Participatory Budgeting Workshop No. 1

June 30, 2022

Prop 1 Round 2 Integrated Regional
Water Management (IRWM) Grant Funding

One Water One Watershed - Santa Ana Funding Area

Agenda

A. Introductions

B. SAWPA - Overview of OWOW Participatory Budgeting Process

    a) General Implementation Competition Pool
    b) Disadvantaged Community Implementation Competition Pool
    c) Geographic-Based Funding (i.e. Watershed-Wide vs. Upper Watershed funding)

C. SAWPA - Recap of OWOW Benefit Area Guidelines

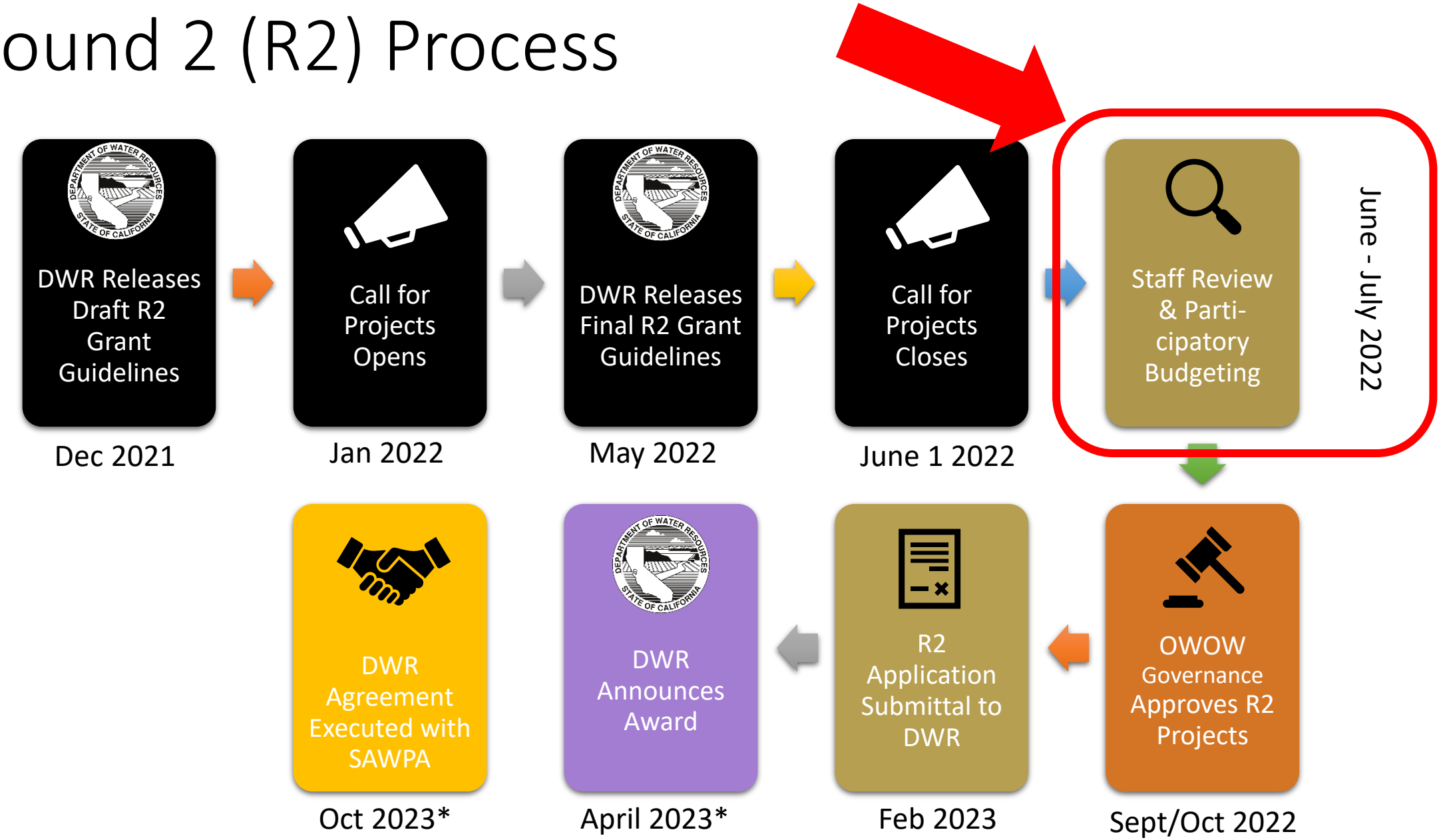
D. SAWPA – High Level Overview of SAWPA's Review Comments

E. Project Applicants – Describe your methodology for determining your benefit area and benefits claimed*

F. Next Steps Including Ranking of Projects

*Note: Use maps and PowerPoint slides provided by SAWPA. Five minutes allotted for each applicant.

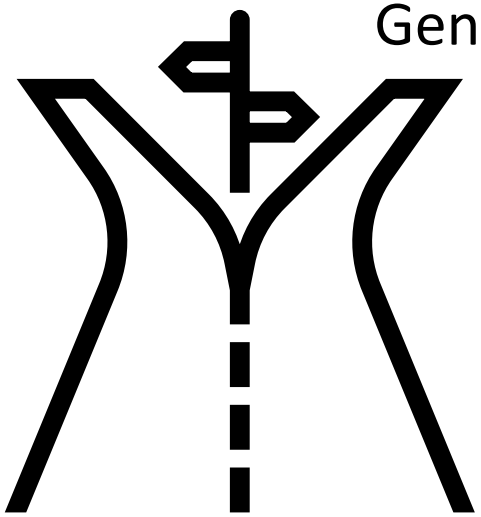
Round 2 (R2) Process



*Best estimate currently. Dates may change based on DWR's time needed to review applications.

Competition Pools for Your Project

Disadvantaged Community*



General Implementation

*Project must have at least 75% of the benefit area (as population and/or geographic area) must be considered "DAC". Can be a single benefit, and single jurisdictional project.

Recommended Round 2 Competition Pools (Not including North OC)

Competition Pools	Grant Amount
DAC	$4,095,000
General Implementation	$14,435,100
Upper Watershed*	$12,372,9423
Watershed Wide*	$2,062,157
DAC and General Total	**$18,530,100**

*Not a competition pool, funding gets distributed after projects are submitted and highest scoring projects are determined.

Projects Seeking Grant Funding by Category

Category	Projects	Grant Requested	Grant Available*
Disadvantaged Community	6	$13,116,020	$4,095,000
General Implementation	18	$54,700,206	$14,435,100**
Total	**24**	**$67,816,226**	**$18,530,100**

26 projects also submitted applicants in order to be included in the Santa Ana River Watershed IRWM OWOW Plan. Entities often take this action In order to be eligible for other State grant opportunities.

*There is also $7,175,543 available through the North Orange County IRWM group for projects received through their process. Projects received by their lead administering agency, Orange County Public Works, are not shown in the above table or in this presentation.

**This amount may increase by $2,000,000 due to roll over of funding from Prop 1 Round 1. Still awaiting approval by Department of Water Resources before it is officially increased.

Ranking Formulas

General Implementation:

$$\sum_{\text{6 categories}} \left(\frac{x\ benefit}{X\ Benefit} \times \text{WF} \right)$$

If Tribe Lead: x 10% of ∑ in ( )

If Regional: x 15% of ∑ in ( )

If New and Innovative: x 5% of ∑ in ( )

If Non-Profit Partner: x 5% of ∑ in ( )

DAC:

$$\sum_{\text{3 categories}} \left(\frac{x\ benefit}{X\ Benefit} \times \text{WF} \right)$$

If Tribe Lead: x 10% of ∑ in ( )

If Non-Profit Partner or Lead*: x 5% of ∑ in ( )

WF = Weighting Factor

*If Non-Profit is the lead, the percentage increases to 10%.

Purpose of Participatory Budgeting Process

- Process developed with the goals of **transparency**, objectivity, and deliberation.
- Purpose was to receive input on the projects proposed in the OWOW process
  - Are the benefits claimed realistic?
  - Is watershed improved without unreasonable expense/detriment to others?
  - Includes active participation of multiple agencies?
- To gather your input, project applicants and stakeholders need to have general knowledge of each other's projects.
  - Which is the reason for standardized two-slide PowerPoint presentations from each of the 24 projects today.

Participatory Budgeting Explanation, Continued

- Up to three participatory budgeting workshops will then be held with applicants for them to:
  - Explain/defend their benefits claimed and the geographic areas benefiting, and
  - Come to consensus on the final recommended funding list of DAC and General Implementation projects.
- And we have the **ranking formula** and **grant funding allocation formula** to help guide this process.
  - SAWPA staff and stakeholder comments will also help guide participatory budgeting process.
- After participatory budgeting process ends in July 2022, SAWPA staff will recommend final list of projects to the OWOW Steering Committee and SAWPA Commission.
  - Included will be the Orange County-based projects submitted to SAWPA by the lead administering agency for the North OC IRWM process.

Grant Funding Allocation Formula

- Purpose is to allocate funding to those top projects based on those top projects share of the sum of the weighted scores, and
- Include any State priority projects near threshold (if applicable).

Project ID	Weighted Score
1	699.90
2	643.89
3	526.26
4	424.44
5	401.53
6	298.39
7	246.87
8	244.25
9	170.26
10	143.83
11	101.49
12	93.87

Top project threshold.

Grant Allocation Formula for Round 2*

Before Running Formula Each Project is "Capped" at Their Grant Request

$$\left(\frac{x\ Weighted\ Score\ of\ Your\ Top\ Project}{X\ Total\ Weighted\ Score\ of\ Top\ Projects} \times \text{Grant Available} \right) + \left(\text{Add More Grant To Your Project Via Formula in first ( )} \right)$$

Additional Stages of Allocation Formula Done if There is Left-Over Grant Due to Project Request "Caps"

*Same formula used in last Prop 1 round.

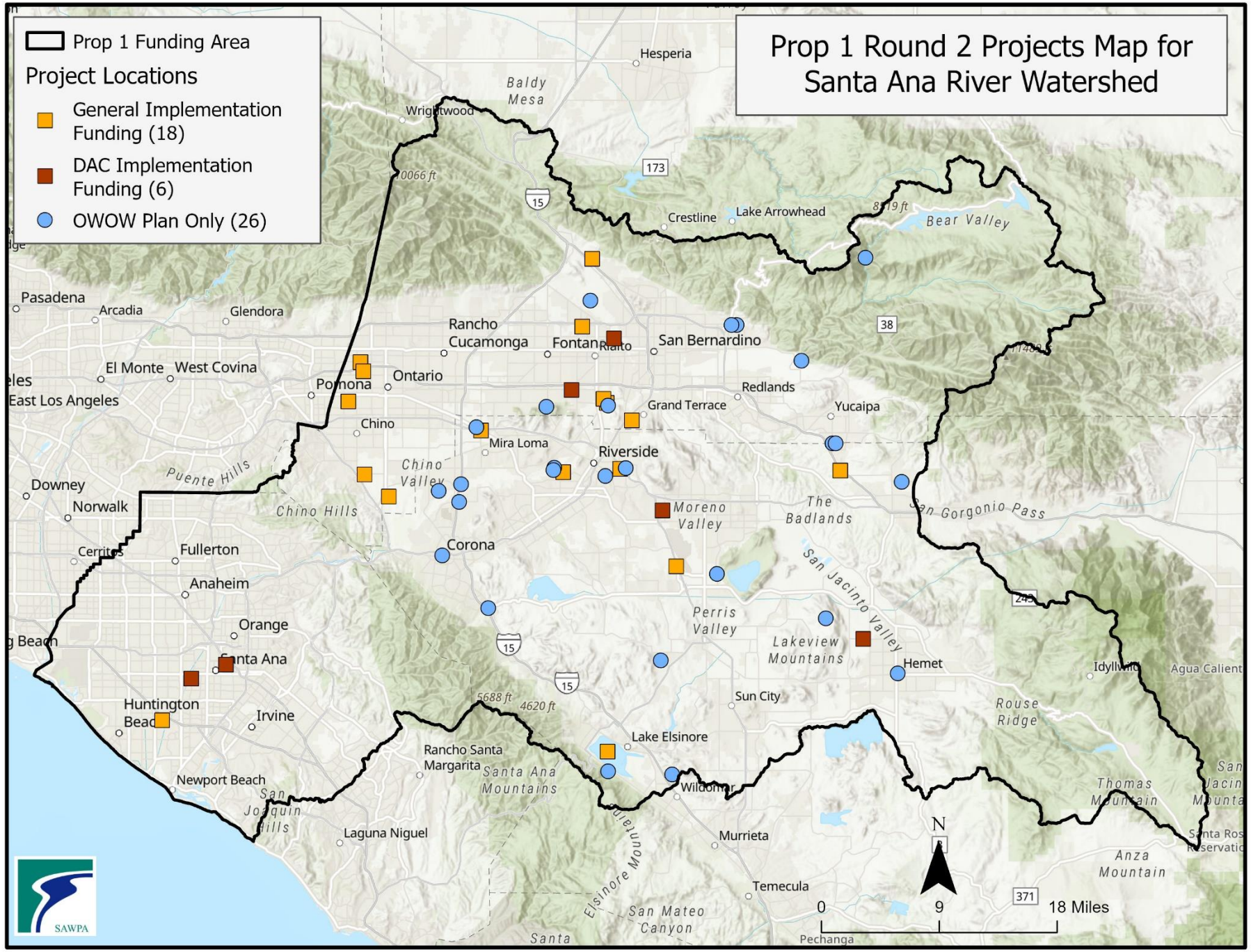
Brief Overview of SAWPA Staff Comments

- Comments reflect similar feedback we received from the Department of Water Resources in Prop 1 IRWM Round 1
- Many are viewed through the lens of the IRWM philosophy,
  - Is the project integrated and regional?
  - Does it provide new benefits to the region?
  - How does the project impact other portions of the region?
- You are not required to address those comments in your remarks today (your responses are required in writing by the deadline provided),
- We may receive additional comments from stakeholders by July 18 and those will be provided to you (with time for you to respond).

Project Changes Policy

A. An applicant may make changes based on SAWPA quality control comments in the document provided (as well as items based on DWR's guidelines and clarifications that they provide after the OWOW Call for Projects deadline). Some of the quality control comments may lead you to recalculate your benefit area and greenhouse gas emissions.

B. What is not allowed, is a modifications to the project's scope of work using information already available before the OWOW Call for Projects deadline. Or unilaterally adding to the benefits claimed in the Call for Projects application.



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List of General Implementation Projects Seeking Funding

Project	Lead Applicant
Lake Rialto Habitat Management and Community Open Space Project	City of Rialto
Large Landscape Water Efficiency Program	Inland Empire Utilities Agency
City of Rialto Recycled Intertie	Inland Empire Utilities Agency
Etiwanda Intervalley Water Quality and Water Resiliency Project Phase-1A	Jurupa Community Services District
Phase 1 - Lake Elsinore Algae Harvesting and Nutrient Removal Project	Lake Elsinore and San Jacinto Watersheds Authority
Wellhead Nitrate Treatment for Wells 4 & 27	Monte Vista Water District
Well Pump Replacements	Monte Vista Water District
Well 2 Replacement	Monte Vista Water District
Well 4 Replacement	Monte Vista Water District
Regional Water Distribution System Leak Detection and Repair Program	Municipal Water District of Orange County
Water Well RN #6 Nitrate Removal System	Riverside Highland Water Company
Cable Creek Basin (Upper)	San Bernardino County Flood Control District
Improved Lake Ctrculation at Prado Regional Park	San Bernardino County Regional Parks
Cactus Basins Connector Pipeline	San Bernardino Valley Municipal Water District
Santa Ana River Sustainable Parks & Tributaries Water Reuse (Purple Pipe)	San Bernardino Valley Municipal Water District
Santa Ana River Watershed Weather Modification Pilot Project	SAWPA
Water Quality of Recycled Water Used in Local Groundwater Recharge	Western Municipal Water District
Calimesa Aquifer Storage and Recovery	Yucaipa Valley Water District

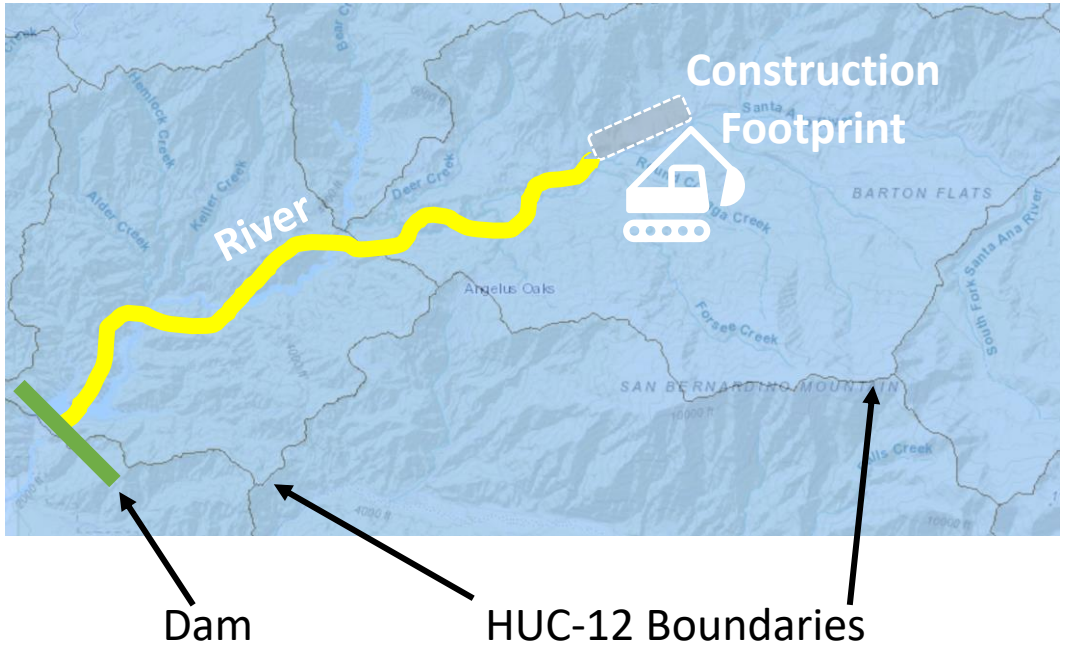
List of DAC Projects Seeking Funding

Project	Lead Applicant
Box Springs Mutual Water Company Well Improvement Project	California Rural Water Association
Cottonwood Avenue Recycled Water Pipeline (East)	Eastern Municipal Water DIstrict
New Washington Well Project	City of Santa Ana
Recycled Water Use Expansion Project	City of Santa Ana
Shamrock and Meridian Septic to Sewer Conversion Project	City of Rialto
Water Quality: Lead Service Line Replacements in Bloomington DAC	West Valley Water District

OWOW Benefit Area Guidance

- Benefit Area limits include the following (listed by project benefit type):
  - **Ecosystem Projects:** US Geological Survey designated HUC-12* level watersheds,
  - **Surface Water Quality and Groundwater Quality:** HUC-12s and DWR-118 Groundwater Basins,
  - **Coastal water quality:** 10-mile buffer areas, and
  - **Inland water body open to public:** 10-mile buffer areas.

Benefit Area Limit Example

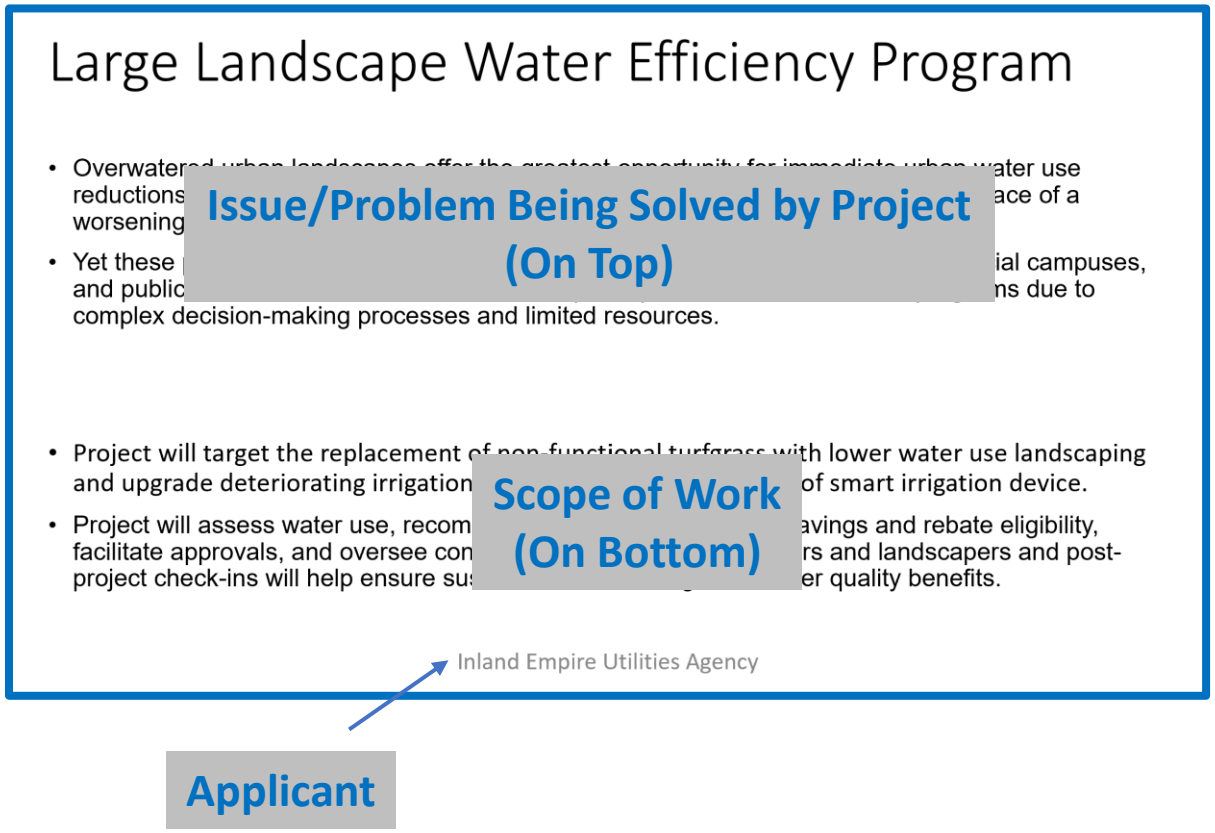


*HUC = Hydraulic Unit Code (more info: https://water.usgs.gov/GIS/huc.html)

Organization of Each Project's Slides

- Each project has two slides
  - **First slide** includes the issue/problem being solved at the top, and the scope of work of the project at the bottom;
  - Text used in the slides is taken directly from the application write-up;
  - **Second slide** shows the map created by SAWPA staff using the files submitted by the project applicant. Highlighted is the project's **benefit area**.

Example of a Project's First Slide

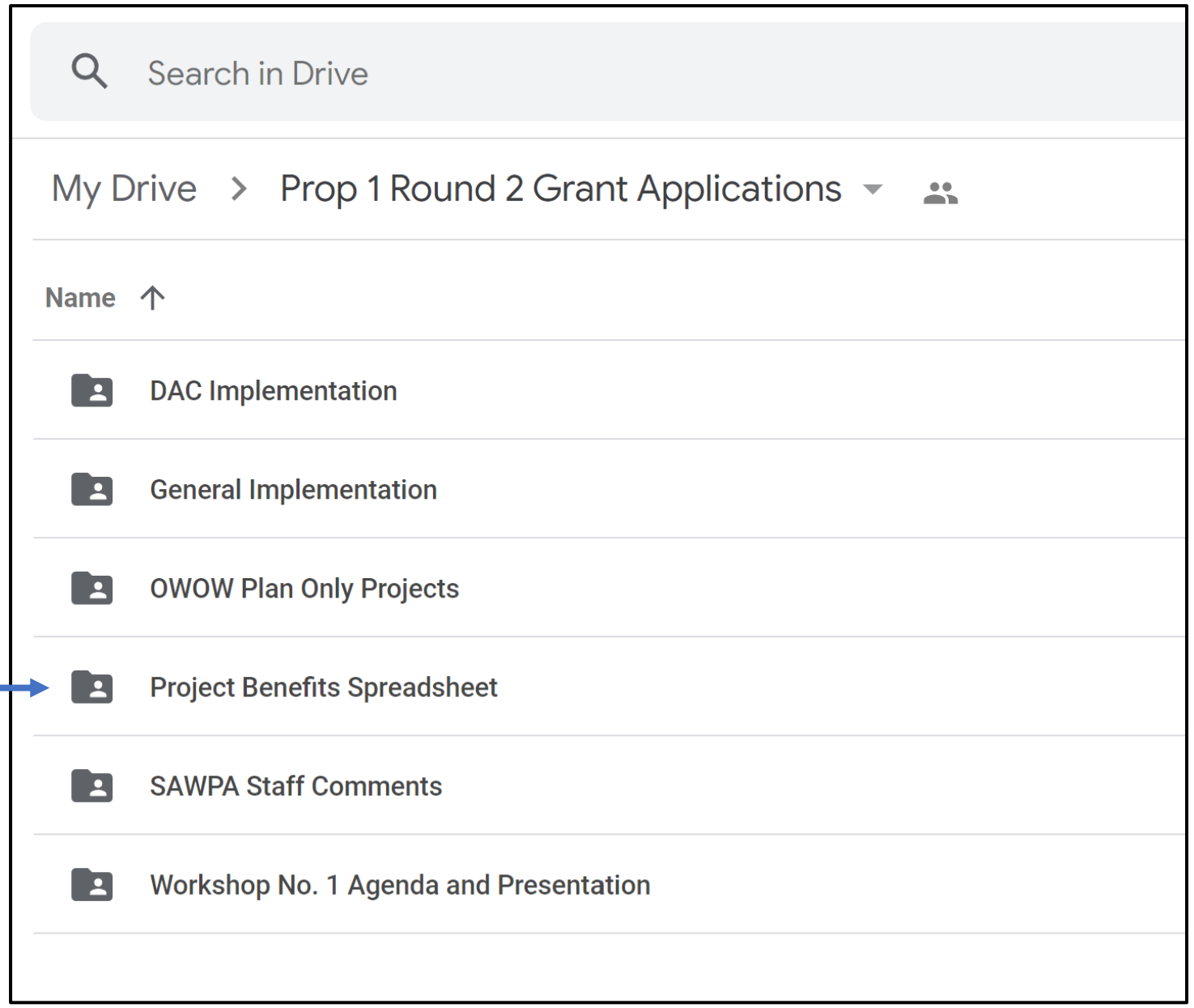


Why Do Benefit Areas Matter?

- The size of a benefit area is often directly linked to the number of benefits claimed for a particular project.
  - And the disadvantaged community (percentage) benefit category is directly tied to the size of a benefit area.
- And more benefits (numerically) lead to a larger score in the OWOW ranking formula.

Online Folders

Shows the benefits and extra points claimed

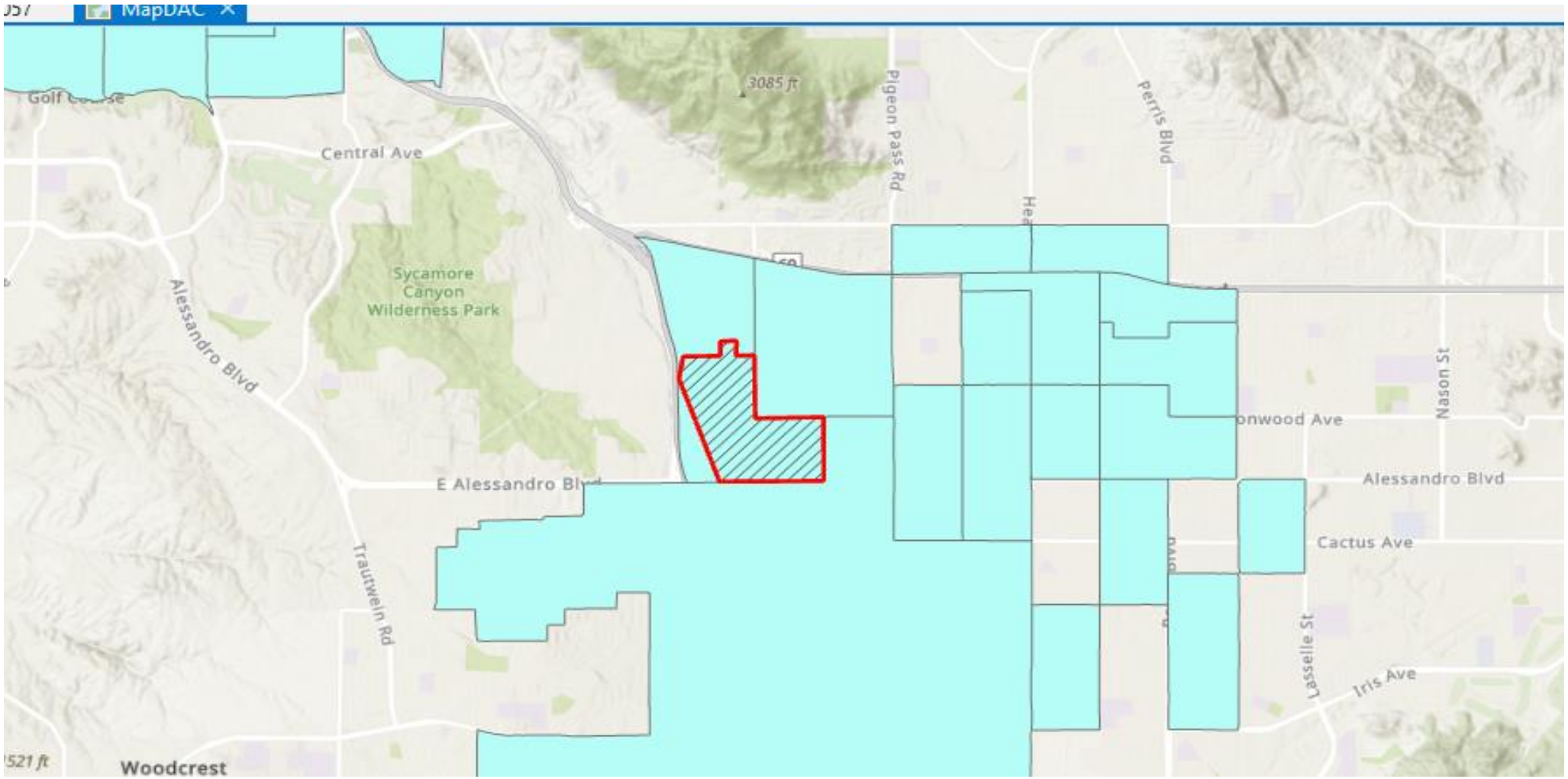


Disadvantaged Community Implementation Projects

Box Springs Mutual Water Company Well Improvement Project

- The Mutual Company's sole production well does not meet State standards for water quality (nitrates) or sanitary seal.
- Drilling to lower water bearing zones will decrease the susceptibility of nitrate contamination and secure a source even if the water table declines.
- The well will allow the system to not have to purchase water from the neighboring system which will decrease its costs as well as free up storage space currently used for water blending.

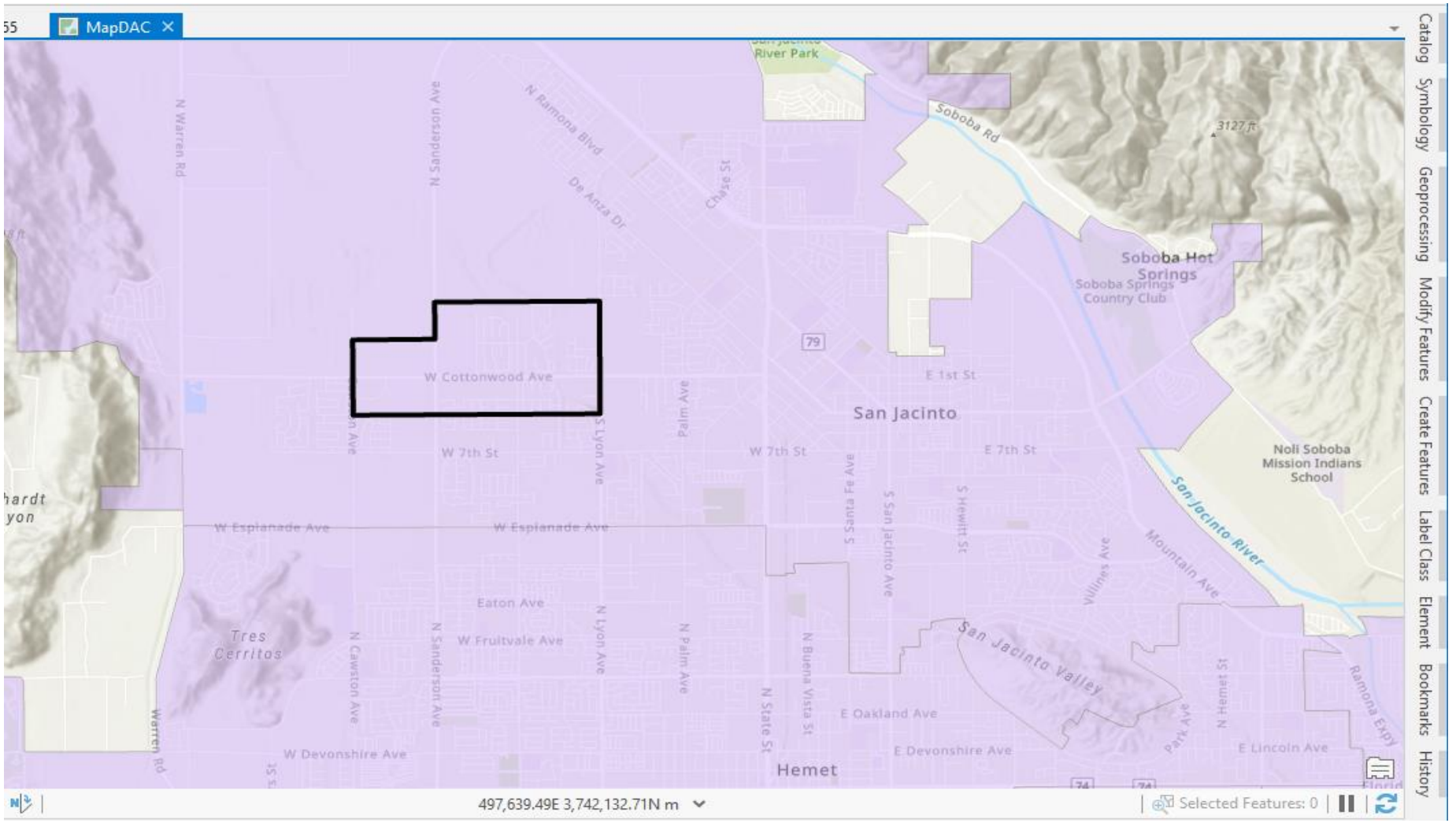
- The new 1,050 GPM well will be drilled to identify low nitrate water zones and secure a low nitrate source for the system.
- A diesel, pad mounted generator and automatic transfer switch will be installed to provide emergency standby power.
- The new well is to become the primary source for the entire system.


MapDAC
3085 ft
Golf Course
Central Ave
Pigeon Pass Rd
Perris Blvd
Sycamore
Canyon
Wilderness Park
Alessandro Blvd
Nason St
Alessandro Blvd
Cactus Ave
Trautwein Rd
Iris Ave
Woodcrest

Cottonwood Ave Recycled Water Pipeline (East)

- The project replaces potable water for landscape irrigation with recycled water, reducing potable water use and lowering cost to end users.
- EMWD recently collaborated with the City of San Jacinto to retrofit city parks and streetscapes with recycled water through the Recycled Water Accelerated Retrofit Program.
- The project will connect an existing recycled water distribution pipeline allowing for the repurposing of an existing 36-inch recycled water transmission pipeline to support the District's Purified Water Replenishment (PWR) groundwater augmentation project currently in final design.

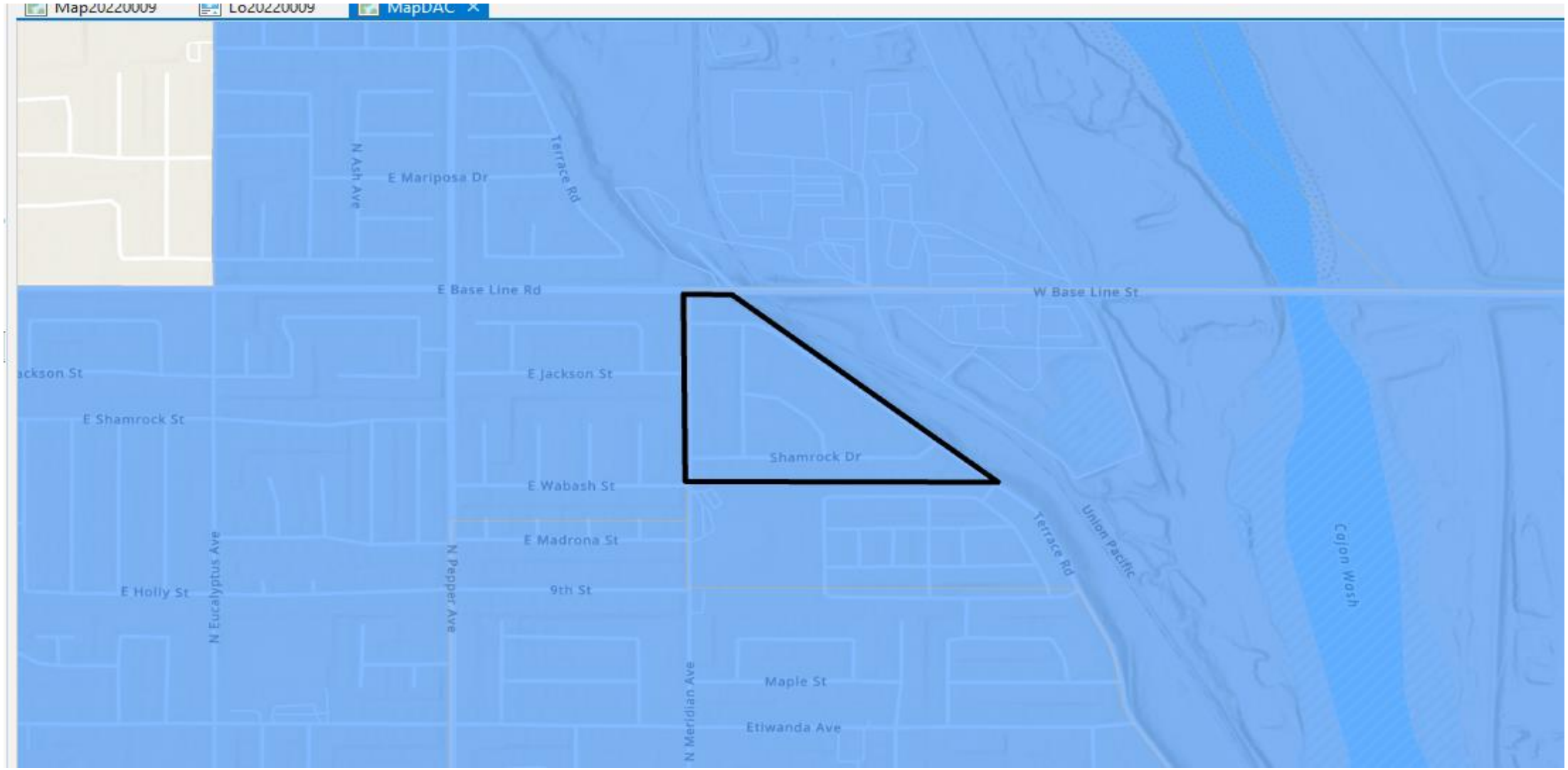
- The project includes construction of approximately 7,850 lineal feet of 12-inch recycled water distribution pipeline.
- The project pipeline connects to the existing 24-inch pipeline in Cawston Avenue and runs easterly along Cottonwood Avenue in the public right-of -way where it connects to an existing 8" diameter pipe in Lyon Avenue in the City of San Jacinto.


MapDAC
Catalog
Symbology
Geoprocessing
Modify Features
Create Features
Label Class
Element
Bookmarks
History
W Cottonwood Ave
San Jacinto
Soboba Hot Springs
Soboba Springs Country Club
Noli Soboba Mission Indians School
San Jacinto River
Soboba Rd
3127 ft
W 7th St
E 1st St
E 7th St
W Esplanade Ave
Eaton Ave
W Fruitvale Ave
Tres Cerritos
E Oakland Ave
E Devonshire Ave
W Devonshire Ave
E Lincoln Ave
Hemet
N Ramona Blvd
De Anza Dr
Chase St
N Sanderson Ave
N Warren Rd
Warren Rd
Palm Ave
N Lyon Ave
S Lyon Ave
S Santa Fe Ave
S San Jacinto Ave
S Hewitt St
Villines Ave
Mountain Ave
San Jacinto River
San Jacinto Valley
N Buena Vista St
N State St
N Hemet St
Park Ave
Ramona Expy
N Cawston Ave
79
74
497,639.49E 3,742,132.71N m
Selected Features: 0

Shamrock and Meridian Septic to Sewer Conversion Project

- Septic systems with improper maintenance or septic system design can lead to premature system failure, degradation of groundwater, and other forms of contamination, including nitrate, phosphate, bacteria, and viruses.
- The pollution prevention help the City sustainably manage and protect the groundwater basins that are the primary source of drinking water in the region.
- Once connected to the sewer, users will pay Rialto wastewater rates and no longer need to pay for septic maintenance, repairs, or replacement

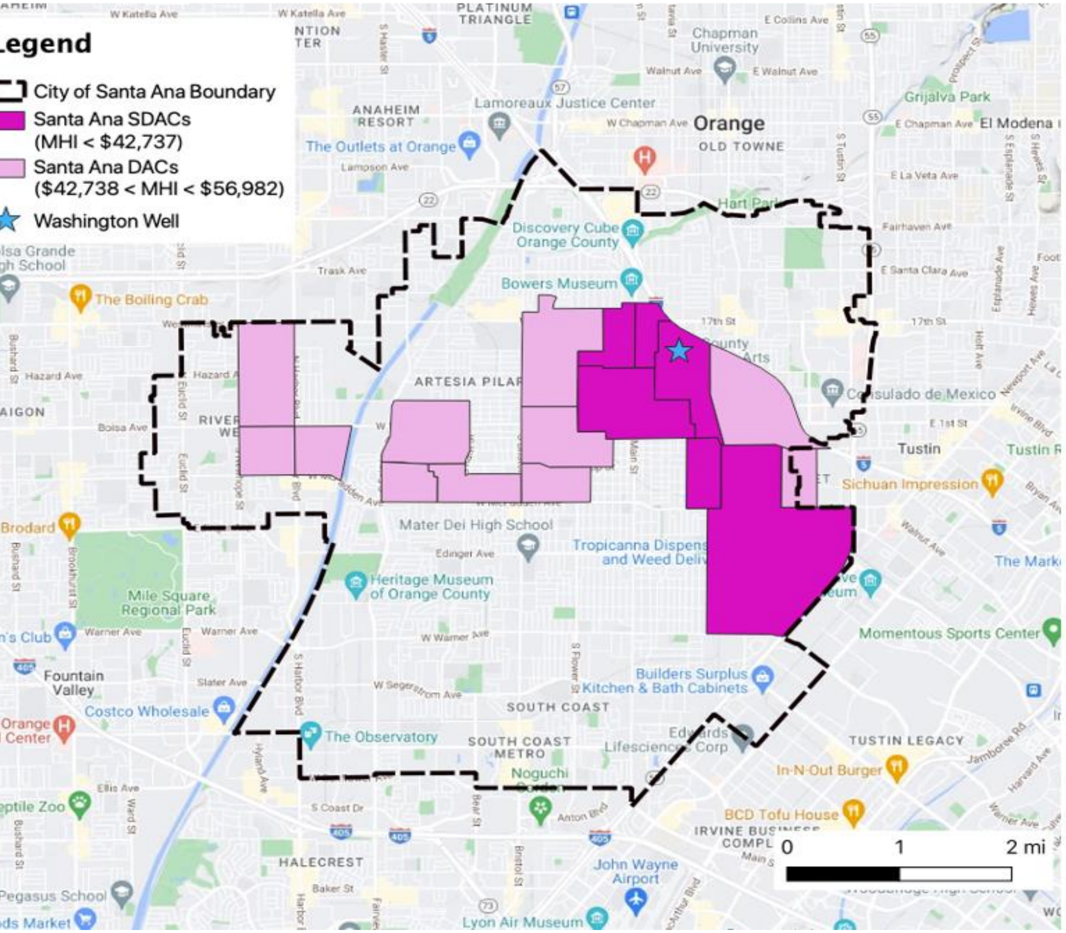
- The project will extend Rialto's existing gravity sewer system with approximately 4,470 feet of 8-inch diameter sewer main pipeline and connections to serve a 62-parcel neighborhood currently using septic tanks for wastewater treatment.

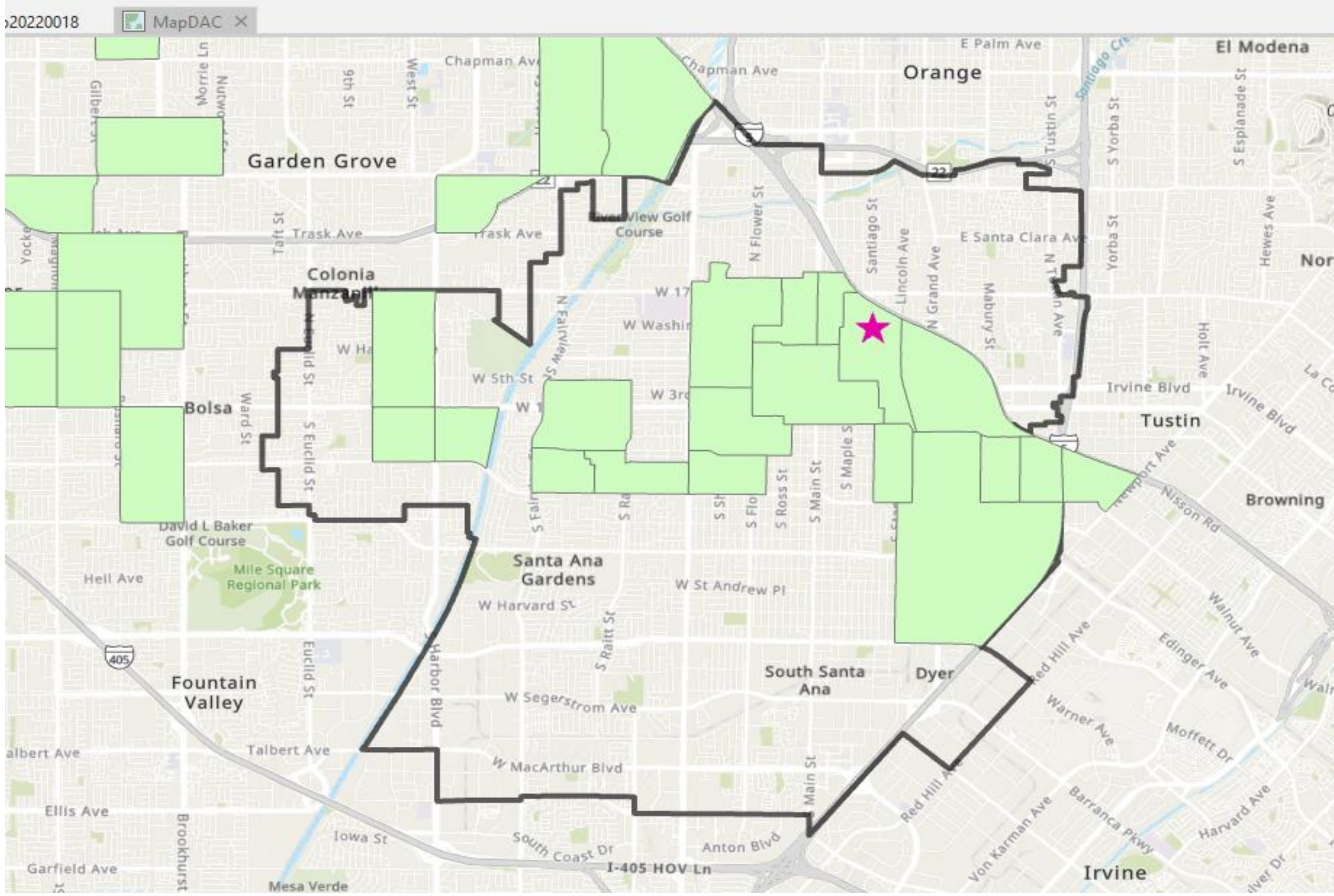

Map20220009
Lo20220009
MapDAC
N Ash Ave
E Mariposa Dr
Terrace Rd
E Base Line Rd
W Base Line St
ackson St
E Jackson St
E Shamrock St
Shamrock Dr
E Wabash St
E Madrona St
N Eucalyptus Ave
N Pepper Ave
E Holly St
9th St
Terrace Rd
Union Pacific
Colon Wash
N Meridian Ave
Maple St
Etiwanda Ave

New Washington Well Project

- The project offers a local supply to help to build long term resilience and close the projected gap between future demand and available supply, consistent with both City of Santa Ana and Metropolitan Water District drought management policies.
- The great significance of the benefits of this project is reflected in the Orange County Water District's (OCWD) action to execute an agreement with the City to remove pumping limits and partially exempt the City from Basin Equity Assessment fees including for the proposed project.

- Similar to the City's other wells, the well is to be drilled to a depth of ~1,300 feet and be installed with minimum of an 18-inch diameter casing. The design capacity of the well will be about 2,500 to 3,000 gpm well pump flow range.
- The water produced will be disinfected using sodium hypochlorite before it is discharged into the water distribution system.

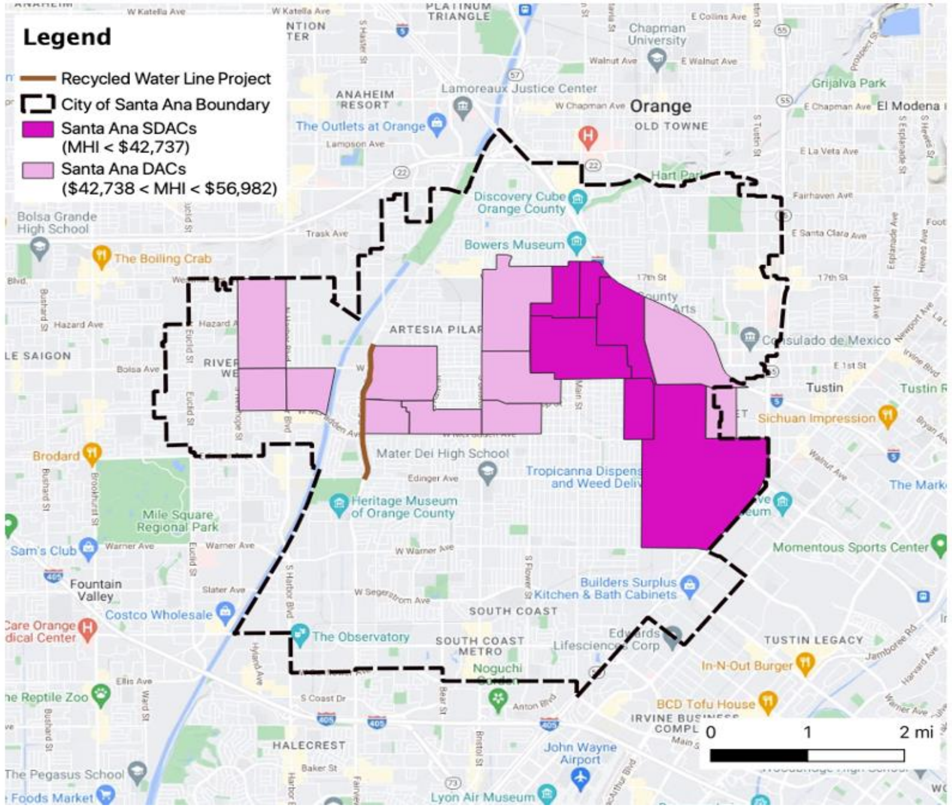

Legend
City of Santa Ana Boundary
Santa Ana SDACs (MHI < $42,737)
Santa Ana DACs ($42,738 < MHI < $56,982)
Washington Well
0
1
2 mi

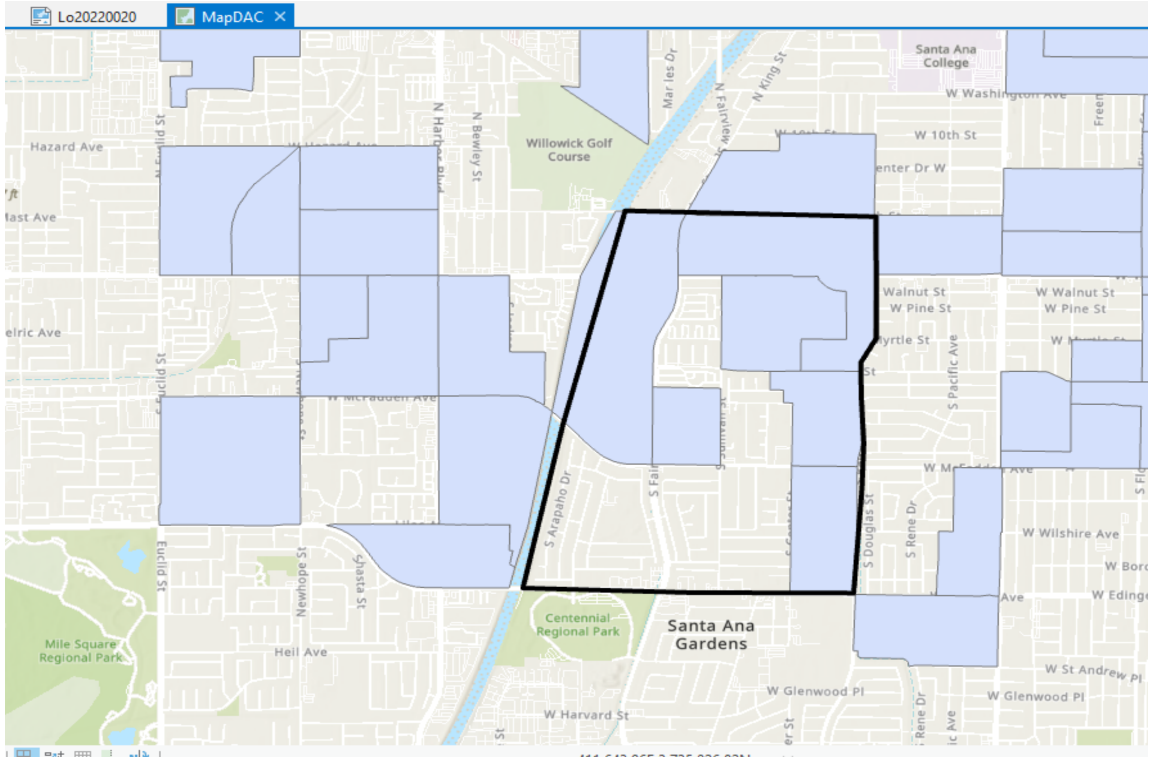

MapDAC

Recycled Water Use Expansion Project

- Currently only one percent of the City's water demand is supplied by recycled water.
  - Recycled water is delivered to the City from the OCWD recycled water system - the Green Acres Project (GAP).
- Given the limited water supplies in the region and the susceptibility to drought, expanding recycled water use in the City will reduce the burden on other water production facilities. The ability to create any additional water supplies is extremely significant to the City to build resilience to drought by reducing dependence on imported water.

- The Project will eventually connect to the GAP water pipeline and involve the following components:
  - Community Engagement & Active Citizenship:
  - Public & Private Green Space
  - Technical, Managerial & Financial Capacity

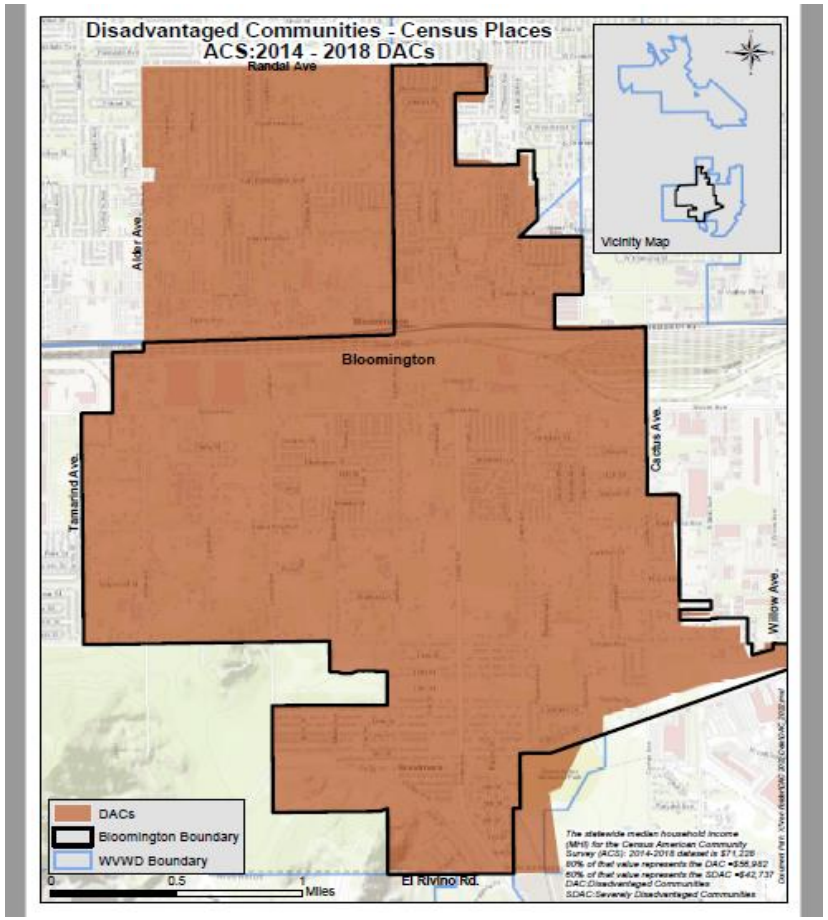

Legend
Recycled Water Line Project
City of Santa Ana Boundary
Santa Ana SDACs
(MHI < $42,737)
Santa Ana DACs
($42,738 < MHI < $56,982)
Orange
OLD TOWNE
Chapman University
Grijalva Park
El Modena
ANAHEIM RESORT
The Outlets at Orange
Lamoreaux Justice Center
Discovery Cube Orange County
Bowers Museum
Bolsa Grande High School
The Boiling Crab
ARTESIA PILAR
LE SAIGON
Consulado de Mexico
Tustin
Sichuan Impression
Mater Dei High School
Brodard
Heritage Museum of Orange County
Mile Square Regional Park
Sam's Club
Fountain Valley
Costco Wholesale
Momentous Sports Center
Builders Surplus Kitchen & Bath Cabinets
SOUTH COAST
The Observatory
SOUTH COAST METRO
TUSTIN LEGACY
In-N-Out Burger
BCD Tofu House
HALECREST
John Wayne Airport
The Pegasus School
Lyon Air Museum
0
1
2 mi

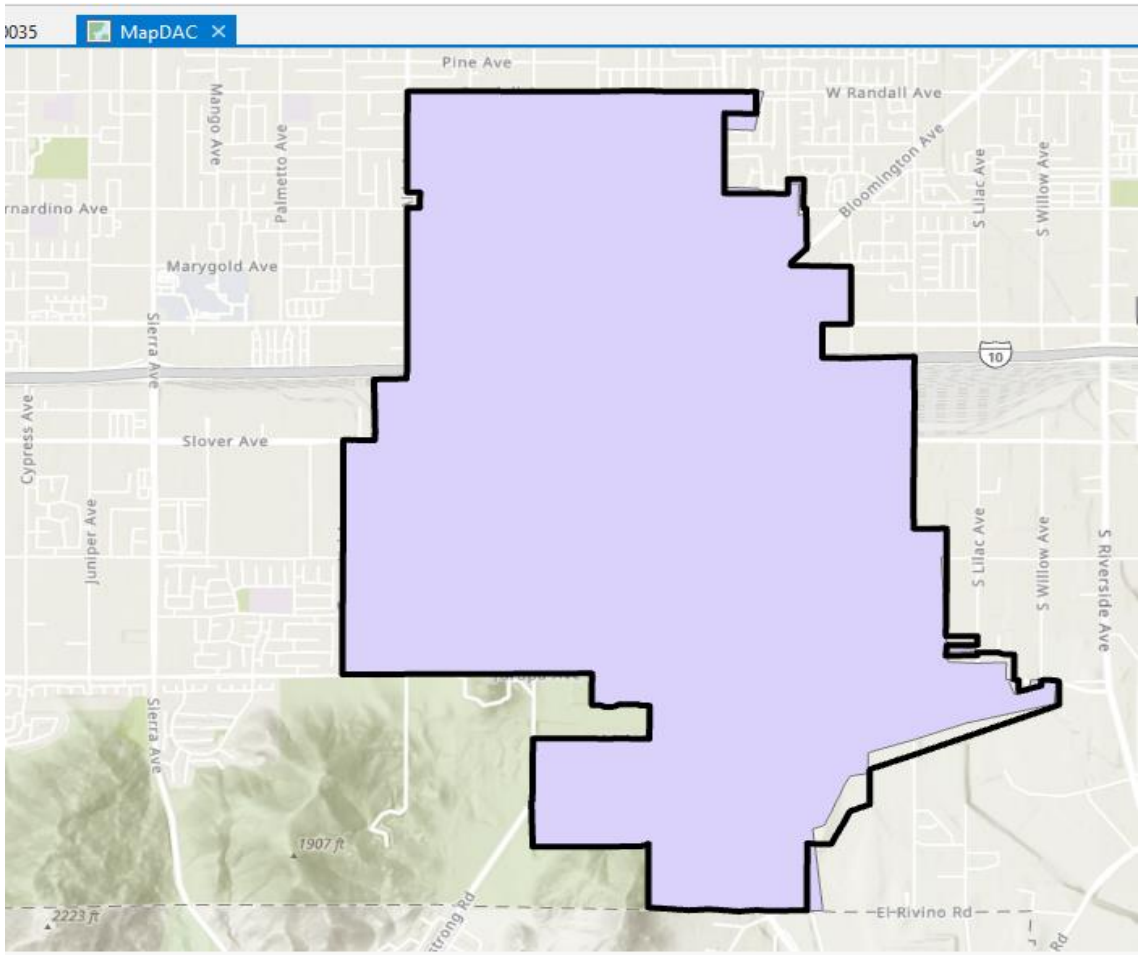

Lo20220020
MapDAC
Santa Ana College
Willowick Golf Course
Hazard Ave
W 10th St
Walnut St
W Pine St
Euclid St
Centennial Regional Park
Mile Square Regional Park
Santa Ana Gardens
Heil Ave
W Glenwood Pl
W Harvard St
W Wilshire Ave
W St Andrew Pl

Water Quality: Lead Service Line Replacements in the Bloomington DAC

- The updated national revised Lead and Copper Rule Revisions makes changes to remove lead out of our drinking water system and better protect communities especially schools and childcare facilities from the risks of lead exposure.
- The rule will require community water systems to inventory water service lines from the water main to the building inlet, even that portion of the service line that is owned by the property owner.

- The project entails eliminating sources of lead by removing lead service lines and fittings, even on the portion's owned by the property owner and replacing them at no cost to the owner.
  - Funding provided directly to the community need.
- The number of water services in the Bloomington DAC is 4,161, which had a consumption demand of 3,454 acre-feet in CY 2021.


Disadvantaged Communities - Census Places
ACS:2014 - 2018 DACs
Randal Ave
Alder Ave
Bloomington
Tamarind Ave
Cactus Ave
Willow Ave
El Rivino Rd
Vicinity Map
DACs
Bloomington Boundary
WVWD Boundary
0
0.5
1
Miles

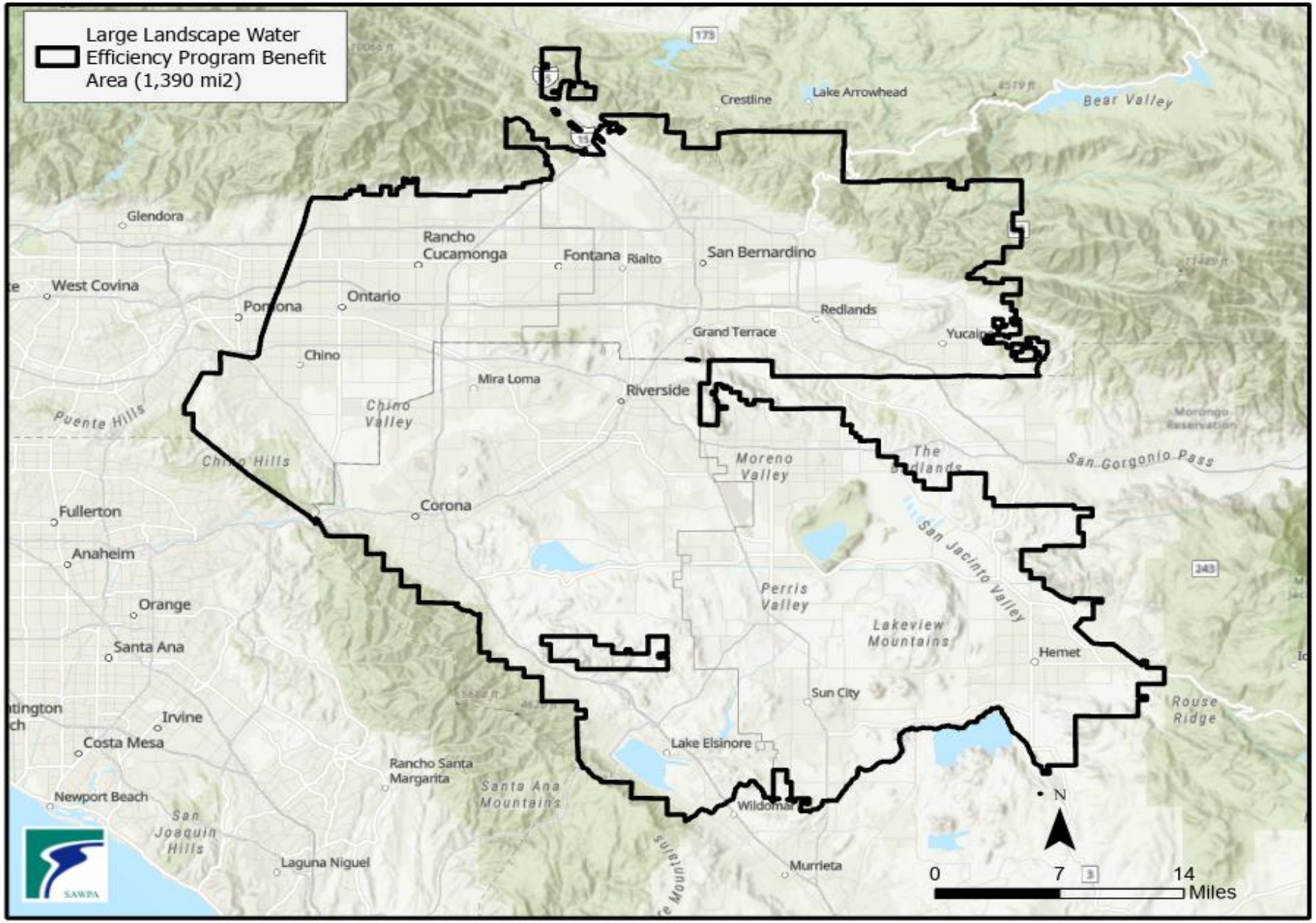

MapDAC
Pine Ave
W Randall Ave
Mango Ave
Palmetto Ave
Bloomington Ave
S Lilac Ave
S Willow Ave
Marygold Ave
Sierra Ave
Slover Ave
Cypress Ave
Juniper Ave
S Riverside Ave
1907 ft
2223 ft
El Rivino Rd

General Implementation Projects

Large Landscape Water Efficiency Program

- Overwatered urban landscapes offer the greatest opportunity for immediate urban water use reductions that can strengthen regional water supplies and climate resilience in the face of a worsening drought.
- Yet these properties, including homeowner associations, multi-family sites, commercial campuses, and public sector customers, have the lowest participation levels in incentive programs due to complex decision-making processes and limited resources.

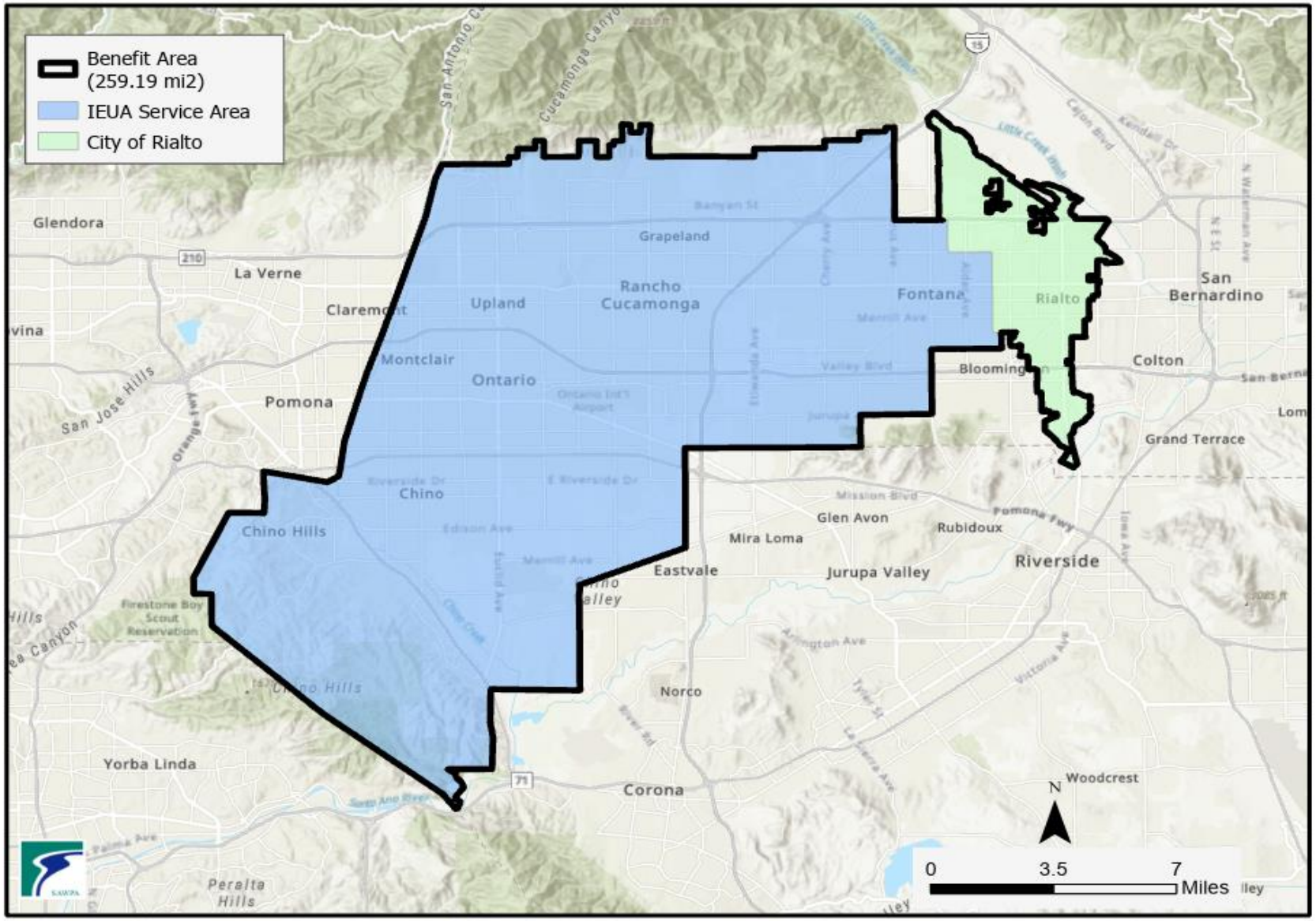
- Project will target the replacement of non-functional turfgrass with lower water use landscaping and upgrade deteriorating irrigation systems through installation of smart irrigation device.
- Project will assess water use, recommend projects for maximum savings and rebate eligibility, facilitate approvals, and oversee construction. Training for managers and landscapers and post-project check-ins will help ensure sustained water savings and water quality benefits.


Large Landscape Water Efficiency Program Benefit Area (1,390 mi2)
Crestline
Lake Arrowhead
Bear Valley
Glendora
Rancho Cucamonga
Fontana
Rialto
San Bernardino
West Covina
Pomona
Ontario
Redlands
Grand Terrace
Yucaipa
Chino
Mira Loma
Riverside
Chino Valley
Puente Hills
Chino Hills
Moreno Valley
San Gorgonio Pass
Corona
Fullerton
Anaheim
Orange
Santa Ana
Irvine
Costa Mesa
Newport Beach
San Joaquin Hills
Laguna Niguel
Rancho Santa Margarita
Santa Ana Mountains
Perris Valley
Lakeview Mountains
San Jacinto Valley
Hemet
Sun City
Lake Elsinore
Wildomar
Murrieta
Rouse Ridge
N
0
7
14
Miles
SAWPA

City of Rialto Recycled Water Intertie Project

- Project will enhance the regional benefits of existing recycled water supplies by improving groundwater quality and reducing dependence on imported water.
- Recharging new recycled water through proposed injection wells will improve the salinity of groundwater within the Chino Basin, increasing useable water supplies and improving economic stability by enhancing a reliable local source of water for the region while lowering its dependence on imported water supplies.
- Project will include advanced treatment in the future to meet regulatory discharge requirements for salinity content.

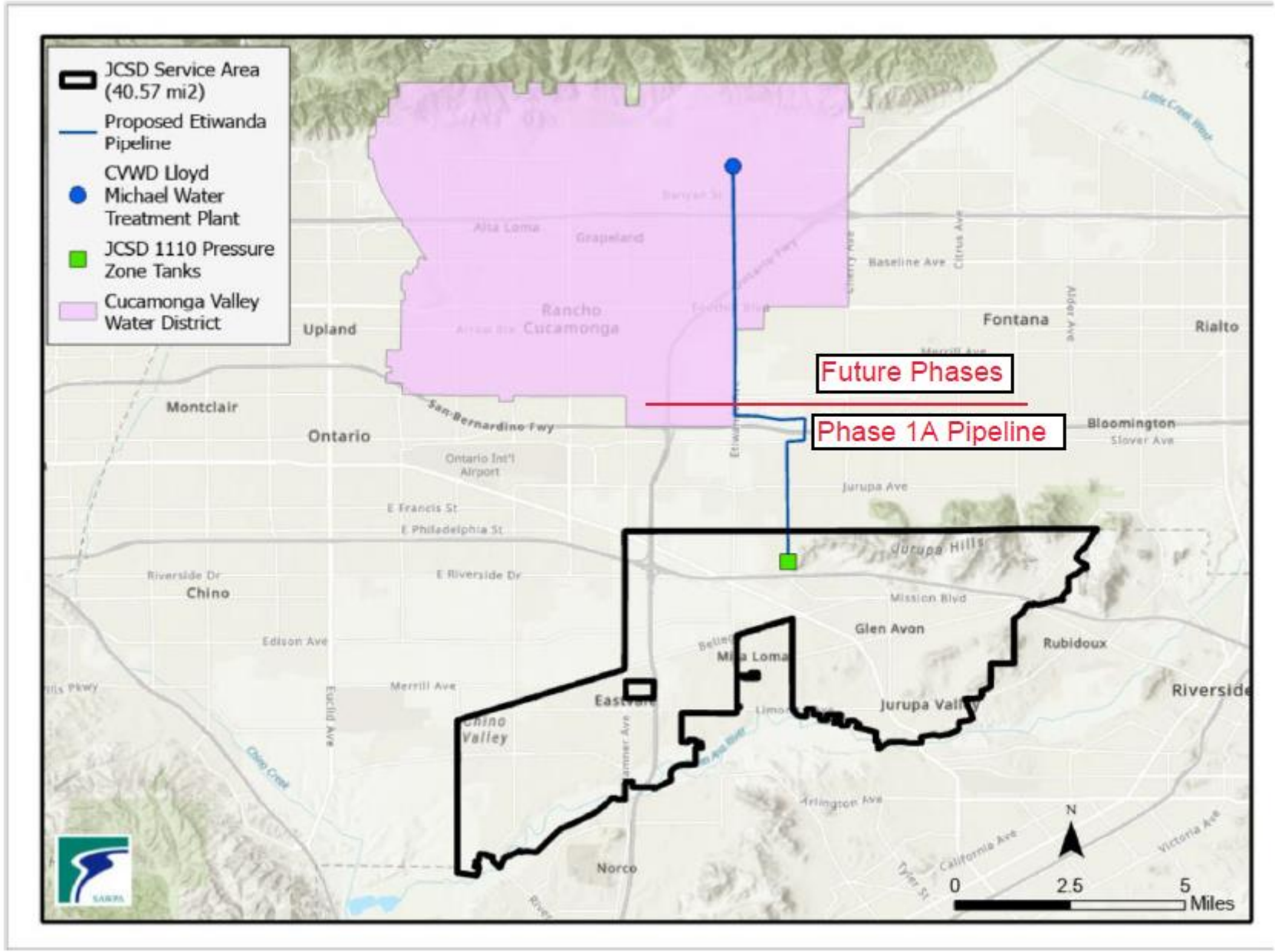
- Project construction includes tying in the City of Rialto's treatment plant's recycled water discharge to IEUA recycled water pipeline system.
- To create the tie-in, 58,700 linear feet of pipe and a pump station are needed.


Benefit Area
(259.19 mi2)
IEUA Service Area
City of Rialto
Glendora
La Verne
Claremont
Upland
Rancho
Cucamonga
Fontana
Rialto
San
Bernardino
Montclair
Ontario
Colton
Pomona
Chino
Chino Hills
Grand Terrace
Glen Avon
Rubidoux
Mira Loma
Eastvale
Jurupa Valley
Riverside
Norco
Yorba Linda
Corona
Woodcrest
Peralta
Hills
N
0
3.5
7
Miles

Etiwanda Intervalley Water Quality and Water Resiliency Project Phase-1A

- There are water quality issues in JCSD's well fields. 43% of the production capacity (23,100 AFY) are inactivate, another 15% rely solely on blending.
- JCSD needs to secure an additional 12,500 AFY; the Project will provide 20,000 AFY with up to 10,485 AFY observed in Phase 1A
- Project will also provide emergency water to CVWD to respond to drought, fire, earthquake, or other disasters

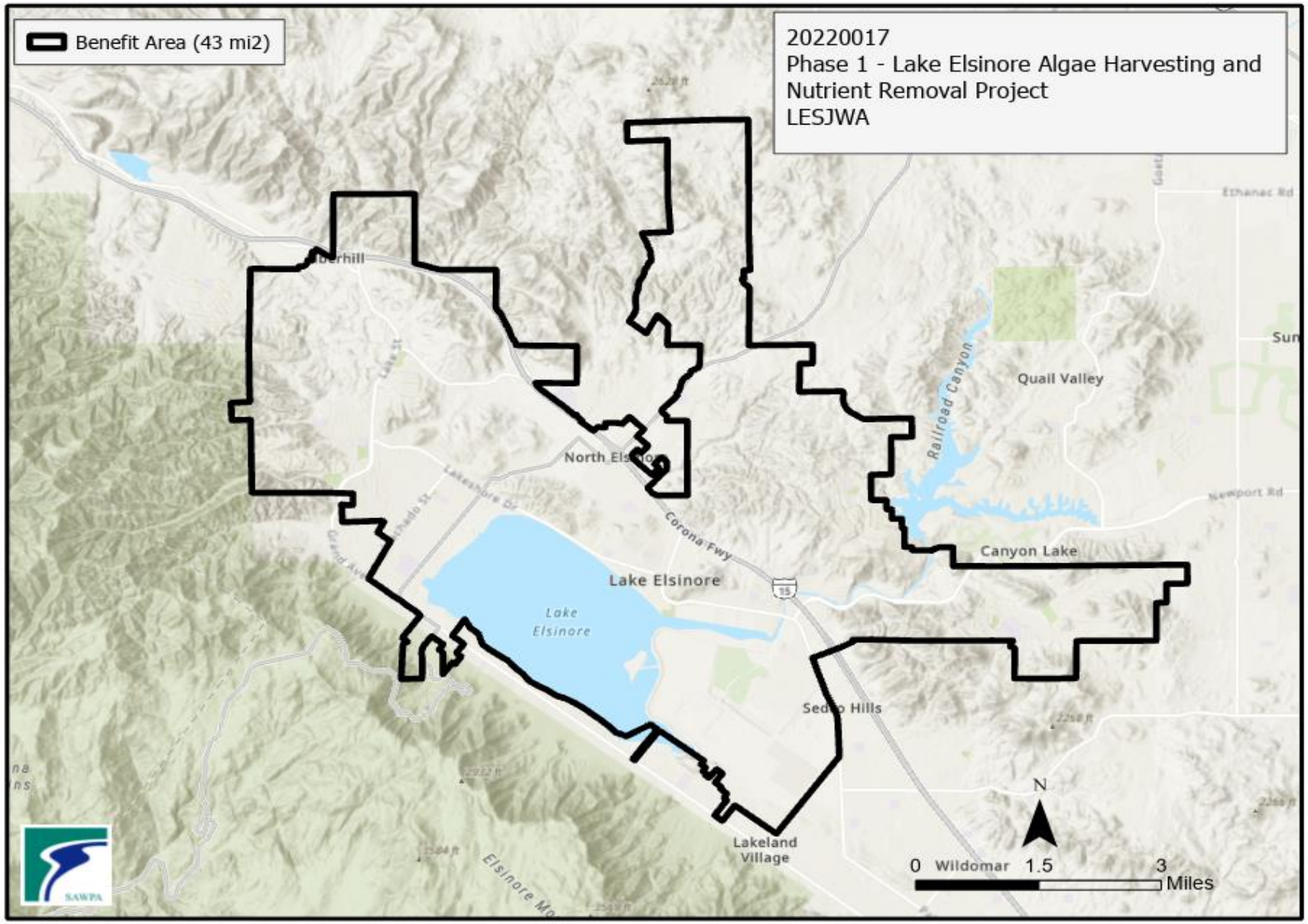
- This project will provide surplus groundwater (from CVWDs service area to JCSD), this water is available in the upper portion of Chino Basin.
  - The water will be supplied from one of CVWD's surface water treatment plants (that ties into the Rialto Feeder imported water pipeline) and the wells in the upper portion of Chino Basin.
- The Etiwanda pipeline will flow in both directions (JCSD↔CVWD).
  - This pipeline also serves as a regional backbone with water supply coordination capabilities with WMWD, City of Fontana, RCSD, CDA, and future CBP pipelines.


JCSD Service Area (40.57 mi2)
Proposed Etiwanda Pipeline
CVWD Lloyd Michael Water Treatment Plant
JCSD 1110 Pressure Zone Tanks
Cucamonga Valley Water District
Future Phases
Phase 1A Pipeline
Upland
Rancho Cucamonga
Fontana
Rialto
Montclair
Ontario
San Bernardino Fwy
Bloomington
Chino
Glen Avon
Rubidoux
Jurupa Valley
Riverside
Norco
N
0
2.5
5
Miles

Phase 1 - Lake Elsinore Algae Harvesting and Nutrient Removal Project

- Widespread harmful algal blooms (HABs) occur in the lake due to ongoing and legacy nutrient loads and these are exacerbated by persistent drought and heatwaves. Since the last major drought in 2016, monitoring by City of Lake Elsinore and State has shown the ongoing occurrence of toxic HABs throughout the year.
- As a result, the City has been forced to post public health warnings and to close the lake for recreational activities, which has negative impacts on local businesses and tourism.
- The draft revised Total Maximum Daily Load (TMDL) report for Lake Elsinore recognizes that innovative, in-lake remediation projects are needed.

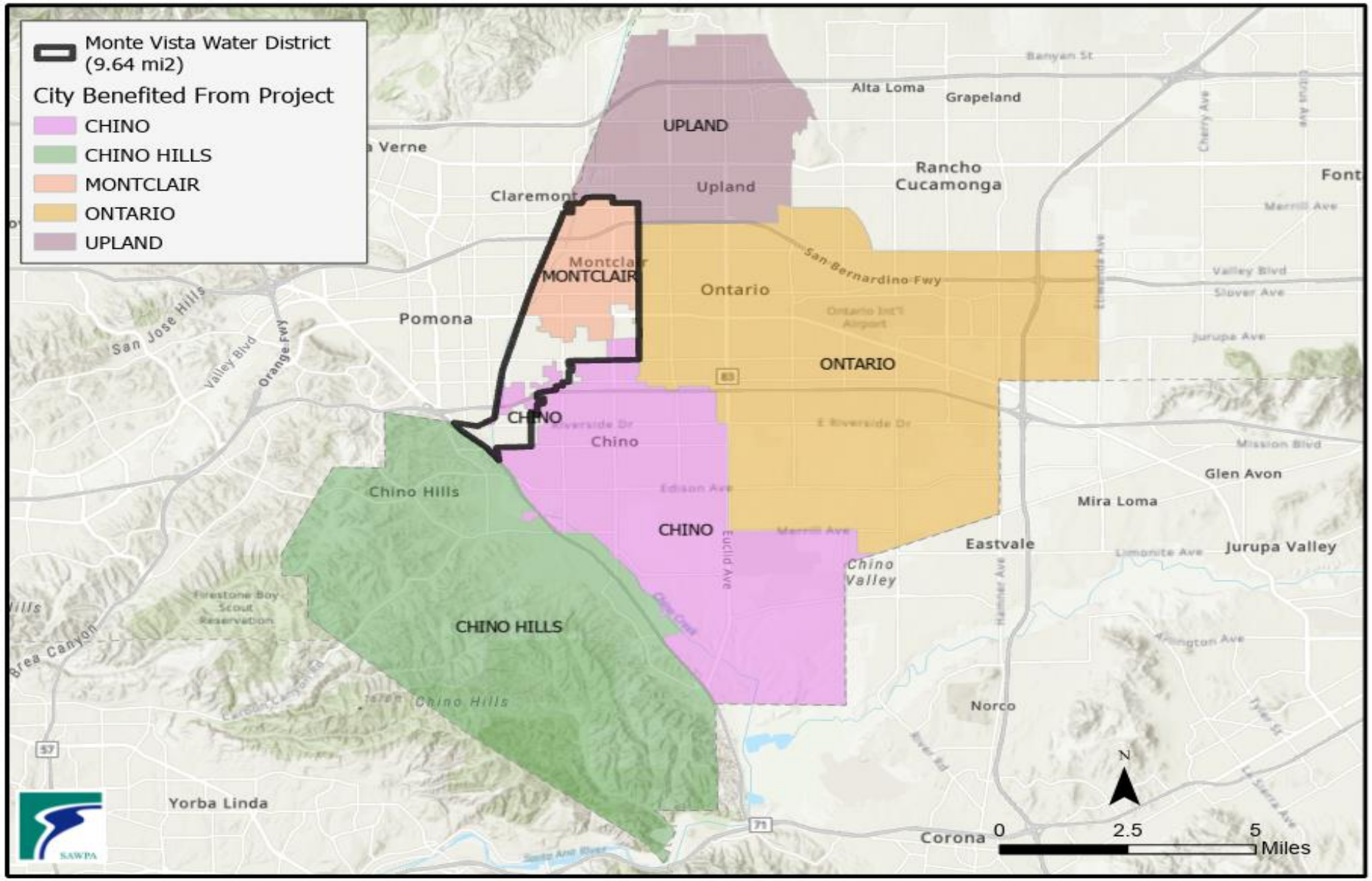
- Project includes implementation of innovative algae harvesting technology to address impacts of HABs.
- The use of Hydronucleation Flotation Technology (HFT)is an advanced liquid/solid separation process that has been optimized to operate at a high hydraulic rate while efficiently capturing algae and associated toxins and nutrients including phosphorus and nitrogen in the form of concentrated slurry.


Benefit Area (43 mi2)
20220017
Phase 1 - Lake Elsinore Algae Harvesting and Nutrient Removal Project
LESJWA
Quail Valley
Railroad Canyon
Canyon Lake
Lake Elsinore
Lake Elsinore
Corona Fwy
Lakeland Village
Ethanac Rd
Newport Rd
N
0 Wildomar 1.5 3 Miles

Wellhead Nitrate Treatment for Wells 4 & 27

- Wells currently exceed 10 mg/L NO3-N and require blending with State Water Project (SWP) water to reduce the nitrates to comply with water quality regulations.
  - These wells will not be able to supply water if Metropolitan Water District (MWD) cannot supply sufficient water to MVWD for blending purposes.
- Project will increase the local and reliable water supply to disadvantaged communities making the District less reliant on the SWP for its imported water supplies

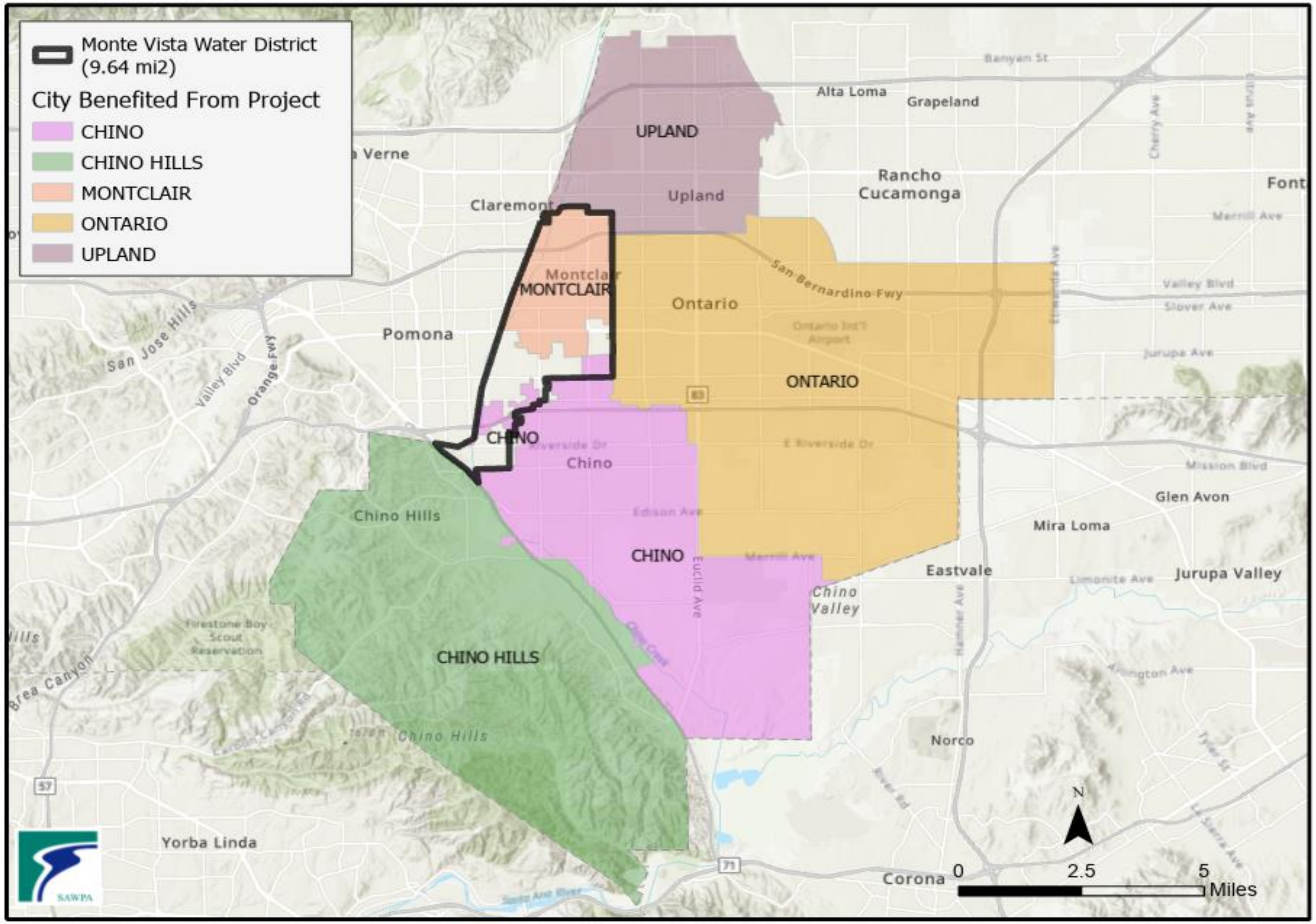
- Project would provide wellhead nitrate treatment for wells 4 and 27 in MVWD's pressure zone 1.
- This supply will be available on an on-going basis to two water agencies, MVWD and the City of Chino Hills.


Monte Vista Water District
(9.64 mi2)
City Benefited From Project
CHINO
CHINO HILLS
MONTCLAIR
ONTARIO
UPLAND
UPLAND
Alta Loma
Grapeland
Rancho Cucamonga
Upland
Claremont
Montclair
MONTCLAIR
Ontario
ONTARIO
Pomona
San Bernardino Fwy
Valley Blvd
Jurupa Ave
CHINO
Chino
Chino Hills
CHINO
CHINO HILLS
Eastvale
Mira Loma
Glen Avon
Jurupa Valley
Chino Valley
Norco
Corona
Yorba Linda
Brea Canyon
San Jose Hills
Orange Fwy
Euclid Ave
Hamner Ave
N
0
2.5
5
Miles
SAWPA

Well 2 Replacement

- The current well is out of service due to water quality issues and casing failure.
- MVWD does not have any active groundwater supplies in this area and relies on water from [pressure] zone 2 or SWP water to feed this zone.
- Project would utilize nitrate treatment to comply with drinking water standards to ensure health and safety standards are met.

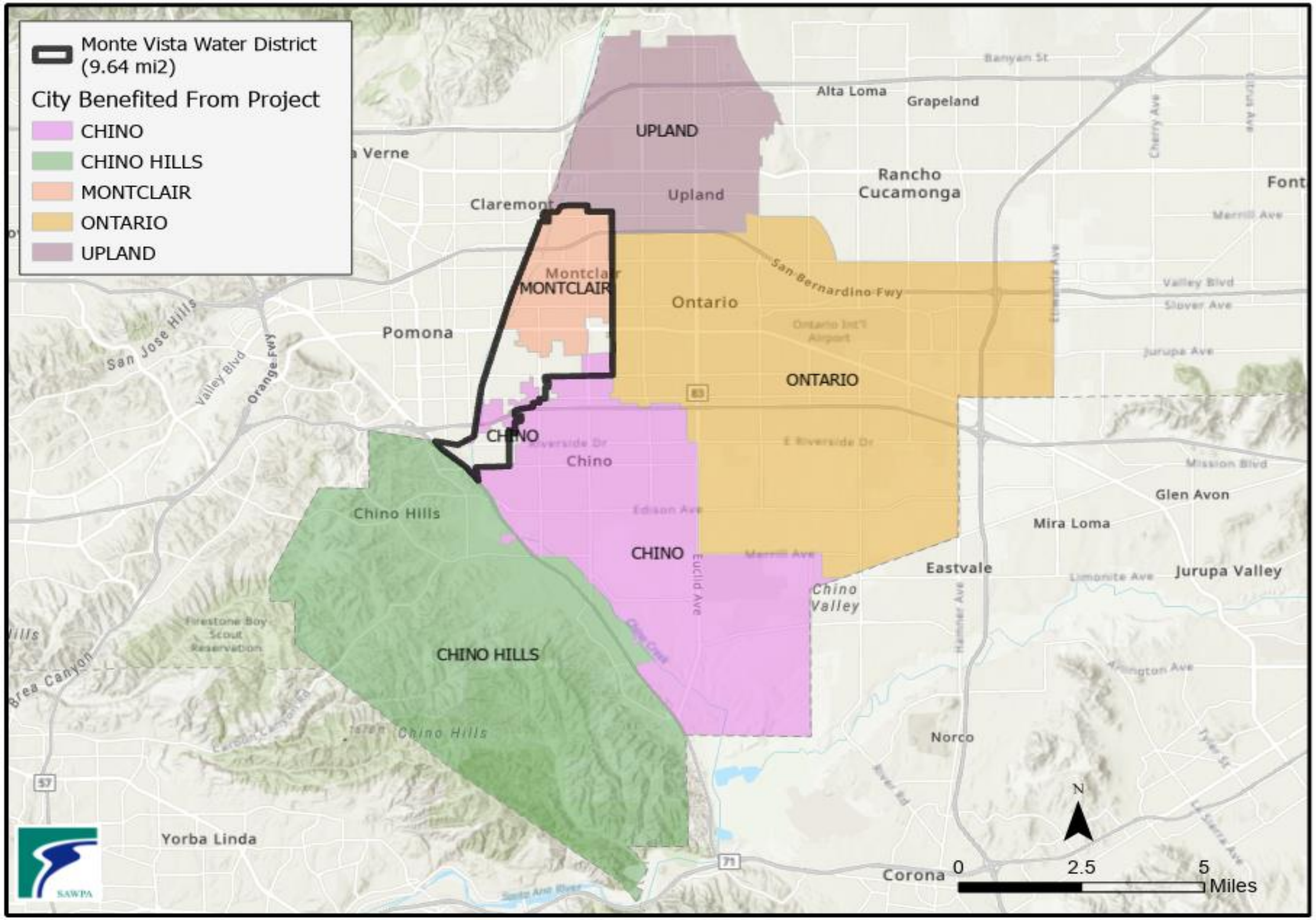
- Project would replace Well 2 with a new production well and will install a packaged ion exchange system to reduce nitrate contamination
- Project will also recoat the tank and upgrade the booster station to deliver water into [pressure] zone 3.


Monte Vista Water District (9.64 mi2)
City Benefited From Project
CHINO
CHINO HILLS
MONTCLAIR
ONTARIO
UPLAND
UPLAND
MONTCLAIR
ONTARIO
CHINO
CHINO
CHINO HILLS
0 2.5 5 Miles
N
SAWPA

Well 4 Replacement

- This project will increase the local and reliable water supply to disadvantaged communities within the Districts service area (confirmed by the DWR DAC Mapping Tool) by providing affordable potable water supply from a local source, making the District less reliant on the SWP for its imported water supplies.
- This project will remove nitrate contaminant from the area known as Management Zone 1 of the Chino Basin.
- This supply will be available on an on-going basis to provide water to two water agencies, the Monte Vista Water District and the City of Chino Hills.

- The project would replace the current well with a larger production well increasing production from 800 GPM to 2,000 GPM.
- The project includes installation of a packaged ion exchange system to reduce nitrate contamination to below 80% of the MCL.

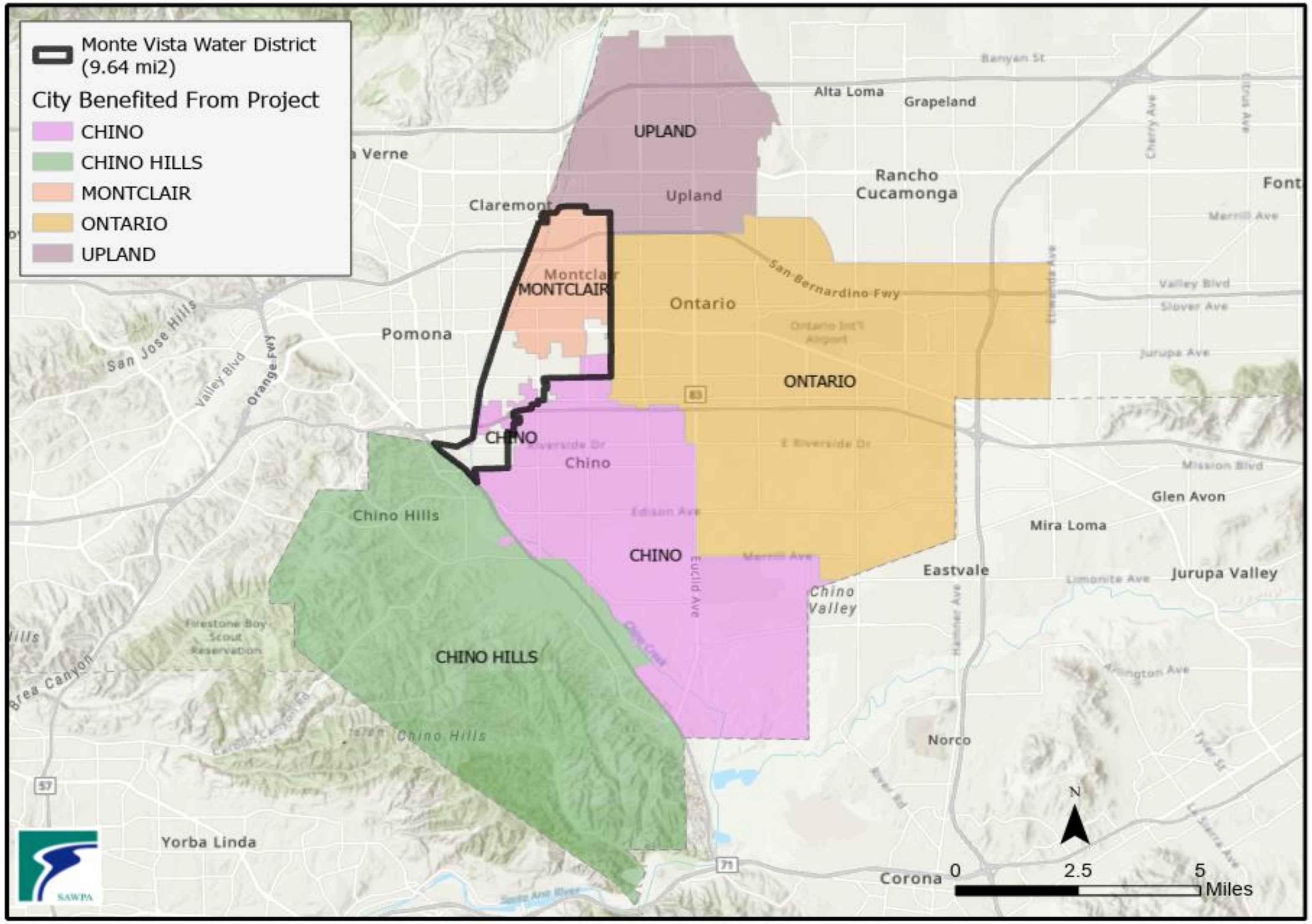


Monte Vista Water District (9.64 mi2)
City Benefited From Project
CHINO
CHINO HILLS
MONTCLAIR
ONTARIO
UPLAND
Alta Loma
Grapeland
UPLAND
Upland
Rancho Cucamonga
Claremont
Montclair
MONTCLAIR
Ontario
San Bernardino Fwy
ONTARIO
Pomona
San Jose Hills
CHINO
Chino
Chino Hills
CHINO
Euclid Ave
Chino Valley
Eastvale
Glen Avon
Mira Loma
Jurupa Valley
CHINO HILLS
Norco
Yorba Linda
Corona
0
2.5
5
Miles
N
SAWPA

Well Pump Replacements

- This project will increase system resiliency and potentially reduce demand on SWP water.
- It will reduce energy costs by operating more efficient well pumps and increasing the operational life of the well.
- Both the District and the City of Chino Hills will be the recipients of water supply from this project.

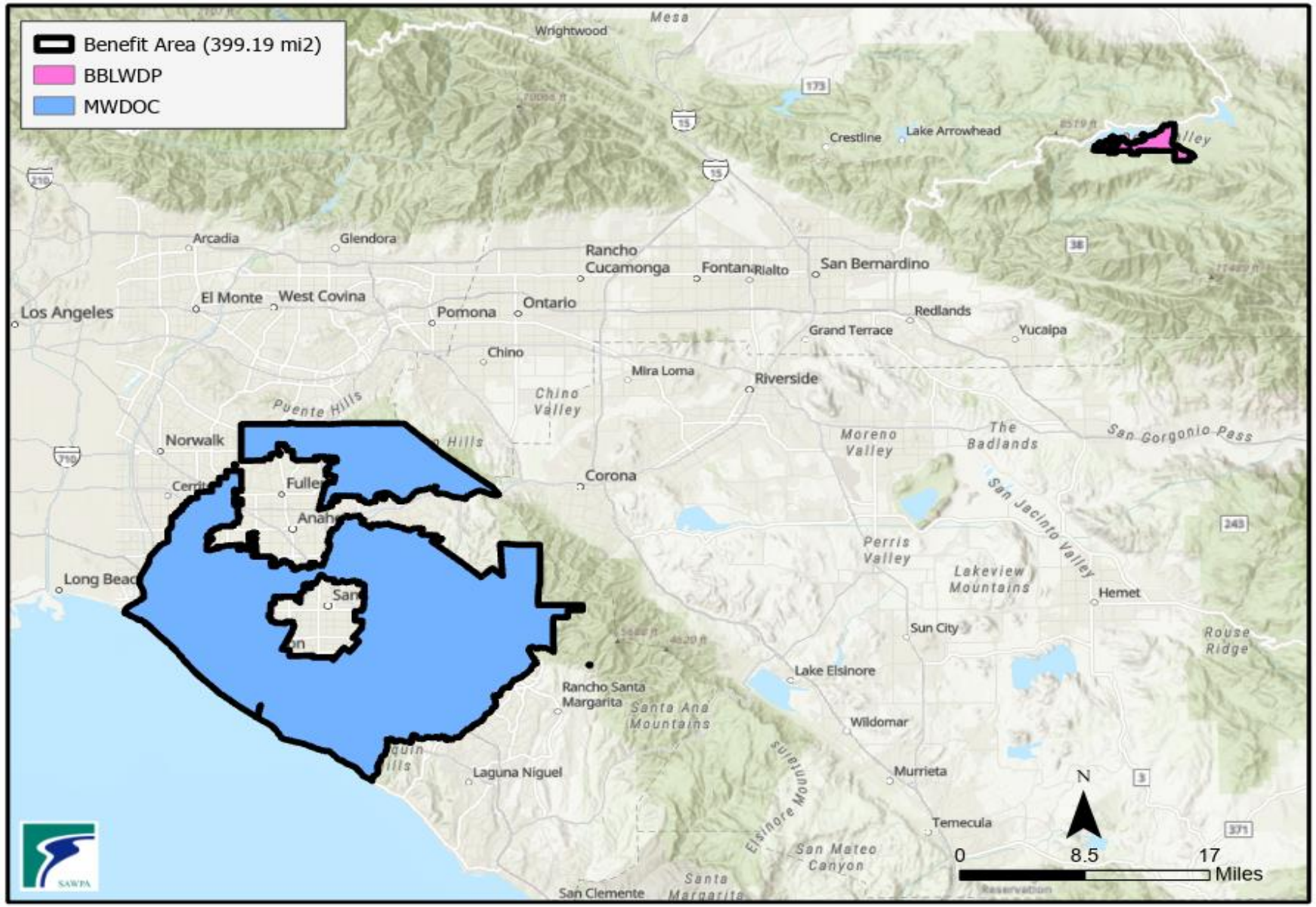
- This project would replace well pumps on Wells 19, 30 ,32, and 33. These well pumps were sized and installed before required treatment was added in later years. This results in the well pumps not operating efficiently and reducing potable water flow.
- Project includes specifying well pumps, drivers, and controls for each of the four wells, ordering the required equipment, and retain contractor for installation.


Monte Vista Water District (9.64 mi2)
City Benefited From Project
CHINO
CHINO HILLS
MONTCLAIR
ONTARIO
UPLAND
0 2.5 5 Miles
N

Regional Water Distribution System Leak Detection and Repair Program

- Through the project, regional demand is reduced, lessening the reliance on imported water from the SWP and Colorado River.
- Water savings achieved helps local supplies become a larger portion of regional supply and lessens pumping from the Bay-Delta, contributing to regional water self-reliance.

- MWDOC and Big Bear Lake Dept of Water and Power will implement a regional leak detection program, surveying 6,400 miles of water mains, the associated water service lines and water meters
  - Project will focus on the early detection of non-surfacing leaks, still hidden underground or in water meter boxes, and then require their timely repair


Benefit Area (399.19 mi2)
BBLWDP
MWDOC
Wrightwood
Mesa
Crestline
Lake Arrowhead
Arcadia
Glendora
Rancho Cucamonga
Fontana
Rialto
San Bernardino
El Monte
West Covina
Los Angeles
Pomona
Ontario
Redlands
Grand Terrace
Yucaipa
Chino
Mira Loma
Riverside
Chino Valley
Puente Hills
Norwalk
Moreno Valley
The Badlands
San Gorgonio Pass
Corona
San Jacinto Valley
Perris Valley
Lakeview Mountains
Hemet
Sun City
Rouse Ridge
Lake Elsinore
Rancho Santa Margarita
Santa Ana Mountains
Wildomar
Laguna Niguel
Murrieta
Temecula
Elsinore Mountains
San Mateo Canyon
San Clemente
Santa Margarita
N
0
8.5
17
Miles

Water Well RN #6 Nitrate Removal System

- Since 2016, Riverside Highland Water Company (RHWC) has lost 5 of its 8 wells to either drought or water quality issues. In three of last four years, we have had to purchase water from another water agency to supplement our current supply.
- The major quality issue has been nitrate levels that exceed the State's Maximum Contamination Level of 10 parts per million (PPM) in two highest producing wells.

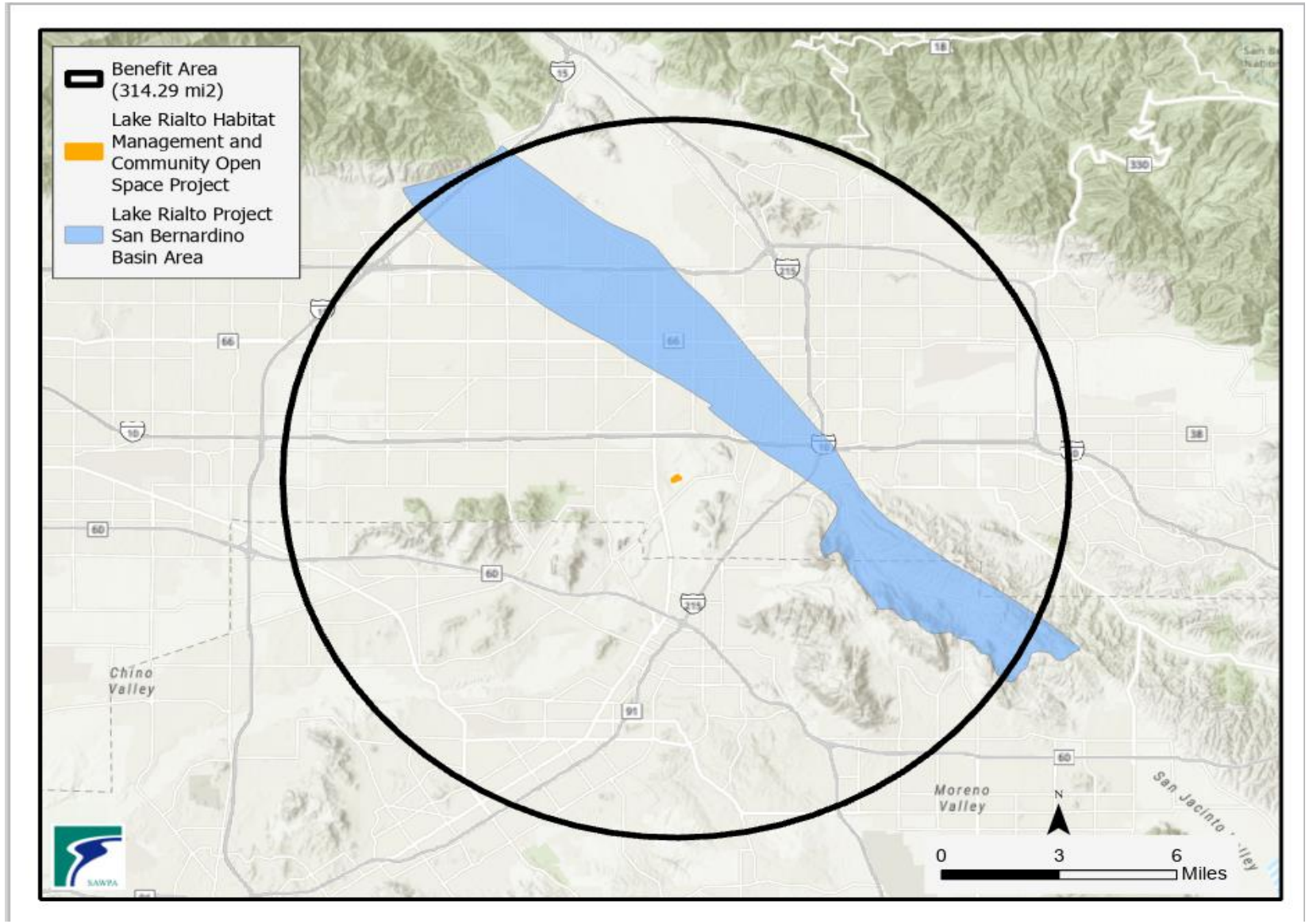
- Project includes adding nitrate treatment to one of these wells, RN #6, which currently has a nitrate level of 11 PPM.
- The nitrate treatment will consist of a Tonka ion exchange system which will be housed inside for security, as well as appurtenances associated with the treatment system such as brine maker/salt storage tank.

Need Map from Project Applicant

Lake Rialto Habitat Management and Community Open Space Project

- Project will lead to water quality improvements - both water temperature, nutrient management, and other water quality benefits such as nitrogen and phosphorus bioremediation, and salt uptake by wetland vegetation, and removal of microplastics.
- Project will hold effluent for several days to reduce the temperature, and enable future management actions that currently cannot occur, including the complete dewatering of Rialto Channel to eradicate non-native aquatic predators and providing (igh flow pulse into the channel to remove sediment,

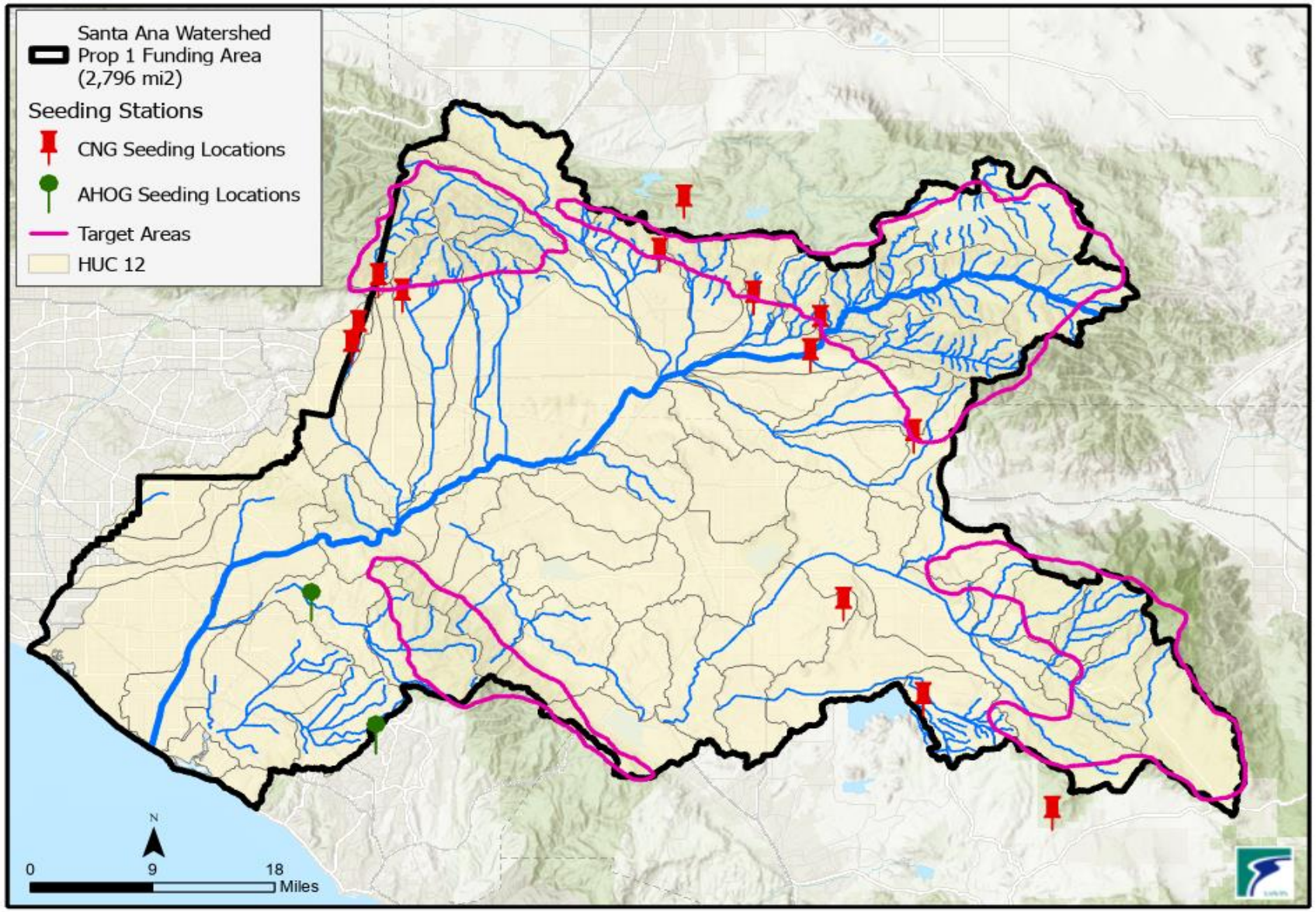
- Project will construct approximately 10 acres of wetlands/vegetation, with an estimated 41 acre-feet of total seasonal storage,
- Lake Rialto will be created using recycled water from the City's adjacent water treatment plant. The City currently discharges tertiary treated effluent into a concrete-lined flood control channel that flows into the unlined Rialto Channel,
- An existing dry pit will be reengineered to create a shallow marsh wetland (3 to 4 acres) that receives tertiary treated effluent, and a deeper lake (6 acres) that receives cleaned effluent once it has passed through bio-filtration, providing water temperature and nutrient management benefits.


Benefit Area
(314.29 mi2)
Lake Rialto Habitat Management and Community Open Space Project
Lake Rialto Project San Bernardino Basin Area
Chino Valley
Moreno Valley
San Jacinto Valley
N
0
3
6
Miles

Santa Ana River Watershed Weather Modification Pilot Project

- Project is to use its results for the potential implementation of a full-scale weather modification for the SAR Watershed, and serve as a model for other regions to support local water management strategies that address climate change impacts such as droughts.
- Feasibility study indicated a potential 8% increase in watershed streamflow at a 10 to 1 benefit to cost ratio.
- Project will benefit all disadvantaged communities and associated organizations by creating clean local water supply allowing lower water rates and no harm to the watershed.

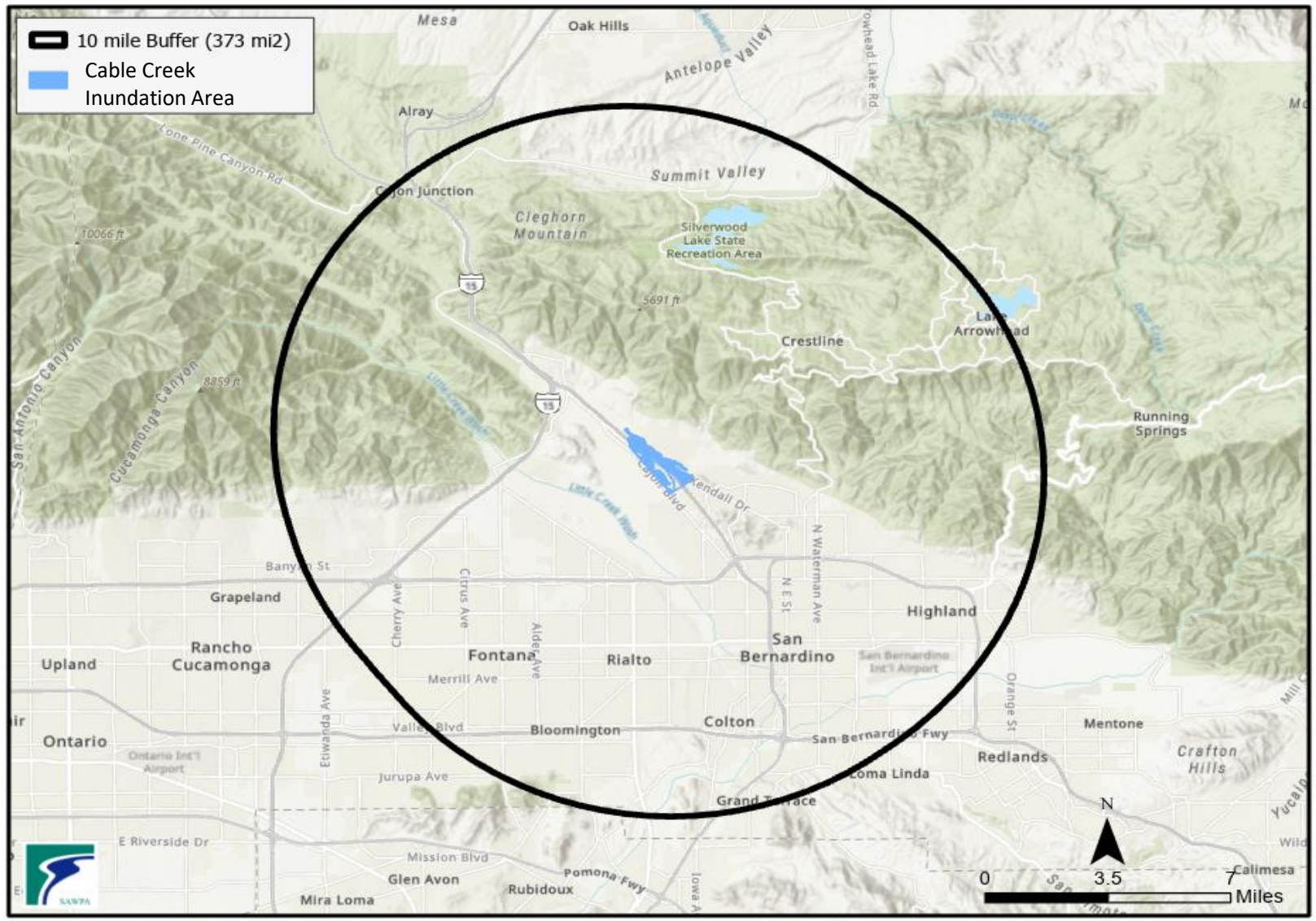
- Project will utilize cloud seeding or precipitation enhancement technology to increase the amount of precipitation in high altitude areas in the Watershed.
- An annual survey will be conducted to validate the model projections and evaluate the amount of capture and recharge of streamflow runoff.


Santa Ana Watershed
Prop 1 Funding Area
(2,796 mi2)
Seeding Stations
CNG Seeding Locations
AHOG Seeding Locations
Target Areas
HUC 12
N
0
9
18
Miles

Cable Creek Basin (Upper)

- The communities within the feasibility study area include some which are disadvantaged in nature and also can experience significant flash flooding from varied terrain.
- Downstream Devils Creek Diversion Channel is designed to accept only 8,600 cubic feet per second (CFS) and 100-year flood events are estimated to be larger.
- Benefits also include pollutant load reduction (1.7E+14 PMN E.coli).

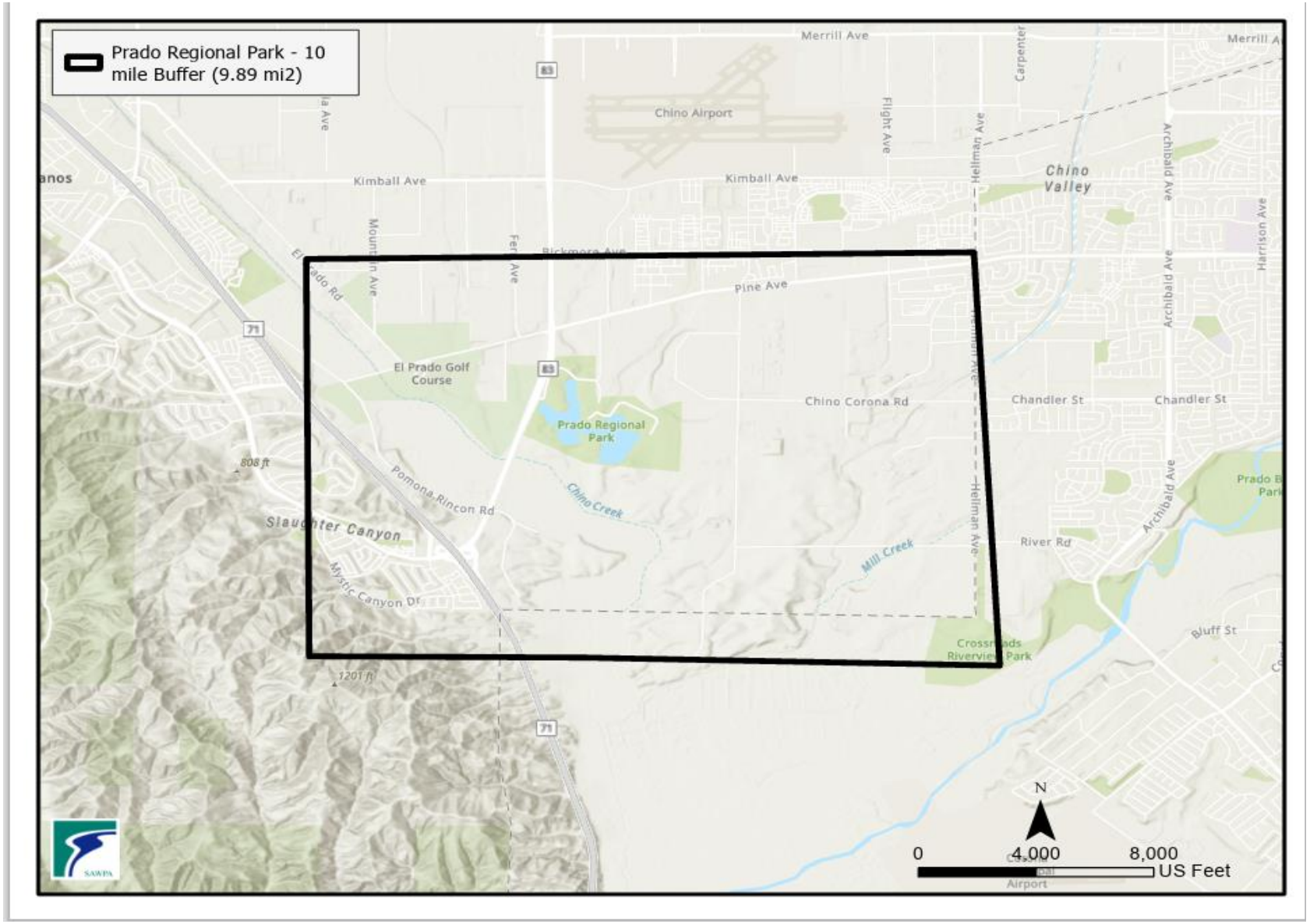
- The proposed basin project will allow for stormwater recharge of up to 859 AFY.
- Construction will consist of basin excavation, outlet structure construction, embankment fill, compaction, rock slope protection, spillway construction, access road construction, fencing, demobilization, etc.


10 mile Buffer (373 mi2)
Cable Creek
Inundation Area
Mesa
Oak Hills
Antelope Valley
Alray
Lone Pine Canyon Rd
Summit Valley
Cajon Junction
Cleghorn
Mountain
Silverwood
Lake State
Recreation Area
10066 ft
5691 ft
Crestline
Running
Springs
San Antonio Canyon
Cucamonga Canyon
8859 ft
Kendall Dr
Grapeland
Rancho
Cucamonga
Upland
Fontana
Rialto
San
Bernardino
Highland
Merrill Ave
Ontario
Ontario Int'l
Airport
Valley Blvd
Bloomington
Colton
Redlands
Mentone
Crafton
Hills
Loma Linda
Jurupa Ave
Grand Terrace
E Riverside Dr
Mission Blvd
Glen Avon
Rubidoux
Mira Loma
Pomona Fwy
Calimesa
N
0
3.5
7
Miles

Improved Lake Circulation at Prado Regional Park

- Each summer this body of water is often negatively affected by algae.
- Infestation not only leads to the lake being closed for long periods of time until the algae subsides, but also affects the health of fish and other wildlife that depend on the lake for survival.
- Results from the Lake testing will be reviewed and assessed to determine the effectiveness of the water circulation system. This information will be made available to managers, decision-makers, and the public.

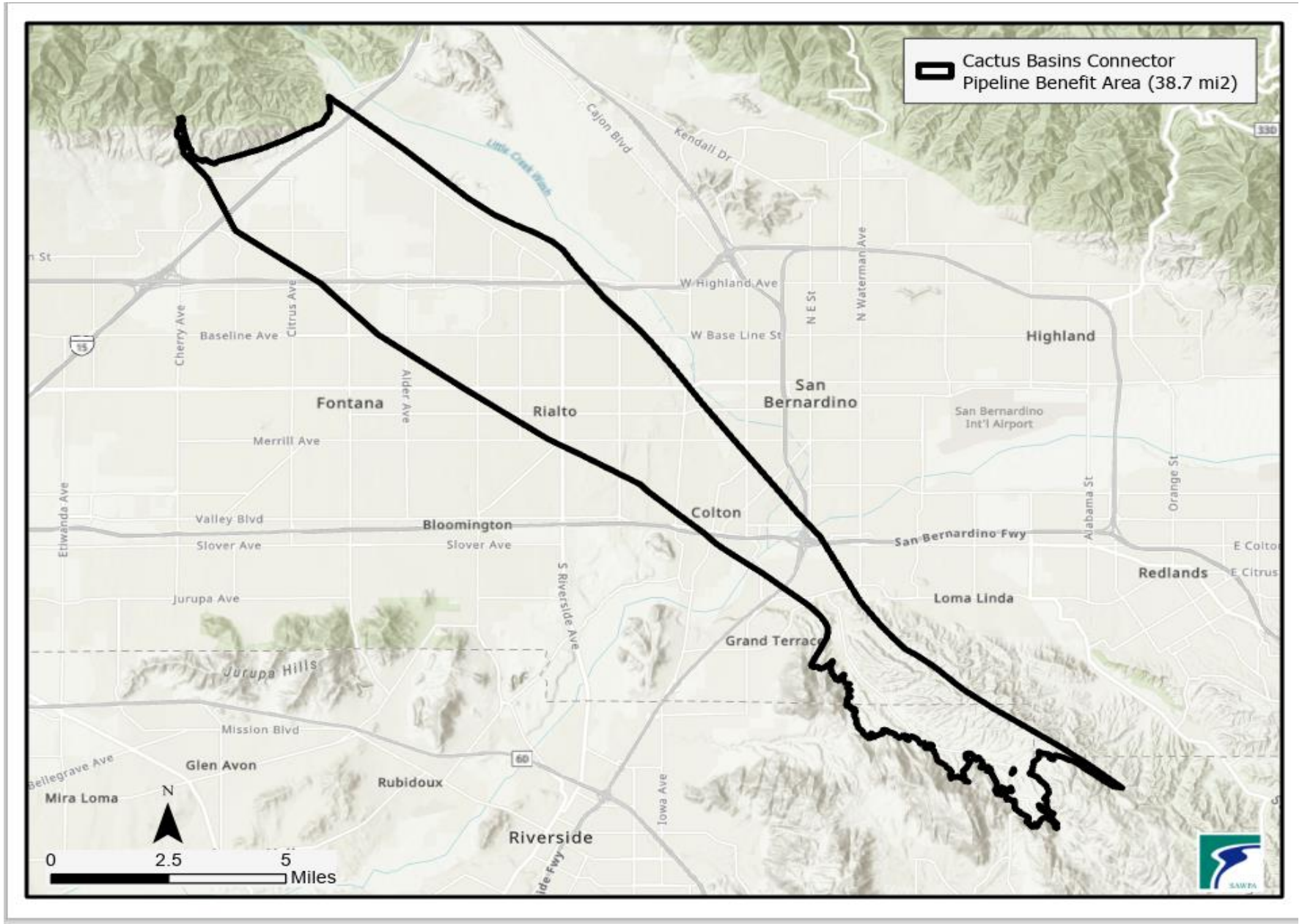
- To improve lake circulation San Bernardino County Regional Parks is proposing the installation of floating mechanical mixers to circulate the water (similar to Solarbees, or equivalent).
- Strategic placement of three devices within Prado Lake will improve circulation in areas of the lake that are typically stagnant and prone to algae infestation.


Prado Regional Park - 10 mile Buffer (9.89 mi2)
Merrill Ave
Chino Airport
Kimball Ave
Kimball Ave
Chino Valley
Pine Ave
El Prado Golf Course
Prado Regional Park
Chino Corona Rd
Chandler St
Chandler St
808 ft
Pomona Rincon Rd
Chino Creek
Slaughter Canyon
Mystic Canyon Dr
Mill Creek
River Rd
Bluff St
1201 ft
Airport
N
0
4,000
8,000
US Feet

Cactus Basin Connector Pipeline

- With climate change, water supplies from the State Water Project (SWP) will be more uncertain and prone to reduced allocations.
- During wet years, the SWP can deliver higher allocations than dry years, however, there is a lack of readily available infrastructure in the District's service area to recharge water from year to year.

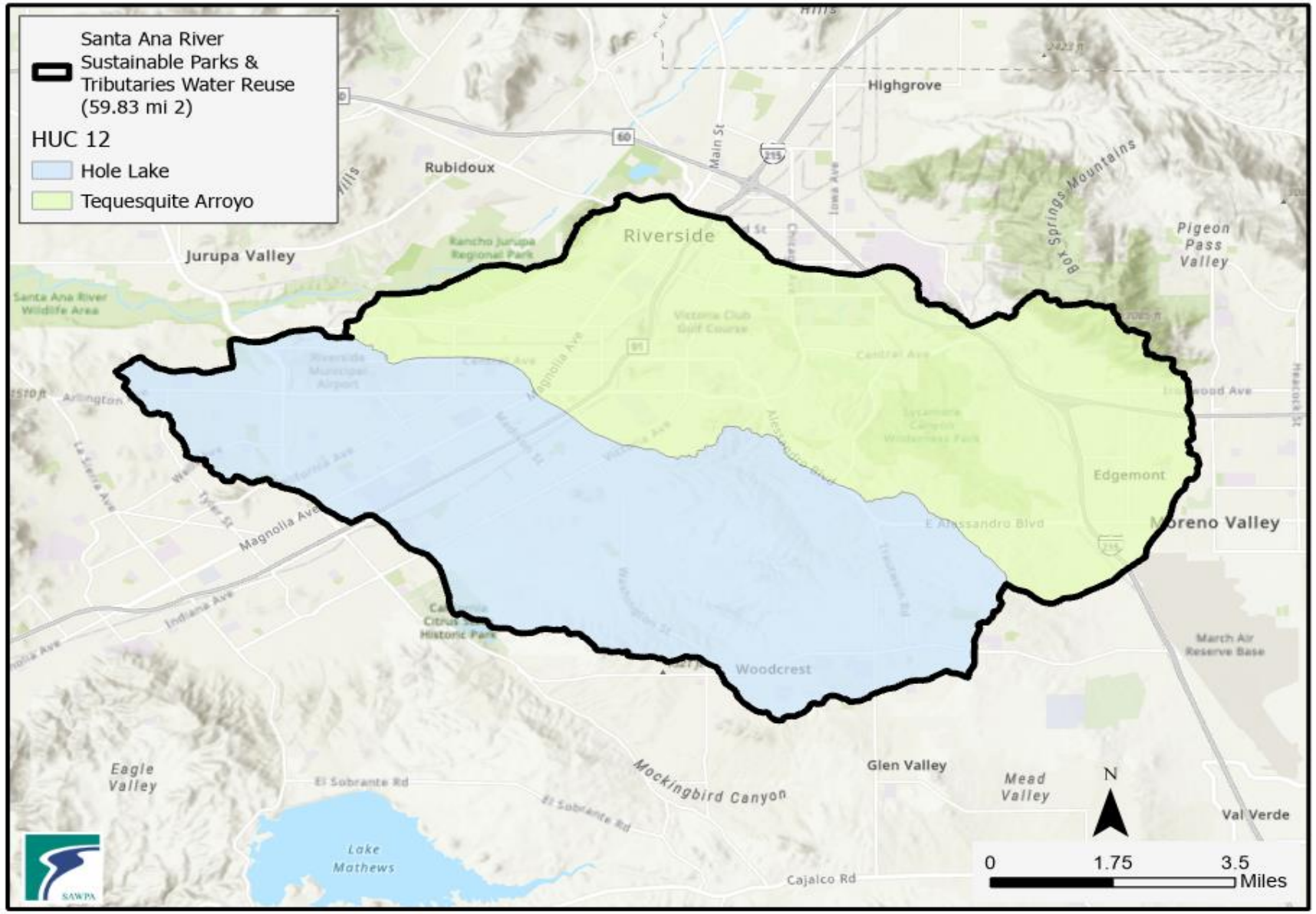
- The District identified the partially developed Cactus Basins in the City of Rialto as the most feasible location to facilitate recharge activities for the Rialto-Colton Basin.
- The proposed pipeline will facilitate SWP recharge in the Cactus Basins.
  - The project includes the construction of new turnout downstream of the Oliver Roemer Water Treatment Plant and 1-mile pipeline and appurtenances
- The Cactus Basins will be used for recharge when the basins are not used for flood control purposes.


Cactus Basins Connector
Pipeline Benefit Area (38.7 mi2)
Cajon Blvd
Kendall Dr
Little Creek Wash
W Highland Ave
W Base Line St
N E St
N Waterman Ave
Highland
San Bernardino
San Bernardino Int'l Airport
Baseline Ave
Citrus Ave
Cherry Ave
Alder Ave
Fontana
Rialto
Merrill Ave
Etiwanda Ave
Valley Blvd
Slover Ave
Bloomington
Colton
San Bernardino Fwy
Alabama St
Orange St
Redlands
Loma Linda
Jurupa Ave
S Riverside Ave
Grand Terrace
Jurupa Hills
Mission Blvd
Glen Avon
Rubidoux
Mira Loma
Riverside
Iowa Ave
N
0
2.5
5
Miles

Santa Ana River Sustainable Parks & Tributaries Water Reuse (Purple Pipe)

- The project's new supply will provide a dependable minimum flow to maintain habitat when there would otherwise be no surface water
- The supply will be utilized for retail irrigation demands and will help offset a like volume of alternative supplies needed to meet those same demands
- Local groundwater basin levels have been declining in large part due to prolonged drought conditions and SWP supplies have been curtailed up to as much as 95% in recent years.

- The project includes the installation of pipeline adjacent to the Santa Ana River (SAR) in order to deliver tertiary treated water from the nearby City of Riverside's water treatment plant to SAR tributaries as well as City parks.
  - This includes construction of approximately 8,000 linear feet of new 12 to 24 inch pipeline.

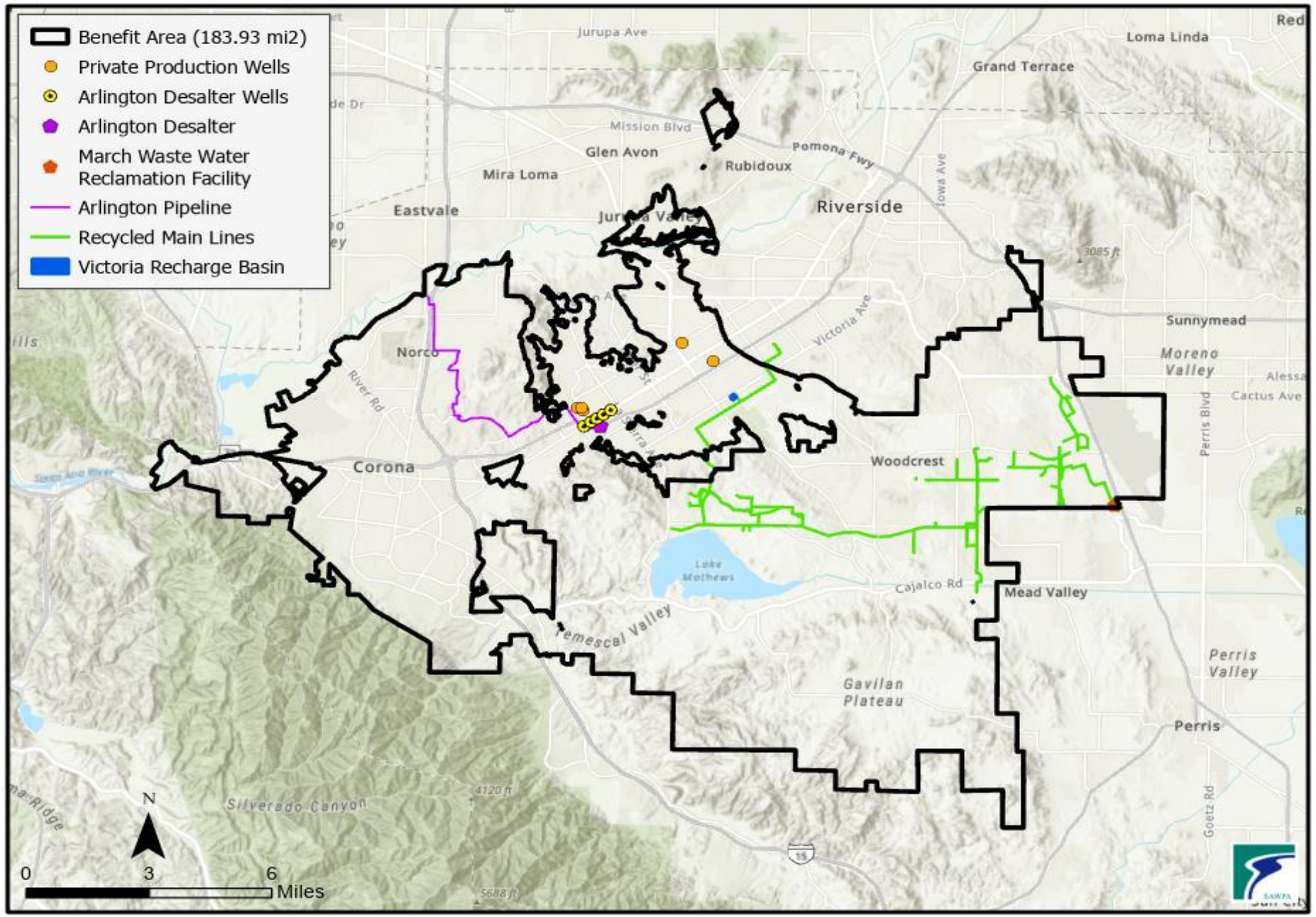

Santa Ana River Sustainable Parks & Tributaries Water Reuse (59.83 mi 2)
HUC 12
Hole Lake
Tequesquite Arroyo
Highgrove
Rubidoux
Riverside
Jurupa Valley
Pigeon Pass Valley
Box Springs Mountains
Edgemont
Moreno Valley
Woodcrest
March Air Reserve Base
Glen Valley
Mead Valley
Val Verde
Eagle Valley
Mockingbird Canyon
Lake Mathews
El Sobrante Rd
Cajalco Rd
Magnolia Ave
Indiana Ave
Main St
N
0
1.75
3.5
Miles

Improving Water Quality of Recycled Water Used in Local Groundwater Recharge Project

- Project does four things - 1) Address decreasing groundwater levels that are affected by historical droughts; 2) increase local water supply availability; 3) treat recycled water tainted by chemical contaminates; and 4) increase future resiliency by mitigating the effects of future droughts.
- It is anticipated that PFAS will be identified as a contaminant with a removal limit in the waste discharge requirement (WDR) permit for the Western Water Recycling Facility (WWRF) in the future.

- Project will treat WWRF water, using an above-ground PFAS treatment system, and then convey water into the Victoria Recharge Basin, recharging the Riverside-Arlington Groundwater Basin.

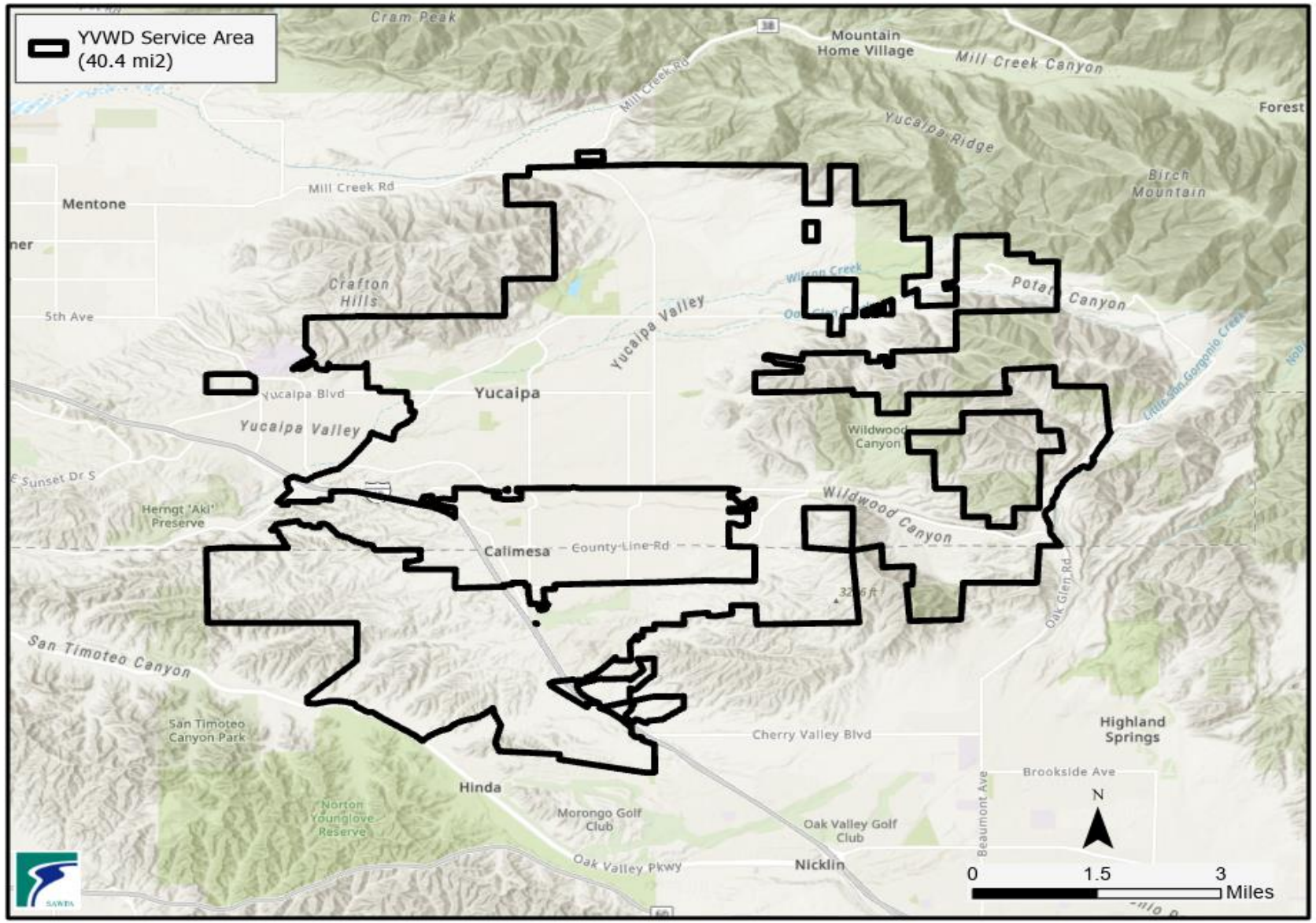
Western Municipal Water District



Calimesa Aquifer Storage and Recovery

- Project is important as it will enable the District to become less reliant on imported water from the SWP and improve the sustainability of the community.
- The 2022 SWP allocation from the Department of Water Resources of 5% has put more pressure on water suppliers to find alternative sources of water.

- Project will recharge Beaumont Groundwater Basin with reverse-osmosis recycled water from the District's Wochholz Regional Water Recycling Facility allowing the District to extract this new water.
- This aquifer storage and recovery project (ASR) includes extracting the new water source as either recycled water from four injection wells, or as drinking water from two drinking water extraction wells.


YVWD Service Area
(40.4 mi2)
Cram Peak
Mountain
Home Village
Mill Creek Canyon
Forest
Mill Creek Rd
Yucaipa Ridge
Birch
Mountain
Mentone
Mill Creek Rd
Crafton
Hills
Yucaipa Valley
Potato Canyon
5th Ave
Yucaipa Blvd
Yucaipa
Yucaipa Valley
Wildwood
Canyon
Sunset Dr S
Herngt 'Aki'
Preserve
Wildwood Canyon
Calimesa
County Line Rd
Oak Glen Rd
San Timoteo Canyon
San Timoteo
Canyon Park
Cherry Valley Blvd
Highland
Springs
Brookside Ave
Hinda
Norton
Younglove
Reserve
Morongo Golf
Club
Oak Valley Golf
Club
Beaumont Ave
Oak Valley Pkwy
Nicklin
N
0
1.5
3
Miles

Next Steps (Including Ranking Shown Below)

General Implementation:

$$\left(\sum_{\text{6 categories}} \left(\frac{x\ benefit}{X\ Benefit} \times \text{WF} \right) \right)$$

If Tribe Lead: x 10% of ∑ in ( )

+

If Regional: x 15% of ∑ in ( )

+

If New and Innovative: x 5% of ∑ in ( )

+

If Non-Profit Partner: x 5% of ∑ in ( )

DAC:

$$\left(\sum_{\text{3 categories}} \left(\frac{x\ benefit}{X\ Benefit} \times \text{WF} \right) \right)$$

If Tribe Lead: x 10% of ∑ in ( )

+

If Non-Profit Partner or Lead*: x 5% of ∑ in ( )

WF = Weighting Factor

*If Non-Profit is the lead, the percentage increases to 10%.

Setting Date for Next Workshop

- July 25, 26 or 27?

Questions

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iachimore@sawpa.org

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