Multi-benefit Projects

Edwin Quinonez, PE
Chief of Planning Division
The District

» $60 million in ad-valorem property tax revenues
» $25 million in capital projects
» 240 Staff
» Over 700 miles of storm drains, channels, and levees
» 61 dams and detention basins
Flood Control

Storm Drains, Channels, Levees, Dams
Mission

We responsibly manage stormwater in service of safe, sustainable and livable communities.

Vision

To be a leader in the field of stormwater management, to achieve extraordinary results for our customers and be known for high quality teams and returned value to our community.

Values

- Integrity – Speak honestly and follow through
- Transparency – Our actions will be visible and understandable
- Trust – We can count on each other and others can count on us
- Teamwork – Shared purpose, shared values, shared goals
- Accountability – We are responsible for results
- Excellence – We deliver outstanding results and exceed expectations
Evolution

Day Creek Channel - North of the 60 Freeway...Old School Uni-tasker
Wolf Creek Channel In Temecula – Nice to have even when it’s not raining
Multi-Use
Eastvale – Harada Park/Basin
Multi-Use
Eastvale – Harada Park/Basin
Multi-Use

Santa Ana River Bike Trail
Conserving stormwater... and other water supplies

Capture stormwater in the winter, excess imported water supplies in summer
Conserving stormwater... and other water supplies

- **Groundwater Enhancement Studies**
  - Temescal Groundwater Master Plan (Corona/EVMWD)
  - Coldwater Creek Groundwater Master Plan (Corona)
  - Arlington Groundwater Desalter Expansion (WMWD)

- **Enhanced Flood Control Master Drainage Plans**
  - West Desert Hot Springs (MSWD)
  - Moreno
  - Lakeland Village

- **Recharge Projects**
  - Arlington Desalter Recharge Expansion Phase II (WMWD)
  - Bautista Creek Recharge Basin Expansion (LHWD)
  - Coldwater Creek Recharge Basin Rehabilitation (Corona)
  - Lincoln/Cota Street Recharge Basin Diversion (Corona)
  - Elsinore Line A Debris Basin (EVMWD)
  - Little Lake Basin Expansion (LHWD)
  - Meridian Channel Diversion Project (EMWD)
  - Mockingbird Reservoir Dredging Project (Riverside)
  - Noble Creek Recharge Basin Expansion (BCVWD)
  - Riverside / Corona Dams Reoperation (Riverside/Corona)
  - San Jacinto River Recharge Basin (EMWD)
Infiltration Testing

- Infiltration or storage potential evaluated on 84 District basins
- Infiltration tests completed on 25 of the basins
Challenges

• Stormwater capture opportunities not as plentiful as we expected

• Aligning resources / timing

• Water rights
Strategy

• Proactively engage potential partners during the design phase

• Incorporate multi-use friendly concepts into the design of projects

• Continue to identify and catalogue potential locations, opportunities for future projects
West Desert Hot Springs MDP

Groundwater Recharge Basins

Water Quality Basins
Victoria Basin

**Purpose**: Expand Arlington Desalter Facility in Riverside to facilitate the recharge of currently unused or underutilized local water resources, including stormwater and dry-weather flows

**Partner**: Western Municipal Water District

**Status**: Completed
Little Lake Basin

**Purpose:** Modify detention basin to include “dead storage” to increase volume retained by 15.3 acre-feet

**Partner:** Lake Hemet Municipal Water District

**Status:** Completed

<table>
<thead>
<tr>
<th>Little Lake Basin Recharge Modifications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phase</td>
</tr>
<tr>
<td>-------</td>
</tr>
<tr>
<td>1</td>
</tr>
<tr>
<td>2</td>
</tr>
<tr>
<td>3</td>
</tr>
<tr>
<td>4</td>
</tr>
<tr>
<td>5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
</tr>
</tbody>
</table>
**Bautista Recharge Basin**

**Purpose:** Expand existing Army Corps of Engineers Bautista Creek Channel Basins to be used to infiltrate surplus imported water by Lake Hemet Municipal Water District

**Partner:** Lake Hemet Municipal Water District

**Status:** Finalizing design

<table>
<thead>
<tr>
<th>Bautista Cr Ch Recharge Basin Expansion</th>
<th>Ponding AC-FT</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>4.5</td>
</tr>
<tr>
<td>2</td>
<td>3.0</td>
</tr>
<tr>
<td>3</td>
<td>10.1</td>
</tr>
<tr>
<td>4</td>
<td>4.8</td>
</tr>
<tr>
<td>5</td>
<td>2.0</td>
</tr>
<tr>
<td>6</td>
<td>0.8</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>25.2</strong></td>
</tr>
</tbody>
</table>
Purpose: Provide 10-year storm return frequency flood protection for the local residents of Cherry Valley while also promoting groundwater recharge and improving water quality by conveying water to NCRF-Ph II

Partner: Beaumont-Cherry Valley Water District (BCVWD)

Status: Conceptual design completed
Phoenix Diversion

**Purpose:** Reducing bacteria in Santa Ana River by diverting dry weather flows to Riverside Sewer Treatment Plant

**Partner:** City of Riverside

**Status:** Finalizing design
Next Steps

- Developing Stormwater Management Plans for Santa Ana, Santa Margarita and Whitewater Watersheds

- Continue to develop facilities that support future partnerships, including water conservation

- Ready to partner
Other District Facility Residents

Questions?