Desert Fish Habitat Partnership

Vol 3 No 4
October-December 2012

DFHP Annual Meeting 14 November 2012

The Desert Fish Habitat Partnership (DFHP) held their annual meeting in November 2012. The meeting was in person at the Interagency Office in Las Vegas but also available via teleconference for those that couldn't travel. Twenty-four DFHP members participated in the meeting that included agenda topics such as following up on last year's action items, the Western FHP multistate conservation grant, allocation of funding for 2013 DFHP projects, DFHP's outreach and education needs, and future solicitation for DFHP projects. The meeting also included a springs and cienega webinar hosted by staff from the Spring Stewardship Institute. If you have any questions regarding the meeting, please contact the DFHP Coordinator, Kayla Barrett.

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

National Park Service, University of Missouri, and Arizona Game and Fish Department staff seining chub pool in Shinumo Creek in Grand Canyon.
Photo credit: National Park Service

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Development of a Science Based Restoration and Management Plan for the San Rafael River, UT: Integrating Data on Fish Distributions and Habitat Needs with Historical Analyses of Channel Change

Justin Jimenez, BLM

Like many rivers in the southwestern US, the San Rafael River in east central Utah has been impacted by hydrological alterations, habitat fragmentation, and non-native woody riparian vegetation establishment. In the lower San Rafael River in particular, spring snowmelt floods have declined in magnitude and duration due to water capture in the upper portion of the basin. However, summer monsoon floods still occur regularly and transport large quantities of sediment into the lower river. This sediment is no longer exported from the river channel due to the loss of spring snowmelt floods. As a result, the channel has narrowed and deepened, the floodplain has aggraded, and backwaters and other off-channel habitats have filled with sediment. Non-native saltcedar (*Tamarix sp.)* has colonized the river banks in high densities and exacerbated floodplain aggradation and channel narrowing by stabilizing bank and floodplain sediments. The combination of reduced spring snowmelt flows and saltcedar colonization has led to a narrowing and simplification of the river channel, which is now primarily dominated by low-velocity, sandy run or glide habitat. Three native species found in the San Rafael, the bluehead sucker (*Catostomus discobolus*), flannelmouth sucker (*Catostomus latipinnis*), and roundtail chub (*Gila robusta*), are currently protected under a Conservation Agreement. However, “the three species” occur in low abundance in the lower river, due to poor habitat quality and the presence of non-native fish species.

We are combining hydrological and geomorphological analyses of channel change with data on current fish distributions and habitat needs to help guide restoration efforts on the lower San Rafael. We are planning to apply an experimental approach to the restoration design, so that we can understand the cumulative impacts of different restoration projects over a large scale. We envision that the outcomes of the San Rafael restoration project will help inform restoration efforts throughout the southwestern US.

Funding provided by National Fish and Wildlife Foundation, Bureau of Land Management, Bureau of Reclamation, and U.S. Geological Survey – UCFWRU.

Current Distribution and Genetic Characterization of Northern Leatherside Chub Populations

Story submitted by Jody Brostrom, USFWS

Jason Blakney, Ernest Keeley and Janet Loxterman from Idaho State University recently completed a three year study looking at historic and current distribution of Northern Leatherside Chub (*Lepidomeda copei*) as well as the historic and contemporary genetic characteristics of this species in their historic range in Idaho, Nevada, Utah and Wyoming. They sampled populations in drainages where Northern Leatherside Chub (NLC) had been previously documented, as well as adjacent drainages. Genetic samples were taken from sampled NLC in the upper Snake, Bear and Green river drainages.

Current NLC distribution is patchy, found only in particular streams within the watersheds they had been previously found, and they were not found in several streams where they had previously been documented. Detection probabilities and measures of abundance were highly variable, based on stream size, sampling technique (electrofishing or baited minnow traps) and patchy distribution. Not surprisingly, habitat degradation and passage issues due to water flow have negatively affected both distribution and densities. Genetic analysis supports that NLC populations in the Upper Snake, Bear and Green river drainages once had hydrologic connectivity, but recently have become increasingly isolated, genetically and geographically due to habitat fragmentation. Populations within subbasins also show significant genetic divergence, likely from fragmentation due to irrigation diversions of stream flow, impoundment from dams, as well as impacts on water quality. These populations are thus more vulnerable to stochastic events that could cause local extirpations and further limit their distribution.

Funding for this study was provided by the U.S. Fish and Wildlife Service Pacific Region using National Fish Habitat Action Plan monies, and the Molecular Research and Core Facility at Idaho State University. For more information contact Ernest Keeley keelerne@isu.edu, or Jason R. Blakney, jason.blakney@gmail.com.

Northern Leatherside chub

Pole Creek, located along the southern Idaho-northwestern Utah border, was one of the recently identified streams to have leatherside chub

Partnership Activities

The 2013 RFP will be reviewed and updated for the 2014 RFP by Megan Bean, Kayla Barrett, Greg Gustina, Jeff Sorensen, and Cynthia Tait.

Jon Sjoberg is the 2013 liaison between DFHP and the Association of Fish and Wildlife Agencies (AFWA) and the Western Association of Fish and Wildlife Agencies (WAFWA).

The 2013 members of DFHP's science and data committee are Dan Dauwalter (chair), Jon Sjoberg, John Wullscheger, Greg Gustina, Cynthia Tait, and Paul Scheerer.

Cynthia Tait and Kayla Barrett participated in a teleconference with Western Native Trout Initiative (WNTI) and Great Plains FHP (GPFHP) coordinators and R6 National Fish Habitat Partnership (NFHP) coordinator to discuss the multistate conservation grant that will provide western FHP's funding for habitat assessments. DFHP science and data committee members and Kayla Barrett, along with WNTI and GPFHP coordinators, drafted and submitted a scope of work to AFWA and participated in the GPFHP habitat assessment webinar.

Kayla Barrett submitted DFHP's funding recommendations and rankings for 2013 projects and submitted to R2 NFHP representative on behalf of the DFHP steering committee.

NFHP NEWS

Training for Fish Habitat Leaders-FHPs are the "primary work units" of the National Fish Habitat Action Plan. The visionary nature of the Action Plan – calling for better science, broader public engagement, and more strategic conservation action – depends on effective FHPs to make it a reality.

Since 2007, eighteen FHPs in all 50 states have met the standards of the National Fish Habitat Board, and a few others are on the drawing board. Our collective challenge now is to make sure the FHPs are as effective as they can be in delivering conservation.

During 2013, the FHPs will benefit from the Fish Habitat Leadership Excellence Program, organizational development training delivered by River Network, a non-profit whose mission is "to empower and unite people and communities to protect and restore rivers and other waters that sustain the health of our country."

The program will kick off with a national workshop of FHPs, January 28-31 in Portland, Oregon. Coordinators, steering committee members, and active partners will come together to hone their skills for leadership, fund-raising, communication, innovation, and peer learning. DFHP will be represented by Heidi Blasius and Dan Dauwalter.

Over the next eight months, a series of up to six webinars will be moderated by River Network staff on topics central to the organizational development needs of all FHPs. Peer group phone meetings will focus on key learning topics. At the end of the program, each of the FHP leaders will have an action plan customized to meet their organizational development needs for the next 12 months.

Partners in the Desert FHP should be on the lookout for announcements of the follow-up training webinars. For more information, contact the National Fish Habitat Board's FHP liaison, Tom Busiahn, tom_busiahn@fws.gov, 703-358-2056.

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. So check us out because it is something that everyone will "like."
http://www.facebook.com/pages/Desert-Fish-Habitat Partnership/193053497376208

Kayla Barrett submitted DFHP's Phantom Lake Spring Restoration story, "Phantom Lake Springs Cienega wetter and better," to USFWS's Eddies. You can check out the article at
http://www.fws.gov/eddies/
in the Summer 2012– Fish and Wildlife Conservation Offices edition.

Upcoming Events

National Fish Habitat Board Meeting

26-27 February 2013, Washington, D.C.

NFHP 2013 10 "Waters to Watch"

Nominations due in March 2013

For More Information:

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www.nature.nps.gov/water/DFH_partnership.cfm
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To view DFHP photos, download documents, see latest news, and learn more, visit the DFHP Facebook page.

www.fishhabitat.org
To learn more about Fish Habitat Partnerships, please visit the National Fish Habitat Partnership 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.*