Report on Ten Years of Implementing the Lower Colorado River MSCP

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Deputy Director
Colorado River Board of California
- 1922 Compact
- 1928 BCPA
- 1944 Treaty w/Mexico
- 60 MAF of storage
- Major diversions –
  - 40 million people
  - 5.5 million acres of agriculture
- Bankline & Levee construction
Environmental Consequences—

- Alteration of pre-development hydrograph
- Removal of native riparian vegetation
- Decoupling river from the floodplain (i.e., channelization and incisement)
- Habitat fragmentation
- Introduction of non-native aquatic and terrestrial species
Historical & Future Projected Use and Demand–
Lower Colorado River Multi-Species Conservation Program—
The Road to the MSCP—

- 1994 “Big River” fishes critical habitat designation
- 1995 listing of southwestern willow flycatcher as endangered
- USBR initiated ESA Section 7 consultation for “routine LCR operations and maintenance activities”
Full pool elevation of Lake Mead to SIB, including the historic floodplain
What Activities does the MSCP cover?

- Routine LCR operations and maintenance activities (flow & non-flow related)
- Diversions and returns
- Non-federal flow and non-flow related activities within the planning area
- Changes in points of diversion of up to 1.574 mafy
- Generation of hydropower, and
- LCR MSCP implementation
Program Overview–

- 50-year Program
- Program budget – $626 million
- 31 species covered
- Create & maintain 8,132 ac. of –
  + 5,940 ac. cottonwood-willow
  + 1,320 ac. honey mesquite
  + 512 ac. marsh
  + 360 ac. Backwaters
- Stocking of razorback suckers and bonytail
- $500,000 to USFWS for humpback chub conservation in Grand Canyon above Lake Mead
The collaborative partnership shared the goal of preparing a program that—
+ Meets the regulatory requirements of ESA Sections 7 and 10;
+ Meets regulatory requirements of CESA;
+ Program underwent rigorous analysis pursuant to NEPA and CEQA too.
Legal Underpinnings—

- 2005 Implementing Documents—
  - Federal: Biological & Conference Opinion
  - Non-Federal: Habitat Conservation Plan & Section 10 Permit
  - California: CESA Section 2081 Permit
  - NEPA/CEQA EIS/EIR Record of Decision
  - Implementation & Funding and Management Agreements between the Feds and Non-Feds
  - State Funding Agreements (AZ, CA, and NV)
  - Mainstream Water Use & Accounting Agreement
  - CA/USBR MOA regarding Program implementation and CESA obligations
CESA 2081 Permit Requirements–

- California participants are required to ensure that—
  + 1,566 acres of CW-W are established in CA
  + 1,048 acres of HM are established in CA
  + 240 acres of marsh are established in CA
  + 194 acres of backwater habitat is established in CA
  + 270,000 razorback sucker and 200,000 bonytail are repatriated to mainstream aquatic habits within CA portions of the LCR
Stakeholder Groups—57 Total

- Federal Group—DOI agencies + WAPA
- Non-Federal Group—State agencies and Ag., M&I, and Power entities
- Native American Tribes
- Other Public Interest Groups
- Conservation Groups
Covered Species—

- **26 “Covered Species”**
  - 12 avian species
  - 4 fish species
  - 1 amphibian
  - 2 reptiles
  - 4 mammals
  - 2 plants
  - 1 insect

- **5 “Evaluation Species”**
  - 3 mammals
  - 2 amphibians
Key Covered Species—

Razorback sucker

SW Willow Flycatcher

Bonytail

Yuma clapper rail
LCR MSCP Conservation Areas through 2014
Palo Verde Ecological Reserve—PVER

- Land is owned by California Department of Fish & Wildlife
- 1,300 acres restored with cottonwood-willow and mesquite habitat.
- Water available from the Palo Verde Irrigation District.
Mass Planting Native Trees—
Laguna Habitat Conservation Area

MSCP Laguna Division Conservation Area Design Concept
Laguna Habitat Conservation Area

Legend
- Shallow Marsh
- Salt Grass
- Shallow Marsh Three Square
- Deep Marsh
- Open Water
- Upland Seed Mix
- Mesquite Deep Pot
- Cottonwood
- Gooding Willow
- Sandbar Willow

Reach 1
- Mean Water Level = 158
- Max Water Level = 160
- Open water = 59.1 AC
- Deep Marsh = 85.9 AC
- Shallow Marsh Saltpans (Sulphur) = 19.9 AC
- Shallow Marsh Distichlis spicata = 29.1 AC
- Sandbar Willow = 22 AC
- Gooding Willow = 27.2 AC
- Cottonwood = 128.8 AC
- Mesquite Deep Pot = 198.5 AC
- Upland Seed Mix = 55.5 AC
- Total Acreage Reach 1: 140.8 Acres

Reach 2
- Mean Water Level = 156
- Max Water Level = 159
- Open water = 20.4 AC
- Deep Marsh = 95.2 AC
- Shallow Marsh Saltpans (Sulphur) = 60.8 AC
- Shallow Marsh Distichlis spicata = 63.8 AC
- Sandbar Willow = 50.3 AC
- Gooding Willow = 39.3 AC
- Cottonwood = 60.5 AC
- Mesquite Deep Pot = 31 AC
- Upland Seed Mix = 21.1 AC
- Total Acreage Reach 2: 481 Acres

Historic Channel
- Average Water Level = 151
- Shallow Marsh Saltpans (Sulphur) = 12.8 AC
- Shallow Marsh Distichlis spicata = 64 AC
- Sandbar Willow = 5.5 AC
- Gooding Willow = 9.6 AC
- Cottonwood = 32.8 AC
- Mesquite Deep Pot = 17.3 AC
- Upland Seed Mix = 7.2 AC
- Total Acreage Historic Channel: 88.4 Acres

*All Acreages are approximate
Laguna Habitat Conservation Area
Monitoring/Research & Adaptive Mgt.—

AMP

Priority Research and Monitoring Questions

Management Goals, Objectives, Questions, and Decisions

Management Actions

Synthesis
Data → Information → Knowledge

New R&M ??s
New Mgmt Decisions
New Mgmt Actions
Rolling 5-year Adaptive Management/Science Strategy

Based upon R&M data, “Minor Modifications” have been made to Covered Species Conservation Measures (approved by USFWS and State wildlife agencies)

Conceptual Ecological Models are being developed for all 26 Covered Species

- Creates link between science activities & restoration site mgt.
- Provides a framework for implementing species’ conservation measures
- 21 species-specific CEMs will have been developed through FY-2015
Program is spending $25-35 million/year

FY-2014 Work Plan/Budget was $35 million

FY-2015 Work Plan/Budget is $37 million

Total Land Cover Types created through FY-2013 –
+ 3,000 acres of the total 8,132 acres required;
+ 1,000 acres restored in California
+ Covered species are using created/restored habitats (e.g., WIFL, YBCU, BEVI, YCR, BLRA, bats, etc.)

Native Fish stockings through FY-2013—
+ 215,000 RASU
+ 60,000 BONY
“Hits & Misses”—

What’s Working—
+ Long-term environmental compliance is in place ;
+ Benefits to CA & LB States—QSA implementation, Water Banking, 2007 Interim Guidelines, etc.;
+ Adaptive management process is successful;
+ Knowledge gained about species , data collection and management, habitat restoration techniques;
+ Public outreach & education;
+ Sharing information with other efforts

What’s Not Working—
+ Native/non-native fish interactions;
+ Controlling non-native aquatic and terrestrial species;
+ Finding suitable lands in CA for restoration
Current Issues of Concern—

- Quagga mussel infestations
- Salt cedar and Salt cedar beetle defoliation along LCR;
- Finding 2,000+ acres of land in CA
- Native/Non-native fish interactions
Administration & Oversight—

- **Steering Committee**
  Provides policy-level oversight, approves Work Plan & Budget

- **Technical Work Group**
  Provides technical assistance, reviews annual work plans
Yellow warbler

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