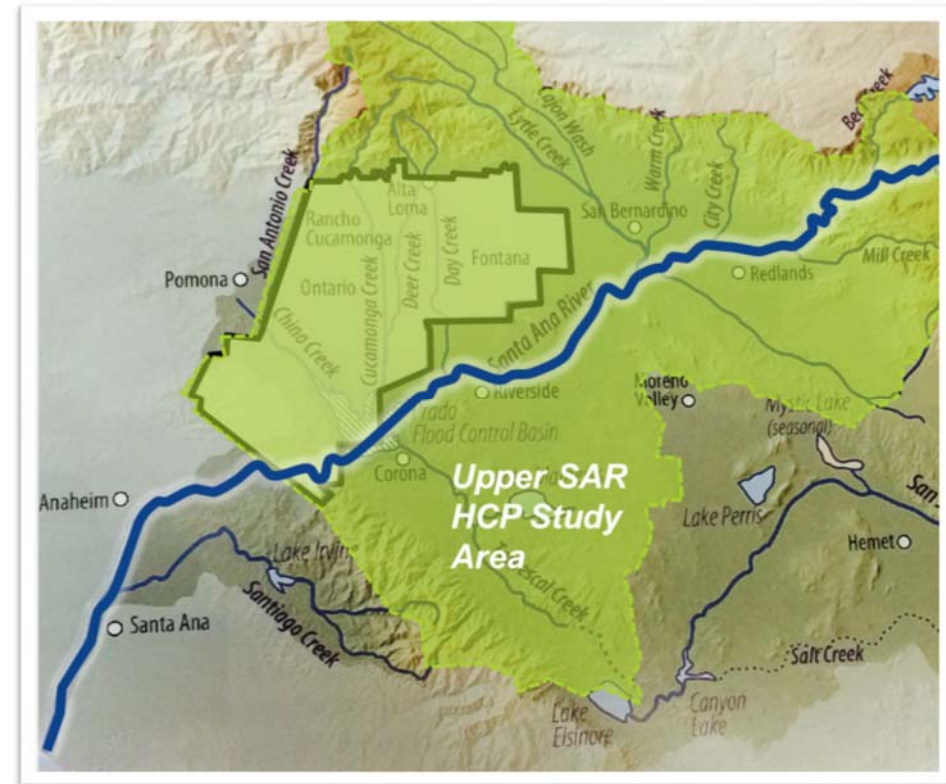


Upper SAR Habitat Conservation Plan & River Model Update FY 2016/17



Upper Santa Ana River Habitat Conservation Plan

- Includes Areas with:
 - Covered Activities
 - Covered Species
 - Conservation Activities
- 863,000 Acres
- Includes all recharge basins within Chino Basin
- Jointly funded between 13 agencies (\$2M)
- IEUA portion cost shared w. Chino Basin Watermaster (\$100K)



Upper Santa Ana River Habitat Conservation Plan (Upper SAR HCP)

- Collaborative Regional Project
 - Water Agencies within the watershed
 - Regulatory Agencies
 - 20+ stakeholder agencies
- Benefits
 - Builds on existing efforts
 - Efficient and cost-effective
 - Greater biological success
 - Mitigation banks
- IEUA Projects
 - Groundwater Recharge Basin expansions and diversions
 - 30-year O&M permits for all existing operations
 - 24 Basins and structures



Upper Santa Ana River Habitat Conservation Plan

- Currently writing the HCP and beginning Environmental analysis process
 - Covered activities effects analysis
 - Cumulative biological impacts
 - Conservation and mitigation strategy
- Initiating discussions on HCP implementation
 - Reporting responsibilities
 - Potential creation of a JPA to manage the Conservation Bank

Upper Santa Ana River Habitat Conservation Plan

Minimum Flow

Goal: identify species needs

- Must maintain at least 20% adult SA sucker fish habitat
- Anything less than this would likely result in a “jeopardy” finding from the USFWS
- Minimum flow need of ~36 cfs on the river
- Flow offset options are being modeled



Opportunity to purchase flows from upstream agencies to meet SAR discharge obligations and increase RW use!

Santa Ana River Integrated Model

Goal: maintain habitat and river functionality

- Integrate various hydraulic models along the river
- Predict the SAR flow (groundwater and surface water interaction)
- Provide biological effects analysis on cumulative long term effects
 - Habitat Conservation Plan Covered Activities and
 - Proposed new projects
- Capability to analyze any future projects not currently in the HCP
- Total project cost: \$1.3M (\$326,700 IEUA/CBWM share)

Other SAR modeling work

- Prado Basin Adaptive Management Plan
 - Monitor and evaluate impact of CDA expansion on riparian habitat behind Prado Dam
- USACE Sediment Transport Study
 - Evaluate sediment loading to support upcoming dam management master planning work
- SAWPA's Waste-Load Allocation Model
 - Tied to Regional Board's water quality objectives in the Basin Plan
 - Used to set effluent limitations, waste discharge
 - Purpose: long-term compliance with Total Inorganic Nitrogen (TIN) and Total Dissolved Solids (TDS) that enter groundwater via the SAR

Santa Ana River Habitat Conservation Plan & River Model Update

Discussion