Lower Colorado River Multi-Species Conservation Program

Balancing Resource Use and Conservation

Status of LCR MSCP Fish Augmentation and Habitat Creation (15 Years of Program Implementation)

Jim Stolberg

Lower Colorado River Multi-Species Conservation Program

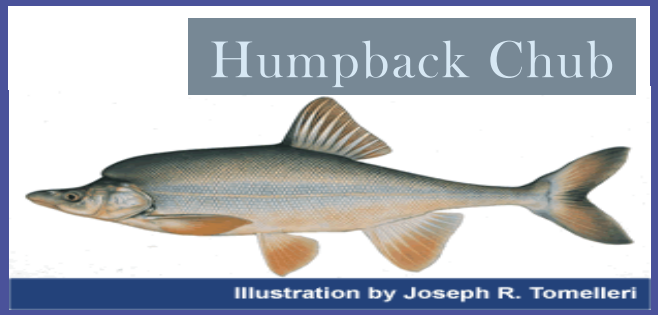
Balancing Resource Use and Conservation

LCR MSCP Fisheries

The LCR MSCP Habitat Conservation Plan (HCP) identifies 17 Conservation Measures for 4 native fishes

Major Fisheries Program Components:

- Augmentation
- Habitat Creation
- Research and Monitoring



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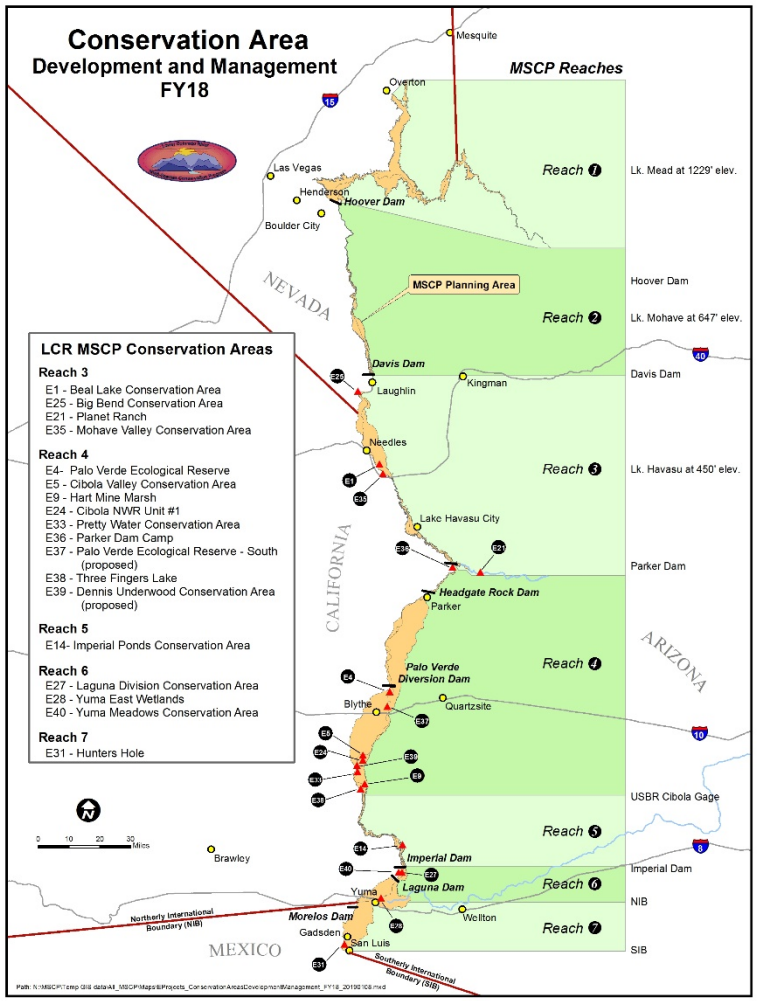

7 Reaches in the LCR MSCP Planning Area:

1 – Full pool elevation of Lake Mead to Hoover Dam

2 – Hoover Dam to Davis Dam (Lake Mohave)

3 – Davis Dam to Parker Dam (Lake Havasu)

4 – Parker Dam to Cibola Gage

5 – Cibola Gage to Imperial Dam

6 – Imperial Dam to Northerly International Boundary (NIB)

7 – NIB to Southerly International Boundary

Augmentation in Reaches 2 – 5

Habitat Creation in Reaches 3 – 6

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LCR MSCP Fisheries

- Augmentation – effort to stock 620,000 bonytail and 660,000 razorback suckers into the lower Colorado River over 50 years

- Habitat Creation – 360 acres of backwater habitat for bonytail and razorback suckers, and up to 85 acres of backwater habitat for flannelmouth suckers in Reach 3

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Augmentation Status Through FY19

Goal		Total
620,000		108,520
660,000		212,413

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Augmentation by Reach Through FY19

SPECIES	LAKE MOHAVE	DAVIS-PARKER	BELOW PARKER	GRAND TOTAL	AUGMENTATION TOTAL
RAZORBACK SUCKER	132,201*	100,146	112,267	344,614*	212,413
BONYTAIL	2,330	60,065	46,125	108,520	108,520
TOTAL	134,531*	160,211	158,392	453,134*	320,933

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Augmentation Accomplishment – All Reaches

REACH	BONYTAIL			% COMPLETE	RAZORBACK SUCKERS			% COMPLETE
	HCP Goal	Current	Remaining		HCP Goal	Current	Remaining	
All	620,000	108,520	511,480	17.5	660,000	212,413	447,587	32

- The LCR MSCP is 15 years into the 50-year program – 30% complete
- Based on the overall augmentation goal for bonytail, we are currently 17.5% complete. Hatchery production capacity has been increased to meet future year goals
- Based on the overall augmentation goal for razorback suckers, we are currently 32% complete

Future Augmentation – All Reaches

Reach 1 (Lake Mead)

No augmentation requirements for Reach 1

The LCR MSCP will continue to assist with other research/conservation/recovery efforts for razorback suckers. This may include some augmentation (small numbers) for those purposes, but no razorback sucker augmentation credit for the program

Dedicated funding is also set aside for humpback chub research in this reach

Future Augmentation

Reach 2 (Lake Mohave)

Bonytail

- No known population remains in Lake Mohave
- Small numbers (<2,500) have been stocked to evaluate dispersal, longer-term movement, and survival
- The HCP identifies 5,000 fish per year for 40 years (200K)

Razorback Suckers

- No specific augmentation requirements (i.e., number of fish per year) for razorback suckers
- Goal: stock ~8,000 individuals ≥ 400 mm in total length per year
- Augmentation is aimed at conserving/increasing this population and maintaining genetic diversity within the population

Future Augmentation

Reach 3 (Davis Dam to Parker Dam; Lake Havasu)

Bonytail

- The HCP identifies 4,000 fish per year for 50 years (200K)
- Augmentation is on target for this reach
- Few captures or contacts with fish > 1 year post stocking

Razorback Suckers

- The HCP identifies 6,000 fish per year for 45 years and an additional 6,000 fish per year for 10 years as “experimental” stockings (330K)
- Population estimates have been relatively stable over the last several years
- Augmentation in this reach may include Lake Mohave origin fish for the purpose of maintaining/increasing genetic diversity within the population (if/as needed)

Future Augmentation

Reaches 4 & 5 (Parker Dam to Imperial Dam)

Bonytail

- The HCP identifies 4,000 fish per year for 45 years and an additional 4,000 fish per year for 10 years (220K)
- Challenges with production capacity, coupled with poor post-stocking survival estimates, postponed stockings in these reaches for several years
- Hatchery production capacity has been increased and the full augmentation goal for these reaches was met in fiscal years ’18 and ‘19

Razorback Suckers

- The HCP identifies 6,000 fish per year for 45 years and an additional 6,000 fish per year for 10 years (330K)

Research and monitoring efforts have been paired with augmentation to evaluate dispersal, seasonal movements, and habitat preference of stocked fishes, and to provide estimates of adult survival

Habitat Creation

Create or protect and manage 360 acres of backwater habitat

- Off-channel, disconnected refuges for bonytail and razorback suckers
- Connected backwaters for flannelmouth suckers (Reach 3)

Current program backwaters (Conservation Areas) total 156 acres of the planned 360

- Big Bend – 15 acres (Reach 3; connected)
- Mohave Valley – 61 acres (Reach 3; connected)
- Imperial Ponds – 80 acres (Reach 5; disconnected)

- Beal Lake – 225 acres (credited under previous BO)
  Renovation: Dredging will be complete in September 2020. Target depth of 12 ft.

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15 acre connected backwater
Dredging schedule for FY21

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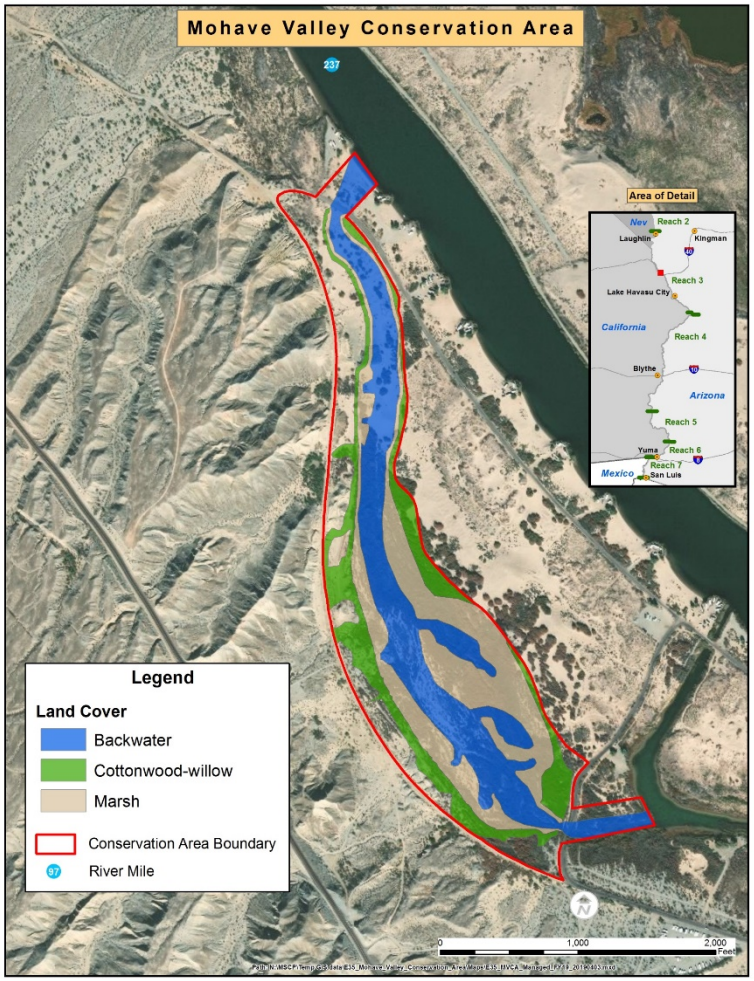

61 acre connected backwater

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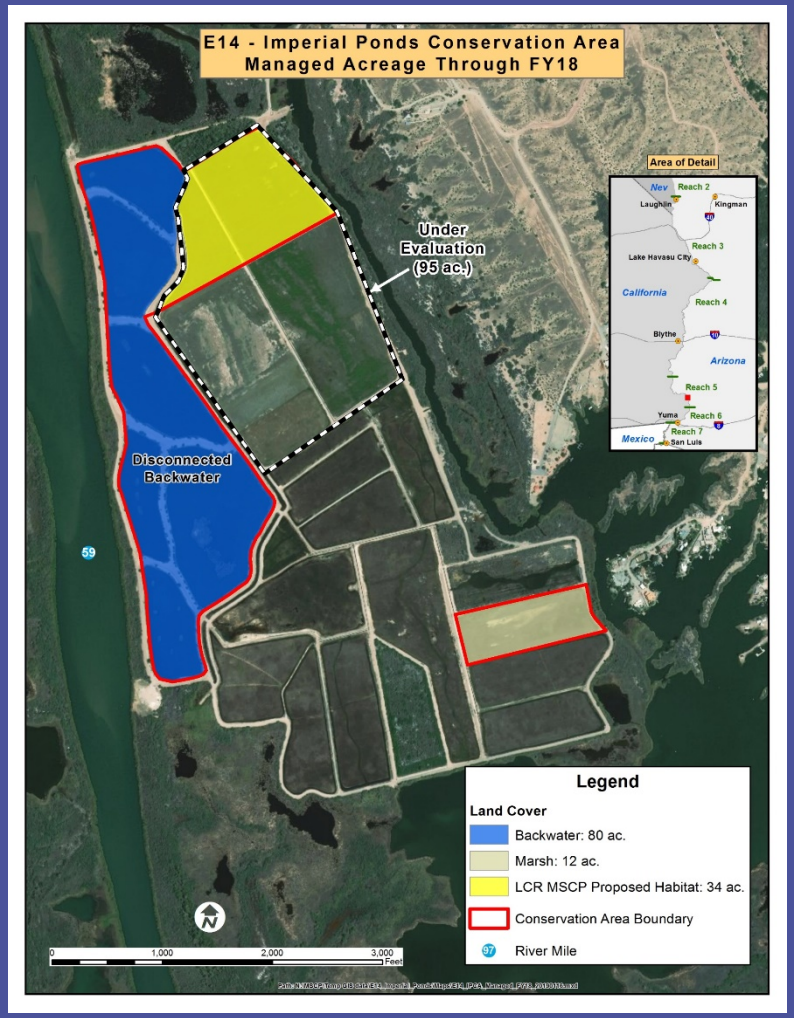

80 acres of disconnected backwaters

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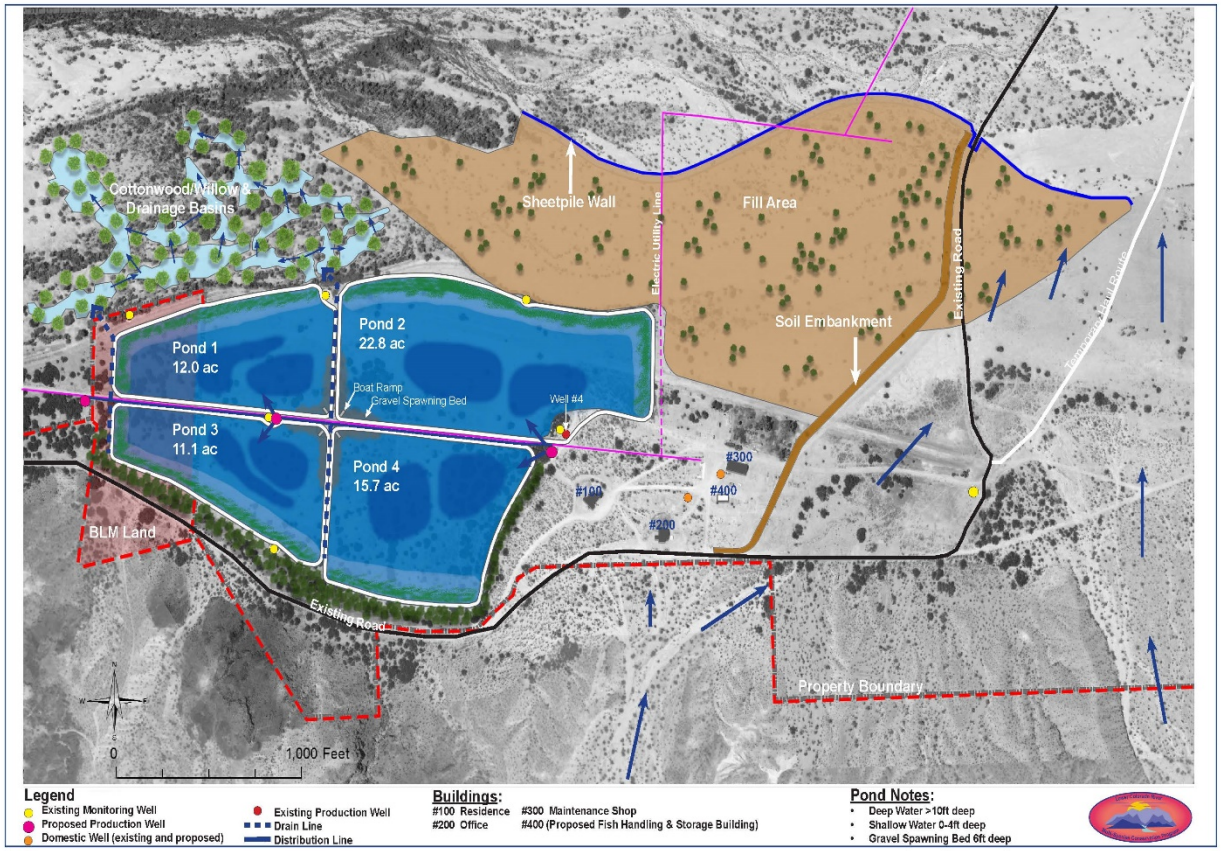
Habitat Creation

Planet Ranch
(under construction)

- 60 acres
- Backwaters will be completed May - June 2020



Habitat Creation

Future Conservation Areas

- Section 26 backwater (Reach 3; connected)
- Imperial Pond 7 (Reach 5; disconnected)
- Yuma Meadows (Reach 6; disconnected)

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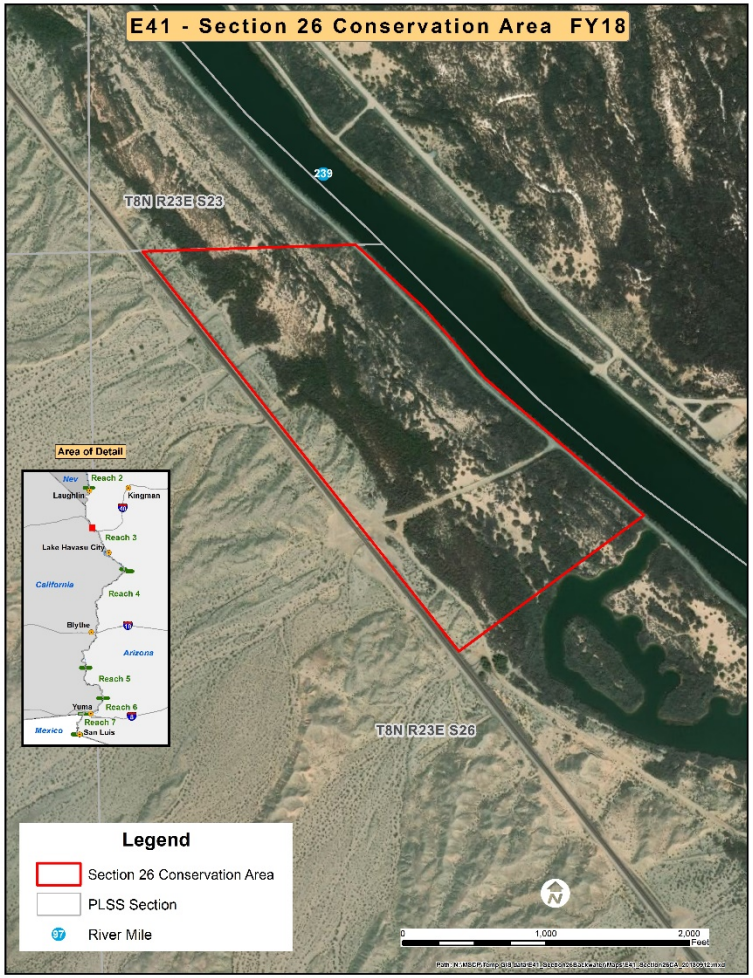
Section 26 backwater

- 20 acres of connected backwater
- Backwater will be managed for bonytail, flannelmouth suckers, and razorback suckers
- Environmental compliance, permitting, and design are scheduled to be initiated in FY20



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Imperial Pond 7

- Imperial National Wildlife Refuge
- 12 additional acres of disconnected backwater
- Future site total of 92 acres of backwater habitat for native fishes

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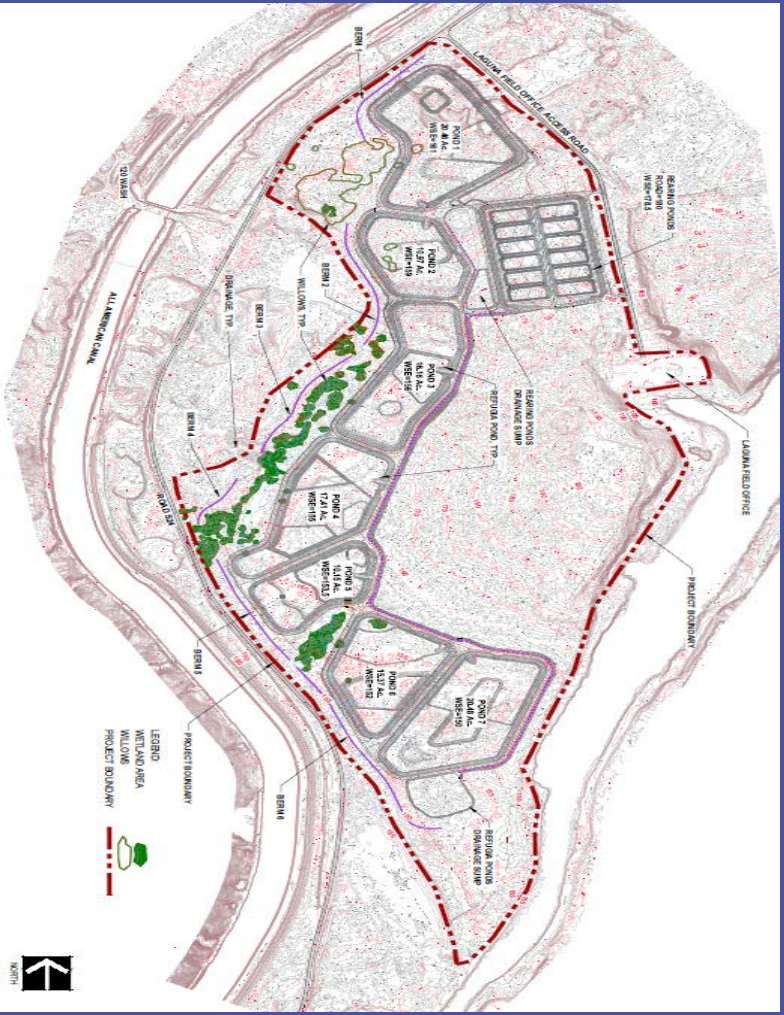
Yuma Meadows

- 123 acres of disconnected backwater
- 7 refugia ponds for bonytail and razorback sucker ranging in size from 10 – 20 acres (111 acres total)
- 12 grow-out ponds for native fishes (1 acre each)
- On-site holding and sorting facility for fishes harvested from grow-out ponds



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Questions?

LCR MSCP website:
https://www.lcrmscp.gov/