

LOCAL AGENCY FORMATION COMMISSION FOR SAN BERNARDINO COUNTY

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DATE: SEPTEMBER 9, 2015
FROM: KATHLEEN ROLLINGS-McDONALD, Executive Officer
MICHAEL TUERPE, Project Manager
TO: LOCAL AGENCY FORMATION COMMISSION



SUBJECT: AGENDA ITEM #8 – LAFCO 3192 – Sphere of Influence Amendment for the Chino Basin Water Conservation District

RECOMMENDATION:

LAFCO staff recommends that the Commission take the following actions:

1. For environmental review, certify that LAFCO 3192 is statutorily exempt from environmental review and direct the Executive Officer to file the Notice of Exemption within five (5) days.
2. Approve the sphere of influence expansion for the Chino Basin Water Conservation District to be coterminous with the sphere of influence of the Inland Empire Utilities Agency.
3. Affirm the description of the functions and services for Chino Basin Water Conservation District as identified in the *LAFCO Policy and Procedure Manual, Section VI, Chapter 3: Listing of Special Districts within San Bernardino LAFCO Purview - Authorized Functions and Services*.
4. Adopt LAFCO Resolution No. 3203 reflecting the Commission's findings and determinations.

BACKGROUND:

The Chino Basin Water Conservation District (hereafter shown as "Chino Basin WCD" or the "District") was formed in 1949 and has a goal to protect the Chino Groundwater Basin in order to guarantee that current and future water needs will be met. The district overlaps the western portion, or about 113 square miles, of the Chino Groundwater Basin. In conjunction with the Inland Empire Utilities Agency ("IEUA") and San Bernardino County Flood Control District, Chino Basin WCD actively protects and replenishes the Basin with rainfall and storm

water discharge from the San Gabriel Mountains. The district's service area includes all or portions of the cities of Chino, Chino Hills, Montclair, Ontario, Rancho Cucamonga, and Upland, and unincorporated areas of San Bernardino County. Additionally, the district's primary function has evolved into providing water conservation education to individuals and organizations within the Basin to further promote the efficient use of local water resources. The recent expansion and improvement of the district headquarters and its demonstration gardens as well as landscape techniques contribute to this public education.

To provide a broader understanding of the district, a brief history of the major governmental events for the District and its relationship with the Local Agency Formation Commission is described below, listed chronologically by end date:

- 1931 Prior to the creation of the District, a group called the Chino Basin Protective Association was organized. The purpose of the organization was to collect funds to prosecute and defend all litigation concerning the Chino Basin Protective Association, defend its operation and invaders of said rights, and invaders of underground water within the Chino Basin.
- 1949 Seeking a more formal mechanism to protect the Chino Groundwater Basin, the Board of Supervisors and the registered voters approved the formation of the Chino Basin Water Conservation District under the Water Conservation Law of 1931.
- 1969 LAFCO considered a proposal submitted by the County to dissolve the Chino Basin WCD (LAFCO 823). The County's application to LAFCO reasoned that the district received property taxes yet provided few if any services and that other districts could and did provide similar services. However, the proposal was terminated because the Commission determined that the district was not a district under the terms of the former District Reorganization Act (therefore not under LAFCO purview at that time), and LAFCO statute directed the process to return to the district's principal act.
- 1983 The Commission established the sphere of influence for the Chino Basin WCD as coterminous with its boundaries (LAFCO 2210). The staff report for this item took the position that the public interest would be served by the dissolution of the district with its functions transferred to the Chino Basin Municipal Water District (now known as the Inland Empire Utilities Agency) which also served as watermaster (at that time) for the basin. However, it was determined that the district was performing a useful public service with limited resources. In the absence of strong local support for dissolution and transfer of its functions, LAFCO did not pursue a change. Further, at that time the district's tax receipts had decreased by 60% following the passage of Proposition 13.

As an outgrowth of the sphere of influence establishment, the Commission directed its staff to conduct a special study on water conservation in the Chino Basin to include the multifaceted areas of water conservation, water resource management, and water reclamation. The special study produced a paper titled, A Position Paper Expressing Concern for the Water Conservation Program within the Chino Basin. The paper reiterated how important it was, and would continue to be, that the region have a coordinated program to conserve natural waters. The paper found that there was no coordinated program at that time and that efforts in water conservation were fragmented, and enormous quantities of water which might be preserved were lost to

the area. The paper indicated several options as to funding and an organizational structure which might provide a coordinated program. In examining the options for solution, considering expertise, staffing and resources, the paper indicated that the two agencies best suited to perform a coordinated conservation effort were the Chino Basin Municipal Water District (now Inland Empire Utilities Agency) and the San Bernardino County Flood Control District – but neither of these wanted the assignment without the assurance of full support from all the other benefitting agencies. The summary of responses from water agencies in the basin generally supported the conclusions of the study and supported a coordinated effort for water conservation, but no specific plans were identified.

1997 According to the initial service review in 2002 for Chino Basin WCD (LAFCO 2892), around 1997 the County of San Bernardino, with participation by LAFCO staff, explored the possibility of dissolving the district, with the water conservation functions to be succeeded to by either IEUA or the Flood Control District. The County drafted legislation to clarify that the standard LAFCO protest process would occur rather than the principal act provision requiring 60% registered voter support; however, the bill failed to advance through the legislature.

2007 The District submitted an application to expand its sphere of influence as well as annexation of territory to the east and northeast of its boundary (LAFCO 3087 and 3088). The stated reasons for the proposal were:

- Enable the District to provide services throughout the area overlying the Chino Groundwater Basin.
- Enable the District to counteract basin groundwater depletion by locating groundwater recharge facilities in areas that could effectively provide groundwater recharge consistent with the Chino Basin Groundwater Management Zones;
- Enable the District to provide water conservation education programs to communities throughout the Chino Basin; and
- Provide benefit to the water ratepayers and taxpayers within the Chino Basin by increasing the geographic scope and benefits for collaborative water resource management programs in which the District can participate.

However, the proposal as submitted included territory not a part of the Inland Empire Utilities Agency/Metropolitan Water District. At issue was that inclusion of this area presented concerns related to: (a) delivery of supplemental water for percolation could not be distributed into areas not a part of the Metropolitan Water District and its member agencies; and (b) if the area remained within the application should the annexation be modified to include concurrent annexation to IEUA/Metropolitan. Additionally, more than one overlying public agency expressed concern regarding use of funds outside the area for which tax revenues were collected. In turn, the District board withdrew its application after determining that it would not be in the best interest of the District to pursue annexation.

2015 In May 2015, the Commission considered the service review for Water Conservation in the Valley Region (attached to this staff report as Attachment #3). As an outgrowth of that review, the Commission initiated a sphere of influence review for the Chino Basin Water Conservation District with the direction that it evaluate the following alternatives (currently the sphere is coterminous with the district's boundaries):

1. Expansion of the sphere of influence to be coterminous with the sphere of influence of the Inland Empire Utilities Agency;
2. Expansion to include the whole of the Chino Groundwater Basin in San Bernardino County (Expansion to include Chino Groundwater Basin area in Los Angeles or Riverside Counties requires an application and approval from the respective LAFCO); or,
3. Designation of a zero sphere of influence.

The following discussion will evaluate the proposal against the mandatory criteria the Commission is required to review as set forth in Government Code Section 56425.

Overview

A sphere of influence is defined by Government Code Section 56076 as "a plan for the probable physical boundaries and service area of a local agency as determined by the Commission". This Commission in its policies related to assignment of a sphere of influence has indicated the purpose is "to encourage economical use and extension of facilities by assisting governmental agencies in planning the logical and economical extension of governmental facilities and services, thereby avoiding duplication of services" and "to promote coordination of cooperative planning efforts".

At this hearing the Commission will:

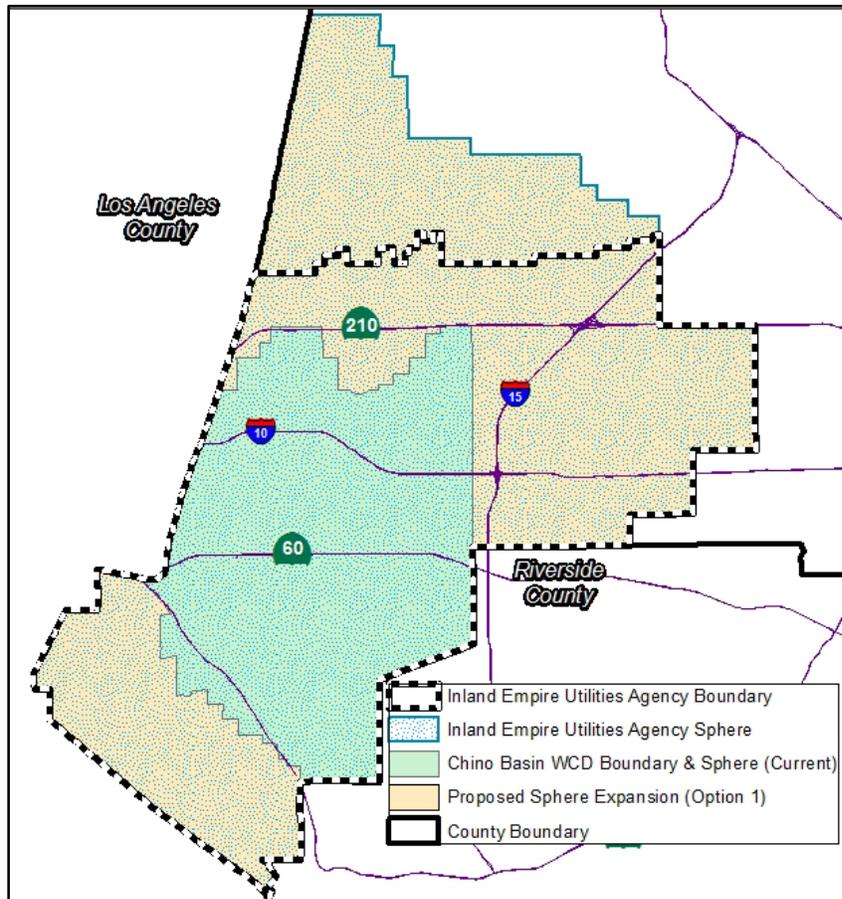
- Consider a sphere of influence amendment for the district from amongst three options (or it may chose not to take any action, thereby maintaining a sphere coterminous with the district's boundary).
- Evaluate and make determinations on the factors outlined in Government Code Section 56425 for LAFCO 3192. These determinations will be guided by the Commission's mission statement which reads in part, "to ensure the establishment of an appropriate, sustainable and logical municipal level government structure for the distribution of efficient and effective public services".

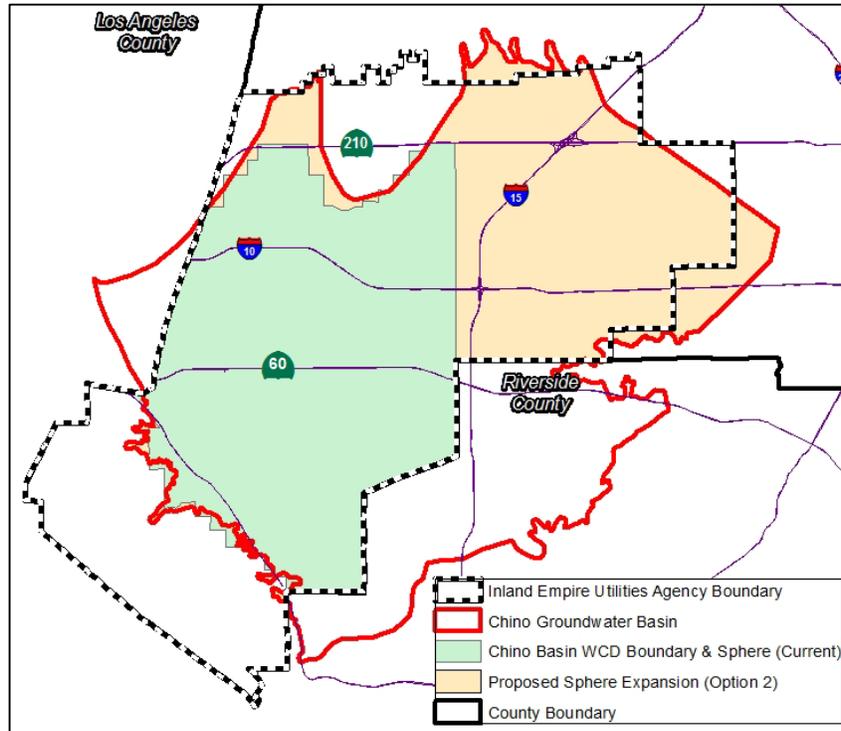
SPHERE OF INFLUENCE AMENDMENT:

Analysis of the Options

In the West Valley both storm water capture and water education activities are provided by the water conservation district and the municipal water district, as well as the Flood Control District. Specifically, the Chino Basin WCD is 1) a single purpose district, 2) is not the only agency within its basin that provides stormwater capture or water education, 3) is overlaid by a municipal water district (IEUA) and flood control district that are authorized and actively provide stormwater capture, and 4) is overlaid by a municipal water district that engages in water education activities regionally. Therefore, a discussion of the potential for streamlining these activities is warranted. The options to be analyzed are:

Option 1 - Expansion of the sphere of influence to be coterminous with the sphere of influence of the Inland Empire Utilities Agency; and Option 2 - Expansion to include the whole of the Chino Groundwater Basin in San Bernardino County; each of which are shown in the two maps below:





The Chino Basin WCD does not encompass the entire Chino Basin nor does it encompass all of the San Bernardino County portion of the Basin. The assignment of a sphere of influence for Chino Basin WCD larger than its boundary will provide a framework for the district to have a greater role in recharge planning and education activities throughout the Basin.

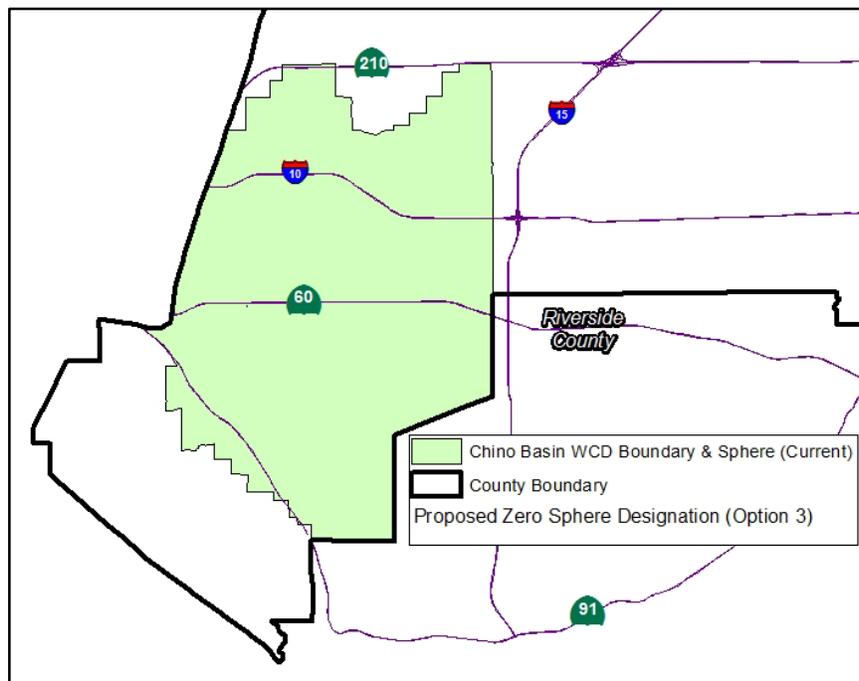
In serving its constituents and the area within its boundaries, the district: 1) participates in surface water capture in conjunction with the Chino Basin Watermaster, IEUA, and SB County Flood Control District, and 2) provides education resources. Focusing on education services, the district has long provided water conservation sustainability through demonstration and education beyond its boundaries. To further its demonstration and education service, it opened its Water Conservation Center campus in 2014 which is available to the public at-large. Being that the scale and scope of the education activities have the capability to extend beyond the district's boundaries, overlying agencies (both wholly within and larger than the district) contract with the Chino Basin WCD to provide demonstration and education. Below are examples:

- IEUA overlays the entirety of the Chino Basin WCD and is authorized to and actively performs water conservation activities (although to a lesser degree). Being that Chino Basin WCD already has the built-in mechanisms for these services, IEUA contracts with Chino Basin WCD to provide certain conservation programs on its behalf.
- Chino Basin WCD administers landscape and irrigation audits in partnership with IEUA and the eight member retail member agencies, and other agencies contract with the district to provide certain conservation programs on its behalf.

While Options 1 and 2 both would expand the district's sphere (thereby expanding the potential reach of its services), Option 1 appears to make more logical service sense. Below are the staff's rationale for this position:

- IEUA’s sphere is a clear and definable boundary; whereas it is the legal, not the geological, boundaries of the Chino Basin that are defined by a court judgment.
- Approximately 5% of the Chino Basin is located within Los Angeles County and 15% in Riverside County. However, the Commission’s jurisdiction on the sphere of influence determinations is limited to San Bernardino County by adoption of MOUs with Riverside and Los Angeles LAFCOs. Option 2 would require Chino Basin WCD to initiate a sphere of influence expansion proposal with the LAFCO in both Riverside and Los Angeles counties. Given these uncertainties, Option 2 would not achieve its full intent if the district did not initiate the applications or the other LAFCOs were to deny the sphere of influence request.
- IEUA’s sphere is larger than the Chino Basin portion in San Bernardino County.
- Lastly, contracts with IEUA would encompass the entirety of the IEUA territory.

Option 3 - Designation of a zero sphere of influence.



The Commission may designate a “zero” sphere of influence signaling its position that a change of organization should take place assigning the district’s service obligations and responsibilities to another agency. Such future action could therefore be either a dissolution or consolidation process.

Efforts and sentiments to dissolve the Chino Basin WCD date back to at least 1969 based on the reasoning that the district’s functions and services could be assumed by an overlying agency that has the same authorized functions and services (IEUA or Flood Control District).

However, to dissolve a water conservation district, Water Conservation District Law requires a petition signed by 60% of the registered voters within a water conservation district to support the dissolution. Therefore, dissolution of the Chino Basin WCD is not likely. Instead, consolidation of a water conservation district provides a more likely mechanism.

In this case, a potential consolidation could be with the overlaying Inland Empire Utilities Agency or SB County Flood Control District. Consolidation offers the greatest level of benefit for resource management, seamless operations, and standardized coverage. For stormwater capture, overhead would reduce as shared equipment and labor would result in savings. All areas would participate in capital costs for new equipment and facility upgrades. Further, IEUA plays a significant role in accounting, operating, and maintaining the eight Chino Basin WCD basins by performing the following functions:

- All basins
 - Stormwater passive capture and volume accounting
 - Stormwater active diversion and volume accounting
 - Imported water delivery and volume accounting
 - Weeding monthly in areas of impact
 - Operate and maintain communication infrastructure
 - Operate and maintain diversion infrastructure
 - Biologic surveys and biological permitting

- Various basins
 - Recycled water delivery and volume accounting
 - Infiltration restoration - lead agency
 - Infiltration restoration - support agency
 - Basin grading maintenance – lead agency
 - Basin grading maintenance – support agency

The redundancies for multiple elected and appointed officials as well as leadership staff would be eliminated. It would be expected that a single agency could use resources more effectively, and water education activities could consolidate thereby resulting in a single, streamlined message.

LAFCO Staff Recommendation

Given the determinations made in the May 2015 service review, the information outlined above, and the determinations required for a sphere amendment which are discussed below, LAFCO staff recommends that the Commission choose Option 1 - expansion of the sphere of influence to be coterminous with the sphere of influence of the Inland Empire Utilities Agency. This option would allow the Chino Basin WCD to provide its educational service on a larger scale and would allow the district to participate with other agencies for stormwater capture activities outside of its boundary but within its sphere of influence (via contracts with overlying agencies or possible annexation). It would also support the Commission's position that the ultimate unification of the agencies would provide the greatest benefit.

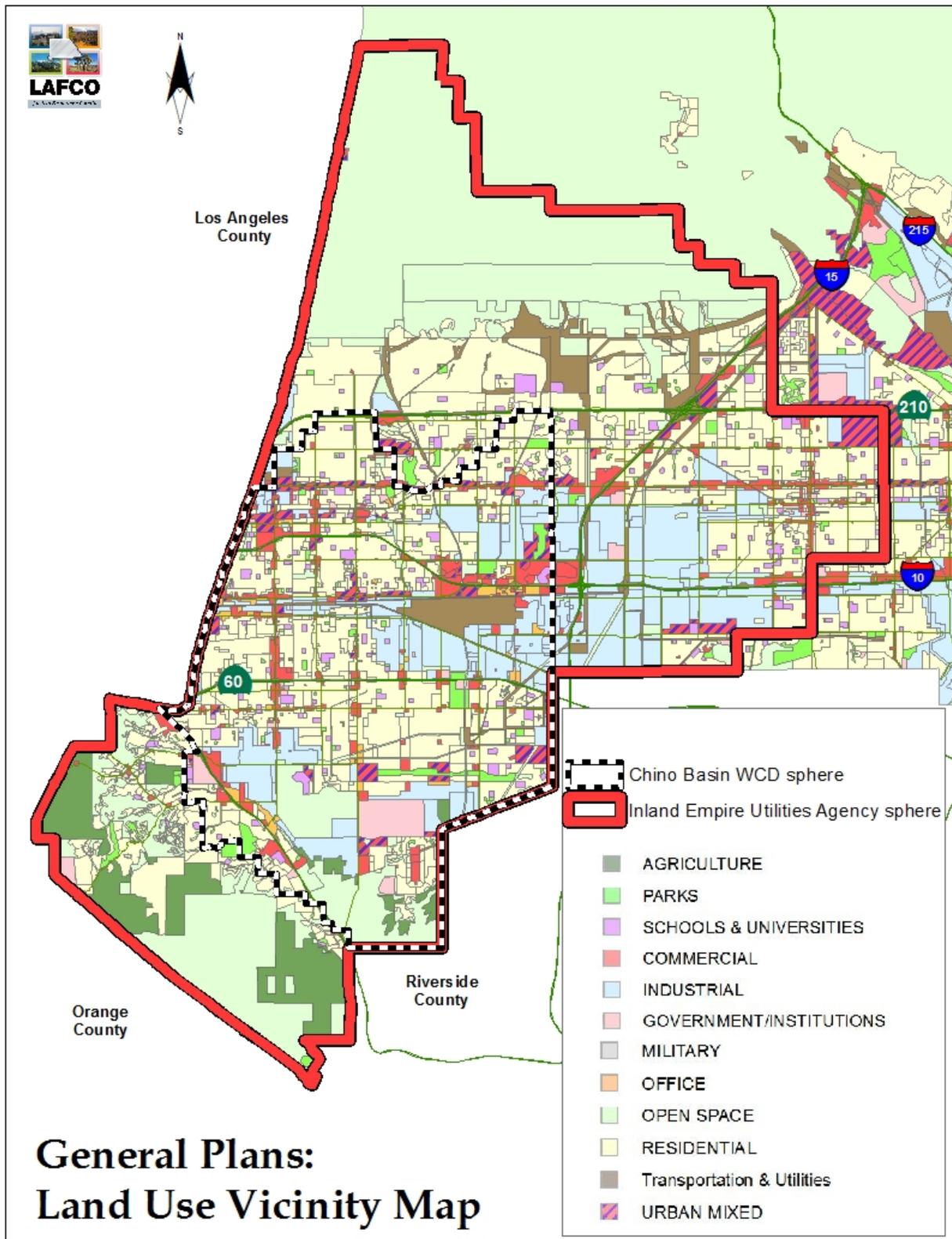
The Chino Basin WCD has provided a letter supporting this option, which is included as Attachment #2 to this report.

FACTORS OF DETERMINATION:

Government Code Section 56425(e) requires that the Commission make a written statement of its determinations on the factors outlined in the statute. The following narrative provides the staff's analysis of these factors, which includes information from the service review conducted in May 2015 titled "Service Review for Water Conservation in the Valley Region".

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

The map below illustrates the land use designations of the city and county jurisdictions within the sphere of influence of the IEUA – shown in red outline (as this area represents the largest of the three options for Commission consideration from this staff report). As shown, residential, urban mixed, and industrial uses are prevalent in the urbanized areas with commercial interspersed. Parks and Open Space are heavy at the southwestern end.



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

Present Need

The population within the IEUA sphere and Chino Basin WCD increased 23% and 6%, respectively, from 1990 to 2000. Interestingly, the IEUA sphere grew at a lesser rate from 2000 to 2010 during the construction boom (16% IEUA sphere). The 2015 estimated population is 841,210 (IEUA sphere) and 444,901 (Chino Basin WCD sphere), and projections identify the areas to grow at marked lesser rate of 0.3% annually through 2020.

Population Source Year	Census			Estimate	Projected			
	1990	2000	2010	2015	2020	2025	2035	2045
Valley Region								
IEUA Sphere	569,490	701,527	814,457	841,210	868,145	916,955	1,022,962	1,141,225
Chino Basin WCD	371,836	393,969	431,167	444,901	458,959	484,763	540,806	603,327
sources: 1990, 2000, and 2010 population (U.S. Census) 2014 estimate & 2020 Projected (ESRI) 2025 through 2045 population (SCAG and LAFCO)								

There are generally two basins within the IEUA sphere: Chino and Cucamonga, both of which are adjudicated. The figure below is a summary of the two basins from the Department of Water Resources (“DWR”). As part of the California Statewide Groundwater Elevation Monitoring Program and pursuant to the California Water Code §10933, DWR is required to prioritize California groundwater basins, so as to help identify, evaluate, and determine the need for additional groundwater level monitoring. As identified by the DWR, the Chino Basin has been designated as a High Priority basin (high cumulative ratings as shown in the chart below) and the Cucamonga Basin as a Medium Priority basin for future monitoring. Both share similar population, groundwater reliance factors, and have been impacted from the increasing population.

California Statewide Groundwater Elevation Monitoring Program								
Upper Santa Ana Valley Basin - West Valley								
			DWR Rating (1 = low, 5 = high)					
Sub-Basin	Sq. Miles	2010 Pop.	Pop.	Pop. Growth	GW Reliance	Impacts	Basin Priority	Impact Comments
Chino	242	898,653	4	2	4	3	High	High nitrates and dissolved solids.
Cucamonga	15	51,001	4	1	3.5	3	Medium	High nitrates reported in 14 of 24 wells tested.

For the first time in California’s history, urban water suppliers are required to comply with new mandatory restrictions aimed at achieving a statewide 25 percent reduction in potable urban water use. The Governor’s Executive Order comes as water supplies continue to decline due to the severe drought gripping the state. The need for water conservation resources has intensified due to this circumstance.

Probable Need

It is not until 2025 that the growth rate is projected to increase. LAFCO uses a 30-year horizon for its population projections, and its analysis in conjunction with Southern California

Associated Governments (“SCAG”) projections provides a projected population of 1.14 million in 2045 for the current IEUA sphere of influence and 603,000 for the current Chino Basin WCD. For the IEUA sphere, which includes the territory of the Chino Basin WCD sphere, the 2045 figure would be roughly twice that of 1990 with an evident corresponding increase in population density.

The population projections identified above do not include the heavy daily business, commercial, education and industrial activities. Further, the transient traffic on Interstates 10 and 15 (two of four interstates that exit Southern California to the east) has significantly increased in volume each decade and is anticipated to continue to do so. All of this signals that the west Valley Region is one of the most densely populated and traveled parts of the state and that the need for water conservation resources will only intensify for the already impacted groundwater basins.

Over the next 25 years, the subject area population is expected to significantly increase. It is paramount that the agencies recognize the need to develop and promote programs that protect existing water resources for the region’s sustainability and future growth. Conservation and the efficient use of water is the most cost-effective source of water supply reliability and are essential to meeting the region’s current and future demand.

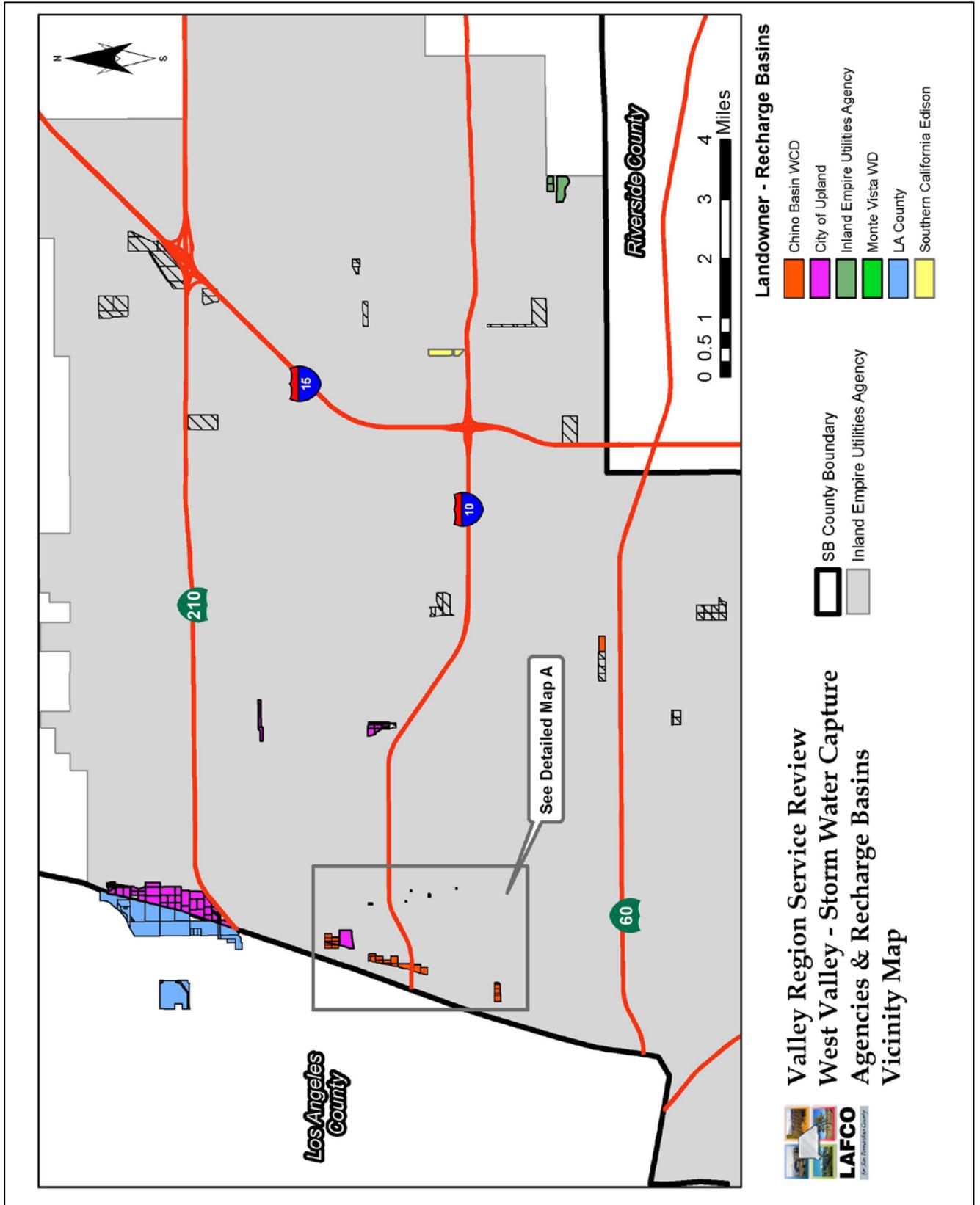
The present capacity of public facilities and adequacy of public services that the agency provides or is authorized to provide;

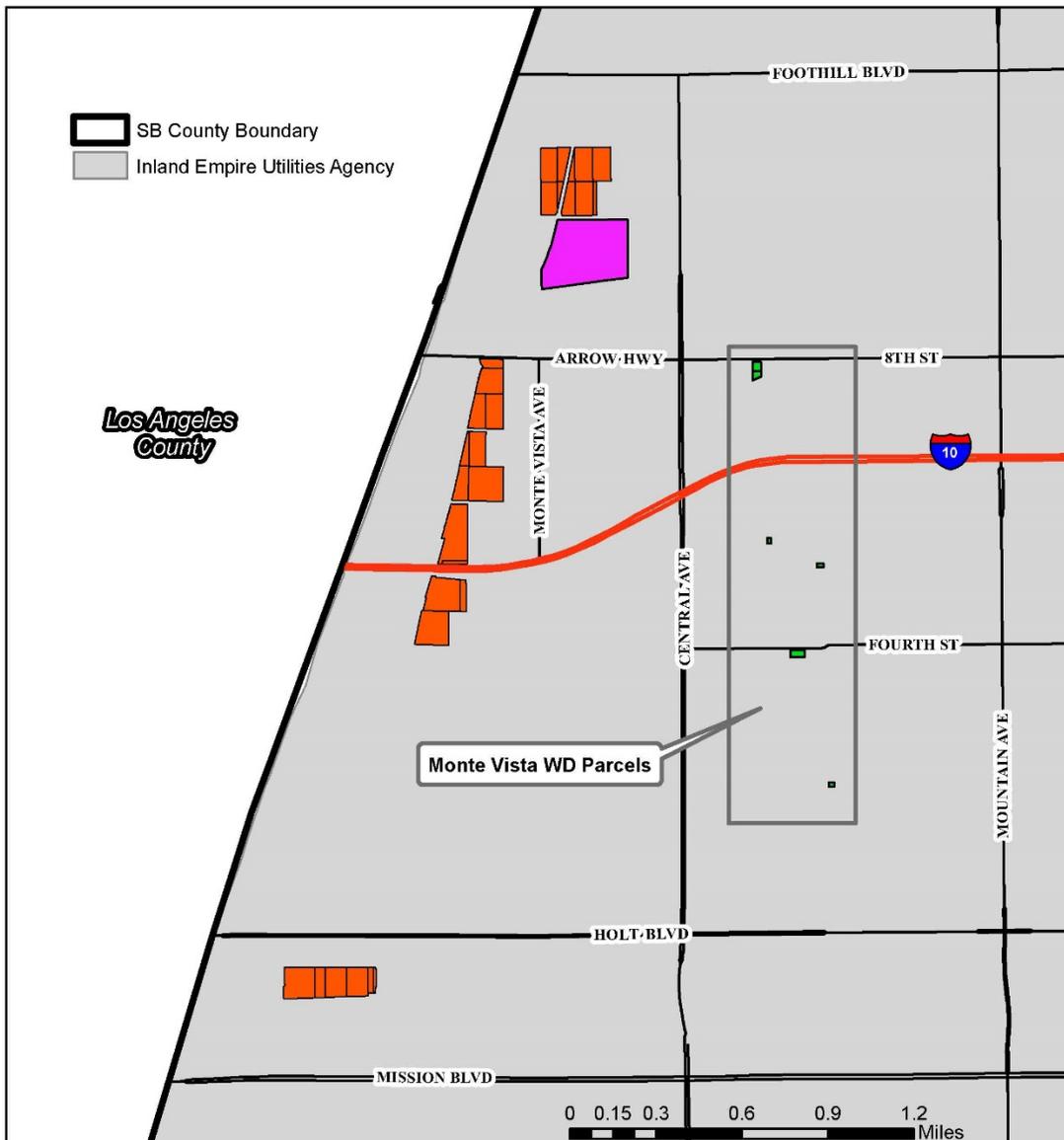
The following agencies actively recharge the groundwater basins (not limited to surface water and stormwater/runoff) or account for recharge within the general West Valley: Chino Basin Water Conservation District, Chino Basin Watermaster (account and implement basin management), Inland Empire Utilities Agency, Monte Vista Water District, and City of Upland. The Inland Empire Utilities Agency encompasses the whole of the agencies under LAFCO purview: Chino Basin Water Conservation District, Monte Vista Water District, and City of Upland. The Chino Basin Watermaster is the court-appointed watermaster for the Chino Groundwater Basin which extends into Los Angeles and Riverside Counties. The adjudicated boundary does not encompass the entirety of the physical boundary, as depicted by the Department of Water Resources. The remaining areas of the physical boundary do not contain significant recharge activities.

Specifically, the Chino Basin WCD actively protects and replenishes its portion of the Chino Basin with rainfall and storm water discharge from the San Gabriel Mountains. Additionally, it provides water conservation education to individuals and organizations within the basin to further promote the efficient use of local water resources.

Surface Water Capture

The maps below illustrate the agencies that actively capture surface and storm water and the associated recharge sites in the West Valley. This first map identifies the landowner of the recharge basins in the West Valley along with a detail map to follow, and the third map identifies the type of recharge (e.g. storm, imported) within the Chino Basin WCD. The Cucamonga Valley Water District generally comprises the Cucamonga Basin (an adjudicated basin), and it does not actively recharge the basin.





*Los Angeles
 County*

Monte Vista WD Parcels

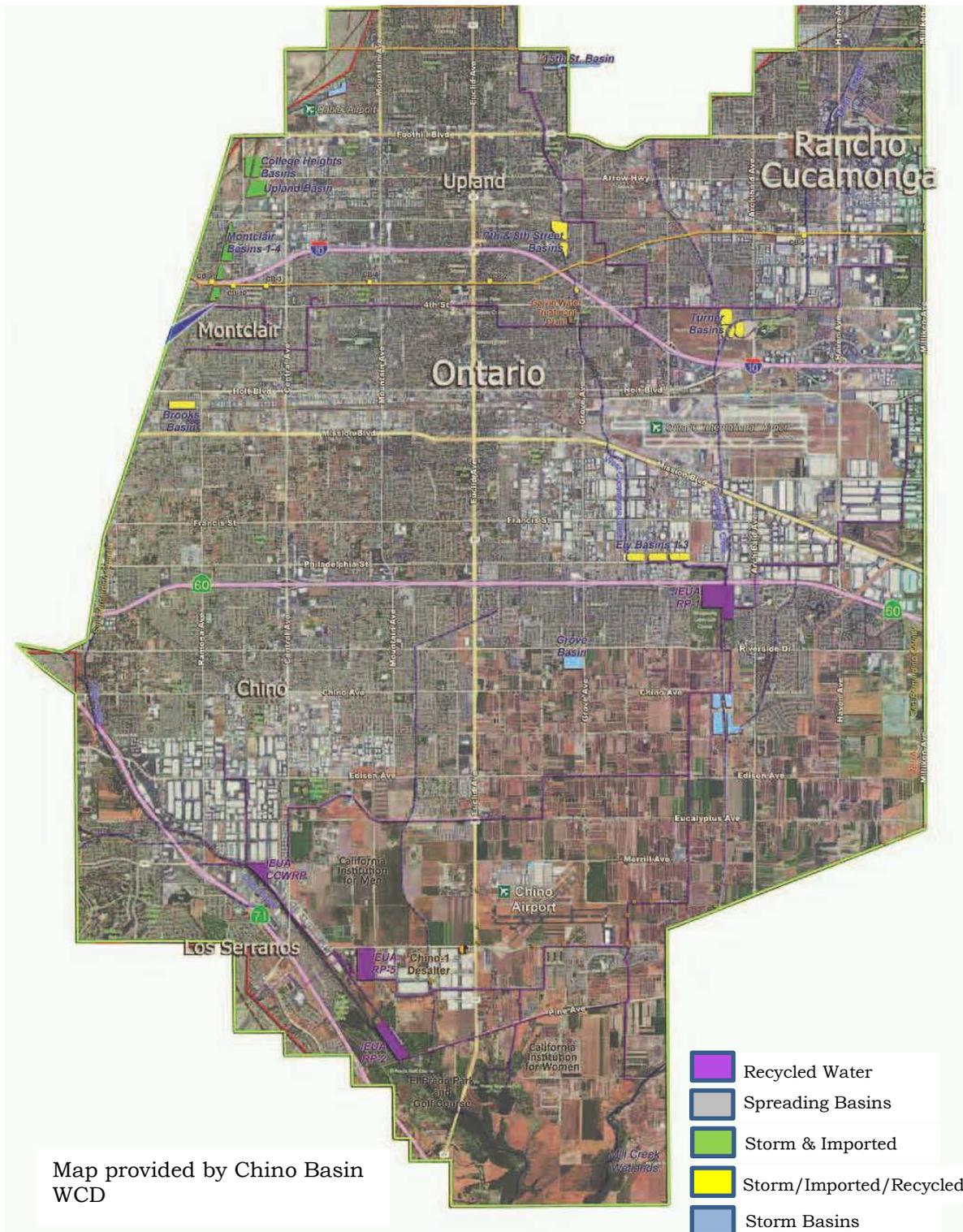


**Valley Region Service Review
 West Valley - Storm Water Capture
 Agencies & Recharge Basins
 Detailed Map A**

Landowner - Recharge Basins

- Chino Basin WCD
- Southern California Edison
- City of Upland
- LA County
- Monte Vista WD

Percolation Basins within Chino Basin WCD



The Groundwater Recharge Master Plan identifies opportunities to use captured water during wet years when surplus water is available. The Agreement for Operation and Maintenance of Facilities to Implement the Groundwater Recharge Master Plan is commonly referred to as the Four Party Agreement, and was entered into by the Watermaster, Flood Control District, Chino Basin WCD, and IEUA to cooperate in a program to implement certain portions of the Recharge Master Plan for the purpose of assuring that the Chino Basin has adequate recharge capabilities to meet its future needs. The effective date of the agreement was January 23, 2003 and continues through December 31, 2032.

The Chino Basin WCD owns eight basins that are used to percolate water from local runoff, imported water purchased by Watermaster parties, and recycled water from IEUA. Five of the basins are located in Montclair, two in Upland, and one in Ontario. The eight basins are described below:

Drainage System, Basin	IEUA Role	CBWCD Role	Storage Capacity (AFY)	Water Recharge Source	Notes
San Antonio Channel Drainage System					
College Heights East	A,B,D,F,H,I,J,L,N	G,M	145	Storm, State Project	No need for E, no infrastructure for C
College Heights West	A,B,D,F,H,I,J,M,N	G,L	126	Storm, State Project	No need for E, no infrastructure for C
Montclair 1	A,B,D,F,H,I,K,M,N	E,G,J,L	134	Runoff, storm, State Project	No infrastructure for C
Montclair 2	A,B,D,F,H,I,K,M,N	E,G,J,L	243	Runoff, storm, State Project	No infrastructure for C
Montclair 3	A,B,D,F,H,I,K,M,N	E,G,J,L	49	Runoff, storm, State Project	No infrastructure for C
Montclair 4	A,B,D,F,H,I,K,M,N	E,G,J,L	97	Runoff, storm, State Project	No infrastructure for C
Brooks	A,B,C,D,F,H,I,K,M,N	E,G,J,L	503	Runoff, storm, recycled, State Project	
West Cucamonga Channel Drainage System					
Ely 3 *	A,B,C,D,F,H,I,J,M,N	E,G,L,K	136	Runoff, storm, recycled	
<p>* Ely #1 and #2 are owned by San Bernardino County Flood Control District.</p> <p>A) Stormwater Passive Capture and Volume Accounting B) Stormwater Active Diversion and Volume Accounting C) Recycled Water Delivery and Volume Accounting D) Imported Water Delivery and Volume Accounting E) Vector Control Coordination F) Weeding Monthly in Areas of Impact G) Landscape and Property Maintenance H) Operate and Maintain GWR Communication Infrastructure I) Operate and Maintain Diversion Infrastructure J) Infiltration Restoration Lead Agency K) Infiltration Restoration - support agency L) Basin grading maintenance - lead agency M) Basin grading maintenance - support agency N) Biologic Surveys and Biological Permitting</p> <p>sources: Chino Basin WCD and IEUA</p>					

As shown above, IEUA plays a significant role in accounting, operating, and maintaining the Chino Basin WCD basins. The outline below summarizes the activity roles from the figure above:

- **IEUA only, all basins**
 - Stormwater passive capture and volume accounting
 - Stormwater active diversion and volume accounting
 - Imported water delivery and volume accounting
 - Weeding monthly in areas of impact

- Operate and maintain communication infrastructure
- Operate and maintain diversion infrastructure
- Biologic surveys and biological permitting

- **IEUA only, various basins**
 - Recycled water delivery and volume accounting

- **Chino Basin WCD only, all basins**
 - Landscape and property maintenance

- **Chino Basin WCD only, various basins**
 - Vector control coordination

- **IEUA and Chino Basin WCD, various basins**
 - Infiltration restoration - lead agency
 - Infiltration restoration - support agency
 - Basin grading maintenance – lead agency
 - Basin grading maintenance – support agency

The district's basins from FY 2006-07 through FY 2013-14 captured and recharged an average of 8,325 acre-feet of water. Of the 8,325 acre feet of water captured, the annual average includes 2,225 acre-feet of storm and nuisance water; 1,351 acre-feet of recycled water; and 4,750 acre-feet of imported water. According to the district, utilizing the Metropolitan Water District's Tier 2 treated rate (\$1,032/ac. ft.), the nominal present value of the average captured and recharged water is over \$8,591,400.

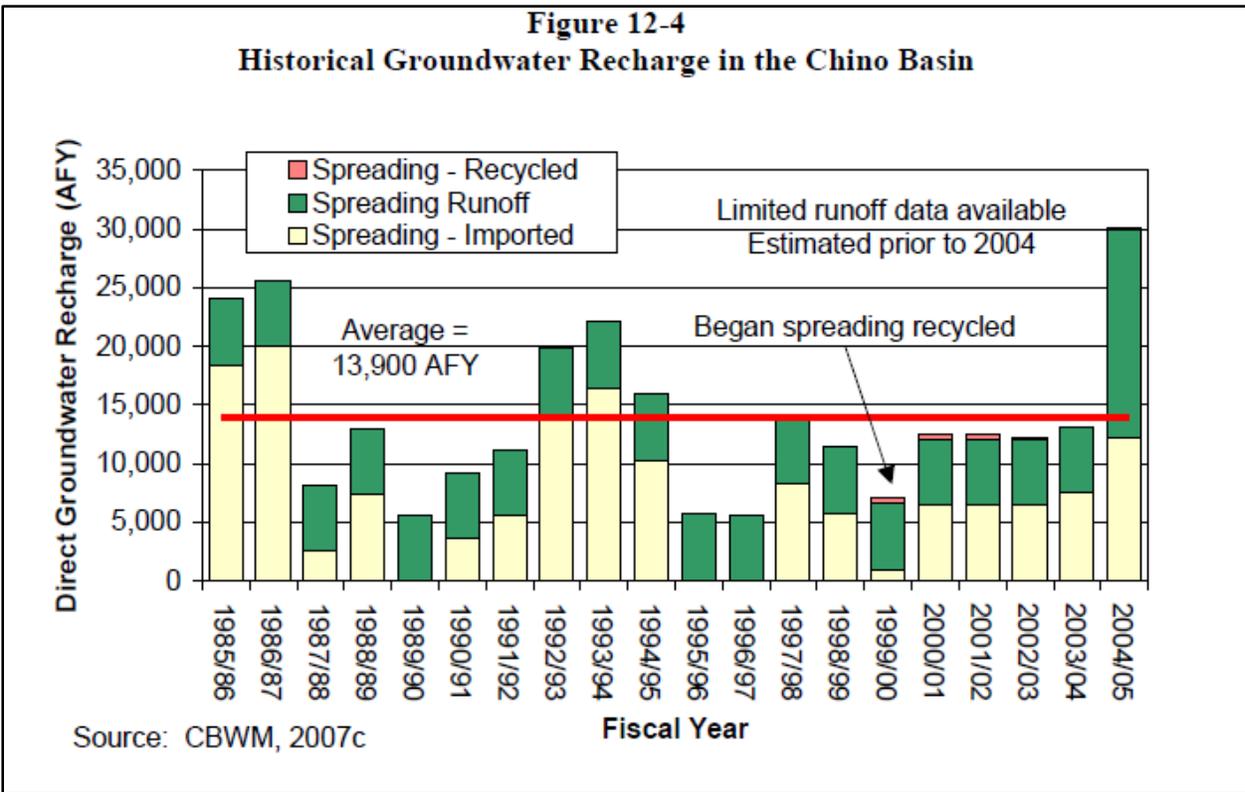
Because storm runoff water represents a potential threat to both residential and commercial property owners, yet is the most economical source for recharge of the Basin water supply, Chino Basin WCD works closely with the Watermaster and the Flood Control District to provide the most effective balance between flood control and water conservation result. As a consequence, a number of Chino Basin WCD land acquisitions and construction projects for water conservation purposes have been made with the Flood Control District and others in mind. Historically, the district has also constructed diversion facilities and improvements to Flood Control District owned basins that help replenish the Chino Basin. Water retained by these facilities would otherwise be lost in flows to the Santa Ana River.

Spreading in the Chino Basin

Imported water, recycled water and runoff (which includes surface water) are currently spread in the Chino Basin. As shown in the figure below, an average of about 13,900 AFY has been spread between fiscal years 1985-86 and 2004-05.¹ About 7,700 AFY has been recharged with imported water from Metropolitan Water District 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 2004-05.²

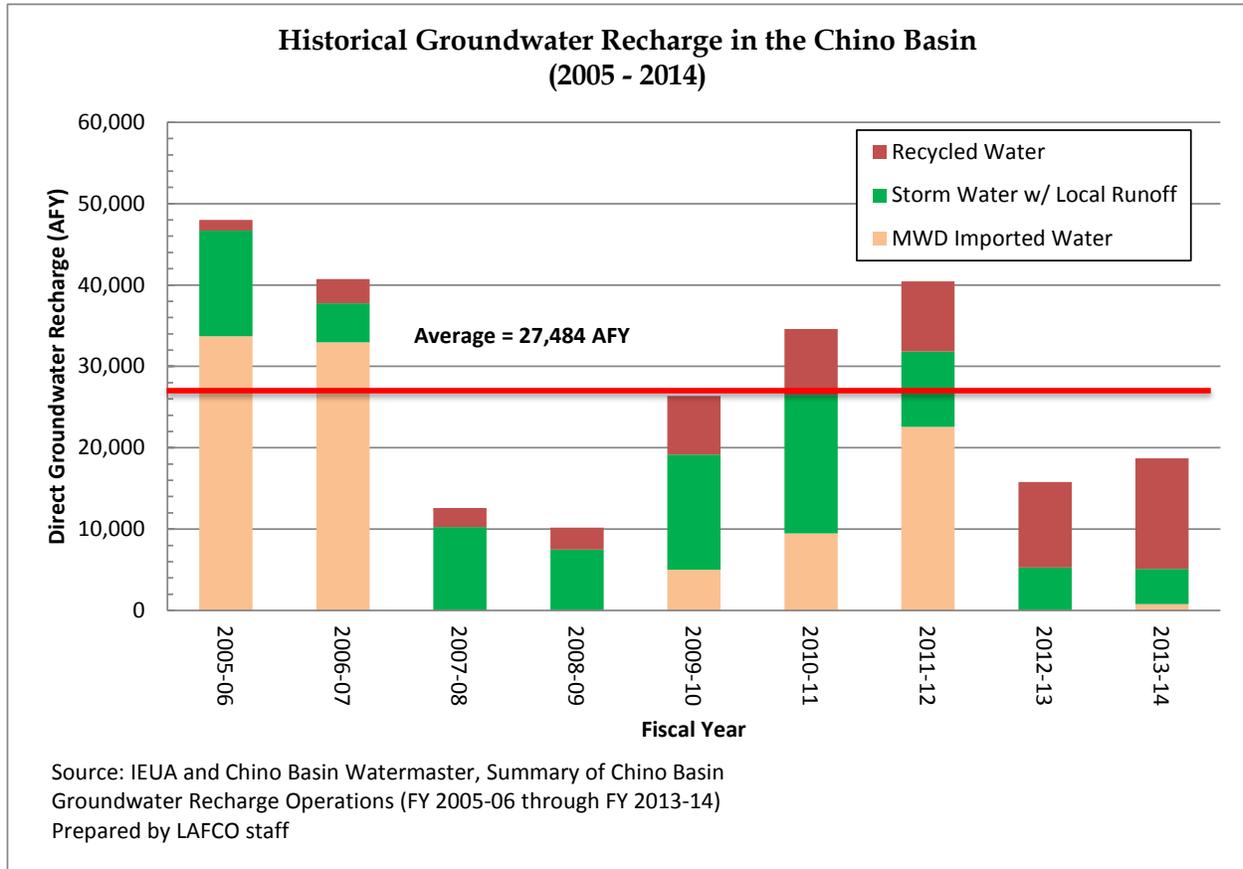
¹ Chino Basin Watermaster, 2007. Recharge data provided 3/28/07. As cited in Metropolitan Water District.

² Metropolitan Water District.



Source: IEUA Recharge Master Plan

Expanding from the above data, 27,484 AFY has been spread from FY 2005-06 through FY 2013-14. 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.



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
Recycled Water	1,304	2,989	2,340	2,684	7,210	8,065	8,634	10,479	13,593
Storm Water w/ Local Runoff	12,999	4,770	10,243	7,498	14,141	17,051	9,266	5,298	4,299
MWD Imported Water	33,705	32,968	0	0	5,001	9,465	22,560	0	795
TOTAL	48,008	40,727	12,583	10,182	26,352	34,581	40,460	15,777	18,687
units in acre-feet									
source: IEUA and Chino Basin Watermaster, Summary of Chino Basin Groundwater Recharge Operations (FY 2005-06 through FY 2013-14)									
Average = 27,484 acre feet/year									

Education and Demonstration

As for water education, the Chino Basin WCD operates a demonstration garden and opened its renovated Water Conservation Center campus in 2014 (although IEUA operates an education park in Chino and the Cucamonga Valley Water District operates a garden within the Cucamonga Basin). The Water Conservation Center includes a landscape design room where one can draft a water wise landscape, classroom that holds 50 people, an educational lobby exhibit and a dedicated classroom building and edible garden area for Children's Education. The newly renovated water-wise demonstration garden features nine demonstration zones with over 300 water wise plant species arranged by type and water

needs. The 1.5 acre garden is open to the public for self-guided or staff guided tours and includes educational signage and demonstration exhibits that teach about water-wise landscaping, efficient irrigation and good maintenance practices. The district site also includes a demonstration parking lot that showcases various permeable pavements and Low Impact Development techniques; and a wilderness park that contains examples of 40 tree species that require low water - both are open to the public. At the Center, the district conducts workshops, hosts public events, accepts and actively pursues field trip visits from schools, and showcases various construction and landscape designs that reduce water consumption. The district taught 24 workshops in 2012-13 and seven in 2013-14, which had an average attendance of 25.

One of the district's longest running programs, an annual Earth Day field trip event, has reached over 25,000 5th graders with water conservation education since 1992. The district also offers daily teaching field trips, focused on water conservation. In addition to these on-site programs, the District runs a water conservation poster contest which received 2,500 entries from 125 classes last year and a grant program that, since 1999, has provided up to \$5,000 for college bound students who are studying towards a career in a water related field.

Landscape Audits

The district administers landscape and irrigation audits in partnership with IEUA and the eight member retail member agencies. Additionally, the district conducts landscape design consultations, and has financially assisted public schools and parks within its boundaries to help offset the costs of onsite irrigation system conversion as a result of connecting to the recycled water system, thus reducing the need for potable water. Chino Basin WCD also provides incentives for public sector schools and parks within its service area. The figure below identifies the district's landscape audit program performance from FY 2007-08 through FY 2013-14.

Chino Basin WCD - Landscape Evaluation and Audit Program

Year	Total Site Audits	Total Irrigated Acreage Audited	Total Potential Water Savings (AF/yr)
FY 07-08	24	36	196
FY 08-09	135	289	782
FY 09-10	105	114	303
FY 10-11	78	86	173
FY 11-12	114	64	71
FY 12-13	48	14	49
FY 13-14	83	15	38

Source: IEUA, Annual Water Use Efficiency Programs Report, FY 2013-14

Conservation Contracts with IEUA

Other agencies contract with Chino Basin WCD to provide conservation programs on its behalf. Documents provided by the district identify IEUA as the main agency that contracts with the district to carryout efforts to reduce consumer consumption. Below is a summary of the current contracts between Chino Basin WCD and IEUA.

- Implementation and Completion of Landscape Audits for Customer Sites Currently Identified as Potentially Significant Water Conservation Candidates within the IEUA Service Area.
 - Contract Date: September 2010
 - Latest Amendment Date: August 2014
- Residential Landscape Training Program
 - Contract Date: January 2011
 - Latest Amendment Date: August 2014
- Dedicated Irrigation Landscape Meters Water Budget Program
 - Contract Date: December 2012
 - Latest Amendment Date: August 2014
- Implementation and Completion of Landscape Transformation Services for Customer Service within the IEUA Service Area
 - Contract Date: July 2013
 - Completed July 2014
- Garden in Every School Program Services within the IEUA Service Area
 - Contract Date: September 2013
 - Latest Amendment Date: November 2014

Qualified Water Efficient Landscaper Certification Program

The Qualified Water Efficient Landscaper (QWEL) Program (developed by the Sonoma Saving Water Partnership and the Environmental Protection Agency) provides landscape professionals with 20 hours of education on principals of proper plant selection for the local climate, irrigation system design and maintenance, and irrigation system programming and operation. QWEL certification is a valuable tool for consumers to be able to select landscape and maintenance professional who understand and have value for water and resource conservation. Seven district staff are QWEL certified and can teach the class to others. The District has received QWEL Board and EPA certification as an adopter of the QWEL program and as an EPA WaterSense Labeled Professional Certification Program provider.

IEUA

In 2009, IEUA worked with its member agencies, to create a Regional Water Use Efficiency Partnership Workgroup. The Workgroup initiated an eight-step process that resulted in the creation of a regional Water Use Efficiency Business Plan to guide its future conservation efforts. The purpose of the Plan is to create the strategy to meet the region's per capita water demand goals. The Plan also identifies cost-effective water use efficiency programs to be implemented in order to achieve regional conservation goals. These programs place a strong emphasis on landscape irrigation efficiency since landscape water use represents a significant portion of the total water demand for the IEUA service area.

IEUA is a member of the Metropolitan Water District of Southern California which provides rebates to Commercial, Industrial, and Institutional ("CII") customers for various water saving technologies through the Save a Buck Rebate Program and Public Sector Program.

Each year, IEUA prepares a comprehensive water-use efficiency report (Annual Water Use Efficiency Programs Report) which tracks the progress that has been made against the goals and objectives, identified in its long-term Water-Use Efficiency Plan. Member agencies receive service area specific data, which serves as a roadmap for developing the next annual budget and assists in evaluating overall program performances. Since 2004, IEUA has reached over 19,000 students with its Garden in Every School program, which educates the school, family, and community about water-wise usage through a garden landscape, featuring drought tolerant plants and efficient irrigation.

IEUA operates the Chino Creek Wetlands and Educational Park located adjacent to the IEUA headquarters in Chino. The park consists of 22 acres that have been landscaped with a wide variety of “California Friendly” trees and grasses and features a state-of-the-art irrigation management system. The park serves as a demonstration area for the community on improving water supply, storm water treatment and water efficiency. The Park’s Water Discovery program has received a total of 212 field trips with 10,890 students since the inception of the program. In addition to the field trips, 7,266 community members and 4,384 students have taken part in IEUA’s annual Earth Day celebration since 2007.

Cucamonga Valley Water District

The Cucamonga Valley Water District and the Frontier Project operate demonstration gardens which are open to visit each weekday. The gardens provide information on water wise landscaping and feature over 100 water savvy plants. Additionally, the district provides landscape consultations for the homes of district customers to identify water waste in the home’s landscape. Each spring, the district hosts a Water Savvy Garden Tour (previously Landscape Tour) to educate residents about the beauty and benefits of water saving landscapes. Since its inception in 2009, the Water Savvy Garden Tour has educated over 600 residents on how they can make changes in their yards to use water efficiently.

The existence of any social or economic communities of interest in the area if the commission determines that they are relevant to the agency;

Within the existing sphere of influence for the Inland Empire Utilities Agency (Option 1), are the following social communities of interest: Cities of Chino, Chino Hills, Fontana (western portion), Montclair, Ontario, Rancho Cucamonga, and Upland; and unincorporated territory. Additionally, there are generally two basins within the IEUA sphere: Chino and Cucamonga, both of which are adjudicated.

Economic communities of interest are vast and varied. To illustrate this point, the subject area includes heavy business, commercial, education, and industrial activities, as well as an international airport. Further, the transient traffic on Interstates 10 and 15 (two of four interstates that exit Southern California to the east) has significantly increased in volume each decade and is anticipated to continue to do so. All of this signals that the area is one of the most densely populated and traveled parts of the state.

AUTHORIZED POWERS:

When adopting or amending a sphere of influence for a special district, the Commission is required to establish the nature, location, and extent of any functions or classes of services provided by the district (Government Code §56425(i)). LAFCO staff recommends that the Commission affirm the service description for Chino Basin WCD as identified in the *LAFCO Policy and Procedure Manual, Section VI, Chapter 3: Listing of Special Districts within San Bernardino LAFCO Purview - Authorized Functions and Services*, as follows:

**Chino Basin Water
Conservation District**

Water Conservation

Groundwater replenishment and water conservation activities, which include water conservation education services

ENVIRONMENTAL CONSIDERATIONS:

The Commission's Environmental Consultant, Tom Dodson of Tom Dodson and Associates, has indicated his recommendation that the review of LAFCO 3192 is statutorily exempt from the California Environmental Quality Act (CEQA). This recommendation is based on the finding that the sphere amendment as a planning boundary is not judged to pose any adverse changes to the physical environment. Therefore, the sphere amendment is exempt from the requirements of CEQA, as outlined in the State CEQA Guidelines, Section 15061 (b)(3). A copy of Mr. Dodson's analysis is included as Attachment #4 to this report.

CONCLUSION:

The Chino Basin WCD does not encompass the entire Chino Basin nor does it encompass all of the San Bernardino County portion of the Basin. Being that the scale and scope of the education activities have the capability to extend beyond the district's boundaries, overlying agencies (both wholly within and larger than the district) contract with the Chino Basin WCD to provide demonstration and education.

Given the determinations made in the May 2015 service review, staff's analysis for this sphere amendment, and the determinations required for a sphere amendment which are discussed in this report, LAFCO staff recommends that the Commission choose Option 1 - expansion of the sphere of influence to be coterminous with the sphere of influence of the Inland Empire Utilities Agency. This option will provide the framework for the district to have a greater role in recharge planning and the opportunity to expand its education activities outside of its boundary but within its sphere of influence. The Chino Basin WCD has provided a letter supporting this option, which is included as Attachment #2 to this report.

KRM/MT

Attachments:

1. [Maps of the Three Sphere of Influence Options for Chino Basin WCD](#)
2. [Letter dated August 31, 2015 from Chino Basin Water Conservation District](#)
3. [Service Review for Water Conservation in the Valley Region \(May 2015\) with links to Attachments \(accessible from digital copy\)](#)
4. [Letter from Tom Dodson of Tom Dodson and Associates](#)
5. [Draft Resolution No. 3203](#)