Carmel River Reroute & San Clemente Dam Removal Project (PLN110373)

Monterey County Planning Commission Workshop

July 25, 2012

URS

URS1

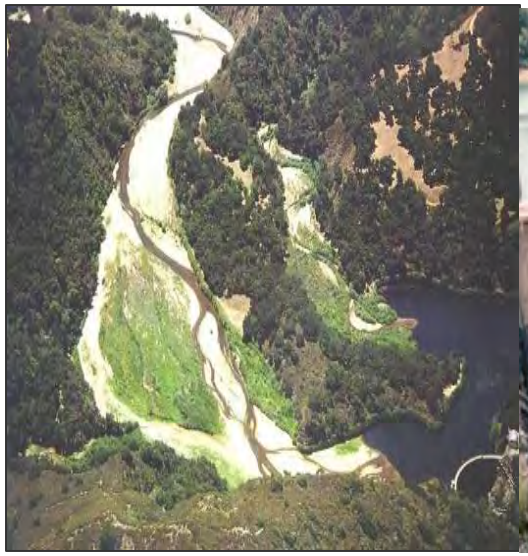
Workshop Agenda

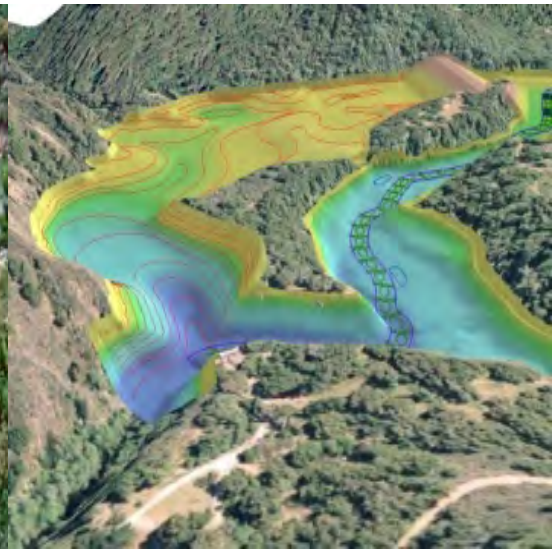
1. Background
2. Project Overview
3. Tree Removals/Mitigation
4. Grading on 25% Slopes
5. Construction Access
6. Parking for Construction Workers
7. Sensitive Habitat
8. Recommendation
9. Applicant's Comments
10. Questions of Staff and Applicant
11. Public Comments
12. Planning Commission Comments

Slide 2

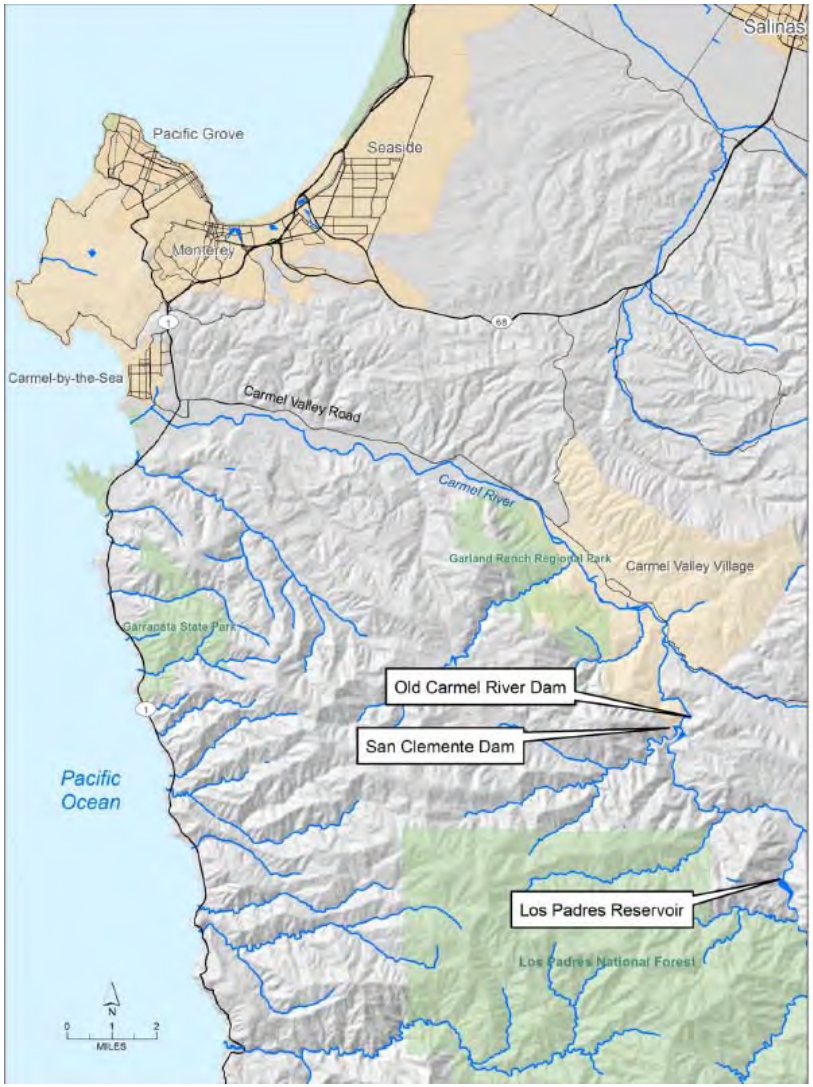
URS1 once it is decided, adding the presenter's name would be good and indicate a relative time split for presentation and Q&A
URS, 07/17/2012

Background





Background
Vicinity Map



PROJECT DESIGN AND ENGINEERING

Coastal Conservancy

CALIFORNIA AMERICAN WATER

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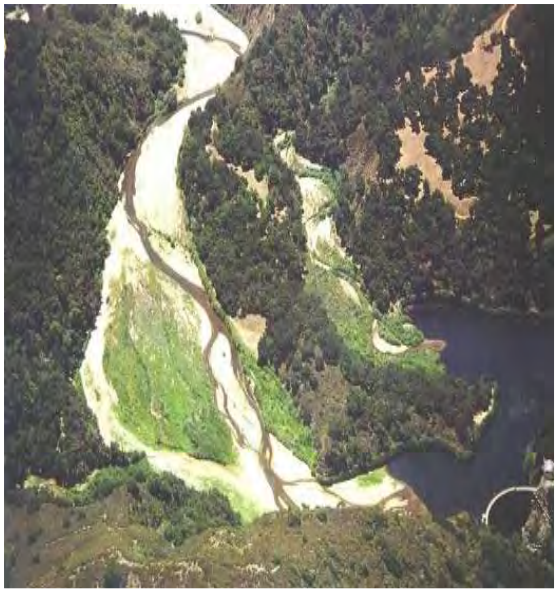
Background
Site Conditions

1. SC Dam built in 1921
   a. 106 feet tall concrete arch dam
   b. 18.5 miles from Pacific
   c. Confluence with San Clemente Creek upstream of dam
   d. Reservoir storage of approximately 1,425 acre-feet
2. Under current conditions
   a. Reservoir filled with approx. 2.5 million CY of sediment
   b. Capacity reduced to approx. 70 acre-feet



San Clemente Dam – Under Construction

PROJECT DESIGN AND ENGINEERING

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San Clemente Dam - Today

PROJECT DESIGN AND ENGINEERING

Coastal Conservancy

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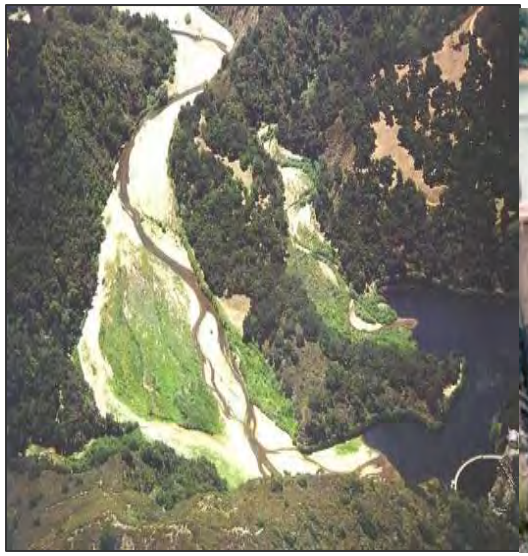
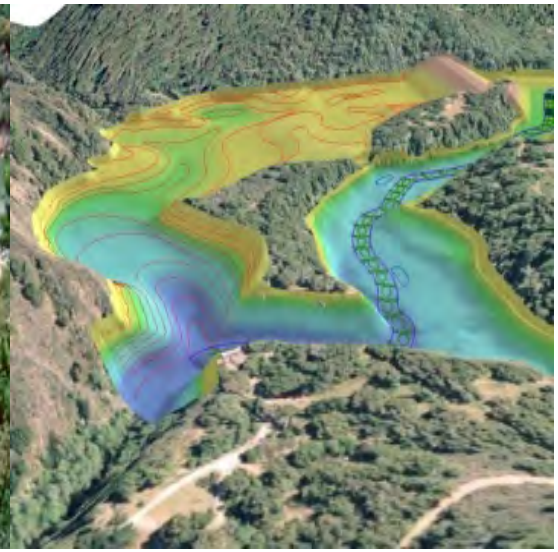
Background
Milestone Summary

1. DWR issued a dam safety order in early 1990s
2. DWR released DEIS/R in 2006
3. Final EIR/S certified in 2007
4. Design & permitting is moving forward with cooperative agreement between California American Water (CAW), State Coastal Conservancy (SCC) and National Marine Fisheries Service (NMFS)
5. SCC and NMFS will secure up to $35 million in additional funding
6. Joint Planning Commission/CVLUAC Site Visit - May 23, 2012
7. CVLUAC recommended approval - July 2, 2012

Project Overview



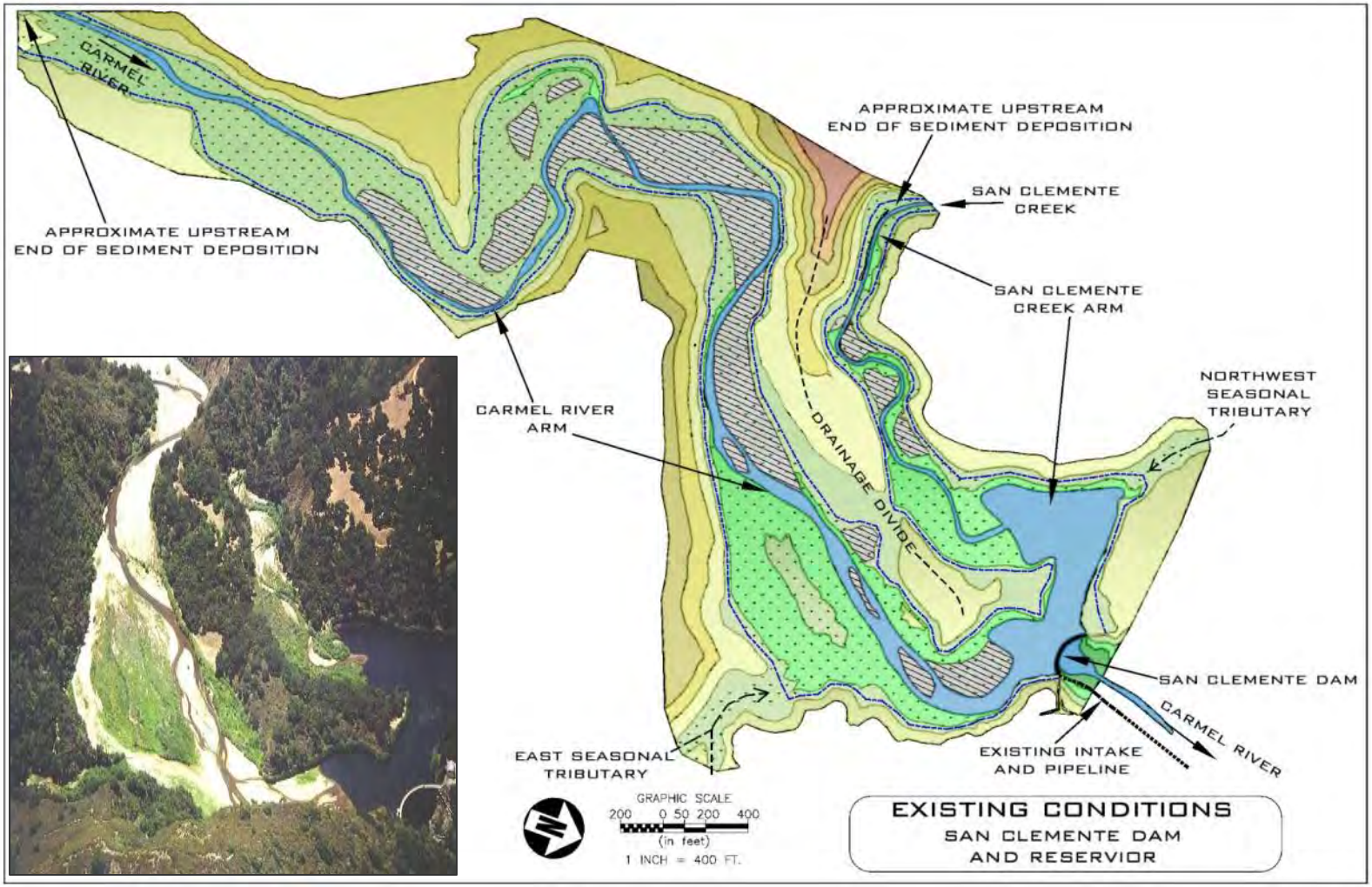


Project Overview
Goals & Objectives

1. Primary Goals
   a. Provide a long-term solution to dam safety issue
   b. Improve fish passage conditions and provide rearing habitat
   c. Diminish potential for excessive erosion, undermining, or slope failure, leading to sediment mobilization
   d. Avoid exacerbating downstream flooding

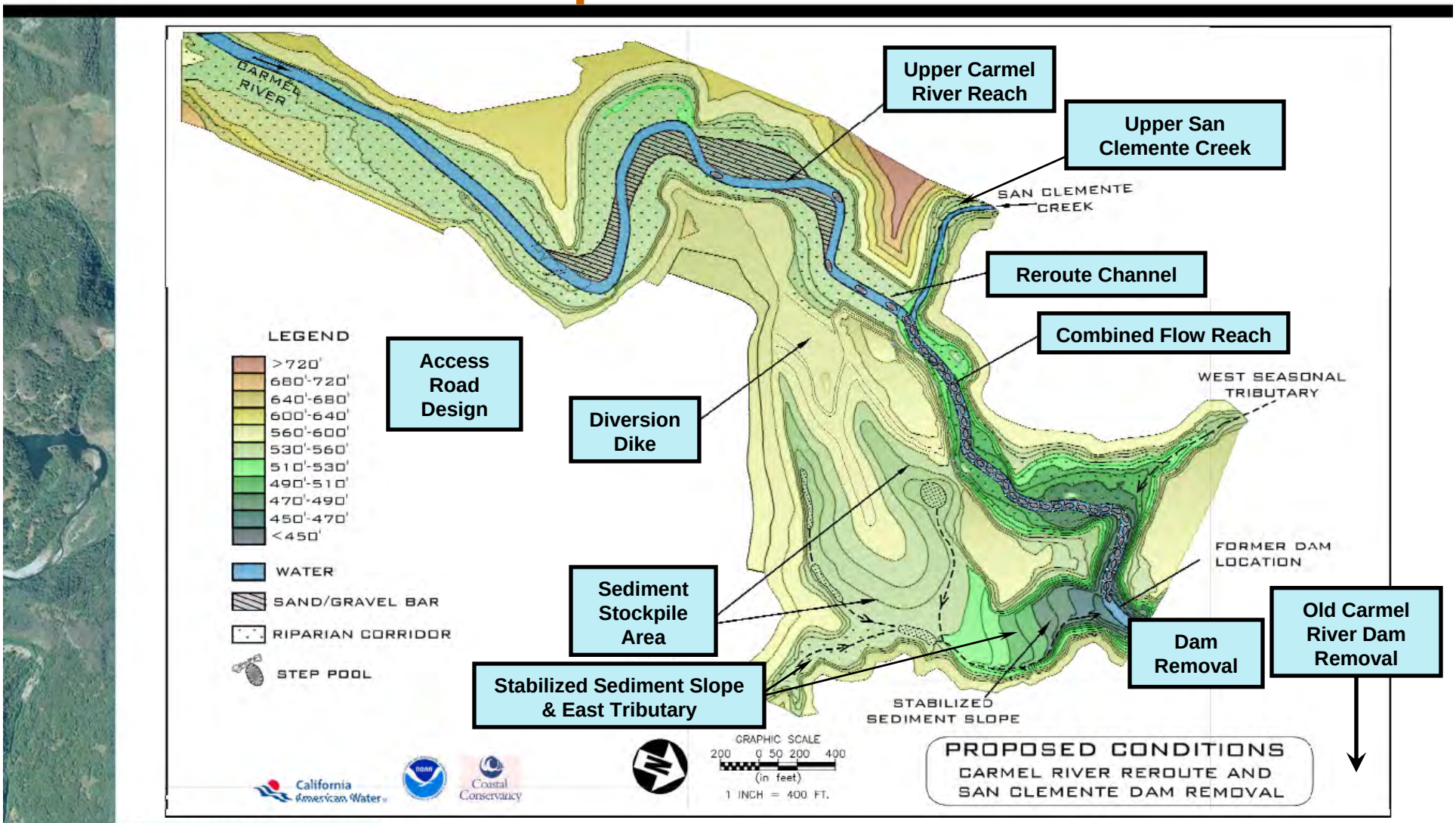
2. Secondary Goals
   a. Restore natural character and function of valley bottom
   b. Shape project components to be as natural as feasible
   c. Provide long-term sustainable habitat
   d. Promote more natural sediment transport regime

Project Overview
Existing Conditions



Project Overview

Proposed Features



PROJECT DESIGN AND ENGINEERING

Project Overview
Pre- and Post- Comparison

Existing Conditions

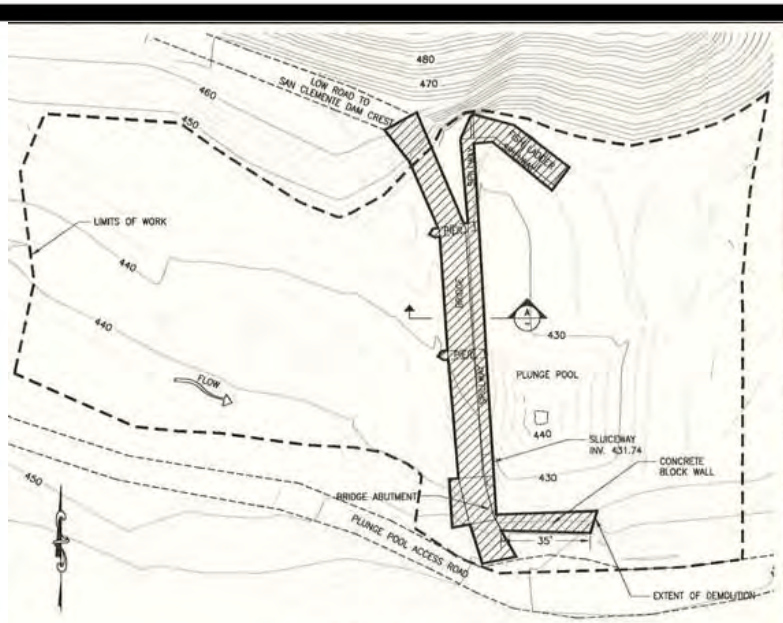
Proposed Conditions

PROJECT DESIGN AND ENGINEERING

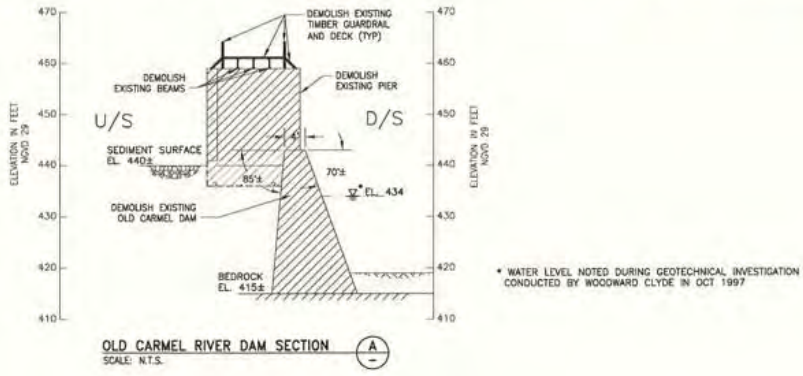
URS2

Project Overview

OCRD Removal

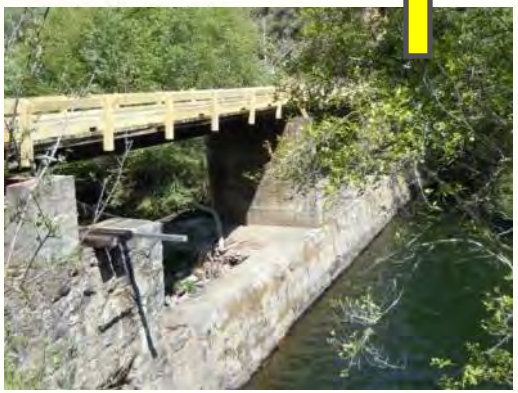


OLD CARMEL RIVER DAM PLAN
SCALE: 1"=40'



OLD CARMEL RIVER DAM SECTION
SCALE: N.T.S.

* WATER LEVEL NOTED DURING GEOTECHNICAL INVESTIGATION CONDUCTED BY WOODWARD CLYDE IN OCT 1997



PROJECT DESIGN AND ENGINEERING

Coastal Conservancy

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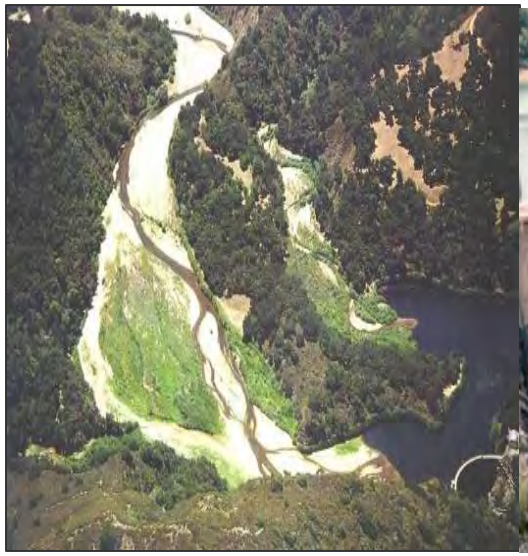
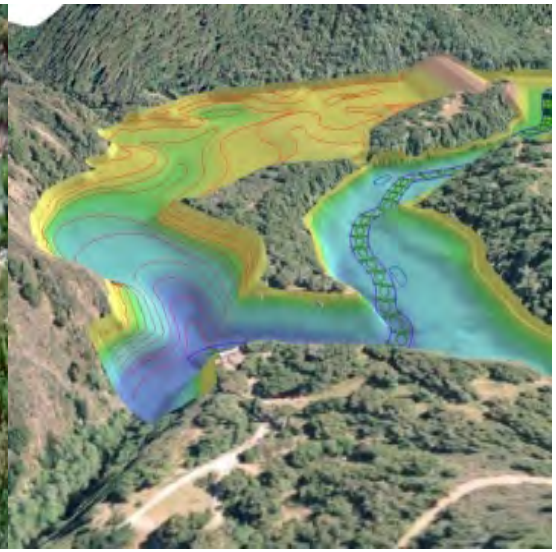
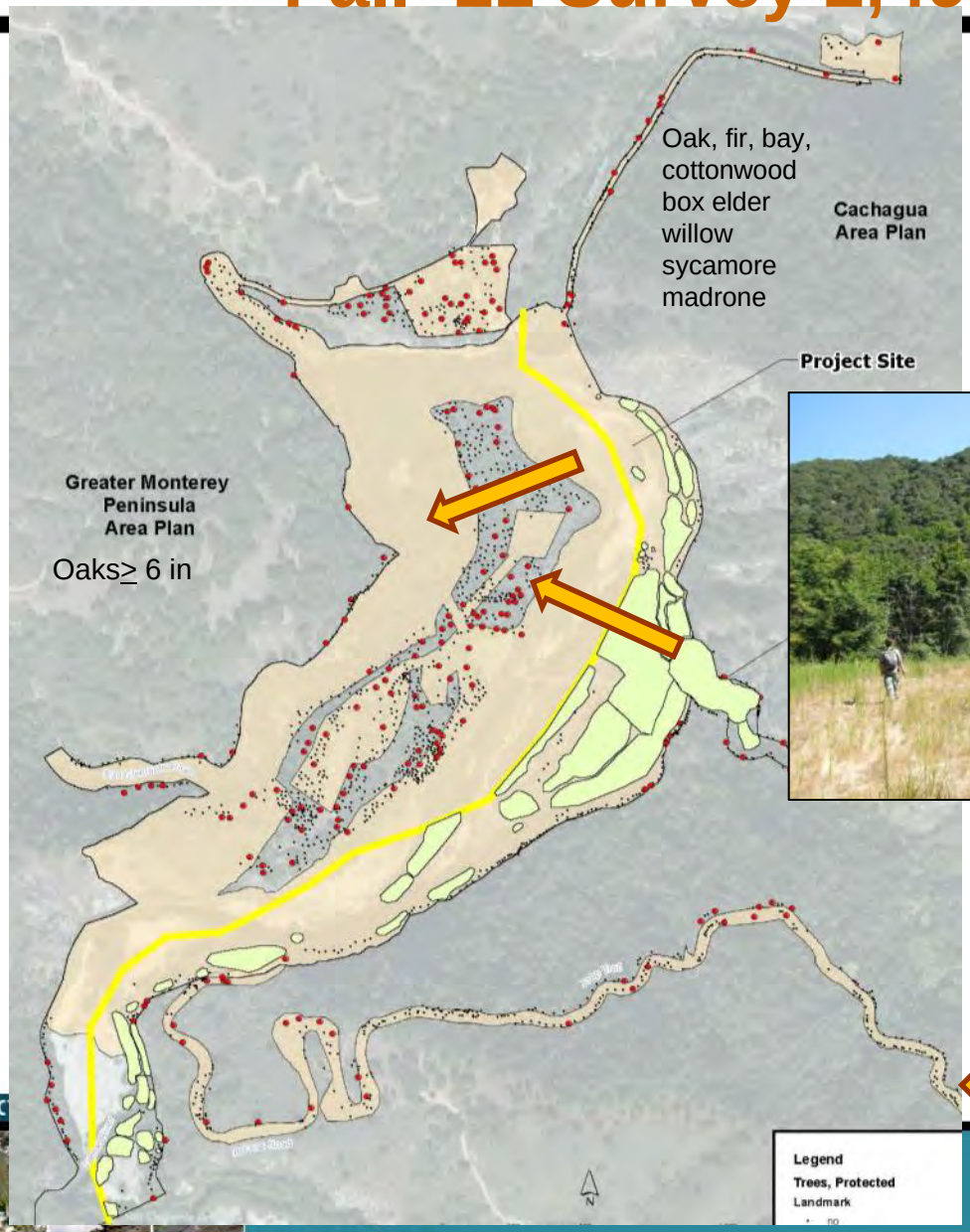
Tree Removal/Mitigation





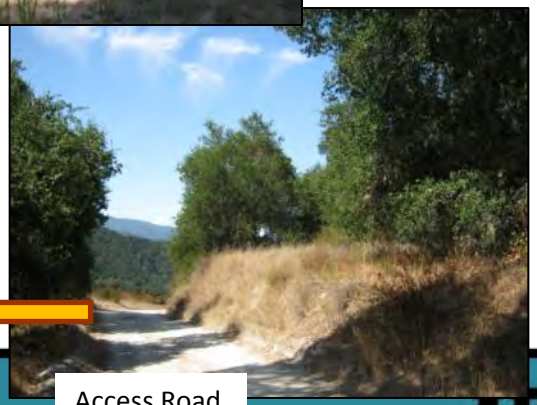
Tree Survey

Fall ‘11 Survey 2,490 trees



San Clemente Creek

Staging Areas

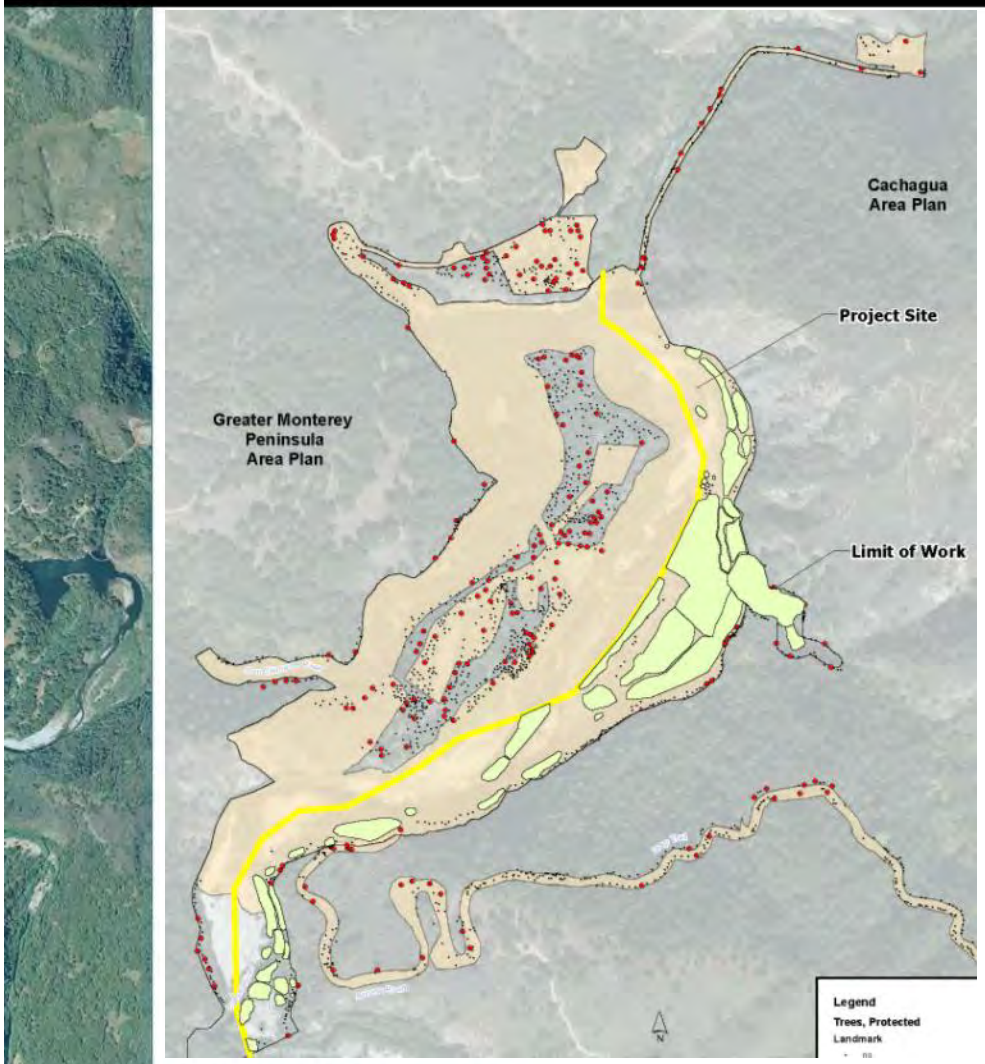


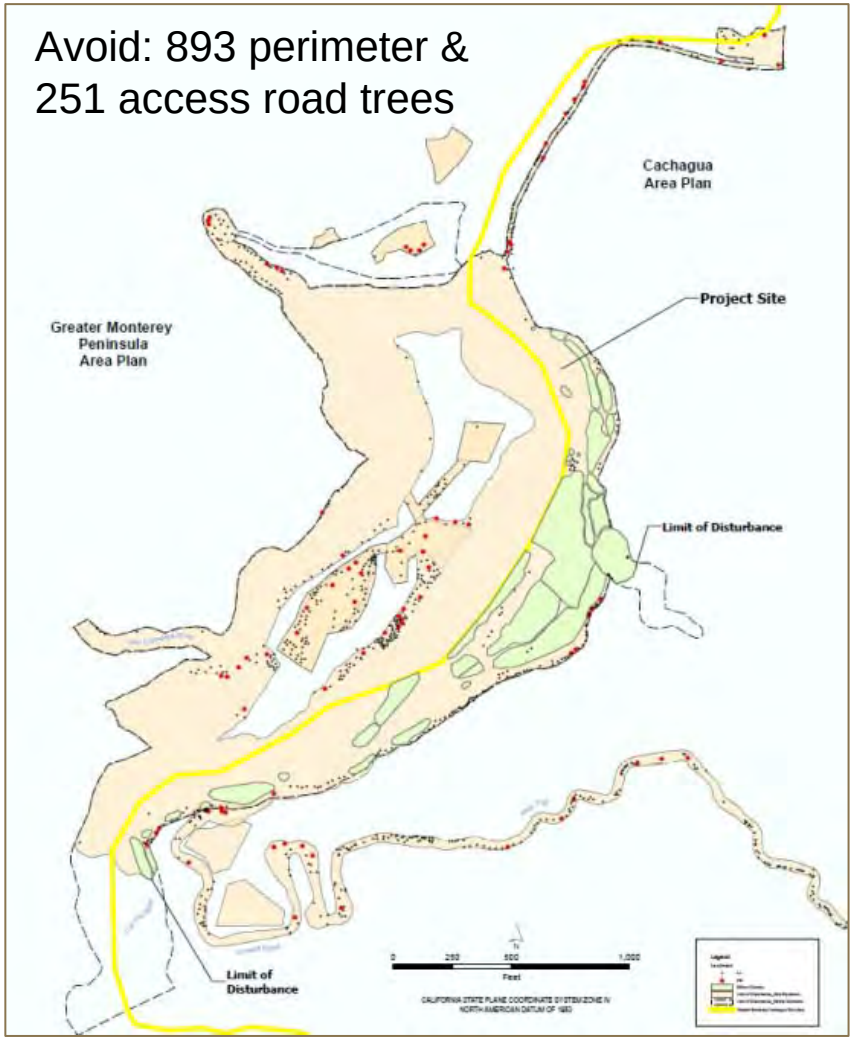
Access Road

Coastal Conservancy

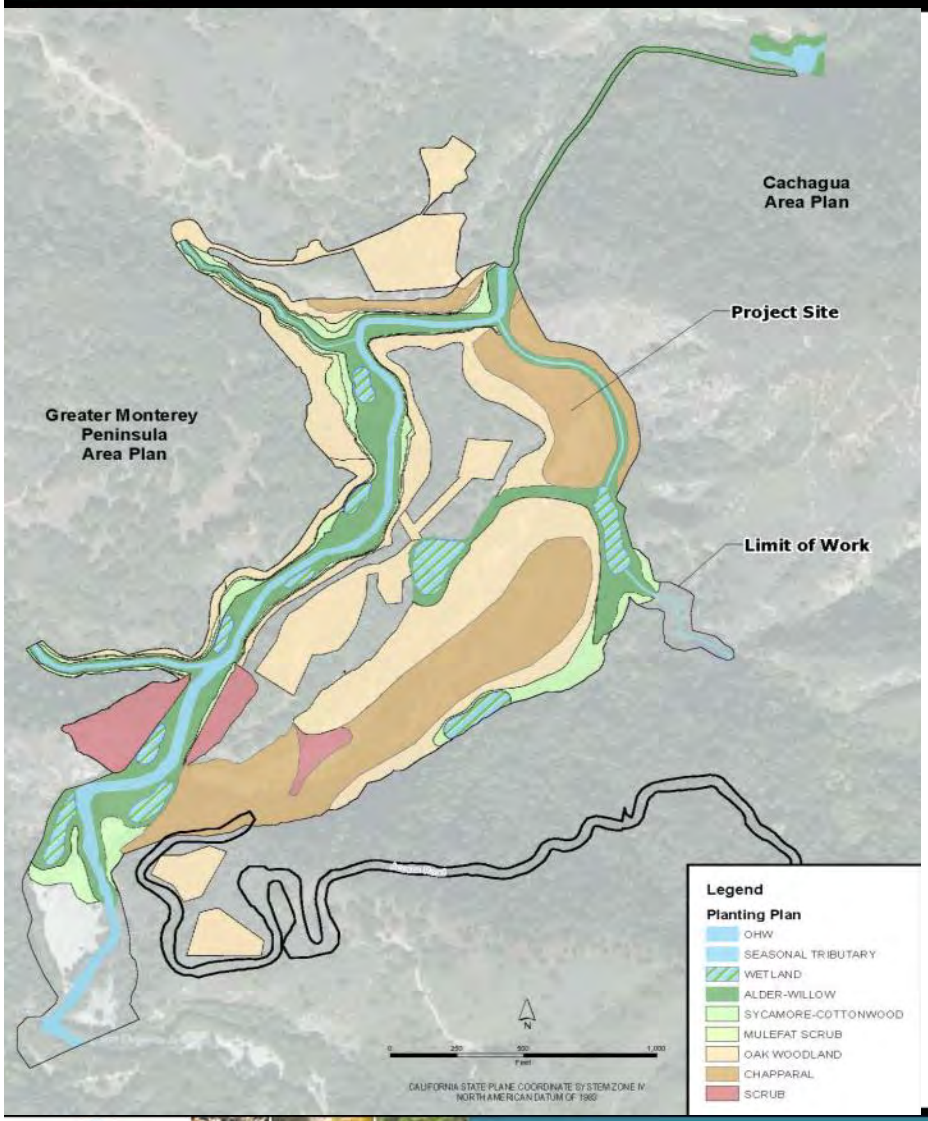
URS

Tree Removal
Design Modifications





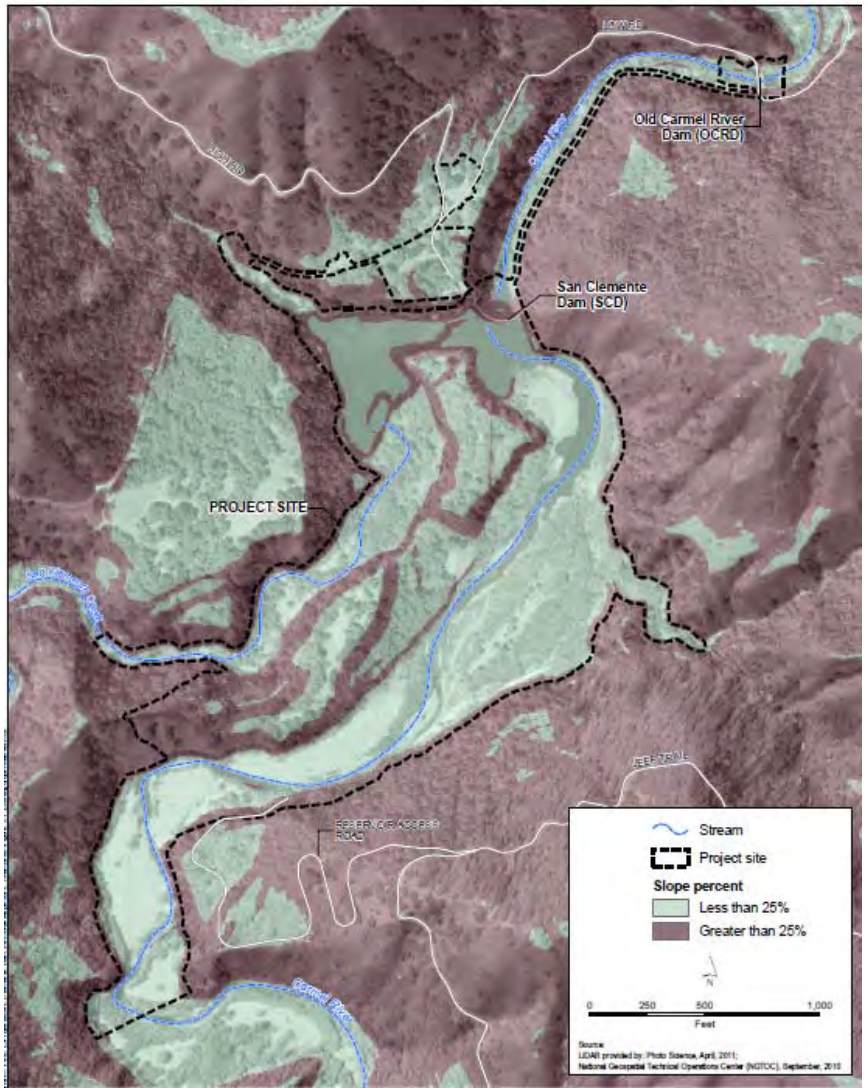
Tree Mitigation
Revegetation Plan



- Local, native species
  - >14,000 trees
  - >10K riparian
- Oak mitigation
  - Plant 1,514 coast live oak
    - 3:1 for < 24” diam @ 2 ft
    - 10:1 for ≥ 24” diam
  - Big Sur Land Trust
    - Accumulating funds for Monterey Co. Oak Woodland Conservation Fund (conservation easement)

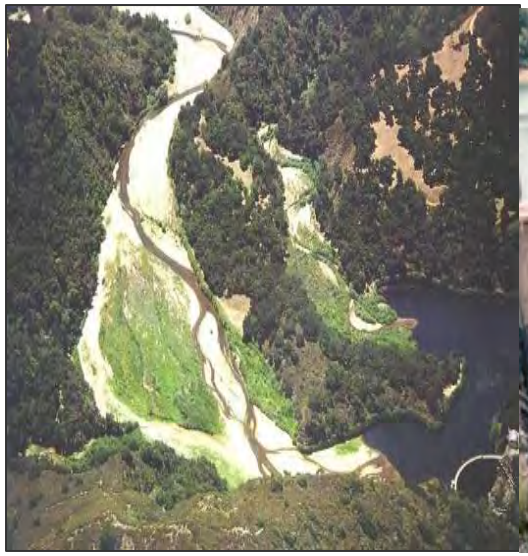
Existing Site Slopes

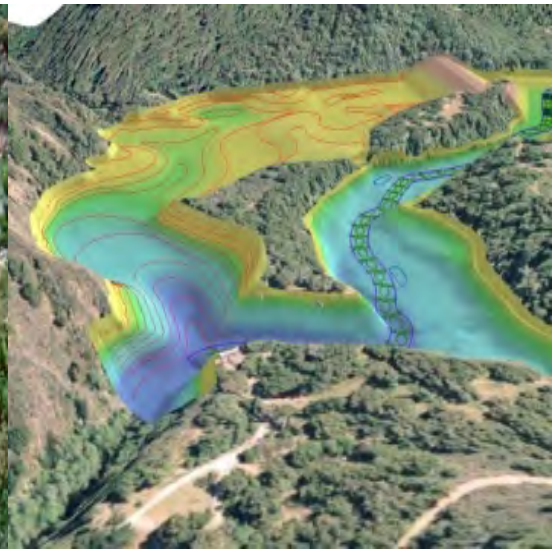
25% Slope Map



PROJECT DESIGN AND ENGINEERING

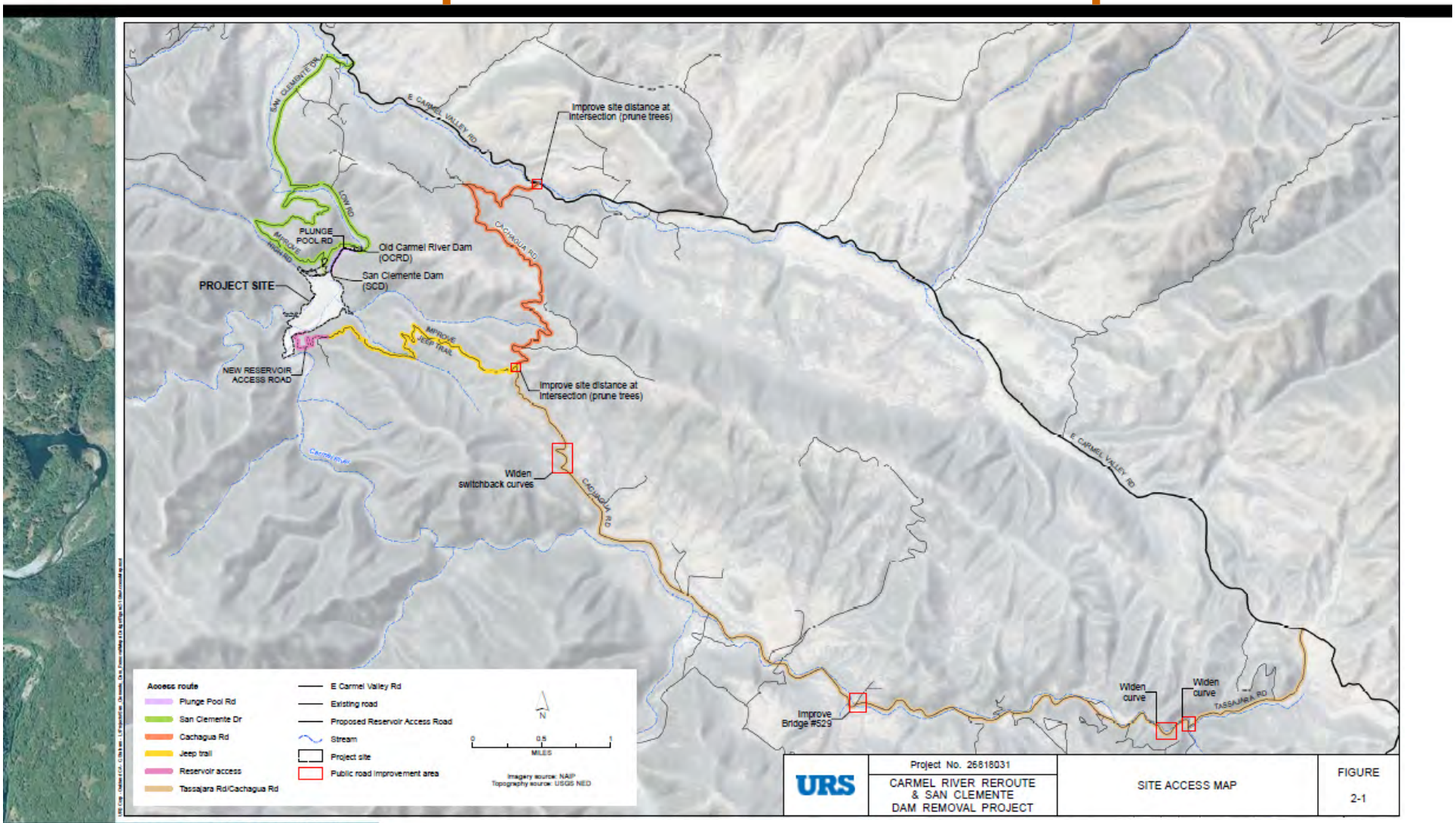
Construction Access





Construction Access

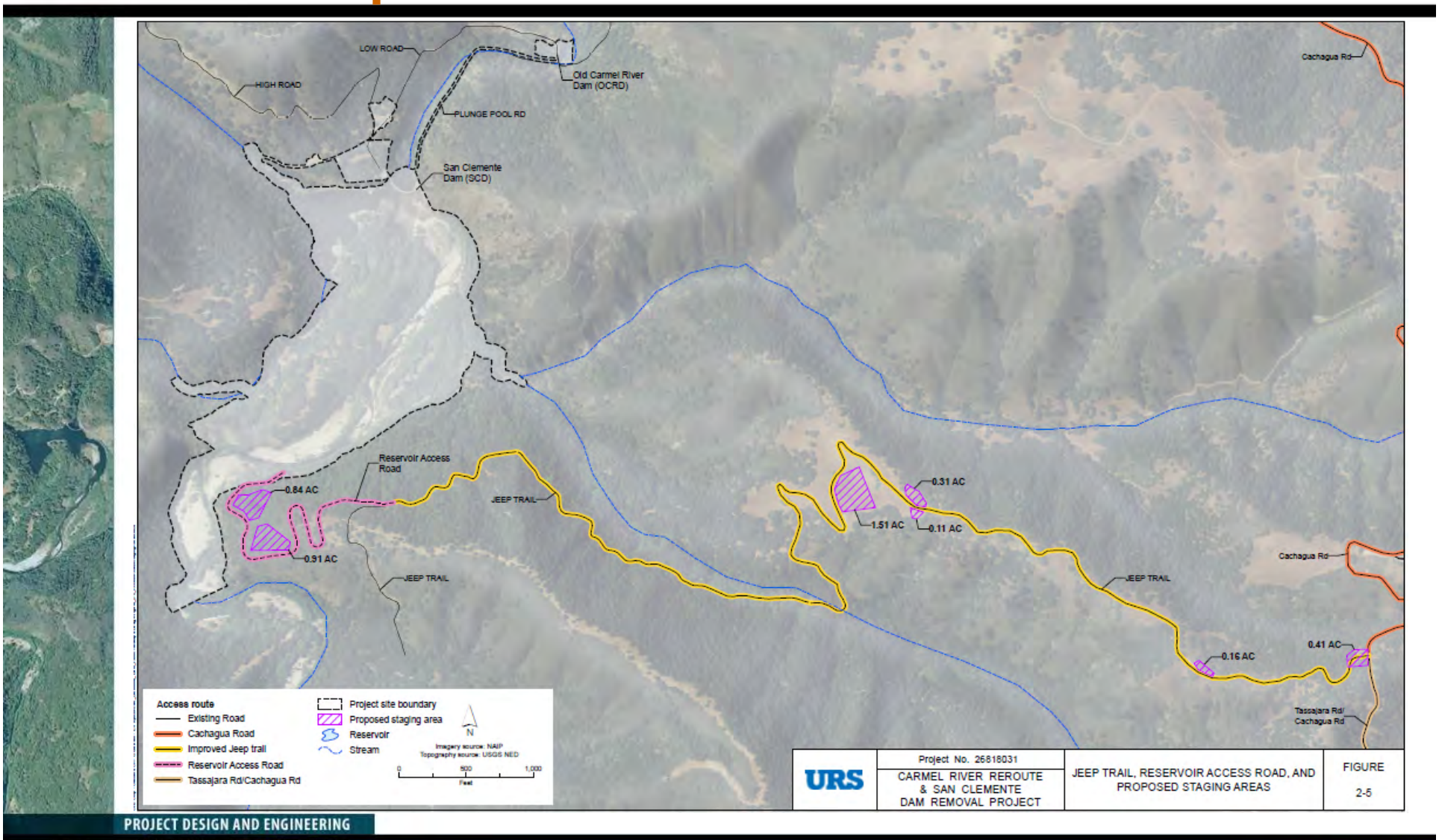
Proposed Access Route Map



PROJECT DESIGN AND ENGINEERING

Construction Access

Jeep Trail/Reservoir Access Road



PROJECT DESIGN AND ENGINEERING

Construction Access

Access Route Alternatives Summary

1. Three initial options:
   a. San Clemente Drive to the Low Road (Low Road option) – NOT FEASIBLE
   b. San Clemente Drive to the High Road (High Road option)
   c. Cachagua Road to the Jeep Trail (Jeep Trail option)

2. Alternative Analysis Summary - Compared to the Jeep Trail Option, the High Road option results in approximately:
   a. 2,800 linear feet of additional road improvement,
   b. 300 linear feet of additional new road construction, and
   c. 3 additional new or replacement bridges
   d. 50% increase in the number of trees impacted
   e. 4.5 additional acres of new road construction disturbance area

3. Jeep Trail Option selected for Project

Access Route Option Summary

Access Element	Jeep Trail Option	High Road Option
Length of Existing Road Improvement (18' width)	11,500 linear feet	14,300 linear feet
Existing Road Improvement Trees Impacted	352 trees	438 trees*
Length of New Road Construction	3,000 linear feet	3,300 linear feet
New Road Disturbance Footprint	2.8 acres	7.3 acres
New Road Trees Impacted	134 trees	291 trees
Total Trees Impacted	486 trees	729 trees
Existing Bridge Improvement	Minor improvements to Bridge #529 on Cachagua Road	Replacement of Bridge at Tularcitos Creek
New Bridge Construction and Associated Impacts	None	Two (2) New Bridges: at Sleepy Hollow Ford and San Clemente Creek


07/11/2012

Parking for Construction Workers

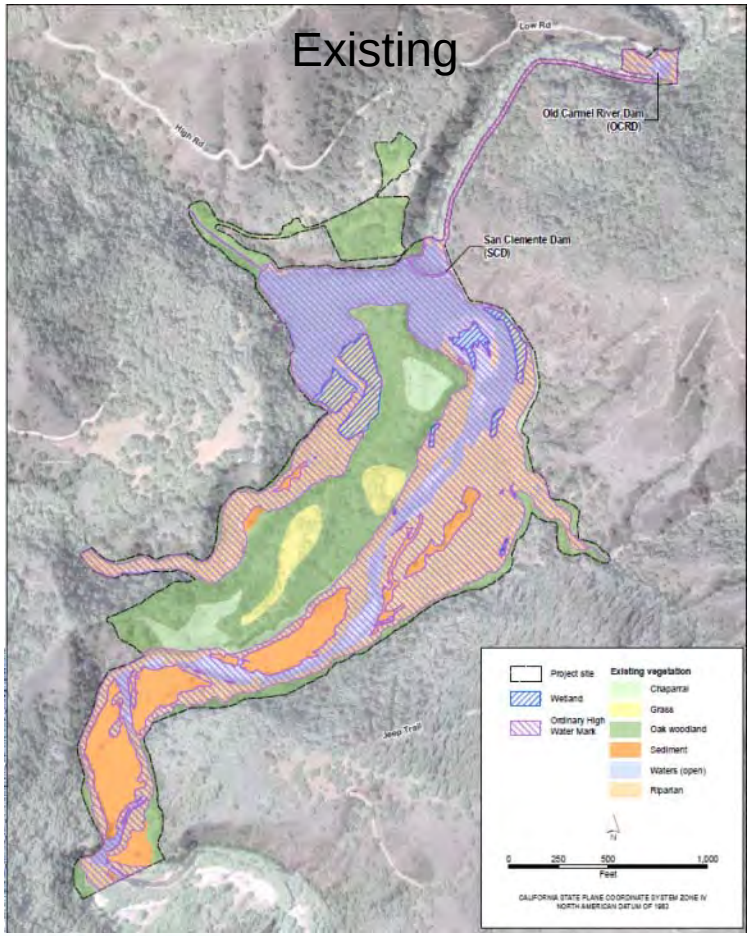
- Access road improvements begin - fall 2012.
- On-site parking at dam limited to 12 spaces.
- During initial phase, use existing park and ride lots at:
  1) Laureles Grade/Highway 68 (19 spaces); and
  2) the Crossroads Shopping Center (33 spaces).
- Once work starts on dam removal, new temporary park and ride lots will be constructed in Carmel Valley for 80 workers.

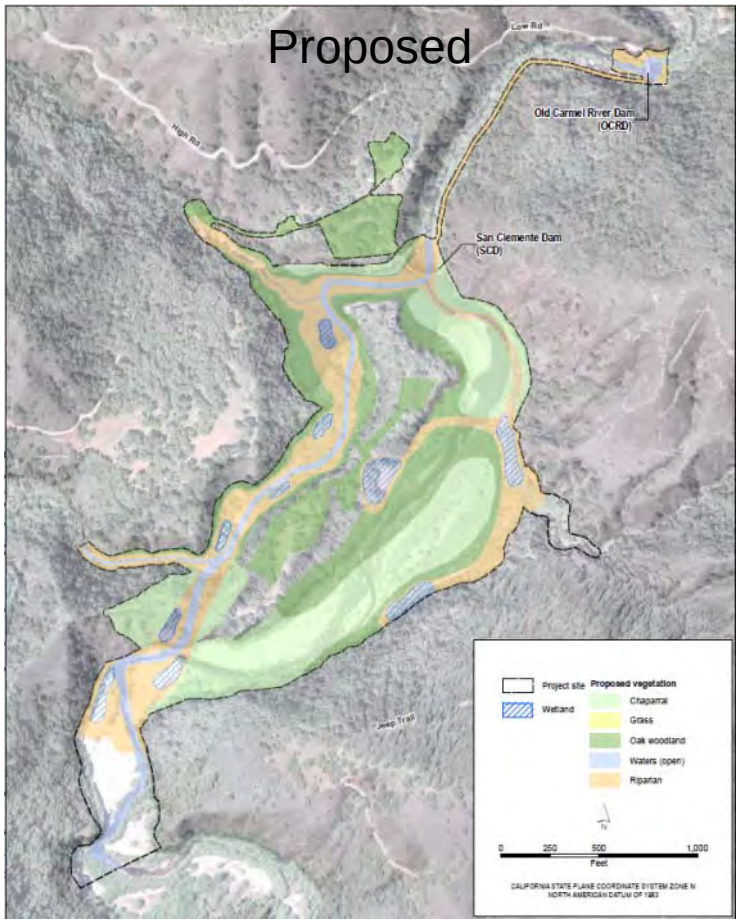
Landscape Restoration Plan

- *Riparian*: 19.8 acres of riparian vegetation will be planted along reconstructed river.
- *Wetland*: 3 acres of wetlands will be restored to achieve a no net loss of wetland and provide habitat for California Red Legged Frog.
- *Upland*: Oak woodlands, chaparral and scrub are proposed for upland restoration in appropriate locations.

Sensitive Habitat Mitigation

Existing & Proposed Habitat



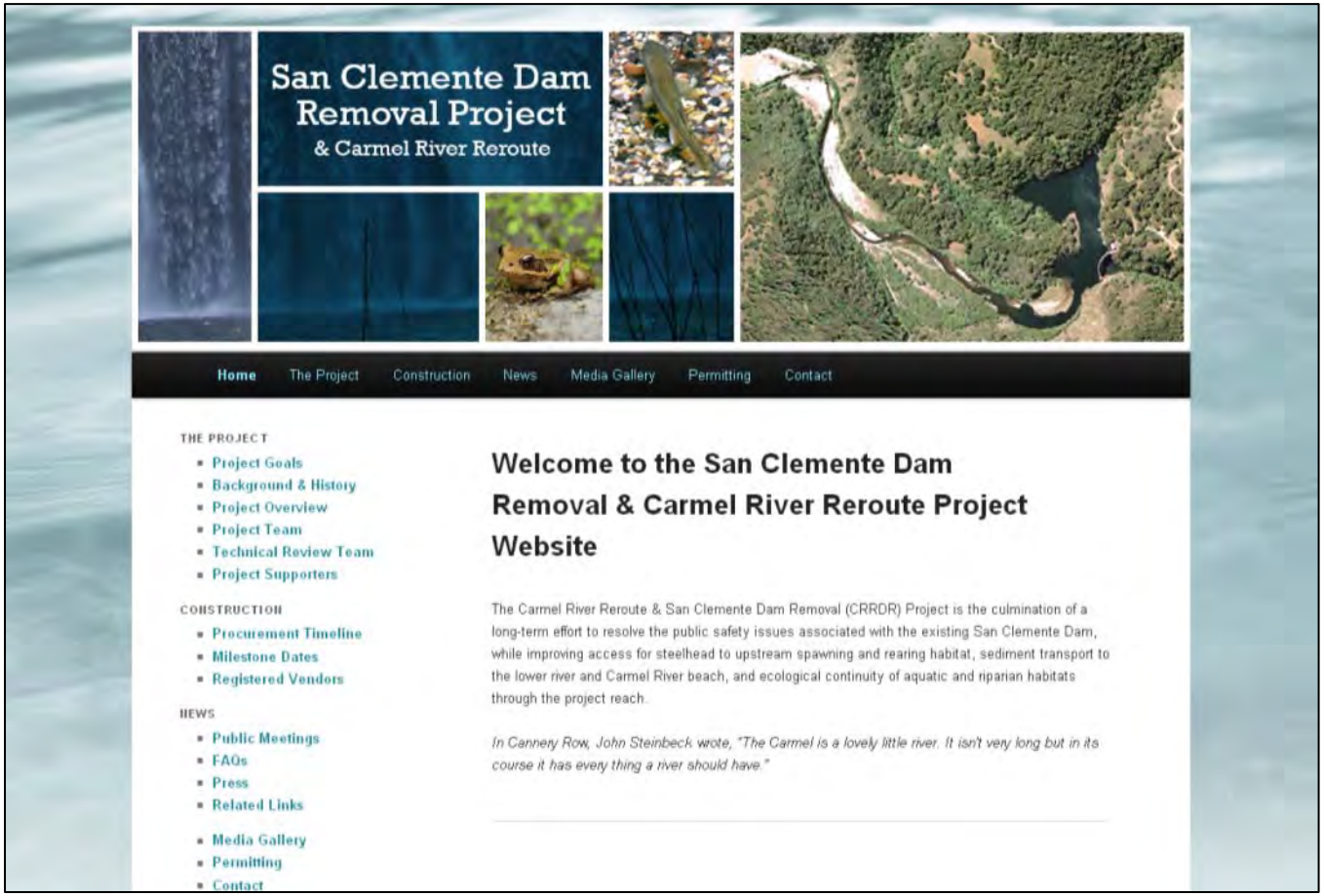


Recommendation

Staff recommends that the Planning Commission conduct a workshop. Issues the Commission may want to discuss include:

- Are the proposed tree removals the minimum necessary to implement the project?
- Is the proposed primary construction access route (i.e., Tassajara Road through Cachagua Road and the Jeep Trail from the southeast) the preferred route?
- Are there any alternatives that could lessen the construction period impacts, particularly in regard to the road improvements proposed on the construction access routes along Cachagua Road and the Jeep Trail?

Questions?



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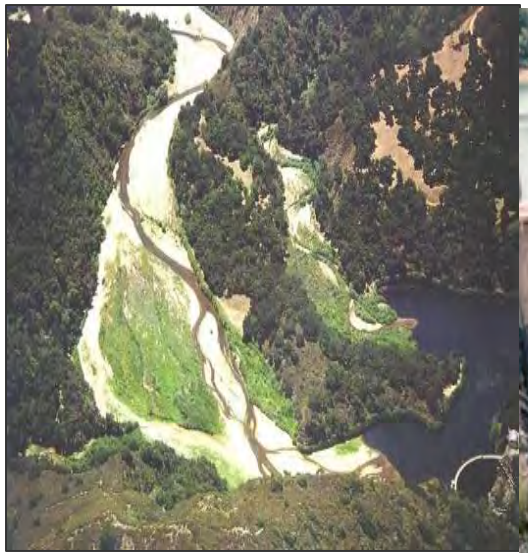
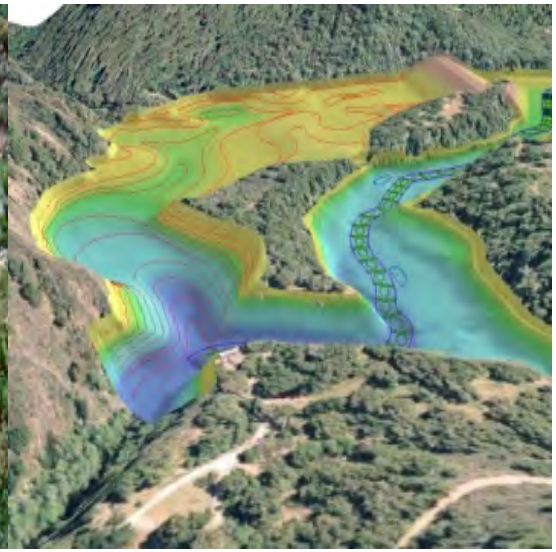
www.sanclementedamremoval.org

Pocket Slides

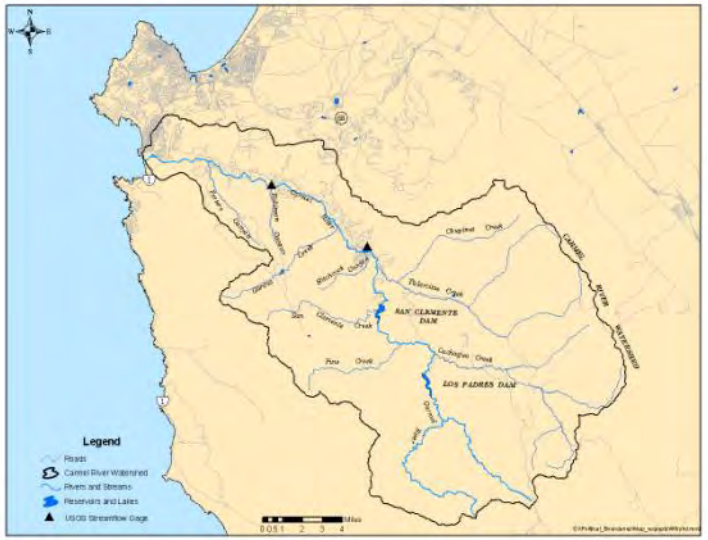




PROJECT DESIGN AND ENGINEERING

Project Overview
Watershed & River Context

1. Watershed Trends:
   a. Ecological restoration of Carmel River and streams
   b. Emphasis on steelhead passage and population



2. Ongoing Projects:
   a. Carmel River Reroute & San Clemente Dam Removal (CAW)
   b. Los Padres Dam Downstream Fish Passage Facility (CAW)
   c. Sleepy Hollow Bridge (MPWMD)
   d. Lower Carmel River Floodplain Restoration and Enhancement (Big Sur Land Trust)
   e. Carmel River Lagoon Ecosystem Protection Barrier (Monterey County)

Project Overview
Timeline

- June 2012: RFP out to shortlisted D-B Teams
- September 2012: D-B Proposals due

  Begin Access Road Construction
- December 2012: D-B Team selection
- March 2013: Execute D-B Agreement

  D-B begins Diversion Design
- May 2013: D-B begins Diversion Construction, Geotechnical Investigations, and Site Design
- 2013 to 2015: Majority of Site Construction
- 2015 to 2020: D-B Post Construction Phase

Construction Access
Access Route Traffic Use

1. Cachagua Road/Jeep Trail
   a. Buses from Park and Ride (Location TBD) for most workers
   b. Some personal vehicles
   c. Construction material in single unit haulers
2. Tassajara Road/Cachagua Road/Jeep Trail
   a. Construction equipment mobilization
   b. Any construction material that would not be able negotiate Cachagua Road
3. San Clemente Drive
   a. Limited personal vehicles
   b. Limited trucks (1 to 2 ton)

Project Overview
CEQA & Permitting Overview

- CEQA / NEPA (Final EIS/R 2007)
  - SEIR – DWR
  - SEIR (OCRD) – State Coastal Conservancy
- Monterey County Combined Development Permit
  - Grading permit
  - Encroachment permit
- CWA §404 permit –USACE
  - ESA §7 Biological Opinions – NMFS & FWS
  - NHPA §106 Concurrence – SHPO
  - CWA §401 Water Quality Certification – RWQCB
  - CWA §404(b)(1) Alternatives Analysis – EPA
- CF&G Code §1600 Lake & Streambed Alteration Agreement
- CESA §2081 incidental take permit – CDFG
- NPDES SWPPP approval – RWQCB

Construction Access

Equipment Mobilization Traffic Estimate

1. Heavy Equipment Mobilization
   a. Extended flatbed to bring in large equipment or crane; Mobile material processing plant.
   b. Route: Tassajara Road to Cachagua Road to Jeep Trail ONLY

2. Equipment Mobilization Estimates:
   a. Typically would involve 0-5 round trips per month
   b. Monthly round trip peaks as follows:
      i. 1st year of site construction – 25 at start of season, 20 at end of season
      ii. 2nd year of site construction – 40 at start of season, 45 at end of season
      iii. 3rd year of site construction – 30 at start of season, 15 at end of season

Construction Access
Traffic Safety

1. Traffic Control Plan by Contractor; Approved by County
2. Coordinate with Cachagua Fire District
   a. 24-hour contact name and number
   b. Copy of approved Traffic Control Plan
   c. Updates to traffic estimates (monthly breakdown)
3. Pilot Cars will be required for
   a. Construction equipment mobilization
   b. Construction material hauling
4. Flagman required public road construction
5. Signage
6. Adherence to speed limits on all public roads will be emphasized
7. Material hauling will be restricted to:
   a. 9 am to 3 pm Monday through Friday
   b. No hauling when school buses are scheduled to run

Construction Access

Traffic Daily Average Trips

Description	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2012												
Personnel Onsite	-	-	-	-	-	-	-	30	40	30	30	40
Personnel Trips[1]	-	-	-	-	-	-	-	10	10	10	10	10
Material Trips												
Single Unit [2]								1	1	9	9	1
Trailer [3]	-	-	-	-	-	-	-	1	1	1	1	1
2013												
Personnel Onsite	20	5	5	20	90	80	60	70	70	70	5	5
Personnel Trips[1]	5	1	1	10	20	15	15	15	20	20	1	1
Material Trips												
Single Unit [2]	1	0	0	1	1	1	1	1	1	1	0	0
Trailer [3]	1	0	0	1	1	1	2	1	1	1	0	0
2014												
Personnel Onsite	5	5	5	20	50	80	80	80	80	90	30	5
Personnel Trips[1]	1	1	1	10	15	20	20	20	20	20	10	1
Material Trips												
Single Unit [2]	0	0	0	1	1	12	12	1	1	1	1	0
Trailer [3]	0	0	0	1	1	1	1	1	1	1	1	0
2015												
Personnel Onsite	5	5	5	20	40	80	70	80	70	60	50	40
Personnel Trips[1]	1	1	1	10	15	20	20	20	20	15	15	15
Material Trips												
Single Unit [2]	0	0	0	1	1	1	4	4	1	1	1	1
Trailer [3]	0	0	0	1	1	1	1	1	1	1	1	1
2016												
Personnel Onsite	-	-	-	-	-	-	30	30	-	-	-	-
Personnel Trips[1]	-	-	-	-	-	-	10	10	-	-	-	-
Material Trips												
Single Unit [2]	-	-	-	-	-	-	1	1	-	-	-	-
Trailer [3]	-	-	-	-	-	-	1	1	-	-	-	-

Construction Access
Material Hauling

1. Construction Materials Imported to Site
   a. Pipe, valves, etc. for diversion
   b. Aggregate base for access roads
   c. Imported aggregates for filter materials
   d. Cement for soil improvement using deep soil mixing (DSM)
2. Construction Materials Removed from Site
   a. Demolition debris (metal, wood, sheetrock, pipe, etc.); concrete will be buried on site