

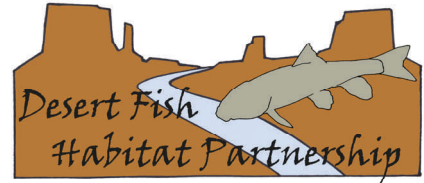
Desert Fish Habitat Partnership

Vol 2 No 2

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DFHP Request for Proposals

The Desert Fish Habitat Partnership (DFHP) is requesting submission of project proposals for the 2012 National Fish Habitat Action Plan (NFHAP) funding cycle and other potential funding sources. Projects should directly address the habitat needs of desert fish, specifically those identified in the DFHP Framework for Strategic Conservation of Desert Fish. Projects which provide on-the-ground habitat conservation or restoration for desert fish in cooperation with multiple, diverse partners and matching resources will be given the highest priority. Given the recent fires in the southwest, fire projects that provide on-the-ground habitat conservation or restoration for desert fish will also be given a high priority. A funding opportunity for fish habitat projects is expected through the National Fish Habitat Board and U.S. Fish and Wildlife Service (USFWS) in Spring 2012. To apply for funding from USFWS, including the NFHAP funding, the proposal and supplemental information must be submitted by 16 September 2011 to the DFHP Coordinator. If you are interested in submitting a proposal, please contact DFHP coordinator.



Bringing together people and organizations with a common interest in voluntary conservation of desert fishes and their habitats



Wallow Fire spreading across Arizona.
Photo credit: USFS

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Fires Spread Across the Southwest Impacting Desert Fishes

Jeremy Voeltz, USFWS; Stephanie Coleman, USFS; Jason Kline, AGFD

On May 29th, the Wallow Fire started in the Apache-Sitgreaves National Forest in the rugged Bear Wallow Wilderness Area in eastern Arizona. Fueled by high winds, high temperatures, low humidity, and extremely dry forest conditions, the fire quickly reached over 100,000 acres, with no containment in sight. When it was finally contained over six weeks later, the fire has charred over 538,000 acres – the largest wildfire in Arizona history.

While more than 6,000 firefighters were working to save structures and build fire lines in an attempt to control the massive fire, several agencies involved in the Desert Fish Habitat Partnership were working behind the scenes to identify affects to aquatic species and to prioritize actions for multi-agency salvage operations targeting the most vulnerable native fishes, frogs, snails, and mollusks.

Meanwhile, in southeastern Arizona, the Horseshoe II fire had been burning out of control in the Chiricahua “sky islands” since May 8th, and by the time it was contained it would burn 222,594 acres and have an affect on drainages on both the eastern and western sides of the Chiricahua Mountains.

The USFS (U.S. Forest Service), AGFD (Arizona Game

and Fish Department, and USFWS quickly identified agency points of contact to work closely with the lead USFS biologists to coordinate

ing held in refuge populations at the USFWS’s San Bernardino National Wildlife Refuge and Tucson’s Arizona Sonoran Desert Museum.



Wallow fire smoke column from Luna Lake before fire reached Alpine, AZ
Photo credit: Stephanie Coleman, USFS

with Incident Management Teams, USFS leadership, Ranger Districts, and safety officers as planning for the salvages continued. Fearing significant fish kills due to ash and sediment flows from the summer monsoon thunderstorm season, the agencies prioritized fish populations to be salvaged from the Black, Blue, Little Colorado, and Yaqui river drainages affected by the two fires.

Mexican stoneroller, Yaqui longfin dace, and federally endangered Yaqui chub were salvaged from Rucker Creek and West Turkey Creek within the burn perimeter of the Horseshoe II fire, and are be-

Federally threatened loach minnow were salvaged from the Blue River and were added to the captive brood stock at AGFD’s Bubbling Ponds State Fish Hatchery. Federally threatened Little Colorado spinedace were salvaged from Rudd Creek, Nutrioso Creek, and the Little Colorado River and added to an existing refuge population at AGFD’s Grassland Wildlife Area. Roundtail chub, a federal candidate species, were salvaged from the Black River and stocked into Ash Creek (a tributary of the Salt River) in an on-going effort to establish a new population of roundtail chub. And finally, Little Colorado sucker and bluehead

story continued...

sucker (Conservation Agreement species) were salvaged from the Little Colorado River and stocked into a separate pond at AGFD's Grassland Wildlife Area.

While the fires may impact other native fish species on USFS lands, such as speckled dace, Sonora sucker, desert sucker, and Apache trout, the decision was made not to salvage any of these species, as the impacted populations are not considered crucial to the

conservation of the species. With the onset of the monsoon season, coupled with the efforts of firefighters, both fires were officially contained by early July. Salvaged populations are doing well at their new locations, and monitoring of burned areas is starting to begin. Later on in the fall of 2011, crews will have a better idea about how the watersheds were affected by the fires, and discussions can begin about when conditions have stabilized to a point

where the salvage fish can be returned to the streams.

While fire is a natural part of these ecosystems, extremely large fires that have occurred over the last 20+ years were historically rare. Fisheries managers from all of the partnering agencies have shown unwavering cooperation and strong partnerships in dealing with the threat of fires and the affects on native aquatic species.



Rucker Creek after burn
Photo credit: Jason Kline, AGFD



Mexican stoneroller salvaged from Rucker Creek
Photo Credit: Jason Kline, AGFD



Little Colorado River spinedace collected from Rudd Creek
Photo credit: Shaula Hedwall, USFWS



Rucker Creek after flooding
Photo credit: Jason Kline, AGFD

Status of Northern Leatherside Chub in Idaho

Jason Blakney, Graduate Student, Idaho State University

Northern leatherside chub (*Lepidomeda copei*) appear to be associated with habitat complexity such as woody debris, beds of aquatic macrophytes, overhanging terrestrial vegetation, and the root systems and undercuts formed by riparian vegetation communities. Affinity for habitat complexity has also been noted for other species within the Genus *Lepidomeda*. Northern leatherside chub also thrive in areas with active beaver activity, most notably in the Salt River Drainage, a tributary to the South Fork Snake River along the Idaho-Wyoming border. Another interesting finding is that streams inhabited by northern leatherside chub often have strong native fish communities, with up seven other native species inhabiting the same reach of stream.

Last field season all northern leatherside chub were collected using a backpack electrofishing unit. For the 2011 field season we implemented an additional method to capture chub: minnow traps baited with dog food. This simple, "old school" method has proven extremely effective for capturing northern leatherside chub, especially in habitats where backpack electrofishing is not effective such as deep pools, beaver ponds,

and streams that are turbid or have high conductivity.



Leatherside chub

Our preliminary mitochondrial DNA (mtDNA) analysis has shown that 20% of fish from a Salt River tributary share the same unique haplotype (DNA sequence) that is dominant in northern leatherside chub from Bear River tributaries. This infers a fairly recent connection between portions of the Bear and Snake River drainages. In early August 2011, we actually discovered a second population of northern leatherside chub in the Salt River Basin, which should provide more information regarding historic connections between the Bear and Snake River systems. Another extant population of northern leatherside chub inhabits the Goose Creek drainage in south-central Idaho, a historic tributary to the Snake River that drains portions of Idaho, Utah, and Nevada. This basin

is no longer connected to the Snake River due to irrigation appropriations. Diversions on tributaries currently occupied by northern leatherside chub may act to further isolate populations. We have observed five unique haplotypes in the Goose Creek drainage that have not been found in any other populations of northern leatherside chub. We



Beaver pond inhabited by LSC

are currently working on amplifying and scoring 10 polymorphic microsatellite loci for the species using primers developed for northern leatherside chub as well as other cyprinid and catostomid fishes.



Leatherside chub stream, Goose Creek drainage

NFCAs, NFWF, and Native Fishes in Upper Colorado River Basin

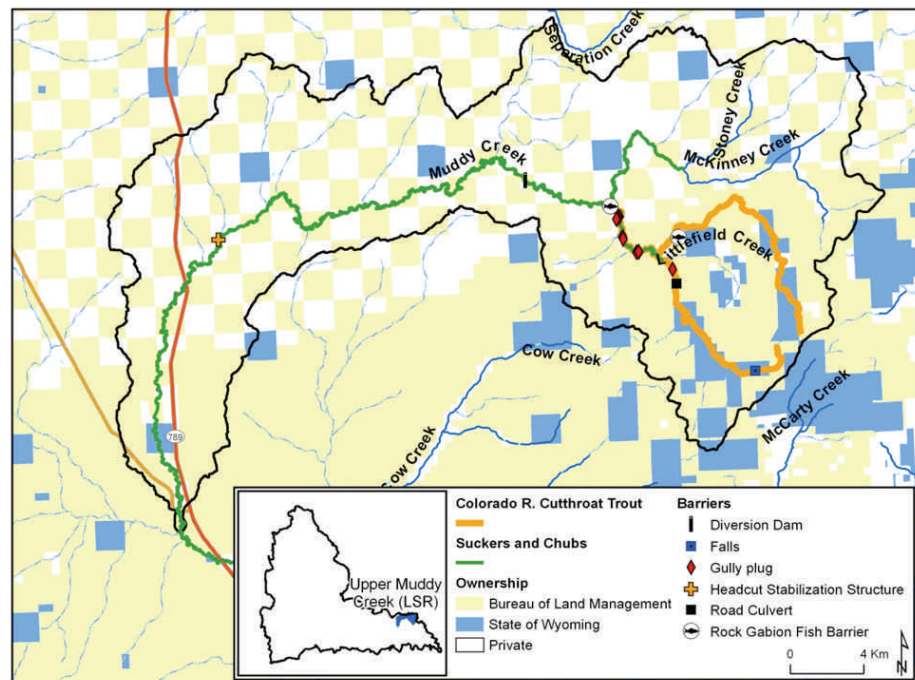
Dan Dauwalter, Trout Unlimited

Native Fish Conservation Areas – Native Fish Conservation Areas (NFCAs) represent a watershed-scale approach to aquatic resource management that is designed around natural watershed boundaries and native fish communities. Targeting conservation efforts at entire aquatic communities is a cost-effective approach when compared to species-by-species approaches more typical of threatened and endangered species conservation efforts. As outlined by Jack Williams and 11 coauthors in the June 2011 issue of *Fisheries* (vol 36: 267-277), NFCA management is intended to emphasize habitat diversity and connectivity resulting from natural ecosystem processes, care for all life stages of focal species, large watersheds that facilitate long-term community persistence, and sustainable long-term management. NFCA management is intended to be based on the aquatic ecosystem and native fish community rather than jurisdictional boundaries and ownerships. While watersheds identified as NFCAs could be managed solely for fish conservation and have a strict protective status (e.g., Redband Trout Reserve, Steens Mountain CPMA, Oregon), their practical implementation is likely to result from cooperative management that allows for other

compatible uses, such as livestock grazing or recreational fishing, at a level that does not inhibit conservation goals.

Implementation of the NFCA concept – The National Fish and Wildlife Foundation (NFWF) has adopted the NFCA concept for one of its Keystone Initiatives focused on native fishes in the Upper Colorado River Basin. The idea behind the initiative is to identify watersheds in the upper basin where multiple native fish objectives can be met with one set of conservation actions. The initiative focuses small to mid-sized streams and Colorado River cutthroat trout, flannel-

mouth sucker, bluehead sucker, and roundtail chub. As part of the planning process for the keystone initiative, key watersheds were identified where cutthroat trout and one or more populations of the three species are sympatric or occur in close proximity to one another. These watersheds were identified through a combination of spatial analysis and consultation with state and federal agencies and NGOs and are intended to serve as a framework that allows NFWF to assess funding priorities. The process of identifying watersheds and implementing the initiative in Wyoming was discussed in the June 2011



Muddy Creek, Wyoming has sympatric populations of Colorado River cutthroat trout, bluehead sucker, flannelmouth sucker, and roundtail chub. Management is focused on conserving the entire native fish community at the watershed scale.

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issue of Fisheries (vol 36:278-288); a similar process was followed in Utah and Colorado. In 2010, Trout Unlimited received NFWF keystone initiative funding for a road culvert removal, channel restoration, and fish passage

projects in Muddy Creek, Wyoming where Colorado River cutthroat trout, bluehead sucker, flannelmouth sucker, and roundtail chub all occur sympatrically. This project was highlighted in the DFHP newsletter, vol. 1, no.

3. Muddy Creek has been the focus of long-term conservation efforts by Wyoming Game and Fish Department, BLM, and project partners for over a decade.

Partnership Activities

The DFHP will be having their annual meeting 1 November 2011 in Salt Lake City, UT. The meeting will be hosted by the Utah Division of Wildlife Resources. If you plan to attend, please let the DFHP Coordinator know.

An ad hoc committee comprised of Megan Bean, Heidi Blasius, Stephanie Carman, Jeanette Haegle, Stewart Jacks, Jeff Sorensen, Jon Sjoberg, and Jeremy Voeltz) developed a branding/endorsement guidance for the DFHP.

The DFHP 2012 RFP schedule is as follows:

- 9/16/11, RFPs must be submitted to DFHP Coordinator
- 9/19/11, Coordinator will send RFPs to respective regional representatives for review
- 10/3/11, Last day for regional representatives to review RFPs for eligibility
- 10/4/11, Coordinator will send eligible RFPs to ranking subcommittee
- 10/17/11, Ranked RFPs must be sent to Coordinator
- 10/18/11, Coordinator will send ranked RFPs to DFHP Steering Committee for review
- 10/24/11, DFHP Steering Committee RFP ranking call
- 11/19/11, RFPs must be entered into USFWS FONS for funding consideration



The U.S. Fish and Wildlife Service will provide more than \$3.4 million to support 84 fish habitat projects in 38 states across the nation under the NFHAP. An additional \$9.8 million in partner contributions, over \$13.2 million in total, will go toward restoring and enhancing stream, lake and coastal habitat, as well as improving recreational fishing and helping endangered species.

The DFHP's topped ranked project, Phantom Lake Spring Cienega, will receive \$53,000 in Service funds and \$57,000 in partner funds that will go to the restoration of the Cienega, which supports several imperiled aquatic species and endangered fishes. For more information please visit www.fishhabitat.org.

FUN NEWS

The Desert Fish Habitat Partnership has a Facebook page! If you are not one of the 500 million users on Facebook, you should be. The DFHP Facebook page has public friendly information posted, pictures, DFHP Newsletters, RFPs, reports, and much more. As of August, the DFHP Facebook page has been viewed 6,600 times this summer and viewed in 8 countries. So check us out because I know it is something that everyone will "like."

We are welcoming Kevin Terry as the SWTFC representative on the DFHP Steering Committee. Kevin has a BS in Fisheries Science from Oregon State University in 2003. Since then he has worked with the Larval Fish Lab at Colorado State University performing seasonal fish removal in the Yampa River near Craig, Colorado. He has been with the Jicarilla Apache Game and Fish Department as fisheries biologist for 5 years and works on the Navajo River to protect roundtail chub, bluehead sucker, and flannelmouth sucker in the upper San Juan River Basin. Kevin recently ended a two year term as the Vice-Chairman of the SWTFC and, along with DFHP, he is also a representative on the 3 species group and the Rangewide Rio Grande Cutthroat trout team. Welcome to DFHP Kevin!

Tom Collazo is retiring from The Nature Conservancy in Arizona after 30 years. Tom first became manager of the Aravaipa Canyon preserve in 1988 and since then has pushed for construction of fish barriers as part of a comprehensive program to manage the riparian/aquatic system and its watershed. Tom will also be stepping down from the DFHP and we will be looking for new representation from TNC. Great luck with your retirement Tom!

Megan Bean (TPWD) and her husband Preston Bean welcomed a baby boy named Harlan Everett Bean on 17 July 2011. Congratulations on your new baby Megan!

Upcoming Events

American Fisheries Society 141st Annual Meeting

4-8 September 2011, Seattle, WA

Western FHPs Meeting

7 September 2011, Seattle, WA

NFHAP Board Meeting

19-20 October, Albuquerque, NM

For More Information:

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www.nature.nps.gov/water/DFH_partnership.cfm

To learn more about the Desert Fish Habitat Partnership, please visit our website.

facebook

www.facebook.com

To view DFHP photos, download documents, and learn more, visit the DFHP Facebook page.



www.fishhabitat.org

To learn more about Fish Habitat Partnerships, please visit the National Fish Habitat Action Plan website.

DFHP Purpose: To conserve aquatic habitat in the arid West for desert fishes and the American people by protecting, restoring and enhancing these unique habitats in cooperation with and in support of, state fish and wildlife agencies, federal agencies, Native American tribes, conservation organizations, and individuals.