Lower Colorado River Multi-Species Conservation Program

Balancing Resource Use and Conservation

LCR MSCP Fish Augmentation Program
Current Status and Future Augmentation Strategies

BUREAU OF RECLAMATION

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LCR MSCP Native Fish Augmentation

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

Augmentation Type	Razorback Sucker			Bonytail		
	Reach 2	Reach 3	Reaches 4/5	Reach 2	Reach 3	Reaches 4/5
Population Augmentation (Type I)	N/A: Maintenance of genetic broodstock	6,000	6,000	5,000	4,000	4,000
Duration (years)	50	45	45	40	50	45
Type I Total	N/A	270,000	270,000	200,000	200,000	180,000
Experimental Augmentation (Type II)	N/A	6,000	6,000	N/A	N/A	4,000
Duration (years)	N/A	10	10	N/A	N/A	10
Type II Total	N/A	60,000	60,000	N/A	N/A	40,000
Program Total	**N/A**	**330,000**	**330,000**	**200,000**	**200,000**	**220,000**

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LCR MSCP Native Fish Augmentation

- Fish Rearing Facilities – Support is currently provided to the following facilities for rearing razorback suckers and/or bonytail:

Fish Rearing Facilities	Partner Agency	Species	
		Razorback Sucker	Bonytail
Willow Beach National Fish Hatchery	USFWS	✓	
Achii Hanyo Native Fish Rearing Facility	USFWS	✓	✓
Southwestern Native Aquatic Resources & Recovery Center	USFWS		✓
Bubbling Ponds Fish Hatchery	AZGFD	✓	
Lake Mead Fish Hatchery	NDOW	✓	✓

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Augmentation Status Through FY20

	Goal		Total
Bonytail	620,000		114,493 (Reaches 2–5)
Razorback Sucker	660,000		227,145 (Reaches 3–5)

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Augmentation by Reach Through FY20

SPECIES	REACH 2 LAKE MOHAVE	REACH 3 DAVIS-PARKER DAM	REACHES 4/5 BELOW PARKER DAM	GRAND TOTAL	AUGMENTATION TOTAL
RAZORBACK SUCKER	139,069*	104,068	123,077	366,214*	227,145
BONYTAIL	2,330	61,083	51,080	114,493	114,493
TOTAL	141,399*	165,151	174,157	480,707*	339,308

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Augmentation Accomplishment – All Reaches

REACH	BONYTAIL			% COMPLETE	RAZORBACK SUCKERS			% COMPLETE
	HCP Goal	Current	Remaining		HCP Goal	Current	Remaining	
2 (Type I)	200,000	2,330	197,670	1	N/A	139,069	N/A	N/A
3 (Type I)	200,000	61,083	138,917	30.5	270,000	104,068	165,932	38.5
3 (Type II)	N/A	N/A	N/A	N/A	60,000	0	60,000	0
4/5 (Type I)	180,000	51,080	128,920	28.4	270,000	123,077	146,923	45.6
4/5 (Type II)	40,000	0	40,000	0	60,000	0	60,000	0
All	**620,000**	**114,493**	**505,507**	**18.5**	**660,000**	**227,145**	**432,855**	**34.4**

- The LCR MSCP is 16 years into the 50-year program – 32% complete

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Fish Augmentation FY21–25

What's Changing

- **Bubbling Ponds Fish Hatchery**
  - AZGFD will begin renovation of rearing ponds in FY21
  - no razorback suckers will be produced for at least the following three years
  - all razorback suckers on station (~38K) will be harvested and stocked or transferred to other rearing facilities by April 2021 (~20K will be > 305 mm)

- **Willow Beach NFH**
  - the USFWS is designing a new hatchery building that may provide an opportunity to increase rearing capacity

- **Achii Hanyo Native Fish Rearing Facility**
  - in-pond spawning of bonytail continues to affect annual production
  - the USFWS has proposed moving bonytail rearing to Willow Beach and rearing additional razorback suckers in the available space at Achii Hanyo

- **Lake Mead Fish Hatchery**
  - targeting additional bonytail and razorback sucker production

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Fish Augmentation FY21–25

Reach	Augmentation Type	Year				
		2021	2022	2023	2024	2025
2	Bonytail Population Augmentation 5,000 per year (Type I)	3,000	4,000	5,000	6,000	7,000
3	Bonytail Population Augmentation 4,000 per year (Type I)	4,000	4,000	4,000	4,000	4,000
3	Razorback Sucker Population Augmentation 6,000 per year (Type I)	6,000	6,000	6,000	6,000	6,000
3	Razorback Sucker Population Augmentation 6,000 per year (Type II)	0	0	0	0	0
4/5	Bonytail Population Augmentation 4,000 per year (Type I)	4,000	4,000	4,000	4,000	4,000
4/5	Bonytail Population Augmentation 4,000 per year (Type II)	4,000	4,000	4,000	4,000	4,000
4/5	Razorback Sucker Population Augmentation 6,000 per year (Type I)	6,000	6,000	6,000	6,000	6,000
4/5	Razorback Sucker Population Augmentation 6,000 per year (Type II)	0	0	0	0	?

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Questions?