

Lower Colorado River Multi-Species Conservation Program



Balancing Resource Use and Conservation

LOWER COLORADO RIVER MULTI-SPECIES CONSERVATION PROGRAM



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Program Manager
LCR MSCP
Bureau Of Reclamation
Boulder City, Nevada, USA



Lower Colorado River Multi-Species Conservation Program



Balancing Resource Use and Conservation

LOWER COLORADO RIVER MSCP PURPOSE

Multi-stakeholder Federal and non-Federal partnership responding to the need to balance the use of lower Colorado River (LCR) water resources and the conservation of native species and their habitats in compliance with the Endangered Species Act.



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LOWER COLORADO RIVER MSCP PLANNING AREA



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LCR MSCP GOALS & OBJECTIVES

- Conserve habitat and work toward recovery of T&E species as well as reduce the likelihood of additional species being listed
- Accommodate present water diversions and power production and optimize opportunities for future water and power development
- Provide the basis for incidental take authorizations

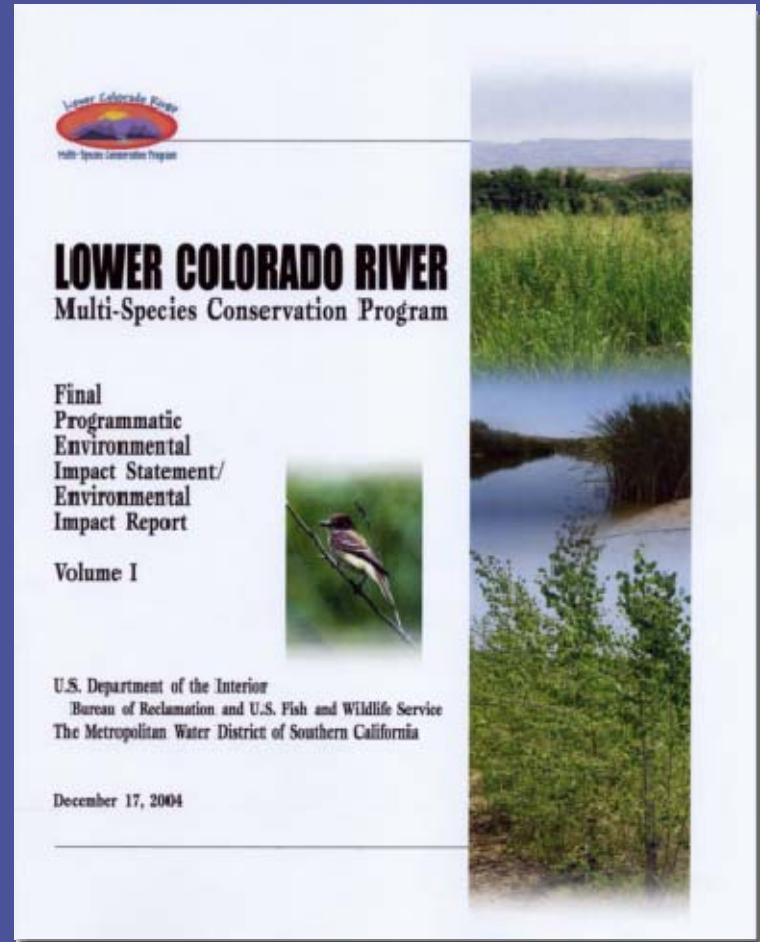


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- 50-Years of ESA and CESA Compliance
 - Unique - Section 7 and 10
 - HCP
- Covered Actions
 - Delivery and Diversion of 9 MAF
 - Maintenance Activities
 - Movement of 1.574 MAF



Lower Colorado River
Multi-Species Conservation Program

Final
Programmatic
Environmental
Impact Statement/
Environmental
Impact Report

Volume I

U.S. Department of the Interior
Bureau of Reclamation and U.S. Fish and Wildlife Service
The Metropolitan Water District of Southern California

December 17, 2004



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STEERING COMMITTEE MEMBERSHIP

- Federal Participant Group
- Arizona Participant Group (26 Permittees)*
- California Participant Group (11 Permittees)*
- Nevada Participant Group (5 Permittees)*
- Native American Participant Group
- Conservation Participant Group
- Other Interested Parties Group

* *Participates as a funding agency*



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STEERING COMMITTEE RESPONSIBILITIES

- Decision Making
 - *Consensus Based*
 - *Dispute Process*
- Provide Input on Implementation
 - *Annual Work Plan, Budget, and Report*



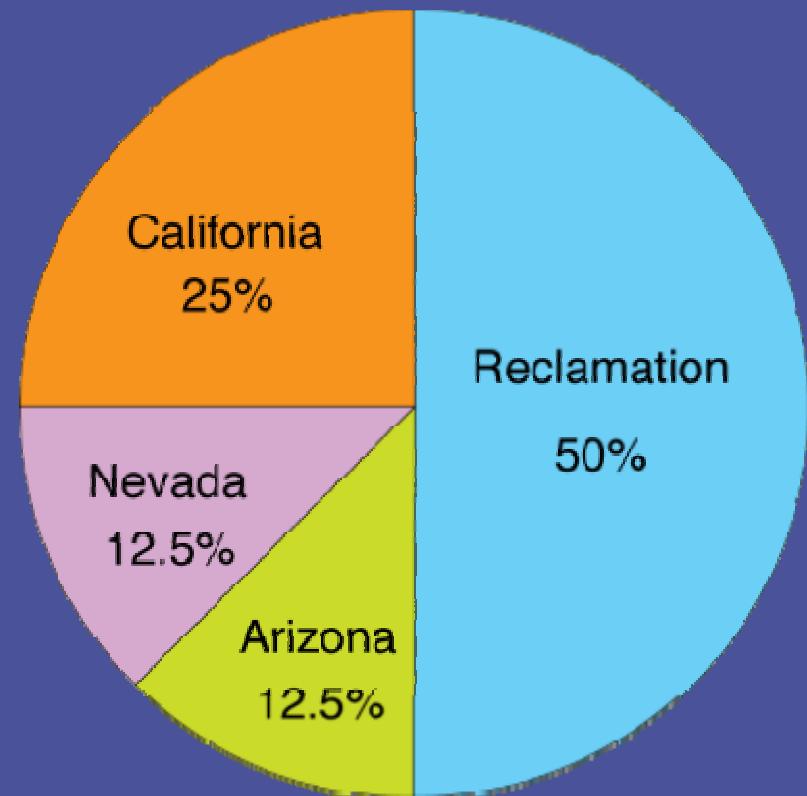
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COST SHARING

- Total Program Cost
\$626 million (2003 dollars)
Adjusted Annually for Inflation
- Federal / State Cost Share
Split 50/50
- Cost Cap



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LCR MSCP COVERED SPECIES

- 6 T&E species
 - 2 birds, 1 reptile, 3 fish
- 20 other species
 - 4 mammals, 10 birds, 2 reptile/amphibian, 1 fish, 1 insect, 2 plants
- 5 “evaluation species”*
 - 3 mammals, 2 amphibians

* Evaluation species are those which would qualify as covered species except sufficient information on their biology, habitat use, and occurrence within the project area are not sufficient at the time the HCP is completed



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PROGRAM COMPONENTS

- Fish Augmentation
- Species Research
- System-wide Monitoring
- Existing Habitat Maintenance
- Conservation Area Development & Management



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FISH AUGMENTATION GOALS

- 660,000 Razorback Suckers
- 620,000 Bonytail



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CONSERVATION AREA DEVELOPMENT AND MANAGEMENT

- Cottonwood-Willow - 5,940 Ac (2,400 ha)
- Mesquite - 1,320 Ac (535 ha)
- Marsh – 512 Ac (207 ha)
- Backwaters – 360 Ac (145 ha)



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PROGRAMMATIC ACCOMPLISHMENTS

- Final Science Strategy
 - Strategy for implementing research and monitoring
 - Planning and Review processes
 - *Annual work plan and accomplishment report*
 - *5 Year research and monitoring priority report*
- Draft 5 Year Research & Monitoring Priorities (08-12)
- Site Selection Criteria
- Native Fish Augmentation Plan
- Annual Accomplishment / Work Plans



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FISH AUGMENTATION



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FISH AUGMENTATION ACCOMPLISHMENTS (FY05-09)

| Species | Lake Mohave | Davis-Parker | Below Parker | Total |
|------------------|-------------|--------------|--------------|----------------|
| Razorback Sucker | 38,097 | 28,728 | 44,100 | 110,925 |
| Bonytail | 6,998 | 17,892 | 11,067 | 35,957 |
| TOTAL | | | | 146,882 |



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SPECIES RESEARCH



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SYSTEM MONITORING



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CONSERVATION AREA DEVELOPMENT & MANAGEMENT



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CONSERVATION AREA DEVELOPMENT ACCOMPLISHMENTS

- LAND AND WATER SECURED (Through FY09)
 - 3,669 Acres (1,485 ha)
 - 17,573 AF/YR
- Acres Managed (Through FY09)
 - 956 Total Acres (387 ha)
 - 702 ac CW (284 ha)
 - 79 ac HM (32 ha)
 - 95 ac BW (38 ha)
 - 80 ac Marsh (32 ha)



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HABITAT CREATION GOALS BY REACH AND STATE

| <u>REACH/STATE</u> | <u>CW</u> | <u>HM</u> | <u>MA</u> | <u>BW</u> | <u>TOTAL</u> |
|--------------------|-----------|-----------|-----------|-----------|--------------|
| REACH 5 AZ | 200 | 50 | 20 | 80 | 350 |
| REACH 5 CA | 200 | 100 | 20 | 40 | 360 |
| REACH 6 AZ | 400 | 150 | 100 | 20 | 670 |
| REACH 6 CA | 250 | 400 | 50 | 30 | 730 |
| REACH 7 AZ | 150 | 100 | 20 | 0 | 270 |



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YUMA AREA PROJECTS

- IMPERIAL PONDS (REACH 5 AZ)
- LAGUNA DIVISION CONSERVATION AREA (REACH 6 AZ)
- YUMA EAST WETLANDS (Potential) (REACH 6 AZ)
- HUNTER'S HOLE (Potential) (REACH 7 AZ)



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IMPERIAL PONDS CONSERVATION AREA



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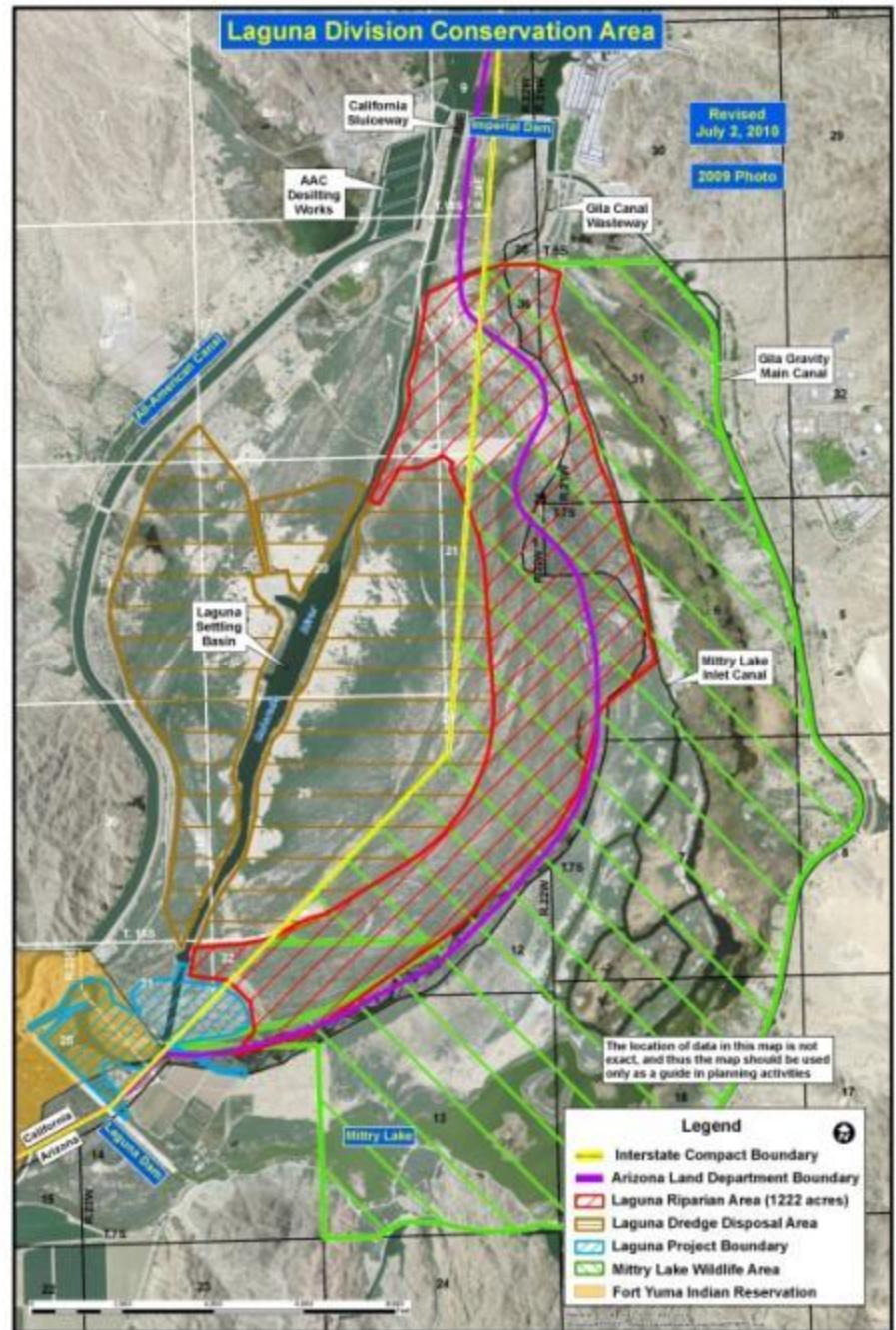
LAGUNA DIVISION CONSERVATION AREA

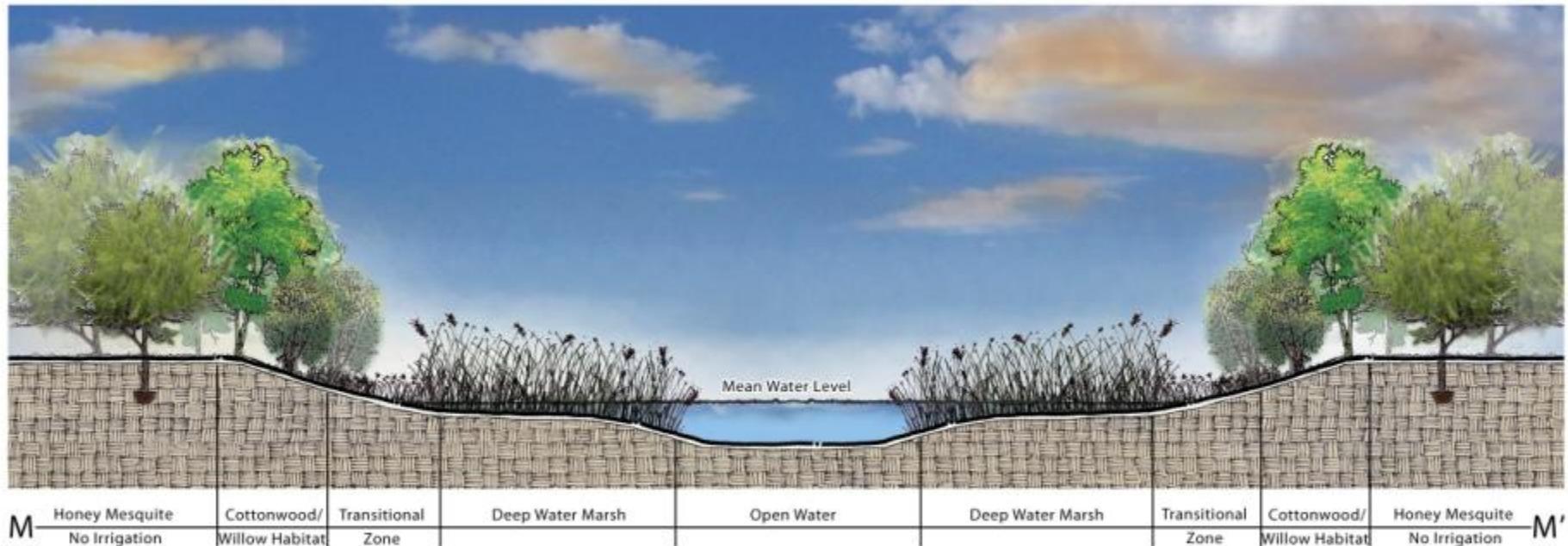
PROJECT UPDATE



Project Site Map

- Project Area – 1154 acres
- Reach Length – 4.3 miles
- Existing Conditions
 - Extensive/dense tamarisk monoculture





Natural
Channel
Design, Inc.



Fred Phillips Consulting

MSCP Laguna Restoration

Reach 3 Typical Channel Cross Section

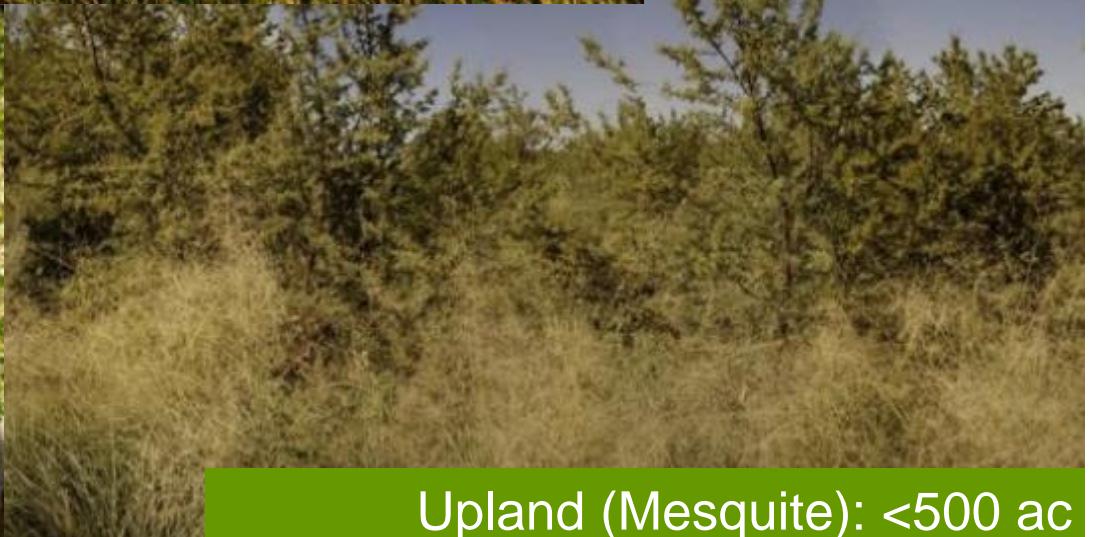
Scale: 1" = 60'
Date: 8/25/10

TARGET HABITATS

Open Water/Marsh: 50 – 100 ac



Cottonwood/Willow: >200 ac



Upland (Mesquite): <500 ac

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YUMA EAST WETLANDS

PARTNERS:

CITY OF YUMA
QUECHAN TRIBE
AZDGF
YCNHA

LCR MSCP RESPONSIBILITIES:

- Maintain existing habitat that meets MSCP covered species habitat requirements
- Adaptively manage existing habitat to provide MSCP covered species habitat



YUMA EAST WETLANDS PRIOR TO RESTORATION



YUMA EAST WETLANDS AFTER RESTORATION



YUMA EAST WETLANDS



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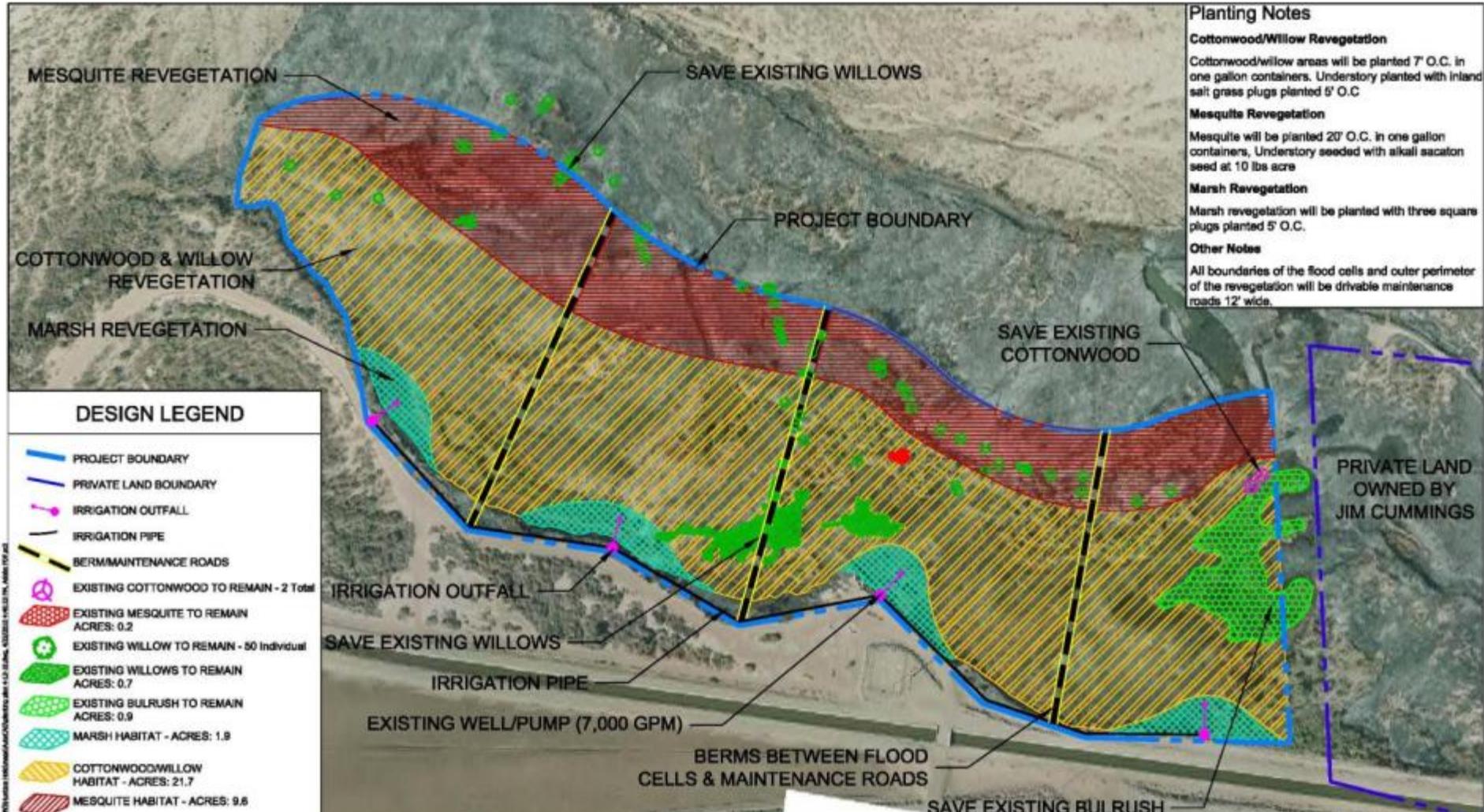


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Hunter's Hole

- 35 acres, CW land cover type
- Compliment to Colonial Miguel Aleman
- Reach 7, Arizona





Fred Phillips Consulting, LLC
401 SOUTH LEROIX STREET
FLAGSTAFF, AZ
86001
TEL 928 773 1530
FAX 928 774 4746
Ecosystem Restoration Land Planning

PREPARED FOR:
YUMA CROSSING NATIONAL
HERITAGE AREA IN
PARTNERSHIP WITH THE
BUREAU OF RECLAMATION

CITY OF YUMA

HUNTER'S HOLE RIPARIAN AND WETLAND RESTORATION

YUMA, ARIZONA

SHEET TITLE :
REVISED PLANTING PLAN

Scale: 1" = 200'
0' 100' 200' 300' 400' 500' NORTH

DATE: APRIL 21, 2010
JOB NO.:
DRAWN BY: JF
DESIGNED BY: FPP/DB
CHECKED BY: FPP

FIGURE 1

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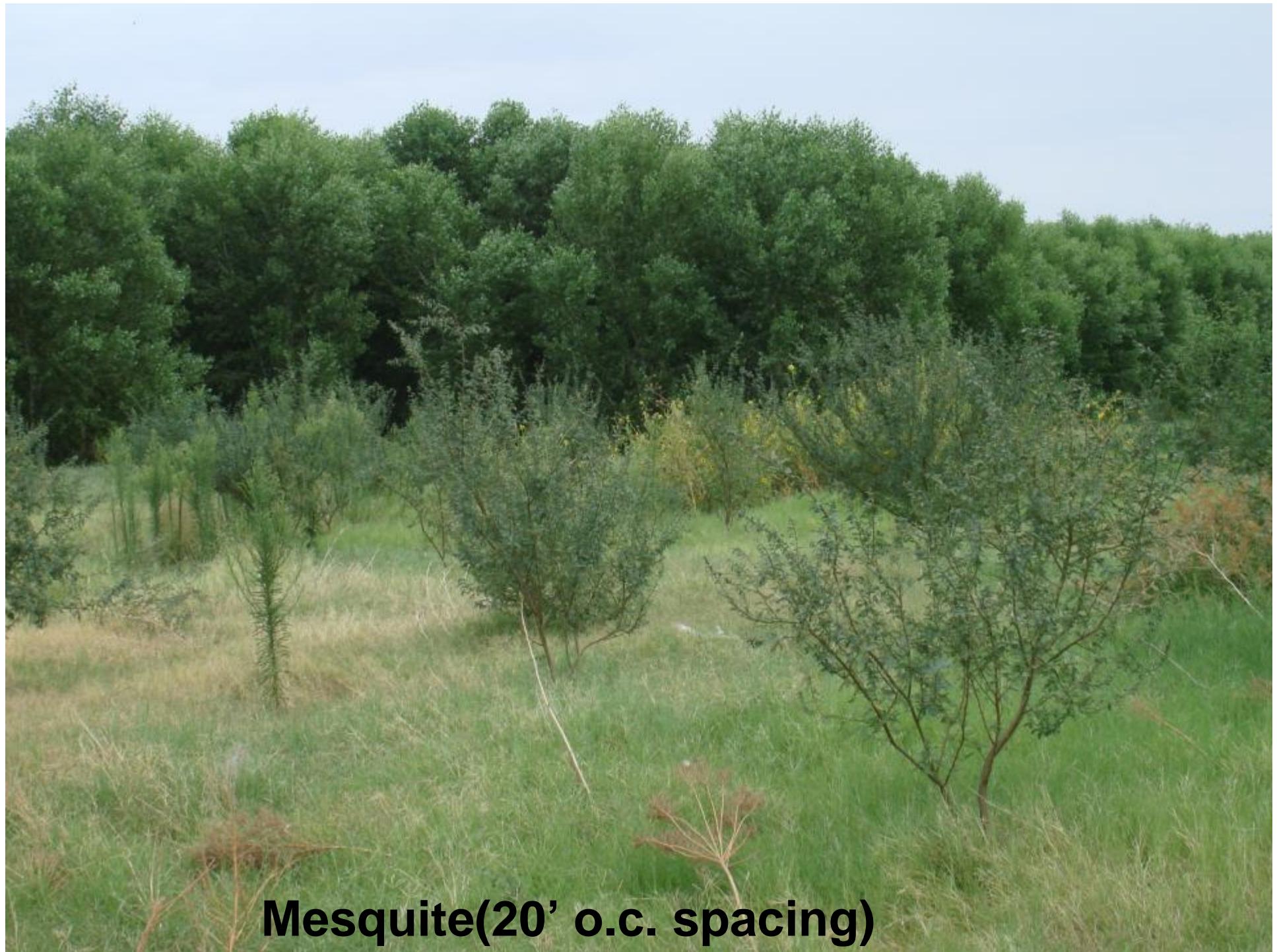


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LCR MSCP RIPARIAN HABITAT CREATION

EXAMPLES OF CREATED HABITAT





Mesquite(20' o.c. spacing)



Cottonwood (5-10' o.c. spacing)



Cottonwood (10-20' o.c. spacing)



Cottonwood (5' o.c. spacing)



Gooodding's Willow 5' o.c. spacing



Coyote willow (Spreads like Bermuda grass)

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www.lcrmscp.gov

