Rubidoux Community Services District Wilson Intertie Project with West Valley Water District

WaterSMART Drought Response Program: Drought Resiliency Projects for Fiscal Year 2025

R25AS00013

October 7, 2024

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SECTION 1 - Technical Proposal

1.1 Executive Summary

October 3, 2024
Rubidoux Community Services District
City of Jurupa Valley
Riverside County, California
Category A Applicant
Task A
Funding Group: I
Grant Funding Requested: $500,000 (32%)
Local Matching Funds: $1,073,076 (68%)
Project Duration: 24 months
Estimated Project Completion Date: October 1, 2027

The Wilson Intertie Project with West Valley Water District ("Project") is being proposed by the Rubidoux Community Services District ("District"). The District's service area is prone to drought and recently suffered a prolonged drought from 2013 to 2017. The proposed Project will create a potable water interconnection with West Valley Water District (WVWD). WVWD is a neighboring water district located in Rialto, California and the water supply it would provide the District is imported water from the State Water Project. The proposed 12-inch diameter pipeline will supply up to 2,500 gallons per minute of potable water supply from WVWD to the District. This project is critical to maintaining near-term water supply reliability during emergency situations—for example, if a District well becomes contaminated or a large water tank must be taken out of service for repairs. In those situations, the Wilson Intertie can be activated, supplying potable water imported from WVWD to temporarily augment water supplies to District customers and ensure a safe and adequate water supply. In the long-term, the Project could be used to meet future water demands due to climate change and population growth by wheeling available water through adjacent water agencies, as RCSD does not currently have a direct connection to regional water supplies. This project is supported by the District's latest Urban Water Management Plan (UWMP, 2022) which was adopted in 2021 and amended in 2022, and the District's 2022 Water Master Plan (WMP, 2022), which list the Wilson Intertie as a necessary near-term improvement.

The District intends to begin construction of the Project after award of contract on October 7, 2025, and finish the Project before October 1, 2027.

The District serves water to a population of nearly 40,000 within the City of Jurupa Valley, California, including disadvantaged low-income neighborhoods. Water use in the District includes single-family residential, multiple-family residential, commercial, institutional and industrial sectors. The District has a highly reliable source of groundwater for its operations. This groundwater source is identified as the "Riverside South Basin," which has been shown to be resilient to both short-term and long-term drought conditions. However, the basin's water quality is impacted, requiring treatment prior to distribution for potable-use purposes.

Table 1 below shows the District's potable water supplies from 2014 through 2023, and the average annual water supply for that 10-year period.

Table 1 - Average Annual Water Supply for 2014 - 2023

Year	Surface Water	Groundwater (acre-feet)	Recycled	Other	Total (acre-feet)
2014	-	*6,627.25*	-	-	*6,627.25*
2015	-	*7,169.83*	-	-	*7,169.83*
2016	-	*6,584.90*	-	-	*6,584.90*
2017	-	*6,789.29*	-	-	*6,789.29*
2018	-	*4,843.62*	-	-	*4,843.62*
2019	-	*4,336.64*	-	-	*4,336.64*
2020	-	*4,769.66*	-	-	*4,769.66*
2021	-	*4,732.52*	-	-	*4,732.52*
2022	-	*6,368.55*	-	-	*6,368.55*
2023	-	*4,368.86*	-	-	*4,368.86*
- *Total Average Annual Water Supply for 2014 – 2023 in AFY*					**5,659.11**

Source: RCSD Large Water System Annual Report to the Drinking Water Program [Section 116530 Health & Safety Code] for years ending December 31, 2014-2023.

Table 2 - Average Annual Water Supply for 2014 - 2023

1.2 Project Location

The Project is located within the District boundary, which comprises 4,907 acres within the City of Jurupa Valley in northwest Riverside County, California. The District is bounded on the north by San Bernardino County, on the west by the Jurupa Mountains and Pedley Hills, on the south by the Santa Ana River, and on the east by the City of Riverside. The District is located approximately 52 miles east of the City of Los Angeles. The centroid coordinates for the District are 33.9995° N, -117.4052° W. The location of the District's service area is shown on Figure 1 - Vicinity Map. The District serves a population of nearly 40,000 that includes low-income, disadvantaged communities.

Figure 1 - Vicinity Map

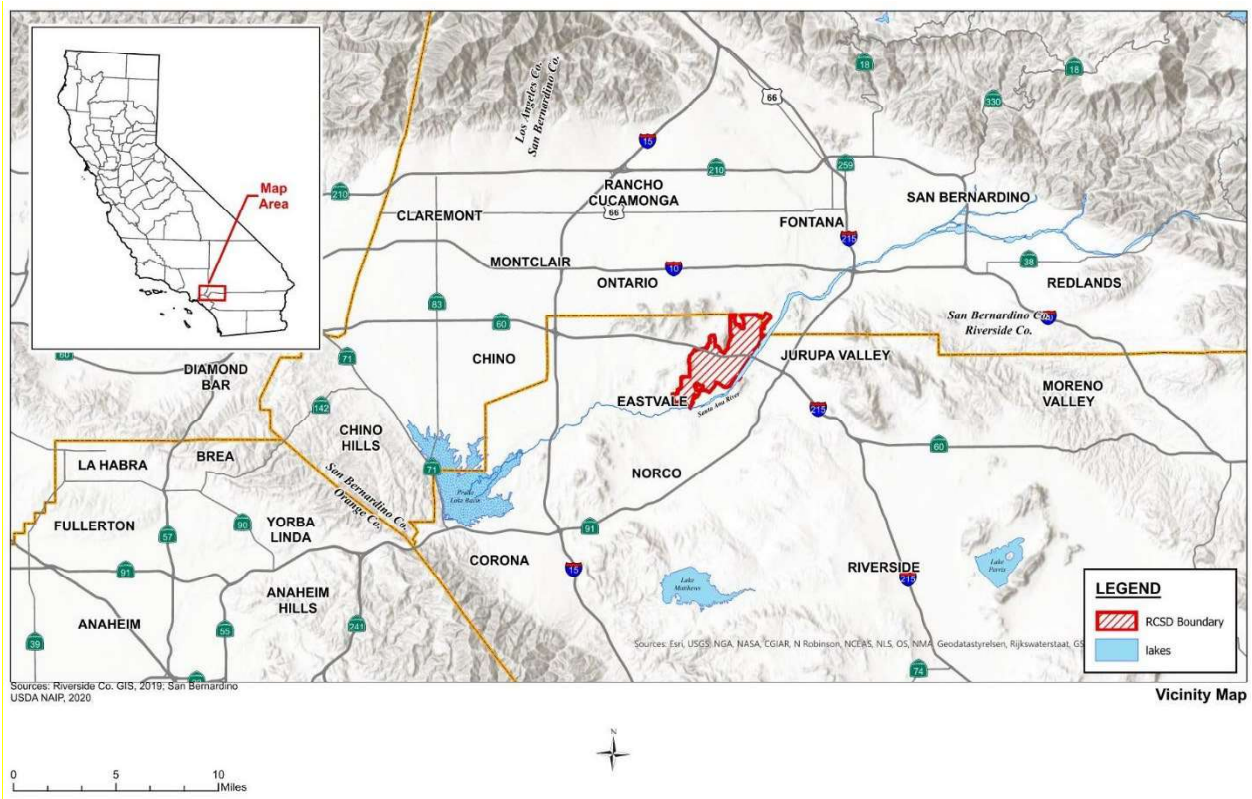
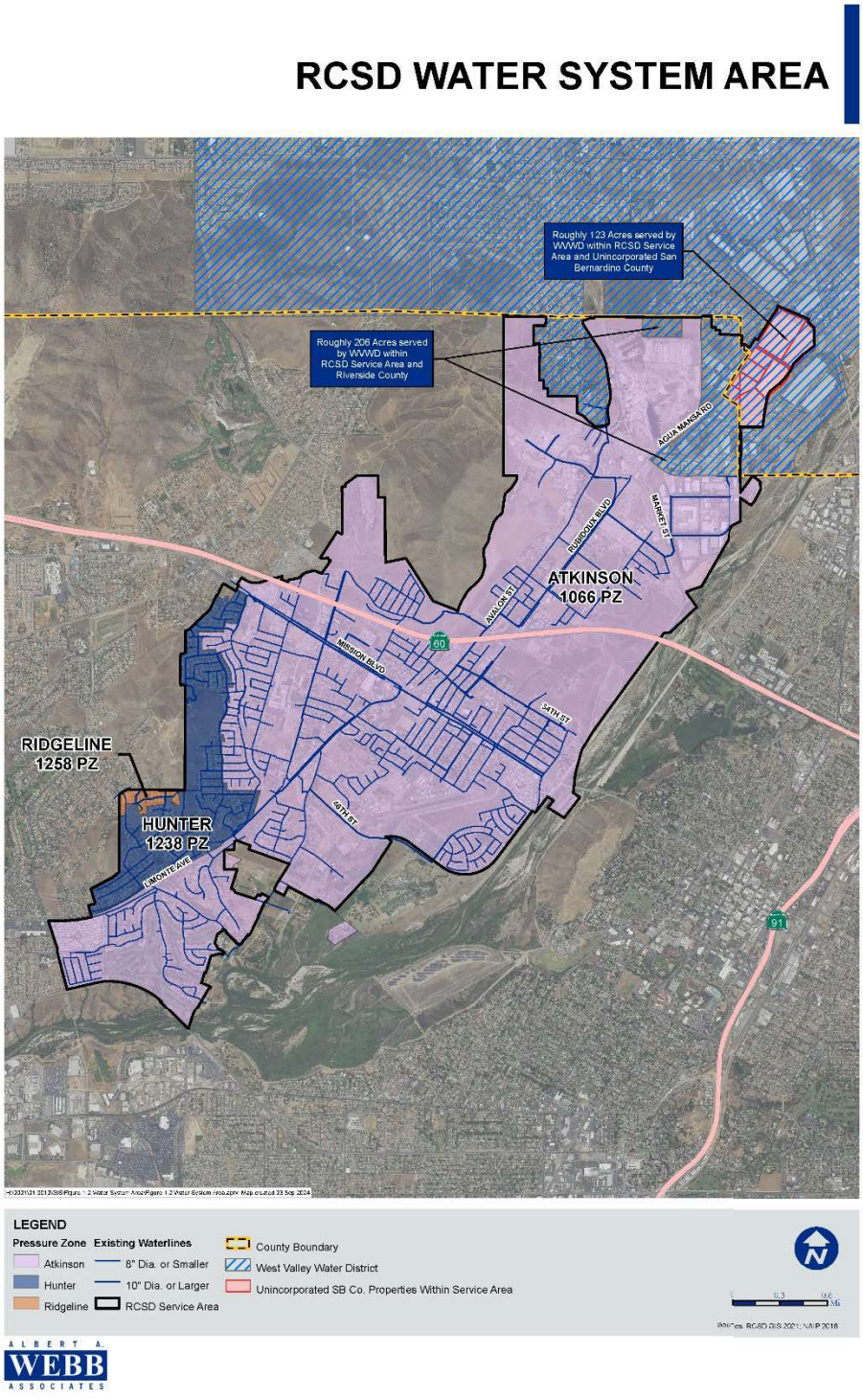


Figure 2 (next page) shows the District's potable water system area with its pressure zones and its proximity to West Valley Water District. The Wilson Intertie Project will be constructed in the northeast quadrant of the Atkinson (1066') Pressure Zone, north of the 60 Freeway.

Figure 2 - RCSD Water System Area



1.3 Project Description

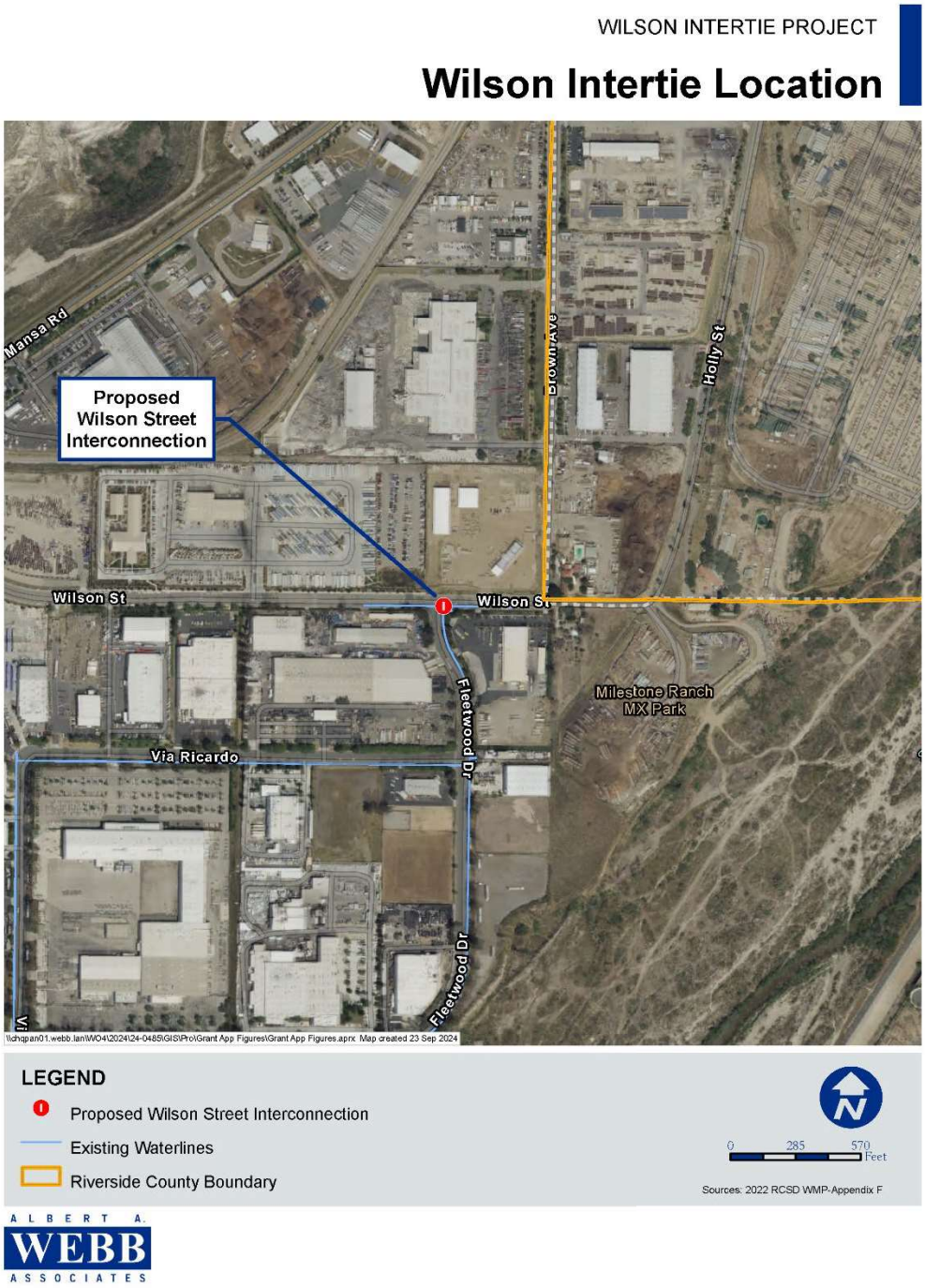
The District's water supply reliability and resistance to drought requires developing a diverse portfolio of water supply options. This includes plans for developing the Wilson Intertie Project with WVWD.

The goals and objectives of constructing the Wilson Intertie are to provide redundancy in the District water system supply, as the District is currently 100% reliant on its groundwater supply. The five-party agreement that undergirds this interconnection—among Rubidoux Community Services District, West Valley Water District, Western Municipal Water District, Metropolitan Water District of Southern California and San Bernardino Valley Municipal Water District—went into effect on June 11, 2024, and will terminate on November 4, 2035 (see **Appendix A** for the first three pages of the agreement). The agreement allows the District to take delivery of up to 2,000 AFY year of State Water Project Water through WVWD. The Wilson Intertie with WVWD provides the necessary infrastructure to implement this agreement's augmented supply of potable water to the District.

The work involved in the Project includes installing approximately 230 linear feet (LF) of 12-inch cement mortar lined and coated steel pipe (CML&C) pipe with fully welded joints, including necessary valves, appurtenances, and connections. Additionally, a magnetic flow meter, pressure reducing valve, and vault for each will be installed. Approximately 600 LF of 1-inch diameter conduit and Category 5E network cable, including connections, will also be installed. The existing asphalt concrete base and cap pavement will also be removed and replaced.

The work will be located north of the 60 Freeway along Wilson Street near the intersection of Fleetwood Drive (see Figure 3 on the next page).

Figure 3 - Wilson Intertie Location



The Project will consist of completing the nine following tasks with the involvement of assigned District staff:

Task 1: Project Management. Overall project management will be conducted by the District General Manager. The Assistant General Manager will provide direct oversight and assistance for the Director of Engineering and Director of Operations from Task 2 through closeout.

Task 2: Environmental and Regulatory Compliance. This task will be overseen directly by the Director of Engineering. The Director of Finance and Administration will oversee and conduct compliance reporting. This task will ensure that the District obtains all necessary all necessary environmental and regulatory compliance permits and approvals. (See Section 3 - Environmental and Cultural Resources and Section 4 – Required Permit and Approvals for more information.)

Task 3: Design. Engineering and design plans have been developed for the Wilson Intertie, so this task has been completed.

Task 4: Bidding. The construction bidding process will be conducted and overseen by the Director of Engineering with support from the General Manager and the Assistant General Manager. The bidding process involves issuing a formal request for proposals, where qualified contractors submit competitive bids detailing their approach, costs, and timelines. In accordance with public works requirements, the District will evaluate the bids and award the contract to the lowest responsible bidder, ensuring compliance with criteria such as experience, financial capability, and the ability to meet project specifications and deadlines.

Task 5: Preconstruction. The task of Preconstruction will be overseen by the Director of Operations with supplemental support from the Director of Engineering. This task involves coordinating site assessments, finalizing project schedules, securing necessary permits, and ensuring that all preconstruction activities align with the project specifications and regulatory requirements.

Task 6: Construction. The Director of Operations, who is also designated as the construction Project Manager, will oversee construction with the assistance of the Assistant General Manager, who will additionally oversee contractor management. This task will also involve the Senior Utility Maintenance 1 and Senior Systems Operator 1 staff members to ensure operational coordination, quality control, and timely project execution.

Task 7: Electrical. The Director of Operations will oversee this task with the assistance of the Assistant General Manager. This task will also involve the Senior Utility Maintenance 1 and Senior Systems Operator 1 staff members, who will contribute to the installation, testing, and inspection of electrical systems to ensure compliance with safety standards and project requirements.

Task 8: Start-Up/Testing. The Director of Operations will oversee startup/testing of the Project with the assistance of the Assistant General Manager. This task will also involve the Senior Utility Maintenance 1 and Senior Systems Operator 1 staff members, who will be responsible for conducting operational tests, calibrating equipment, and verifying that performance meets project specifications and operational standards.

Task 9: Project Closeout. The Director of Engineering will conduct closeout procedures with support from the General Manager, Assistant General Manager, ensuring that all contractual obligations are met, documentation is completed, and final inspections are conducted. This task will include compiling as-built drawings, securing warranties, and ensuring that all project deliverables meet the required standards before final acceptance.

The District intends to begin the Project after award contract, but not before October 7, 2025 and finish the Project by October 1, 2027.

1.4 Applicant Category and Eligibility

The District was formed in 1952 as the first Community Service District (CSD) in California. Pursuant to the Community Services District Law (CSD Law) in California Government Code Sections 61000-61226.5, which governs the formation and operation of CSDs, CSDs are a type of special district, which are local governments that provide a wide range of services to defined areas. The District provides the following services: potable water, wastewater, fire protection/prevention services, trash collection and disposal, street lighting, and weed abatement.

The District meets the criteria for applying for this Drought Resiliency Projects grant under Section C.1.1 of the Notice of Funding Opportunity No. R25AS00013, which includes water districts in California as eligible applicants. The U.S. Bureau of Reclamation has funded projects in partnership with water districts and CSDs

1.5 Evaluation Criteria

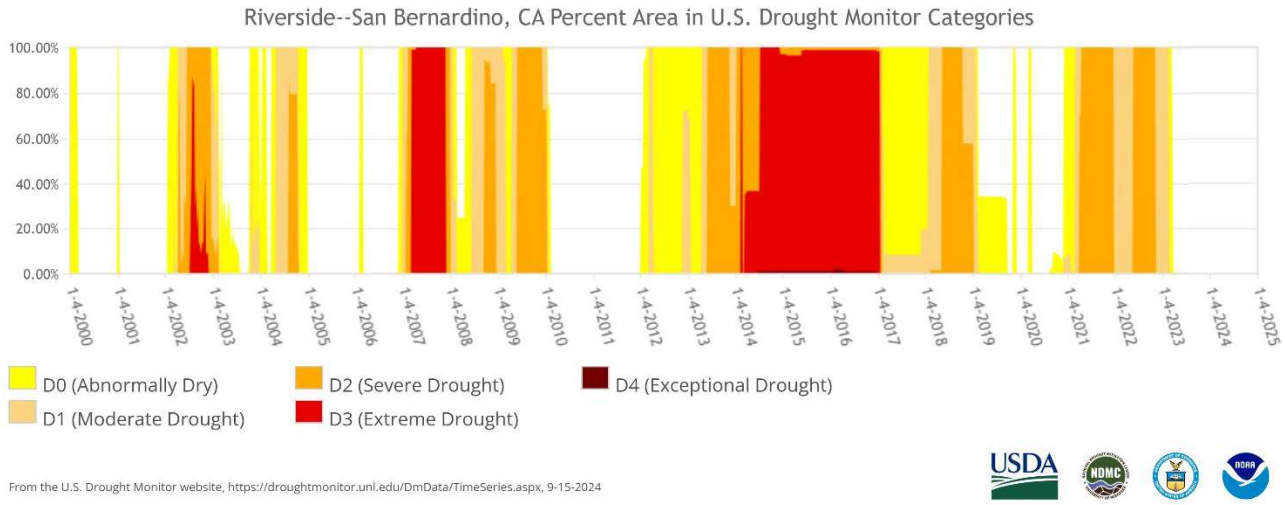
1.5.1 *Evaluation Criterion A – Severity of Drought or Water Scarcity Conditions and Impacts*

1.5.1.1 Describe the severity of the impacts that will be addressed by the project:

a. Describe recent, existing, or potential drought or water scarcity conditions in the project area.

Although the District service area is not currently suffering from drought,[1] the District area, like most of Southern California, frequently experiences drought, sometimes for multiple years Figure 4 below shows the severity of drought in the region from 2000 to 2024. The most current prolonged drought affecting the area occurred from 2013 through 2017.

Figure 4 - Regional Drought Conditions 2000 - 2024



Source: U.S Drought Monitor, Riverside-San Bernardino, CA Percent Area in U.S. Drought Monitor Categories. https://droughtmonitor.unl.edu/DmData/TimeSeries.aspx

Climate Projections for the Project Area

In its most recent Urban Water Management Plan (adopted in June 2021 and amended in April 2022) the District referenced the California Fourth Climate Change Assessment[2] for historical and projected drought and climate change effects in the District area using the

[1] Source: Drought Monitor. https://droughtmonitor.unl.edu/CurrentMap/StateDroughtMonitor.aspx?CA

[2] California's Climate Change Assessment. https://www.climateassessment.ca.gov/

tools and resources available at the Cal-Adapt website.[3] The Fourth Climate Change Assessment is still the most recent available (the Fifth Assessment will be released in 2026). The relevant climate change projections for the District are summarized here.

The Cal-Adapt tools synthesize studies from California's scientific community that include volumes of downscaled climate change projections and climate impact research. These projections of future climate are based on average values from a number of models, and Cal-Adapt provides the caveat that they should not be treated as weather predictions, because they address the future climate in general and how often extreme events might occur, but do not predict when they might happen.

The Cal-Adapt climate models below reflect the actual historical climate for the period 1950 to 2005 in the District and then make predictions for various climatic conditions for the period of 2006 to 2100. The models make projections using two scenarios known as Representative Concentration Pathways (RCP). The two RCP scenarios represent medium and high greenhouse gas and aerosol emissions, and each RCP corresponds to a standardized set of assumptions of the greenhouse gas emissions trajectory in throughout the rest of this century. Cal-Adapt does not provide data for a "low" greenhouse gas emissions scenario.

The Medium Emissions Scenario (RCP 4.5) represents global carbon dioxide (CO_2) emissions peaking by 2040 and then declining. In this scenario, temperatures statewide are projected to increase 2-4 degrees Celsius (°C) by the end of this century.

The High Emissions Scenario (RCP 8.5) represents CO_2 emissions continuing to increase over the rest of the 21st century. In this scenario, temperatures statewide are projected to increase 4-7 °C.

For the purposes of this application, the District used Cal-Adapt's "Local Climate Change Snapshot" tool to provide the following climate projections for temperature and precipitation, selecting the City of Jurupa Valley as the representative location of the District service area.

Cal-Adapt Temperature Projections

While temperatures will increase statewide in California through the end of the century, local impacts will vary greatly. Four temperature change climate indicators are reported by Cal-

[3] Cal-Adapt tools and resources website. https://cal-adapt.org

Adapt: 1) Annual Average Maximum Temperature, 2) Annual Average Minimum Temperature, 3) Extreme Heat Days, and 4) Warm Nights.

Annual Average Maximum Temperature averages all the hottest daily temperatures in a year. The future projections of the most likely outcome and range of Annual Average Maximum Temperature for baseline (1961-1990) and mid-century (2035-2064) time periods in the Jurupa Valley area are shown in Table 2.

Table 3 - Average Annual Maximum Temperature

Time Period	Change from Basel ne	30-year Average	30-year Range
Baseline (1961-1990)	*--*	*79.3 °F*	*78.9 - 79.7 °F*
Mid-century (2035-2064)			
RCP 4.5	*+4.5 °F*	*83.8 °F*	*81.6 - 86.3 °F*
RCP 8.5	*+5.4 °F*	*84.7 °F*	*82.1 - 87.0 °F*

Source: Cal-Adapt, Local Climate Snapshot for Jurupa Valley.
RCP: representative concentration pathway; 4.5: medium emissions scenario; 8.5: high emissions scenario.

Annual Average Minimum Temperature averages all the coldest daily temperatures in a year. Table 3 shows the future projections of the most likely outcome and range of Annual Average Minimum Temperature for baseline and mid-century time periods in the Jurupa Valley area.

Table 4 - Average Annual Minimum Temperature

Time Period	Change from Basel ne	30-year Average	30-year Range
Baseline (1961-1990)	*--*	*50.7 °F*	*50.4 – 50.9 °F*
Mid-century (2035-2064)			
RCP 4.5	*+3.9 °F*	*54.6 °F*	*52.9 – 56.0 °F*
RCP 8.5	*+4.9 °F*	*55.6 °F*	*53.9 – 57.2 °F*

Source: Cal-Adapt, Local Climate Snapshot for Jurupa Valley.
RCP: representative concentration pathway; 4.5: medium emissions scenario; 8.5: high emissions scenario.

Extreme Heat Days represents the number of days in a year when daily maximum temperature is above a temperature of 104.1 °F. The future projections of the most likely outcome and range of Extreme Heat Days for baseline and mid-century time periods in the Jurupa Valley area are shown in Table 4.

Table 5 - Extreme Heat Days

Time Period	Change from Baseline	30-year Average	30-year Range
Baseline (1961-1990)	--	*4 days*	*2 – 5 days*
Mid-century (2035-2064)			
RCP 4.5	*+16 days*	*20 days*	*13 – 45 days*
RCP 8.5	*+21 days*	*25 days*	*14 – 60 days*

Source: Cal-Adapt, Local Climate Snapshot for Jurupa Valley.
RCP: representative concentration pathway; 4.5: medium emissions scenario; 8.5: high emissions scenario

Warm Nights represents the number of days in a year when daily minimum temperature is above a temperature of 68.7 °F. Table 5 shows the most likely outcome and range of Extreme Heat Days for baseline and mid-century time periods in the Jurupa Valley area.

Table 6 - Warm Nights

Time Period	Change from Baseline	30-year Average	30-year Range
Baseline (1961-1990)	--	*5 days*	*1 – 11 days*
Mid-century (2035-2064)			
RCP 4.5	*+21 days*	*26 days*	*14 – 46 days*
RCP 8.5	*+29 days*	*34 days*	*20 – 55 days*

Source: Cal-Adapt, Local Climate Snapshot for Jurupa Valley.
RCP: representative concentration pathway; 4.5: medium emissions scenario; 8.5: high emissions scenario

Cal-Adapt Precipitation Projections

In California, the climate varies between dry and wet years. According to projections for much of the state, future wet years will be wetter, and future dry years will be drier. Dry years will also be more likely to be followed by dry years, which increases the risk of drought. Although California's average annual precipitation is not projected to change significantly during the next 50 to 75 years, the precipitation will likely occur in more intense storms and within shorter wet seasons, increasing the risk of flooding and resulting in more runoff, which can impact water collection and infiltration.

Three climate indicators are reported by Cal-Adapt for precipitation changes: 1) Maximum 1-day Precipitation, 2) Maximum Length of Dry Spell, and 3) Annual Precipitation.

Maximum 1-Day Precipitation amount for each year represents the greatest amount of daily rain or snow over a 24-hour period for each year. The future projections of the most likely

outcome and range of Maximum 1-day Precipitation for baseline and mid-century time periods in the Jurupa Valley area are shown in Table 6.

Table 7 - Maximum 1-day Precipitation

Time Period	Change from Baseline	30-year Average	30-year Range
Baseline (1961-1990)	--	*1.205 inches*	*1.014 – 1.359 inches*
Mid-century (2035-2064)			
RCP 4.5	*+0.058 inches*	*1.263 inches*	*1.038 – 1.426 inches*
RCP 8.5	*+0.079 inches*	*1.284 inches*	*1.063 – 1.516 inches*

Source: Cal-Adapt, Local Climate Snapshot for Jurupa Valley.
RCP: representative concentration pathway; 4.5: medium emissions scenario; 8.5: high emissions scenario

Maximum Length of Dry Spell represents the maximum length of dry spells for each year, specifically, the maximum number of consecutive days with precipitation less than one millimeter for each year. The future projections of the most likely outcome and range of Maximum Length of Dry Spell for baseline and mid-century time periods in the Jurupa Valley area are shown in Table 7.

Table 8 - Maximum Length of Dry Spell

Time Period	Change from Baseline	30-year Average	30-year Range
Baseline (1961-1990)	--	*138 days*	*123 – 156 days*
Mid-century (2035-2064)			
RCP 4.5	*+8 days*	*146 days*	*125 – 171 days*
RCP 8.5	*+10 days*	*148 days*	*117 – 181 days*

Source: Cal-Adapt, Local Climate Snapshot for Jurupa Valley.
RCP: representative concentration pathway; 4.5: medium emissions scenario; 8.5: high emissions scenario

Annual Precipitation represents total projected precipitation for each year. Table 8 shows the most likely outcome and range of Annual Precipitation for baseline and mid-century time periods in the Jurupa Valley area.

Table 9 - Annual Precipitation

Time Period	Change from Baseline	30-year Average	30-year Range
Baseline (1961-1990)	--	*10.9 inches*	*9.4 – 12.0 inches*
Mid-century (2035-2064)			
RCP 4.5	*-0.4 inches*	*10.5 inches*	*8.1 – 13.8 inches*
RCP 8.5	*-0.4 inches*	*10.5 inches*	*7.9 – 14.2 inches*

Source: Cal-Adapt, Local Climate Snapshot for Jurupa Valley.
RCP: representative concentration pathway; 4.5: medium emissions scenario; 8.5: high emissions scenario

Uncertainty of Cal-Adapt Projections

Cal-Adapt predictions approximate future climate, but as with any statement about the future, there is no way to be certain of their accuracy. The level of human greenhouse gas emissions is a source of some of that future uncertainty. If the actual emissions path differs from the projection scenarios, they may ultimately prove to be inaccurate.

Also, different climate models may produce different outcomes. There are more than 30 global climate models developed by climate modeling centers around the world, and many have different ways of representing aspects of the climate system. Climate scientists are constantly working to improve the theories of the climate system and its representation in climate models. In the meantime, one way to account for model differences is to look at projections from as many different models as possible to get a range of possible outcomes and thus reduce the uncertainty. An average of the values can be taken across the different models, and this average value is a more likely outcome than the value from any single model.

That climate change is occurring and is caused by human activity is the consensus of the overwhelming majority of scientists engaged with the issue. What is less certain is the extent to which the climate will change in the future, and precisely how the changes will affect natural and human systems.

Regional Projections of Climate Change Impacts

In addition to the Cal-Adapt projections, Western Municipal Water District (WMWD or Western), a partner in the agreement that enabled the Wilson Intertie Project, conducted an analysis of climate change data as part of Western's 2020 UWMP and provided the results to its member agencies within its service area, including the District, on April 22, 2021. The

source data were climate models gathered by DWR for water resources planning (WMWD, 2021).[4]

Western's 2021 research and analysis in the technical memorandum generated factors that area retail agencies can apply to their own water demand and supply projections regarding the potential effects of climate change. The District used these factors in its most recent Urban Water Management Plan, and they are also summarized here.

Western's findings are in line with the Cal-Adapt conclusions presented earlier in this section. The WMWD data analysis noted that temperature increases are estimated to increase evapotranspiration rates, impacting landscaping, irrigated agriculture and native vegetation in residential and industrial/commercial sectors. For all types of years, regardless of hydrologic conditions, outdoor water use is projected to rise by 3% over the next two decades.

The water demand change factors are applied to outdoor water uses, which have been adjusted for future population growth and conservation measures. Indoor water uses are assumed to respond to future population growth and conservation as well but are not sensitive to climate change.

Table 9 below shows the water demand change factors for outdoor water use related to climate change.

Table 10 – Water Demand Change Factors Due to Climate Change

Beginning Year	Normal Year	Single-Dry Year	Five-Year Dry Period
2020	*100.0%*	*100.0%*	*100.0%*
2025	*100.6%*	*100.6%*	*99.8%*
2030	*101.2%*	*101.3%*	*101.2%*
2035	*101.8%*	*101.9%*	*101.8%*
2040	*102.4%*	*102.5%*	*102.4%*
2045	*103.1%*	*103.2%*	*103.0%*

Source: Western Municipal Water District, Technical Memorandum: Western Drought Contingency Plan – Climate Change Vulnerability Assessment, April 22, 2021 (WMWD, 2021)

[4] Western Municipal Water District, Technical Memorandum: Western Drought Contingency Plan – Climate Change Vulnerability Assessment, April 22, 2021.

The baseline year is 2020. Because the District is unable to separate out indoor from outdoor water use for most of its customers at the time of this analysis, the factors have been applied to all demands. Factors that are greater than 100% increase the demand and factors that are less than 100% decrease the demand. To account for the potential effects of climate change to projected water demands, the District conservatively applied the normal year factors from Western's analysis in Table 9 above to its demand projections in the latest UWMP demand projections beginning in 2025 through 2045, even though some of that demand is indoor use that is not sensitive to climate change. The results are shown below in Table 10.

Table 11 - Potential Increase in Water Demand from Climate Change

	2025	2030	2035	2040	2045
TOTAL DEMANDS From UWMP[1]	*7,960*	*10,686*	*11,416*	*12,149*	*12,886*
Normal Year Water Demand Climate Change Factor[2]	*100.6%*	*101.2%*	*101.8%*	*102.4%*	*103.1%*
TOTAL DEMANDS with Climate Change Factor (AF)	*8,008*	*10,814*	*11,621*	*12,441*	*13,285*
Potential Increase in Water Demand from Climate Change (AF) [3]	*48*	*128*	*205*	*292*	*399*

Notes: Units in acre-feet (AF).
(1) From District UWMP Submittal Table 4-2.
(2) Factors from Table 9 above.
(3) Difference between total demands and total demands with climate change factor.

The combination of analyses from the Cal-Adapt projections and the WMWD technical memo and analysis show that climate change is expected to result in increasing temperatures and less rainfall—the two factors that increase water demand most.

a. What are the ongoing or potential drought or water scarcity impacts to specific sectors in the project area if no action is taken (e.g., impacts to agriculture, environment, hydropower, recreation, tourism, forestry), and how severe are those impacts? Impacts should be quantified and documented to the extent possible.

As mentioned earlier, the Wilson Intertie Project is a necessary near-term improvement, in part because the District does not currently have an alternative source of potable water to

its groundwater basin if water supplies are interrupted due to water quality issues or catastrophic events such as fire, earthquakes, or power loss.

The City of Jurupa Valley's 2018 Local Hazard Mitigation Plan (LHMP)[5] states that the most prominent hazards in the area "...are a major earthquake, flooding potential from 100-year storm events in winter months along the Santa Ana Riverbank, and windstorms causing power outages" (p. 13). The LHMP further states, "Earthquake risk is very high in western Riverside County (which includes Jurupa Valley), due to the presence of two of California's most active faults: the San Andreas and San Jacinto" (p. 13). The LHMP lists among the "critical facilities" that could be impacted as one regional treatment plant, 11 water well/tank sites, three water distribution plants, and one sewer lift station (p. 16). Also in the LHMP is an assessment and ranking of risks, including flood, earthquake, wildfire, severe weather (heat/wind/cold), technical hazards, drought severity, and agricultural hazards (pp. 20-21).

The WMWD data analysis outlined in the previous two pages noted that temperature increases due to climate change are estimated to increase evapotranspiration rates, impacting landscaping, irrigated agriculture, and native vegetation in residential and industrial/commercial sectors. For all types of years, regardless of hydrologic conditions, outdoor water use is projected to rise by 3% over the next two decades. Table 10 from that WMWD analysis shows that climate change will increasingly impact water demand, further accentuating the need for redundancy in District supplies such as that provided by the Wilson Intertie Project.

1.5.2 *Evaluation Criterion B – Project Benefits*

1.5.2.1 Assess the significance of the project in advancing drought resiliency or mitigating water scarcity through augmenting and diversifying water supplies, thus improving water supply reliability.

As outlined in the Project Description (Section 1.3), in June 2024, the District executed an agreement that allows for up to 2,000 AFY of imported water through the Wilson Intertie (see Appendix A). The agreement currently runs through November 4, 2035, which mirrors the State Water Project contracts. This will likely be extended upon expiration. This intertie is vital as the District is currently 100% groundwater-reliant. This provides a redundant source of supply, diversifying the District's water supply portfolio and strengthening the District's water supply reliability.

[5] City of Jurupa Valley 2018 Local Hazard Mitigation Plan: https://www.jurupavalley.org/181/Local-Hazard-Mitigation-Plan

a. What is the estimated quantity of additional supply the project will provide and how was this estimate calculated? Clearly state this quantity in AFY as the average annual benefit over ten years.

Due to the design capacity of the Wilson Intertie and in accordance with the five-party agreement this project will be capable of supplying approximately 2,000 AFY of additional potable water supply for the District. This can be accessed in emergency situations should anything happen to the District's wells or could be utilized as a source of supply as an alternative to future well development. This is paramount for a place like the District, since a significant portion of the community is considered disadvantaged (See Evaluation Criterion E).

b. What percentage of the total water supply does the project's water yield represent? How was this estimate calculated? It is recommended to use your 10-year average that was presented in the Executive Summary to calculate this percentage. It is recommended to use the following chart:

The average annual water supply for the District from 2014 through 2023 is 5,659.11 AFY of water (see Table 1). This project is capable of creating 2,000 AFY of additional water supply over the current annual average. This means that this project can add to or supplement approximately 35% of the current annual average supply (See Table 11).

Table 12 - Project Impact on Average Annual Water Yield

Total Project Water Yield (2,000 AFY)
District's 10-Year Average Annual Water Supply (5,659.11 AFY)
Percentage Yield (35.3%)

c. How will the project build long-term resilience to drought or other water reliability issues? Include factors such as the predictability of supply, variability in availability, and the likelihood of interruptions or failures.

This project will provide assurance to the District that it has a ready availability of 2,000 AFY of imported water in case of well failures, water contamination, or if water supply infrastructure needs to be temporarily taken offline.

d. How many years will the project continue to provide benefits?

The project is expected to provide the stated benefits for more than 40 years.

e. Provide a qualitative description of the degree/significance of the benefits associated with the additional water supplies, including how the project supply could help buffer against water shortages, reduce the need for emergency responses, and enhance the resilience of water systems?

Because the Wilson Intertie Project will create a redundant source of water supply that is 35% over the annual average water supply of the District, the Project represents an enhanced ability to supply water during prolonged drought periods, respond to natural disasters, water quality degradation, and events that require extraordinary fire suppression efforts. The Project could also help supplement supply during future construction projects that require water supply infrastructure to be taken offline, such when wells need to be replaced. For regulatory and emergency compliance, the intertie will help the District meet regulatory requirements more easily by creating a backup system that supports emergency response plans and reduces the likelihood of fines for non-compliance during system failures. Further, the intertie will improve the District's water quality management. By connecting the two systems, the District can blend water sources with varying qualities, improving overall water quality for customers. This can help dilute certain contaminants or adjust chemical balances. Lastly, the intertie will improve hydraulics for firefighting as it will enhance the water flow and pressure available for firefighting, which is crucial given the District close proximity to high risk wildfire areas, thus improving public safety.

1.5.2.2 Project Benefits (Task C only)

Not applicable. This application is for Task A.

1.5.2.3 Additional Project Benefits

Additional Project Benefits include:

1. Pressure Management and Flow Efficiency: The intertie can help optimize water pressure across both the District and WVWD, improving distribution efficiency and reducing the strain on infrastructure.
2. Future Growth Accommodation: The intertie will provide a foundation for accommodating future growth, as the connected systems can support expansions in service areas or increased demand, allowing for planned regional development without stressing existing resources.

1.5.2.3.a Climate Change

a. In addition to drought resiliency measures, does the proposed project include other natural hazard risk reductions for hazards such as wildfires or floods?

The Project provides an alternative supply in the event of damage caused to parts of the system caused by wildfires and floods. As noted below in *Evaluation Criteria E: Presidential and Department of the Interior Priorities*, according to the *White House Council on Environmental Quality's interactive Climate and Economic Justice Screening Tool (CEJST),* of the 11 census tracts within the District boundaries, two of the tracts have greater than or equal to the 90th percentile of the share of properties that are at risk of flood in 30 years. Also, five of the tracts in the District have greater than or equal to the 90th percentile for share of properties at risk of fire in 30 years. All of these tracts contain district water supply and firefighting infrastructure and apparatus that are also subject to these wildfire and flood risks.

The Intertie will provide a redundant source of water that can replace up to 35% of the current water supply while repairs are made to damaged infrastructure.

1.5.2.3.b Ecological Benefits

The project will not result in ecological benefits.

1.5.2.3.c Other Benefits

a. Will the project benefit multiple sectors and/or users (e.g., agriculture, municipal and industrial, environmental, recreation, or others)? Describe the associated sector benefits?

In addition to residential customers within the District, the Project may benefit municipal users such as schools and government facilities; the City of Jurupa Valley's trade tech center which is currently under development; industrial users in the growing northeastern area of the District; recreational users such as Jurupa Hills Country Club and Rancho Jurupa Regional Sports Park in addition to a number of new parks currently under development by Jurupa Area Recreation and Parks District, one of which will be the City of Jurupa Valley's first inclusive playground designed specifically for individuals with disabilities; and historic Flabob Airport, which attracts visitors to the area.

b. Will the project benefit a larger initiative to address sustainability?

The Wilson Intertie will allow for bidirectional flow, which connects Riverside and San Bernardio counties. Also, the intertie potentially offers many of the same benefits to West Valley Water District as the District will experience from implementation.

c. Will the project help to prevent a water-related crisis or conflict? Is there frequently tension or litigation over water in the basin?

There are no currently anticipated water conflicts that could affect water availability. In fact, the five-party agreement that assures water availability for the Wilson Intertie is a testament to the degree of interagency cooperation that exists in the region.

1.5.3 *Evaluation Criterion C – Planning and Preparedness*

a. Plan Description and Objective.

The Wilson Intertie Project is supported by the District's latest Urban Water Management Plan (UWMP, 2022) which was adopted in 2021 and amended in 2022.

The Urban Water Management Plan (UWMP) is required under the Urban Water Management Planning Act (Act) of 1983. The Act is codified in California Water Code (CWC or Water Code) Sections 10610 - 10657. The Act requires an urban water supplier (Supplier) that is providing water for municipal purposes either directly or indirectly to more than 3,000 customers or supplying more than 3,000 acre-feet (AF) of water annually to adopt an Urban Water Management Plan (UWMP) and update it every five years. The Act requires each Supplier to submit their UWMP to the California Department of Water Resources. DWR staff then reviews the submitted plans to make sure they have satisfied the requirements identified in the Act, including subsequent revisions.

The UWMP requires water suppliers to conduct a highly detailed analysis of the District service area climate, actual and future projected water supplies, and water supply reliability in normal, single dry, and multiple dry years. The UWMP addresses drought specifically in the chapter on Service Reliability and Drought Risk Assessment, detailing subjects including Water Service Reliability Assessment, Reliability by Type of Year, Total Water Supply and Use Comparison, Multiple Dry Year Reliability, and Drought Risk Assessment.

a. Plan Development Process

The UWMP was a collaborative process. The District provided written notice to the following interested entities to provide them with ample time to participate in the process:

- City of Jurupa Valley
- City of Riverside Public Utilities
- City of Riverside Water Quality Control Plant
- County of Riverside
- County of San Bernardino
- Cucamonga Valley Water District
- Inland Empire Utilities Agency
- Jurupa Community Services District
- Jurupa Unified School District
- Santa Ana River Water Company
- Western-San Bernardino Watermaster
- Western Municipal Water District
- West Valley Water District

The public was notified of the District's public hearing on the plan and availability to review the draft UWMP in the local newspaper (*The Press Enterprise)* once a week for two successive weeks pursuant to Government Code section 6066. The District also placed an announcement on its website. The draft UWMP and draft WSCP were posted on the District website and at the District Headquarters.

The plan was submitted to DWR within 30 days of adoption as required, after which it underwent a comprehensive review by DWR. The document was prepared by a combined team of 12 staff from the District and Webb Associates of Riverside.

b. Plan Support for Project.

The Wilson Intertie concept was listed as a priority in this plan. Passages in Chapter 7 of the UWMP that specifically address the concept of the Wilson Intertie may be found in **Appendix B**.

On page 7-6 of the UWMP's Service Reliability and Drought Risk Assessment Chapter the intertie is mentioned conceptually under Catastrophic Events and Interties:

> *"The District and JCSD share two interties and a mutual aid agreement that can be activated in an emergency to flow in either direction (i.e., RCSD Intertie South and Jewel Street Intertie). Currently, West Valley and RCSD are actively working together to develop a connection."* (See Appendix B, Page 7-6).

[Note on the above comment: The JCSD intertie has existed for 10 years, but this is not considered a true emergency intertie because should an event occur in the summer for which the District needs imported water, JCSD would be unable to provide it.]

On page 7-21 of the UWMP's Service Reliability and Drought Risk Assessment Chapter, the intertie is mentioned again under Total Water Supply and Use Comparison:

> *"Emergency supplies can be obtained from the intertie and mutual aid agreement with JCSD, and the District is actively working with West Valley Water District to develop a connection."* (See Appendix B, Page 7-21)

On page 7-21 of the UWMP's Water Shortage Contingency Plan Chapter (Chapter 8) the intertie is mentioned as a future supply augmentation source in Table 8-3: Supply Augmentation and Other Actions. (See Appendix B, 8-11).

1.5.4 *Evaluation Criterion D – Readiness to Proceed and Project Implementation*

a. Describe the implementation plan of the proposed project. Please include an estimated project schedule that shows the stages and duration of the proposed work, including major tasks, milestones, and dates for completing the project within the applicable timeframe. Milestones may include but are not limited to preliminary and/or final design, environmental and cultural resources compliance, permitting, and construction/installation.

The District intends to complete the Project within 2 years from the date of contract execution according to Project Activity and Deliverable Schedule on the next page in Table 12.

Table 13 - Project Activity and Deliverable Schedule

MILESTONE/TASK/ ACTIVITY	PLANNED START DATE	PLANNED COMPLETION DATE
Task 1 Project Management	*October 7 2025*	*October 1, 2027*
Task 2 Environmental and Regulatory Compliance	*October 7, 2025*	*March 2026*
Task 3 Design	*Already Done*	*N/A*
Task 4 Bidding	*March 2026*	*May 2026*
Task 5 Pre-Construction	*May 2026*	*July 2026*
Task 6 Construction	*July 2026*	*January 2027*
Task 7 Electrical	*January 2027*	*April 2027*
Task 8 Start Up/Testing	*April 2027*	*June 2027*
Task 9 Closeout	*June 2027*	*October 1, 2027*

b. Describe any permits or approvals that will be required (e.g., water rights, water quality, stormwater, other regulatory clearances). Include information on permits or approvals already obtained. For those permits and approvals that need to be obtained, describe the process, including estimated timelines for obtaining such permits and approvals.

See Section 3 - Environmental and Cultural Resources Compliance and Section 4 - Required Permits or Approvals of this application for information on permits and approvals that the District anticipates will need to be obtained and those it has already obtained. The District plans to begin environmental and regulatory compliance work on October 7, 2025 and finish obtaining all necessary permits and approvals by March 2026 before the bidding process begins.

c. Identify and describe any engineering or design work performed specifically in support of the proposed project. If design work has commenced, what phase of design is the project current in (e.g., preliminarily or final and percentage-30%, 60%, 90%, or complete). If additional design is required, describe the planned process and timeline for completing the design. Projects that are further in design will receive more points.

The engineering and design work for the Project has been completed (see Appendix C for these plans).

d. Describe any land purchases that must occur before the project can be implemented, and the status of the purchase. (While land purchases are not allowable costs under this NOFO, this information is still important to assess the readiness to proceed.)

No land purchases will be needed for this Project.

e. If the project is completely or partially located on Federal land or at a Federal facility, explain whether the agency supports the project and has granted access to the Federal land or facility, whether the agency will contribute toward the project, and why the Federal agency is not completing the project?

None of the project will be located on Federal land or at a Federal facility.

f. Describe any new policies or administrative actions required to implement the project.

No new policies will be required to implement the Project. The only administrative action required to implement the project is the Board of Directors approval of RCSD Resolution No. 2024-918, which was passed and adopted at the September 19, 2024 Board of Directors Meeting (see **Appendix D** for the resolution).

1.5.5 *Evaluation Criterion E – Presidential and Department of the Interior Priorities*

1.5.5.1 Benefits for Disadvantaged Communities

The Wilson Intertie Project will help disadvantaged communities in the District that are prone to fire and flooding by assuring fire-suppression capacity and resilience to effects on water supply by natural disasters such as fire and flooding. The project will also provide backup supply to disadvantaged communities in the event of a drought, well failure or water contamination issue

For identification of disadvantaged communities that will benefit from this project, the District utilized the *White House Council on Environmental Quality's interactive Climate and Economic Justice Screening Tool (CEJST), which is available online at https://screeningtool.geoplatform.gov/en/*. According to the U.S. Bureau of Reclamation, the CEJST is a geospatial mapping tool that utilizes publicly available, nationally consistent data

sets related to climate change, the environment, health, and economic opportunity to identify disadvantaged communities.

The tool identifies five (of 11 total) Census Tracts within the District that are designated as Disadvantaged based on a variety of factors referred to as "burdens." These Disadvantaged tracts are:

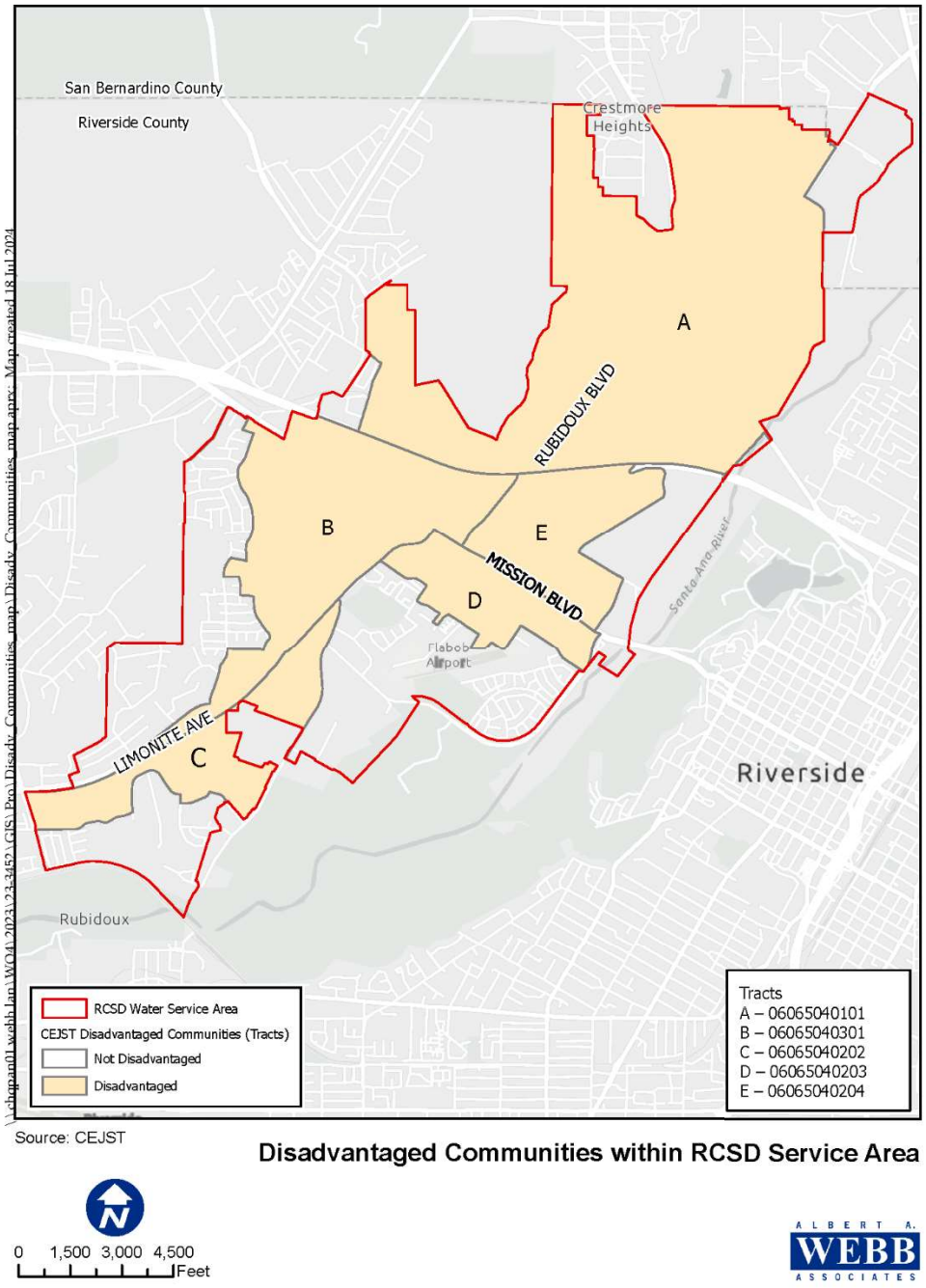
06065040101—Riverside County
06065040202—Riverside County
06065040203—Riverside County
06065040204—Riverside County
06065040301—Riverside County

Four of the tracts (excluding 06065040101) are identified as Low Income. The CEJST defines a census tract as low income if it ranks above the 65th percentile in the income criteria (percentage below 200% of the Federal Poverty Level).

In addition to being low income. the CEJST also considers other environmental, health, and climate metrics in eight categories. If a community meets both the income and other threshold in any one of the categories, it is considered disadvantaged. Some of the other thresholds met among these District tracts and their identification are:

- *Greater than or equal to the 90th percentile for share of properties at risk of flood in 30 years:* Tracts 06065040203 (96%) and 06065040204 (95%).
- *Greater than or equal to the 90th percentile for share of properties at risk of fire in 30 years:* 06065040101 (90%), 06065040202 (97%), 06065040203 (99%), 06065040204 (98%), and 06065040301 (90%).
- *Greater than 90th percentile for share of properties with particulate matter in the air of less than 2.5 microns* (PM2.5): 06065040202 (97%), 06065040203 (96%), 06065040204 (96%), and 06065040301 (97%).
- Greater than or equal to the 90th percentile for exposure to diesel particulate matter: 06065040101 (90%), 06065040203 (90%), and 06065040204 (91%).
- Greater than or equal to the 90th percentile for proximity to NPL (Superfund) sites: 06065040101 (91%), 06065040203 (90%), 06065040204 (91%), and 06065040301 (90%).

Figure 5 - Disadvantaged Communities Within RCSD Service Area



1.5.6 *Evaluation Criterion F – Nexus to Reclamation*

Given climate change effects and the specter of future drought, the District is seeking diversified water supplies to improve resiliency of supply. This includes this Project with West Valley Water District which provides up to 2,000 AFY of State Water Project supplies. USBR supports water storage projects in general. Uthe U.S. Bureau of Reclamation supports sustainable water resiliency through agency cooperation in general. Although this is a relatively small project, it is vital to this disadvantaged, seismically active, flood-prone area.

1.5.7 *Evaluation Criterion G – Stakeholder Support for Proposed Project*

The agreement that allows the District to take delivery of up to 2,000 AFY year of State Water Project Water through the Wilson Intertie with WVWD was initiated on June 11, 2024 by five parties: WVWD, Western, The Metropolitan Water District of Southern California, San Bernardino Valley Municipal Water District, and the District. This agreement is a demonstration of the broad stakeholder support for the Wilson Intertie Project.

In addition, the District has received letters of support for the Project from Santa Ana Watershed Project Authority, Western, City of Jurupa Valley and WVWD (See **Appendix E** for these letters)

There are no stakeholders providing cost-share or other material support to the Wilson Intertie Project.

1.6 Performance Measures

During the start-up/testing phase of the Wilson Intertie Project, we will verify that the intertie components are working according to the design and engineering specifications by conducting live flow testing. The tests will confirm the minimum and maximum flow capacity of the station. After initial post-construction testing, we conduct periodic testing and routine preventive maintenance.

SECTION 2 - Budget Narrative

2.1 Budget Proposal

A budget proposal is provided in the following table, which identifies both the District and Bureau of Reclamation grant funds required to implement the project. The proposed budget breakdown by Budget Object Category for the project along with the federal and non-federal funding shares is provided in Table 13.

Table 14 - Project Budget by Budget Object Category

Summary			
6. Budget Object Category	**Total Cost**	**Federal Estimated Amount**	**Non-Federal Estimated Amount**
a. Personnel	**$62,640**		
b. Fringe Benefits	**$25,836**		
c. Travel	**$0**		
d. Equipment	**$0**		
e. Supplies	**$0**		
f. Contractual	**$228,400**		
g. Construction	**$1,256,200**		
h. Other Direct Costs	**$0**		
i. Total Direct Costs	**$1,573,076**		
j. Indirect Charges	**$0**		
Total Costs	**$1,573,076**	**$500,000**	**$1,073,076**
	Cost Share Percentage	**32%**	**68%**

2.2 Budget Narrative

The Budget Narrative is tied to the application's required Federal Forms SF-424 (Application for Federal Assistance) and SF-424A, (Budget Information – Non-Construction Programs, which are submitted with this application.[6] The District's proposed budget includes the following costs.

2.2.1 *Personnel*

The salaries and wages included in the budget proposal are for all District employees who will be directing and overseeing the Project. Table 14 below shows the personnel costs for

[6] Note: The SF-424C (Budget Information – Construction Programs) shows the federal share as $503,384.32 instead of the $500,000 we are requesting. This is because the form only allows whole numbers for the Federal percentage share. Also, we submitted the SF-424C because it is mandatory on the Grants.gov workspace even though the Notice of Funding Opportunity R25AS00013 for this grant does not require it.

the Project. All of the positions reflect the hourly rate for the current staff member occupying the position, except for the Senior Utility Maintenance 1 and Senior Systems Operator 1, which reflect an hourly rate reflect an hourly rate which reflect an hourly rate based on the top of range for the position. Compensation rates are consistently applied to Federal and non-Federal activities.

Table 15 - Personnel Costs for Project

POSITION TITLE	TIME (HOURS)	RATE/HR	TOTAL COST	RATE BASIS
General Manager	*60*	*$121*	*$7,260*	*Current Salary*
Assistant General Manager	*120*	*$114*	*$13,680*	*Current Salary*
Director of Engineering	*120*	*$105*	*$12,600*	*Current Salary*
Director of Operations	*120*	*$89*	*$10,680*	*Current Salary*
Director of Finance & Administration	*60*	*$95*	*$5,700*	*Current Salary*
Senior Utility Maintenance 1	*120*	*$48*	*$5,760*	*Current Salary*
Senior Systems Operator 1	*120*	*$58*	*$6,960*	*Current Salary*
		Total	**$62,640**	

The salary and wage rates are provided based on 2024/2025 Salary Schedule. The total salaries and wages cost for the 2-year project period is $62,640. The primary staff hours are allocated to the Engineering and Operations Department over the 2-year project. This will include but is not limited to completing the following essential tasks shown in Table 15.

Table 16 - Project Tasks

PROJECT TASKS	
Task 1 Project Management	*Task 6 Construction*
Task 2 Environmental Compliance	*Task 7 Electrical*
Task 3 Design	*Task 8 Start Up/Testing*
Task 4 Bidding	*Task 9 Closeout*
Task 5 Pre-Construction	

Table 16 shows the Project personnel from Table 14 and the tasks that are allocated to them.

Table 17 - Personnel Task Allocations

POSITION TITLE	TASKS
General Manager	*Brian Laddusaw, the General Manager, will provide general oversight of the project, ensuring all tasks are completed per the schedule. Mostly coordination with staff and less with granting agency and contractors.*
Asst. General Manager	*Brandon Thomas, the Assistant General Manager, will provide direct oversight over the Director of Engineering and Director of Operations from environmental compliance through closeout. AGM will be involved with the construction phase and contractor management.*
Director of Engineering	*Ted Beckwith, the Director of Engineering, who is also designated as the construction Project Manager, will directly oversee the environmental compliance, bidding and pre-construction and will be supplemental support to the Director of Operations during construction, electrical, and start-up/testing. The Director of Engineering will also perform close out procedures.*
Director of Operations	*Miguel Valdez, The Director of Operations, will mostly be focused on the construction, electrical and start-up/testing phases of the project.*
Director of Finance & Administration	*Kirk Hamblin, The Director of Finance & Administration will oversee all grant documents and compliance reporting.*
Sr. Utility Maintenance 1	*This position will mostly be focused on the construction, electrical, and start-up/testing phases of the project.*
Sr. Systems Operator 1	*This position will mostly be focused on the construction, electrical, and start-up/testing phases of the project.*

Project Year Breakdown of Personnel Costs for Tasks by Position

General Manager Brian Laddusaw will provide oversight of the project, ensuring all tasks are completed per the schedule. The breakdown of tasks by hour and hourly rates for each project year is below.

Task 1: 30 hrs Y1 x $121/hr + 30 hrs Y2 x $121/hr = $7,260

Assistant General Manager Brandon Thomas will provide direct oversight over the Director of Engineering and Director of Operations from environmental compliance through closeout. The AGM will be involved with the construction phase and contractor management. The breakdown of tasks by hour and hourly rates for each project year is below.

Task 2: 8 hrs Y1 x $114/hr + 0 hrs Y2 x $114/hr = $912
Task 4: 10 hrs Y1 x $114/hr + 0 hrs Y2 x $114/hr = $1,140
Task 5: 12 hrs Y1 x $114/hr + 0 hrs Y2 x $114/hr = $1,368
Task 6: 30 hrs Y1 x $114/hr + 20 hrs Y2 x $114/hr = $5,700
Task 7: 0 hrs Y1 x $114/hr + 10 hrs Y2 x $114/hr = $1,140
Task 8: 0 hrs Y1 x $114/hr + 10 hrs Y2 x $114/hr = $1,140
Task 9: 0 hrs Y1 x $114/hr + 20 hrs Y2 x $114/hr = $2,280

Total: 120 hrs x $114/hr = $13,680

Director of Engineering Ted Beckwith, who is also designated as the construction Project Manager, will directly oversee the environmental compliance, design, bidding and pre-construction and will be supplemental support to the Director of Operations during construction, electrical, and start-up/testing. Director of Engineering will also perform close out procedures. The breakdown of tasks by hour and hourly rates for each project year is below.

Task 2: 15 hrs Y1 x $105/hr + 0 hrs Y2 x $105/hr = $1,575
Task 4: 15 hrs Y1 x $105/hr + 0 hrs Y2 x $105/hr = $1,575
Task 5: 20 hrs Y1 x $105/hr + 0 hrs Y2 x $105/hr = $2,100
Task 6: 30 hrs Y1 x $105/hr + 15 hrs Y2 x $105/hr = $4,725
Task 7: 0 hrs Y1 x $105/hr + 10 hrs Y2 x $105/hr = $1,050
Task 8: 0 hrs Y1 x $105/hr + 5 hrs Y2 x $105/hr = $1,575
Task 9: 0 hrs Y1 x $105/hr + 10 hrs Y2 x $105/hr = $1,050

Total: 120 hrs x $105/hr = $12,600

Director of Operations Miguel Valdez, will mostly be focused on the construction, electrical and start-up/testing phases of the project.

Task 6: 60 hrs Y1 x $89/hr + 20 hrs Y2 x $89/hr = $7,120
Task 7: 0 hrs Y1 x $89/hr + 20 hrs Y2 x $89/hr = $1,780
Task 8: 0 hrs Y1 x $89/hr + 20 hrs Y2 x $89/hr = $1,780

Total: 120 hrs x $89/hr = $10,680

Director of Finance and Administration Kirk Hamblin will oversee all grant documents and compliance reporting. The breakdown of tasks by hour and hourly rates for each project year is below.

Task 1: 30 hrs Y1 x $95/hr + 30 hrs Y2 x $95/hr = $5,700

The Senior Utility Maintenance 1 will mostly be focused on the construction, electrical and start-up/testing phases of the project. The breakdown of tasks by hour and hourly rates for each project year is below.

Task 6: 60 hrs Y1 x $48/hr + 20 hrs Y2 x $48/hr = $3,840
Task 7: 0 hrs Y1 x $48/hr + 20 hrs Y2 x $48/hr = $960
Task 8: 0 hrs Y1 x $48/hr + 20 hrs Y2 x $48/hr = $960

Total: 120 hrs x $48/hr = $5,760

The Senior Systems Operator 1 will mostly be focused on the construction, electrical and start-up/testing phases of the project. The breakdown of tasks by hour and hourly rates for each project year is below.

Task 6: 50 hrs Y1 x $58/hr + 20 hrs Y2 x $58/hr = $4,060
Task 7: 0 hrs Y1 x $58/hr + 25 hrs Y2 x $58/hr = $1,450
Task 8: 0 hrs Y1 x $58/hr + 25 hrs Y2 x $58/hr = $1,450

Total: 120 hrs x $58/hr = $6,960

2.2.2 *Fringe Benefits*

Table 17on the next page shows the Fringe Benefit rates for all District employees involved in the Wilson Intertie Project.

Table 18 - Fringe Benefits

POSITION TITLE	RATE/HR	HOURS	FRINGE BEN.	TOTAL COMP.
General Manager	*$35.79*	*60.00*	*$2,148*	*+ $7,260 = $9,408 (22.8%)*
Assistant General Manager	*$43.55*	*120.00*	*$5,227*	*+ $13,680 = $18,907 (27.6%)*
Director of Engineering	*$41.77*	*120.00*	*$5,012*	*+ $12,600 = $17,612 (28.4%)*
Director of Operations	*$38.58*	*120.00*	*$4,630*	*+ $10,680 = $15,310 (30.2%)*
Director of Finance & Administration	*$29.04*	*60.00*	*$1,743*	*+ $5,700 = $7,443 (23.4%)*
Senior Utility Maintenance 1	*$28.15*	*120.00*	*$3,379*	*+ $5,760 = $9,139 (36.9%)*
Senior Systems Operator 1	*$30.82*	*120.00*	*$3,699*	*+ $6,960 = $10,659 (34.7%)*
		Total	**$25,836**	

As noted in Table 17, by adding total fringe benefits and total salaries and wages from Table 14 to get total compensation, only the Senior Utility Maintenance 1 position is above the 35% threshold. The breakdown of Fringe Benefits for that position is as follows:

- Senior Utility Maintenance 1: Social Security (10.6%), Medicare (2.5%), SDI (1.8%), Health (49.4%), Dental (2.8%), Vision (1%) , Life Insurance (2.3%), and Public Employees Retirement System (30%)

Travel

No travel is anticipated.

Equipment

The project is not requesting funds for equipment.

2.2.3 *Materials and Supplies*

The project is not requesting funds for materials and supplies.

2.2.4 *Contractual*

The District has allocated $228,400 in contractual costs for construction management and inspection. This represents 20% of the construction cost. The contractor for construction management and inspection will be identified as part of the Bidding phase.

2.2.5 *Construction*

The District has allocated $1,256,200 in construction costs for the Project, which includes a 10% contingency over the Engineer's Estimates. The engineering and design costs related to construction are listed above in 2.2.7 Contractual.

The Engineer's Estimates for the Wilson Intertie Project are provided in Figure 6 on the next page). The estimate provides a detailed breakdown of all construction costs by item for the Project.

Figure 6 – Engineer's Construction Cost Estimate for the Wilson Intertie

587-19.64.5

RUBIDOUX COMMUNITY SERVICES DISTRICT
WILSON STREET INTERCONNECTION
TO WEST VALLEY WATER DISTRICT

ENGINEER'S CONSTRUCTION COST ESTIMATE
(FINAL DRAFT)

Item No.	Description	Estimated Quantity	Unit of Measure	Unit Price	Line Item Cost
1.	Mobilization, Demobilization, Bonds, Insurance (@ 6%)	1	LS	N/A	$60,000
2.	Encroachment Permit, Traffic Control Plans, and Traffic Control	1	LS	N/A	$35,000
3.	Trench Protection	1	LS	N/A	$10,000
4.	Furnish and Install 12" CML&C Welded Steel Pipe with Fully Welded Joints	240	LF	$1,000	$240,000
5.	Furnish and Install 12" Fittings (Tees, bends, etc.)	1	LS	N/A	$25,000
6.	Furnish and Install 12" Butterfly Valve	8	EA	$13,000	$104,000
7.	Furnish and Install Connection to WVWD System	1	EA	$15,000	$15,000
8.	Furnish and Install Connection to RCSD System	1	EA	$15,000	$15,000
9.	Furnish and Install Meter Vault, Including 12" Ultra Mag Meter	1	EA	$140,000	$140,000
10.	Furnish and Install PRV Vault, Including 8" PRV	1	EA	$150,000	$150,000
11.	Furnish and Install 6" Fire Hydrant	1	EA	$12,000	$12,000
12.	Furnish and Install 1" Water Service, Including Connection to 12" WVWD Pipeline and Tie-In to Existing Water Meter	1	EA	$10,000	$10,000
13.	Furnish and Install AC Base Pavement	230	LF	$50	$11,500
14.	Furnish and Install AC Overlay	230	SF	$45	$10,350
15.	Furnish and install 1" conduit and CAT 5E and #14 wires, as shown on Sheet 4 of the Construction Drawings, including pavement restoration.	1	LS	N/A	$125,000
16.	Allowance for Unforeseen Conditions	1	LS	N/A	$75,000
				Subtotal:	$1,037,850
				Construction Contingency (10%):	$103,785
				Construction Total:	**$1,141,635**
				Construction Total (Rounded):	**$1,142,000**

SS/lge
587-19P64-Cost Est-Final Draft.xlsx (06/27/2024)

The District does not plan to use its own equipment for construction. Construction materials are identified in Figure 6 on the previous page. Construction bidding and contracting has not been conducted yet for the proposed project, so no contracts can be presented at the time of application. Other construction related costs such as permitting are included in Figure 6.

2.2.6 *Third Party In-Kind Contributions*

The project is not requesting third party in-kind contributions.

2.2.7 *Environmental and Regulatory Compliance Costs*

The Wilson Intertie project is not requesting funding for environmental and regulatory compliance costs. U.S. Bureau of Reclamation estimated costs for the Wilson Intertie are estimated at $5,000 (see Section 3 for more detail).

2.2.8 *Other Expenses*

The project is not requesting funding for other expenses.

2.2.9 *Indirect Costs*

No indirect costs are included.

SECTION 3 - Environmental and Cultural Resources Compliance

The project will be conducted within an already disturbed public right-of-way.

Regarding compliance with state environmental regulations, the District is expected to take a discretionary action to proceed with the project and therefore trigger review under the California Environmental Quality Act (CEQA). The District has already filed a Notice of Exemption for a Class 3 exemption, Gov. Code. Sec 15303(d). (See **Appendix F** for the Notice of Exemption.) Because construction of the project is occurring on approximately 230 linear feet of an existing roadway, the work is not expected to adversely impact cultural resources, or sensitive plant or animal species and a CEQA exemption would be applicable.

Regarding NEPA, ESA, and NHPA compliance, the District has contacted Leslie Cleveland, the Drought Program Manager for the Southern California U.S. Bureau of Reclamation Office, (Temecula). She recommends a budget of $5,000 for regulatory compliance work for the Project. The District will work with Reclamation to determine what level of environmental NEPA compliance is required and to obtain authorization before any ground disturbing activities take place.

The District is not aware of the presence of any of any species listed or proposed to be listed as a Federal threatened or endangered species, or designated critical habitat in the project area. There are no wetlands or other surface waters inside the project boundaries that potentially fall under CWA jurisdiction as “Waters of the United States.” The project will not result in any modification of or effects to, individual features of an irrigation system.

The District is not aware of any archeological sites in the project area. The project will not have an adverse and disproportionate effect on communities with environmental justice concerns, and it will not limit access to, and ceremonial use of, Indian sacred sites or result in other impacts on tribal lands. The District will take care to ensure the project does not contribute to the introduction, continued existence, or spread of noxious weeds or non-native invasive species known to occur in the area.

SECTION 4 - Required Permits or Approvals

This project will require a Division of Drinking Water plan review and operating permit update to assure that all public drinking water facilities are designed and constructed in a manner

which protects public health. An encroachment permit will also be needed for work within the public right-of-way.

SECTION 5 - Overlap or Duplication of Effort Statement

The District is only seeking outside funds through the WaterSmart Water and Energy Efficiency grant (WEEG) under Funding Group 2.

SECTION 6 - Conflict of Interest Disclosure Statement

There are no anticipated potential conflicts of interest existing at the time of this submission.

SECTION 7 - Unique Entity Identifier and System for Award Management

The Rubidoux Community Services District's Unique Entity Identifier (UEI) for the System for Award Management is KVPTT9U7J1A5.

SECTION 8 - Official Resolution

The District's Board of Directors passed the Resolution 2024-918 on September 19, 2024, authorizing the submittal of the District's application to the U.S. Bureau of Reclamation's WaterSMART Drought Response Program Drought Resiliency Grant program for the District's Wilson Intertie Project. The resolution is included in this application as **Appendix D**.

SECTION 9 - References

USBR United States Bureau of Reclamation (USBR), 2021. *Water Reliability in the West – 2021 Secure Water Act Report.* (Available at Water Reliability in the West - 2021 SECURE Water Act Report (usbr.gov)

UWMP Albert A. Webb Associates, 2022. *Rubidoux Community Services District Urban Water Management Plan-April 2022* (UWMP) (Available at https://www.rcsd.org/urban-water-management-plan-april-2022.)

WMP Albert A. Webb Associates, 2022. *Rubidoux Community Services District Water Master Plan-May 2022* (WMP) (Available at https://www.rcsd.org/water-master-plan-and-wastewater-master-plans-may-2022)

WMWD Western Municipal Water District, Technical Memorandum: Western Drought Contingency Plan – Climate Change Vulnerability Assessment, April 22, 2021.

Appendix B

References to the Wilson Intertie Project in the RCSD Urban Water Management Plan

in the past. With the additional treatment systems being installed currently and ongoing testing, the District does not expect water quality to constrain supplies in the future.

Water Supply Constraints

The District's groundwater supply could be constrained in the event of declining groundwater levels. In that case, the cost of production would increase to pump at deeper depths or at new locations or purchase supplies from other sources. However, this is unlikely according to the groundwater data submitted from the District and verified by the Watermaster. As of 2019, total extractions from the Riverside South Basin area were 26,500 AF, which is compared to total extractions in the base period of 1959-1963 at 29,633 AF. Accumulated credits as of 2019 totaled 719,796 AF and accumulated obligations totaled 175,575 AF for a net credit of 544,221 AF (to Western) as of 2019 (WSBW(c), p. 167). Because aggregate production in the adjudicated area remains below the base right, and credits available to offset obligations are roughly ten times the base right, ample supply in the basin is expected. Further, records show relatively stable groundwater elevations for RCSD wells over the past 20 years. Refer to Chart 6-1 in Chapter 6 for recorded annual aggregate production volumes and refer to Chart 6-2 for recorded RCSD groundwater surface elevations.

As described in Section 6.8, the District is pursuing an imported water supply via a future Agency Connection. Imported water supplies may be constrained due to regulatory, legal, biological, and structural constraints on the State Water Project supplies from the Sacramento/San Joaquin Delta in Northern California. To address reliability of imported water supplies for its retail agencies, which includes RCSD, Western prepared a Technical Memorandum describing the results of its Climate Change Vulnerability Assessment (dated April 22, 2021) (Appendix H). It states, "The current (November 2020) draft of Metropolitan's 2020 UWMP Drought Risk Assessment indicates that no service reliability concerns are projected for imported water during normal and drought periods before 2045. For purposes of the UWMP, imported water supplies to Western can be assumed to be unchanged during normal years, single dry years, and five-year droughts" (p. 3). Therefore, RCSD will also assume that projected imported water supplies from the future Agency Connection will be available in normal and drought years.

Catastrophic Events and Interties

Catastrophic events including electrical outages, earthquakes, fire, or any other natural disaster could constrain water supplies. In the event of such an emergency, the District is prepared to purchase emergency water supplies from neighboring agencies over the time required to get the District's system functioning again.

The District and JCSD share two interties and a mutual aid agreement that can be activated in an emergency to flow in either direction (i.e., RCSD Intertie South and Jewel Street Intertie). Currently, West Valley and RCSD are actively working together to develop a connection. The District is actively working with the City of Riverside to make a connection to the City's distribution system in order to receive imported water supplies from Western. In an emergency, this may be another option to satisfy demands until the repairs can be made.

The District has one natural gas portable generator, diesel backup generators at three potable wells, and backup generators at the Mahnke, Thompson, and Smith Water Treatment Plants to provide emergency water in the event of a widespread power failure. The non-potable irrigation wells do not have backup power onsite. As of March 2021, the District secured grant funding to purchase fixed generators at two potable wells and a booster station for the purpose of increased system reliability and mitigate power disruptions to service (DM 2021-17).

In 2020, the District retained Harper & Associates Engineering, Inc. to conduct corrosion investigations and seismic, structural, and safety engineering evaluations of the District's four active water storage tanks (HAE(a), HAE(b), HAE(c), HAE(d)). The results of the seismic analyses portion of the reports are provided in Chapter 8 under the seismic assessment and mitigation discussion. These reports provide the District action items they can undertake to improve system reliability in an earthquake emergency.

7.1.3 Reliability by Type of Year

RCSD has had a reliable water supply to meet demands during normal, single-dry, and multiple-dry years and to-date has not experienced a water shortage. Further, the District had sufficient water supplies during the statewide drought from 2012 to 2017. The Water Code requires each water supplier to determine three types of years and how much supply was

- Sales of potable water to JCSD using the existing interties will begin again at approximately 2,000 AFY.
- Shadow Rock and Agua Mansa Commerce Center Specific Plan expected completion year with additional 216 AFY and 50 AFY water demand, respectively.
- Total water consumption increases from 2024 by approximately 38% due to urban growth (2.6%), Shadow Rock project (216 AFY), Agua Mansa project (50 AFY), sales to JCSD (2,000 AFY) and 1.7% increase in non-potable use).
- No decline in customer water usage as compared to 2020, unless there is a statewide conservation mandate to reduce water use, or an inexplicable decline in groundwater supplies, or an emergency water shortage not caused by drought.
- No decline in water supply from non-potable or potable well water as compared to 2020.

One source of uncertainty in the aforementioned assumptions is timing of when the future imported water supply will be completed and when deliveries will start, and whether the drought affects the amount delivered. Likewise, timing for completion of the Agua Mansa project is uncertain. Another source of uncertainty is whether non-potable water demand will increase and whether the District will be forced to mandate water conservation as a result of a statewide drought declaration or as a result of an unforeseen interruption of service from an earthquake or other hazard.

7.2.3 Total Water Supply and Use Comparison

When a water supplier cannot meet the demand of its customers for whatever reason, this DRA assumes two things can happen: the supplier can mandate customers to conserve water, thus reducing demand; and/or the supplier can augment or supplement its normal supplies with an emergency and temporary source of water.

RCSD customers were responsive to the water conservation mandate in 2015. The District is in the process of developing an updated and thorough water conservation ordinance which will

help clarify expectations and authorities. Water demands are expected to gradually increase as the service area builds out by about 2049 and a couple of large development projects are annexed into the District (see Chapter 4).

Supply augmentation for RCSD comes from the District's ability to fully utilize production capabilities and produce additional water from the Riverside South Basin consistent with the Judgment (Appendix K). Emergency supplies can be obtained from the intertie and mutual aid agreement with JCSD, and the District is actively working with West Valley Water District to develop a connection.

Assuming the next five years, 2021 through 2025, are a five-consecutive-year drought, and taking into account the assumptions in Section 7.2.2, the District's potential water supply surplus (or shortage) is provided in **Submittal Table 7-5** (next page)**.** If there is a shortage, then the benefit of a supply augmentation or use reduction action is shown to address the shortage. Because Western's climate change factors show 100% of supply and demand beginning in 2020, no climate change effects have been added to the calculations in Submittal Table 7-5.

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beyond a normal water supply scenario. Pursuant to the Judgment, the District can pump what is needed to meet customer needs (Appendix K).

The District's supply augmentation actions are listed in **Submittal Table 8-3.**

Submittal Table 8-3: Supply Augmentation and Other Actions			
Shortage Level	Supply Augmentation Methods and Other Actions by Water Supplier ***Drop down list*** *These are the only categories that will be accepted by the WUEdata online submittal tool*	How much is this going to reduce the shortage gap? *Include units used (volume type or percentage)*	Additional Explanation or Reference *(optional)*
Add additional rows as needed			
All Levels	Expand Public Information Campaign	1-5%	
All Levels	Transfers	Will vary depending on need and availability	Intertie with JCSD or emergency interties with WVWD or Western.
All Levels	Other Purchases	Will vary depending on need and availability	Purchase additional imported water from Western when connection to RPU is completed (see UWMP Table 6-7).
1	Other Actions (describe)	5%	Utilize full pumping ability in the Basin
2	Other Actions (describe)	10%	Utilize full pumping ability in the Basin
3	Other Actions (describe)	20%	Utilize full pumping ability in the Basin
4	Other Actions (describe)	20%	Utilize full pumping ability in the Basin
5	Other Actions (describe)	10%	Utilize full pumping ability in the Basin
6	Other Actions (describe)	10%	Utilize full pumping ability in the Basin
NOTES: JCSD = Jurupa Community Services District; WVWD = West Valley Water District; Western = Western Municipal Water District; RPU = City of Riverside Public Utilities			

8.4.3 Operational Changes

The operational actions that would be undertaken during a water shortage are shown in Submittal Table 8-2 and Submittal Table 8-3. The District already has a program to monitor, analyze, and track customer usage rates and has budgeted a pipeline replacement program.

8.4.4 Additional Mandatory Restrictions

All mandatory restrictions developed by the District in addition to any state-mandated prohibitions are listed in Submittal Table 8-2. No additional mandatory restrictions are in effect other than a prohibition against water waste; however, the Board of Directors has the discretion to develop in the future locally appropriate restrictions as conditions dictate.

8.4.5 Emergency Response Plan

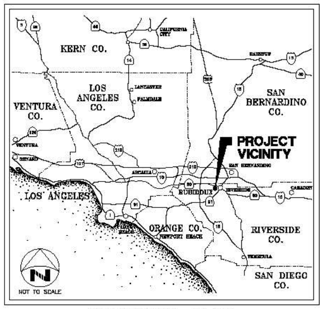
RCSD prepared and submitted to the State an updated Emergency Response Plan (ERP) dated December 2021 (revised 2022). The prior ERP was dated March 26, 2008. Applicable

Appendix C

Design Drawings for the Wilson Intertie Project

RUBIDOUX COMMUNITY SERVICES DISTRICT

WILSON STREET INTERCONNECTION TO WEST VALLEY WATER DISTRICT



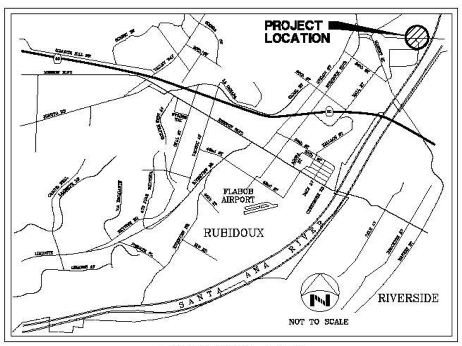
VICINITY MAP

DRAWING INDEX

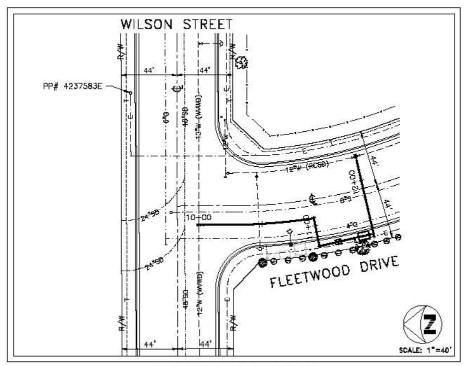
SHEET No.	DESCRIPTION
1	TITLE SHEET, LOCATION AND VICINITY MAPS, AND DRAWING INDEX
2	PLAN AND PROFILE - STA.10+00.0± TO STA.12+21.7±
3	MISCELLANEOUS DETAILS
4	WATER SERVICE RELOCATION AND SCADA CABLE SCHEMATIC

LEGEND

SYMBOL	DESCRIPTION
	EXISTING EDGE OF PAVEMENT
---W---	EXISTING WATERLINE
---E---	EXISTING ELECTRICAL FACILITY
---E(OH)---	EXISTING OVERHEAD ELECTRICAL FACILITY
---G---	EXISTING GAS FACILITY
---S---	EXISTING SEWER FACILITY
---SFM---	EXISTING SEWER FORCE MAIN FACILITY
---SD---	EXISTING STORM DRAIN FACILITY
SD	EXISTING STORM DRAIN FACILITY
---T---	EXISTING TELEPHONE FACILITY
---F/O---	EXISTING FIBER OPTIC FACILITY
SDMH	EXISTING STORM DRAIN MANHOLE
TMH	EXISTING TELEPHONE MANHOLE
PP	EXISTING POWER POLE
R/W	EXISTING RIGHT-OF-WAY
	PROPOSED PIPELINE
	UTILITY INTERFERENCE FLAG. APPROXIMATE LOCATION OF INTERFERENCE WITH TYPE OF UTILITY INDICATED BY ABBREVIATION: CATV- CABLE TV, E- ELECTRIC, G- GAS, S- SEWER, SD- STORM DRAIN, T- TELEPHONE, TR- TRAFFIC, AND W- WATER.
PVC	POLYVINYL CHLORIDE PIPE



LOCATION MAP

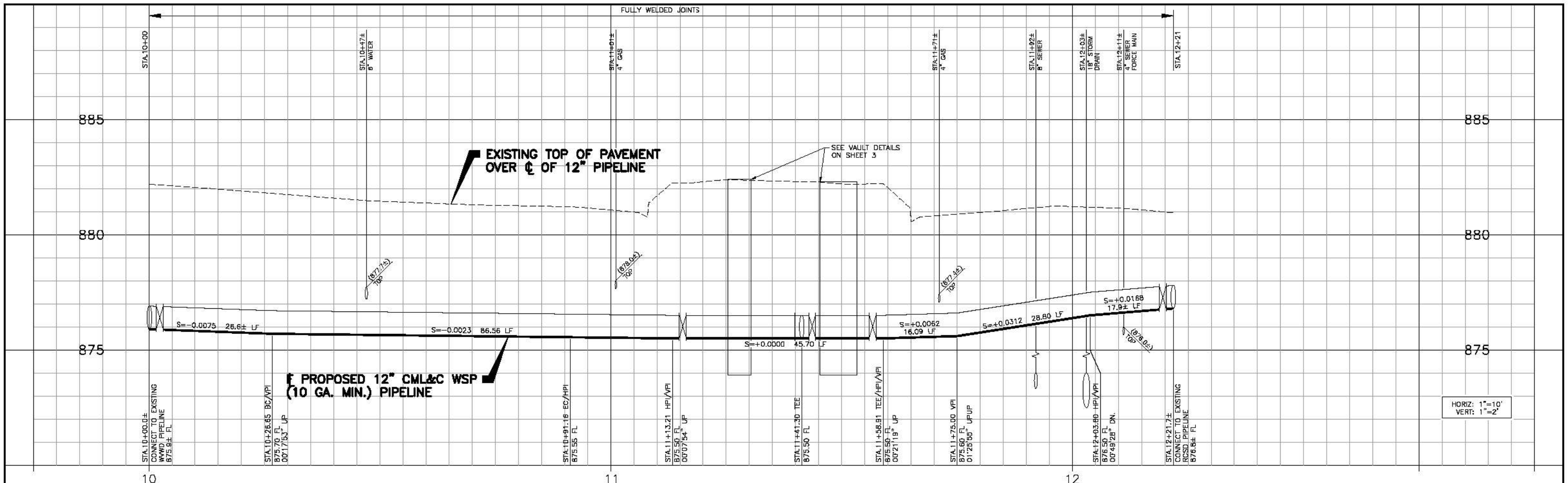


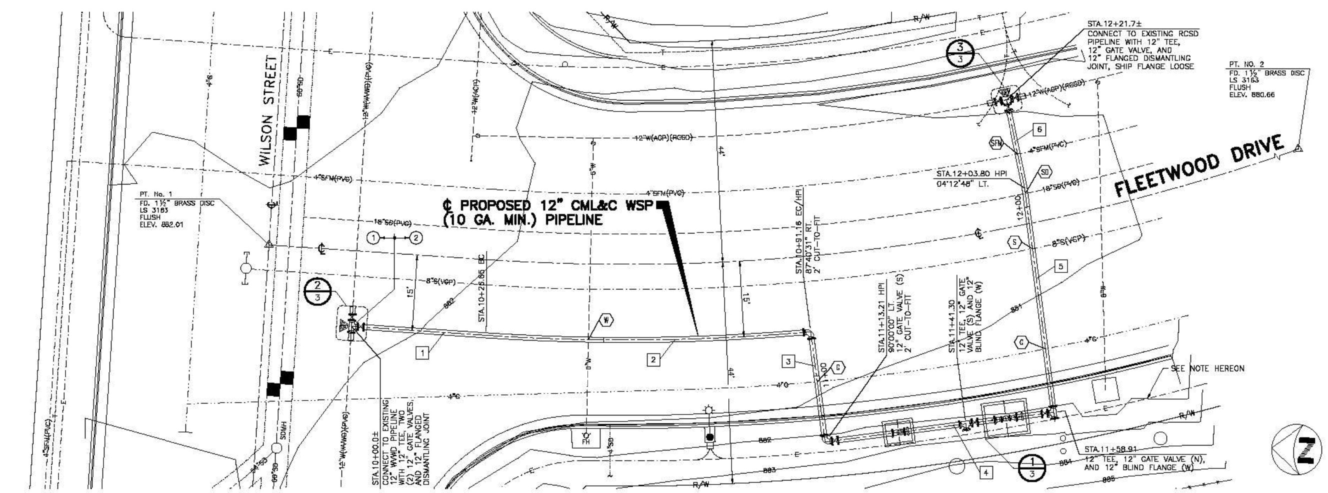
DRAWING INDEX

48 hours BEFORE excavation 1-800-227-2600 CALL Underground Service Alert

WEST VALLEY WATER DISTRICT	VERIFY SCALES	RUBIDOUX COMMUNITY SERVICES DISTRICT					KRIEGER & STEWART Engineering Consultants		RUBIDOUX COMMUNITY SERVICES DISTRICT	SHEET
ACCEPTED BY ______ LINDA JADESKI ASSISTANT GENERAL MANAGER	BAR IS ONE INCH ON ORIGINAL DRAWING 0 1"	APPROVED BY ______ TED BECKWITH DIRECTOR OF ENGINEERING					3602 University Avenue • Riverside, CA 92501 www.kriegerandstewart.com • 951 • 684 • 6900	SCALE AS SHOWN; FIELD BOOK N/A; DESIGN SS; DRAWN SPK; CHECKED SS	WILSON STREET INTERCONNECTION TO WEST VALLEY WATER DISTRICT	1
DATE ______	IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY	DATE ______	SYM	REVISIONS	DATE	BY	APPROVED BY ______ REGISTERED ENGINEER No. 85367 DATE 06/23/23		TITLE SHEET, LOCATION AND VICINITY MAPS, AND DRAWING INDEX	OF 4 SHEETS; R.C.S.D. PLAN No. 587-19.64

REGISTERED PROFESSIONAL ENGINEER No. 85367 CIVIL STATE OF CALIFORNIA





PIPELINE DATA

No.	DELTA/BEARING	R	T	L
1	S00°09'55"E	–	–	26.65'
2	08°54'24"	415.00'	32.32'	64.51'
3	S78°36'12"W			22.05'
4	S11°23'48"E	–	–	45.70'
5	N78°36'12"E	–	–	44.89'
6	N74°23'24"E	–	–	17.88'

NOTES:

1. CONTRACTOR SHALL COORDINATE RELOCATION OF ELECTRICAL CONDUIT WITH FACILITY OWNER (SOUTHERN CALIFORNIA EDISON) IN ORDER TO INSTALL VAULTS AND PIPE AS SHOWN.
2. CONTRACTOR SHALL COORDINATE START UP AND FIELD ADJUSTMENT OF PRESSURE REDUCING VALVE WITH MANUFACTURER'S REPRESENTATIVE.
3. CONTRACTOR SHALL COORDINATE START UP AND CALIBRATION OF MAGNETIC FLOW METER WITH MANUFACTURER'S REPRESENTATIVE AND PER MWD'S REQUIREMENTS (SEE CONSTRUCTION SPECIFICATION).

Ⓡ NOTES:

1. WEST VALLEY WATER DISTRICT TO OWN, OPERATE, AND MAINTAIN.
2. RUBIDOUX COMMUNITY SERVICES DISTRICT TO OWN, OPERATE, AND MAINTAIN.

VERIFY SCALES

BAR IS ONE INCH ON ORIGINAL DRAWING

0 1"

IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

SYM	REVISIONS	DATE	BY

REGISTERED PROFESSIONAL ENGINEER SINISA SARIC No. 85367 CIVIL STATE OF CALIFORNIA

KRIEGER & STEWART Engineering Consultants

3602 University Avenue • Riverside, CA 92501
www.kriegerandstewart.com • 951 • 684 • 6900

APPROVED BY [signature]
REGISTERED ENGINEER No. 85367 DATE 06/23/23

SCALE 1"=10'
FIELD BOOK N/A
DESIGN SS
DRAWN SPK
CHECKED SS

RUBIDOUX COMMUNITY SERVICES DISTRICT

WILSON STREET INTERCONNECTION TO WEST VALLEY WATER DISTRICT

PLAN AND PROFILE
STA.10+00.0± TO STA.12+21.7±

SHEET 2 OF 4 SHEETS

R.C.S.D. PLAN No. 587–19.64

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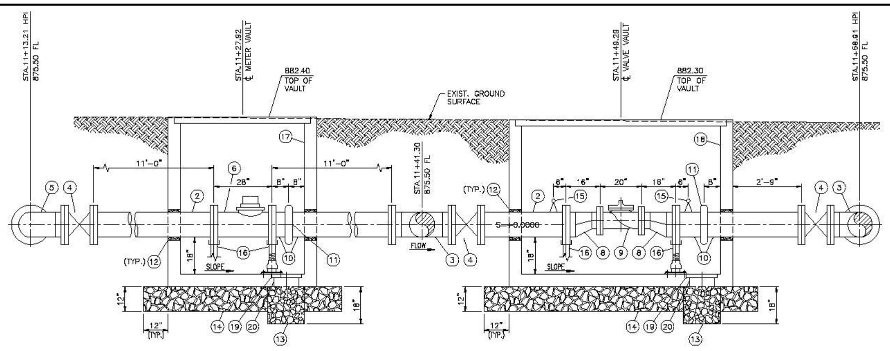
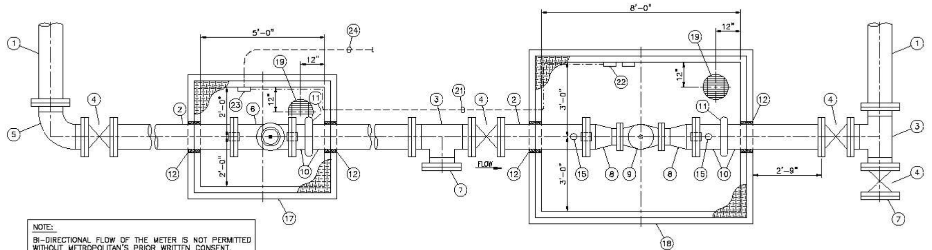


ELEVATION



NOTE:
BI-DIRECTIONAL FLOW OF THE METER IS NOT PERMITTED WITHOUT METROPOLITAN'S PRIOR WRITTEN CONSENT.

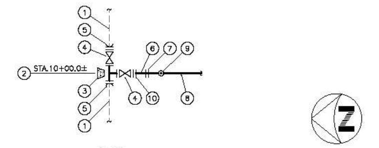
PLAN

(#) MATERIAL, EQUIPMENT, AND WORK DESCRIPTIONS FOR DETAIL 1:

1. 12" 10 GAUGE CML&C WSP WITH CLASS "E" FLANGES (SHIPPED LOOSE).
2. 12" STD. WT. CML&C WSP WITH CLASS "E" FLANGES (SHIPPED LOOSE).
3. 12" FLANGED TEE.
4. 12" FLANGED RESILIENT BUTTERFLY VALVE PER STANDARD DRAWING W1030.
5. 12" FLANGED 90° ELBOW.
6. 12" FLANGED MCCROMETER ULTRA MAG FLOW METER CAPABLE OF BI-DIRECTIONAL FLOW MEASUREMENTS, WITH PROCOMM CONVERTER, 24VDC, MODBUS COMPATIBLE, WITH REMOTE DISPLAY, OR APPROVED EQUAL, TIED INTO SCADA FOR REMOTE METER READS.
7. 12" CLASS "E" BLIND FLANGE.
8. 12"x8" STD. WT. PAINTED WSP FLANGED ECCENTRIC REDUCER.
9. 8" PRESSURE REDUCING VALVE, CLA-VAL MODEL 90-01BPSYKCX D/S, CLASS 150 FLANGE, WITH STAINLESS STEEL TUBING AND FITTINGS AND INTERMEDIATE POWER GENERATOR, CLA-VAL MODEL X143IP, OR APPROVED EQUAL.
10. 12" STANDARD WEIGHT WSP FLANGED BY GROOVED END SPOOL.
11. 12" FLEXIBLE COUPLING, VICTAULIC STYLE 77 OR APPROVED EQUAL.
12. LINK-SEAL MODEL "C", SIZED TO FILL VOID BETWEEN PIPE AND VAULT.
13. PEA GRAVEL WRAPPED IN FILTER FABRIC.
14. SET PRECAST CONCRETE VAULT ON 3/4" GRADED CRUSHED ROCK BASE COMPACTED TO 95% RELATIVE COMPACTION, MINIMUM.
15. 3/4" HALF COUPLING, BUSHING, AND 1/4" BALL VALVE WITH PRESSURE GAUGE (0 TO 300 PSI IN 10 LB. INCREMENTS).
16. PIPE SUPPORT PER STD. DWG. W143.
17. 5'-0" LONG x 4'-0" WIDE x (DEPTH AS REQUIRED) PRECAST CONCRETE VAULT WITH DOUBLE LEAF SPRING ASSISTED GALVANIZED PARKWAY RATED COVER. PRECAST FLOOR SHALL BE SLOPED AT 2% MINIMUM TO DRAIN.
18. 8'-0" LONG x 6'-0" WIDE x (DEPTH AS REQUIRED) PRECAST CONCRETE VAULT WITH DOUBLE LEAF SPRING ASSISTED GALVANIZED PARKWAY RATED COVER. PRECAST FLOOR SHALL BE SLOPED AT 2% MINIMUM TO DRAIN.
19. 12" INLET TYPE GRATE.
20. PROVIDE 12" HOLE WITH PVC SLEEVE TO SERVE AS SUMP.
21. 1" OCAL CONDUIT WITH 2-#14, 1-#14 GRD. CONDUCTORS FROM CLA-VAL POWER GENERATOR ELECTRONICS/BATTERY HOUSING TO MCCROMETER FLOW METER SIGNAL CONVERTER. 24 VDC. ATTACH CONDUIT TO INTERIOR WALL OF VAULT WITH GALVANIZED STRUT AND SS ANCHORS.
22. CLA-VAL E-X143IP POWER GENERATOR ELECTRONICS/BATTERY HOUSING MOUNTED ON VAULT WALL WITH SS ANCHORS, OR APPROVED EQUAL.
23. MCCROMETER PROCOMM FLOW METER SIGNAL CONVERTER MOUNTED ON VAULT WALL WITH SS ANCHORS, OR APPROVED EQUAL.
24. 1" OCAL CONDUIT FROM FLOW METER SIGNAL CONVERTER TO JUNCTION BOX AT RCSD WATER TREATMENT FACILITY. INSTALL CAT 5E CABLE WITH RJ-45 CONNECTORS ON EACH END. BELDEN 1701A OR APPROVED EQUAL.

VAULTS DETAIL (1/2)

SCALE: 1/2"=1'-0"



LEGEND:

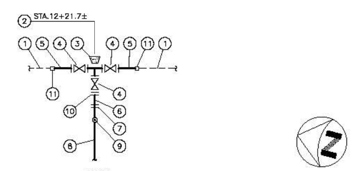
1. EXISTING WVWD 12" PVC PIPELINE.
2. 12"x12" FLANGED DUCTILE IRON TEE.
3. THRUST BLOCK PER STD. DWG. G40.
4. 12" FLANGED GATE VALVE.
5. 12" FLANGE x MJ ADAPTER.
6. 12" DISMANTLING JOINT (ROMAC OR APPROVED EQUAL).
7. 12" CLASS E FLANGE (SHIP FLANGE LOOSE).
8. 12" CML&C WELDED STEEL PIPE WITH FULLY WELDED JOINTS.
9. TEMPORARY 2" TOP OUTLET.
10. 12" TEMPORARY TEST PLATE.

NOTES:

1. PRIOR TO CONSTRUCTION, CONTRACTOR SHALL EXCAVATE AND EXPOSE EXISTING 12" PIPELINE AT CONNECTION POINT TO DETERMINE ITS EXACT LOCATION (HORIZONTAL AND VERTICAL), DIAMETER, AND MATERIAL.
2. WVWD WILL CLOSE EXISTING VALVES IN WILSON STREET. CONTRACTOR SHALL DEWATER EXISTING PIPELINE SO THAT NO OPEN END BECOMES SUBMERGED AND BEGIN CONSTRUCTION BY CUTTING IN 12"x12" TEE AND TWO (2) 12" GATE VALVES (EASTERLY AND SOUTHERLY). THEREAFTER, CONTRACTOR SHALL INSTALL 12" DISMANTLING JOINT AND 12" CML&C WELDED STEEL PIPE WITH TEMPORARY TEST PLATE AND 2" TOP OUTLET FOR TESTING.
3. AFTER 12" PIPELINE HAS BEEN TESTED AND DISINFECTED BY CONTRACTOR AND ACCEPTED BY DISTRICT, THE DISTRICT WILL CLOSE EXISTING VALVES TO ISOLATE THE CONNECTION LOCATION. THEREAFTER, CONTRACTOR SHALL DEWATER PROPOSED PIPELINE SO THAT NO OPEN ENDS OF THE PROPOSED PIPELINE BECOMES SUBMERGED, REMOVE TEST PLATE AND 2" TOP OUTLET AND PLUG 2" OUTLET.
4. FITTINGS AND APPURTENANCES FOR CONNECTION TO WVWD SHALL BE KEPT CLEAN DURING INSTALLATION AND SHALL BE SWABBED WITH CHLORINE SOLUTION BEFORE INSTALLATION.
5. CONTRACTOR SHALL FURNISH ALL SURVEYING AND MEASUREMENTS REQUIRED TO DETERMINE EXACT LOCATION AND DIAMETER OF EXISTING 12" PIPELINE AT CONNECTION POINT.

CONNECTION DETAIL AT STA.10+00.0± (2/2)

N.T.S.



LEGEND:

1. EXISTING RCSD 12" ACP PIPELINE.
2. 12"x12" FLANGED DUCTILE IRON TEE.
3. THRUST BLOCK PER STD. DWG. G40.
4. 12" FLANGED GATE VALVE.
5. 12" FLANGE x PE DUCTILE IRON SPOOL, (3' MINIMUM).
6. 12" DISMANTLING JOINT (ROMAC OR APPROVED EQUAL).
7. 12" CLASS E FLANGE (SHIP FLANGE LOOSE).
8. 12" CML&C WELDED STEEL PIPE WITH FULLY WELDED JOINTS.
9. TEMPORARY 2" TOP OUTLET.
10. 12" TEMPORARY TEST PLATE.
11. 12" TRANSITION COUPLING.

NOTES:

1. PRIOR TO CONSTRUCTION, CONTRACTOR SHALL EXCAVATE AND EXPOSE EXISTING 12" PIPELINE AT CONNECTION POINT TO DETERMINE ITS EXACT LOCATION (HORIZONTAL AND VERTICAL), DIAMETER, AND MATERIAL.
2. RCSD WILL CLOSE EXISTING VALVES IN FLEETWOOD DRIVE. CONTRACTOR SHALL DEWATER EXISTING PIPELINE SO THAT NO OPEN END BECOMES SUBMERGED AND BEGIN CONSTRUCTION BY CUTTING IN 12"x12" TEE AND 12" GATE VALVE (WESTERLY). THEREAFTER, CONTRACTOR SHALL INSTALL 12" DISMANTLING JOINT AND 12" CML&C WELDED STEEL PIPE WITH TEMPORARY TEST PLATE AND TOP OUTLET FOR TESTING.
3. AFTER 12" PIPELINE HAS BEEN TESTED AND DISINFECTED BY CONTRACTOR AND ACCEPTED BY DISTRICT, THE DISTRICT WILL CLOSE EXISTING VALVES TO ISOLATE THE CONNECTION LOCATION. THEREAFTER, CONTRACTOR SHALL DEWATER PROPOSED PIPELINE SO THAT NO OPEN ENDS OF THE PROPOSED PIPELINE BECOMES SUBMERGED, REMOVE TEST PLATE AND 2" TOP OUTLET AND PLUG 2" OUTLET.
4. FITTINGS AND APPURTENANCES FOR CONNECTION TO RCSD SHALL BE KEPT CLEAN DURING INSTALLATION AND SHALL BE SWABBED WITH CHLORINE SOLUTION BEFORE INSTALLATION.
5. CONTRACTOR SHALL FURNISH ALL SURVEYING AND MEASUREMENTS REQUIRED TO DETERMINE EXACT LOCATION AND DIAMETER OF EXISTING 12" PIPELINE AT CONNECTION POINT.
6. ALL CUTTING AND HANDLING EXISTING ACP SHALL BE IN ACCORDANCE WITH CCR, TITLE 8, LATEST.

CONNECTION DETAIL AT STA.12+21.7± (3/2)

N.T.S.

VERIFY SCALES BAR IS ONE INCH ON ORIGINAL DRAWING 0 — 1" IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY	SYM	REVISIONS	DATE	BY

REGISTERED PROFESSIONAL ENGINEER — SINISA SARIC — No. 55367 — CIVIL — STATE OF CALIFORNIA

KRIEGER & STEWART Engineering Consultants
3602 University Avenue • Riverside, CA 92501
www.kriegerandstewart.com • 951 • 684 • 6900

APPROVED BY [signature]
REGISTERED ENGINEER No. 55367 DATE 06/23/23

SCALE	AS SHOWN
FIELD BOOK	N/A
DESIGN	SS
DRAWN	SPK
CHECKED	SS

RUBIDOUX COMMUNITY SERVICES DISTRICT

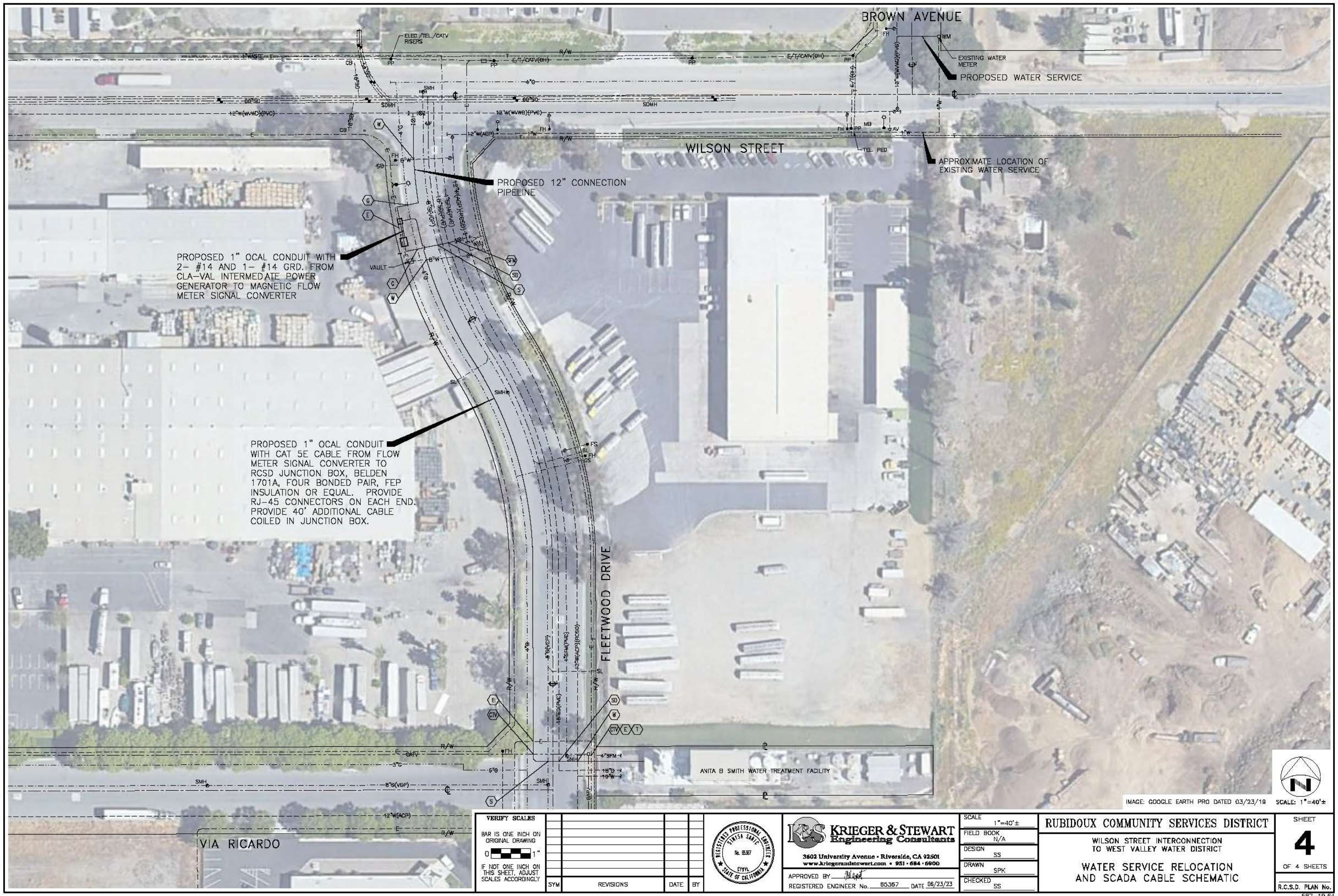
WILSON STREET INTERCONNECTION
TO WEST VALLEY WATER DISTRICT

MISCELLANEOUS DETAILS

SHEET 3 OF 4 SHEETS

R.C.S.D. PLAN No. 587-19.64

DWG. NO.: 587-19.64 FILE NO.: 587-19.64 UPDATE BY: TNW PROJ. ENGR.: SS PLOT DATE: 12/04/23 PLOT TIME: SCALE: 1=1



VERIFY SCALES

BAR IS ONE INCH ON ORIGINAL DRAWING

0 1"

IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

SYM	REVISIONS	DATE	BY

REGISTERED PROFESSIONAL ENGINEER SINISA SARIC No. 65367 CIVIL STATE OF CALIFORNIA

KRIEGER & STEWART Engineering Consultants
3602 University Avenue • Riverside, CA 92501
www.kriegerandstewart.com • 951 • 684 • 6900

APPROVED BY [signature]
REGISTERED ENGINEER No. 65367 DATE 06/23/23

SCALE 1"=40'±
FIELD BOOK N/A
DESIGN SS
DRAWN SPK
CHECKED SS

RUBIDOUX COMMUNITY SERVICES DISTRICT

WILSON STREET INTERCONNECTION TO WEST VALLEY WATER DISTRICT

WATER SERVICE RELOCATION AND SCADA CABLE SCHEMATIC

SHEET 4 OF 4 SHEETS

R.C.S.D. PLAN No. 587-19.64

Appendix D

RCSD Board Resolution No. 2024-918 for the Wilson Intertie Project

RESOLUTION NO. 2024-918

A RESOLUTION OF THE BOARD OF DIRECTORS OF THE RUBIDOUX COMMUNITY SERVICES DISTRICT AUTHORIZING THE GENERAL MANAGER, OR DESIGNEE, TO APPLY FOR, RECEIVE, AND ENTER INTO A COOPERATIVE AGREEMENT, AND ADMINISTER A GRANT FOR THE FY 2025 BUREAU OF RECLAMATION DROUGHT RESPONSE PROGRAM DROUGHT RESILIENCY PROJECTS FOR FISCAL YEAR 2025 (R25AS00013) —INTERTIE PROJECT

WHEREAS, the General Manager, or designee, of the Rubidoux Community Services District ("DISTRICT"), may legally bind the District by their signature; and

WHEREAS, the DISTRICT wishes to enter into the Bureau of Reclamation's Drought Response Program Drought Resiliency Projects for Fiscal Year 2025 Grant to fund the Wilson Intertie with West Valley Water District in the amount not to exceed $500,000; and DISTRICT will provide the amount of funding and/or in-kind contributions specified in the funding plan; and

WHEREAS, the DISTRICT Board of Directors and the General Manager have reviewed and support the application submitted, and

WHEREAS, the DISTRICT will work with the Bureau of Reclamation to meet established guidelines for entering into a cooperative agreement.

NOW BE IT THEREFORE, BE IT RESOLVED that the Board of Directors of the DISTRICT, hereby supports the application submitted and authorizes the General Manager to execute any and all documents associated with this grant process.

PASSED AND ADOPTED, at a regular meeting of the Board of Directors of the Rubidoux Community Services District, held on the 19th of September 2024, by the following vote:

AYES: John Skerbelis, Hank Trueba, Jr., F. Forest Trowbridge,

Armando Muniz

AWAY:

NOES: Bernard Murphy

ABSENT:

ABSTENTIONS:

John Skerbelis, President
Rubidoux Community Services District

(Seal)

ATTEST:

Brian R. Laddusaw
General Manager

APPROVED AS TO FORM AND CONTENT:

John R. Harper
District Counsel

Appendix E

Letters of Support for the Wilson Intertie Project

WESTERN WATER
Powered by water.
Driven by service.

Western Municipal Water District
14205 Meridian Parkway
Riverside, CA 92518
General Business | 951.571.7100
Customer Service | 951.571.7104

Craig D. Miller
General Manager

Bureau of Reclamation
Financial Assistance Operations Section
Attn: NOFO Team
P.O. Box 25007
Denver Federal Center
Denver, CO 80225-0007

RE: Support for Rubidoux Community Services District's U.S. Bureau WaterSMART Drought Response Program Grant Application—Wilsor

Dear NOFO Team,

Western Municipal Water District is pleased to express its support for the U.S. Bureau of Reclamation WaterSMART Drought Response Program Drought Resiliency Projects Grant application for the Wilson Intertie with West Valley Water District (WVWD), submitted by Rubidoux Community Services District (RCSD).

Western Municipal Water District is one member of a five-party agreement to supply State Water Project supplies to the Wilson Intertie. The interconnection with West Valley Water District will have the capacity to supply up to 2,500 gallons per minute of that imported potable water.

RCSD's current water supply comes from a highly reliable groundwater source, but true water supply reliability and drought resilience depends on water supply options that address extraordinary circumstances and future ability to serve a growing population. The Wilson Intertie with WVWD will provide a vital alternative water source to help maintain the District's water supply reliability, drought resiliency, and ultimately, the overall robustness of supply.

This connection could be activated in emergency situations, such as a tank breach or a sudden water quality issue with a well, temporarily augmenting water supply to RCSD customers with safe potable water. The Wilson Intertie could also be used to meet future water demands due to population growth.

Western Municipal Water District asks for your consideration of the Rubidoux Community Services District WaterSmart grant application for the Wilson Intertie with West Valley Water District, which will be vital to drought resilience and water supply reliability in our region.

Sincerely,

Ryan Shaw

Ryan Shaw
Director of Water Resources

West Valley Water District

ESTABLISHED AS A PUBLIC AGENCY IN 1952

WEST VALLEY WATER DISTRICT'S MISSION IS TO PROVIDE OUR CUSTOMERS WITH SAFE, HIGH QUALITY AND RELIABLE WATER SERVICE AT A REASONABLE RATE AND IN A SUSTAINABLE MANNER.

September 24, 2024

Bureau of Reclamation
Financial Assistance Operations Section
Attn: NOFO Team
P.O. Box 25007
Denver Federal Center
Denver, CO 80225-0007

RE: Support for Rubidoux Community Services District's U.S. Bureau of Reclamation WaterSMART Drought Response Program Grant Application—Wilson Intertie

Dear NOFO Team,

West Valley Water District (WVWD) is proud to offer support to Rubidoux Community Services District's U.S. Bureau of Reclamation WaterSMART Drought Response Program Drought Resiliency Projects Grant application for the Wilson Intertie with WVWD.

Although Rubidoux Community Services District (RCSD) currently gets its water from a highly reliable groundwater source, its water supply reliability and resistance to drought requires developing a diverse portfolio of water supply options. This interconnection with our district will provide a viable option for maintaining a robust supply of water that is further resilient to drought and both foreseen and unforeseen circumstances.

The interconnection with WVWD will be built near Wilson St. and Fleetwood Dr. and will be designed to supply up to 2,500 gallons per minute of imported potable water. WVWD is one member of a five-party agreement to supply State Water Project supplies to the Wilson Intertie.

This connection could be activated in emergency situations, such as a well becoming contaminated or a large water tank being forced out of service for repairs, temporarily augmenting water supply to RCSD customers with safe potable water. The Wilson Intertie could also be used to meet future water demands due to population growth.

WVWD appreciates your consideration of Rubidoux Community Services District WaterSmart grant application for the Wilson Intertie with our district, which will be vital to drought resilience and water supply reliability in our region.

Sincerely,

John Thiel, General Manager

855 W. Base Line Rd., P.O. Box 920 / Rialto, CA 92377-0920
Ph: (909) 875-1804 / Fax: (909) 875-1849
www.wvwd.org

FAX (909) 875-7284 Administration
FAX (909) 875-1361 Engineering
FAX (909) 875-1849 Customer Service

City of
JURUPA VALLEY
California

September 16, 2024

Bureau of Reclamation
Financial Assistance Operations Section
Attn: NOFO Team
P.O. Box 25007
Denver Federal Center
Denver, CO 80225-0007

RE: Support for Rubidoux Community Services District's U.S. Bureau of Reclamation WaterSMART Drought Response Program Grant Application—Wilson Intertie

Dear NOFO Team,

The City of Jurupa Valley is proud to offer our support for the Rubidoux Community Services District's U.S. Bureau of Reclamation WaterSMART Drought Response Program Drought Resiliency Projects Grant application for the Wilson Intertie with West Valley Water District.

The Rubidoux Community Services District ("District") service a population of nearly 40,000 residents within our city. While the District has a highly reliable source of groundwater for its operations, its water supply reliability and resistance to drought requires developing a diverse portfolio of water supply options. The Wilson Intertie with West Valley Water District (WVWD) will provide another water source and help maintain the District's water supply reliability and drought resiliency.

This proposed connection with WVWD will create a 12" pipeline to supply up to 2,500 gallons per minute of potable water supply. It will ensure water supply reliability in emergency situations—for example, if a well becomes contaminated or if a water tank is damaged and must be taken out of service for repairs. In those situations, the Wilson Intertie can be activated, supplying imported water to ensure a safe and adequate water supply. The Wilson Intertie could also be used to route available water through adjacent water agencies to meet future water demands as our city grows.

We thank you for your consideration of this grant application for the Rubidoux Community Services District, to help it meet its current and future drought resiliency and water supply reliability goals.

Sincerely,

Rod B. Butler

Rod Butler,
City Manager, City of Jurupa Valley

Santa Ana Watershed Project Authority

Over 50 Years of Innovation, Vision, and Watershed Leadership

September 30, 2024

Bureau of Reclamation
Financial Assistance Operations Section
Attn: NOFO Team
P.O. Box 25007
Denver Federal Center
Denver, CO 80225-0007

RE: **Support for Rubidoux Community Services District's U.S. Bureau of Reclamation WaterSMART Drought Response Program Grant Application—Wilson Intertie**

Dear NOFO Team,

The Santa Ana Watershed Project Authority (SAWPA) strongly supports Rubidoux Community Services District's U.S. Bureau of Reclamation WaterSMART Drought Response Program Drought Resiliency Projects Grant application for the Wilson Intertie with West Valley Water District.

SAWPA, a Joint Powers Authority with five member agencies in southern California, works to advance innovative, integrated, and sustainable solutions that protect the Santa Ana River Watershed and its water resources. SAWPA provides planning services for the watershed through our One Water One Watershed (OWOW) program. By leading efforts in developing regional plans, programs, and projects that protect the water resources of the Santa Ana River basin, with the goal of maximizing beneficial uses within the watershed.

The Rubidoux Community Services District ("District") services a population of nearly 40,000 residents within the City of Jurupa Valley, including disadvantaged low-income neighborhoods. While the District has a highly reliable source of groundwater for its operations, its water supply reliability and resistance to drought requires developing a diverse portfolio of water supply options. The Wilson Intertie with West Valley Water District (WVWD) will provide another water source and help maintain the District's water supply reliability, drought resiliency, and the overall robustness of supply.

The proposed project will include creating an interconnection with WVWD near Wilson St. and Fleetwood Dr.. This 12" pipeline will supply up to 2,500 gallons per minute of potable water supply. This is critical to near-term water supply reliability in emergency situations—for example, if a well becomes contaminated or a large water tank must be taken out of service for repairs. In those situations, the Wilson Intertie can be activated, supplying water imported from the State Water Project to temporarily augment water supplies to District customers and ensure a safe and adequate water supply. In the long-term, the Wilson Intertie could be used to meet future water demands due to population growth by wheeling available water through adjacent water agencies as RCSD does not currently have a direct connection to regional water supplies.

SAWPA strongly supports the Rubidoux Community Services District WaterSmart grant application for the Wilson Intertie with West Valley Water District, which will be vital in helping the District ensure drought resilience and water supply reliability for its customers.

Sincerely,

Jeff Mosher
General Manger
Santa Ana Watershed Project Authority (SAWPA)