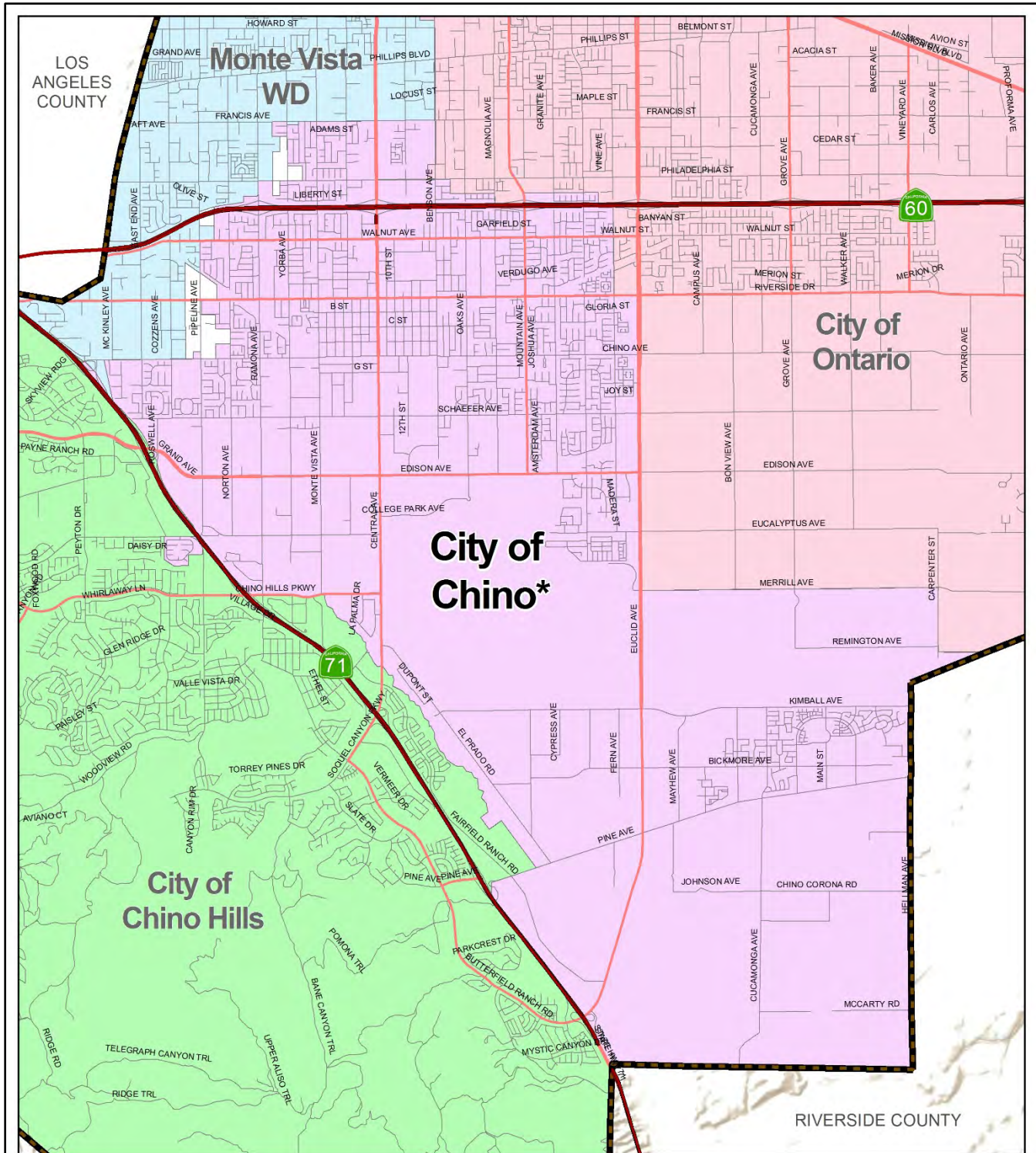
Sources: City of Chino Hills Urban Water Management Plan (2015); State Water Board Stress Test and Water Conservation Targets, financial statements

City of Chino Hills Additional Information

As a condition of the City of Chino Hills' incorporation in 1991 (LAFCO 2650), the City of Chino Hills assumed service responsibility for the entirety of County Waterworks District #8 ("Waterworks #8"). The boundaries of Waterworks #8 were coterminous with the incorporation area, with the exception of several parcels located northeast of the incorporation area. Waterworks #8 was a Board of Supervisors governed special district that was under the administrative direction of the Chino Hills Manager's Office. The circumstance as to the City's assuming responsibility for this area at its time of incorporation remains today – the City of Chino's water lines are not adjacent to this area. Therefore, the City of Chino Hills remains as the most logical water provider – not in a governmental structure sense, rather in a service delivery sense.

Additionally, the City of Chino Hills has confirmed that there is a sliver of Chino Hills that the City of Pomona provides water service and a small area of Pomona that Chino Hills provides sewer service.

The Monte Vista Water District provides wholesale water supply to the City of Chino Hills. Under the provisions of a long-term agreement executed in July 1998, the District is contracted to deliver to Chino Hills up to 20.22 mgd. Since initiation of full deliveries in 1999, the District has delivered between 7,500 and 14,000 AFY of water to the City under the terms of the agreement. The agreement between the two agencies contains provisions regarding water delivery limitations during emergency situations such as natural or other disasters.



City of Chino



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Map Created: 5/3/2017

*In instances of overlapping water systems, the boundary of the underlying government system is reduced.

- City of Chino
- City of Chino Hills
- City of Ontario
- Monte Vista Water District
- Valley Region
- San Bernardino County Line

City of Chino

Chino

Agency Information			
Principal Act	Government Code Title 4 - §34000	Year Formed	1910
Governance	Separately elected mayor and 4 city council members	Square Miles	30.9
Website	http://www.cityofchino.org/	2015 Population	84,465

LAFCO Authority	
Authorized Functions	Police, water, sewer, solid waste, community development, parks and community services, and general administrative services
Previous service review	http://www.sbclafco.org/Proposals/ServiceReviews/ValleyRegion/WestValleyRegion.aspx

Infrastructure				
Supply	Groundwater (9 active wells with total capacity of 9,590 gpm), purchased State Water Project (Water Facilities Authority), purchased desalted water (Chino Basin Desalter Authority)			
Storage	5 tanks with total storage of 18.5 MG			
Distribution	16" and 24" transmission lines; 3 pressure zones; 3 booster stations			
Connections	Within Boundary	Outside Boundary/Within Sphere	Outside Sphere	Total
	19,029	19	--	19,048

Per Capita Water Use & Conservation					
Gallons/Capita/Day Residential		Cumulative Savings (compared to 2013)	State Stress Test Summary ¹		
Nov 16	Feb 17		Est. Annual Potable Demand	Est. Annual Total Supply for WY 2019	Current State Cons. Standard
86.0 AF	59.8 AF	15.5%	15,733 AF	23,931 AF	0%

Typical Monthly Residential Water Bill (3/4" meter, 15 ccf), as of 1 July 2016			
Meter Charge	Consumption Charge	Surcharge	Total
\$23.43	\$39.60	--	\$63.03

Cash Flows	2011	2012	2013	2014	2015
Increase (Decrease) in Cash & Equivalents	(\$370,873)	\$223,579	(\$1,935,155)	\$991,363	\$8,013,928
Cash & Equivalents, End of Year	\$4,165,562	\$4,389,141	\$2,453,986	\$3,445,349	\$11,459,277

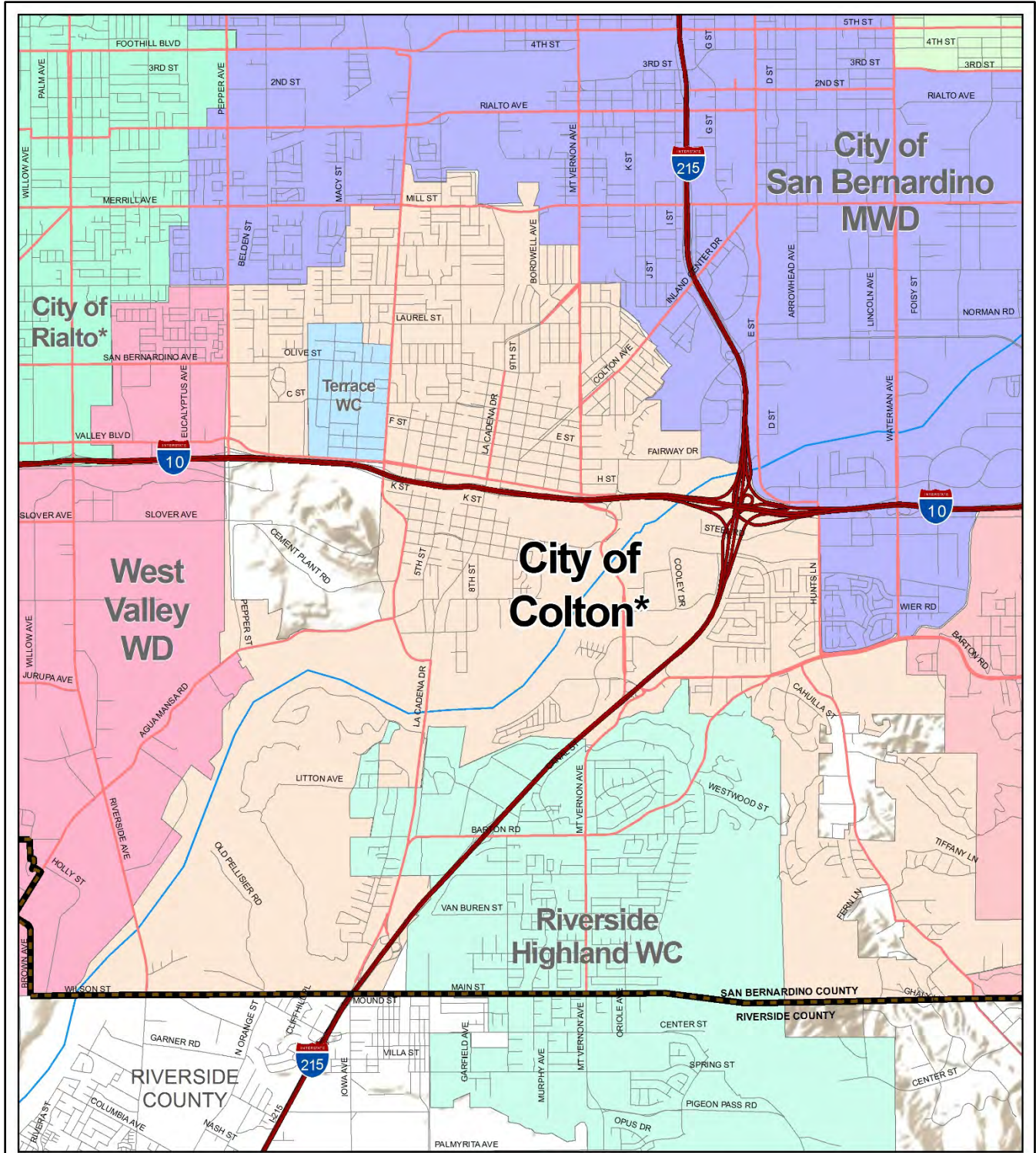
Sources: City of Chino website, City of Chino Hills Urban Water Management Plan (2015); State Water Board Stress Test and Water Conservation Targets, financial statements

¹ The Cities of Chino, Chino Hills, Ontario, Upland; and the Monte Vista Water District (collectively, "Member Agencies") are member agencies and joint owners of the Water Facilities Authority. The Water Facility Authority and the Member Agencies have jointly agreed to coordinate to collect relevant data and documentation for submittal of the aggregated conservation standard certification.

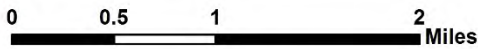
City of Chino Additional Information

In 1983 Waterworks District No. 8 (“WW8”) took over several private water companies in the Chino Hills and West Chino areas. The question of service providers was decided by the Commission in 1986 when it determined the sphere of influence for the Monte Vista Water District in this area. This decision set in place agreements reached between the City of Chino, Monte Vista WD and WW8.

In 1989 WW8 desired to detach from those areas east of Highway 71 in order to concentrate its efforts to the west of Highway 71. LAFCO 2500 transferred service from one agency to another (WW8 to Monte Vista WD), and since there was no new development or change in local service requirements the Commission overrode its community-by-community approach to these considerations which normally would have included the consideration of annexation to the City of Chino. However, significant portions remained within the City of Chino service area where it continues to provide to service.



City of Colton



- City of Colton*
- City of Loma Linda
- City of Rialto*
- City of San Bernardino Municipal Water Department
- East Valley Water District
- Riverside Highland Water Company
- Terrace Water Company
- West Valley Water District
- Valley Region
- San Bernardino County Line



Disclaimer: The information shown is intended to be used for general display only and is not to be used as an official map.

Map Created: 5/15/2017

*In instances of overlapping water systems, the boundary of the underlying government system is reduced.

City of Colton

Colton

Agency Information			
Principal Act	Government Code Title 4 - §34000	Year Formed	1887
Governance	7-member city council; 6 elected by district; 1 city-wide	Square Miles	14
Website	http://www.ci.colton.ca.us/	2015 Population	45,496

LAFCO Authority	
Authorized Functions	Police and fire protection, electricity, water, sanitation, public works, parks, recreation and certain social services and general administration services
Previous service review	http://www.sbclafco.org/Proposals/ServiceReviews/ValleyRegion/EastValleyRegion.aspx

Infrastructure				
Supply	Groundwater (15 wells with total capacity of 12,855 gpm from the Riverside North, Rialto-Colton, and Bunker Hill Subbasins)			
Storage	9 water storage reservoirs			
Distribution	120 miles of water distribution pipelines, 5 booster pumping plants, 2 pressure reducing facilities			
Connections	Within Boundary	Outside Boundary/Within Sphere	Outside Sphere	Total
	10,290	11	-	10,301

Supply & Demand, AFY	2015	2020	2025	2030	2035	2040
Supply	12,608	12,608	13,000	13,770	14,853	14,853
Demand	9,008	10,458	11,301	11,978	12,698	13,462

Per Capita Water Use & Conservation					
Gallons/Capita/Day Residential		Cumulative Savings (compared to 2013)	State Stress Test Summary		
Nov 16	Feb 17		Est. Annual Potable Demand	Est. Annual Total Supply for WY 2019	Current State Cons. Standard
86.0 AF	Did not file	10.3%	10,287 AF	9,133 AF	11%

Typical Monthly Residential Water Bill (3/4" meter, 15 ccf), as of 1 July 2016			
Meter Charge	Consumption Charge	Surcharge	Total
\$22.78	\$1.47 x 15 = \$22.05	-	\$44.83

Cash Flows	2011	2012	2013	2014	2015
Increase (Decrease) in Cash & Equivalents	\$(2,878)	\$137	\$(1,813,718)	\$1,557,954	\$3,451,201
Cash & Equivalents, End of Year	\$3,597,456	\$3,597,593	\$1,783,875	\$3,358,076	\$6,809,277

Sources: 2015 San Bernardino Valley Regional Urban Water Management Plan; City of Colton website, State Water Board Stress Test and Water Conservation Targets, financial statements

City of Colton Additional Information

Dispute

The validity and extent of the City’s water rights are disputed, and are the subject of a lawsuit currently pending in the Superior Court for the County of San Bernardino. The suit is entitled *San Bernardino Valley Municipal Water District et al. v. San Gabriel Valley Water Co. et al.*, Case No. CVDS1311085.¹ Whether the area referred to as "No Man's Land" is part of the Rialto-Colton Subbasin is disputed and is the subject of a lawsuit currently pending. It should be noted that the parties have been working to reach a resolution for some time now and the case is close to reaching an amenable end.

Retail System	Rialto-Colton Subbasin	Lytle Creek Subbasin	Rialto Basin	Area known as "No Man's Land"
City of Colton	Dispute	Dispute	Dispute	Dispute
City of Rialto	Dispute	Dispute	Dispute	Dispute
Fontana Water Company	Dispute	Dispute	No	Dispute
West Valley Water District	Dispute	Dispute	Dispute	Dispute

Out of Agency Service Contracts

On two occasions LAFCO has authorized the City of Colton to provide water service outside of its boundary (but within its sphere of influence) within the service area of Terrace Water Company, a mutual water company that serves the areas. The purpose of the City's requests were to alleviate a potential health and safety concern associated with insufficient fire flow provided by the Terrace Water Company. On both occasions, Terrace Water Company consented to the City providing the service due to insufficient water capacity and difficulty providing fire flow.

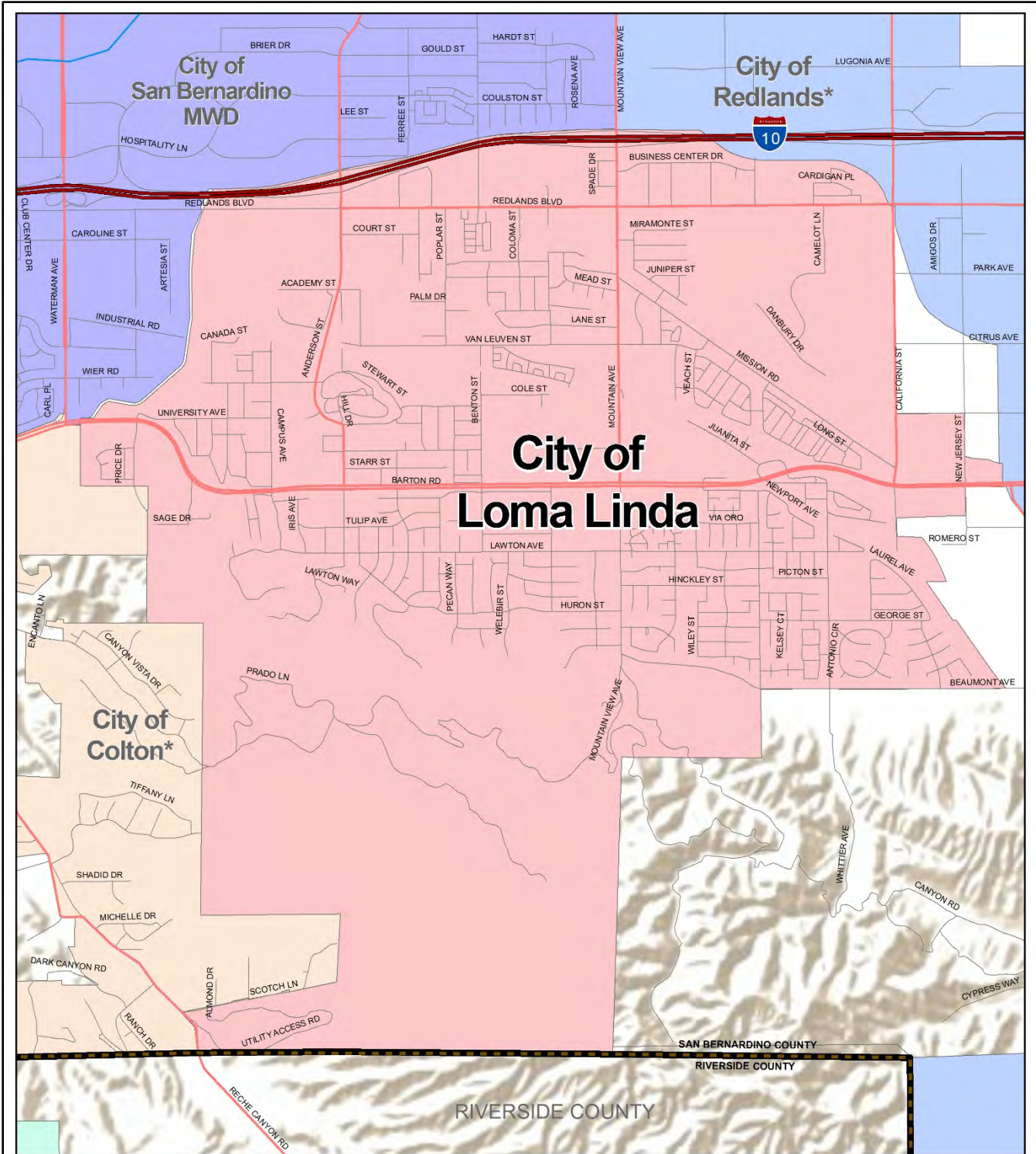
First, in 2008, LAFCO authorized the City to provide water service and future sewer service to roughly ¾ acre located on the north side of Valley Blvd. between Cyprus and Grand Avenues (LAFCO Service Contract #337). In 2016 the Commission approved Service Contract #406 authorizing the City to provide water and sewer services to roughly six acres for a proposed affordable housing project generally located at the northeast corner of Valley Blvd. and Cyprus Avenue.

City of Colton Service in Loma Linda

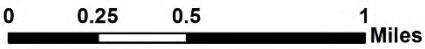
In 1992, LAFCO 2706 and 2707 (1) transferred 1.8 acres of unincorporated land from the City of Colton sphere of influence to the City of Loma Linda sphere of influence; and (2) annexed the area to the City of Loma Linda. What is unique about this proposal was that the City of Colton agreed to provide water and sewer service to the entire tract on an interim basis (area generally known as

¹ Upper Santa Ana River Watershed Integrated Regional Water Management Plan (January 2015), Sec. 2.3.

South Hills), under an agreement reached with the City of Loma Linda. This service agreement recognizes that the City of Loma Linda cannot economically extend its water and sewer services to the area until other areas, adjacent to the site and within Loma Linda boundaries, begin to develop. Once that additional development occurs, the City of Loma Linda is supposed to acquire full service responsibility for the entire area. However because as the adjacent areas have not developed – what was once agreed to as an interim arrangement has become permanent.



City of Loma Linda



Disclaimer: The information shown is intended to be used for general display only and is not to be used as an official map.

Map Created: 5/8/2017

*In instances of overlapping water systems, the boundary of the underlying government system is reduced.

- City of Loma Linda
- City of Colton*
- City of Redlands*
- City of San Bernardino
- Municipal Water Department
- Riverside Highland Water Company
- Valley Region
- San Bernardino County Line

City of Loma Linda

Loma Linda

Agency Information			
Principal Act	Government Code Title 4 - §34000	Year Formed	1970
Governance	5-member city council, elected at large	Square Miles	10.6
Website	http://lomalinda-ca.gov/	2015 Population	23,298

LAFCO Authority	
Authorized Functions	Park and recreation, fire protection and emergency medical response, water, streetlights, and wastewater collection services
Previous service review	http://www.sbclafco.org/Proposals/ServiceReviews/ValleyRegion/EastValleyRegion.aspx

Infrastructure				
Supply	Groundwater (6 wells with 12,700 gpm capacity from the Bunker Hill sub-basin)			
Storage	6 reservoirs with 14 million gallon capacity			
Distribution	5 pressure zones, 6 booster zones, 6 pressure reducing stations			
Connections	Within Boundary	Outside Boundary/Within Sphere	Outside Sphere	Total
	5,391	11	--	5,402

Supply & Demand, AFY	2020	2025	2030	2035	2040
Supply	6,418	6,814	7,236	7,683	7,683
Demand	5,200	5,527	5,875	6,245	6,638

Per Capita Water Use & Conservation					
Gallons/Capita/Day Residential		Cumulative Savings (compared to 2013)	State Stress Test Summary		
Nov 16	Feb 17		Est. Annual Potable Demand	Est. Annual Total Supply for WY 2019	Current State Cons. Standard
113.4 AF	72.2 AF	16.3%	5,556 AF	4,965 AF	11%

Typical Monthly Residential Water Bill (3/4" meter, 15 ccf), as of 1 July 2016			
Meter Charge	Consumption Charge	Surcharge	Total
\$13.86	\$10.95	--	\$24.61

Cash Flows	2011	2012	2013	2014	2015
Increase (Decrease) in Cash & Equivalents	\$(28,703)	\$164,202	\$(146,664)	\$(210,832)	\$(428,132)
Cash & Equivalents, End of Year	\$1,533,335	\$1,697,537	\$1,550,873	\$1,340,041	\$911,909

Sources: 2015 San Bernardino Valley Regional Urban Water Management Plan; City of Loma Linda website, State Water Board Stress Test and Water Conservation Targets, financial statements

City of Loma Linda Additional Information

Measure V, Growth Management

In 2006, the voters of the City of Loma Linda passed Ballot Measure V, stating that:

“The purpose and intent of this initiative measure is to amend the Loma Linda General Plan by the addition of a new growth management element designed to establish principles of managed growth that will preserve, enhance, and maintain the special quality of life valued by this community, including the protection of hillside areas, preservation of open space, and maintenance of safe, quiet residential areas so that future development within the City will occur in a way that promotes the social and economic well-being of the entire community.”

Measure V added Chapter 2A, Growth Management, to the General Plan. As noted in Measure V, “it must be constantly remembered that all of the elements of the General Plan are intricately woven together and a significant change in one could affect them all.” Thus, maintaining the internal consistency of the General Plan as required by State law requires each of the elements of the General Plan to be consistent with the provisions of Measure V as approved. According to Chapter 2A, several provisions of Measure V have the potential to affect the production of housing for all economic segments of the community, including:

- Lowering the maximum allowable density of the “High Density Residential” land use designation from 20 dwelling units per acre to 13 units per acre.
- Lowering the maximum allowable density of the “Low Density Residential” land use designation from 5 dwelling units per acre to 4 units per acre.
- Modifying all land use designations to have a minimum density of zero units per acre.
- Eliminating the potential for small lot single family by establishing a 7,200 square foot minimum lot size for all detached residential development throughout the City.
- Reducing the potential buildout within hillside areas.
- Establishing stringent traffic mitigation standards that could restrict the density of new development or delay start of construction.

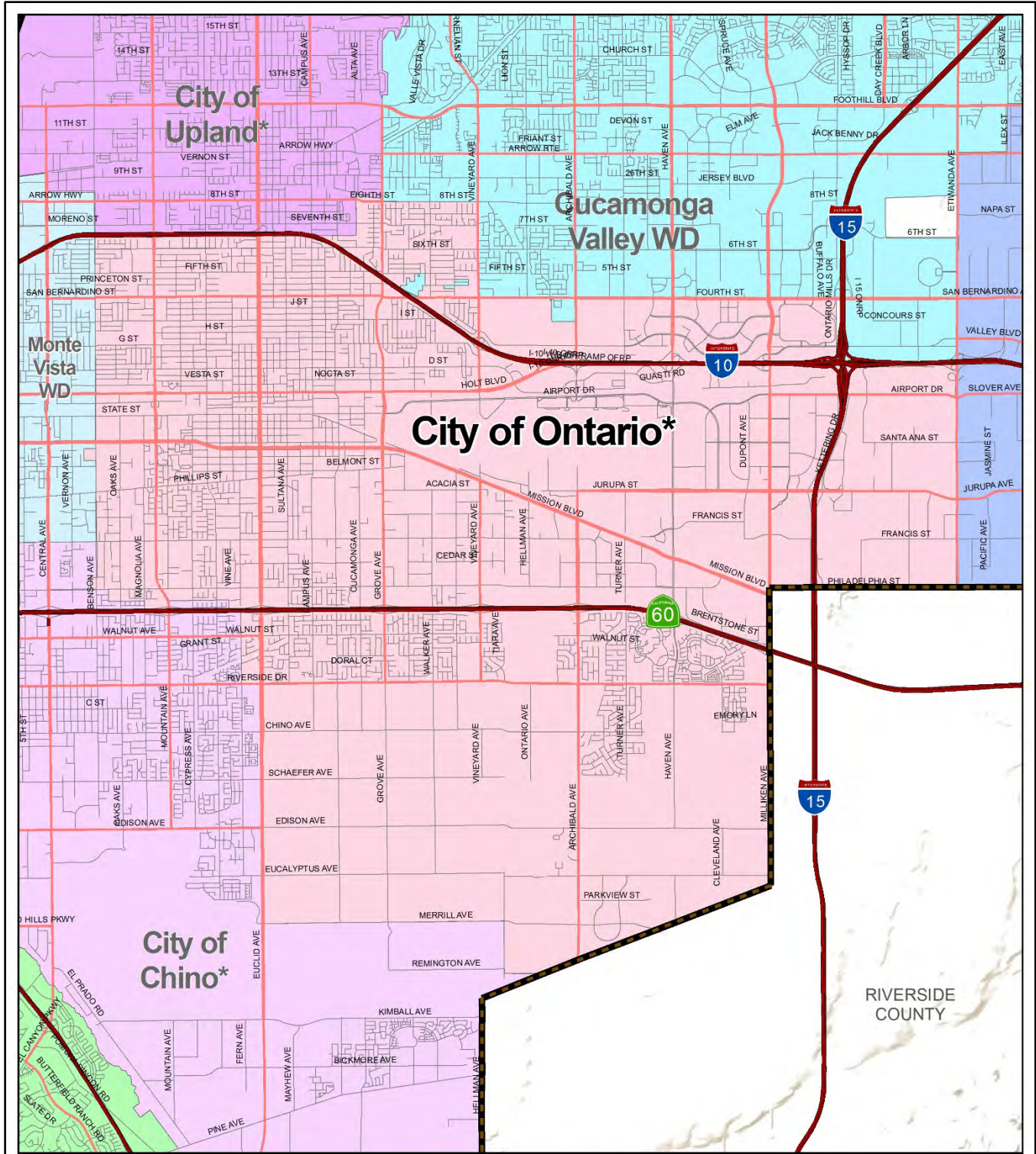
Reducing the intensity of potential development within Loma Linda’s hillside areas was one of Measure V’s major objectives. Because of the “environmental constraints” that any hillside development would have to address, the overall density of potential development within the South Hills area would have been low, even prior to Measure V. According to Chapter 2A, it is estimated that Measure V will result in a 200-500 dwelling unit decrease in the buildout of the South Hills Area, after considering the density transfers and bonuses available both prior to and after the adoption of Measure V, affecting the production of housing for above moderate income households.

Measure V was intended to recognize the substantial limitations present within the City’s hillside. Given the City’s language, this area is not intended to develop with needs for municipal level services. Government Code Section 56076 defines a sphere of influence as “a plan for the probable physical boundaries and service area of a local agency, as

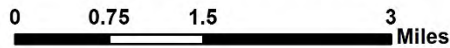
determined by the commission.” Therefore, if substantial limitations restrict the extension of services to the South Hills, LAFCO staff questions if this area should remain within the City’s sphere of influence. While staff is not recommending a sphere reduction in this service review, the subsequent service reviews for wastewater and fire protection may show compounding reasons for such a recommendation.

City of Colton Service in Loma Linda

In 1992, LAFCO 2706 and 2707 (1) transferred 1.8 acres of unincorporated land from the City of Colton sphere of influence to the City of Loma Linda sphere of influence; and (2) annexed the area to the City of Loma Linda. What is unique about this proposal was that the City of Colton agreed to provide water and sewer service to the entire tract on an interim basis (area generally known as South Hills), under an agreement reached with the City of Loma Linda. This service agreement recognizes that the City of Loma Linda cannot economically extend its water and sewer services to the area until other areas, adjacent to the site and within Loma Linda boundaries, begin to develop. Once that additional development occurs, the City of Loma Linda is supposed to acquire full service responsibility for the entire area. However, as the adjacent areas have not developed – what was once agreed to as an interim arrangement has become permanent and cannot develop due to Measure V.



City of Ontario



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Map Created: 5/15/2017

*In instances of overlapping water systems, the boundary of the underlying government system is reduced.

	City of Ontario		Cucamonga Valley Water District
	City of Chino		Monte Vista Water District
	City of Chino Hills		Fontana Water Company
	City of Upland		Valley Region
	San Bernardino County Line		

Agency Information			
Principal Act	Government Code Title 4 - §34000	Year Formed	1890
Governance	5-member city council, elected at large	Square Miles	50
Website	http://www.ontarioca.gov/	2015 Population	168,777

LAFCO Authority	
Authorized Functions	Parks and recreation, sewer, solid waste, water, fire protection and emergency response and police services
Previous service review	http://www.sbclafco.org/Proposals/ServiceReviews/ValleyRegion/WestValleyRegion.aspx

Infrastructure				
Supply	Groundwater (20 active wells, 47900 gpm capacity) ¹ , purchased desalted water (Chino Basin Desalter Authority), purchased State Water Project & surface water (Water Facilities Authority); surface water (through shares in the San Antonio Water Company); recycled water			
Storage	12 reservoirs with total storage of 75 MG			
Distribution	5 pressure zones; 8 booster stations			
Connections	Within Boundary	Outside Boundary/Within Sphere	Outside Sphere	Total
	34,308	--	--	34,308

Supply & Demand, AFY	2015	2020	2025	2030	2035	2040
Supply	36,153	39,369	43,710	50,966	61,470	73,640
Demand	36,153	39,369	43,710	50,966	61,470	73,640

Per Capita Water Use & Conservation					
Gallons/Capita/Day Residential		Cumulative Savings (compared to 2013)	State Stress Test Summary ²		
Nov 16	Feb 17		Est. Annual Potable Demand	Est. Annual Total Supply for WY 2019	Current State Cons. Standard
81.5 AF	60.2 AF	16.7%	35,809 AF	55,993 AF	0%

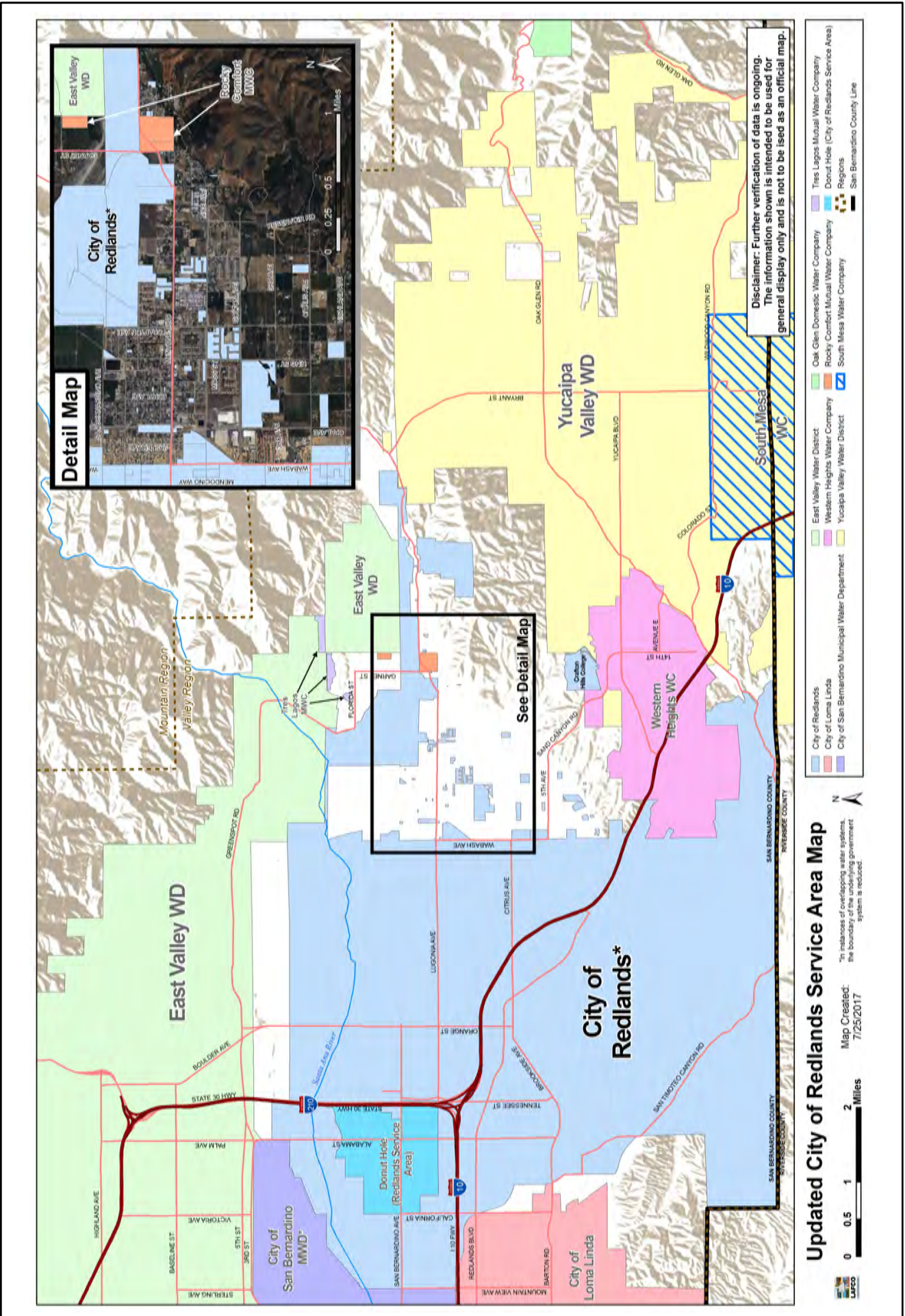
Typical Monthly Residential Water Bill (3/4" meter, 15 ccf), as of 1 July 2016			
Meter Charge	Consumption Charge	Surcharge	Total
\$31.45	\$35.85	--	\$67.30

Cash Flows	2011	2012	2013	2014	2015
Increase (Decrease) in Cash & Equivalents	\$12,701,797	\$11,930,065	\$6,834,590	\$20,774,240	\$2,689,352
Cash & Equivalents, End of Year	\$73,693,119	\$85,623,184	\$92,457,774	\$113,232,014	\$115,921,366

Sources: City of Ontario website, City of Ontario Urban Water Management Plan (2015); State Water Board Stress Test and Water Conservation Targets, financial statements

¹ Has shares in San Antonio Water Company

² The Cities of Chino, Chino Hills, Ontario, Upland; and the Monte Vista Water District (collectively, "Member Agencies") are member agencies and joint owners of the Water Facilities Authority. The Water Facility Authority and the Member Agencies have jointly agreed to coordinate to collect relevant data and documentation for submittal of the aggregated conservation standard certification.



City of Redlands

Redlands, unincorporated San Bernardino County, and small portion of the City of San Bernardino

Agency Information			
Principal Act	Government Code Title 4 - §34000	Year Formed	1888
Governance	5-member city council, elected at large	Square Miles	36 ¹
Website	http://www.cityofredlands.org/	2015 Population	85,276

LAFCO Authority	
Authorized Functions	Fire protection and emergency medical, water, sewer, police, parks and recreation, library, airport and cemetery services
Previous service review	http://www.sbclafco.org/Proposals/ServiceReviews/ValleyRegion/EastValleyRegion.aspx

Infrastructure				
Supply	Groundwater (20 wells with capacity of 30,458 gpm), surface water, State Water Project (SB Valley Municipal Water District)			
Storage	18 reservoirs, 54.5 million gallon storage capacity			
Distribution	400 miles of distribution pipeline, 7 pressure zones, 37 booster pumps			
Connections	Within Boundary	Outside Boundary/Within Sphere	Outside Sphere	Total
	19,504	2,754	0	22,258

Supply & Demand, AFY	2015	2020	2025	2030	2035	2040
Supply	25,936	62,148	63,966	63,534	64,098	64,098
Demand	24,322	33,138	34,164	34,940	35,715	35,715

Per Capita Water Use & Conservation					
Gallons/Capita/Day Residential		Cumulative Savings (compared to 2013)	State Stress Test Summary		
Nov 16	Feb 17		Est. Annual Potable Demand	Est. Annual Total Supply for WY 2019	Current State Cons. Standard
139.3 AF	69.6 AF	22.4%	27,201 AF	47,645 AF	0% ²

Typical Monthly Residential Water Bill (3/4" meter, 15 ccf), as of 1 July 2016			
Meter Charge	Consumption Charge	Surcharge	Total
\$17.68	\$8.85	--	\$26.53

Cash Flows	2011	2012	2013	2014	2015
Increase (Decrease) in Cash & Equivalents	(\$1,681,625)	\$6,438,046	\$(8,455,856)	(\$5,955,697)	\$1,823,675
Cash & Equivalents, End of Year	\$26,841,319	\$33,279,365	\$24,823,509	\$18,867,812	\$20,691,487

Sources: City of Redlands website, San Bernardino Valley Regional Urban Water Management Plan (2015), State Water Board Stress Test and Water Conservation Targets, financial statements

¹ Does not include 5,000 residents served outside the City boundary but within the City's sphere of influence.

² "The City plans to achieve at least a 15 percent potable water use reduction, as compared to 2013. This amount was established based on the safe yield in the basin, anticipated conservation from other basin users, and imported State Water Project water. If a 15 percent reduction is achieved it is anticipated there will be little to no impact to the basin."

City of Redlands Additional Information

The City shares/co-owns a reservoir with San Bernardino Valley Municipal Water District (Valley District) to meet the needs of both utilities. The collaboration has allowed both agencies to meet customer demands and at the same time reduce costs.

The City also has identified that it owns shares of the following water entities:

Bear Valley Mutual: 90,572
Crafton Water Co.: 408.75
Lugonia Water Co.: 837.5
Redlands Heights Water Co.: 982.5
Redlands Water Co.: 1,234.83
South Mountain Water Co.: 911
West Redlands Water Co.: 464.5

Measure U

A growth management initiative referred to as Measure U was passed by the City voters in 1997, as enacted within the Redlands General Plan and Municipal Code. The principles of managed development established by the measure assure that future development within the City occurs in a way that promotes the social and economic well-being of the entire community. Section J of the Measure states that it is "...consonant with and furthers the purpose and intent of Proposition R, approved by the voters in 1978, and Measure N, approved by the voters in 1987 with regard to the preservation of agricultural land." Specifically, development within the planning area and sphere of influence of the City of Redlands shall conform to development standards within the City. Further, the City has a total of 550 residential units available for development each calendar (150 units within the sphere of influence and 400 units within the City). If the proposed service connection is adjacent to the City limits, then annexation is the sole method of obtaining service.

For utility connections for residential development outside of the City limits, the City adopted Ordinance 2080 in July 2015 setting forth requirements:

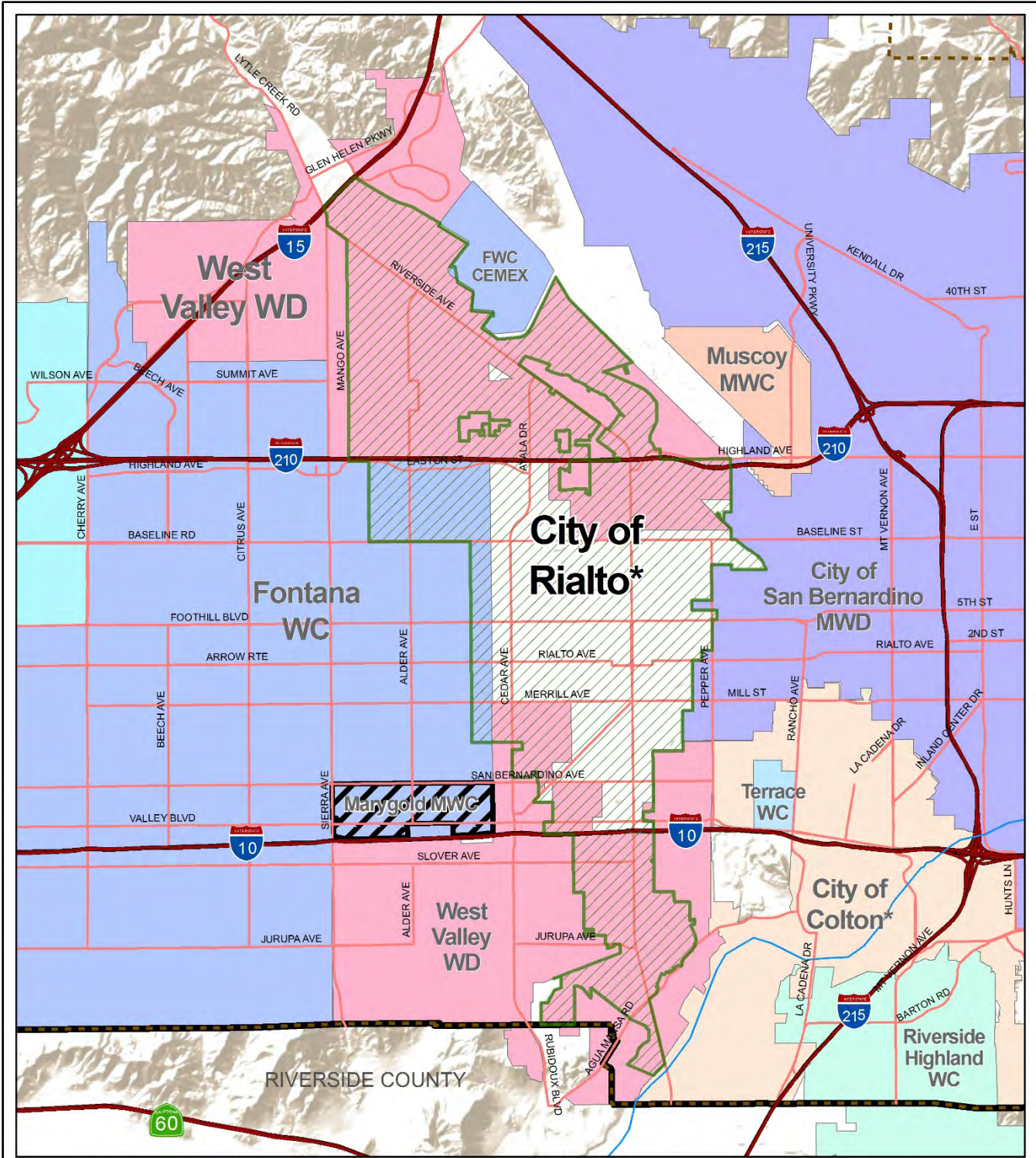
- The owner of the property to be served enters into a preannexation agreement with the city, which requires the owner to irrevocably consent to annexation proceedings
- Payment to the City of an amount equivalent to all capital improvement and other development fees which would be applicable to the property if it were within city limits.
- The preannexation agreement shall provide, among other things, that in the event the property is not annexed to the city in accordance with the terms of the agreement, the owner of the property shall pay each year to the city, as liquidated damages, a sum equal to the property taxes and any sales taxes the city would have received had the property been annexed.
- The preannexation agreement shall further provide that the failure to make such liquidated damages payments shall be cause for the city to cease water and/or sewer service to the project.

The City is currently working with community members on an updated general plan anticipated to be brought to Council late-2017 that will provide a vision of development through 2035.

Service in Yucaipa

Crafton Hills College currently receives its water and sewer services through the City of Redlands. This arrangement took place in the early 1970s when the College was developed. The availability of the level of service required could not be provided by the Western Heights Mutual Water Company for water service, and sewer service was not available within the community. The area, at that time, was a part of the City of Redlands sphere of influence.

LAFCO 2803 in 1996 (Yucaipa Valley sphere expansion) recognized an interim water supply agreement with the City of Redlands to provide a temporary water service to the residential subdivision identified as Tract 12222 within the City of Yucaipa and service area of the Yucaipa Valley Water District. This agreement was entered into prior to the implementation of Govt. Code Section 56133 (which requires Commission approval of such contracts) and continues to this day.



City of Rialto



Disclaimer: The information shown is intended to be used for general display only and is not to be used as an official map.

Map Created:
5/3/2017

*In instances of overlapping water systems, the boundary of the underlying government system is reduced.

	City of Rialto		Muscoy Mutual Water Company		West Valley Water District
	City of San Bernardino Municipal Water Department		Riverside Highland Water Company		Marygold Mutual Water Company
	City of Colton*		Terrace Water Company		Valley Region
	Fontana Water Company		Cucamonga Valley Water District		San Bernardino County Line

Agency Information			
Principal Act	Government Code Title 4 - §34000	Year Formed	1911
Governance	5-member city council (mayor elected separately)	Square Miles	89
Website	http://yourrialto.com/	2015 Population	54,453

LAFCO Authority	
Authorized Functions	Police, fire protection and emergency medical, roads, parks and recreation, public improvements, planning and zoning, and general administrative services
Previous service review	http://www.sbclafco.org/Proposals/ServiceReviews/ValleyRegion/EastValleyRegion.aspx

Infrastructure				
Supply	Groundwater (8 wells from Rialto-Colton Subbasin, Lytle Creek Subbasin, San Bernardino Basin Area, and the “Chino wells”, the latter of which are not located within the adjudicated boundaries of Chino Basin.), treated surface water (West Valley Water District), treated groundwater (SB Valley Municipal Water District), recycled			
Storage	6 reservoirs with a total of 28.0 MG			
Distribution	162 miles of distribution mains; 3 pressure zones; 3 sub-pressure zones			
Connections	Within Boundary	Outside Boundary/Within Sphere	Outside Sphere	Total
	11,950	6	-	11,956

Supply & Demand, AFY	2015	2020	2025	2030	2035	2040
Supply	8,795	11,596	12,096	12,596	13,096	13,596
Demand	8,795	10,583	11,216	11,886	12,597	13,350

Per Capita Water Use & Conservation					
Gallons/Capita/Day Residential		Cumulative Savings (compared to 2013)	State Stress Test Summary		
Nov 16	Feb 17		Est. Annual Potable Demand	Est. Annual Total Supply for WY 2019	Current State Cons. Standard
85.4 AF	63.7 AF	20.4%	10,277 AF	11,400 AF	0% ¹

Typical Monthly Residential Water Bill (3/4” meter, 15 ccf), as of 1 July 2016			
Meter Charge	Consumption Charge	Surcharge	Total
\$30.25	\$22.25	--	\$52.50

Cash Flows	2011	2012	2013	2014	2015
Increase (Decrease) in Cash & Equivalents	\$417,917	(\$3,367,392)	\$5,863,660	(\$4,527,407)	(\$2,117,851)
Cash & Equivalents, End of Year	\$13,432,267	\$12,667,935	\$18,531,595	\$14,004,188	\$11,886,337

Sources: San Bernardino Valley Regional Urban Water Management Plan (2015); State Water Board Stress Test and Water Conservation Targets, financial statements

¹ “The City is reviewing options for reduction percentage higher than 0%.”

City of Rialto Additional Information

The City is a community water system that supplies water for domestic purposes to approximately one-half of the population of the City of Rialto, or an estimated population of 49,000. The City's service area is essentially the incorporated area between I-10 and 210. This service area is the central portion of the City of Rialto. The remaining City areas are served by the West Valley Water District ("WVWD") and Fontana Water Company.

Contract with Veolia

Since 2002, the City contracted with Veolia Water North America ("Veolia") for the water system's operations. However, due to contamination, Rialto had to purchase water at a high premium from other municipal operators, and main breaks became commonplace. Additionally, according to the Brookings Institution, Rialto's "historically underfunded system also struggled to meet pension liabilities, which were starting to weigh on the utility's ability to affordably raise capital in the tax-exempt market."²

As a result, in January 2013, the City deepened its contract relationship with Veolia for a 30-year contract to manage the City's water and wastewater systems. All construction, operations, and customer service are performed by Veolia. Under the agreement the City retains full ownership of water and wastewater system assets, water rights and supply, and authority over all rate-setting. Additionally, the City contracted with WVWD to provide operation and maintenance services to the City's treatment plants. Veolia is obligated to upgrade the system and has committed to \$41 million in capital improvements. The deal effectively shifted all the operational and financial risks inherent in running the utility to RWS, while easing the City's budgetary challenges. The Contract Agreement between the City and WVWD was dated July 9, 2013 and the Second Amendment to the Contract Agreement was dated August 12, 2014.

Of caution, these agreements can hinder future budgetary flexibility and may end up costing users or taxpayers more over the long term. The obligated payments are a liability against the City that are paid by the customers through rates.

Water Quality

The Rialto-Colton Sub-basin contains a groundwater contaminant plume called the Rockets, Fireworks, and Flares Site, which is in the process of being removed. The cleanup is focused on pollution from the 160-acre formerly named B.F. Goodrich Superfund site where toxic chemicals, including perchlorate and trichloroethene ("TCE"), were disposed over many decades. The cost of to remediate the site cleanup is being funded by a number of partners including the U.S. Environmental Protection Agency and the Goodrich Corporation.

All active wells located in the Rialto and North Riverside groundwater basins suffer from perchlorate contamination (except Rialto Well 5) and perchlorate treatment is provided to

² Brookings Institution. "Private Capital, Public Good. Drivers of Successful Infrastructure Public-Private Partnerships". December 2014.

these contaminated wells. The treatment system was constructed to intercept, contain, and treat the impacted groundwater in accordance with Regional Water Quality Control Board Orders RB-2003-0013 and RB-2004-0072. Rialto has adopted a “zero tolerance” policy for perchlorate, meaning that it will not serve water with any perchlorate even if the water meets all of the public health standards. In 2003, the City declared a water shortage emergency in accordance with California Water Code §350-359.

Rialto operates wastewater service within the city and has recently initiated deliveries of recycled water to the California Department of Transportation. Surface water treatment of Lytle Creek water is provided by the Oliver P. Roemer Water Filtration Plant owned and operated by West Valley. Rialto owns a portion of the capacity of that plant.

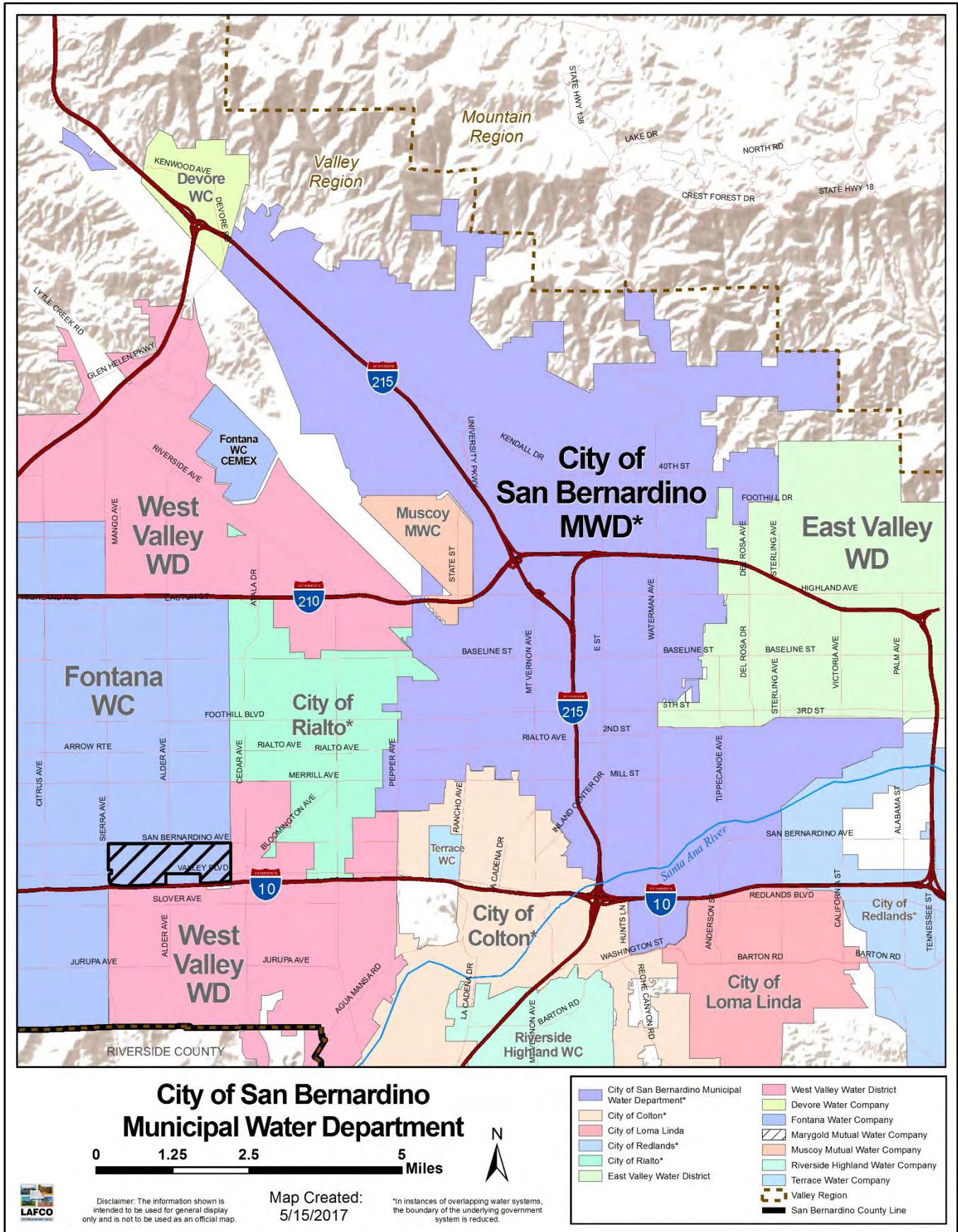
A portion of the City in the west is within the certificated service area of the Fontana Water Company, which produces water from within the boundary of another state water contractor, the Inland Empire Utilities Agency.

Dispute

The validity and extent of the City’s water rights are disputed, and are the subject of a lawsuit currently pending in the Superior Court for the County of San Bernardino. The suit is entitled *San Bernardino Valley Municipal Water District et al. v. San Gabriel Valley Water Co. et al.*, Case No. CVDS1311085.³ Whether the area referred to as "No Man's Land" is part of the Rialto-Colton Subbasin is disputed and is the subject of a lawsuit currently pending. It should be noted that the parties have been working to reach a resolution for some time now and the case is close to reaching an amenable end.

Retail System	Rialto-Colton Subbasin	Lytle Creek Subbasin	Rialto Basin	Area known as “No Man’s Land”
City of Colton	Dispute	Dispute	Dispute	Dispute
City of Rialto	Dispute	Dispute	Dispute	Dispute
Fontana Water Company	Dispute	Dispute	No	Dispute
West Valley Water District	Dispute	Dispute	Dispute	Dispute

³ Upper Santa Ana River Watershed Integrated Regional Water Management Plan (January 2015), Sec. 2.3.



City of San Bernardino - Municipal Water Department

San Bernardino

Agency Information			
Principal Act	<i>City Charter, Adopted 11-8-16. [Amended at 7-19-17 LAFCO hearing]</i>	Year Formed	1905
Governance	Board of Water Commissioners (appointed by Mayor and subject to confirmation by Common Council)	Square Miles	81
Website	http://www.ci.san-bernardino.ca.us/water	2015 Population	199,657

LAFCO Authority	
Authorized Functions	Water, sewer (collection, treatment) <i>[Amended at 7-19-17 LAFCO hearing]</i>
Previous service review	http://www.sbclafco.org/Proposals/ServiceReviews/ValleyRegion/EastValleyRegion.aspx

Infrastructure				
Supply	Groundwater (55 wells with a capacity of 64,563 gpm)			
Storage	44 storage reservoirs with 112 MG total storage capacity			
Distribution	700 miles of pipeline; 13,800 valves; 19 pressure zones; 4,000 fire hydrants			
Connections	Within Boundary	Outside Boundary/Within Sphere	Outside Sphere	Total
	?	?	?	42,000

Supply & Demand, AFY	2015	2020	2025	2030	2035	2040
Supply	36,035	58,271	66,830	75,466	84,082	90,582
Demand	36,035	45,969	49,094	53,339	57,623	59,449

Per Capita Water Use & Conservation					
Gallons/Capita/Day Residential		Cumulative Savings (compared to 2013)	State Stress Test Summary		
Nov 16	Feb 17		Est. Annual Potable Demand	Est. Annual Total Supply for WY 2019	Current State Cons. Standard
94.6 AF	69.6 AF	19.7%	44,098 AF	44,641 AF	0% ¹

Typical Monthly Residential Water Bill (3/4" meter, 15 ccf), as of 1 July 2016			
Meter Charge	Consumption Charge	Surcharge	Total
\$20.15	\$17.25	\$3.30 (assumes elevation zone 1)	\$40.70

Cash Flows	2011	2012	2013	2014	2015
Increase (Decrease) in Cash & Equivalents	\$13,792,066	(\$8,213,042)	(\$9,484,423)	\$2,614,383	\$6,304,318
Cash & Equivalents, End of Year	\$42,706,673	\$34,493,631 ²	\$5,373,390	\$7,987,773	\$14,292,091

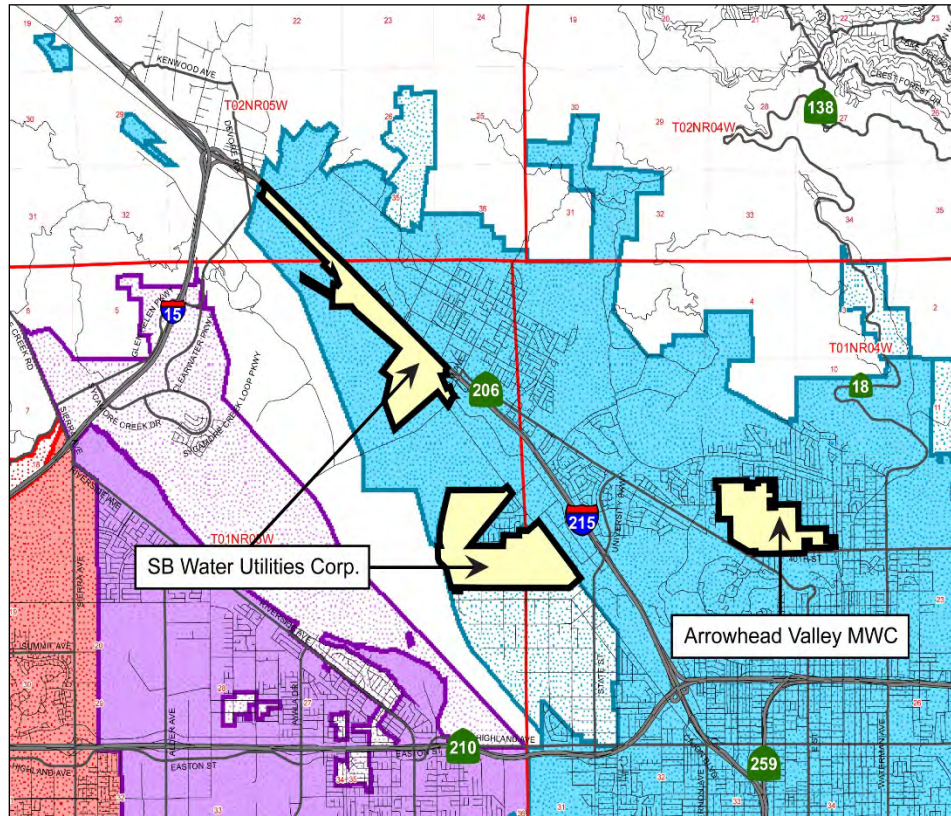
Sources: San Bernardino Municipal Water District website, San Bernardino Valley Regional Urban Water Management Plan (2015); City of San Bernardino Water Facilities Master Plan (2015), State Water Board Stress Test and Water Conservation Targets, financial statements

¹ "The City of San Bernardino Municipal Water Department (SBMWD) understands the severity of the drought and feels it is prudent that aggressive conservation measures, including a conservation standard, be maintained. Adopting the calculated conservation standard of 0% does not support this approach. SBMWD will implement a 15% conservation standard as a result of this conservative approach. This will also maintain uniformity with neighboring San Bernardino Basin Area suppliers, as it is SBMWD's understanding that most are adopting a conservation standard of at least 10%."

² 2012 ending cash balance restated in 2013 audit to be \$14,587,813. \$19,635,819 was determined to be an Investment rather than "Cash and cash equivalents". Therefore, the beginning balance for 2013 was restated to exclude this amount.

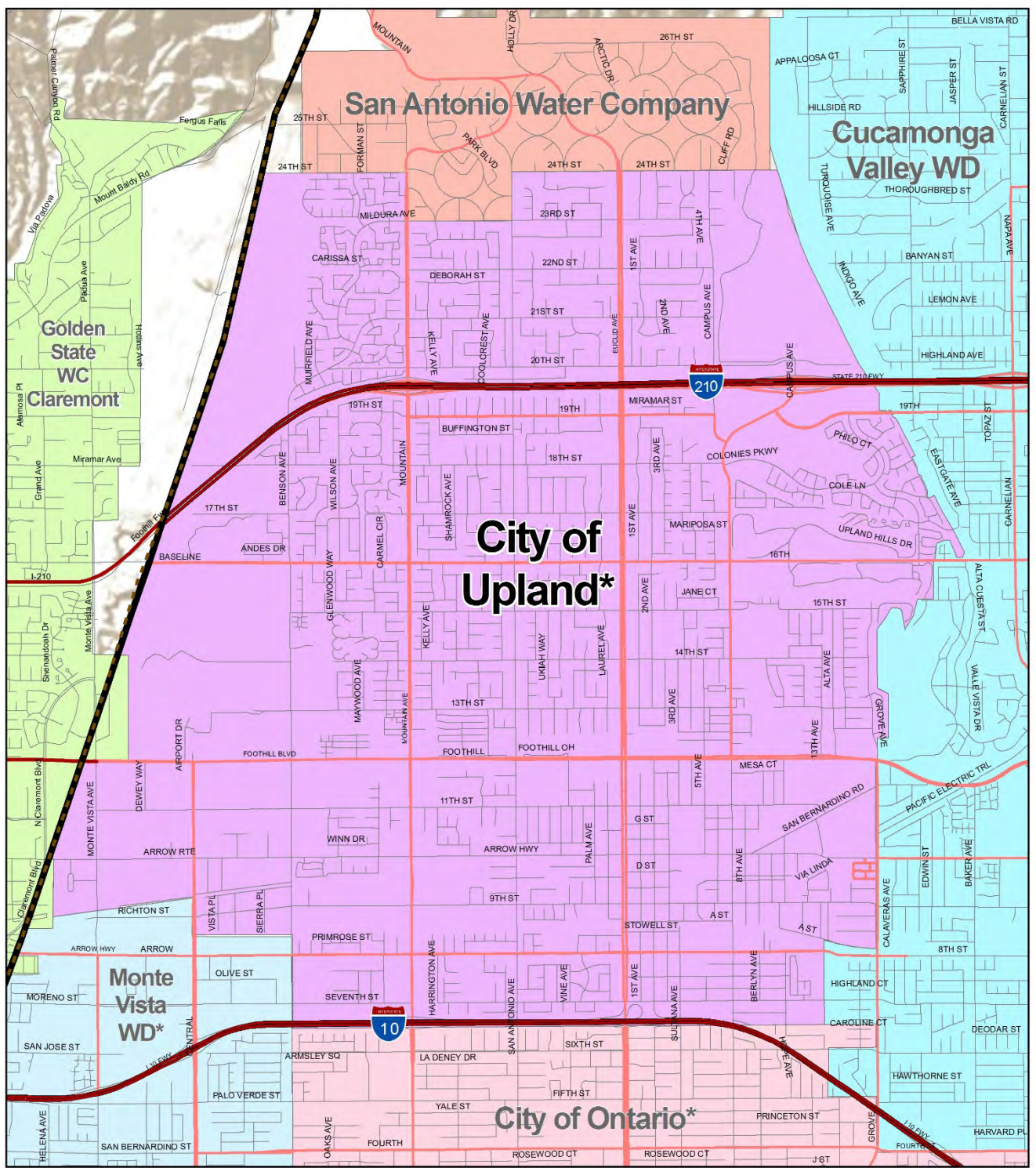
City of San Bernardino - Municipal Water Department Additional Information

The City has purchased the following water systems: Victoria Farms, San Bernardino Water Utility Corporation and Arrowhead Valley Mutual Water Company. For the latter two systems, in 2010 the Commission determined that the provision of water service within the service areas identified for the Water Utility Corporation and the Mutual Water Company are exempt from the provisions of Government Code Section 56133 (Service Contract #352). The figure below illustrates the former service areas for the two systems.

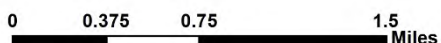


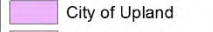
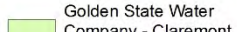
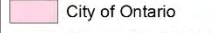
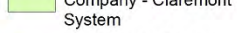
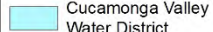
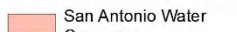
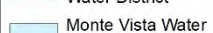
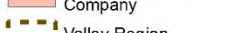
The Commission's policy related to out-of-agency service contracts addresses the obligations assumed by public agencies when acquiring private/mutual water companies is as follows:

"In the case where a city or district has acquired the system of a private or mutual water company prior to the enactment of this legislation, those agencies shall be authorized to continue such service and provide additional connections within the certificated service area of the private or mutual water company defined by the Public Utilities Commission or other appropriate agency, at the time of acquisition without LAFCO review or approval as outlined in Govt. Code Section 56133..."



City of Upland



	City of Upland		Golden State Water Company - Claremont System
	City of Ontario		Monte Vista Water District
	Cucamonga Valley Water District		San Antonio Water Company
	Valley Region		San Bernardino County Line



Disclaimer: The information shown is intended to be used for general display only and is not to be used as an official map.

Map Created: 5/2/2017

*In instances of overlapping water systems, the boundary of the underlying government system is reduced.

City of Upland

Upland

Agency Information			
Principal Act	Government Code Title 4 - §34000	Year Formed	1906
Governance	5-member City Council (mayor elected separately)	Square Miles	16 (approx.)
Website	ci.upland.ca.us	2015 Population	75,787

LAFCO Authority	
Authorized Functions	Animal services, library, parks and recreation, water, storm drains, roads and refuse
Previous service review	http://www.sbclafco.org/Proposals/ServiceReviews/ValleyRegion/WestValleyRegion.aspx

Infrastructure				
Supply	Groundwater (19 wells with a capacity of 17,467 gpm), treated surface water (total capacity of 4,167 gpm), purchased treated groundwater (San Antonio Water Company), treated surface water (Water Facilities Authority)			
Storage	17 reservoirs with total capacity of 49.8 MG			
Distribution	10 transmission lines, 5 pressure zones, 340 miles of mains			
Connections	Within Boundary	Outside Boundary/Within Sphere	Outside Sphere	Total
	18,813	--	--	18,813

Supply & Demand, AFY	2015	2020	2025	2030	2035
Supply	20,627	24,911	24,961	25,051	25,051
Demand	19,850	22,325	23,148	22,241	24,725

Per Capita Water Use & Conservation					
Gallons/Capita/Day Residential		Cumulative Savings (compared to 2013)	State Stress Test Summary ¹		
Nov 16	Feb 17		Est. Annual Potable Demand	Est. Annual Total Supply for WY 2019	Current State Cons. Standard
128.5 AF	75.3 AF	22.2%	21,324 AF	20,294 AF	0%

Typical Monthly Residential Water Bill (3/4" meter, 15 ccf), as of 1 July 2016			
Meter Charge	Consumption Charge	Surcharge	Total
\$19.35	\$10.73	--	\$30.08

Cash Flows	2011	2012	2013	2014	2015
Increase (Decrease) in Cash & Equivalents	\$5,356,600	(\$8,363,748)	(\$2,057,861)	\$1,385,881	\$1,973,260
Cash & Equivalents, End of Year	\$12,828,270	\$4,464,522	\$2,406,661	\$3,792,542	\$5,765,802

Sources: City of Upland website, City of Upland Urban Water Management Plan (2015), State Water Board Stress Test and Water Conservation Targets, financial statements

¹ The Cities of Chino, Chino Hills, Ontario, Upland; and the Monte Vista Water District (collectively, "Member Agencies") are member agencies and joint owners of the Water Facilities Authority. The Water Facility Authority and the Member Agencies have jointly agreed to coordinate to collect relevant data and documentation for submittal of the aggregated conservation standard certification.

City of Upland Additional Information

The City of Upland has an ownership in the San Antonio and West End water companies based upon the number of stock shares owned. To protect the water rights for the citizens of Upland, the City's water utility has followed the practice of purchasing shares of stock in the water companies as they become available. The City's primary motivation for owning shares in the water companies is to secure rights to well water pumped by the two companies. Two Upland City Council members are also on the Board of San Antonio Water Company. As development takes place within the City, the City requires developers to contribute 1.5 shares for each acre developed.

The following schedule summarizes the City's investment in joint ventures at June 30, 2015 and the gain (loss) on the investment for the year:

<u>Water Company</u>	<u>Percentage Ownership</u>	<u>Total Joint Venture Equity</u>	<u>City's Equity Interest</u>	<u>City's Share of Joint Venture Net Income (Loss)</u>
San Antonio Water Company	68%	\$ 25,824,984	\$ 17,527,417	\$ 228,694
West End Water Company	91%	2,343,431	2,136,740	(93,166)
Water Facilities Authority	20%	25,602,184	5,120,437	(176,218)
Total			<u>\$24,784,594</u>	<u>\$ (40,690)</u>

Source: 2014-15 audit

In 2015, LAFCO requested that the City provide brief responses to the following questions regarding its Statement of Cash Flows. Below are the questions and the City's responses.

1. Explain "Cash transfers out" in 2011-12 for \$5,235,720. What department or fund received the majority of the transfers and for what purpose?

The \$5,235,720 "cash transfer out" balance relates to \$72,388 in cash going to the Solid Waste Utility Fund during FY 2010/11 as a result of short-term cash borrowing to cover deficit cash balance. During FY 2011 /12, \$4,666,462 in cash went to the following funds as a result of short-term cash borrowing to cover deficit cash balances:

- a. HOME Program Fund \$144,852
- b. Housing Fund \$67,818
- c. Community Development Block Grant Fund \$145,693
- d. SB 509 Public Safety Sales Tax Fund \$52,168
- e. Self-Funded Insurance Liability Fund \$4,255,931

During FY 2011 /12 the Water Fund also transferred \$641,646 to the General Fund due to midyear budget savings that would benefit the General Fund. The change in cash due to/from between FY 2010/11 and FY 2011 /12 (\$4,666,462 - \$72,388) is \$4,594,074, plus the transfer (\$641,646) equals the \$5,235, 720 in "cash transfer out".

2. Explain "Cash transfers in" in 2013-14 for \$1,826,205. What department or fund received transferred the majority of the cash and for what purpose?

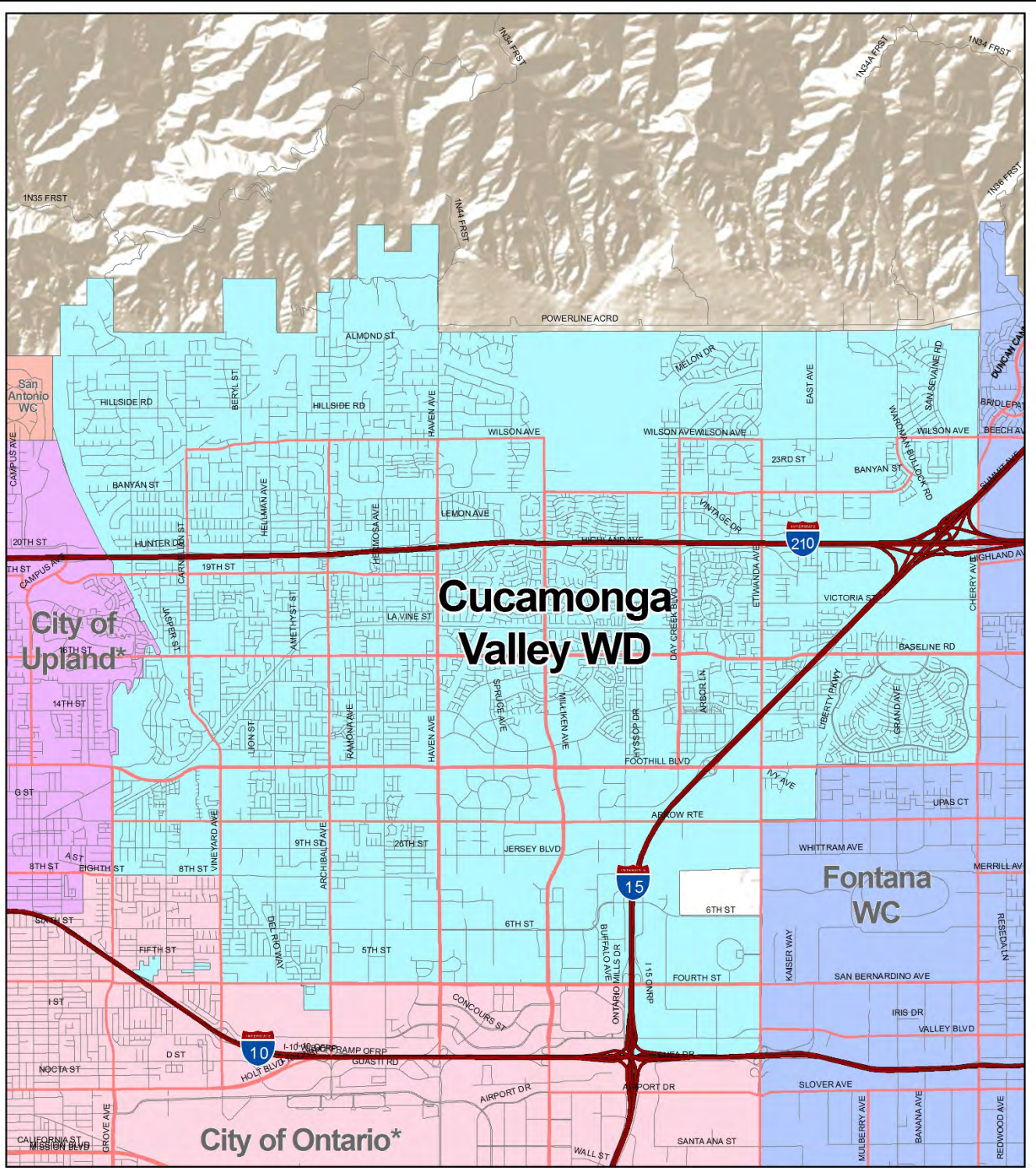
The \$1,826,205 "cash transfer in" balance relates to \$3, 752,306 in cash going to various funds as a result of short-term cash borrowing to cover deficit cash balance during FY 2012/13. During FY 2013/14, \$1,948,590 in cash went to the following funds also as a result of short-term cash borrowing to cover deficit cash balances:

- a. General Fund \$26,487
- b. CalHOME Fund \$56,575
- c. Community Development Block Grant Fund \$143,332
- d. SB 509 Public Safety Sales Tax Fund \$39,214
- e. Homeland Security Grants - PD Fund \$12,507
- f. Solid Waste Utility Fund \$853,530
- g. Animal Services Fund \$816,945

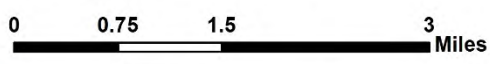
During FY 2013/14 the Water Fund also transferred \$22,290 to the Solid Waste Utility Fund, the Sewer Utility Fund, and the Animal Services Fund in equal amounts to reimburse for personnel and administrative cost. The change in due to/from between FY 2010/11 and FY 2011 /12 (\$1,948,590 - \$3, 752,306) is \$1,803,716, plus the transfer (\$22,490) equals the \$1,826,205 in "cash transfer in".

3. Explain the net decrease in cash for 2011-12 and 2012-13.

The net decrease in cash for FY 2011 /12 is due to a decrease in cash of \$7.8M due to \$4.7M going to various funds due to short-term cash borrowing to cover deficit cash and \$641 K going to the General Fund (as noted in Number 1 above). Also, there was a decrease in operating revenue, specifically in charges for services, for \$4.5M while there was an increase in operating expenses of \$1.8M. The net decrease in cash for FY 2012/13 is due to the overall decrease and cash and investments of \$2M. Also, during the year the Water Utility Fund loaned the Self-Insurance Liability Fund \$923,000 to cover costs associated with legal bills.



Cucamonga Valley Water District



Disclaimer: The information shown is intended to be used for general display only and is not to be used as an official map.

Map Created: 5/8/2017

*In instances of overlapping water systems, the boundary of the underlying government system is reduced.

	Cucamonga Valley Water District		Fontana Water Company
	City of Ontario		San Antonio Water Company
	City of Upland		Valley Region
			San Bernardino County Line

Cucamonga Valley Water District

Rancho Cucamonga; portions of Upland, Fontana, and Ontario

Agency Information			
Principal Act	County Water District Law Water Code Division 12 - §30000 et seq.	Year Formed	1955
Governance	5 member Board of Directors, elected at large	Square Miles	47
Website	http://www.cvwdwater.com/	2015 Population	200,466

LAFCO Authority	
Authorized Functions	Water and sewer
Previous service review	http://www.sbclafco.org/Proposals/ServiceReviews/ValleyRegion/WestValleyRegion.aspx

Infrastructure				
Supply	Groundwater (21 active wells with capacity of 37,400 gpm); surface water (capacity of 74.8 MGD)			
Storage	35 reservoirs with capacity of 94.9 MG			
Distribution	707 miles of pipeline ranging from 4" to 42" in diameter			
Connections	Within Boundary	Outside Boundary/Within Sphere	Outside Sphere	Total
	50,531	--	--	50,531

Supply & Demand, AFY	2015	2020	2025	2030	2035
Supply	42,678	60,500	63,100	65,700	65,700
Demand	42,663	60,500	63,100	65,700	65,700

Per Capita Water Use & Conservation					
Gallons/Capita/Day Residential		Cumulative Savings (compared to 2013)	State Stress Test Summary		
Nov 16	Feb 17		Est. Annual Potable Demand	Est. Annual Total Supply for WY 2019	Current State Cons. Standard
114.8 AF	72.2 AF	23%	52,737 AF	55,239 AF	0%

Typical Monthly Residential Water Bill (3/4" meter, 15 ccf), as of 1 July 2016			
Meter Charge	Consumption Charge	Surcharge	Total
\$17.82	\$13.33	--	\$31.15

Cash Flows	2011	2012	2013	2014	2015
Increase (Decrease) in Cash & Equivalents	(\$1,592,830)	\$10,490,010	\$38,400,929	(\$28,617,922)	(\$13,065,048)
Cash & Equivalents, End of Year	\$19,668,474	\$30,158,484	\$68,559,413	\$39,941,491	\$26,876,443

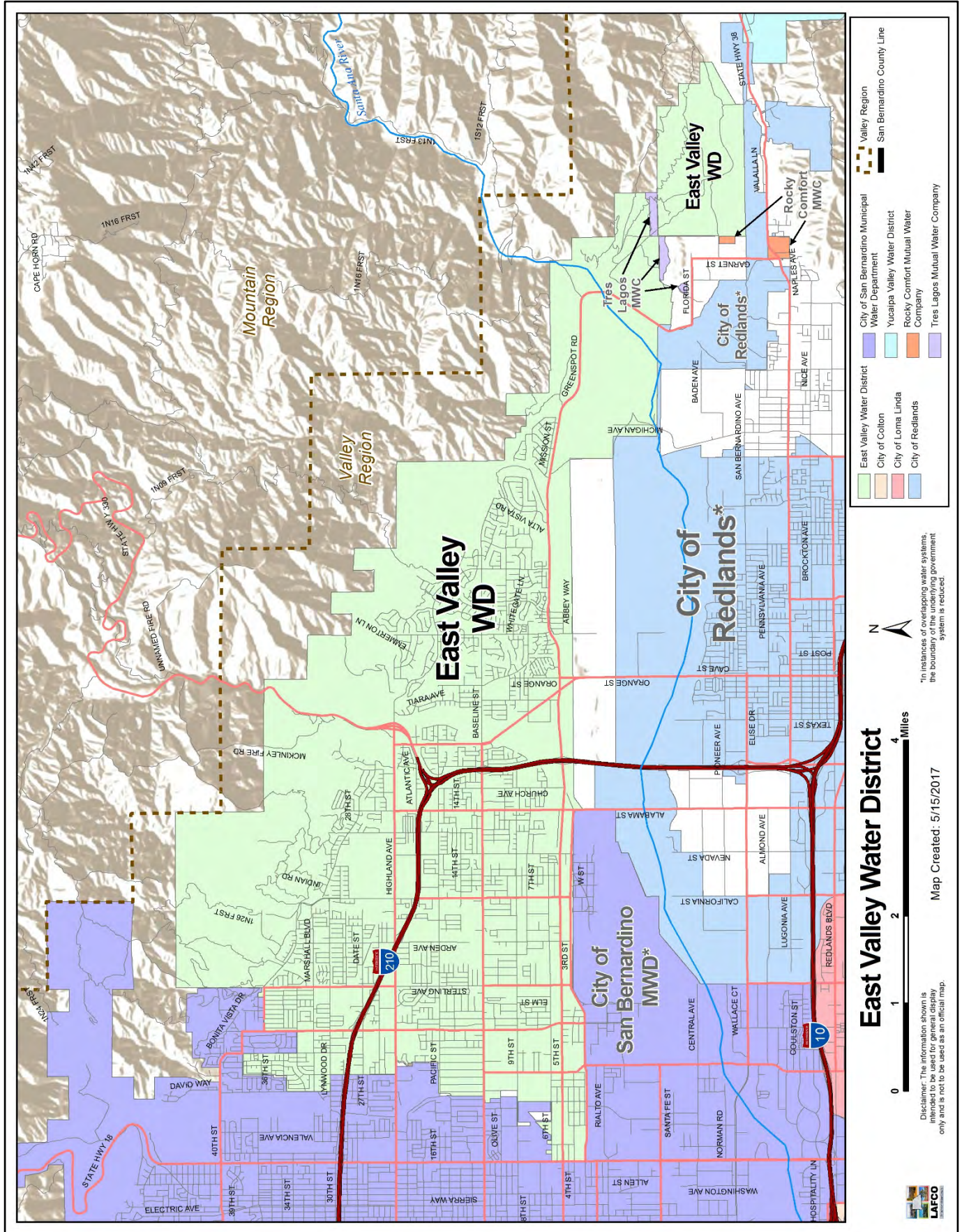
Sources: Cucamonga Valley Water District Urban Water Management Plan (2015); Cucamonga Valley Water District website, Cucamonga Valley Water District Water Supply Master Plan (2013); State Water Board Stress Test and Water Conservation Targets, financial statements

The District owns a majority stake in the Fontana Union Water Company (58%). Other shareholders are: San Gabriel Valley Water Company (40%), City of Rialto (1%), and 13 others (each under ½%).

In response to the draft service review, the district provide the following descriptions regarding the changes in its cash flows:

The Cash Flows table includes both Unrestricted and Restricted Cash & Cash Equivalents balances in the calculation of the amount of Increase (Decrease) in Cash & Cash Equivalents. CVWD's Restricted Cash & Cash Equivalents include unspent bond proceeds, obligatory Reserves for future Bond payments and the Intergovernmental payable to IEUA. These funds are not available for the District to spend at will. The explanation for the large changes through years 2013-2015 are listed below:

- 2013 - Increase of \$38,400,929 - The District issued the 2012 revenue Bonds. Total unspent proceeds at Year End were \$41,500,000.
- 2014 - Decrease of \$28,617,922 - 2012 Revenue Bond proceeds spent on Capital Projects amounted to \$26,339,545.
- 2015 - Decrease of \$13,065,048 - 2012 Revenue Bond proceeds spent on Capital Projects amounted to \$13,505,192.



East Valley Water District¹

Highland

Agency Information			
Principal Act	County Water District Law Water Code Division 12 - §30000 et seq.	Year Formed	1954
Governance	5-member Board of Directors, elected at large	Square Miles	30.1
Website	http://www.eastvalley.org	2015 Population	104,457

LAFCO Authority	
Authorized Functions	Water, sewer, park and recreation (not actively provided)
Previous service review	http://www.sbclafco.org/Proposals/ServiceReviews/ValleyRegion/EastValleyRegion.aspx

Infrastructure				
Supply	Groundwater (22 wells with capacity of 38.8 MGD), surface water (Santa Ana River, State Water Project with SB Valley Municipal Water District with capacity of 8.0 MGD)			
Storage	29 reservoirs with capacity of 29.82 MGD			
Distribution	295 miles of pipeline; 24 booster pumping stations; 10 pressure reducing stations			
Connections	Within Boundary	Outside Boundary/Within Sphere	Outside Sphere	Total
	21,461	1	--	21,462

Supply & Demand, AFY	2015	2020	2025	2030	2035	2040
Supply	16,942	43,972	47,810	51,702	55,652	55,652
Demand	16,942	31,609	32,879	33,943	35,050	36,203

Per Capita Water Use & Conservation					
Gallons/Capita/Day Residential		Cumulative Savings (compared to 2013)	State Stress Test Summary		
Nov 16	Feb 17		Est. Annual Potable Demand	Est. Annual Total Supply for WY 2019	Current State Cons. Standard
104.3 AF	72.4 AF	21.2%	20,666 AF	22,295 AF ²	0% ³

Typical Monthly Residential Water Bill (3/4" meter, 15 ccf), as of 1 July 2016			
Meter Charge	Consumption Charge	Surcharge	Total
\$29.27	Variable due to rate structure	-	Variable

Cash Flows	2011	2012	2013	2014	2015
Increase (Decrease) in Cash & Equivalents	\$13,108,535	\$2,321,996	\$13,768,777	(\$17,028,086)	\$42,783
Cash & Equivalents, End of Year	\$18,423,063	\$20,866,208	\$34,634,985	\$17,606,899	\$17,649,682

Sources: Water System Master Plan (2014); East Valley Water District Urban Water Management Plan (2015); East Valley Water District website, State Water Board Stress Test and Water Conservation Targets, financial statements

¹ Originally formed in 1954 as East San Bernardino County Water District; name changed to East Valley Water District in 1982.

² "Supplies include groundwater production from the Bunker Hill Basin, State Project Water, and surface water from the Santa Ana River."

³ "East Valley Water District will be implementing a 15% water conservation standard in effort to maintain and improve water supply levels in the San Bernardino Basin Area. The District along with other water agencies in the region are using the operating safe yield of the basin as the guideline to reduce water demands."

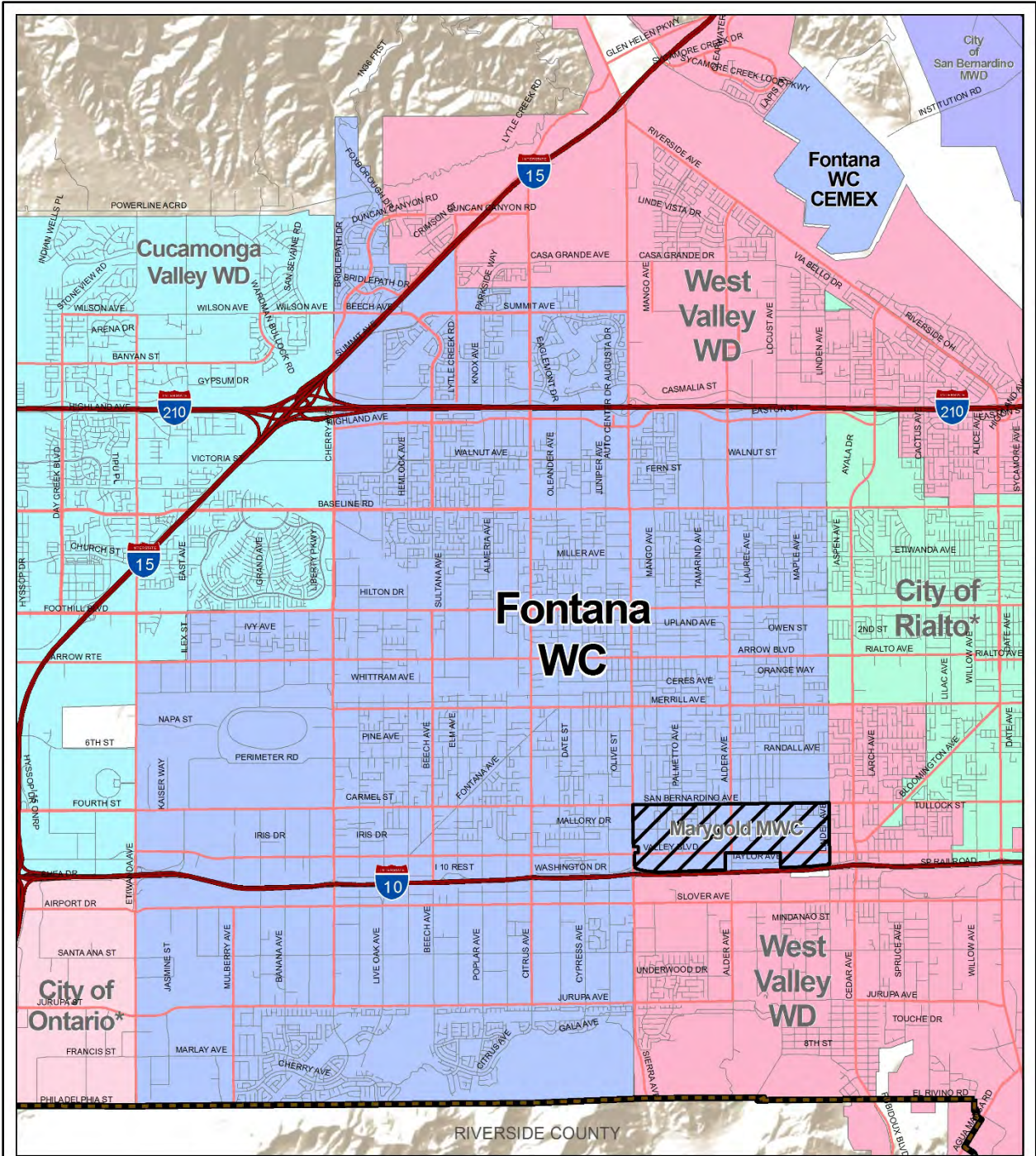
East Valley Water District Additional Information

In April 2004, the City of San Bernardino Municipal Water Department authorized the East Valley Water District (formerly named East San Bernardino County Water District) to provide service to a parcel of land (Wyle Laboratories) within the Water Department's service area as set forth in the "Joint Powers Agreement of 1965 between the City of San Bernardino and the East San Bernardino County Water District".⁴ The reason for the change in service responsibility was due to the closure of Norton Air Force Base and the transfer of water and sewer lines along Third Street.

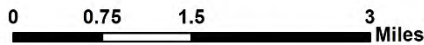
To formalize this arrangement via the LAFCO process, the District submitted an application to LAFCO to annex the area (LAFCO 2972), which also had an interim request to provide service outside its boundary. The area was defined as a lease-hold assigned to Wyle Laboratories by the Inland Valley Development Agency and did not conform to an entire parcel. However, LAFCO is required to annex whole parcels. Additionally, the landowner at the time was listed United States Government and obtaining a signature representing the United States Government was not feasible. Therefore, LAFCO was unable to process the application and refunded the filing fees allowing for resubmission.

The District continues to provide service to the laboratory; however, the two reasons identified above no longer remain. In 2005, the parcel was reconfigured which isolated the laboratory as well the ownership name changing to Inland Valley Development Agency. Therefore, the District's service outside of its boundary can be memorialized and conform to the LAFCO process outlined in the Government Code.

⁴ Letter dated 15 April 2004 from City of San Bernardino Municipal Water Department to East Valley Water District.



Fontana Water Company



Disclaimer: The information shown is intended to be used for general display only and is not to be used as an official map.

Map Created: 5/3/2017

*In instances of overlapping water systems, the boundary of the underlying government system is reduced.

- | | |
|---|---------------------------------|
| Fontana Water Company | Cucamonga Valley Water District |
| City of Ontario | West Valley Water District |
| City of Rialto | Marygold Mutual Water Company |
| City of San Bernardino Municipal Water Department | Valley Region |
| | San Bernardino County Line |

Fontana Water Company

Fontana, Rialto, Rancho Cucamonga, Ontario, and unincorporated areas of San Bernardino County

Agency Information			
Regulated by	California Public Utilities Commission	Year Formed	1924
Parent Co.	San Gabriel Valley Water Company	Square Miles	52
Website	http://fontanawater.com/index.php	2016 Population	225,300
Ownership in	In 1992, Fontana Water Company acquired all of the principal water production, storage, and distribution facilities of Fontana Union Water Company.		

Infrastructure			
Supply	Groundwater (35 wells with capacity of 49,775 gpm), surface water (Lytle Creek 20,139 gpm), State Water Project (SB Valley Municipal Water District and Inland Empire Utilities Agency)		
Storage	23 reservoirs, 29.96 million gallon storage capacity		
Distribution	692 miles of distribution pipeline		
Connections	Within Boundary	Outside Boundary	Total
	46,626	--	46,626

Supply & Demand, AFY	2020	2025	2030	2035	2040
Supply	40,140	47,536	50,773	53,711	56,562
Demand	40,140	47,536	50,773	53,711	56,562

Per Capita Water Use & Conservation					
Gallons/Capita/Day Residential		Cumulative Savings (compared to 2013)	State Stress Test Summary		
Nov 16	Feb 17		Est. Annual Potable Demand	Est. Annual Total Supply for WY 2019	Current State Cons. Standard
89.9 AF	57.9 AF	22.0%	43,706 AF	43,706 AF	0% ¹

Typical Monthly Residential Water Bill (3/4" meter, 15 ccf), as of 7-1-16 [Amended 7-19-17 at LAFCO hearing]			
Meter Charge	Consumption Charge	Surcharge	Total
\$21.80	\$50.17	\$1.21	\$73.18

Sources: Fontana Water Company, Fontana Water Company website, Urban Water Management Plan (2015), State Water Board Stress Test and Water Conservation Targets, Sanitary Survey Report

¹ "The Company will retain the previous conservation target of 26% called for by the SWRCB but on a voluntary basis and without surcharges and penalties. Non-essential and prohibitive water use restrictions will remain in effect pursuant to the Company's CPUC-authorized Rule No. 14.1 Water Shortage Contingency Plan, Stage 1 Water Alert condition."

Fontana Water Company Additional Information

Dispute

The validity and extent of the Company’s water rights are disputed, and are the subject of a lawsuit currently pending in the Superior Court for the County of San Bernardino. The suit is entitled *San Bernardino Valley Municipal Water District et al. v. San Gabriel Valley Water Co. et al.*, Case No. CVDS1311085.² Whether the area referred to as "No Man's Land" is part of the Rialto-Colton Subbasin is disputed and is the subject of a lawsuit currently pending. It should be noted that the parties have been working to reach a resolution for some time now and the case is close to reaching an amenable end.

Retail System	Rialto-Colton Subbasin	Lytle Creek Subbasin	Rialto Basin	Area known as “No Man’s Land”
City of Colton	Dispute	Dispute	Dispute	Dispute
City of Rialto	Dispute	Dispute	Dispute	Dispute
Fontana Water Company	Dispute	Dispute	No	Dispute
West Valley Water District	Dispute	Dispute	Dispute	Dispute

² Upper Santa Ana River Watershed Integrated Regional Water Management Plan (January 2015), Sec. 2.3.

Monte Vista Water District

Montclair, Chino Hills, portions of Chino, and unincorporated territory

Agency Information			
Principal Act	County Water District Law Water Code Division 12 - §30000 et seq.	Year Formed	1927
Governance	5-member Board of Directors	Square Miles	30
Website	http://www.mvwd.org	2015 Population	134,861

LAFCO Authority	
Authorized Functions	Water (retail and wholesale) and park and recreation (not actively provided)
Previous service review	http://www.sbclafco.org/Proposals/ServiceReviews/ValleyRegion/WestValleyRegion.aspx

Infrastructure				
Supply	Groundwater (12 wells with a capacity of 20050 gpm), state water project water from IEUA, recycled water from IEUA; treated surface water (Water Facilities Authority with a capacity of 13500 gpm)			
Storage	6 storage reservoirs, 13 million gallon total storage capacity			
Distribution	203 miles of distribution pipeline; 4 pressure zones; 4 booster stations			
Connections	Within Boundary	Outside Boundary/Within Sphere	Outside Sphere	Total
	?	?	--	12,041

Supply & Demand, AFY	2015	2020	2025	2030	2035	2040
Supply	16,833	51,790	51,749	51,778	51,828	51,828
Demand	16,834	35,200	35,396	35,730	36,081	36,364

Per Capita Water Use & Conservation					
Gallons/Capita/Day Residential		Cumulative Savings (compared to 2013)	State Stress Test Summary		
Nov 16	Feb 17		Est. Annual Potable Demand	Est. Annual Total Supply for WY 2019	Current State Cons. Standard
75.7 AF	55.2 AF	21.1%	10,143 AF	14,236 AF	0%

Typical Monthly Residential Water Bill (3/4" meter, 15 ccf), as of 1 July 2016			
Meter Charge	Consumption Charge	Surcharge	Total
\$19.01	\$29.25	--	\$48.26

Cash Flows	2011	2012	2013	2014	2015
Increase (Decrease) in Cash & Equivalents	(\$3,357,444)	\$2,751,455	\$655,723	(\$126,959)	\$480,331
Cash & Equivalents, End of Year	\$7,721,777	\$10,473,232	\$11,128,955	\$11,001,996	\$11,485,980

Sources: Monte Vista Water District Urban Water Management Plan (2015); Monte Vista Water District website, State Water Board Stress Test and Water Conservation Targets, financial statements

Monte Vista Water District Additional Information

Source of Supply

The District currently receives its water supply from four sources:

- Groundwater produced from the Chino Groundwater Basin, an adjudicated basin managed through the Chino Basin Watermaster process;
- Imported State Water Project surface water from northern California received from the Metropolitan Water District of Southern California through the Inland Empire Utilities Agency and the Water Facilities Authority;
- Entitlement water deliveries from the San Antonio Water Company, including groundwater produced from local adjudicated groundwater basins and surface water produced from the San Antonio Creek Watershed; and,
- Recycled water from Inland Empire Utilities Agency.

Since 2002, the District has purchased the City of Montclair's portion of the regional recycled water recharge into the Chino Groundwater Basin.

Transfer of Service from Waterworks #8 to Monte Vista Water District

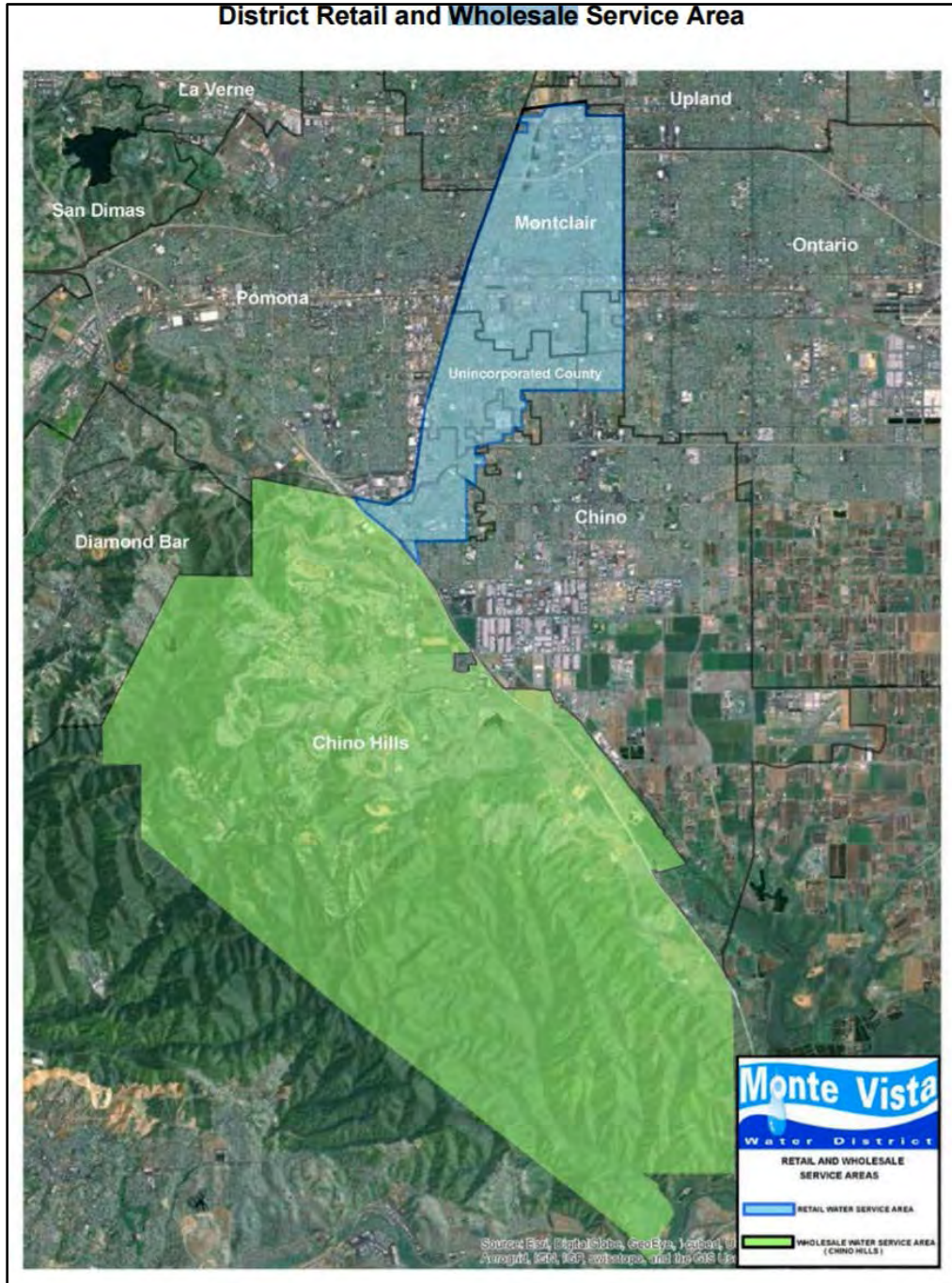
In 1983 Waterworks District No. 8 ("WW8") took over several private water companies in the Chino Hills and West Chino areas. The question of service providers was decided by the Commission in 1986 when it determined the sphere of influence for the Monte Vista Water District in this area. This decision set in place agreements reached between the City of Chino, Monte Vista WD and WW8.

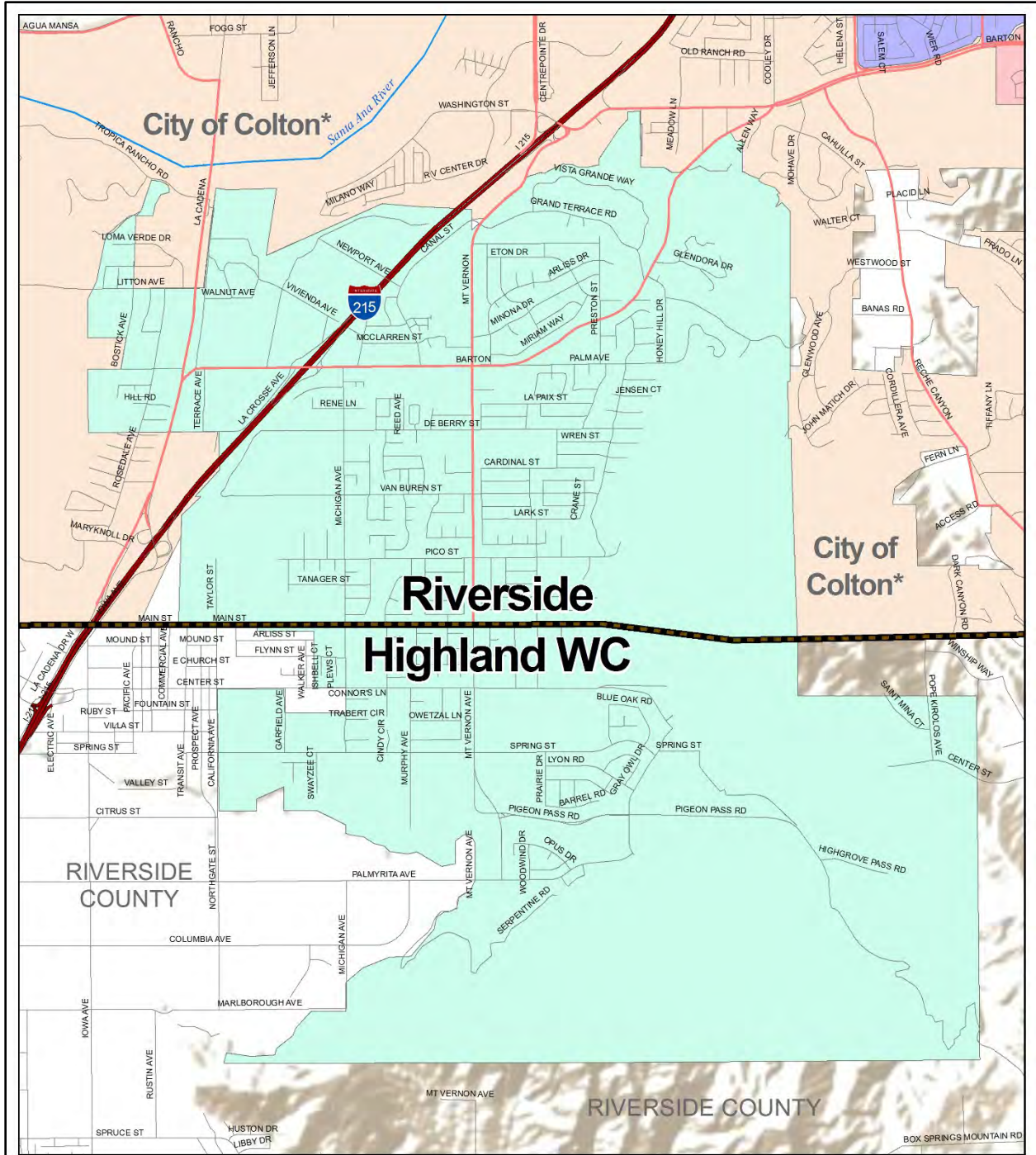
In 1989 WW8 desired to detach from those areas east of Highway 71 in order to concentrate its efforts to the west of Highway 71. LAFCO 2500 transferred service from one agency to another (WW8 to Monte Vista WD), and since there was no new development or change in local service requirements the Commission overrode its community-by-community approach to these considerations which normally would have included the consideration of annexation to the City of Chino. However, significant portions remained within the City of Chino service area where it continues to provide service.

Wholesale to City of Chino Hills

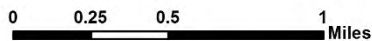
In addition to its retail customers, the District provides wholesale water supply to the City of Chino Hills. The water deliveries to Chino Hills include both imported supplies from the Water Facilities Authority located in the City of Upland and from groundwater and other local supplies available to the District. Under the provisions of a long-term agreement executed in July 1998, the District is contracted to deliver to Chino Hills up to 20.22 mgd. Since initiation of full deliveries in 1999, the District has delivered between 7,500 and 14,000 AFY of water to the City under the terms of the agreement. The agreement between

the two agencies contains provisions regarding water delivery limitations during emergency situations such as natural or other disasters. The District's retail and wholesale service areas are shown in the figure below.





Riverside Highland Water Company



Disclaimer: The information shown is intended to be used for general display only and is not to be used as an official map.

Map Created: 5/2/2017

*In instances of overlapping water systems, the boundary of the underlying government system is reduced.

- Riverside Highland Water Company
- City of Colton*
- City of Loma Linda
- City of San Bernardino Municipal Water Department
- Valley Region
- San Bernardino County Line

Riverside Highland Water Company

Grand Terrace, portions of Colton, portions of unincorporated San Bernardino and Riverside Counties

Agency Information			
Regulated by	California Corporation Commission	Year Formed	1998
Website	http://rhwco.com/	Square Miles	8.35
Parent Co.	none	2015 Population	16,007
Ownership in	none		

Infrastructure			
Supply	Groundwater (6 wells with capacity of 8,642 gpm)		
Storage	8 reservoirs, 8.01 million gallon storage capacity		
Distribution	Asbestos concrete, PVC, cement coated steel pipes; 3 pressure zones; 3 boosters; 3 distribution zones ranging from 6" to 24" pipes		
Connections	Within Boundary	Outside Boundary	Total
	45,045	--	3,964

Supply & Demand, AFY	2020	2025	2030	2035	2040
Supply	8,435	8,435	8,435	8,435	8,435
Demand	4,107	4,294	4,492	4,702	4,923

Per Capita Water Use & Conservation					
Gallons/Capita/Day Residential		Cumulative Savings (compared to 2013)	State Stress Test Summary		
Nov 16	Feb 17		Est. Annual Potable Demand	Est. Annual Total Supply for WY 2019	Current State Cons. Standard
161.1 AF	74.6 AF	21.1%	3,847 AF	8,187 AF	0% ¹

Typical Monthly Residential Water Bill (3/4" meter, 15 ccf), as of 1 July 2016			
Meter Charge	Consumption Charge	Surcharge	Total
\$36.90	\$13.20	--	\$50.10

Sources: Company website, San Bernardino Valley Regional Urban Water Management Plan (2015), State Water Board Stress Test and Water Conservation Targets, Sanitary Survey Reports

¹ "Riverside Highland Water Company will continue to stress conservation. We raised the rates by 8.5% and compressed our conservation tiers by 20% at the beginning of June 2016. We will also continue to monitor excessive use through our automated meters and physically monitoring water habits."

West Valley Water District¹

Rialto, Fontana, Colton and unincorporated of San Bernardino and Riverside Counties

Agency Information			
Principal Act	County Water District Law Water Code Division 12 - §30000 et seq.	Year Formed	1952
Governance	5 Board of Directors, elected at large	Square Miles	31
Website	http://www.wvwd.org	2015 Population	80,161

LAFCO Authority	
Authorized Functions	Water, sewer (not active)
Previous service review	http://www.sbclafco.org/Proposals/ServiceReviews/ValleyRegion/WestValleyRegion.aspx

Infrastructure				
Supply	23 wells from five groundwater basins and treats surface water from Lytle Creek and State Water Project water at its 14.4 mgd Oliver P. Roemer Water Filtration Facility			
Storage	25 reservoirs with a capacity of 72.61 million gallons			
Distribution	360 miles of distribution pipeline			
Connections	Within Boundary	Outside Boundary/Within Sphere	Outside Sphere	Total
	?	?	--	18,305

Supply & Demand, AFY	2015	2020	2025	2030	2035	2040
Supply	17,131	36,400	41,900	45,400	48,400	48,400
Demand	17,131	20,799	22,256	23,802	25,492	27,312

Per Capita Water Use & Conservation					
Gallons/Capita/Day Residential		Cumulative Savings (compared to 2013)	State Stress Test Summary		
Nov 16	Feb 17		Est. Annual Potable Demand	Est. Annual Total Supply for WY 2019	Current State Cons. Standard
99.6 AF	75.9 AF	23.1%	20,382 AF	22,099 AF	0% ²

Typical Monthly Residential Water Bill (3/4" meter, 15 ccf), as of 1 July 2016			
Meter Charge	Consumption Charge	Surcharge	Total
\$22.21	\$32.80	--	\$55.01

Cash Flows	2011	2012	2013	2014	2015
Increase (Decrease) in Cash & Equivalents	(\$4,956,786)	(\$2,122,226)	\$1,376,141	\$3,105,869	\$2,341,063
Cash & Equivalents, End of Year	\$13,580,601	\$11,458,375	\$12,834,516	\$15,940,385	\$18,281,448

Sources: West San Bernardino County Water District website, 2015 San Bernardino Valley Regional Urban Water Management Plan, State Water Board Stress Test and Water Conservation Targets, financial statements

¹ Formerly West San Bernardino County Water District; changed name to West Valley Water District in 2003

² "The Governors Executive Order called for conservation as a way of life for California and as the overall water levels decline in the Districts source basins, West Valley Water District is mindful to ensure that our water supplies remain healthy for future use. With that in mind, the West Valley Water District has self-certified to the State that our projected supplies are sufficient to meet the estimated demand over the next three years. However, in order to protect our water supplies for the future, the District, along with other neighboring water districts have submitted a self-imposed conservation standard of 15%. This conservation standard allows for what is called a safe yield to be drawn from the groundwater basins...."

West Valley Water District Additional Information

Dispute

The validity and extent of the District’s water rights are disputed, and are the subject of a lawsuit currently pending in the Superior Court for the County of San Bernardino. The suit is entitled *San Bernardino Valley Municipal Water District et al. v. San Gabriel Valley Water Co. et al.*, Case No. CVDS1311085.³ Whether the area referred to as "No Man's Land" is part of the Rialto-Colton Subbasin is disputed and is the subject of a lawsuit currently pending. It should be noted that the parties have been working to reach a resolution for some time now and the case is close to reaching an amenable end.

Retail System	Rialto-Colton Subbasin	Lytle Creek Subbasin	Rialto Basin	Area known as “No Man’s Land”
City of Colton	Dispute	Dispute	Dispute	Dispute
City of Rialto	Dispute	Dispute	Dispute	Dispute
Fontana Water Company	Dispute	Dispute	No	Dispute
West Valley Water District	Dispute	Dispute	Dispute	Dispute

Water Quality

The Rialto-Colton Sub-basin contains a groundwater contaminant plume called the Rockets, Fireworks, and Flares Site, which is in the process of being removed. The cleanup is focused on pollution from the 160-acre B.F. Goodrich Superfund site where toxic chemicals, including perchlorate and trichloroethene (“TCE”), were disposed over many decades. The cost of to remediate the site cleanup is being funded by a number of partners including the U.S. Environmental Protection Agency and the Goodrich Corporation.

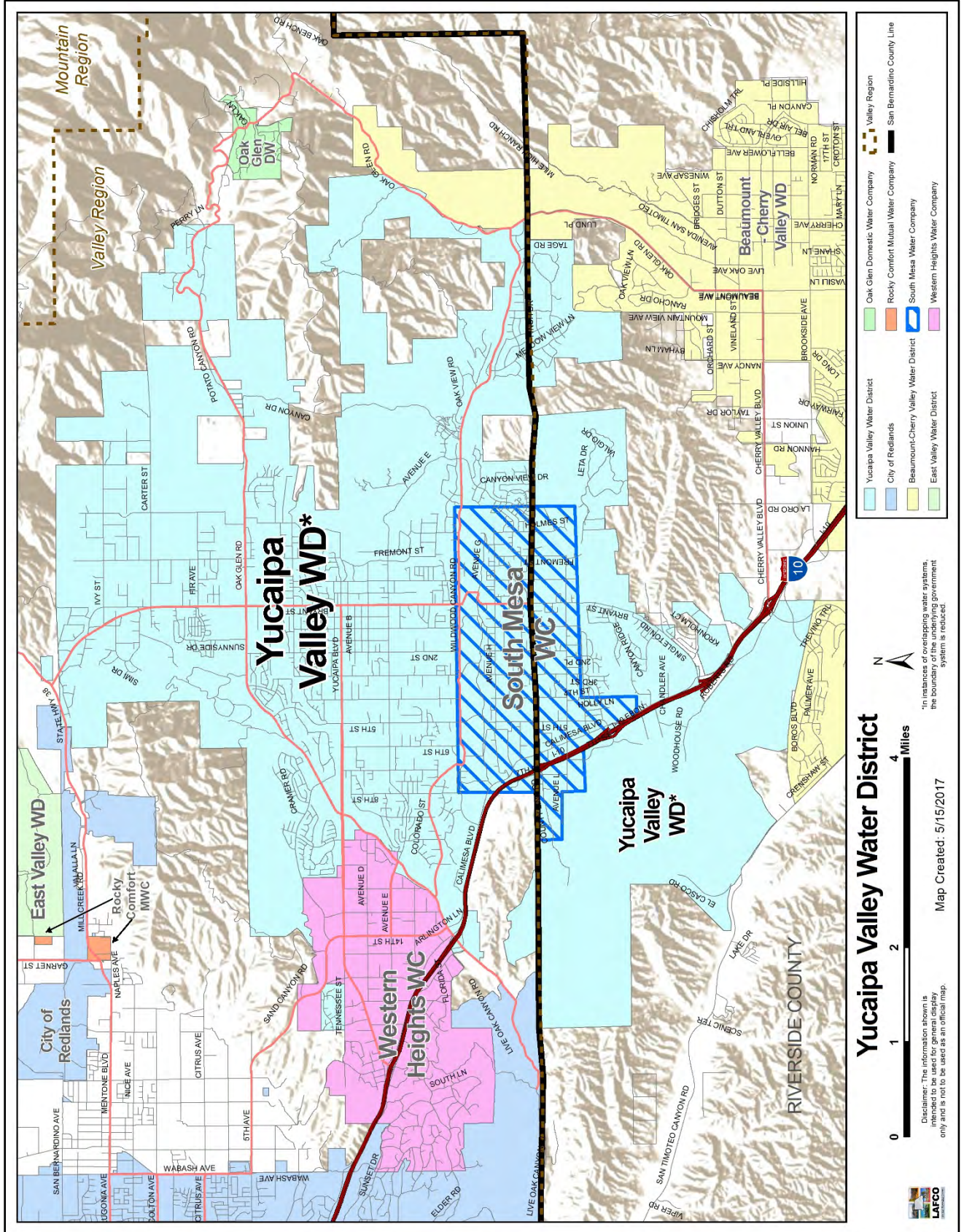
All active wells located in the Rialto and North Riverside groundwater basins suffer from perchlorate contamination (except Rialto Well 5) and perchlorate treatment is provided to these contaminated wells. The treatment system was constructed to intercept, contain, and treat the impacted groundwater in accordance with Regional Water Quality Control Board Orders RB-2003-0013 and RB-2004-0072. In September 2016 West Valley began using bio-remediation to remove perchlorate and restore water for potable use. The plan has capacity to provide water to 16,000 customers. Construction of a second plant is underway, estimated to deliver water in 2019.

The cost of to remediate the site cleanup is being funded by a number of partners including the U.S. Environmental Protection Agency and the Goodrich Corporation. A judicial

³ Upper Santa Ana River Watershed Integrated Regional Water Management Plan (January 2015), Sec. 2.3.

consent decree required Goodrich, under the EPA's oversight, to fund clean-up facilities. Goodrich has agreed to pay \$700,000 or more annually for the operations and maintenance costs of the removal system for the life of the project. The operational costs of the second plant will also be paid by Goodrich.⁴

⁴ Steinberg, Jim. "Settlement to help fund microbe treatment of perchlorate in Rialto-Colton groundwater." San Bernardino County Sun. 13 February 2017.



Yucaipa Valley Water District

Yucaipa, Calimesa

Agency Information			
Principal Act	County Water District Law Water Code Division 12 - §30000 et seq.	Year Formed	1971
Governance	5 Board of Directors, elected by division	Square Miles	40
Website	http://www.yvwd.dst.ca.us/	2015 Population	44,745

LAFCO Authority	
Authorized Functions	Water and sewer
Previous service review	http://www.sbclafco.org/Proposals/ServiceReviews/ValleyRegion/EastValleyRegion.aspx

Infrastructure				
Supply	Groundwater (25 wells), surface water (Oak Glen Water Filtration Plant)			
Storage	27 reservoirs with 34 MG total capacity			
Distribution	215 miles of potable water distribution lines; 18 pressure zones			
Connections	Within Boundary	Outside Boundary/Within Sphere	Outside Sphere	Total
	?	?	--	12,434

Supply & Demand, AFY	2015	2020	2025	2030	2035	2040
Supply	14,500	28,879	30,413	31,598	33,358	32,608
Demand	10,808	12,891	13,751	14,730	15,815	17,007

Per Capita Water Use & Conservation					
Gallons/Capita/Day Residential		Cumulative Savings (compared to 2013)	State Stress Test Summary		
Nov 16	Feb 17		Est. Annual Potable Demand	Est. Annual Total Supply for WY 2019	Current State Cons. Standard
155.4 AF	85.6 AF	10.6%	12,026 AF	9,581 AF ¹	20%

Typical Monthly Residential Water Bill (3/4" meter, 15 ccf), as of 1 July 2016			
Meter Charge	Consumption Charge	Surcharge	Total
\$14.00	\$21.44	--	\$35.44

Cash Flows	2011	2012	2013	2014	2015
Increase (Decrease) in Cash & Equivalents	(129,171)	(997,012)	(432,786)	2,766,157	4,530,528
Cash & Equivalents, End of Year	8,528,353	7,531,341	7,098,555	9,864,712	14,395,240

Sources: Yucaipa Valley Water District website, San Bernardino Valley Regional Urban Water Management Plan (2015); phone conversation with office staff (10/18/16), State Water Board Stress Test and Water Conservation Targets, financial statements

¹ "The Yucaipa Valley Water District took a very conservative approach in the development of the available water supplies in order to proactively secure and conserve water supplies for possible future severe/extreme drought conditions."

Yucaipa Valley Water District Additional Information

Water Tracking

The previous service review for the Yucaipa Valley Water District (“District”) from 2004 (LAFCO 2932) identified that the District serves within two state water contractors: San Bernardino Valley Municipal Water District (“Valley District”) and the San Geronio Pass Water Agency (“SGPWA”). As identified in the staff report, the question of delivery of water between state contractors can have serious consequences as it is prohibited by the terms of the state contracts. Staff recommended that the agencies review the possibility of addressing the exchange of water through the same type of agreement signed by West Valley Water District, Valley District, Inland Empire Utilities Agency, and Metropolitan Water District of Southern California in 2002.

As a part of this service review update, LAFCO staff has inquired with the District on this circumstance. The District has notified LAFCO that since 2007 it has implemented a mechanism to calculate the imported water the District receives from Valley District and SGPWA and the District’s distribution of the imported waters. A review of the mechanism reveals a tracking of supplemental water for Valley District and SGPWA from the District broken down by potable water and recycled water with amounts paid to SGPWA.

Service by City of Redlands into Yucaipa

Crafton Hills College currently receives its water and sewer services through the City of Redlands. This arrangement took place in the early 1970s when the College was developed. The availability of the level of service required could not be provided by the Western Heights Mutual Water Company for water service, and sewer service was not available within the community. The area, at that time, was a part of the City of Redlands sphere of influence.

LAFCO 2803 in 1996 (Yucaipa Valley sphere expansion) recognized an interim water supply agreement with the City of Redlands to provide a temporary water service to the residential subdivision identified as Tract 12222 within the City of Yucaipa and service area of the Yucaipa Valley Water District. This agreement was entered into prior to the implementation of Govt. Code Section 56133 (which requires Commission approval of such contracts).

In 2004, LAFCO 2932 (service review and sphere update for the Yucaipa Valley Water District) included a sphere reduction and expansion for the District. The District's sphere was reduced within the Crafton Hills area to correspond to the City of Yucaipa sphere of influence, excluding areas within the City of Redlands sphere. The sphere was expanded to include three areas, generally including the area east and west of Sand Canyon Road, which includes the area of Tract 12222 and the Crafton Hills College; the area within the City of Yucaipa sphere of influence along Crafton Hills Ridge Trail; and the area within the City of Yucaipa boundary generally east of Mill Creek Road, south and west of the National Forest boundary.

APPENDIX F

Listing of: Community Water Systems, Wholesalers, and Joint Power Authorities

VALLEY REGION

Community Water System, Wholesaler, or JPA	Function	Location in SB County	Approx. Pop.	Retail Connections	Area (sq. miles)	Address
Aqua Mansa Water Company c/o Elsinore Valley Municipal Water District	Wholesale water rights	Near Colton	--	--	--	31315 Chaney St Lake Elsinore, CA 92531
Beaumont Cherry Valley Water District	Retail	Yucaipa	46,314	0 in SB County	28	560 Magnolia Avenue Beaumont, CA 92223-2258
California Institute for Men – Chino	Retail	Chino	10,667	1,912	< 1.00	14901 S. Central Ave. Chino, CA 91710
California Institute for Women – Chino	Retail	Chino	2,000	1,124	< 1.00	16756 Chino-Corona Road Corona, CA 92880
Chino Basin Desalter Authority (JPA)	Purify & distribute	West Valley	1.3 million	--	300+	2151 S Haven Ave #202 Ontario, CA 91761
City of Chino	Retail	Chino	84,465	19,048	31	13220 Central Avenue Chino, CA 91710
City of Chino Hills	Retail	Chino Hills	77,596	21,491	46	14000 City Center Drive Chino Hills, CA 91709
City of Colton	Retail	Colton	45,496	10,301	14	650 N. La Cadena Drive Colton, CA 92324
City of Loma Linda	Retail	Loma Linda	23,298	5,402	10.6	25541 Barton Road Loma Linda, CA 92354
City of Ontario	Retail	Ontario	168,777	34,308	50	303 East "B" Street Ontario, CA 91764
City of Redlands	Retail	Redlands	85,276	24,864	36	35 Cajon Street Redlands, CA 92373
City of Rialto	Retail	Rialto	54,453	11,956	89	150 S. Palm Avenue Rialto, CA 92376
City of San Bernardino Municipal Water Department	Retail	San Bernardino, Muscoy	199,657	42,000	81	P.O. Box 710 San Bernardino, CA 92402
City of Upland	Retail	Upland, San Antonio Heights	75,787	18,813	16	460 N. Euclid Avenue Upland, CA 91786
Cucamonga Valley Water District	Retail	Rancho Cucamonga	200,466	50,531	47	10440 Ashford St. Rancho Cucamonga, CA 91730

*Countywide Service Review for Water
Appendix F - Listing*

Community Water System, Wholesaler, or JPA	Function	Location in SB County	Approx. Pop.	Retail Connections	Area (sq. miles)	Address
Devore Water Company	Retail	Devore	1,600	493	2.35	18185 Kenwood Avenue Devore, CA 92407
East Valley Water District	Retail	Highland	104,457	21,462	30.1	31111 Greenspot Road Highland, CA 92346
Fontana Union Water Company c/o Fontana Water Company	Wholesale water rights	Fontana	200,000	--	40+	15966 Arrow Route Fontana, CA 92335
Fontana Water Company	Retail	Fontana	225,300	46,426	52	15966 Arrow Route Fontana, CA 92335
Golden State Water Company – Claremont	Retail	Upland/Montclair	347 (SB County)	103 (SB County)	8.96	915 W Foothill Blvd, Suite E Claremont, CA 91711
Inland Empire Utilities Agency	Wholesale	West Valley	856,000	--	239	6075 Kimball Avenue Chino, CA 91708
Lytle Springs Water Company	Retail	Lytle Creek	475	95	0.07	3546 N Riverside Ave Rialto, CA 92376
Marygold Mutual Water Company	Retail	Bloomington	3,449	934	1.23	9725 Alder Ave Bloomington, CA 92316
Meeks and Daley Water Company c/o Elsinore Valley Municipal Water District	Wholesale water rights	Near Redlands	--	--	--	31315 Chaney St Lake Elsinore, CA 92531
Metropolitan Water District of Southern California	Wholesale	Area of Inland Empire Utilities Agency	856,000 (SB County)	--	239 (SB County)	700 North Alameda Street Los Angeles, CA 90012
Monte Vista Water District	Wholesale, retail	Montclair, Chino, Chino Hills	134,861	12,041	30	10575 Central Avenue Montclair, CA 91763
Mt. Baldy Homeowners' Association	Retail	Mt. Baldy	350	112	0.13	P.O. BOX 611 Mt. Baldy, CA 91759
Muscoy Mutual Water Company	Retail	Muscoy	7,500	1,562	2.03	2167 Darby St San Bernardino, CA 92407
Oak Glen Domestic Water Company	Retail	Oak Glen	200	35	0.38	11550 Raspberry Lane Oak Glen, CA 92399
Reche Canyon Mutual Water Company	Water rights	Colton	--	--	--	2651 Reche Canyon Rd. Colton, CA 92324
Rialto/Colton Basin Joint Powers Authority	Funding for remediation	Rialto, Fontana	260,000	--	135	P.O. Box 920 Rialto, CA 92377
Riverside Highland Water Company	Retail	Grand Terrace	16,007	3,964	8.35	12374 Michigan Street Grand Terrace, CA 92313

*Countywide Service Review for Water
Appendix F - Listing*

Community Water System, Wholesaler, or JPA	Function	Location in SB County	Approx. Pop.	Retail Connections	Area (sq. miles)	Address
Rocky Comfort Mutual Water Company	Retail	Mentone	100	32	0.08	1350 Orange Lane Mentone, CA 92359
San Antonio Canyon Mutual Service Company	Retail	Mt. Baldy Village	120	64	0.03	P.O. Box 631 Mt. Baldy, CA 91759-0631
San Antonio Water Company	Retail	Upland/San Antonio Heights	3,264	1,209	2.14	139 N. Euclid Avenue Upland, CA 91786-6036
San Bernardino Valley Municipal Water District	Wholesale	East Valley	691,000	--	325	380 East Vanderbilt Way San Bernardino, CA 92408
San Gorgonio Pass Water Agency	Wholesale	Yucaipa (no wholesale activity in County)	2,000	--	5	1210 Beaumont Avenue Beaumont, CA 92223
Santa Ana Watershed Project Authority	Watershed Quality	Valley Region	1,547,000 (SB County)	--	564 (SB County)	11615 Sterling Avenue Riverside, CA 92503
South Mesa Water Company	Retail	Yucaipa	7,573	2,935	4.27	391 West Avenue L Calimesa, CA 92320
Terrace Water Company	Retail	Colton	2,200	592	0.43	P.O. Box 640 Colton, CA 92324
Tres Lagos Mutual Water Company c/o San Bernardino County Flood Control District	Retail	Mentone	80	20	0.10	825 East Third Street San Bernardino, CA 92415
Water Facilities Authority (JPA)	Treatment	West Valley	500,000	--	135	1775 N Benson Ave Upland, CA 91784
West End Consolidated Water Company	Wholesale	Upland	78,787	--	15	1370 N. Benson Ave. Upland, CA 92867
West End Water Development Treatment & Conservation JPA	Treatment & conservation	San Bernardino, Rialto	254,110	--	170	P.O. Box 920 Rialto, CA 92377
West Valley Water District	Retail	Rialto, Fontana, Colton	80,161	18,305	31	P.O. Box 920 Rialto, CA 92377
Western Heights Water Company	Retail	Yucaipa/Redlands	6,000	2,281	4.58	32352 Avenue D Yucaipa, CA 92399
Yucaipa Valley Water District	Retail	Yucaipa	44,745	12,434	40	12770 Second Street Yucaipa, CA 92399

Sources: San Bernardino County Public Health Permit Update Reports; agency websites; Urban Water Management Plans; CA Dept. of Public Health Annual Inspection Reports