

# Overview of Riverside Public Utilities - Water & Riverside Habitat, Parks, and Water Project

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## INLAND EMPIRE CHAPTER WATER REUSE ASSOCIATION

May 21, 2019

# City of Riverside Mayor & City Council

**Rusty Bailey**  
Mayor



**Mike Gardner**  
Ward 1



**Andy Melendrez**  
Ward 2



**Mike Soubirous**  
Ward 3



**Chuck Conder**  
Ward 4



**Chris Mac Arthur**  
Ward 5



**Jim Perry**  
Ward 6



**Steve Adams**  
Ward 7

# City of Riverside Board of Public Utilities Members



Jo Lynne Russo-Pereya  
Board Chair  
Ward 4/Citywide



David Crohn  
Ward 1/Citywide



Jennifer O'Farrell  
Ward 1



Ana Miramontes  
Ward 2



Elizabeth Sanchez-Monville  
Ward 3



David Austin  
Ward 4



Andrew Walcker  
Ward 5



Jeanette Hernandez  
Ward 6



Gil Ocegueda  
Ward 7

# City of Riverside Public Utilities Executive Management

Todd Corbin  
Utilities General Manager



Daniel E. Garcia  
AGM – Power Resources



George Hanson  
AGM – Energy Delivery



Brian Seinturier  
Fiscal Manager



Todd Jorgenson  
AGM - Water

# WATER DIVISION OVERVIEW

1. Riverside's Municipal Water Utility was established in 1913
2. Service Area Size: 74 square miles
3. Provide potable, non-potable, and recycled water to retail and wholesale customers.
4. 157 Employees.
5. Replacement value of the Water System is estimated at over a billion dollars.

# EARLY RIVERSIDE

1. Southern California Colony Association, 1870
2. First Santa Ana River diversion, 1871





# CITRUS





# EARLY WATER DEVELOPMENT





# WATER RIGHTS

1. Established Riparian & Appropriative Rights
2. Consolidation



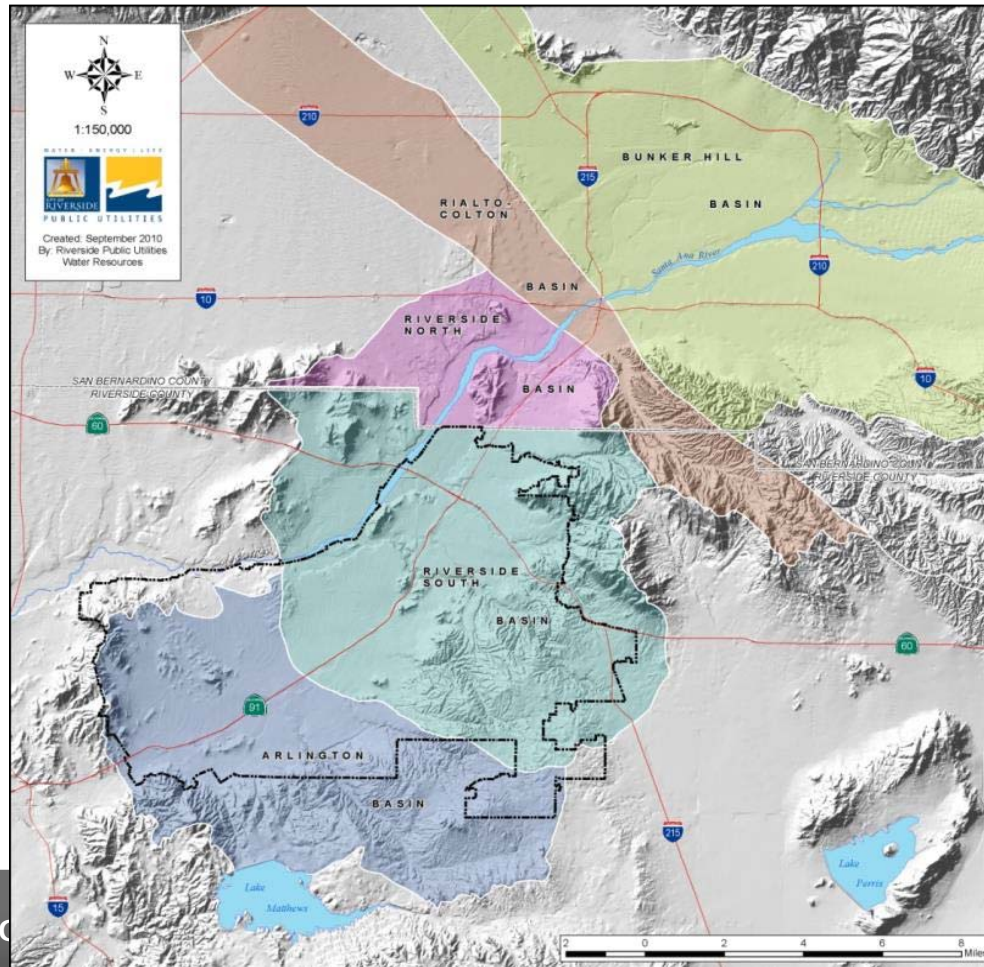
# WATER SYSTEM

1. 56 Domestic wells
2. 65,428 meters
3. 144 Booster station pumps
4. 1,003 miles of pipeline
5. 6 Treatment Plants
6. 16 Reservoirs





# RIVERSIDE'S GROUNDWATER RIGHTS



## Extraction/Export Rights

### Bunker Hill

- 55,263 AFY Export

### Colton

- 2,728 AFY Export

### Riverside North

- 10,902 AFY Export

### Riverside South

- 16,880 AFY Extraction

**85,773 AFY Total**

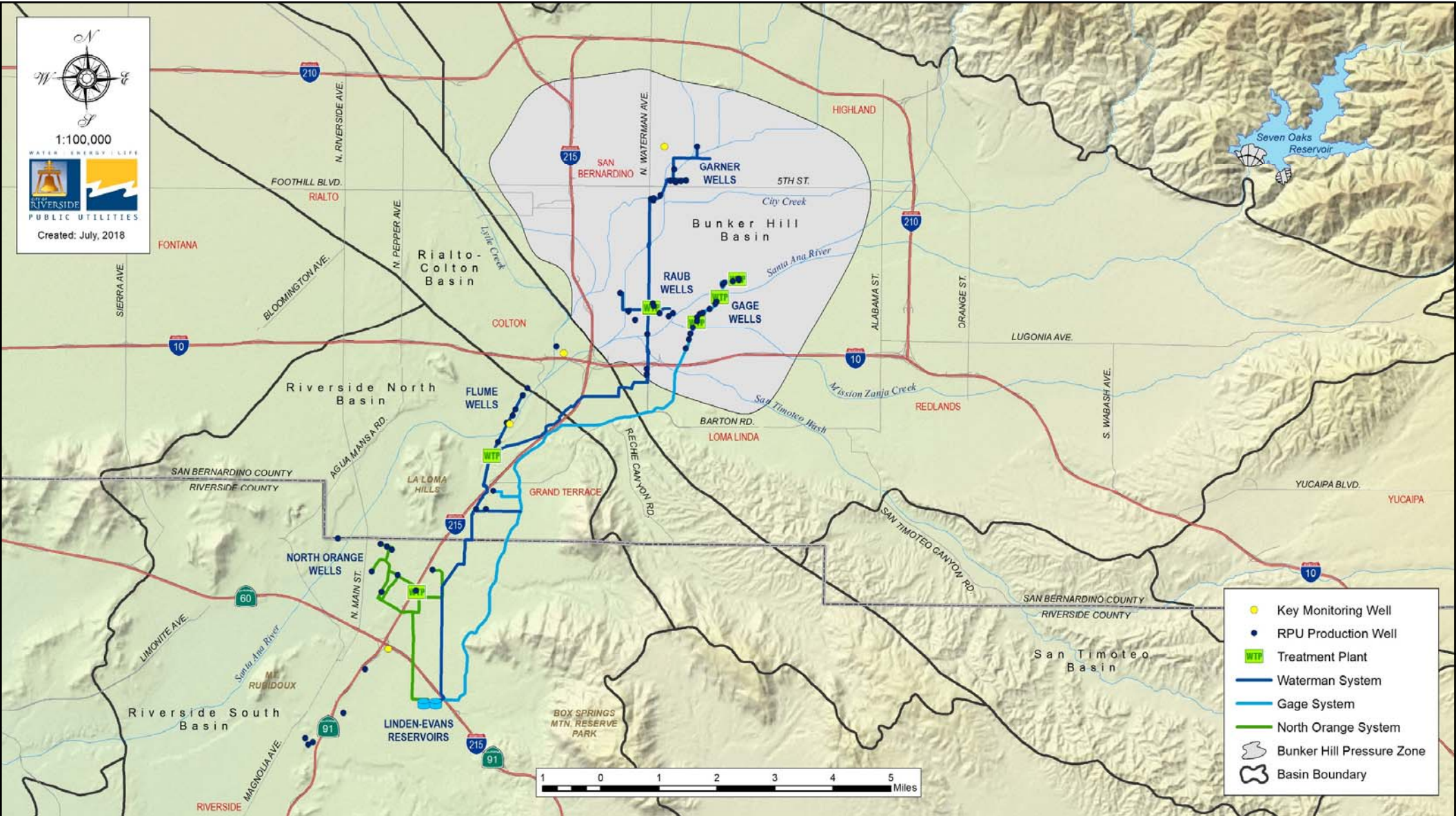




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WATER ENERGY LIFE

Created: July, 2018



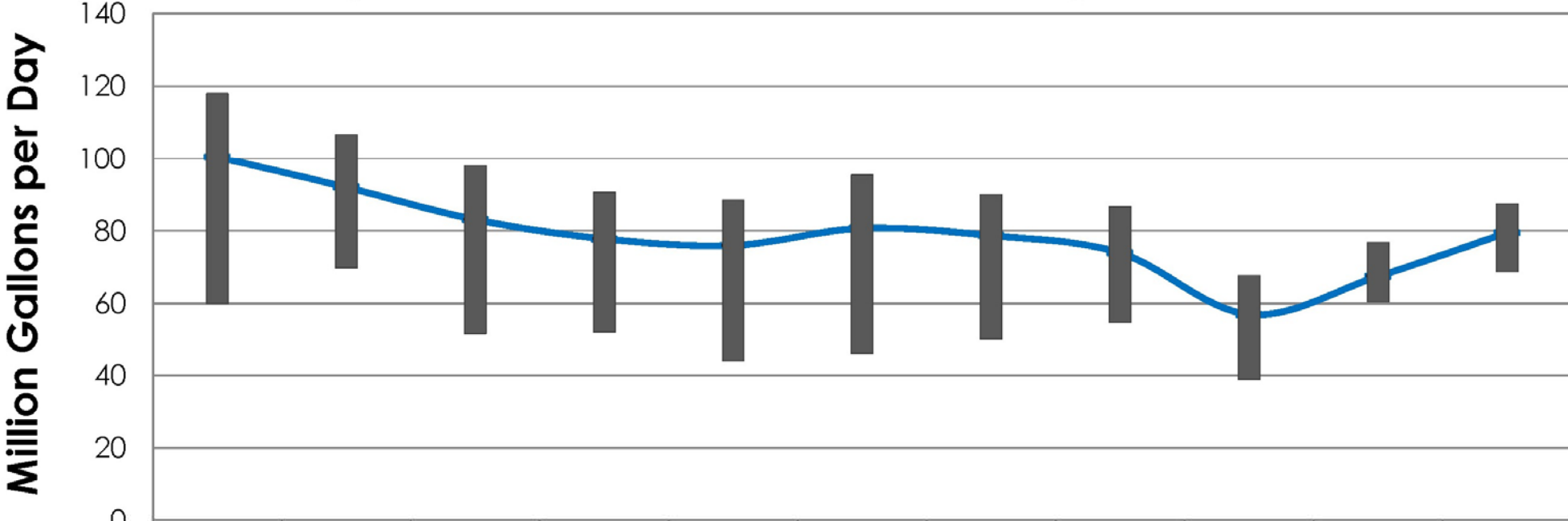
- Key Monitoring Well
- RPU Production Well
- Treatment Plant
- Waterman System
- Gage System
- North Orange System
- Bunker Hill Pressure Zone
- Basin Boundary





# WATER DEMAND

RPU Summer Period Water Consumption Variation  
(Summer Period = June 15 to October 15)



	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Maximum Day	118	106.6	98.0	90.6	88.4	95.4	90.0	86.6	67.7	76.8	87.5
Average Day	100.4	92.0	83.1	77.8	76.0	80.7	78.7	73.9	57.0	67.5	79.5
Minimum Day	60	69.8	51.7	52.1	43.9	46.0	50.0	54.8	38.8	60.4	68.7

# WATER SUPPLY OPPORTUNITIES

Begins with Cooperative Partnerships

## 1. Stormwater

- a. Enhanced Recharge (*SBVMWD/WMWD/RPU*)
- b. Active Recharge (*SBVMWD/WMWD/RPU*)
- c. Rubber Dam (*SBVMWD/WMWD/RPU*)
- d. Local Flood Control Basins (*Riv County Flood/RPU*)

## 2. Recycled Water Reuse

- a. Riverside Habitat, Parks, and Water Project (*SBVMWD/HCP/RPU*)
- b. Jackson Street Pipeline, Phase 2 (*WMWD/RPU*)

## 3. Water Conservation

- a. Water Use Efficiency Programs (*WMWD/RPU*)
- b. Demand Management

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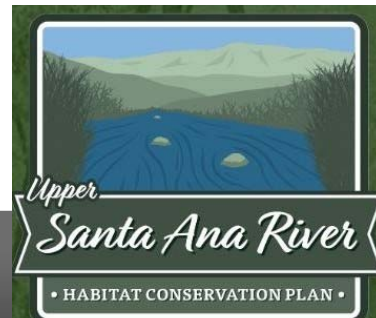
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# SAR HABITAT CONSERVATION PLAN

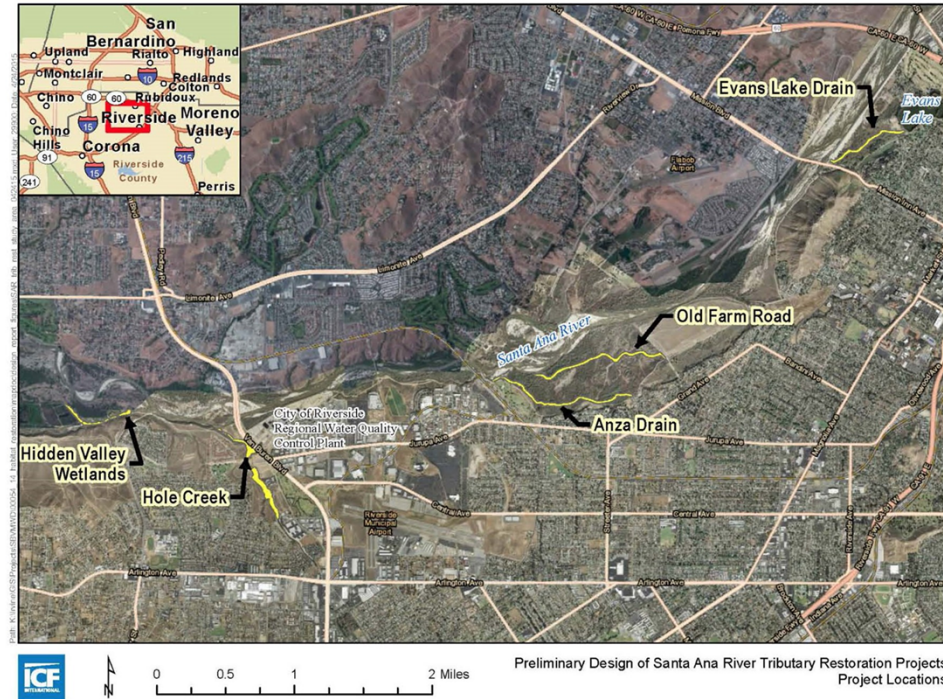
1. Water Agencies working with Wildlife Agencies & NGOs to promote and mitigate the impacts to endangered species, enabling construction of new water supply projects on a regional scale
2. Pre-mitigating for potential impacts to 23 native species and creating bank
3. Protects minimum flow needs for species
4. Provides platform to maximize ecological value of water





# SAR HCP RESTORATION EFFORTS

1. Tributaries
  - a. Anza (prop 84)
  - b. Old Ranch Creek (prop 84)
  - c. Hole Creek (prop 84)
  - d. Hidden Valley Creek (prop 84)
2. Hidden Valley Wetlands
3. Evans Creek & Wilderness area



# NEED RELIABLE WATER SUPPLY



Old Farm Rd.



Hole Creek



Hidden Valley

# RIVERSIDE HABITAT, PARKS & WATER PROJECT BACKGROUND

1. Regional Recycled Water Concept Study, WSC 2016
  - a. Collaborative effort led by Valley District to build partnerships, identify regional recycled water projects & rank the projects in terms of cost and benefit
  - b. Project was conceived to support the HCP and to deliver recycled water to irrigation customers.
  - c. Recognized as one of the top recycled water projects within the region because of its financial, social & environmental strengths

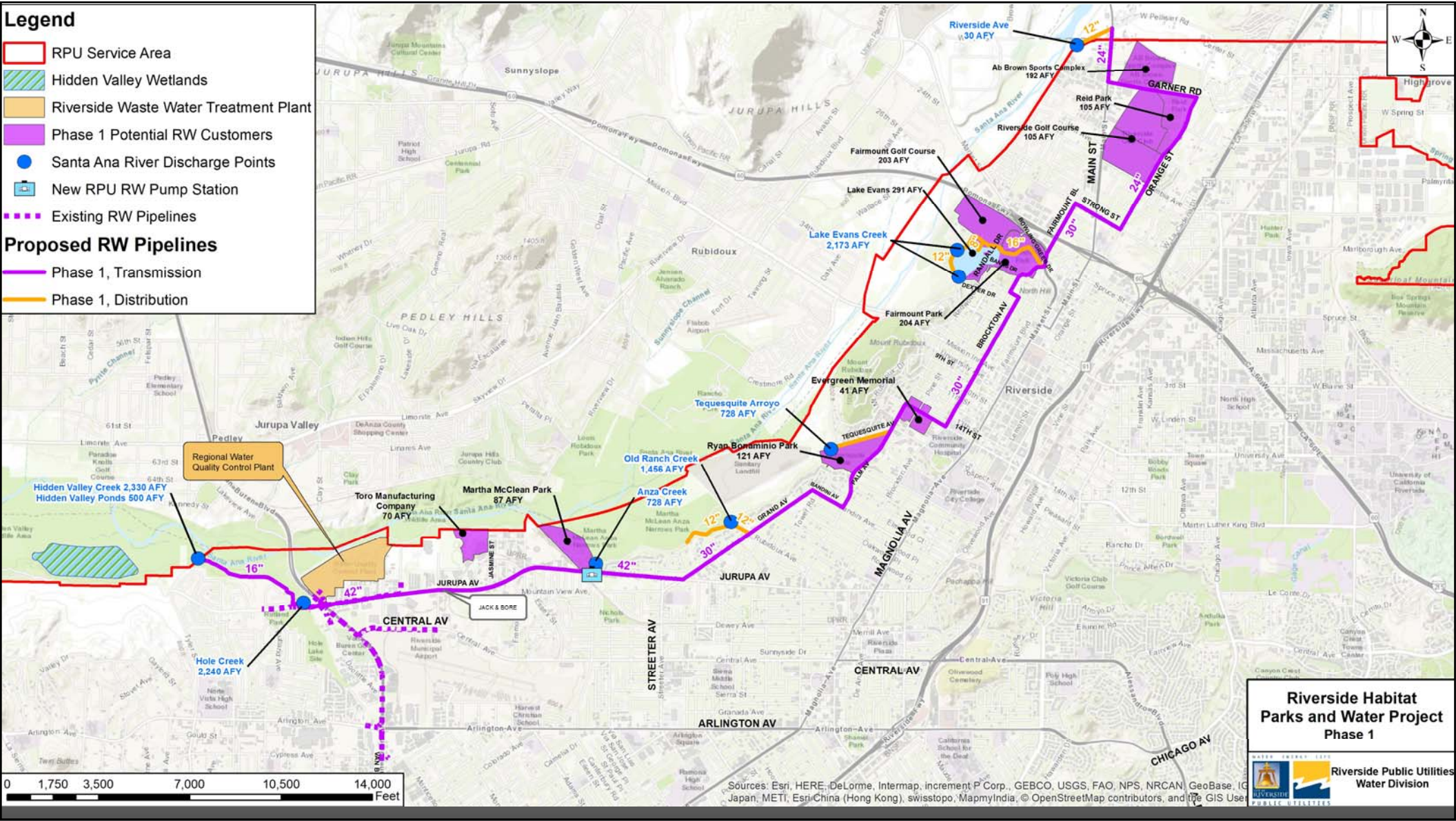


**Legend**

- RPU Service Area
- Hidden Valley Wetlands
- Riverside Waste Water Treatment Plant
- Phase 1 Potential RW Customers
- Santa Ana River Discharge Points
- New RPU RW Pump Station
- Existing RW Pipelines

**Proposed RW Pipelines**

- Phase 1, Transmission
- Phase 1, Distribution



**Riverside Habitat  
Parks and Water Project  
Phase 1**

Riverside Public Utilities  
Water Division

Sources: Esri, HERE, DeLorme, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Japan, METI, Esri China (Hong Kong), swisstopo, MapmyIndia, © OpenStreetMap contributors, and © GIS User



# PROJECT DISCHARGE BASICS

1. Riverside Narrows Discharge (15,250 afa)
  - a. Hidden Valley Wetlands
  - b. Hidden Valley Creek
  - c. Hole Creek
  - d. RWQCP Outfall
2. Upstream Discharge (5,000 afa)
  - a. Anza Creek
  - b. Old Ranch Creek
  - c. Tequesquite Arroyo
  - d. Evans Creek
3. Recycled Water (4,750 afa)

# PROJECT BENEFITS

1. Water Reuse on regional, integrated scale
2. Habitat creation, improvement & sustainability
3. Enables construction of HCP water supply projects
4. Provides a drought proof supply to tributaries and parks and provides a primary/secondary water supply
5. Creates a new production right from the SBBA for RPU
6. Improved water quality (replacing dry-weather flow)
7. Public outreach & education components

## NEXT STEPS

1. Initiate the Riverside-Valley District Partnership through an MOU & present it to respective governing Boards/Council for consideration & support (2019)
2. Collaborate with Environmental groups (2019)
3. Planning/Design/Permits/Agreements (begin in 2019)
4. Construction (TBD)



# Questions?

