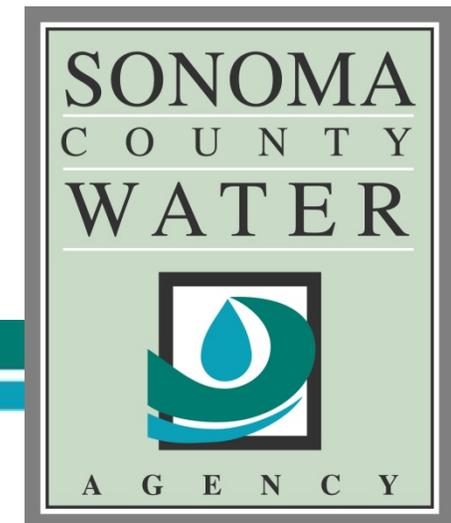


Dry Creek Community Meeting

May 12, 2014

David Manning

Environmental Resources Coordinator



www.sonomacountywater.org

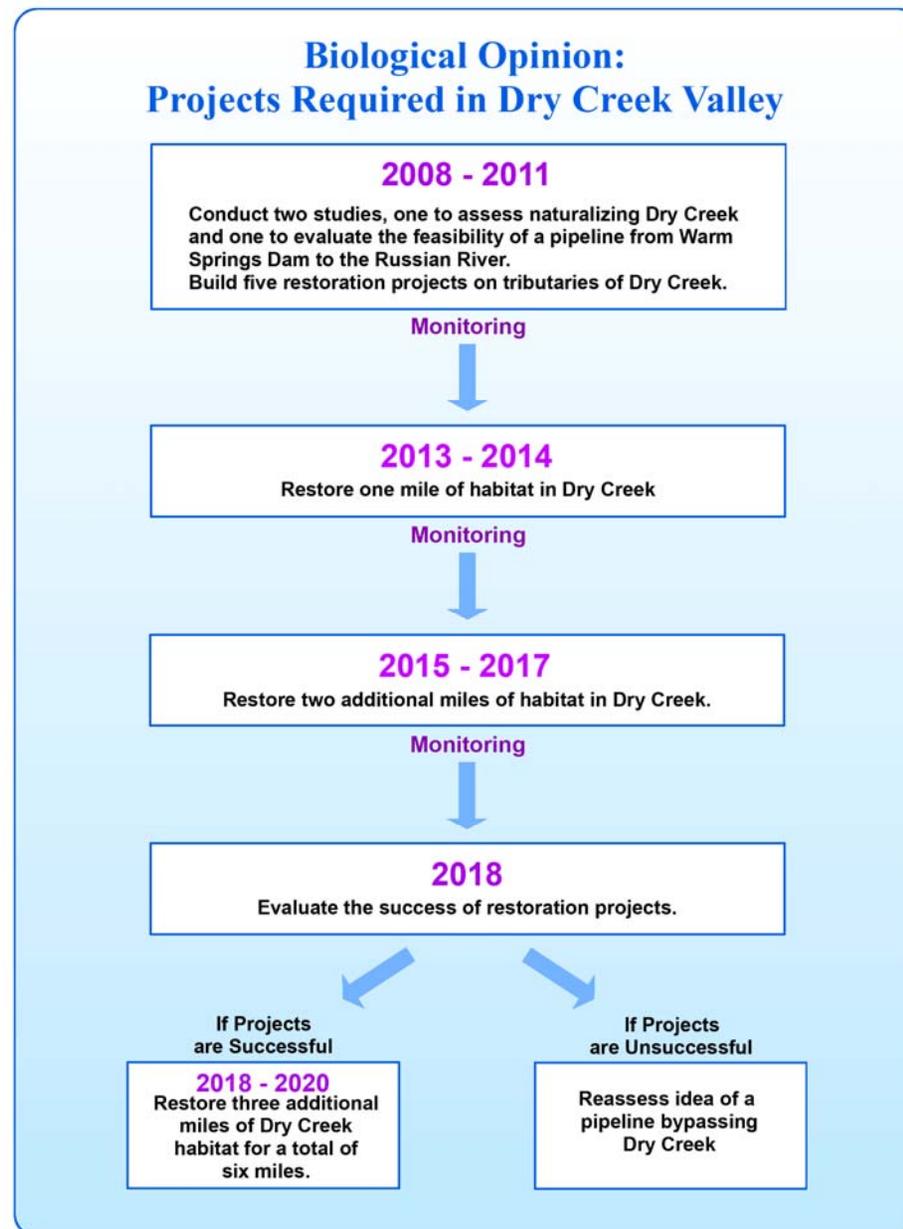
2008 Biological Opinion

- Status quo water operations:
 - Jeopardize Coho Salmon and Steelhead
 - *Do not* jeopardize Chinook Salmon
 - 23 Actions for SCWA and US Army Corps to modify operations
 - 15 Year Timeline (2008 to 2023)
 - Cost \$157,000,000

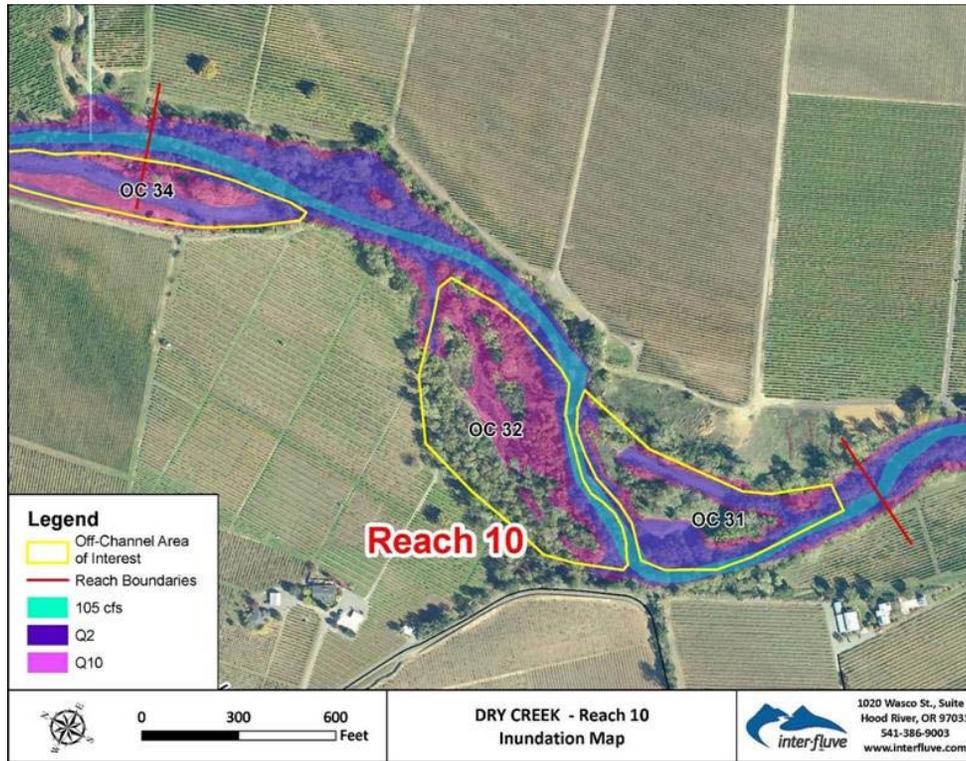


Dry Creek Objectives & Timeline

- Reduce water velocity for coho summer and winter rearing
- Improve depth, cover, habitat complexity
- Enhance 6 of 14 miles
- 12 years
- Use an Adaptive Management Approach

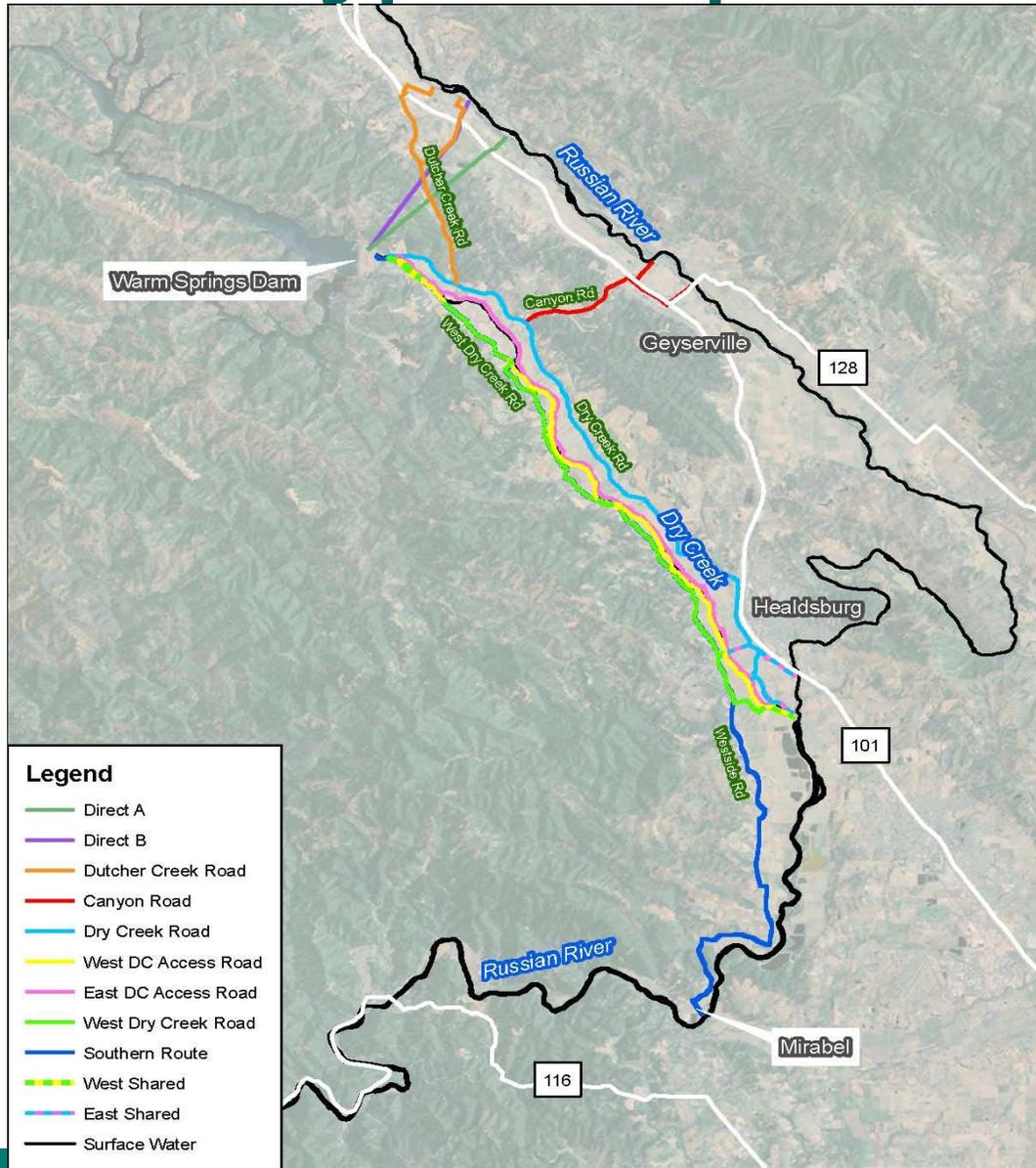


Habitat Feasibility Study



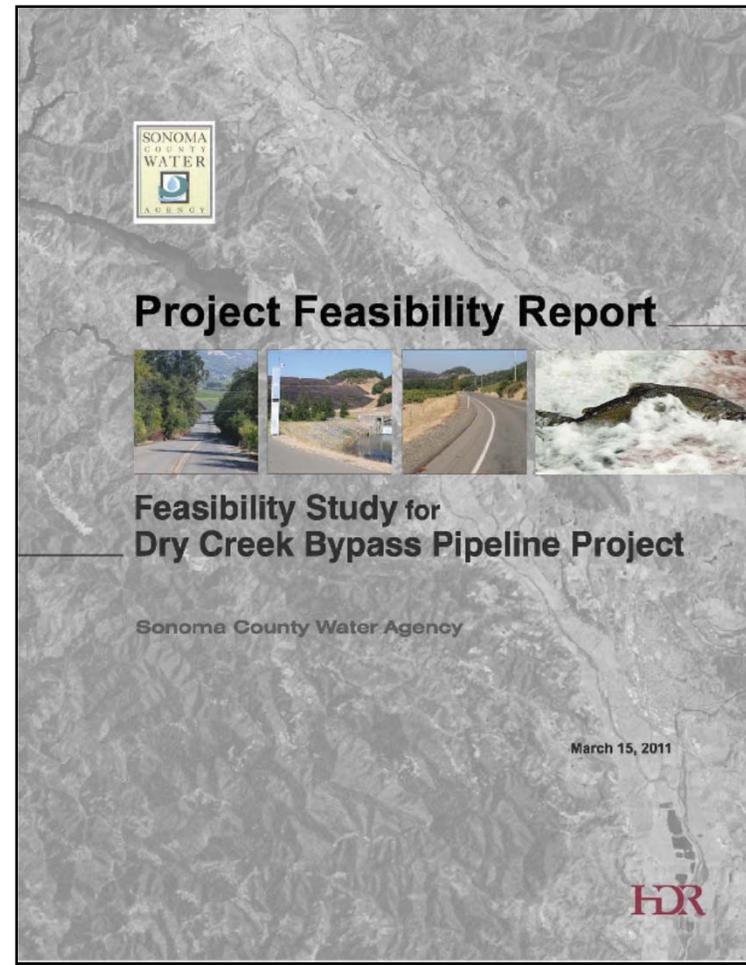
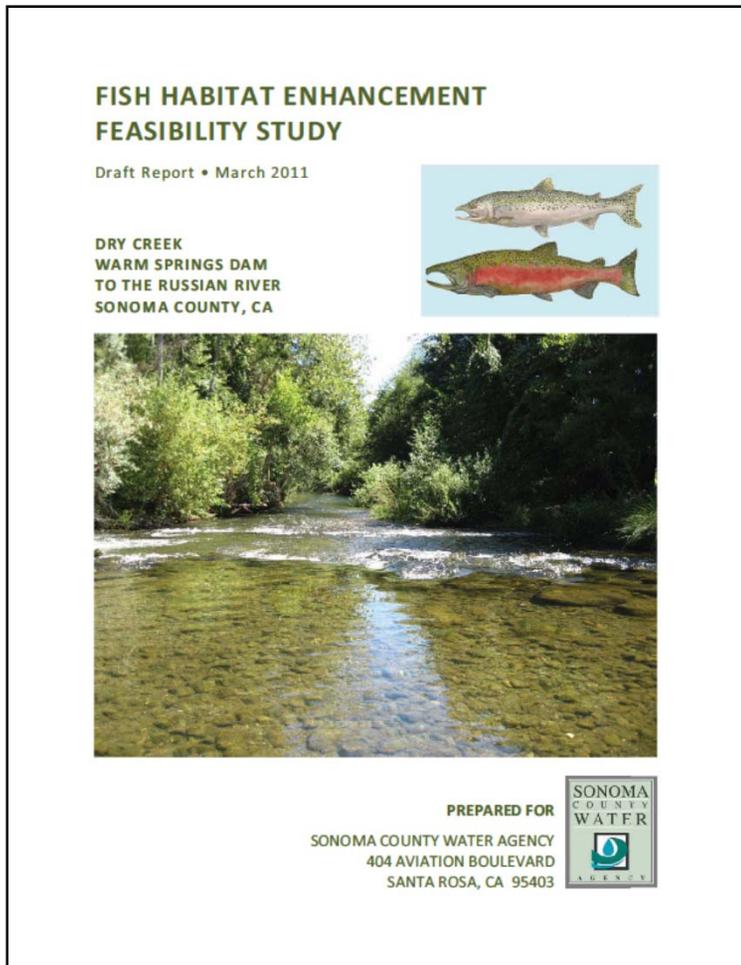
- 45 Potential project opportunities
- Distributed throughout 14 miles
- 9 miles of off channel habitat
- Total cost for 6 mile objective = \$36 to \$48 Million

Dry Creek Bypass Pipeline Study



Plan "A" Habitat Enhancement

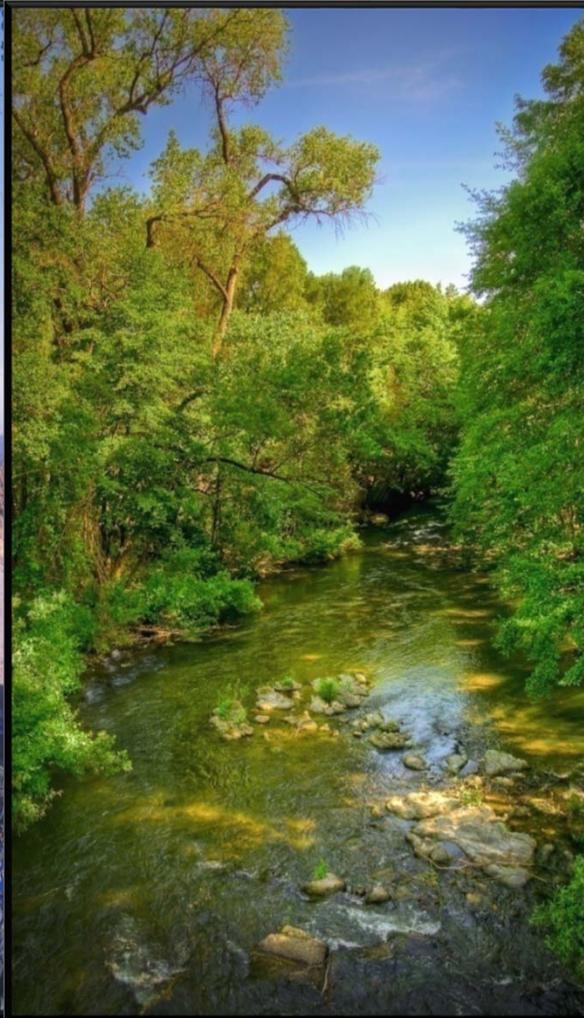
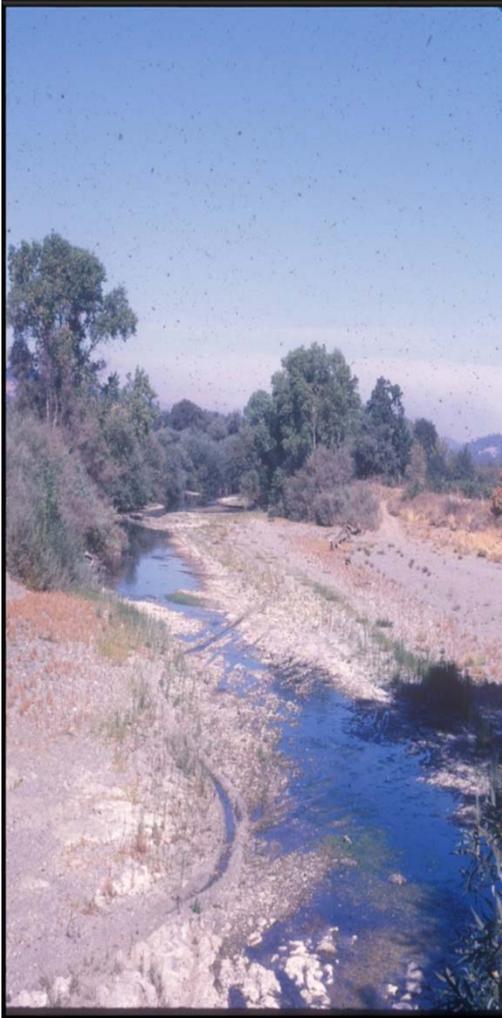
Plan "B" Bypass Pipeline



1980

2008

2014

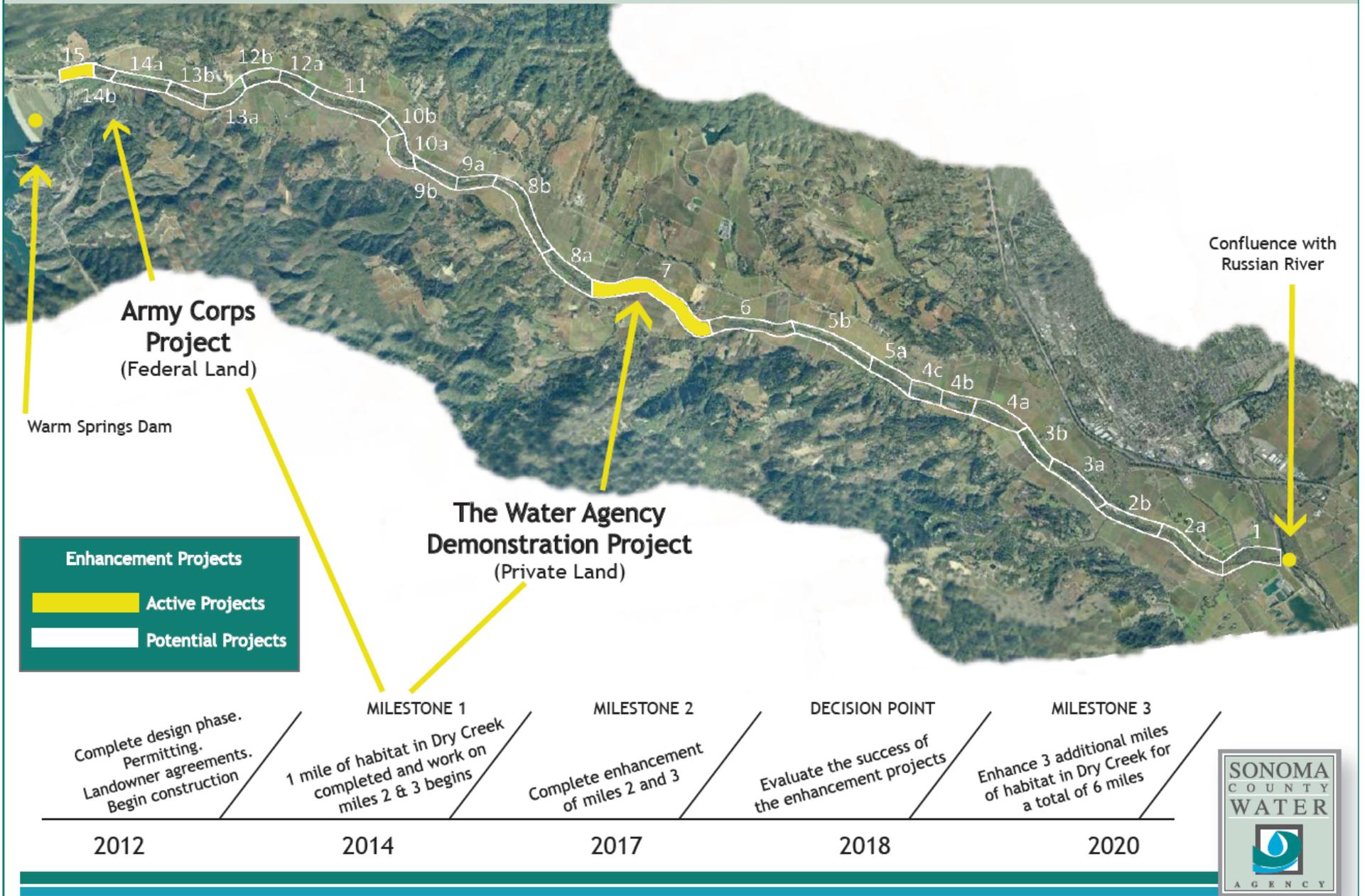


Enhancement Techniques



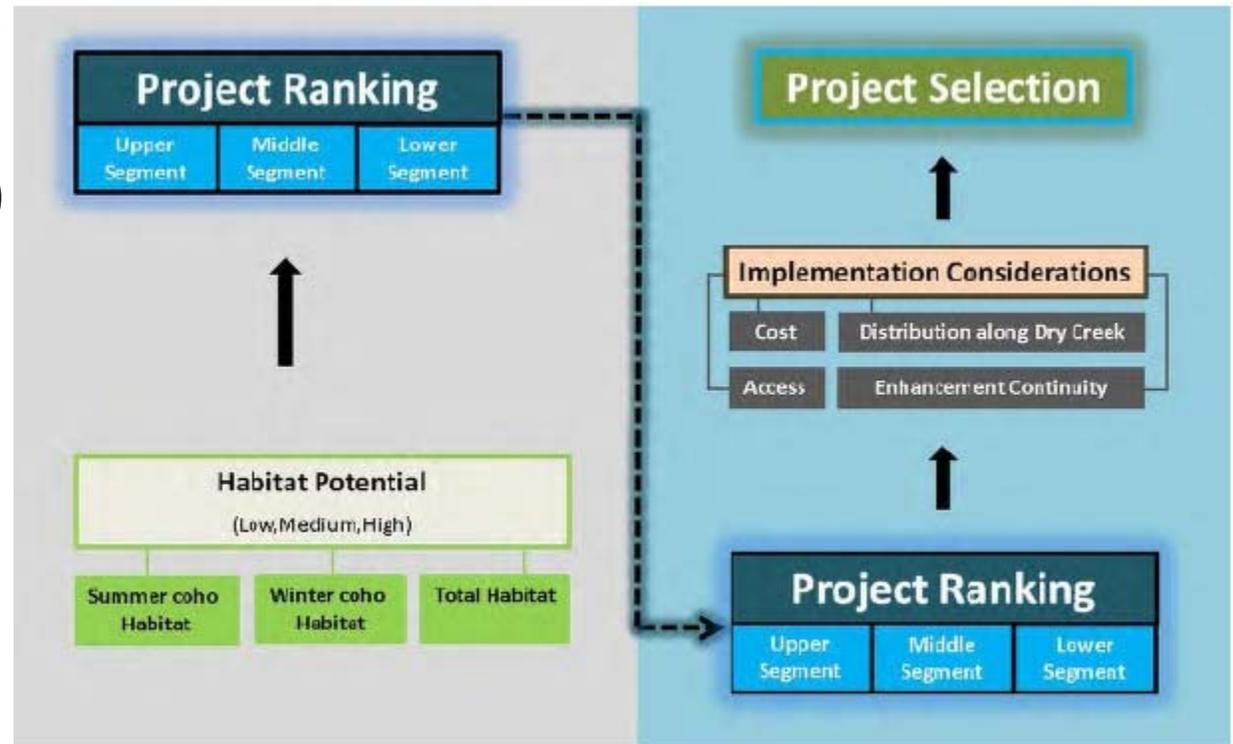
DRY CREEK HABITAT ENHANCEMENT REACHES

PREPARED BY SONOMA COUNTY WATER AGENCY | FEBRUARY 2012



Future Habitat Projects In Dry Creek

- Miles 2-3 - 2015-2017
- Miles 4-6 - 2018-2020
- Site Evaluation and Ranking
- Landowner Outreach
- Additional CEQA, Permitting, Right of Way



Stakeholders

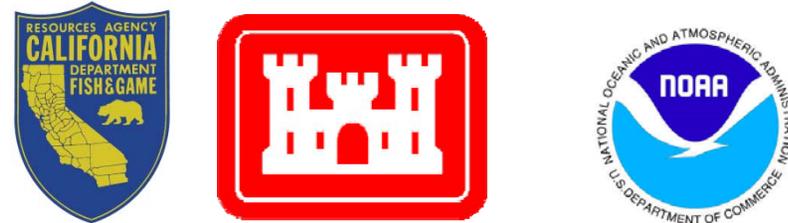
Water Agency & Customers



Tribes



Partner Agencies



Agriculture



Property Owners



Dry Creek Habitat Enhancement

David Cuneo, Principal Environmental Specialist



www.sonomacountywater.org



DRY CREEK HABITAT ENHANCEMENT REACHES

PREPARED BY SONOMA COUNTY WATER AGENCY | FEBRUARY 2012



Enhancement Projects

- Active Projects
- Potential Projects

Army Corps Project
(Federal Land)

The Water Agency Demonstration Project
(Private Land)

Complete design phase.
Permitting.
Landowner agreements.
Begin construction

MILESTONE 1
1 mile of habitat in Dry Creek
completed and work on
miles 2 & 3 begins

MILESTONE 2
Complete enhancement
of miles 2 and 3

DECISION POINT
Evaluate the success of
the enhancement projects

MILESTONE 3
Enhance 3 additional miles
of habitat in Dry Creek for
a total of 6 miles

2012

2014

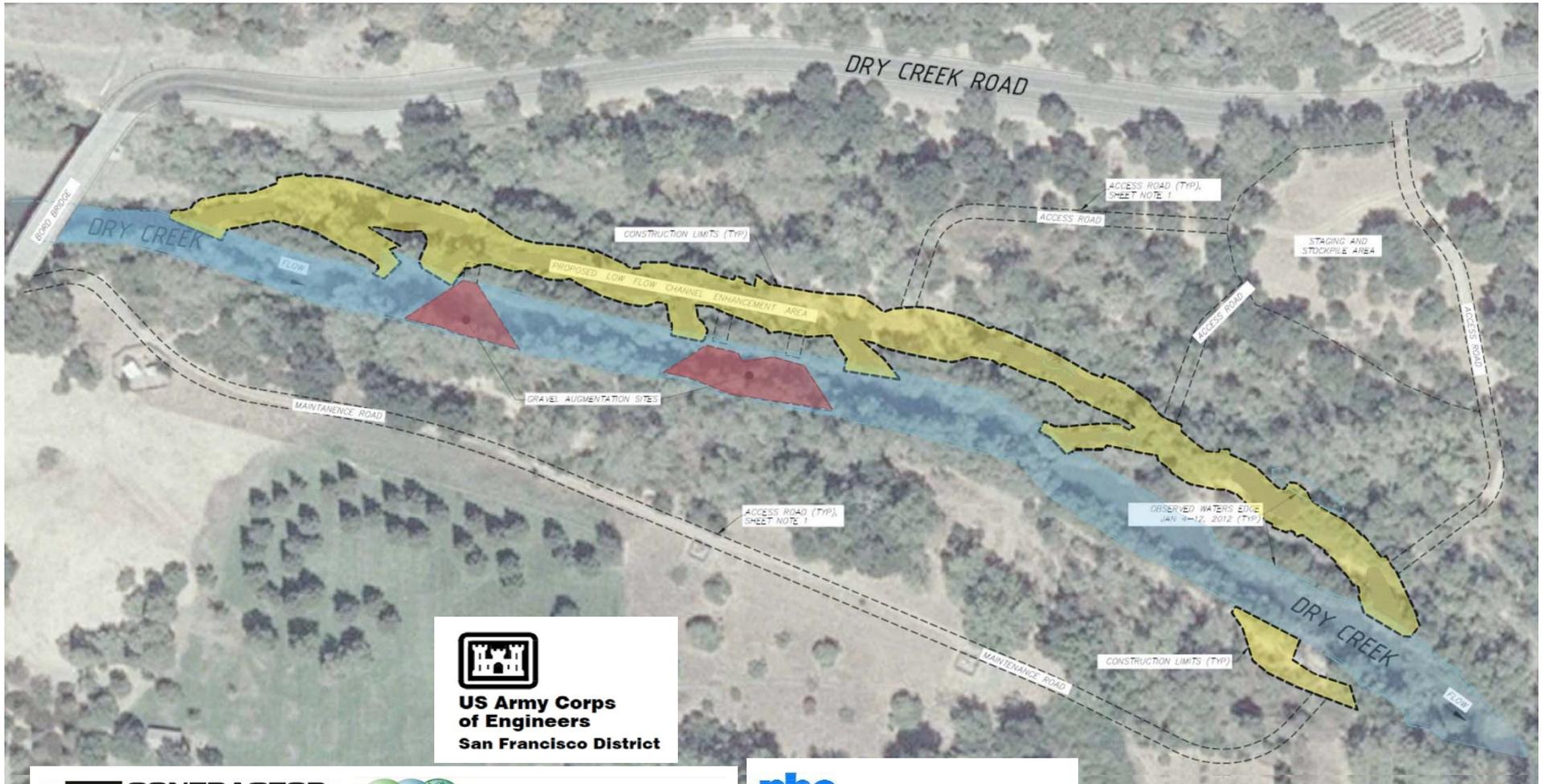
2017

2018

2020



U.S. Army Corps of Engineers - Reach 15



**US Army Corps
of Engineers**
San Francisco District



**CONTRACTOR
SERVICES GROUP INC.**
Home Office: P.O. Box 1505 • West Sacramento, CA 95691
Oregon: 147 North Central Ave #201, Medford, OR 94501
Texas: 1517 Centre Place Dr. #350, Denton, TX 76205
Main Phone: (916) 371-7303 • Fax: (866) 366-6646



ECORP Consulting, Inc.
ENVIRONMENTAL CONSULTANTS

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315 North 5th Street
Redlands, CA 92374
Ph: (909) 307-0646

Northern California
2525 Warren Drive
Rocklin, CA 95677
Ph: (916) 787-9100

San Diego Region
3914 Murphy Canyon Rd.
Suite A212
San Diego, CA 92135
Ph: (858) 278-0280

Bay Area
1448 Harrison Street
Suite 303
San Francisco, CA 94103
Ph: (415) 553-4101

Orange County
1831 Park Court Plaza
Building II, Ste 103
Santa Ana, CA 92704
Ph: (714) 648-0630



3950 industrial blvd, suite 100C
west sacramento, california 95691
(916) 371-7400 fax: (916) 371-7475
www.nhcweb.com



August 15, 2013



Sonoma County Water Agency

Dry Creek Habitat Enhancement Demonstration Project

- Van Alyea Family
- Mascherini Family
- Seghesio Family
- Kight Family - Quivira Winery
- Wolmer Family
- Douglas Lipton
- Farrow - Amista Winery
- Wallace - Dry Creek Vineyards, Inc.
- Rued Family

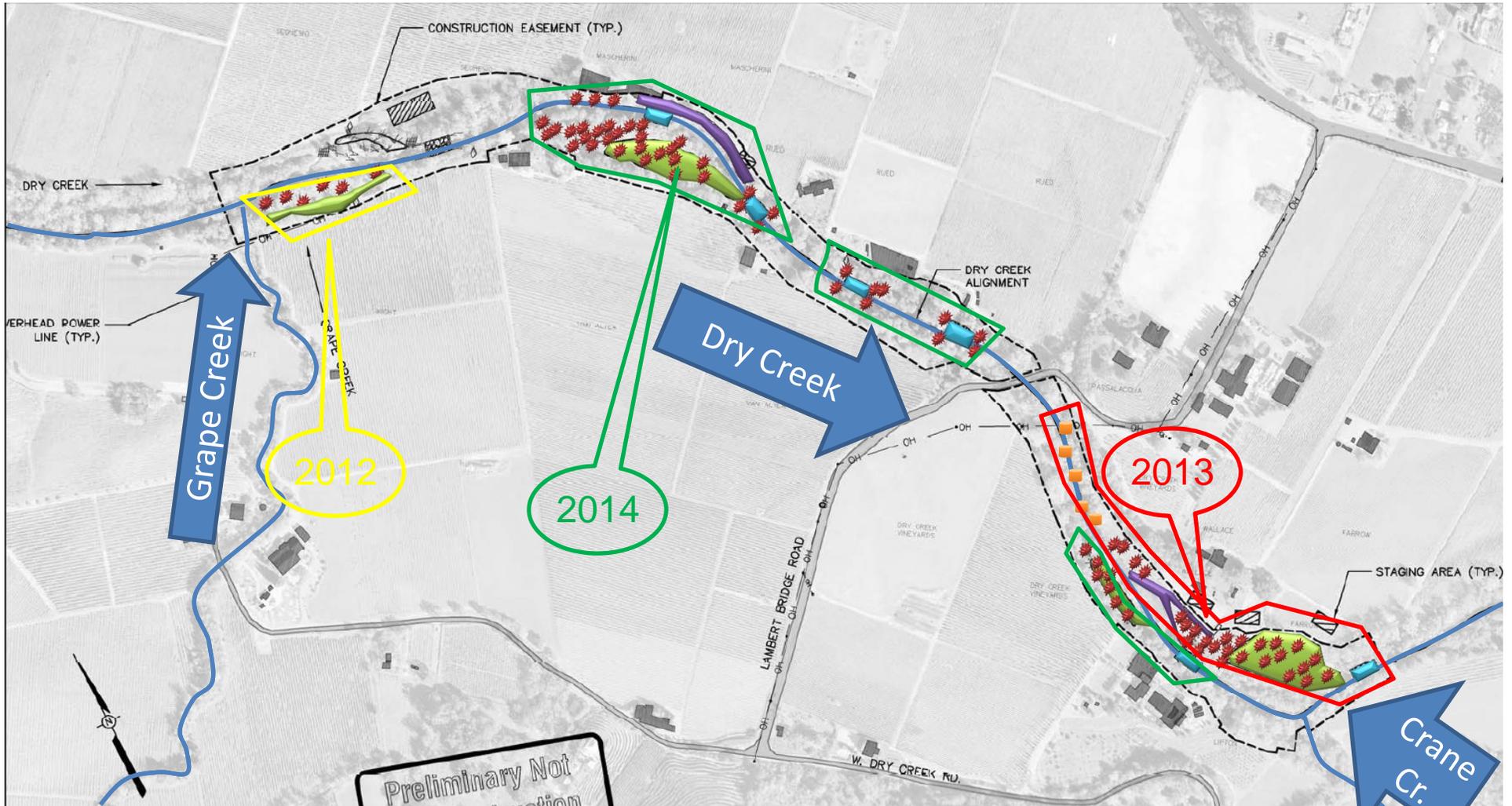
INTER-FLUVE, INC.
1020 WASCO STREET, SUITE 1
HOOD RIVER, OR 97031
541.386.9003



Hanford ARC
23195 Maffei Road
Sonoma, CA 95476
PH (707) 975-3105
FAX (707) 996-6641



Demonstration Project Design Details



November 20, 2012 – Winter Backwater



December 1, 2012 – Winter Backwater



October 17, 2013 - Summer Backwater



April 30, 2014 - Summer Backwater



Boulder Field in Dry Creek



September 16, 2013 – Bank Stabilization



April 30, 2014 - Bank Stabilization



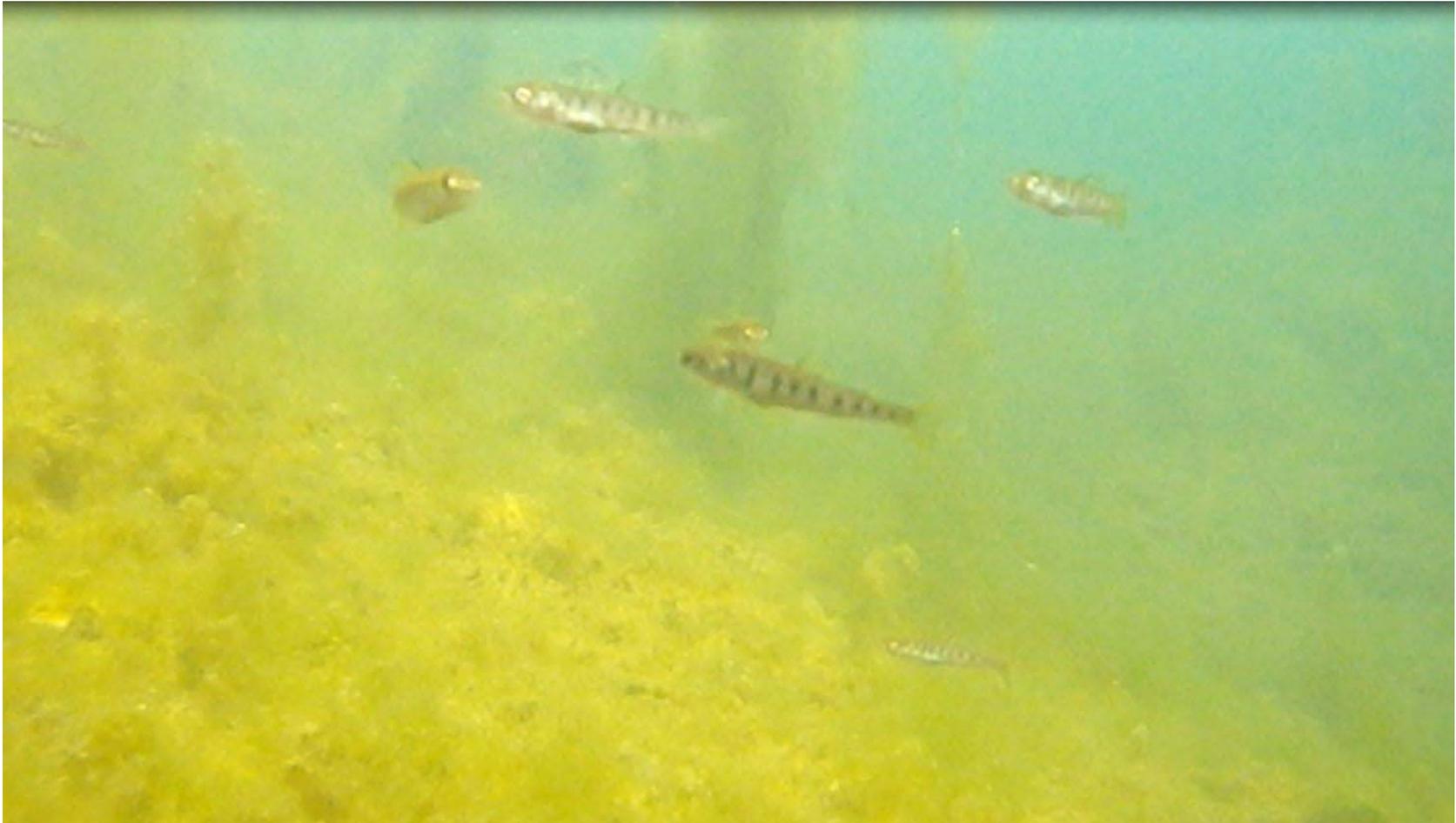
February 24, 2014 - Adult Salmonid



February 26, 2014 - Adult Salmonid



April 18, 2014 - Juvenile Salmonids



December 3, 2012 – Winter Backwater



October 31, 2013 – Winter Backwater





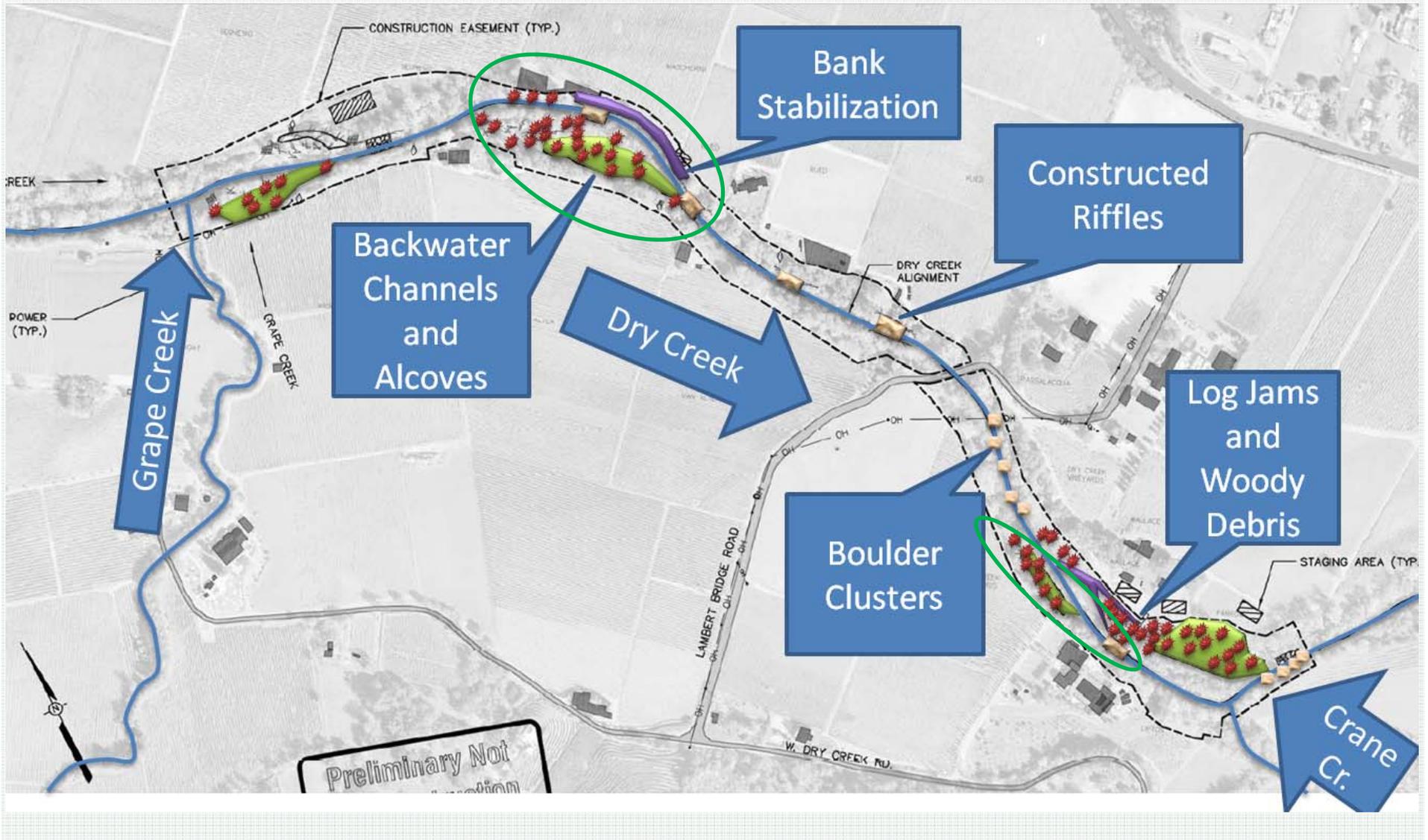


Dry Creek Habitat Enhancement

- Gregory Guensch, Engineer



Demonstration Project Design Features



Backwater A Constructed in 2013



Rendering of Backwater C

(to be constructed in 2014)



Typical Features: Floodplain Log Structure



Typical Features: Backwater Habitat Structure



Typical Features:

Log Jam and Isolating Work During Construction



Typical Features: Bank Stabilization (under construction)



Typical Features: Bank Stabilization (year after construction)

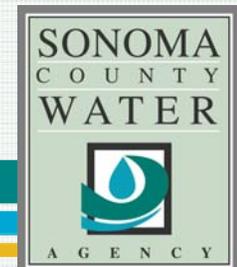


Typical Features: Constructed Riffle



Basic Information

- Construction staging, early June
- Instream work can start June 15
- Instream work must end by October 15
- Hours limited to weekdays 7:00AM to 5:00PM
- Logs and rock stored at Warm Springs Dam
- Some boulders may be delivered
- Heavy trucks won't cross Lambert Bridge
- No road closures

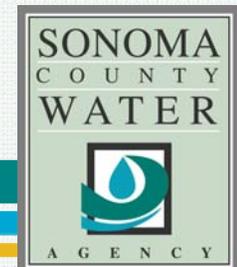


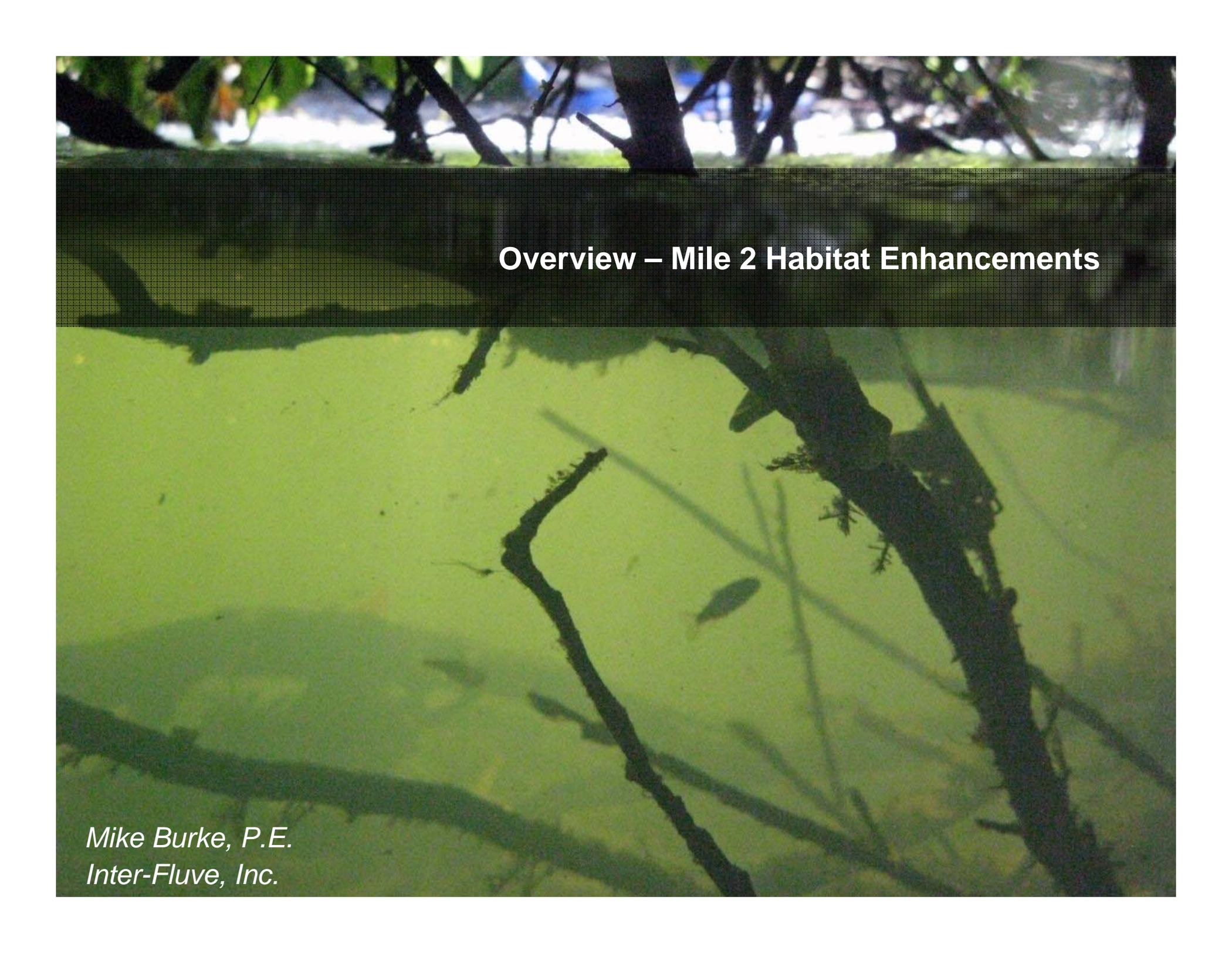
2014 Construction Access Routes



Contacts

- Construction Questions, Comments, Concerns:
 - Oscar Martin (707) 975-5684
- General Questions and Comments Regarding the Project:
 - Greg Guensch (707) 547-1972



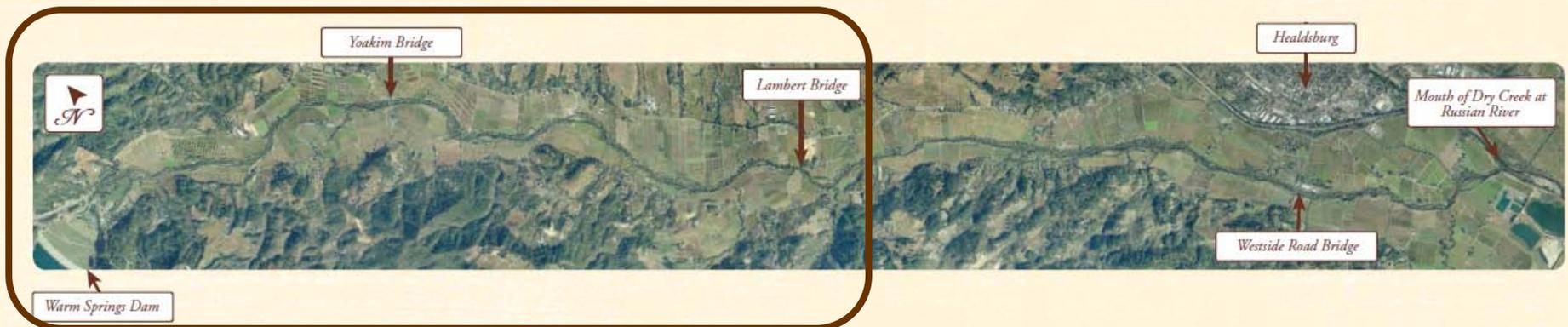
An underwater photograph of a stream. The water is clear and greenish. Several dark logs are scattered throughout the scene, some partially submerged and some protruding from the water. A single fish is visible in the middle ground, swimming towards the right. The background shows more logs and some light filtering through the water.

Overview – Mile 2 Habitat Enhancements

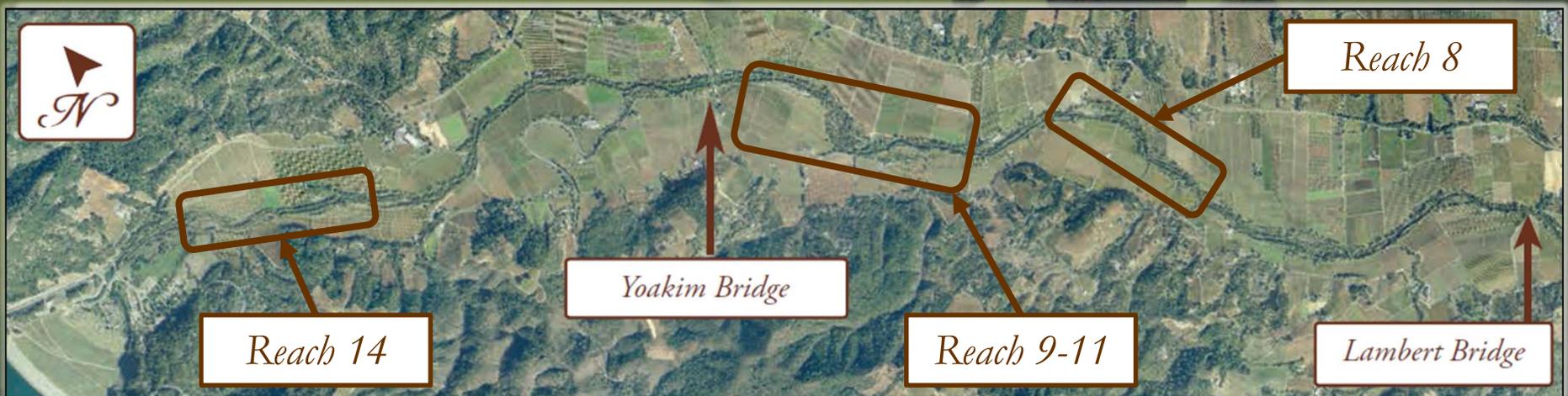
*Mike Burke, P.E.
Inter-Fluve, Inc.*

Overview

- Mile 2 Project Area
- Schedule
- Example Preliminary Design
- Next Steps



Overview – Mile 2 Project Area

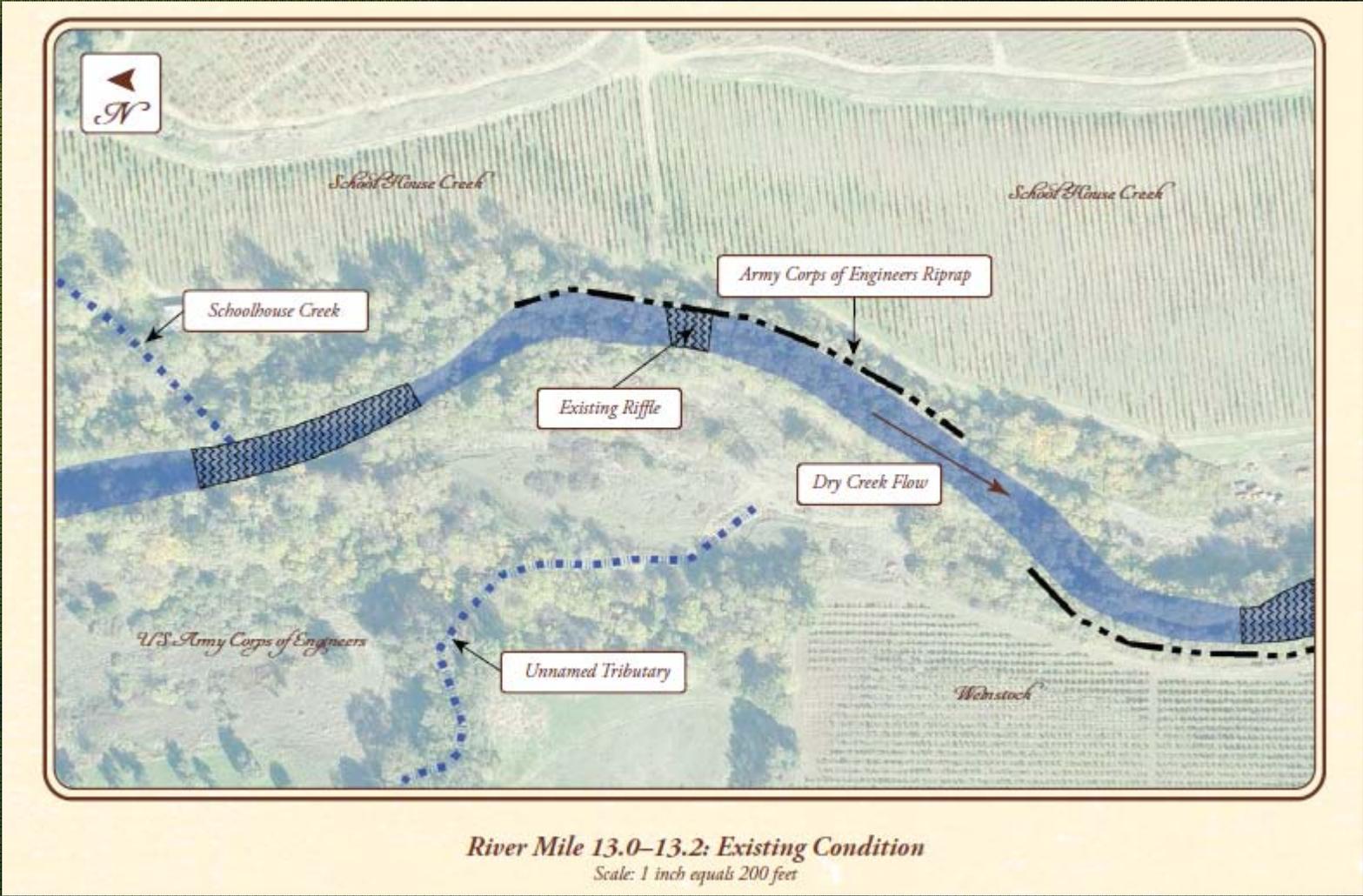


- 2.7 miles over three reaches to start
- 1.25 miles for detailed design

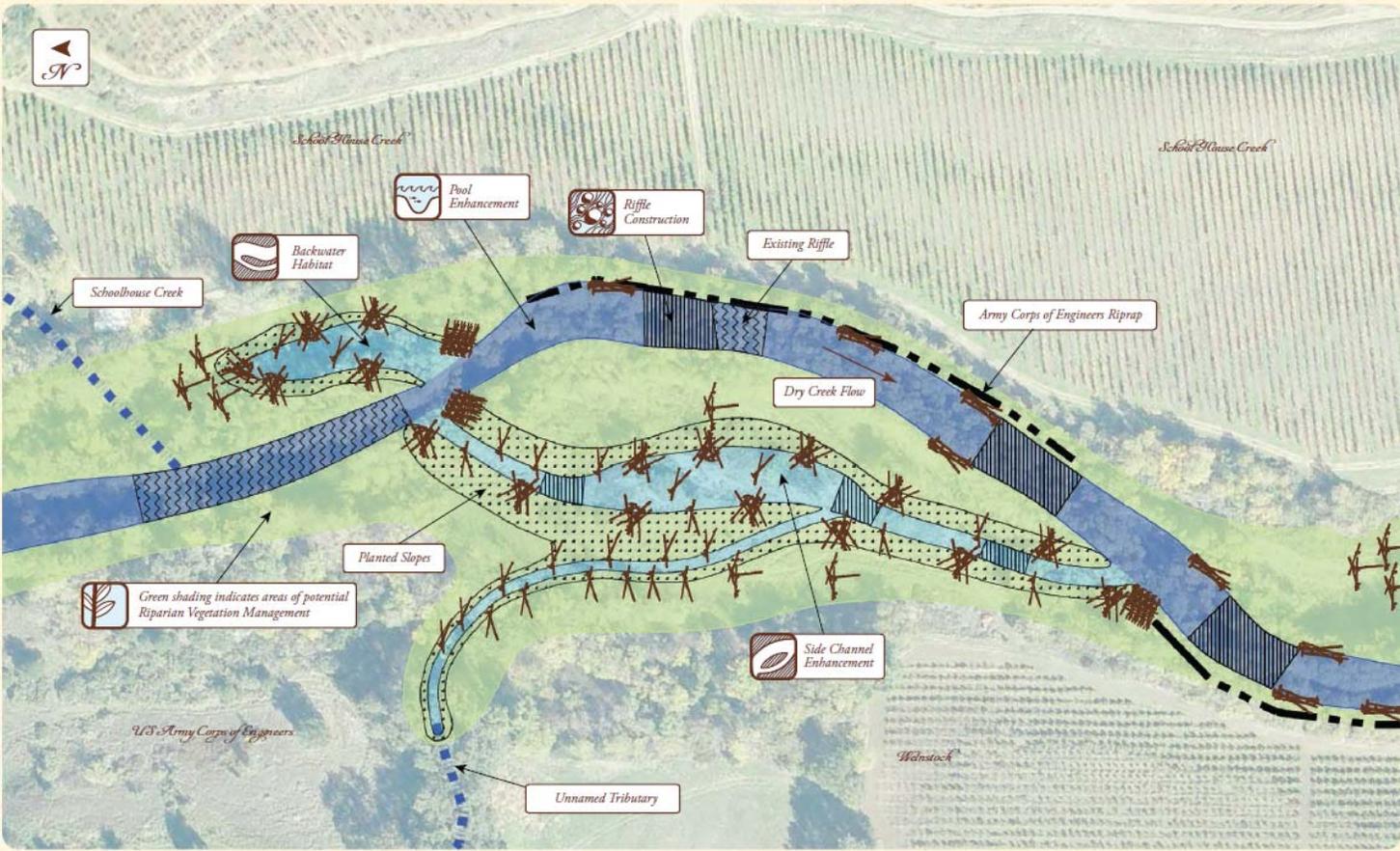
Schedule

- | | |
|---------------------------|-------------|
| ➤ Property Owner Outreach | ONGOING |
| ✓ Preliminary Design | SPRING 2014 |
| ☐ Detailed Surveys | SUMMER 2014 |
| ☐ 60% Design | WINTER 2015 |
| ☐ Final Design | SUMMER 2015 |
| ☐ Construction | SUMMER 2016 |

Example Preliminary Design – Reach 14

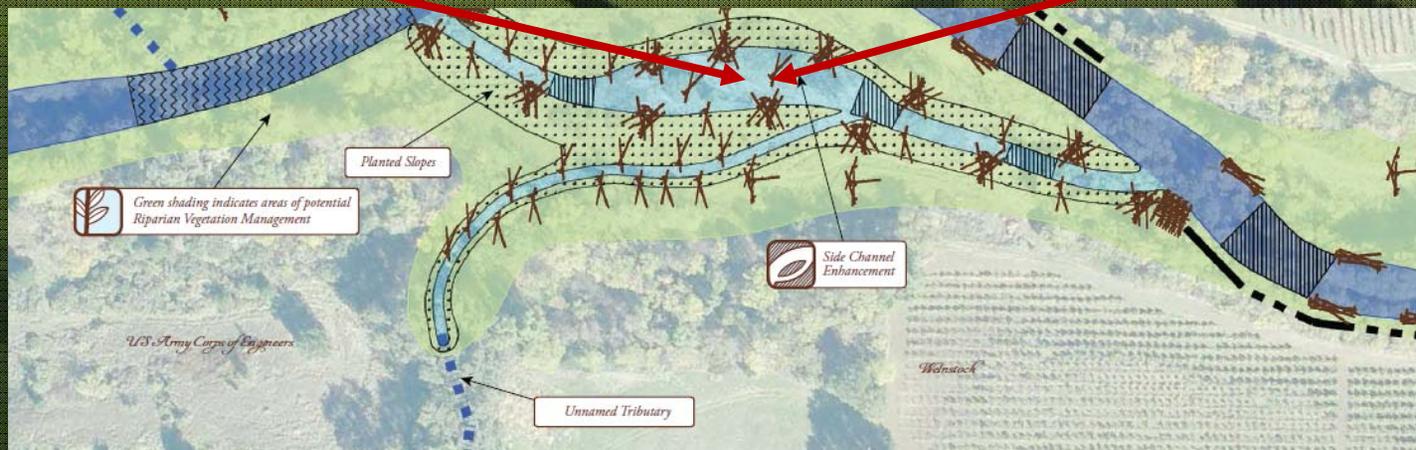


Example Preliminary Design – Reach 14

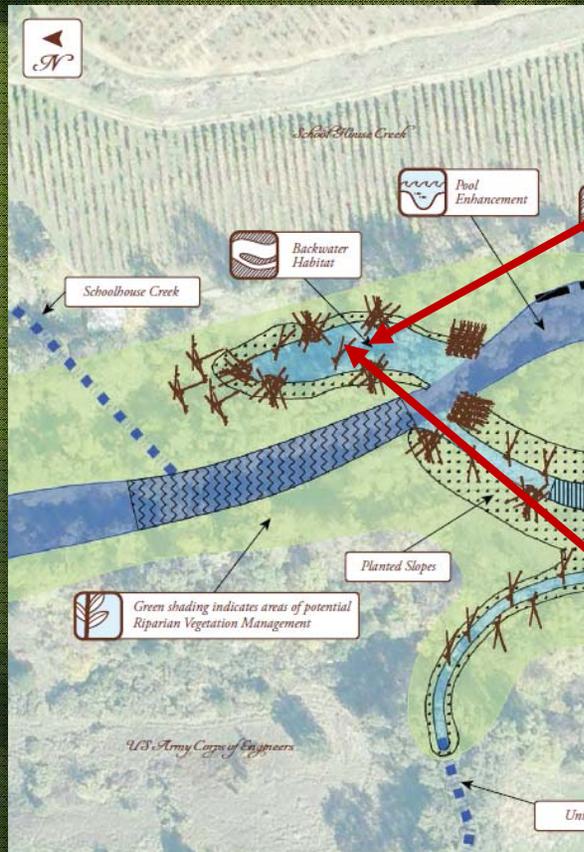


River Mile 13.0-13.2: Proposed Enhancement
Scale: 1 inch equals 120 feet

Example Preliminary Design – Side Channel



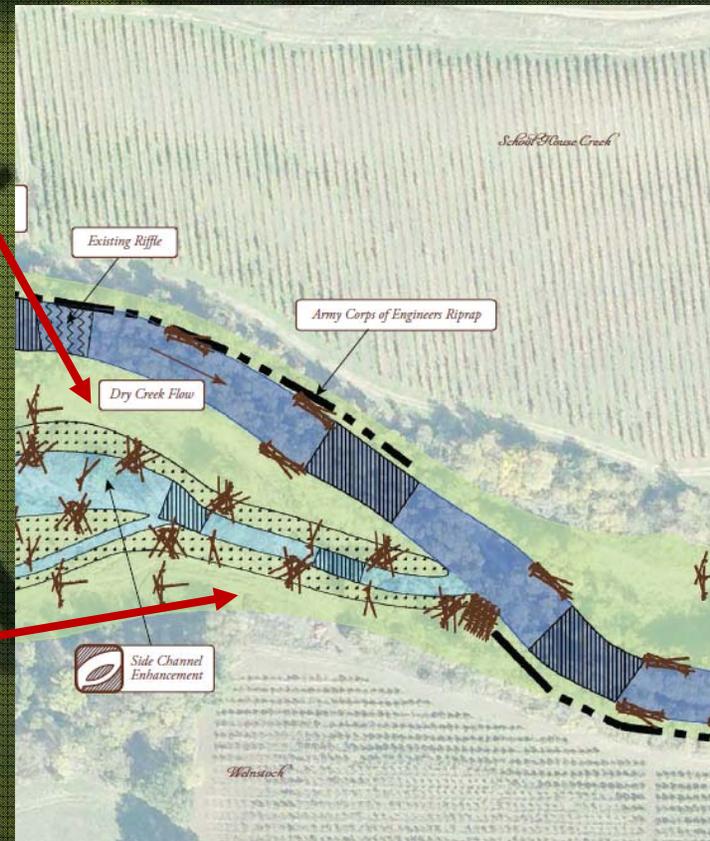
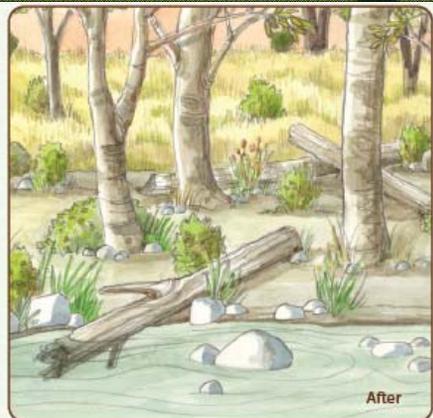
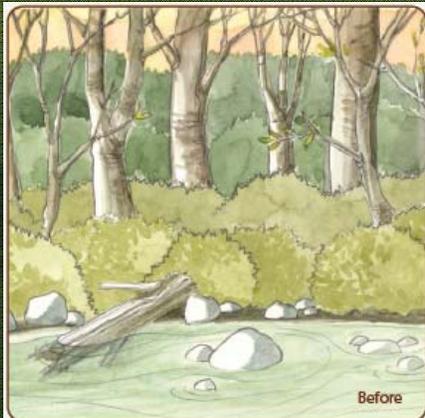
Example Preliminary Design – Backwater Habitat



Example Preliminary Design – Riffle and Log Jam



Example Preliminary Design – Vegetation Management



Next Steps

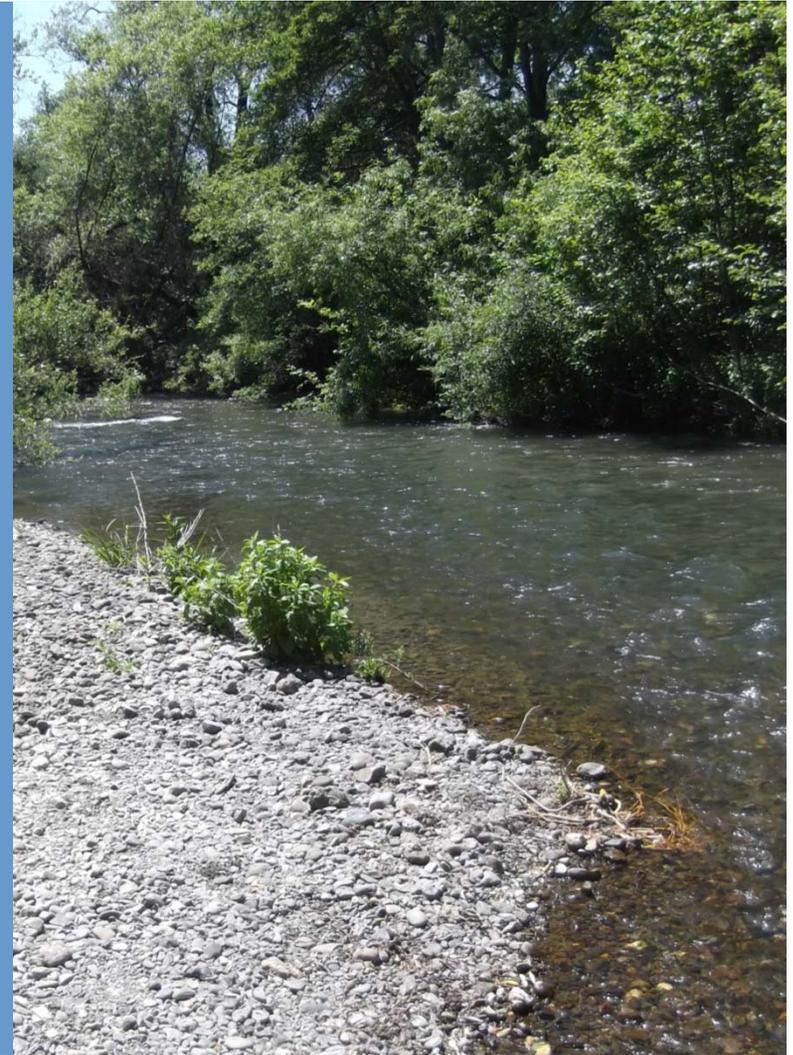
- | | |
|---|-------------|
| ➤ Property Owner Outreach | ONGOING |
| ✓ Preliminary Design | SPRING 2014 |
| <input type="checkbox"/> Detailed Surveys | SUMMER 2014 |
| <input type="checkbox"/> 60% Design | WINTER 2015 |
| <input type="checkbox"/> Final Design | SUMMER 2015 |
| <input type="checkbox"/> Construction | SUMMER 2016 |

Dry Creek Habitat Enhancement Project Mile Three



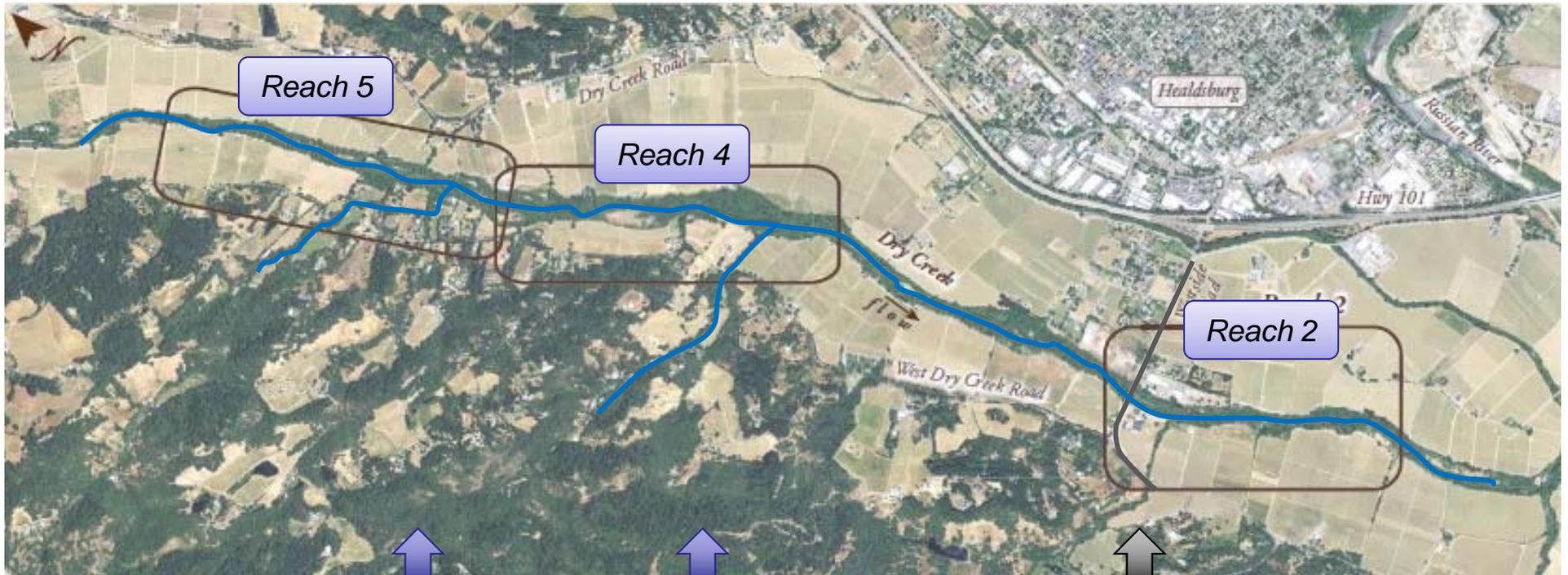
Annual Dry Creek Community Meeting

May 12, 2014



Mile Three Overview

(River Mile 1 to 5)



Kelly Creek

Pine Ridge Creek

Westside Road

Mile Three – Key Considerations

- Russian River backwater
 - Vertical and lateral channel adjustments
 - Sediment deposition & scour
- Tributary flow and sediment inputs
 - Magnitude, frequency and variability
- USACE grade control sills
 - Backwater and flow widening
- Existing topography
 - Past channel alignments
 - Backwaters & depressions
 - Relative elevations
- Flow concentration
 - Channel narrowing & Sediment transport

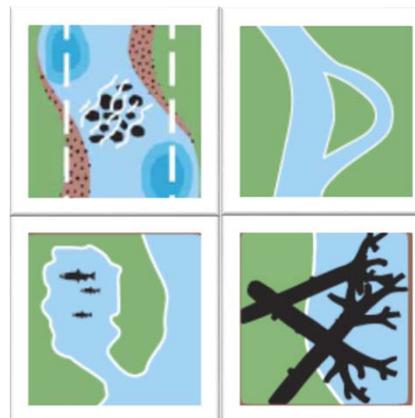
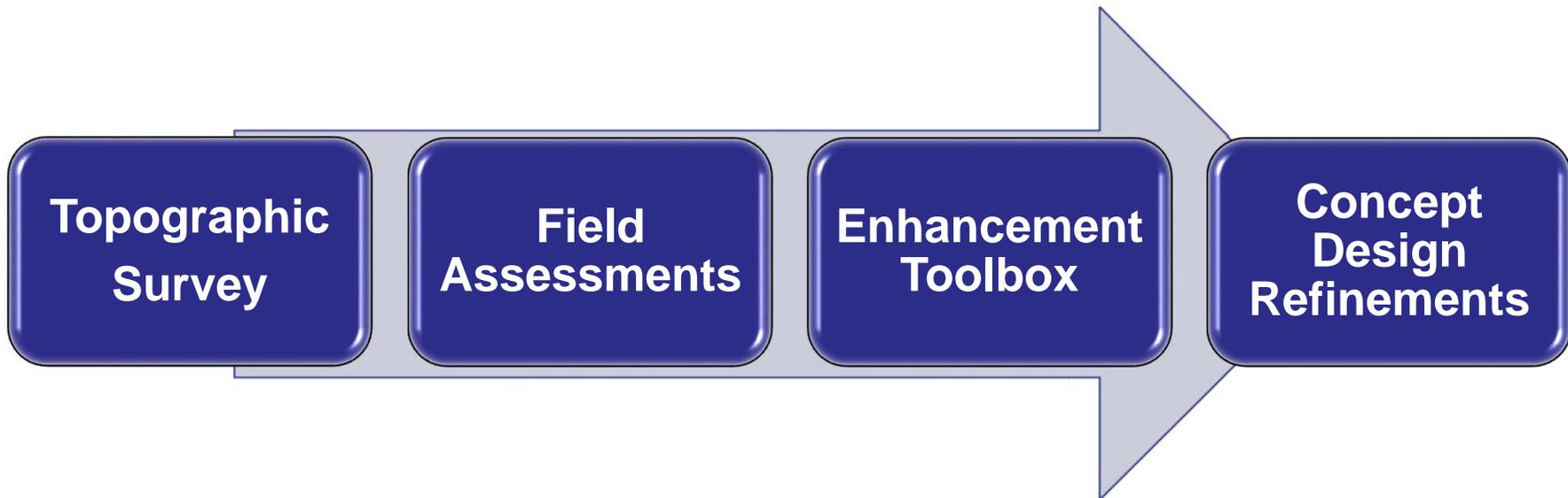


Mile Three – Key Considerations

- Fish utilization
 - Temporal duration and frequency
- Water quality
 - Temperature & Dissolved oxygen
- Sustainability & resilience
 - Sediment accumulation
 - Blockage or disconnection
 - Habitat function
 - Wood recruitment and regeneration

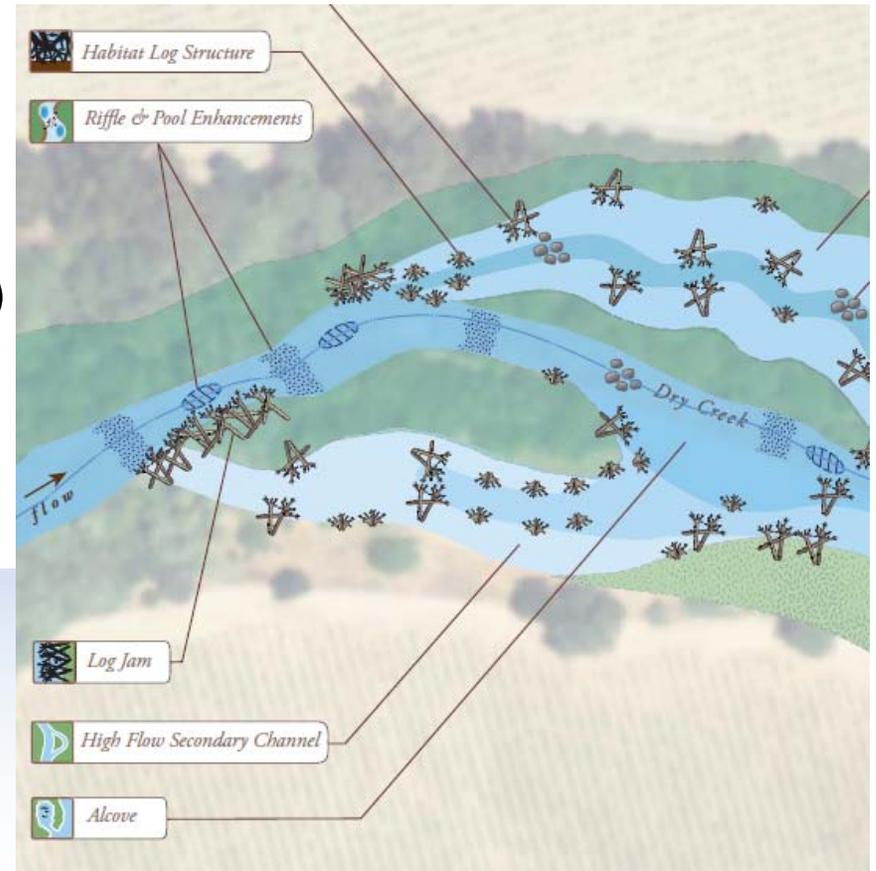


Concept Design Development

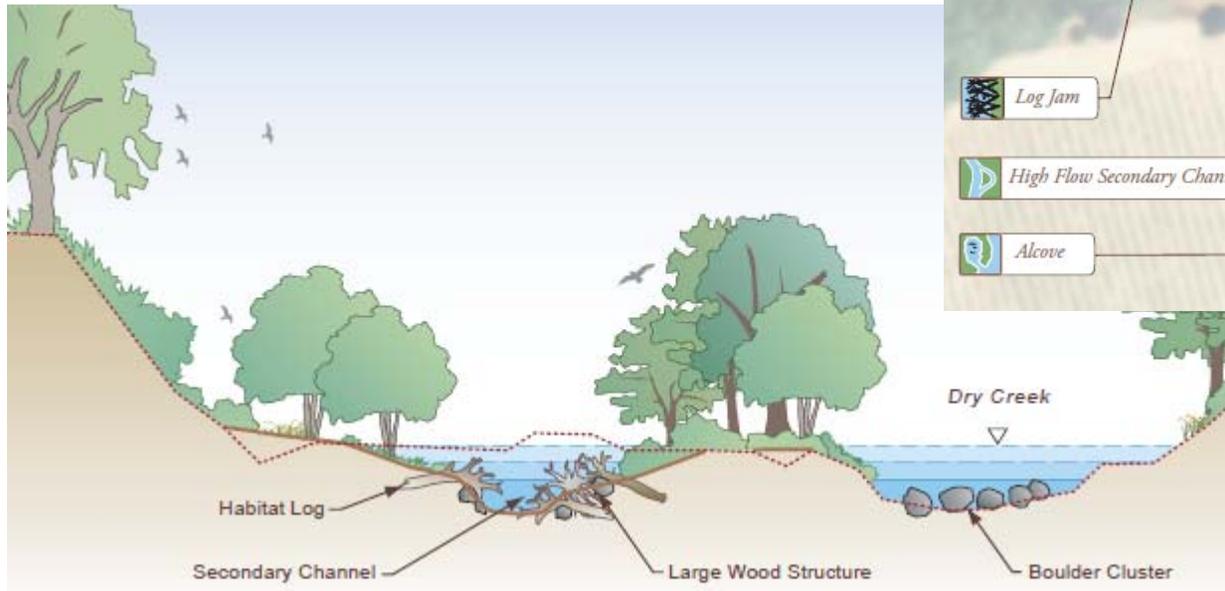


Concept Designs

- Site-specific concept designs
- 12 sites over three reaches (~2 miles)
- Revisions based on landowner input
- Select 1+ mile for detailed design



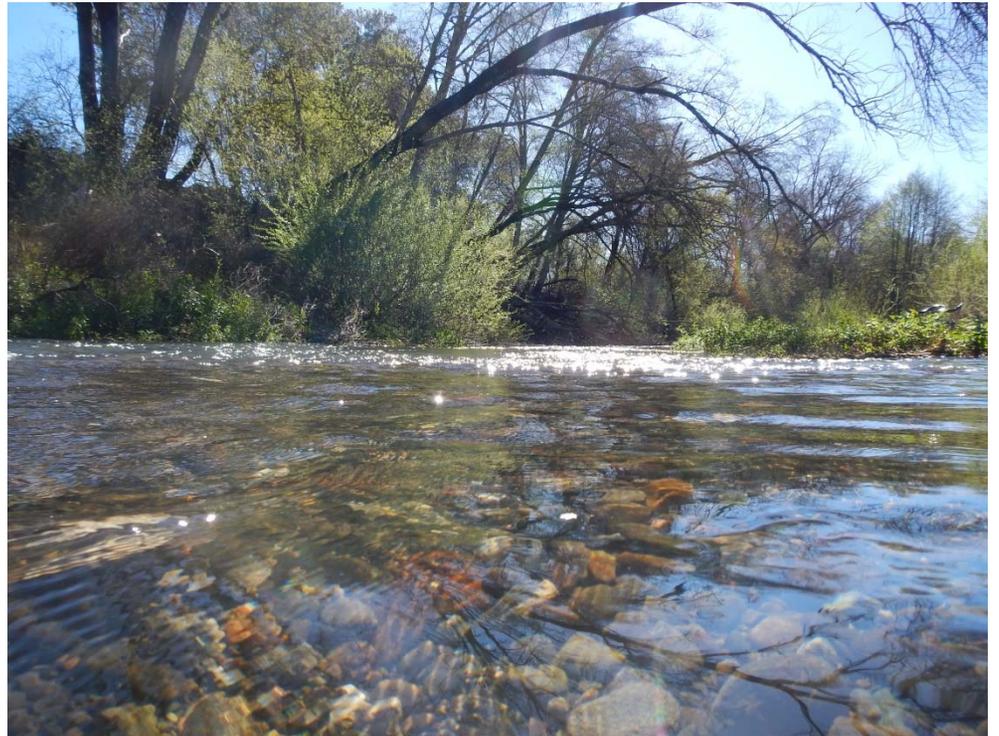
Plan View



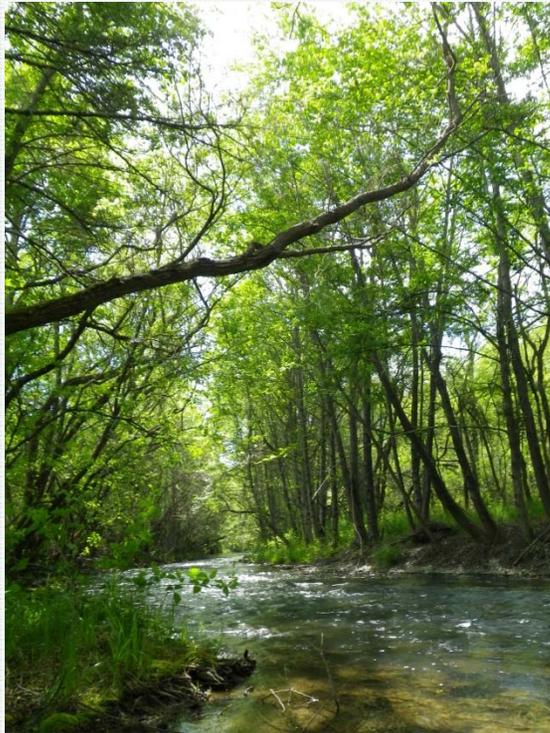
Cross Section

Next Steps

- Landowner Meetings
 - Review concept designs
- Finalize Concept Designs
- Initiate detailed analysis
 - Modeling, basis of design
- Detailed topographic survey
 - Supplemental field-based design review
- Design Development



Notice of Preparation



Anne Crealock
Senior Environmental Specialist
anne.crealock@scwa.ca.gov



Notice of Preparation

- Scoping is part of the California Environmental Quality Act (CEQA) public process
- Water Agency receives input from the public
 - Comments/Concerns
 - Ideas for scope and content of the Environmental Impact Report (EIR) and Project Alternatives

Notice of Preparation

- The EIR will consider public input received during scoping process (May 5 – June 12)

- How to comment

- Turn in comment card this evening

- Mail comments to:

Anne Crealock

404 Aviation Blvd.

Santa Rosa, CA 95403

- Email comments to:

anne.crealock@scwa.ca.gov