

# Lower Colorado River Multi-Species Conservation Program



*Balancing Resource Use and Conservation*

## Fish Augmentation 5-Year Summary

The Lower Colorado River fish augmentation program incorporates the use of multiple federal and state hatcheries, existing wild populations, and created and semi-natural isolated backwaters as a portfolio of tools to produce and stock native fish to meet its program goals. This fact sheet presents a summary view of how many fish have been produced during the first 5 years of program implementation, and a look at how many wild caught razorback sucker larvae have been collected to maintain genetic diversity.

### *Native Fish Stockings*

The target goals for native fish stockings under the LCR MSCP include 660,000 razorback sucker and 620,000 bonytail within reaches 2-5, over the 50-year lifespan of the program. These fish are produced from either spawning captive fish from hatchery brood stock, or from wild razorback sucker larvae collected directly from Lake Mohave<sup>1</sup>. Juvenile fish are reared to sub-adult size and are then stocked into lower Colorado River, its reservoirs, backwaters, or off channel habitats, within the program area. The current minimum size for stocked fish is 300 mm, however stocked fish range in sizes sometimes larger than 500 mm. The hatcheries currently utilized by the program include: Willow Beach National Fish Hatchery (USFWS), Achii Hanyo (satellite facility to WBNFH), Dexter National Fish Hatchery (USFWS), Bubbling Ponds State Fish Hatchery (AZGFD), and Lake Mead State Fish Hatchery (NDOW).

The following tables summarize the total numbers of fish that have been stocked for credit through the Lower Colorado River Multi-Species Conservation Program. The totals are inclusive of the first six years of program implementation (1/01/2005-12/31/2010) and are presented by year, reach, and species.

Razorback Sucker Totals							
	2005	2006	2007	2008	2009	2010	Total
Reach 2	12,203	11,344	1,284	770	12,496	9,203	47,300
Reach 3	0	6,264	7,080	9,536	5,848	7,180	35,908
Reach 4/5	4,814	11,454	12,750	9,127	5,955	6,093	50,193
Total	17,017	29,062	21,114	19,433	24,299	22,476	133,401

<sup>1</sup> Wild bonytail larvae are not collected for production fish due to the extreme scarcity or non-occurrence in the wild within the program area.

<b>Bonytail Totals</b>							
	2005	2006	2007	2008	2009	2010	Total
Reach 2	6,941	0	0	57	0	0	6,998
Reach 3	0	4,104	5,118	4,597	4,073	4,032	21,924
Reach 4/5	0	4,007	4,019	535	2,506	961	12,028
Total	6,941	8,111	9,137	5,189	6,579	4,993	40,950

#### *Collection of Wild-Caught Larvae*

Lake Mohave continues to be considered the most genetically diverse populations of razorback sucker in the wild. For this reason, the collection of wild caught larval razorback suckers from Lake Mohave to maintain the genetic diversity the of the fish reared and repatriated, is a critical component of the fish augmentation program.

Razorback sucker larval collection goals are established annually at the Lake Mohave Native Fish Work Group meeting in January. Collections are conducted on Lake Mohave from late January through early April, and distributed across four collection zones; Yuma, Tequila, Nine Mile, and Above Owl Point. A robust larval collection approach such as this allows for a greater number of potential pairings between fish that spawn at different times, locations, or even spawn at multiple times and locations. The following table summarizes the numbers of wild caught razorback sucker (Lake Mohave) from 2005-2010.

<b>Lake Mohave Razorback Sucker Larvae Collection</b>							
Zone	2005	2006	2007	2008	2009	2010	Total
Nine Mile	18,104	5,949	4,987	7,031	6,025	8,094	50,190
Tequila	27,052	35,400	6,010	9,016	8,490	12,070	98,038
Yuma Cove	14,835	21,729	7,875	9,850	8,985	8,661	71,935
Above Owl Point	521	897	1,696	3,871	4,012	5,064	16,061
Total	60,512	63,975	20,568	29,768	27,512	33,889	40,950
Annual Goals	65,000	60,000	20,000	31,000	27,500	33,000	