

The Outlet

A publication of the Montana Chapter American Fisheries Society
January 2007

PRESIDENT'S CORNER

I thought I would focus on the theme for our upcoming meeting and attempt to spark some discussion about who we are and what we “fisheries biologists” do anyway. I do not know about you, but I get that question quite often when I tell my job title to folks outside of the non-biological field. My son once told someone that I was a “fisheries apologist” – quite astute for one so young. What I personally have been doing is helping put together the Environmental Impact Statement (EIS) for the Gallatin River Outstanding Resource Water (ORW) designation. If you are unaware of this proceeding, I would venture that you are not alone as the coverage has been pretty minimal even in the Gallatin Valley.

In a nutshell, ORW designation would attempt to “preserve” the water quality of the Gallatin River from the boundary of Yellowstone National Park to the confluence with Spanish Creek. I will be so bold as to say, that I think this is a good and worthy idea and applaud DEQ for pushing this proposed action ahead.

What does this have to do with “returning to the river”? I guess the overall focus of the discussion surrounding this issue has bothered me a bit and I would like to see fisheries biologists get our feet back in the river of activism. Anyone who knows me knows that I am not a good trout angler - not even an adequate angler. I grew up fishing for catfish and snapper and trawling for shrimp (and associated interesting junk) off the bottom of the Gulf of Mexico and its estuarine areas. Those fish like stinky stuff, not fragile hunks of hair/feathers - so my fly rod finesse is sorely lacking. But, I grew up loving where the fish live, and I still consider myself, first and foremost, an advocate of the river (pretty much any river). To conserve rivers, we protect the associated resources, including benthic macroinvertebrates, riparian vegetation, wildlife, fish, human uses, and land values (I learned a LOT about land values and socioeconomics during the Gallatin EIS).

Ok, I am rambling and preaching to the choir, but sometimes the politics of our work can be a challenge. However, our constituency needs to be educated as what we do keeps the fish thriving and their “secret fishing spot” producing those awesome trips year after year. I realize it is hard for those of us who work for an agency to step out of our respective uniforms and make our personal opinions known. Working for an agency (or a consulting firm) does not nullify your place as a citizen, nor should it prevent you from voicing an opinion as an individual. Of the 13 people who commented in support of the ORW designation, one person's name was familiar to me as a fisheries biologist; however, this person did not call attention to their title or professional affiliation in their letter. This person just said they thought the ORW was a good idea and provided enough background to let DEQ know that theirs was an informed opinion. To me, that letter was a reminder that I should have commented or asked the ExCom to compose a letter that would express the Chapter's position on this issue. In this case, I believe the Chapter would have supported the action, but there

are several bills and issues brewing in the state and nationally that we may want to express opposition. The key is to express that position in a way that gets counted.

In the public review of the ORW EIS, advocates for the river were pretty well shouted down by the advocates for development. It took somewhere in the neighborhood of 2,500 signatures to get the ORW petition before the BER. Only 13 people commented in support of moving the ORW forward in contrast to 54 comments in opposition.

Since this is basically our only chance to have an ORW designated in the State, I would like to see Montana grapple with the difficulties it would create. How do we add up the incremental impacts to water quality in a rapidly developing watershed? Can we encourage people to voluntarily reduce their pollutant load to the river? How can regulation lead to increased property value (if that is the focus of some citizens) and conserve resources below the water line?

I am asking folks to comment to your representatives on the ORW legislation, or some other issue that piques your interest, when and if it is introduced to the legislature this session. Please take a minute or 30 to read the text of a bill or reflect on an issue that you are aware of because of your position in fisheries. Whatever your opinion, let your representative know.

By the way, in the last two years DEQ has downgraded the water quality rating of the West Fork Gallatin River from partial support to NON SUPPORT for the coldwater fishery as well as for contact recreation in that tributary to the Gallatin (caused by nutrients and sediment from ground disturbing activities). That seems to me a rather loud bell ringing and perhaps it is time for someone to take notice, especially someone(s) qualified to assess the potential changes over the short and long term to the river and its fishery.

Leanne H. Roulson

President, MCAFS

Montana Chapter of the American Fisheries Society 40th Annual Meeting

“Return to the river: revisiting and reinvigorating the source of our passion and professionalism”

**February 13-16, 2007
Hilton Garden Inn, Missoula, Montana**

This promises to be a great meeting, beginning with the plenary session that will feature a keynote address by former nine-term member of the House of Representatives from Montana, Pat Williams, followed by our featured speaker, Montana Fish, Wildlife and Parks biologist, Chris Clancy. Following the plenary session there will be over 50 oral presentations, including three symposia, a fantastic raffle arranged by the MSU student subunit, and social events.

Prior to the main conference Kate Walker and Lisa Eby have arranged a wonderful and timely continuing education course “How to move fish, water and wood through culverts.” This important topic has been well-

received with chapter members and other professions - registration is close to 100 already but it is not too late to register.

To register, view the conference agenda, and continuing education agenda visit the chapter website (<http://www.fisheries.org/units/AFSmontana>).

If you have not made your room reservation for the conference, call the Hilton Garden Inn (406-532-5300 or 1-877-STAY HGI) or the Missoula Courtyard Inn by Marriott (406-549-5260). The Courtyard will honor state rates for rooms under our block and hold rooms until Friday, February 5. Please mention the American Fisheries Society to receive the group rate.

I look forward to seeing you in Missoula.

Sincerely,

David Schmetterling

President Elect and Program Chair

Continuing Education Agenda

How to Move Fish, Water and Wood through Culverts

Tuesday February 13, 2007

8:00 **Welcome Aquatic Organism Passage – why do we care?** Brian Riggers, Fisheries Biologist, Lolo National Forest

8:45 **Introduction to Stream Simulation** Anne Connor, P.E./Civil Engineer, Clearwater National Forest

9:30 *Break*

10:00 **Understanding Stream Processes, Function and Stability at Road Crossings** Traci Sylte, P.E./Hydrologist, Lolo National Forest

11:00 **Hydrology, Discharge Estimates and Culvert Capacity** Traci Sylte, P.E./Hydrologist, Lolo National Forest

11:45 *Lunch - provided*

12:45 **Stream Simulation, Bed and Grade Control Design** John Kattell, P.E./Transportation Structures, R1-RO Engineering

2:45 *Break*

3:15 **Site Survey and Assessment** Shane Hendrickson, Fisheries Biologist, Lolo National Forest

4:00 **Case Study – Hogback Creek, Montana - Pipe to Bridge** Shane Hendrickson, Fisheries Biologist, Lolo National Forest

4:30 **Case Study- Badger Creek, Idaho - Pipe and Bottomless Arches** Anne Connor, P.E./ Civil Engineer, Clearwater National Forest

5:00 **Question and Answer** (optional)

5:30 *Adjourn*

MCAFS Meeting Agenda

Wednesday February 14, 2007

8:00 Plenary Session: **Return to the River: Revisiting and Reinvigorating the Source of our Passion and Professionalism**

8:10 **Natural Resource Management in the Changing Intermountain West** Pat Williams

8:40 **Fisheries professionals; rubbing and standing on shoulders** Chris Clancy

9:10 *Break*

9:30 **Fish Assemblages to Environmental Patterns at Three Multi-state Scales** Bob Hughes

9:50 **Outbreak of Viral Hemorrhagic Septicemia** Ken Stagmiller

10:10 **Nuisance Alga *Didymosphenia geminata*: A Threat to our Fisheries** Leah C.S. Elwell

10:30 **Fish assemblages in the Powder and Tongue River in relation to coalbed natural gas development** Windy Davis

10:50 **Spatio-temporal variation in prairie stream fish assemblages** Jason Mullen

11:10 **Assessment of Post-stocking Dispersal of Age-1 Pallid Sturgeon: Implications for Acclimation** Eric Oldenburg

11:30 **Population viability of Arctic grayling in the Gibbon River, Yellowstone National Park** Amber Steed

11:50 *Awards Lunch*

1:30 **Lake Trout Suppression in Lake Pend Oreille Idaho – Will It Work?** Ned Horner

1:45 **Are anglers able to reduce lake trout abundance in Flathead Lake?** Barry Hansen

2:00 **Lake trout suppression in Yellowstone Lake: the reality of this battle for cutthroat trout persistence** Todd Koel

2:15 **Lake Trout in the Lakes of Glacier National Park, Montana** Michael Meeuwig

2:30 *Break*

2:50 **Lake Trout Population Control in Lake Pend Oreille, Idaho: Reversing Lessons from the Great Lakes** Mike Hansen

3:05 **Simple population models: what can they tell us about lake trout suppression?** Lisa Eby

3:20 *Panel Discussion*

4:10 *Committee Caucuses*

Thursday February 15, 2007

8:00 *Welcome and Announcements*

8:10 **Analyzing tradeoffs between the threat of invasion by nonnative trout and effects of intentional isolation for native westslope cutthroat trout using a Bayesian belief network** Doug Peterson

8:30 **Fish Barrier Design in North central Montana** David C. Moser

8:50 **Effects of Road Culverts on Eastern Montana Prairie Fish Assemblages** Leo R. Rosenthal

9:10 **Use of PIT Tag-Detecting Antennas to Assess Culvert Passage of Yellowstone Cutthroat Trout and Rainbow Trout in Mulherin Creek, a Tributary of the Yellowstone River** Andrew Solcz

9:30 **Fish Passage Planning and Development for Bull Trout at Thompson Falls Dam, Montana** Ginger Gilin

9:50 *Break*

10:10 **Expected changes to the distribution, abundance and life history expression of fishes following the removal of a Montana hydroelectric dam** David Schmetterling

10:30 **Restoration Plan for the Clark Fork River and Blackfoot River near Milltown Dam** John Muhlfeld

10:50 **Influence of Migratory Barriers on Genetic Diversity and Similarity among Bull Trout Populations in Glacier National Park, Montana** Michael Meeuwig

11:10 **Big Coulee: an Attempt to Thwart Extinction** Stan Vansickle

11:30 **Barrier Assessment of the Chadbourne Diversion Dam on the Shields River** Matt Blank

11:50 **Fish Losses to Irrigation Diversions on Two Tributaries of the Bitterroot River, Montana** Leslie Bahn

12:10 *Lunch on your own*

1:10 **Efficacy of fish screens at preventing entrainment of westslope cutthroat trout *Oncorhynchus clarki lewisi* juveniles in three irrigation canals of Skalkaho Creek, Montana** Ryan Harnish

1:30 **Seasonal and spawning movements of genetically pure and hybridized westslope cutthroat trout in the Fan Creek drainage, Yellowstone National Park** Carrie Brook

1:50 **Movement of Anglers and Sediment Transport: Implications for Moving Aquatic Nuisance Species** Kiza Gates

2:10 **Effects of Water Temperature and Angling on Survival of Trout in Montana Streams** James Boyd

2:30 **Environmental conditions affecting the toxicity of piscicides** Peter Brown

2:50 **Collection of Samples to Detect Hybridization: One of These Things May Not be Like the Other** Matt Corsi

3:10 **Tracking fluvial cutthroat trout movements with stable isotope markers in a stream network** Adam Sepulveda

3:30 *Break*

3:50 *Business meeting*

6:30-??? *Banquet and Raffle*

Friday February 16, 2007

8:00 **Welcome and Announcements Concurrent Session: Conservation of Artic Grayling in Montana** Buddy Drake

8:10 **Montana Arctic Grayling: Status, Concerns and Antidotes** Jim Magee

8:30 **Can Candidate Conservation Agreements Save Montana's Fluvial Arctic Grayling?** Peter Lamothe

8:50 **The Restoration of the Upper Big Hole Watershed's Riparian and Instream Habitat using Candidate Conservation Agreements** Jeff Everett

9:10 **Improving Streamflows in the Upper Big Hole Using Candidate Conservation Agreements** Mike Roberts

9:30 **Understanding Entrainment Dynamics and Potential Implications to the Conservation of Arctic Grayling in the Big Hole River** Adam Petersen

9:50 **Grayling Reintroduction in the Ruby River, Montana** Emily Rens

10:10 *Break*

10:30 **Changes in Angler Use Following an Unauthorized Walleye Introduction in Canyon Ferry Reservoir** Eric Roberts

- 10:50 **Effects of Spill on the Kootenai River below Libby Dam in 2006** Ryan Sylvester
- 11:10 **Correct implementation of variable flow flood control (VARQ) at Libby Dam during 2006 could have avoided spill and prevented impacts to Kootenai River fish** Brian Marotz
- 11:30 **Investigations into Rapid Temperature Decreases in the Upper Madison River downstream from Quake Lake, MT** Frank Pickett
- 8:00 **Welcome and Announcements Concurrent Session: Fisheries Techniques** Leslie Bahn
- 8:10 **Estimation of Fish Age Using Otolith Relative Mass** Craig Stafford
- 8:30 **A new biochemical genetic technique to examine hybridization among westslope cutthroat, Yellowstone cutthroat, and rainbow trout** John Powell
- 8:50 **Evaluation of Stocking as a Means of Replacing Introduced Trout Populations in Lakes with Westslope Cutthroat Trout** Robb F. Leary
- 9:10 **Who's Yer Daddy?** Wade Fredenberg
- 9:30 **Considering Natural Vegetation Development Processes in Streambank Stabilization Design** Amy Sacry
- 9:50 **Dual-Frequency Identification Sonar (DIDSON) for Fisheries Applications: Cool Tool or Expensive Toy?**
Susan Camp
- 10:10 *Break*
- 10:30 **Spawning Abundance of Bull Trout (*Salvelinus confluentus*) in relation to Geomorphology, Temperature and Roads in tributaries of Rock Creek Basin (Missoula and Granite Counties), Montana, USA** Gary Carnefix
- 10:50 **Eustache Creek Mine Site and Stream Channel Reclamation- Planning, Monitoring, and Implementation**
Scott Spaulding
- 11:10 **Hebgen Reservoir Activities Update: Still Looking at Factors that could Potentially be Limiting Wild Rainbow Trout Recruitment to the Hebgen Fishery** Travis Lohrentz
- 11:30 **Population Structure and Seasonal Habitat Use of the Northern Pike Population of Cabinet Gorge Reservoir, Montana** Sean Moran
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A Tribute to Wally McClure

In 2002, while Wally McClure was the fisheries program manager on the Gallatin National Forest (GNF), GNF fisheries personnel under his direction discovered a potential genetically pure westslope cutthroat trout population in a small unnamed tributary to Hebgen Reservoir on its southwest side. Wally and GNF west zone fisheries staff conducted field surveys on this stream in the fall of 2002 that confirmed that this population is one of two known genetically pure populations in the Hebgen Lake basin. Incidentally, this was the last stream that Wally worked on before taking ill.

To commemorate Wally's outstanding career and devotion to native fish restoration, the GNF is petitioning the U.S. Board on Geographic Names to officially designate the unnamed tributary as Wally McClure Creek. Using Wally's full name rather than just his surname emphasizes the commemorative intent of the name change and avoids any ambiguity.

The Board on Geographic Names requires that five years pass after a person's death before reviewing a proposal. The board also requires a short biography of the person to be honored including his/her association with the feature to be named and an explanation of how he/she made a significant contribution to the area. The board also takes into account additional supportive letters from Federal, State, Tribal, and local administrative authorities, petitions, newspaper articles, and evidence of local support. Given Wally's contribution to native fish restoration and education and the many friends he made along the way, there should be no lack of evidence or support for the name change. To that end, the GNF will be seeking a letter of support from the MCAFS for this name change to be included with the official proposal package to the Board on Geographic Names.

Although the westslope cutthroat trout population in what we now unofficially call Wally McClure Creek is not hybridized, there is a substantial threat from rainbow trout introgression. Typically Wally McClure Creek flow disappears subsurface before reaching its confluence with the Ruoff irrigation ditch, tributary to Hebgen Reservoir. This disconnection has thus far prevented genetic introgression with nonnative rainbow trout from the ditch and reservoir. However, in 2005 surface flow came within 50 yards of the ditch and in spring 2006, the stream did temporarily connect with the ditch after passing through a temporary fish screen. It is therefore likely that rainbow trout could invade Wally McClure Creek unless a permanent fish barrier is constructed.

To eliminate the potential for introgression in the Wally McClure Creek cutthroat trout population, the GNF has received funding from PPL Montana to construct a concrete fish barrier. The specs and drawings for this project are complete and the barrier will be constructed this summer. To further commemorate Wally's accomplishments the GNF would like to install a bronze plaque with his likeness (laser engraved) and a few words of recognition on the completed barrier. To pay for the plaque (\$900 - \$1,100 estimated cost) we would like to take up a collection at the annual MTAFS meeting and use a portion of the funds generated from the live auction.

The GNF would very much appreciate the support of MCAFS in these two endeavors to commemorate Wally and his contribution to fisheries resource protection and restoration in Montana.

Chapter Notes

Raffle Committee

The MSU student subunit has been busy gathering donations for the raffle. Thanks to the generosity of Montana businesses, we have a great selection of quality goods from dry bags to porta-potties to outdoor art so bring your money jar and join the fun! Our big ticket items include an over/under shotgun and several fly rods. To contribute to the Wally McClure Scholarship we will be having a live auction for a log bed (handmade by Wally) and a tanned moose hide (moose shot by Wally). Bring your running shoes, your check books, and good spirits!

We are STILL looking for donations from talented AFS craftsmen and women for the general raffle. We would be very happy to take extra paraphernalia promoting your projects or organizations (t-shirts, hats, coffee mugs, etc...). Half of this year general raffle proceeds will remain in MT AFS. Please contact **Windy Davis** if you would like to contribute. wdavis@montana.edu, (406) 994-6643

Donated items can be brought to the meeting. Stop by the raffle table to purchase your tickets!

Thank you.
Windy N. Davis

Other Conference News:



2007 Oregon Chapter Annual Meeting 43rd ANNUAL MEETING “Big Fish over Big Dams: Complexities, Controversies, and Opportunities” February 27 - March 2, 2007 Eugene Hilton and Conference Center, Eugene, Oregon

On-line registration for the 2007 Oregon Chapter Annual Meeting will start on December 1, 2006. Go to: www.oregonstate.edu/conferences/registration.html to register. You can also visit the Oregon Chapter website: www.orafs.org for meeting details and updates.

If you have questions about registration for the 2007 Oregon Chapter Annual Meeting contact Danielle Warner at: ORAFS@comcast.net, or 360-807-4065.

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