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

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

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 Oceguera  
Ward 7

Jo Lynne Russo-Pereya  
Board Chair  
Ward 4/Citywide
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
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.
1. Southern California Colony Association, 1870
2. First Santa Ana River diversion, 1871
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**

Olympic-Size Swimming Pool ~ 2 Acre-Feet
WATER DEMAND

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

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