

West Valley Water District Plan for Service

Attachment 3



**PLAN FOR SERVICE
FOR THE
LYLE CREEK RANCH DEVELOPMENT
AS REQUIRED BY
LOCAL AGENCY FORMATION COMMISSION
COUNTY OF SAN BERNARDINO**

Prepared by:
West Valley Water District
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June 11, 2015

INTRODUCTION

This “Plan for Service” is being submitted to the County of San Bernardino Local Agency Formation Commission (LAFCO) as required by Government Code Section 56653 for the Lytle Creek Ranch Development (Development). This Plan for Service (plan) will cover the use of domestic and irrigation water as well as the fire flow protection needed for those portions of the Development that are proposed to be annexed into the West Valley Water District’s (District) service area. These portions are currently outside of the Districts service area boundary but are within its sphere of influence (see Figure 1). The remaining portion of the Development that is not a part of this annexation is currently within the Districts service area.

West Valley Water District is a County Water District, a public agency of the State of California, organized and existing under the County Water District Law of the State of California (Division 12, Section 30,000 of the Water Code). The District serves water to customers within the Cities of Rialto, Fontana, Colton, Jurupa Valley (Riverside County) and to unincorporated areas of San Bernardino County. Its water distribution system includes eight pressure zones which are divided into a north and south system with the City of Rialto serving the area in between.

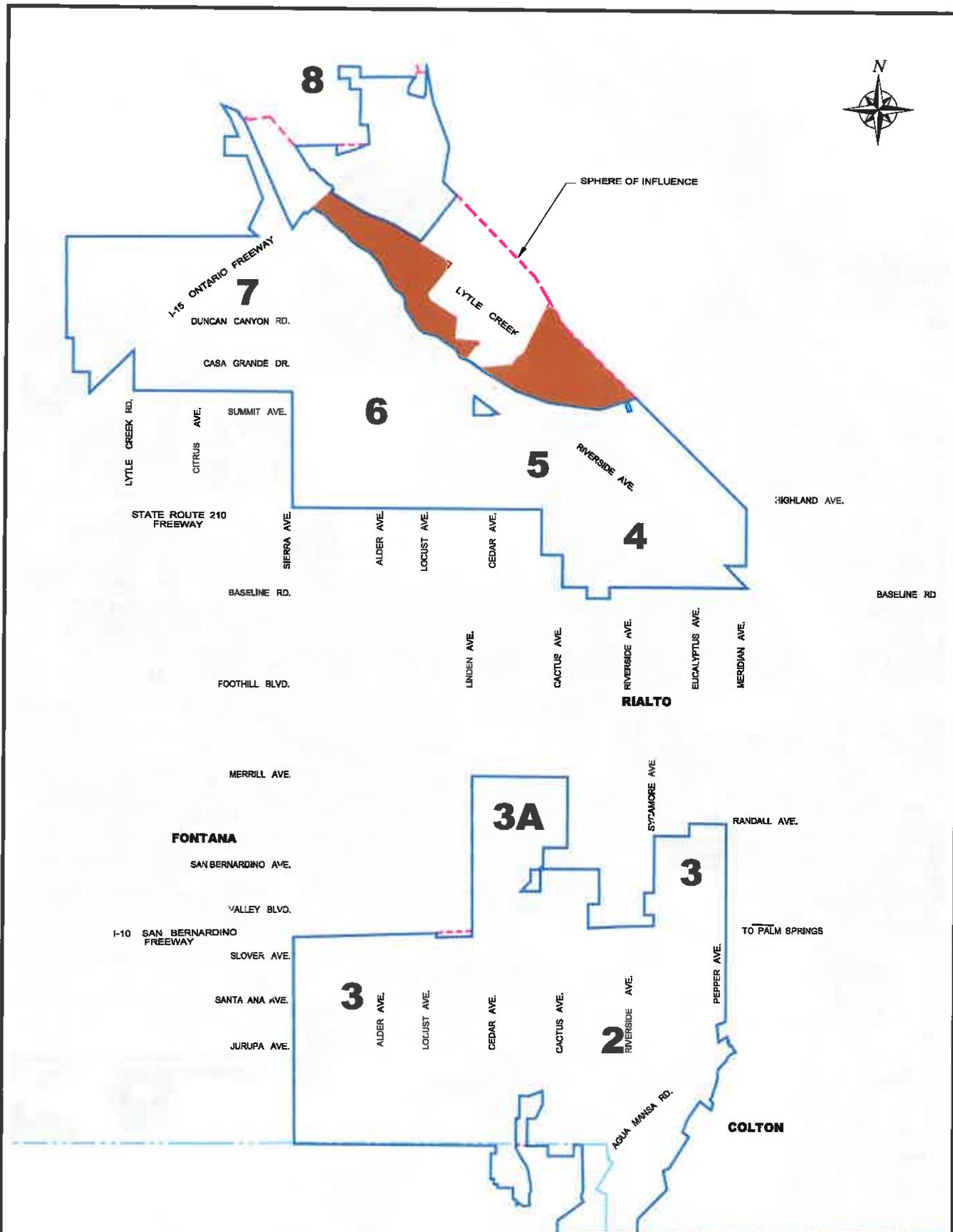
The Lytle Creek Ranch Development is a master planned community comprised of a mix of land uses and is located within the northern portion of the City of Rialto and the County of San Bernardino.

PROJECT DESCRIPTION

The Development is generally described as being north east of Riverside Avenue from the old El Rancho Verde Golf Course north to the I-15 (Ontario) Freeway. The proposed annexation area is located in the Districts northern service area within pressure zones 5, 6 and 7.

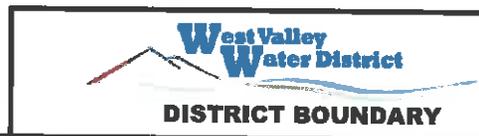
The Development is a master planned community arranged into four separate Neighborhoods (I, II, III and IV), each containing a mix of land uses. The nine land use categories identified within this project, include three Single-Family Residential designations, (SFR-1, SFR-2 and SFR-3), Multi-Family Attached Residential (MFR), Mixed Use, Elementary School, Open Space/Recreation, Open Space and Roadways. The portion of the Development to be annexed into the Districts service area includes land uses in Neighborhood II and Neighborhood III.

In Neighborhood II 537.2 acres and in Neighborhood III 574.2 acres will be annexed into the Districts service area for a total of 1,111.4 acres. Of that 1,111.4 acres, only 257 acres in Neighborhood II and 128.9 acres in Neighborhood III will be developed and the remaining area will stay as natural open space.



LEGEND

-  WEST VALLEY WATER DISTRICT SERVICE AREA BOUNDARY
-  SPHERE OF INFLUENCE
-  COUNTY BOUNDARY
-  LYTLE CREEK PROJECT ANNEXATION AREA



LEVEL AND RANGE OF SERVICE

A description of the level and range of each service to be provided to the affected territory.

The District's distribution system is divided into a north and south section and is comprised of eight pressure zones serving elevations from 920 to 2,267 feet above sea level. This vast change in elevation has required the District to construct facilities that can boost water supplies to those upper pressure zones. The District has also designed the system to allow water to be dropped down to lower pressure zones, thus providing the District with operational flexibility.

WATER DEMAND

The Development is comprised of approximately 2,624 single family dwelling units, 563 multi-family dwelling units, an elementary school, commercial, open space and roadways.

Neighborhood II - 869 dwelling units of SFR - 2 (5-8 dwelling units per acre)
1,136 dwelling units of SFR - 3 (8-14 dwelling units per acre)
364 dwelling units of MFR (14-28 dwelling units per acre)

Neighborhood III - 149 dwelling units of SFR-1 (2-5 dwelling units per acre)
226 dwelling units of SFR-2 (5-8 dwelling units per acre)
244 dwelling units of SFR-3 (8-14 dwelling units per acre)
199 dwelling units of MFR (14-28 dwelling units per acre)
5.4 acres of commercial
13 acres of elementary school

Each equivalent dwelling unit (EDU) utilizes an average of 750 gallons per day (gpd). The open space will remain natural and will not require any water or facilities. The water use for the elementary school and the commercial area is calculated at 3,500 gpd per acre. The Average Day Demand and Peak Day Demand are estimated below.

$$\begin{aligned}\text{Average Day Demand (ADD)} &= (3,187 \text{ EDU} \times 750 \text{ gpd/EDU}) + (3,500 \text{ gpd} \times 18.4 \text{ acres}) \\ &= 2,390,250 \text{ gpd} + 64,400 \text{ gpd} \\ &= 2,454,650 \text{ gpd} \\ &= 1,705 \text{ gpm}\end{aligned}$$

$$\begin{aligned}\text{Peak Day Demand (PDD)} &= 2 \times (\text{ADD}) \\ &= 4,909,300 \text{ gpd} \\ &= 3,410 \text{ gpm}\end{aligned}$$

STORAGE

The largest fire flow requirements are for the elementary school which would be 3,000 gallons per minute (gpm) for 3 hours or 540,000 gallons. The required storage (PDD plus Fire Flow) for the proposed development is as follows:

PDD Storage (1.0 x PDD)	= 4,909,300	gallons
<u>Fire Flow Storage (3,000 gpm x 3 hours)</u>	<u>= 540,000</u>	<u>gallons</u>
Storage (with Fire Flow)	= 5,449,300	gallons

The existing storage capacity for the pressure zones that will serve the development are as follows:

Pressure Zone 5 – 13.0 million gallons

Pressure Zone 6 - 11.25 million gallons

Pressure Zone 7 – 9.15 million gallons

Current storage volumes are sufficient to supply the existing PDD within the system with some excess capacity. Depending on the timing of this development, there may be some capacity within the existing reservoirs to supply a portion of the development. As growth continues and increased demand is placed on these reservoirs, new reservoirs will need to be constructed.

EXTENTION OF FACILITIES

An indication of when the service can be feasibly extended to the affected territory.

The District continually assess development within its service area to determine where and when additional facilities are required. Changes in the economy that affect the speed of development, water demands and the areas within the District where growth is occurring are all things that drive the need for additional infrastructure.

There are multiple pipelines in Riverside Avenue, which is near the annexation area, that could initially assist in the transmission of water supplies to the development. As demand grows within the system additional facilities will be required to serve the annexed area. The developer and the District will have to work together closely to determine the timing of this phased development to coordinate the construction of the needed facilities.

FACILITY UPGRADES

An identification of any improvement or upgrading of structures, roads, water or sewer facilities, other infrastructure, or other conditions the affected agency would impose upon the affected territory.

Water demand for the development is based on the estimated number of dwelling units that will be within the annexation area, along with the estimated commercial and school usage. To serve water to the proposed annexed area, the District will have to construct new off-site facilities, including 5.4 million gallons of storage capacity, develop 3,410 gpm of water supply and the pump stations and pipelines needed to transport that supply to the development.

All on-site improvements required to serve the development including the in tract pipelines, hydrants, water services and appurtenances would be constructed and funded by the developer. Plans for all tracts would be submitted to the District for review and approval and would be designed to the Districts latest “Standards for Domestic Water Facilities.”

In the event there are existing facilities that would need to be relocated to accommodate the footprint of the new development, the District will make arrangements with the developer for those relocations. In addition, the District may need to obtain land from the Development to build the required storage reservoirs and pump stations at the required system elevations.

FISCAL IMPACT ANALYSIS

The Plan shall include a Fiscal Impact Analysis which shows the estimated cost of extending the service and a description of how the service or required improvements will be financed. The Fiscal Impact Analysis shall provide, at a minimum, a five (5)-year projection of revenues and expenditures. A narrative discussion of the sufficiency of revenues for anticipated service extensions and operations is required.

In 2012 an updated Capacity Charge study (study) was prepared for the District based on the 2012 Water Master Plan. The study assessed the facilities required due to projected growth and the replacement of the facilities in existence. The purpose of the study was to establish a method for new connections to pay for their proportional share of existing and future District facilities. Each new residential and nonresidential connection within the District will add to the incremental need for water and each new connection will benefit from the new facilities constructed.

Based on the recommendations from the study a cost or capacity charge was established for every new water service connecting to the Districts distribution system. This capacity charge fee is assessed and collected on all new development. These fees are then used to finance the replacement of existing facilities and the construction of new facilities. The facilities required for this development would be funded by capacity charge fees collected by the District.

IMPROVEMENT DISTRICT

An indication of whether the annexing territory is, or will be, proposed for inclusion within an existing or proposed improvement zone/district, redevelopment area, assessment district, or community facilities district.

The proposed annexation area is not currently within any improvement, assessment or community facilities district for West Valley Water District.

AVAILABILITY OF WATER

If retail water service is to be provided through this change, provide a description of the timely availability of water for projected needs within the area based upon factors identified in Government Code Section 65352.5 (as required by Government Code Section 56668(k)).

The District has multiple water supply sources that it utilizes: groundwater, local canyon runoff from Lytle Creek and imported State Water Project (SWP) water delivered through the San Gabriel Feeder from the San Bernardino Valley Municipal Water District (SBVMWD). Groundwater is pumped from five basins including, the Lytle Creek Basin, Bunker Hill Basin, Rialto Basin, North Riverside Basin and the Chino Basin. Over the years, the Districts supply of groundwater has served as the predominant water supply.

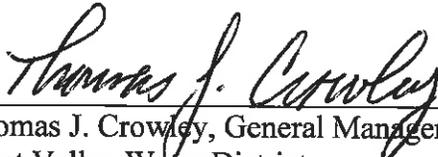
To satisfy the 1,705 gpm average day demand (3,410 gpm PDD) for the development, the supply source could come from the following:

- **Expand of the Oliver P. Roemer Water Filtration Facility (WFF)** - The WFF has a current treatment capacity of 14.4 million gallons per day (mgd) from a combination of both Lytle Creek Surface Water and SWP water. The District has plans to expand the capacity of the WFF by 6.0 mgd by constructing a new membrane plant. This would allow the District to utilize additional SWP water when it is available.

- **Purchase additional Base Line Feeder water from the Bunker Hill Basin -** The District has an existing agreement with SBVMWD which provides 5.8 mgd (up to 5,000 acre feet per year) of supply to the system. To utilize additional supplies from this source, new wells and/or agreements would have to be implemented.
- **Drill new wells –** The Districts distribution system is designed to pump water supplies to the upper pressure zones or drop supplies down to lower pressure zones depending on what water source is being used and the demands on the system. The drilling of a new well in any area of the system could be used to supply the annexed area.

CERTIFICATION

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.



Thomas J. Crowley, General Manager
West Valley Water District

Date: 9/30/15