Russian River Biological Opinion Implementation Brief

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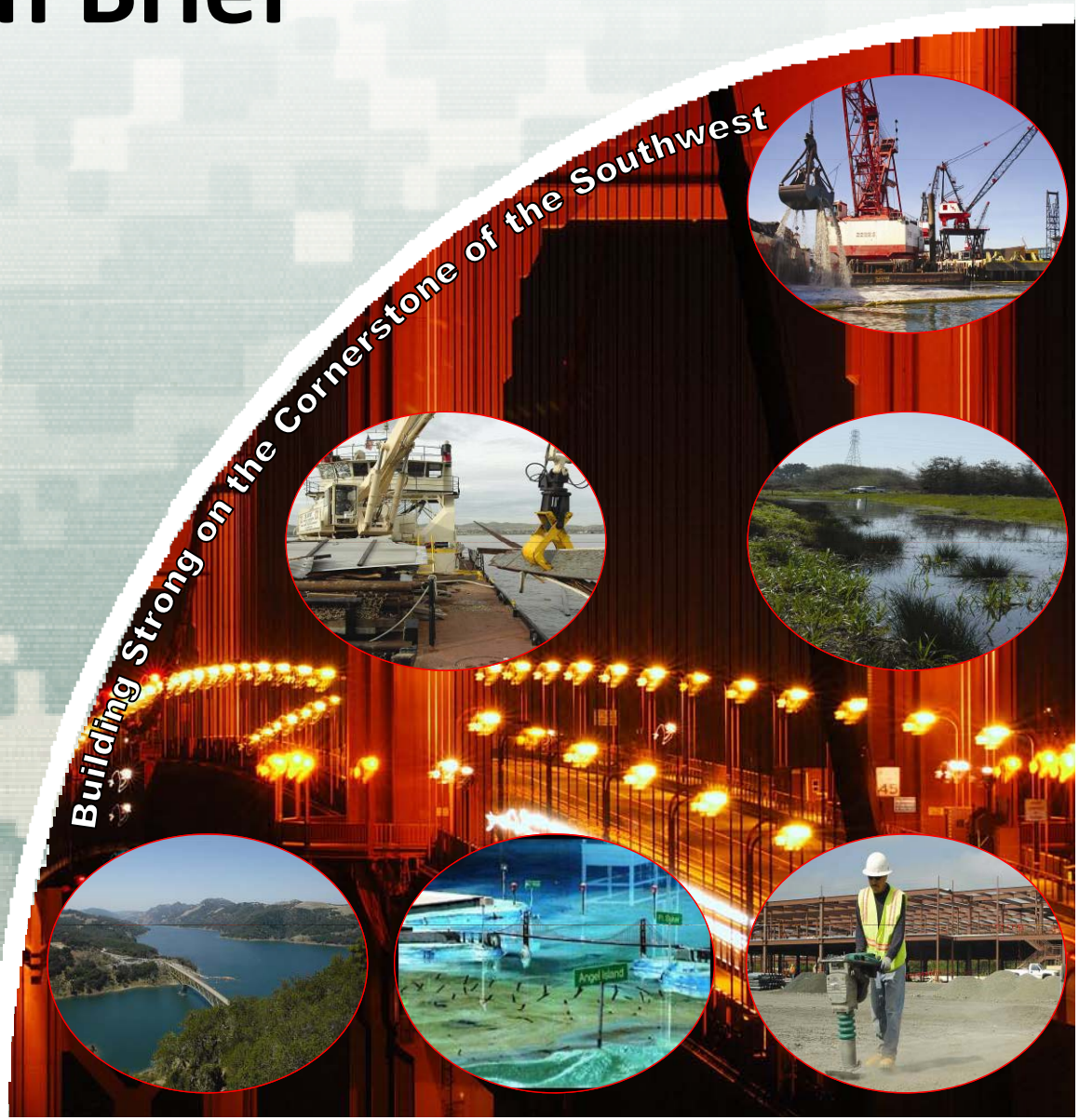

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The Role of the Corps

- Corps built and operated projects
  - Warm Springs Dam and Lake Sonoma
  - Coyote Valley Dam and Lake Mendocino
  - Hatchery and Broodstock Program as mitigation
- BIOLOGICAL OPINION: Jeopardy!

What We're Already Doing

- Hatchery & Broodstock Program expansion
- Design of Emergency Water Supply Line to Hatchery
- Working Model of Restoration Project
- Built and use the MOTIV
- Worked with all agencies in adjusting hydrograph (wave for fishes) to mimic natural event
- Completed 3 Initial Appraisals Reports with Recommendations
- Ongoing CVD Feasibility Study (delayed due to budget constraints)
- Coordination where possible

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Photo from the Redwood National Park collection

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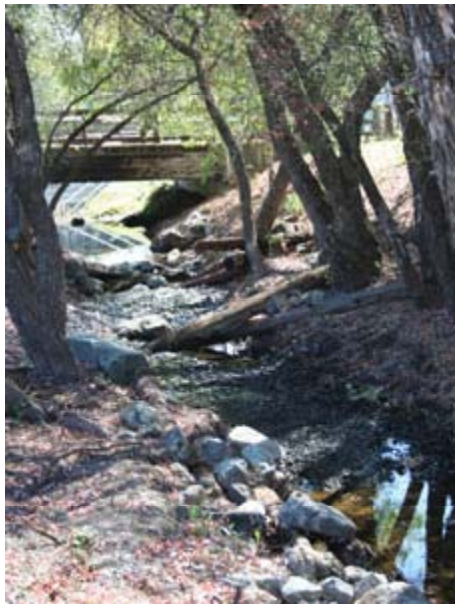
Lake Sonoma Working Model Restoration Project

Before: The channel is choked with non-native plants and years of sediment buildup. There is no stream habitat and public cannot see migrating steelhead.

Cooperating agency personnel (from left) Elliot Doss, Bill Cox, and Joel Miller shock and remove fish from the old channel.



Invasive plants were removed and banks were reseeded with native grasses. The channel was lined with river gravel and a new stream habitat was created with root wads, redwood logs, & rock weirs to mimic native stream water flow for returning steelhead.

Photos and info from Nancy Rogers and David W. Moore article "Channeling Hope: Applying Interpretation to a Stream Restoration Project".

Motorized Outlet Tunnel Inspection Vehicle (MOTIV)

Result of design competition ENGINEERS VS. MECHANICS eventually joined into one working group to design this one-of-a-kind inspection vehicle that allows dam & worker safety w/o needing to shut off water.

http://www.spn.usace.army.mil/newsrelease/newsrelease_motiv_11_16_10.html

Future Objectives

- Implement the Dry Creek Demonstration and Restoration Project
- Regionalize the Hatchery
- Continue design and implementation of the Emergency Water Supply Line to Hatchery
- Complete a study to look at possible dam and/or O&M changes at dam to benefit salmon
  - Bypass at CVD
  - Ramp down rates

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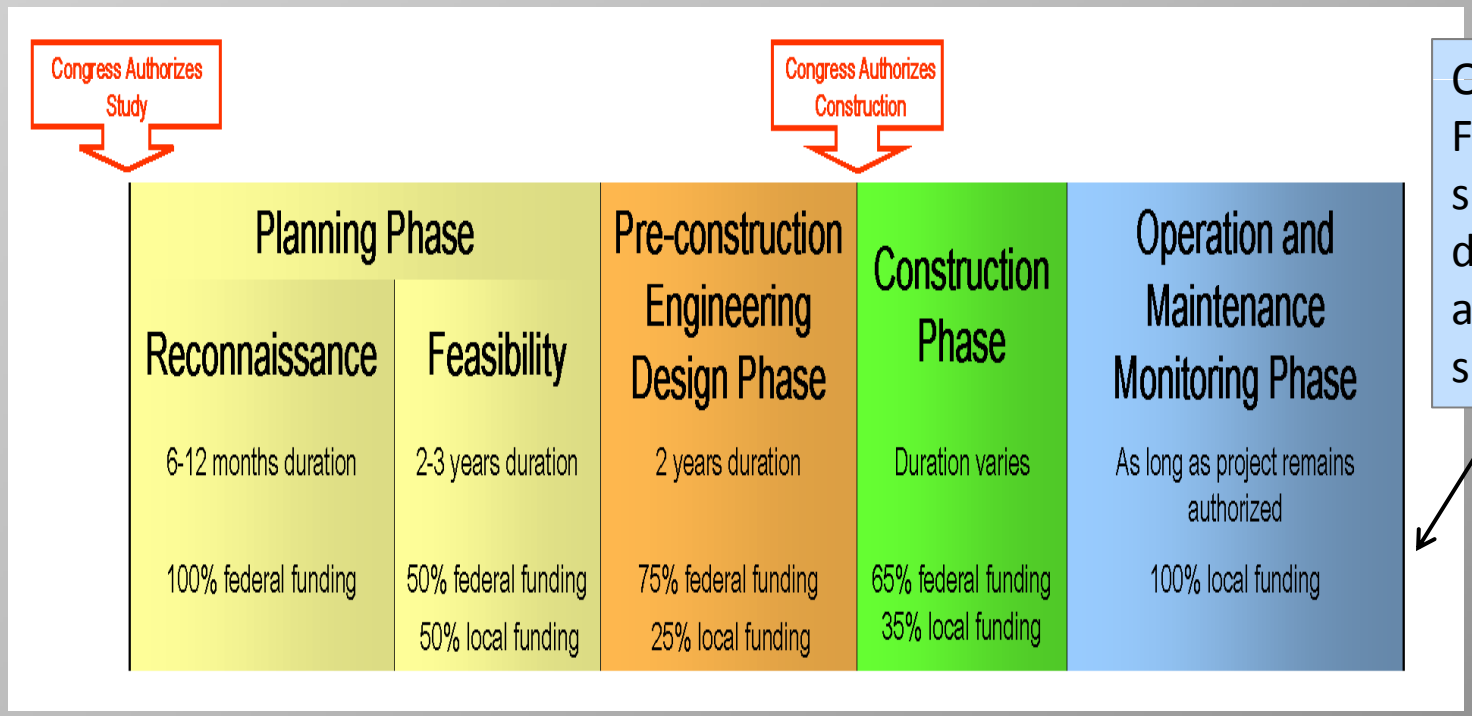
Future Objectives (cont.)

- Study and implement restoration projects in the Russian River watershed and adjoining coastal watersheds to improve habitat for listed salmonids in the ESU
- Address turbidity concerns if they are deemed harmful by raising CVD and relocating outlet tunnel.



O&M for dams is Federal. Cost sharing will vary depending on authority specifications.

Questions?

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