

# South Orange County Regional Recycled Water Planning



San Diego Regional Water Quality  
Control Board

Santa Margarita Water District  
February 11, 2015

*Santa Margarita  
Water District*

# SMWD Recycled Water

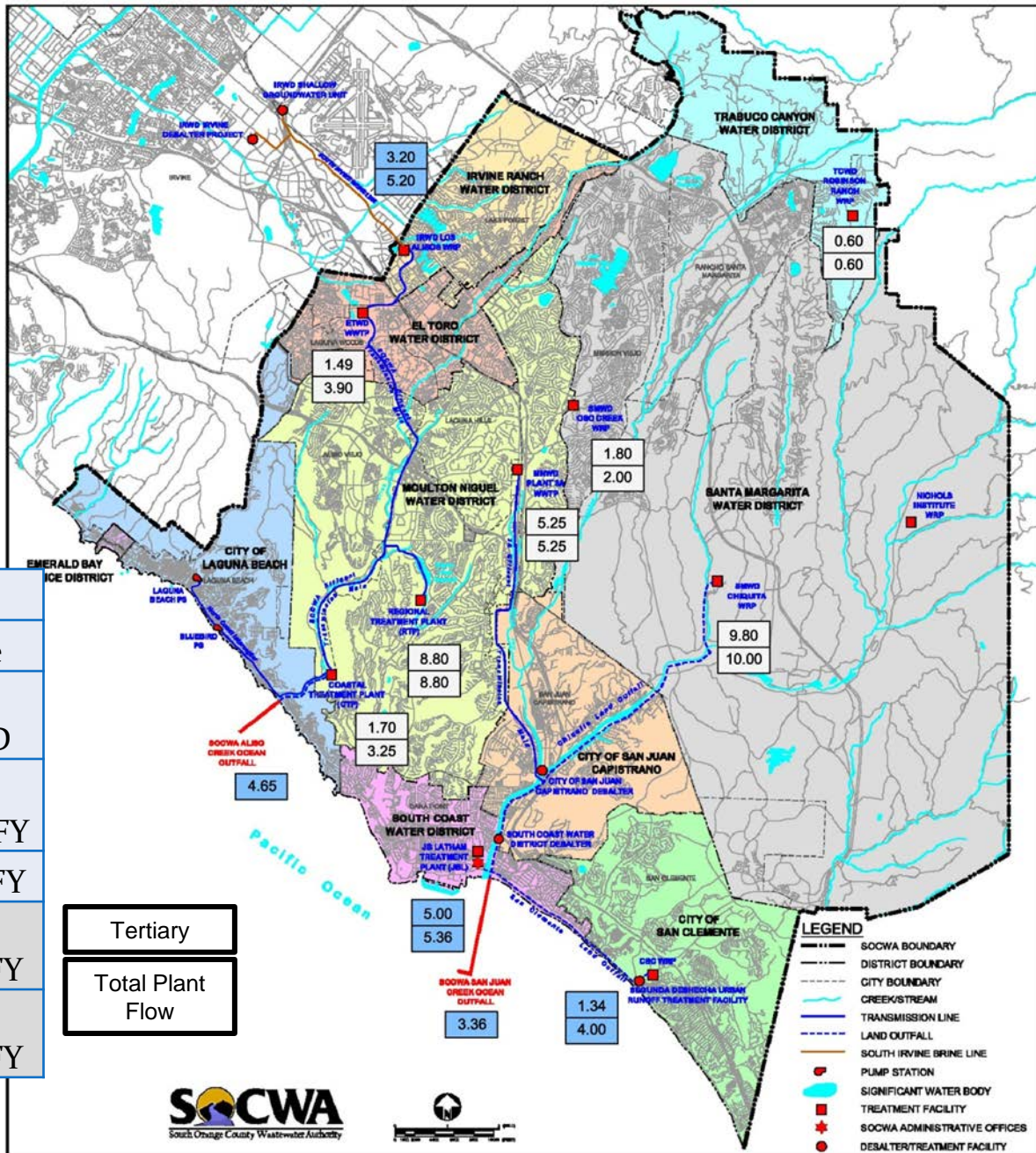
- Integral to Water Reliability Planning since 1979
- Currently meeting 17% of demand, projected to over 30%
- Ultimately utilize 100% of the wastewater
- Challenges:
  - Need Seasonal storage
  - Need Treatment plant expansion



# South Orange County Regional Recycled Water Planning Effort

- Recycled water since 1970's
- Commonality of goals and projects
- SOCWA holds Regional Recycled Water Permit 97-52
  - Long history of collaboration with Regional Board
- March 2014, SMWD regional recycled water summit
  - Identified opportunities, available supplies, current uses, proposed uses, impediments and developing implementation strategies

# Regional Recycled Water Potential



11 Treatment Plants

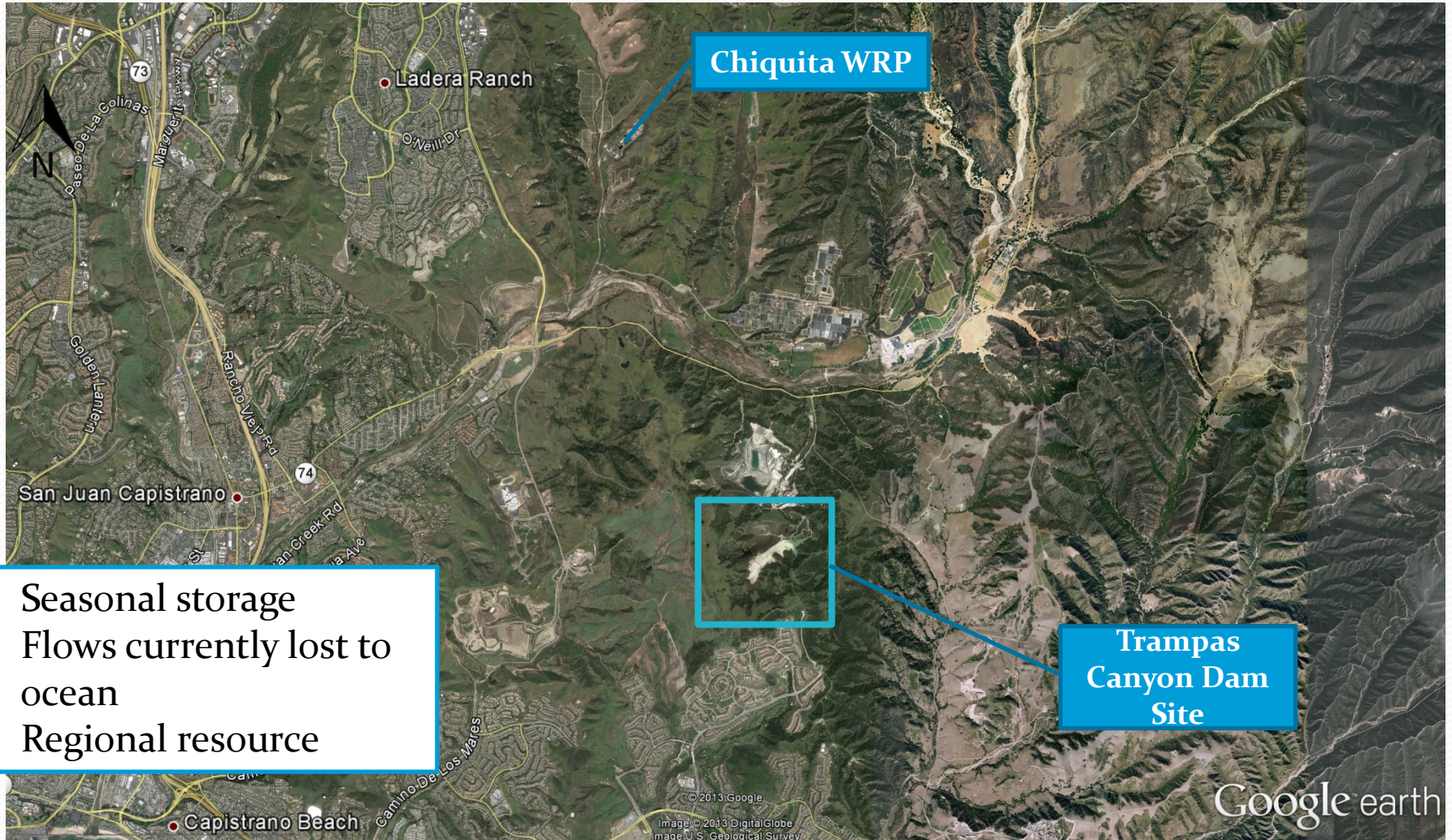
	Current	Future
Capacity	43 MGD	48 MGD
Recycled production	17,700 AFY	44,100 AFY
Ocean Disposal	30,800 AFY	10,100 AFY
San Juan Watershed	18,900 AFY	3,400 AFY
Aliso Creek Watershed	11,900 AFY	6,700 AFY

Tertiary  
Total Plant Flow

# SMWD Recycled Water Projects

- Removing the obstacles for sustainable local supplies:
  - Expansion of Chiquita WRP – 4.0 MGD
  - Expansion of 3A Plant – 3.75 MGD
  - Coordination of wastewater flows between Oso Creek , 3A and Latham Plants - Up to 6.0 MGD
  - SMWD Trampas Canyon seasonal storage reservoir – 5,000 AF
  - San Juan Basin Optimization Plan
    - Recycled water recharge

# Trampas Canyon Seasonal Storage Reservoir



# San Juan Basin Optimization Project

- Integrated with Regional Recycled Water Master Plan
- Impaired Basin impacted by ongoing drought
- Project includes
  - Development of a seawater barrier through a pumping trough or through injection
  - Development of storm water and urban return flow recharge
  - Development of recycled water recharge
- Sustainable water supply



### Monitoring Sites

- ▲ SJBA Monitoring Wells
- Vegetation Monitoring Sites
- CSJC Desalter Well
- SCWD Desalter Well
- SOCOD Test Well
- Other Production Well

Groundwater Recharge: Stormwater and/or Recycled Water

Adaptive Management Required Based on Modeling

Seawater Intrusion Barrier: Trough or Mound





# Next Steps



- Finalize current project planning efforts
- Coordinate with Regional Board
  - Basin Plan Amendment
  - Water quality and project features
  - Potential project permitting
- Work with South Orange County Integrated Regional Watershed Management Plan
- Complete funding planning and applications