

Santa Margarita Conjunctive Use Project, Phase I

August 2, 2016

United States Versus Fallbrook



- United States Government sues all water users in Fallbrook
- Final Judgment Requires a ***Physical Solution between U.S. and FPUD***

United States Versus Fallbrook



- United States Government sues all water users in

← United States Government

- Final Judgment Requires a *Physical Solution between U.S. and FPUD*

← Fallbrook

History of Waters of the Santa Margarita River



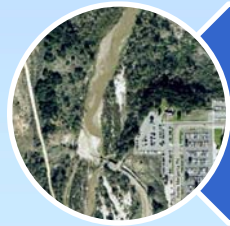
US. Versus Fallbrook



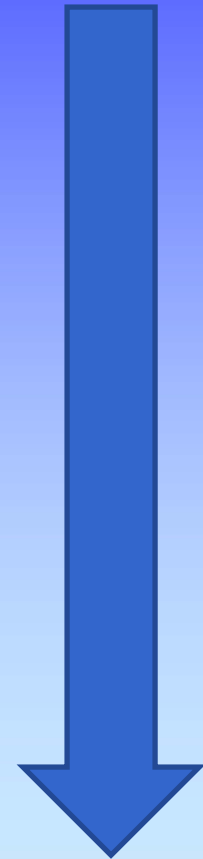
Two Dam Project



4 Party Agreement

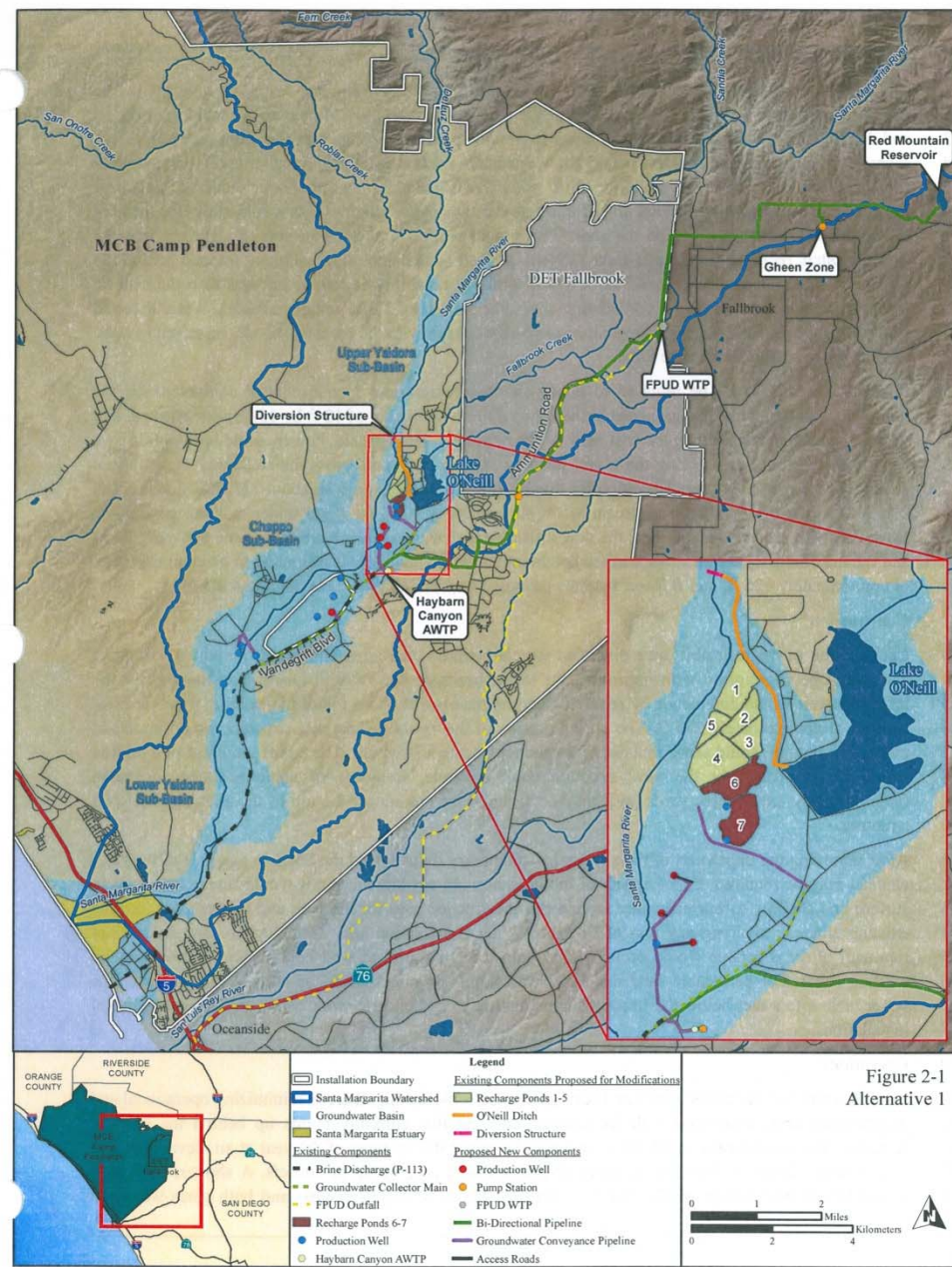


Santa Margarita
Conjunctive Use Project



Santa Margarita River Conjunctive Use Project

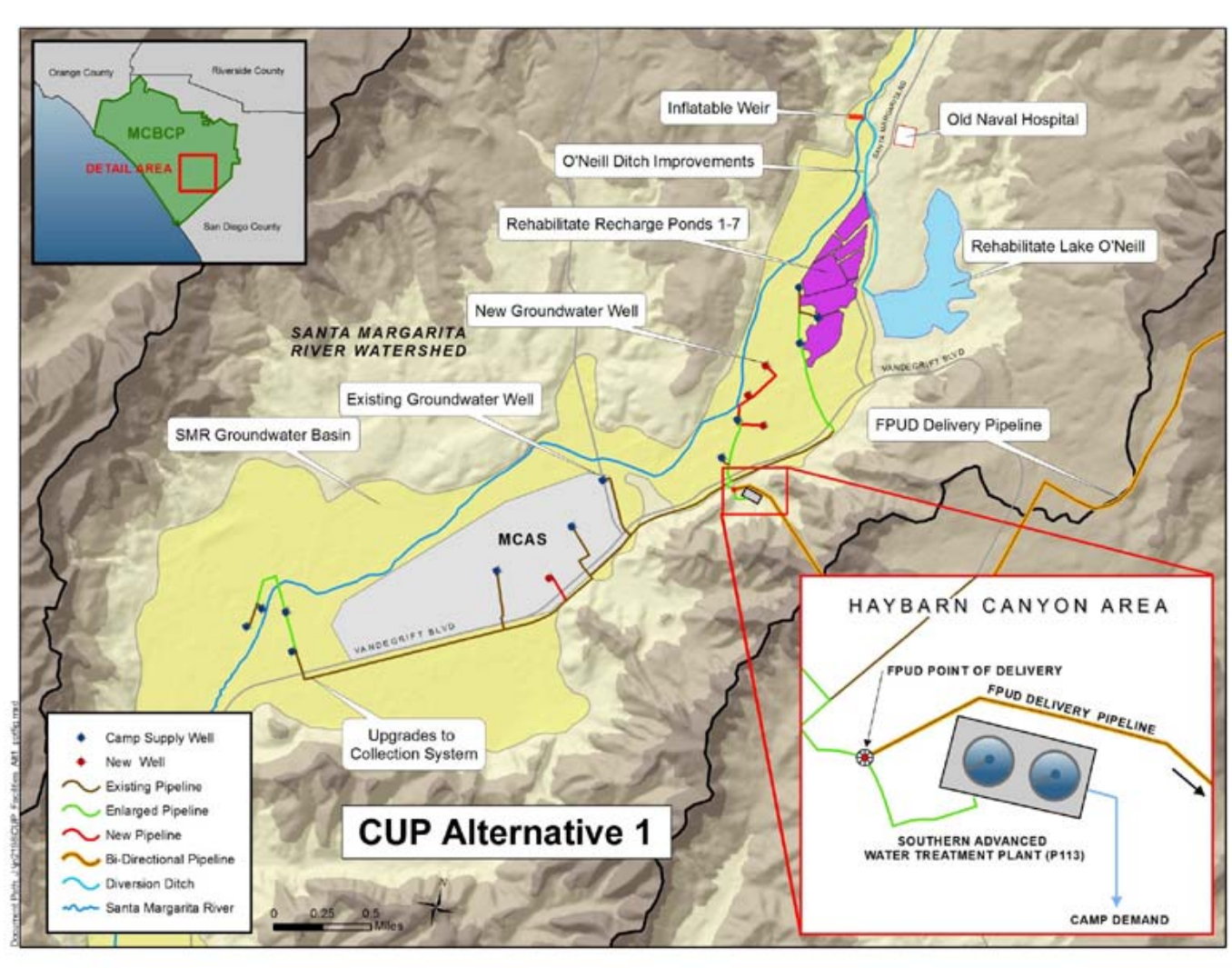
Average Annual Yield
(10,800 AFY)



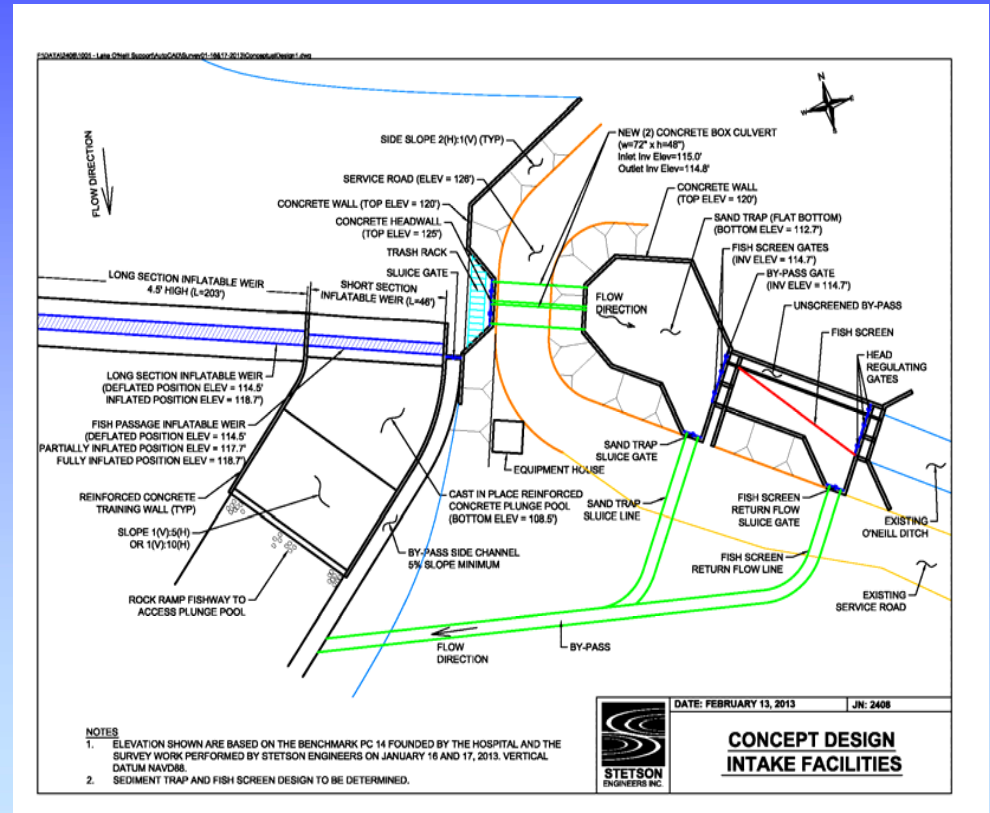
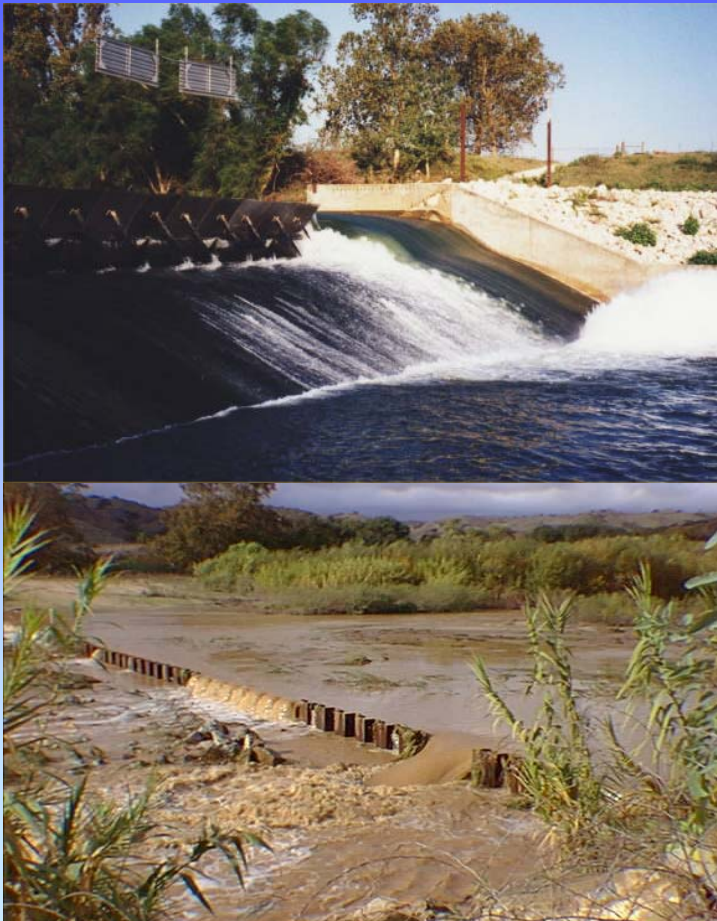
IRWM Project Includes

- Environmental Permitting (CEQA/NEPA)
- Hydrological Modeling, Water Rights Petitions and Settlement.
- Feasibility and Final Design of FPUD Facilities

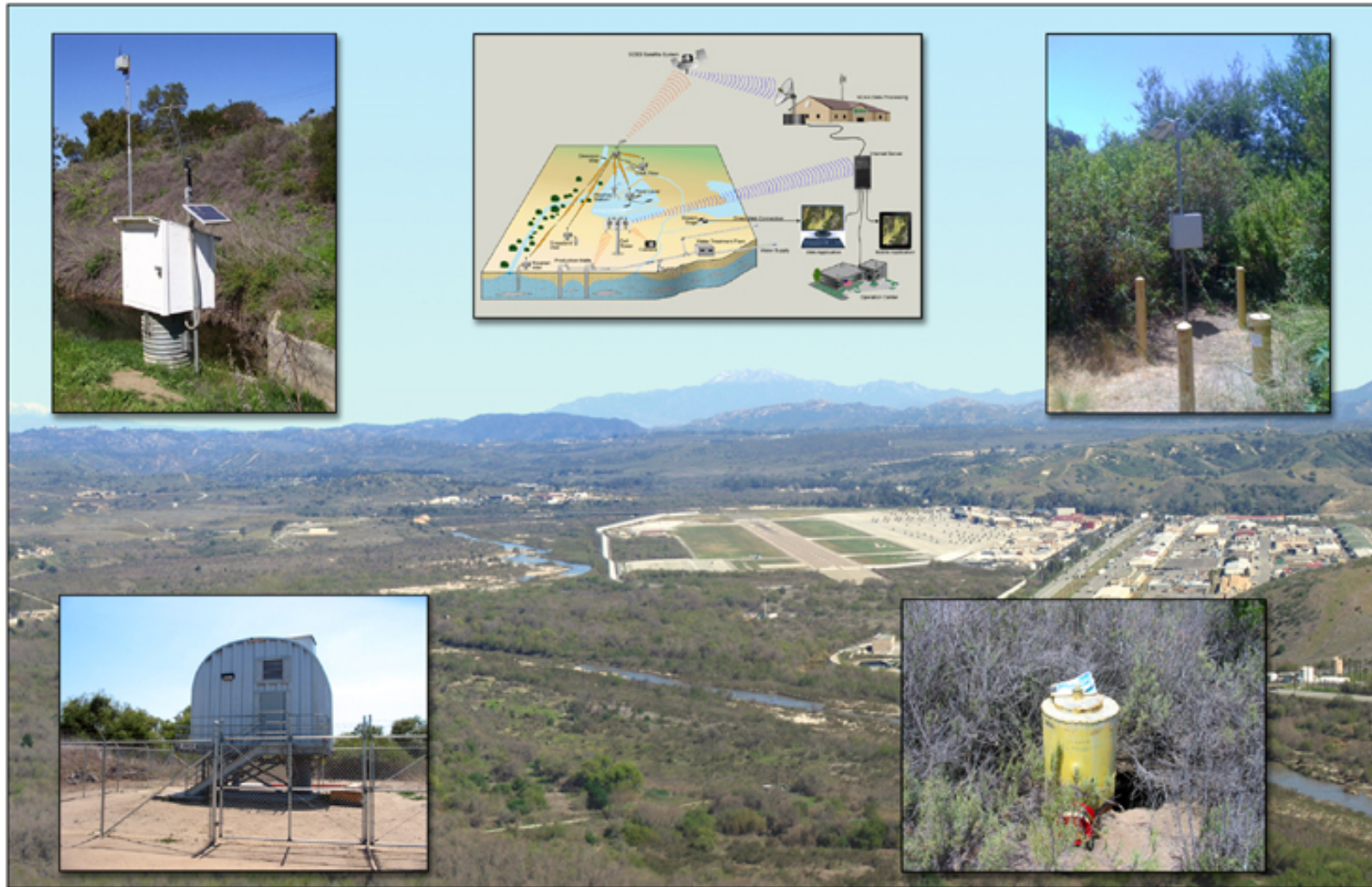
Santa Margarita Conjunctive Use Project



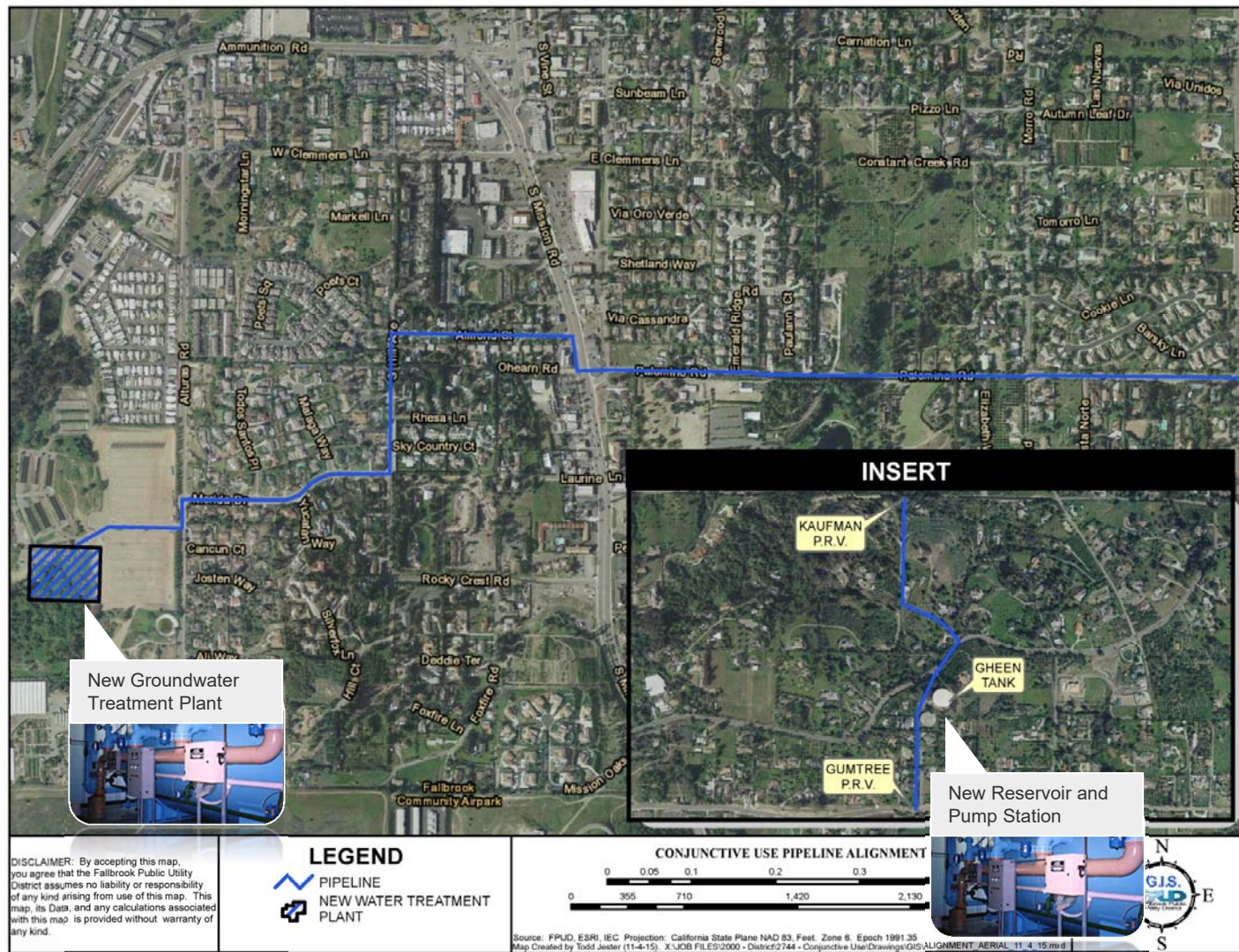
Proposed Improvements to Diversion Facilities



Proposed Improvements to Groundwater Facilities



Proposed Treatment/Delivery Facilities for FPUD



Water Supply/Environmental Benefits



Water Cutbacks

- Provides a local supply to buffer cutbacks of the imported supplies
- Provides imported water supplies for the base during extended droughts



Water Supply

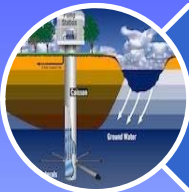
- Locally available groundwater that has lower energy requirements than alternative supplies
- Reduces demands on the Delta
- Resolves outstanding water rights litigation on the river



Environment

- Permanently Preserved 1,400 acres of high value habitat as open space
- Modify diversion dam to facilitate passage
- Maintain flows and groundwater levels required for riparian habitat and species

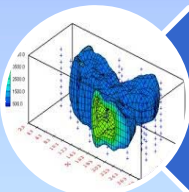
Changes Made to Project to Reduce Environmental Impacts



Reduced Maximum Diversion Rate



Provide Fish Passage Facilities and Diversion Operating Plan



Develop Adaptive Management Plan based on real time groundwater data and modeling



Replace Sheet Pile Weir with Inflatable Weir to Restore Sediment Transport

Changes Made to Project to Reduce Environmental Impacts



Diversion Rate

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rating Plan



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groundwater data
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Lessons for Other Project Sponsors

- Federal Matching Funds
- Consultations on Steelhead (2+ years)
 - Species Recovery in Marginal Habitat

Next Steps

- Construction of Camp Pendleton Facilities (Underway)
- Construction of FPUD Facilities (2017).