Planning Team

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Ecological Condition of Rivers

Percent of Impaired Waters—1998 (Updated Feb. 2000)

- No Waters Listed
- < 5%
- 5 – 10%
- 10 – 25%
- > 25%
BOR and Climate Change
Interior Department: Landscape Cooperatives
Fact Sheets on each Program

Summaries of responses to Institutional Challenges
The selected 16 Programs

• Cover most of Reclamation’s large river restoration activities.

• Represent a wide range of restoration objectives and geographic regions.
Great Plains Region
- Intake Diversion Dam Modification, Yellowstone River
- Missouri River Ecosystem Recovery Plan
- Platte River Recovery Implementation Program

Lower Colorado Region
- Gila River Basin Native Fishes Conservation Program
- Lower Colorado River Multi-Species Conservation Program

Mid-Pacific Region
- Battle Creek Salmon and Steelhead Restoration Project
- Central Valley Project Improvement Act
- San Joaquin River Restoration Program
- Trinity River Restoration Program

Pacific Northwest Region
- Columbia/Snake Salmon Recovery Program Methow River M2 Project Restoration
- Savage Rapids Dam Removal

Upper Colorado Region
- Glen Canyon Dam Adaptive Management Program
- Middle Rio Grande Endangered Species Collaborative Program
- Upper Colorado River Endangered Fish Recovery Program
- San Juan River Basin Recovery Implementation Program
The river reaches associated with the 16 Programs
(Stars = Savage Rapids Dam, Yellowstone Diversion Dam)
Trinity River Restoration Program

Program Summary: The Trinity River Restoration Program is a long-term, comprehensive effort to restore fish and wildlife populations in the Trinity River below dams that are part of California's Central Valley Project. The restoration work is underway as part of meeting requirements of the Central Valley Project Improvement Act of 1992, which includes fish and wildlife protection and mitigation as CVP purposes that have equal priority with irrigation, domestic uses and power generation. The Trinity River program includes flow management, channel rehabilitation, sediment control, and watershed restoration. The results are monitored and assessed to incorporate experience into future restoration efforts through adaptive management. This program is consistent with the America's Great Outdoors Initiative, including expansive ecological restoration of river processes and fish and wildlife habitat.

Strategic Value: The program's strategy takes a riverine approach to create a dynamic river capable of building and maintaining sufficient habitat system-wide. The program's goals are to complete necessary infrastructure modifications to allow implementation of higher peak releases; to create sufficient suitable habitat through achievement of healthy river attributes; and to predict, measure, and evaluate progress toward long-term goals that also influence short-term management actions.

Benefits: Restoration of the Trinity River in northern California is an important aspect of meeting CVPIA requirements for fish and wildlife mitigation as the CVP meets its water supply responsibilities. The CVP has long-term agreements to supply water to more than 250 contractors in 29 of California's 58 counties. Deliveries by the CVP include providing an annual average of 5 million acre-feet of water for farms, 600,000 acre-feet of water for municipal and industrial users, and water for wildlife refuges and maintaining water quality in the Sacramento-San Joaquin Delta.

Indian Creek mechanical channel rehabilitation site during construction and after.

August 2011
# Matrices of Roles

**Roles Matrix:**

**Intake Diversion Dam Modification, Lower Yellowstone Project, Montana**

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<th>Program Partner</th>
<th>Decision Maker</th>
<th>Formal Advisor</th>
<th>Funder/In-Kind provider</th>
<th>Funds Manager</th>
<th>Program Implementer</th>
<th>Legal/Beneficiary</th>
<th>Regulatory/Oversight</th>
<th>Outreach/Support</th>
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A snapshot of how each Program is organized
Questions to Program Managers

- Governance Arrangements
- Ecosystem Complexity and Timescales
- Organizing Science
- Progress toward Restoration
- Support and Investment
- Law and Policy

• How are you addressing each of these Institutional Challenges
  – What works?
  – What remains a challenge?

• Responses are summarized for each Challenge.
Restoration at
http://www.usbr.gov/river/
Ecological Needs:

- Should BOR be given authority like that of COE, in which the agency could pursue restoration based on ecological needs?
- Does the Secure Water Act provide the template for this more expansive role?
- Should the USBR Basin Study process be the vehicle for a more systematic engagement by the agency in addressing the condition of the West’s rivers?
Should national commitment to restoration cut across agency lines?

- Conference focus is BOR, but these lines confuse the public.

- Efforts in the Great Lakes, Chesapeake Bay, the Mississippi, and Everglades are part of a national restoration effort to decrease pollution and improve fishing and crabbing.

- Would federal legislation be appropriate and useful, or does the more ad hoc approach have its benefits?
Cooperation:

• How should Federal agencies work with others to support enduring, broad-based organizations that can engage with river restoration activities?

• Are Landscape Conservation Cooperatives too big?

• EPA-funded watershed groups too small?
Value gained:

• In additional coordination of river restoration activities across Reclamation, either on science, budgeting, or institutional approaches?

• Or across Federal agencies (e.g., USBR, USACE, EPA, FWS, NOAA)?
Uncertainty:

• Who should bear the risk of uncertainty in restoration projects pursuant to the ESA?

• How to balance the need of water users for certainty against the uncertainty attached to species’ needs?
Engagement:

• Relationships formed around restoration projects reflect investments by individuals and nonprofits in the health of a river.

• Can sustain projects during difficult political or budgetary periods.

• How do federal agencies strengthen the role of nongovernmental actors?

• How would a healthy level of engagement be measured?
Communication:

• Congress members are busy and few are trained in the natural sciences.

• We ask a lot when we propose adaptive management, or have to explain away missteps in project decisions.

• Assuming a core of support for the goals of restoration, how should we communicate the challenges of restoration in a fashion that encourages, rather than discourages, more such efforts?
Meeting the Challenge:

- Most agency staff begin their careers in scientific or technical fields, but may assume leadership for complex restoration projects.

- How do we recruit, train, and support staff to deal with the institutional challenges of river restoration?
The Conversation Begins