Riverside County Flood Control and Water Conservation District



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

Riverside Flood and Water Conservation

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

Evolution



Wolf Creek Channel In Temecula – Nice to have even when it's not raining

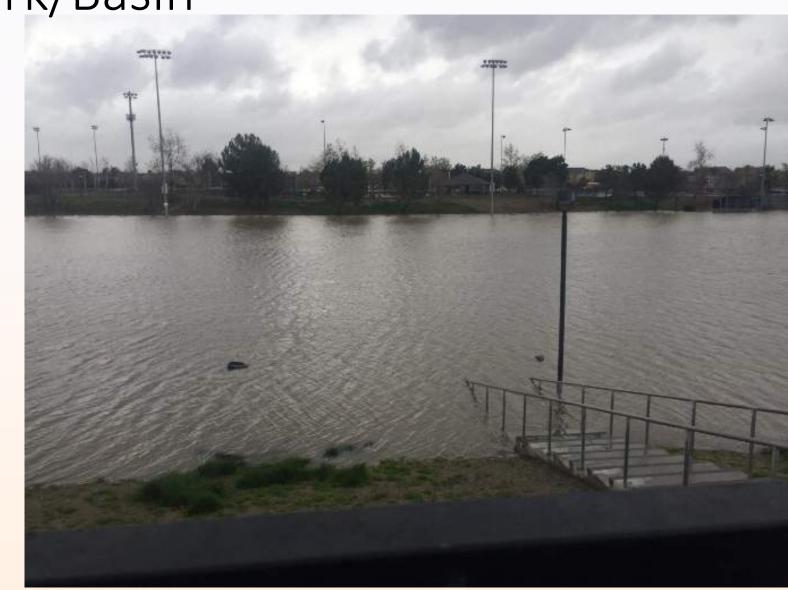
Multi-Use

Eastvale – Harada Park/Basin



Multi-Use

Eastvale – Harada Park/Basin





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)

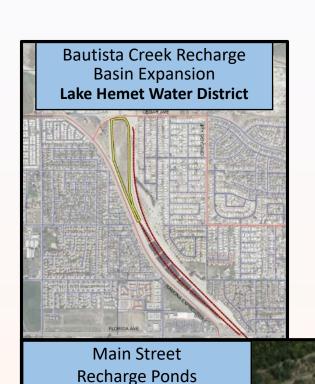
Meridian Channel Diversion Project (EMWD)

Mockingbird Reservoir Dredging Project (Riverside)

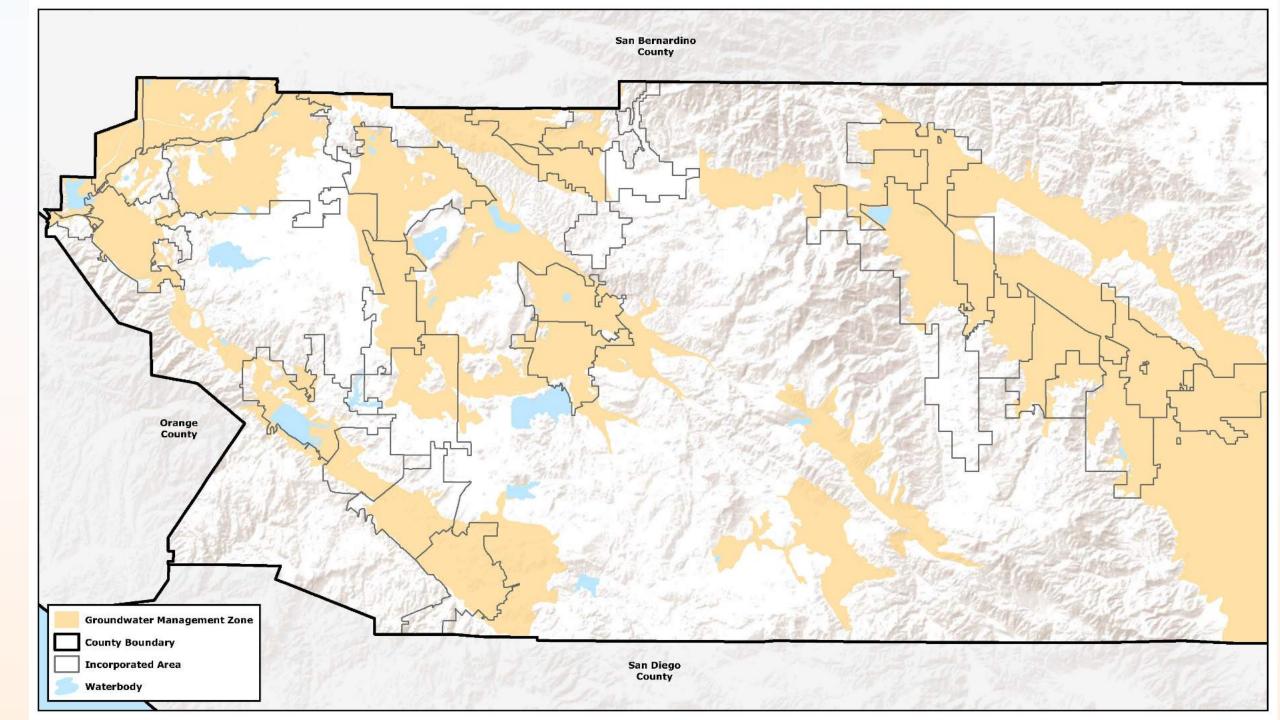
Noble Creek Recharge Basin Expansion (BCVWD)

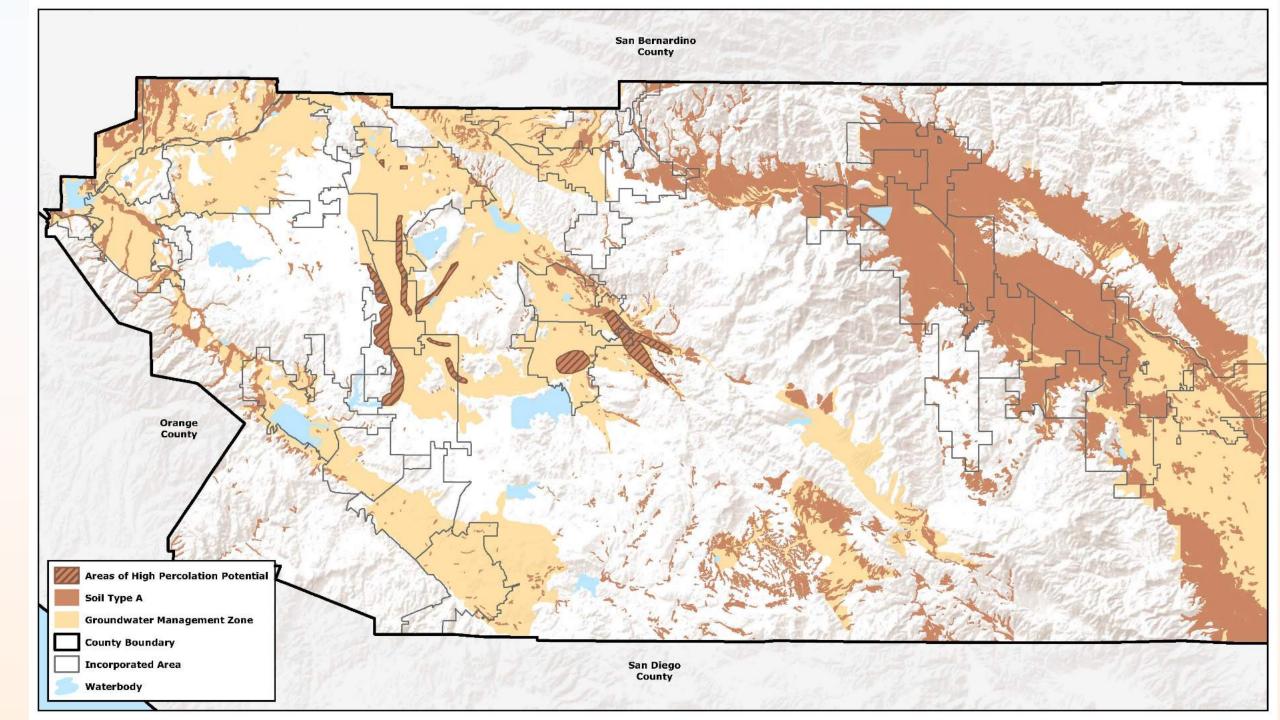
Riverside / Corona Dams Reoperation (Riverside/Corona)

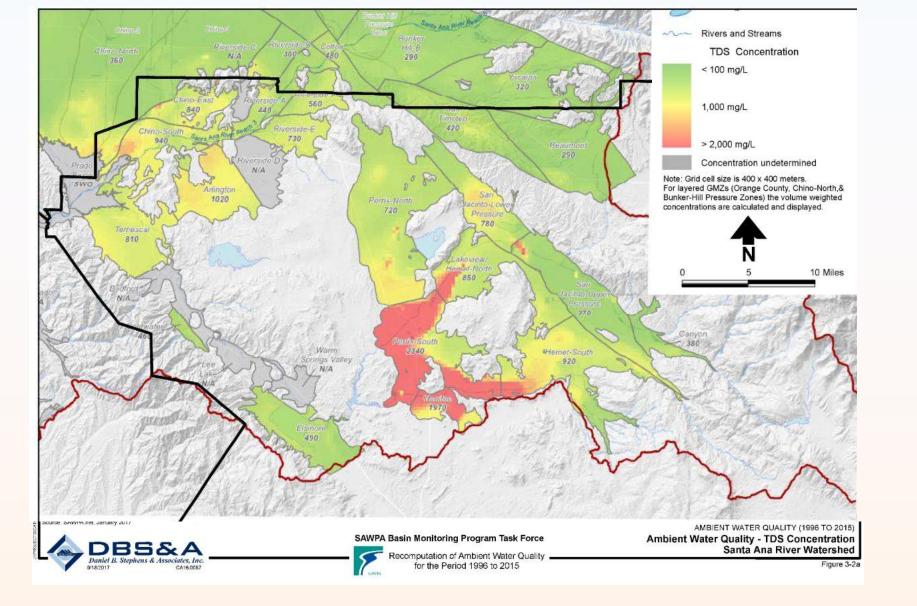
San Jacinto River Recharge Basin (EMWD)



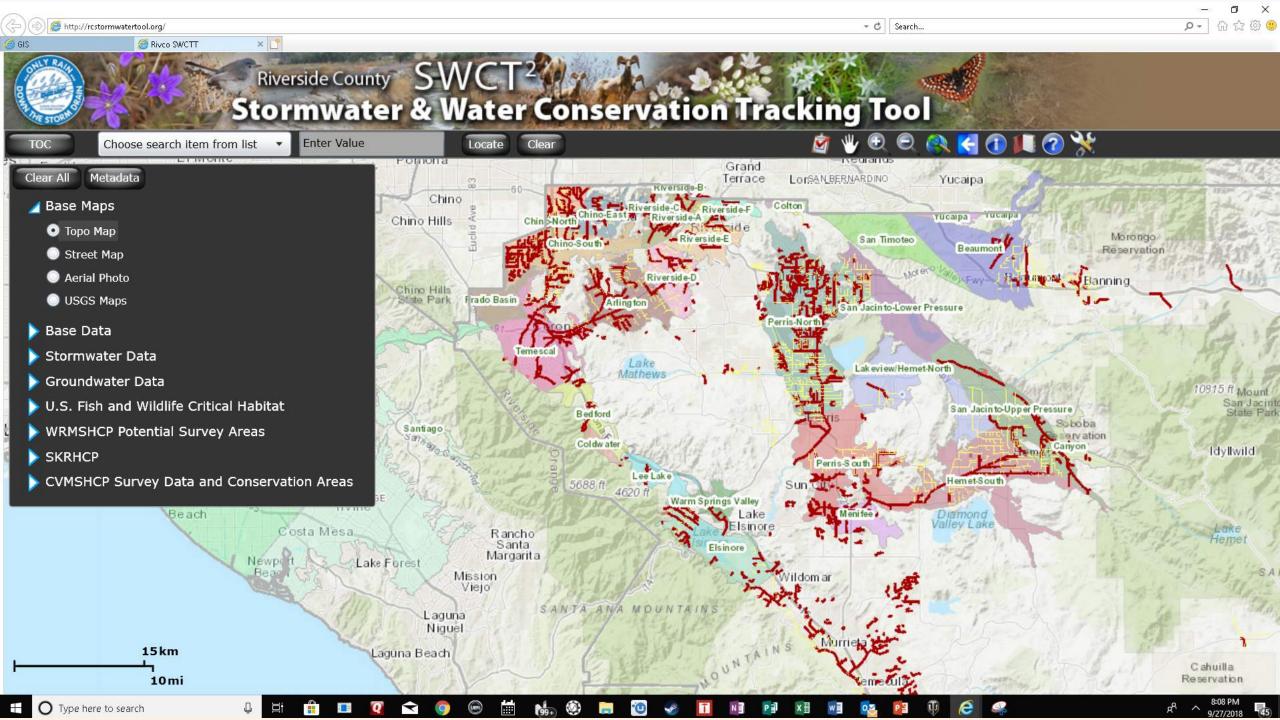
City of Corona







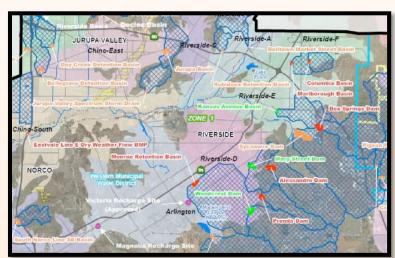




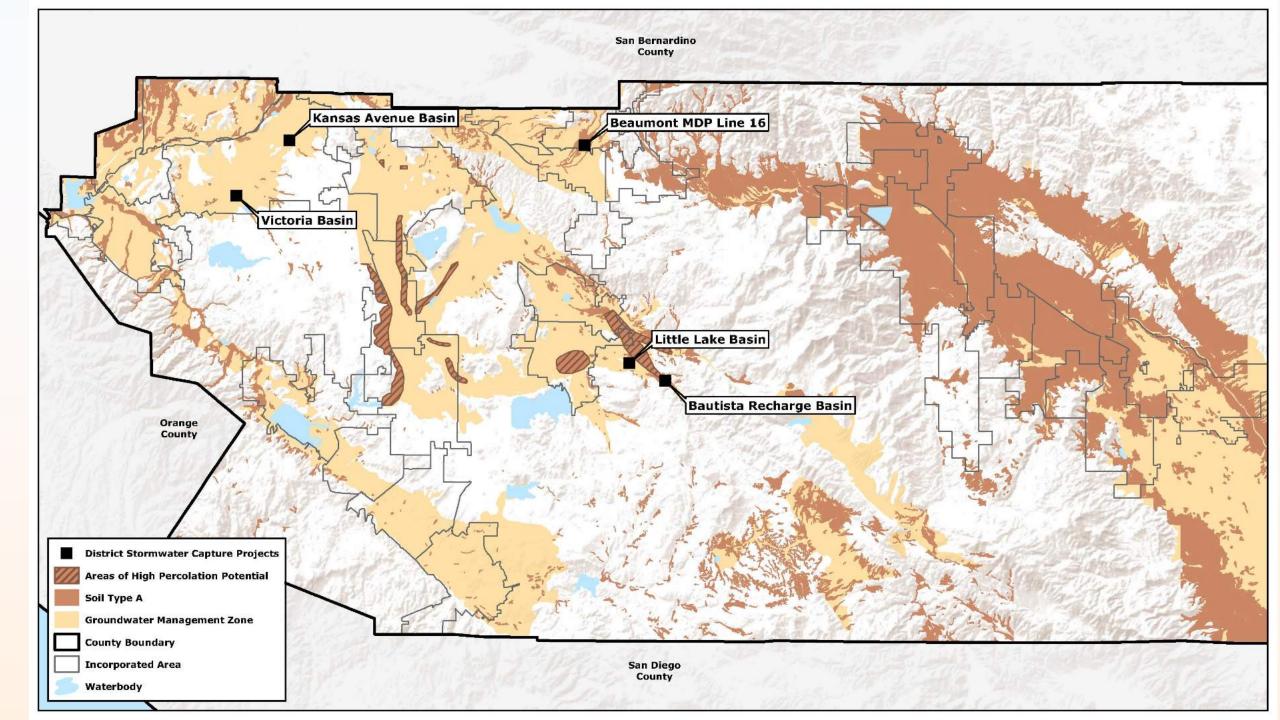
Infiltration Testing



- 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

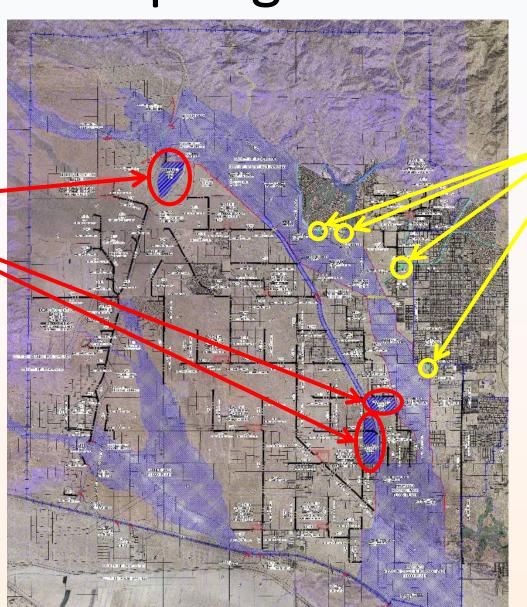
• Proactively engage potential partners during the design phase

- 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 dryweather flows

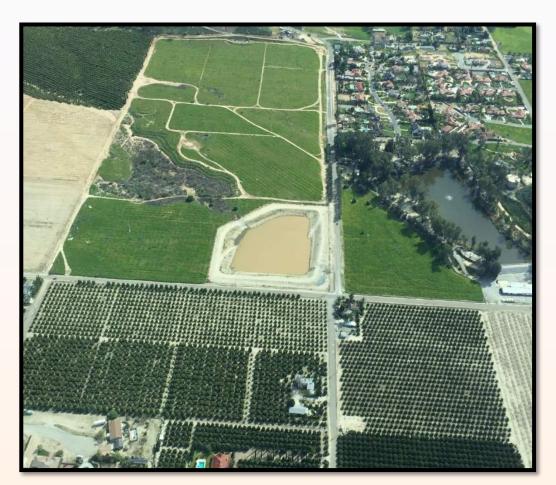
Partner: Western Municipal Water

District

Status: Completed

Little Lake Basin





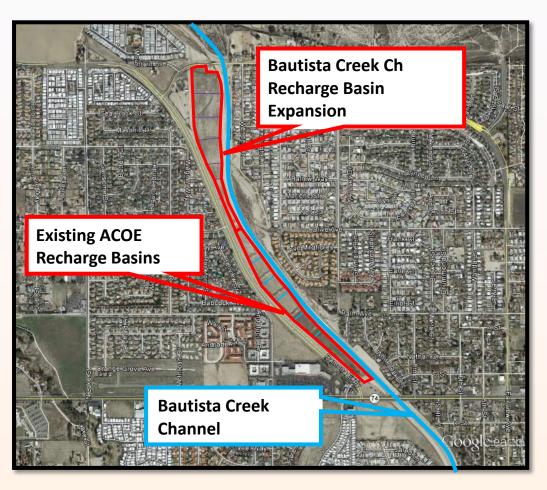
Purpose: Modify detention basin to include "dead storage" to increase volume retained by 15.3 acre-feet

Partner: Lake Hemet Municipal Water District

Status: Completed

Little Lake Basin Recharge Modifications	
Phase	Δ Volume (acre-feet)
1	3.3
2	3.2
3	3.1
4	2.9
5	2.8
Total	15.3

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

Bautista Cr Ch Recharge Basin Expansion	
Step Basin	Ponding AC-FT
1	4.5
2	3.0
3	10.1
4	4.8
5	2.0
6	0.8
Total	25.2

Beaumont MDP Line 16





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

