

The Confluence

The Journal of Colorado Plateau River Guides

Number 28, Winter 2006

Hank Stewart and Sand Wash

**The Boatmen Stories of
Arthur Wheeler**

**John and Parley
The Galloway's Testify**

Glen Canyon Diary: 1955

**Otis "Dock" Marston
Moab To Hite: 1964**



Headwaters Institute

Diamond Down

**Hell's Half Mile
A Book Review**

Poetry

Dam Solution



Historic cabins near the Sand Wash ferry on the Green River in Desolation Canyon
Photo credit: Dan Miller

The Confluence

...wants to be the quarterly journal of Colorado Plateau River Guides. CPRG has a fiscal sponsor, Living Rivers, a 501(c)(3) river advocacy organization that promotes river restoration.

CPRG is dedicated to:

- Protecting the rivers of the Colorado Plateau
- Setting the highest standards for the river guiding profession
- Providing the best possible river experience
- Celebrating the unique spirit of the river community

Guide Membership is open to anyone who works, or has worked, in the river industry of the Colorado Plateau

General Membership is open to those who love the Colorado Plateau

Membership dues

\$20 per year
\$100 for six years
\$295 for life
\$495 as a benefactor

General meetings and board meetings will be announced

Officers

President	Daniel Phillips
Vice-President	Vacant
Secretary/Treasurer	John Weisheit
Past President	Annie Payne

Directors

Bluff	Vacant
Grand Juntion	Vacant
Green River	Vacant
Moab	Vacant
Vernal	Vacant
UGO Rep	Lars Haarr

Colorado Plateau River Guides

PO Box 344
Moab, Utah 84532
435.259.1063
Fax: 435.259.7612
www.riverguides.org
john@riverguides.org

We need opinions, articles, poetry, artwork, and photos. Please include graphics with your text submission.

Editor this issue	Kealan Partlow
Managing editor	John Weisheit
Printing	Times-Independent

ISSN: #1078-425X

Note: Printed on a blend of tree-free kenaf and post consumer recycled paper.

DISCLAIMER: The opinions and statements made within the pages of *The Confluence* are those of the author and do not necessarily represent the position of the guide membership, the board of the Colorado Plateau River Guides, nor our fiscal sponsor. If you have an opposing or supportive viewpoint, please send your comments for publication.

CPRG RIVER EDUCATION for 2006: Contact your employer for registration information and details.

Cataract: April 24-27

Contact: Arlo at Sherri Griffith Expedition

Loma/Westwater: May 6-9 (Westwater 8-9)

Contact: Amie at Adventure Bound

San Juan: Sept 5-7

Contact: Kristen at Wild Rivers

Land Based: Date TBA

Contact Kirsan at Rim Tours

A SPECIAL THANKS to 2005 donors for the river education programming: Utah Guides and Outfitters, Utah State Parks and Recreation and Tag-A-Long Expeditions.

A SPECIAL THANKS to 2005 river education instructors:

Alyssa Van Schmus, Black George Simmons, Dan McCool, Jeff Arbon, John Dohrenwend, John Weisheit, Kent Frost, Melissa Memory, Peter Fitmaurice, Stephanie Miller, Steve Young, Sue Phillips and Tim Graham.

A SPECIAL THANKS for financial assistance to develop the CPRG web page to Robert E. Tubbs, Jr., and to Kealan Partlow and John Weisheit for web page construction.

Visit the site at: www.riverguides.org

IMPORTANT ANNOUNCEMENT! All general memberships to CPRG have been freely extended for one year because no issue of *The Confluence* was produced in 2005.

Finances: Before the printing and distribution of this issue, CPRG had \$3452 in the bank.

General Membership Meeting Minutes Spring 2005

The meeting began at 11 a.m. on April 9th at Dano's house, 233 Aspen Ave., in Moab. In attendance: Dano Phillips, Steve (T-Berry) Young, Nancy (Monk) Allemand.

The attendees waited for others to show for 15-20 minutes. When none did, they began talking about what CPRG needed to do first. Dano mentioned that CPRG didn't have its own Utah business license and would need one to attain 501(c)(3) status in the future. All three agreed it would be beneficial to get CPRG's own non-profit status and to get out from under Living River's umbrella.

Wanting to hold elections at the meeting, the three attending decided to proceed. All board positions were open except Secretary/Treasurer. When Dano was elected in 2003 to be president, approximately 15 people attended that meeting and it was decided to hold elections with the members present. And so it was decided to go with that set precedent. Nancy and T-Berry voted to re-elect Dano as a second-term president. Dano accepted.

All three talked about who CPRG could contact to see if anyone would agree to be an area director. Dano said he would contact Dee Holliday of Holiday River Expeditions and Bob Quist of Moki Mac for nominations for Green River area director, and Nathan Sosa of Wild Rivers for San Juan/Bluff area director. He also said he would talk to Dennis Smoldt, manager of Moab OARS, about taking on the position of CPRG Treasurer in the future.

T-Berry said he'd talk to the Canyonlands Natural History Association (CNHA) about once again sponsoring CPRG under their 501(c)(3) non-profit status. This idea was due to the attendees' feeling that Living Rivers turned many members, past and present, off.

Dano made the motion to adjourn the meeting. T-Berry seconded. It ended at 12 p.m.

The Prez Sezs

Hi All -Hope everyone had a fulfilling year of guiding and private trips, living out in those places where we all benefit from the wisdom of perspective. Having some exciting water certainly did us all some good—the Dolores for early-season fun, Cataract up to its old tricks, Westwater and Dinosaur and Desolation and San Juan moving along at a clip, we can all agree, that helped us slough off the low-water blahs. This season found us enjoying what we had almost forgotten. It was a gift.

The Utah Guides and Outfitters (UGO) decided to run a Cataract interpretive trip, with a River Education Seminar held on the day before the launch. The programming was organized by John Weisheit. For the Dinosaur Education Seminar, many thanks go to Tim Mertens of Dinosaur Adventures. CPRG would also like to thank Steve Young of the National Park Service, Jeff Arbon of Utah State Parks and Recreation, and the staff of Tag-A-Long Expeditions. For financial assistance we'd like to thank UGO and Utah State Parks and Recreation.

I won't mince words—CPRG needs your energy to keep its solvent force going. With over 300 members to whom cards were sent earlier this year for the Spring General Membership Meeting, only two folks showed. We need members to fill Board of Director slots. No attendance, no vote. Without participation, without input, all our chambers have gone flat. Where do you want CPRG to go, and are you willing to take it there?

This Prez Sez is my chance to state frankly, to everyone out there who may read it, that CPRG is not an anti-motor organization. I have heard much talk, indeed much disgusted talk, that CPRG does not support outfitters and guides who choose to use motors. Can anyone out there tell me of an outfitter that hasn't used a motor to get off Cat? To speed up a trip for clients who can't take an entire week? If we, the guides' organization, were anti-motor, we'd be anti-guiding. And so we are not. Yet, nor are we going to suppress discussion and articles from someone personally opposed to motors. CPRG is, and always has been, an open forum. These issues are real, and visceral to some. If you've been chased away from the good education and celebration of CPRG because of the motor issue, I invite you to come back, lend your assistance, and make the

guides' organization vibrant.

Here's my chance also to thank Living Rivers for being our fiscal sponsor, as we've dodged the rain under the umbrella of their 501(c)(3) non-profit status. We were supposed to get our own 501(c)(3) by December 2004, and have failed to do so, but are still slowly working on it. The problem, you may guess, is lack of help. Getting this non-profit status takes lots of energy, some money, and time. We've had no one, or no team, that has taken on such a big responsibility. And so we are still under the Living Rivers umbrella until we find our way to our own.

Here's another issue guides have mentioned to me. They don't like CPRG's affiliation with Living Rivers. LR, they say, is too political and carries too much of a stain of anti-dam sentiment for an educational organization like CPRG. My response to those with that view I dispense here: CPRG needs Living Rivers' sponsorship now to maintain the website (<http://www.riverguides.org>), and to give us non-profit power. Not all of us may agree with LR's stand, and so let that be the impetus to get our own status. We need to know what you want to do, and we need your presence at meetings to engage in discussions about these very important matters.

Indeed I am optimistic that we can climb from our current position of inactivity and misunderstanding. There's a lot to do, but more importantly, a lot we CAN do. Don't feel scolded, don't feel guilty, but just ask yourselves how you want to assist the Colorado Plateau River Guides toward the goals of education and celebration of the river community. Let your friends know of our focus and open forum. You, the members, have asked for it, and now I need you help in making it so.

To all a good winter. See you out on the water next season!

Right side up, Dano

From the Secretary/Treasurer

by John Weisheit

I do not agree with the understanding of the issues as presented directly and indirectly with the CPRG members in the preceding article/minutes. The board of CPRG has never determined that CPRG is an education only organization, nor has it ever determined that it is an advocacy only organization. At present CPRG protects the Colorado River in every way possible.

I also do not think that Dano and others have correctly identified the problem concerning the lack of volunteerism in CPRG. The statements from the last page have identified controversial environmental activism from Living Rivers as the cause for the waning of CPRG. Environmental activism may be a symptom, but it is not the root cause. I think the root cause is apathy and that it began to grow the day after CPRG was founded. Regardless, we need to start a public discussion on this matter for better understanding and to make a clear record.

I would like to provide some clarity on the issue of fiscal sponsorship. The position of Living Rivers towards

CPRG is: LR agrees to provide non-profit administrative assistance to CPRG because the river guides' mission statement includes protecting the rivers of the Colorado Plateau. This arrangement is very simple and will not be terminated unless CPRG abandons river protection as a component of its mission statement.

However, the issue brought forward at the annual meeting is about a controversy that is more complex than a simple business relationship between LR and CPRG. I think this discussion needs further clarification too. Although Dano's discussion and the minutes do not specifically state this, I do recognize that the issue at hand is more about me and less about LR. This is what needs to be made very clear: my opinions and my activism belong to myself and is not necessarily specific to any organizational entity. My opinions and my ambitions are why my history includes co-founding CPRG in 1993 and co-founding LR in 2000. If CPRG members want to attach some responsibility to the growing activism found within CPRG, then they should attach it to me where it belongs.

To be transparent, it is obvious that some CPRG members are uncomfortable with my activism as it relates to my OpEd piece two issues back where I attack the Holy Grail of the outfitting industry, the outboard motor. And irritating to others because I am a motor guide. I hope that CPRG members understand that this is exactly what one should expect from a person who believes very strongly in river protection and wilderness values. And I also hope that CPRG members realize that activism and freedom of speech are guaranteed under the constitution and that the door of citizenship opens from both directions.

There really is nothing that I have to apologize for and changing CPRG policy to place limits on its mission statement to control diversity is not the answer. I do know leaving CPRG because of this controversy is also not the answer, especially when avoiding representative debate.

To be specific, the problem with CPRG is not my aggressive activism. I am just one member of 300 who takes the time to say and write what I think needs to be heard. I also think individuals should be allowed to say and write their opinions without the fear of losing sources of funding and membership participation. The strength of an organization comes from its dedication to its mission statement and not from money or patronizing membership perceptions. I also think it is important to recognize that many river guides and outfitters agree that we need more river protection than what we have right now. So until we acknowledge the political makeup of this river community for what it really is, then CPRG and will not overcome this particular controversy to a satisfactory conclusion.

So let's not be an organization that has doubts. Rather let's welcome our controversies with healthy debate. Let's fight for what we believe in and let's do this with the spirit of good intention. Let's make the Colorado River and the guiding profession the best it can possibly be. Let's discuss ways in which we can improve our knowledge, our wages and make the river safe and enjoyable for everybody. We do need to fight for the things for which we are about to lose: the endangered fish of the Colorado River and economic sustainability for the people who depend of

the Colorado River for their thirst and livelihood.

I announced five years ago that I do not have the time to volunteer for CPRG at the same level. What keeps me in place is the apathy I previously mentioned. Regular attention to *The Confluence* and web page must be my replacement's first priority. CPRG has money, it has a web page, it has a fiscal sponsor, and it has computer hardware and software to pass on to someone who can get the work done on a dependable basis. Who is this person and will he/she guarantee dependability at the bridge crossing before us?

I really hope that this organization will continue to endorse the advocacy banner not just for the river but for ourselves. Education programs alone will not achieve these important goals and will eventually leave us empty-handed.

In closing I want to share a summary of what the charter members discussed at the very first CPRG meeting held at Pack Creek Ranch, November 1993. The consensus at the time was: we will try a little of everything. In the two days of meetings CPRG managed to fill a mixed bag of issues that basically included education, service projects, environmental advocacy and labor organizing.

The agenda for guide education included natural and cultural history, first aid, river rescue, prevention of illness and injury, resource protection, river etiquette, and recycling. Service projects included the stabilization of archeology sites and trash removal. Weed removal was not mentioned, but subsequent journal articles and projects did appear.

Concerning environmental advocacy we discussed wild and free rivers, wilderness inventories, regulation of jet-skis, impacts from overflights, improving air quality, biological integrity for endangered species, eliminating grazing from public lands and stopping the immediate threat of the Animas-La Plata Project. We did not discuss oil and gas development nor uranium waste issues, but some board members did get pro-active on these issues later.

Concerning labor organizing, some charter members expressed a desire to advocate for better wages and benefits and we did discuss the unionizing of river guides. Meaningful leadership on this issue never has materialized. I think this should be acted on more seriously. I believe the industry can bear a progressive labor movement and if it can't, then we need to know why.

CPRG should continue to work for all the members and for all the issues and to explore them with full transparency. The ideas and energy from CPRG volunteers should be welcomed and encouraged at all times. Nothing should be tossed out until the full membership determines otherwise in a setting of full disclosure and debate. Whether the program or issue succeeds or not is not as important as allowing the community to fully engage and challenge the membership in all its activities, especially when it relates to the biological integrity of the Colorado River, because if we lose the rivers life, we lose the base part of our river community.

Thanks for reading my opinion and I encourage you to voice your own at meetings, by mail or telephone, or through this journal.

Diamond Down

By Keri Scott

It was the winter of 2000 and I had the boatman blues. I was attending Northern Arizona University and all I could think about was going down the river. For the past two summers, a company that ran the biggest white water craft on the North American continent through the Grand Canyon had employed me. I needed a river fix bad so I decided I would invite all my friends to attend my first private trip ever: a Diamond down trip over spring break. None of the people I invited were boatman, so they were excited at first, but one by one they declined the invitation, all except for one, my good friend and roommate, Tonya (not her real name).

As the time drew closer Tonya drew more skeptical. She was nervous because only two people were going, she didn't know how to swim, and she had never gone on a river trip before. I begged and begged her to go because I knew I couldn't do it myself. Finally, the night before we left, I officially talked her into it.

Everything was set. I had Tonya with me for companionship and safety, my parents would do the shuttle, and the permits were in hand. I had picked up all the supplies at a rental place in Flagstaff (at the time all the boating gear I had was a lifejacket, dry bag and a rocket box), and all the food had been purchased.

The next day we were on our way! We got to Diamond Creek at a reasonable time and proceeded to unload the gear, inflate the boat and start packing. At this point I would like to list my rowboat experience: zero. I had never even stepped on to a rowboat before. I had seen rowboats on the river, and it didn't look too hard. It seemed to me that all you had to do was sit in the middle of the boat and push on the oars, simple enough. I knew the rapids fairly well and the dangers. I also knew what the dam release was and what it would look like when we went through.

When it came to packing the rowboat, I started to think

that maybe I was in over my head. I had no idea how to put on the frame, where all the stuff went, what all the straps were for, or the big metal plate with pipes on the bottom of it (now I know it was a folding table). Luckily the boat rental place handed me an Allen wrench and told me to keep it in my pocket; they also chose locking oars for me. It took the rest of the day to get the boat half-packed.

Over dinner that night I entertained my parents and Tonya with all the famous flash flood stories of Diamond Creek, and told them to look for the axle and wheel of one of the two International trucks that had been washed into the river. It wasn't too cold for late March, but somewhere in the middle of it we had one of those out of nowhere, hell raising storms. I thought we were in a good place should Diamond Creek flash, so I turned over in my sleeping bag and proceeded to go back to sleep. However my parent's tent had broken its poles in the wind, and the rain was coming in. They woke me up and told me that we needed to leave immediately because Diamond was going to flash and they didn't want to be there. I tried to convince them that we were okay and

needed to stay, but my Dad told me in certain words that we were going even if he had to drag me to the trucks. Diamond didn't flash and we spent the rest of the night somewhere on the side of the dirt road sleeping in the trucks. We were off to a good start.

The next morning we woke up to snow on the cliffs, I looked over at Tonya and asked if she still wanted to go. She returned the question and, because I am stubborn, I said yes. We drove back down to

the boat and finished packing, which took till noon. The river was rising and so was my frustration. I don't remember how I got all the stuff on the boat and tied it down, or if I did tie it down at all, but I do remember that I put the rocket boxes where my feet were supposed to go. Therefore I had to sit somewhat Indian style. We got on the boat, waved goodbye to my parents and proceeded to go down the river. Later my parents told me that they had never seen me look so scared in my life.

Now for those of you who have not traversed the lower Grand there are basically six rapids: Diamond Creek, Travertine, 231 Mile, 232 Mile, 234 Mile, and Bridge Canyon or 235 Mile. Being a motor guide I was a little concerned about 231 Mile and I was really concerned about 232 Mile. At low water 232 Mile has a nice lateral that comes out and will try to push you into the "Fangs" on the right side of the river. The Fangs are



nicely polished Vishnu Schist that likes to rip boats up before it flips them over.

As I pushed down river through Diamond Creek I fully realized that we were screwed. I couldn't even avoid the two small holes in Diamond, and I thought to myself "how in the world am I going to break the lateral in 232". I thought maybe I would get better the more I tried, so I didn't tell Tonya at that point that I thought we were probably going to die. As we went through Travertine my skills had not improved. I tried to push to shore so that we could see the waterfall in the side canyon, but I didn't make it, we went down river.

Talk between Tonya and I had almost ceased. By the look on my face she could tell that I was terrified. I still tried to pretend that I knew what I was doing, but she wasn't buying it.

I was able to make the eddy at Travertine Falls, a camp and my scouting stop for 231 Mile. Even though I knew the rapids, I failed to realize the higher vantagepoint a motor rig has over a rowboat. As I pushed towards the tie-up tree I told Tonya to tie up the boat. To my amazement she thought that I meant right then and there and jumped off the boat. I thought I had killed my roommate who didn't know how to swim. She managed to hang on to the bowline and step on to shore as the boat drew closer. When she got out of the water I was given the look of death. After that, what little conversation there had been between us ceased.

As I climbed to where I could see the rapid my arms would not stop shaking, but I was so pumped up on adrenaline I didn't feel cold or fatigue. I looked at the rapid and saw the run. Miss the big hole, simple. Did I miss the big hole? Of course not, I was pushing. Remember, the only method I knew at the time was the upstream ferry. I had never even heard of downstream ferry. As we went through it my roommate disappeared in a wall of water and the oars were knocked out of my hands, but we made it through and thanks to the wisdom of the boat rental place, I still had my oars.

Now I only had a mile to get ready for the rapid I feared the most, 232 Mile. That was the longest mile of my life. I just wanted to be below it. As the horizon line disappeared I wished I had my big motorboat. I started to push over to the right to scout the rapid and realized that my left oar stand had come loose. I proceeded to freak out. I frantically searched for the allen wrench in my pockets (I forgot which pocket I had put it in), found it, and started tightening up the wrong screw with the roar of the river in the background. I was shaking so bad I could hardly get the wrench in the socket. Tonya, seeing the state I was in, took it from my hands and tightened up the right screw and gave me a dirty look. When she finished it was too late to scout, so I screamed, "Fuck it were just going to run it!" I pushed with all my might to break the lateral. Just as I thought we were going to make it, the lateral rose up and

curled on us. This had the effect of spinning me backwards. Now we were hurtling towards the Fangs. I started cussing and pushing frantically up river. I knew we were doomed. At the point when I realized that we were about to go over the Fangs. I closed my eyes and imagined the sound of the boat being ripped to shreds. Silence. I looked over as my oar hit the last of the fangs, clunk and it was over. We made it. I pushed over to the middle of the river and felt the best feeling ever, the feeling that we were going to live.

I started to relax and enjoy the trip at this point. As we went through the last rapids I was amazed how much bigger they seemed in a small boat. After we made it through the last of the rapids Tonya started talking to me again. We were both relieved and happy to be alive.

We pulled into camp at Separation Canyon and that's when my fatigue hit me. I could barely lift my arms. All I wanted to do was get warm, eat and sleep. Tonya cooked dinner and I looked for firewood. Nothing was dry from the night before. As I started to go further up the canyon, I got the strong feeling I was being watched and the hair started to stand on the back of my neck. I promptly gave up and went back to camp.

During the previous summer we would stop here for lunch on commercial trips. A fellow guide and I would argue over the prints we saw in the sand. I would say that they were a cat's and he would say that they were a dog's. It turns out that I was right. That night we were serenaded with the sounds of what I thought sounded like a toddler being tortured and Tonya thought it was a screaming woman. Neither of us had ever heard the calling of a mountain lion, but I'm sure if we had just unzipped our tent and looked out we would have seen one. Not realizing what it was we slept like babes.

Due to our experience the day before, all Tonya and I wanted to do was get home. That day we took turns rowing in one-hour intervals. The tourists that fly over in helicopters from Las Vegas all looked at us like we were crazy. They were the only people we saw on our whole trip. We rowed well into dark. The lake had gone down quite a bit since the last time I was there and I was worried that we would miss Pearce's Ferry, so we tied up to a spider infested tree in the middle of the lake and slept on the boat.

The next morning we woke to realize that we were only about a mile from our take out. I was shocked to see the lake so low and Scorpion Island was not an island any more. As we drove home I'm sure Tonya secretly vowed never to go down the river again. As I have gained more and more river experience, I've realized how incredibly lucky and stupid we were. Others say we were brave, I say we were ignorant.



Headwaters Institute at Ten: Still Providing Leadership in Watershed Education

by Tom Hicks

Executive Director, Headwaters Institute

Mission: To provide education that inspires individuals and communities to care for and connect with their watershed.

Vision: The Headwaters Institute and its associated network of educators strive to be the premier provider of natural history, conservation, and interpretative trainings for professional guides. These seminars encourage and promote a deeper public understanding of the importance of healthy rivers and their watershed ecosystems from ridgeline to Coastline.

Our mission gains momentum and credibility when individuals collaborate in the educational process and open themselves to learning from each other and the natural world. Informed individuals inspired by moving water will help protect, conserve, and restore its vitality for the enjoyment of future generations.

Ten years ago, in spring of 1996, nearly one hundred rafting guides gathered for a "Rendezvous" on the Rio Grande near Pilar, New Mexico. Two years before, the Rio Grande had been identified by American Rivers as North America's "Most Endangered River" and most did not even know anything was wrong. The basic premise behind the pilot project was to assemble local and regional experts to fill in the personal gaps in each guide's interpretive knowledge of the local watershed so guides would be better informed to educate their guests. Not only was the Rio one of the original eight Wild & Scenic Rivers passed into law in 1968, surrounded by fascinating Pueblo and Hispanic history, but it had some health issues as well.

The keynote speaker, John Nichols, author of the *Milagro Beanfield War*, had been invited to discuss story telling. That evening he approached the head high flames of the bonfire with a measured hesitation and then quickly lit into his audience of guides, recounting quiet and private moments fishing deep within the Rio's deep basalt canyon years before that were utterly ruined by the loud and raucous approach of beer can littering raft guides and their guests. There was an awkward quiet with no interrupting punch line or laughter.

But then his tone softened and he adjusted his stance. "You guides are not the same guides. You guides are different. The fact that you are here and willing to organize this day and to listen and learn about the local history and understand the community other than for your yahoo thrills

is encouraging. My opinion of guides and rafting has been changed." He raised his beer and a loud cheer went forth.

The subtle style of his story-telling message still echoes loudly today. From that glowing ember followed additional seminars on the American, Arkansas, and Kern in 1997. The Headwaters Institute's Rio pilot project successfully (1) tested lowered attendance fees and made them affordable (i.e. \$20 for three meals and beer), (2) shortened the seminar format to a day or two (rather than 5-7 days), (3) held the seminar on land, and (4) broadened participation to include multiple guides and multiple outfitters at the same time. With increased attendance seminars turned into exciting early season community events, abuzz with raffle prizes and boatman contests, not to mention the renewal of river friendships and tall tales.

The educational lynchpin was an individual coordinator who led the process with the support of a local steering committee made up of guides, outfitters, river managers, outdoor educators from programs like Outward Bound and NOLS, river conservation organizations, and others interested in guide education. The increase in guide attendance, as high as one hundred and seventy-five guides on the Arkansas in 1998, directly translated into increased public contact.

In 1998, the Headwaters Institute joined with Canyonlands Field Institute and the Colorado Plateau River Guides to organize "Desert Waters" here on the Plateau, which was followed by "Life on the Rocks," "Boats and Boaters," and subsequent seminars focused on teaching guides interpretive techniques and sharing information on the multi-faceted Plateau Country. Guide seminars on the Plateau have often been shared and used as an informal national standard for outstanding interpretive trainings, most notably with the longer format that gets more in depth than typical guide seminars

Since 1996, Headwaters Institute seminars have been conducted in south central Alaska near Palmer, California Coast, Deschutes, Futaleufu in Chile, Kern, Uinta Basin (Thanks Herm!), Maine Coast, Maine North Woods, Pigeon, Rogue, Salt, and Snake. Some of these seminars have expanded to train sea kayaking and fly-fishing guides or a combination of professional guides and tourism employees who have potential windows of educational contact with the public. Approximately 3,000 professional guides have been trained at 75 seminars and they have had over 1.5 million contact days with the general public.

Of course the key questions that remain after all this hard work by coordinators and local steering committees is "what has Headwaters Institute actually accomplished?" or "what have those guides told their guests?" It is an unusual challenge to quantify the impact of how interpretation of a "teachable moment" translates into a tangible outcome. An early experiment on the Rio Grande was designed to link guide outreach to their guests' direct donation to outfitter led river conservation efforts, but the concept was short on important implementation detail and clarity that led to its demise on a broader scale. Other informal methods of quantification include guide tips or requests for a certain guide, but in many respects the measurements of an outdoor education program focused on guides

have remained as elusive and mysterious as the guides who have attended our seminars.

Experience reinforces that if guides do not have specialized information about their watershed and the river corridor, they will either say nothing of educational value or they will make it up. Most rivers' depth is "chest high on a duck" and almost all vegetation can confidently be identified by its generic Latin genus, "*greenus besideus*." Of course, that is why it always helps to ask if anyone is a geologist before discussing plate tectonics and advanced theories related to the heat generated by the friction of plates in subduction zones, which creates magma which wells up in an underground chamber before exploding in a torrential gush of oozing lava from a volcano... around a late night campfire surrounding by the mythic women's Swedish paddling team. At a fundamental level guiding is about entertainment.

Yet more so, guides have a unique role as educators in today's American west, whether they are rafting, mountain biking, fly-fishing, sea kayaking, or even Jeepin! The average visitor to a western river corridor does not seek out the snake that an informed guide picks up and points out does not have a rattle. Nor do these guests know much other than any bright combination of stars are either Orion's Belt or the Big Dipper. By the time a guide is asked "Who were the Anasazi and where did they go?" hard information becomes useful. Ask any resource manager about what guides need to teach their guests and almost anyone can lip-synch the mantra "Leave No Trace," but how? If a guest asks "what's the commotion about draining Lake Powell?" or "how much water is lost to evapo-transpiration on the lake each year?" a well-informed guide is at a new level of navigation.

The river conservation promise is that guides can inform their guests about the distinct and riveting issues that affect rivers since each guide has individual contact with hundreds of customers or "customer contact days" (multi-day trips) and cumulatively guides have direct access to millions of members of the vacationing public each year. That is clout.

But how that aggregate clout is managed and applied is another matter. In 1806, John Colter, upon return from the Pacific Ocean with Lewis and Clark, turned around to lead two trappers back into unimaginable wilds of the Northern Rockies. A guiding tradition was born and passed on to the mountain man and subsequent guides, based on basics such as capability, integrity, and credibility. This is an inherited legacy that must be protected and guarded carefully.

Most notably, this promise has borne conservation fruit on California rivers like the American, Stanislaus, and Kern where groups like Friends of the River pioneered "the guide talk" and letter writing campaigns to stop dams, such as Auburn Dam. However, the use of guides for direct conservation outreach is most successful when it is carefully synchronized between conservation organizations and outfitters. In an almost unimaginable scenario, one river conservation organization accessed guides to deliver a message that ultimately tried to limit outfitters' access and numbers on the river. Pull plug. End of message.

The underlying reality behind the conveyance of any educational message from a guide to the public is that guiding and outfitting is primarily a function of customer service. If the client leaves happy, then everyone is happy, and some have unfortunately discovered what happens when a client is not happy. They do not need to be right, but they are the customer.

To the extent that a savvy guide can point out both sides of a complex river conservation issue, great, but customer service awareness needs to be recognized alongside basic marketing priorities or there might not be a positive and glowing word of mouth referral that keeps guides on the river and the company in business. Preaching the gospel according to the river can and occasionally does backfire, since not all are on a river trip to be converted. Most are there to find adventure, spend time with family, and simply be on vacation and away from work and home.

The Headwaters Institute is organizationally separate from conservation organizations' and their often noble objectives, although this distinction was not as distinct in the first years of the program, since foundations paid for the promise of river conservation and directly subsidized the cost of paying seminar coordinators to keep admission costs low and to incentivize outfitters to send guides. It worked for a while, but Headwaters Institute learned it could not deliver on this promise without becoming an advocate of its own, which ultimately it chose not to be.

Today, the Headwaters Institute has its own 501(c)(3) tax-exempt status and remains solely focused on the substantive role of providing a neutral, non-biased watershed education forum for professional guides. A fundamental decision was made by staff, directors, and advisors to stay rooted in the outdoor education community where it could provide the most value and service to the guides who attended its varied seminars and their guests.

Our best example of this conservation-education boundary was a decision to not sign a petition seeking to make Wyoming's Snake River a Wild & Scenic River, when in some respects it was a no-brainer that was supported by the vast majority of locals in Jackson. There was some pressure to do what was popular. Instead, through our local coordinator we offered the use of the local "Summit on the Snake" as a forum to discuss the value and merit of W&S status and ultimately, when Wyoming's Sen. Craig Thomas' office decided to endorse W&S status this past spring, they chose to make the announcement at the Summit. Our program was not the news, but its contents were.

Initially derided as uneducatable or simpletons with no interests other than beer, adrenaline, and late night heroics, the Headwaters Institute tested the premise and proved that guides are in fact different than we once were. Most guides are intelligent, educated, and curious (we each know one or two that aren't, but they don't read *The Confluence!*) and often eager to share what they know for the pure joy and pleasure of watching the learning and understanding that transforms their guests' immediate experience and perceptions of their surroundings. What these lessons hold a week or a month or years later back in the comforts and familiarity of home is not our business as much as it is to ensure that guides are poised to maximize

the potential of their interactions with their guests in the present tense of a guided experience, also known as the teachable moment. In that moment, a hopeful seed of appreciation and stewardship can be planted with intention, but it cannot be forced.

The size of the public education challenge may be daunting and so immense as to engender paralysis, some would say it is a Sisyphean task or a faith-based endeavor. When the rafting industry trends are analyzed and one recognizes that senior guides with more than 5-7 years experience are their own form of endangered species, it becomes clearer that the guide-to-guide transfer of interpretive knowledge is fragile and inconsistent. Guide education seminars are an investment that needs to be shared by outfitters, resource managers, and guides themselves.

Ultimately, when teachable moments are not even recognized or they are actively sidestepped by a timid guide the Headwaters Institute has a clear role and mission. Executing that mission is a big task that has primarily centered on the heavily rafted commercial rivers, i.e. Arkansas, where at least some guides are starting out with interpretation as an active component in their bag of tricks, since low water catches up with us all, no matter where we boat. As those guides mature onto bigger rivers and more difficult rapids in Utah, Arizona, Idaho, and the international circuit, they can safely deliver the payload while telling jokes and making a balanced and impassioned case for river conservation. Indeed, it was the deft touch of a guide on Costa Rica's Upper Pacuare that sparked my own personal river education odyssey.

The guides who are attracted by the value of a professional interpretive training demand a training that is professional and educationally stimulating. To that end the Headwaters Institute has stayed focused and patiently tried to reach out and educate each participant of our varied seminars at their personal point of curiosity and expertise. While challenging and far from lucrative, the results are tangible and real and the seminars are often fun and inspiring. Thousands of guides have taken our seminars and become *River Jedi*, knighted with the educational tools to begin interpreting their watershed.

Please consider how you might take the idea of educating guides and personally providing your own leadership in watershed education. If done well, the rafting and recreation industries may benefit and more people who come to rivers for their renewal might someday become a national populace that is watershed literate.

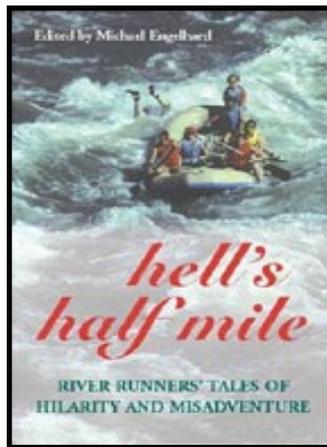
Book Review

Hell's Half Mile: River Runners Tales of Hilarity and Misadventure

by Michael Engelhard
Breakaway Books. 272 pp. \$15.00

Nearly every night spent in the canyons on the banks of this river or that one, a magical thing occurs. Deprived of televisions, radios, computers, and playstations the ancient art of storytelling is revived. These river stories

recount scenes of humor, disaster, heroism and depravity. With each telling the wave often becomes a bit larger, the boat a bit smaller, the bear a bit taller.



In guide and author Michael Engelhard's new book, **Hells Half Mile**, he has compiled some of the finest examples of this tradition. Some of these tales have been published before, while some are making their first foray outside

of the campfires glow. Some come from the likes of Edward Abbey and Katie Lee, while other tales recount such misadventure (and even questionable legality) as to require pseudonym's such as Eddy Fence. To be sure, this is no inside joke. The contents of this collection will leave everyone from the most experienced boater, to the complete novice laughing aloud and eagerly turning the pages.

On the river these stories are recounted for a variety of reasons. On the first night of an eighteen-day expedition Michelle Murray's lighthearted tale, *Binkler's Butterball*, would serve to break the ice between a group of strangers about to spend three weeks together. Below the Big Drop rapids of Cataract Canyon stories such as Christa Sadler and Dave Edwards *High Water* will remind commercial customers of the skill that was required to "make it look easy". For episodes of forgotten gear, there is Karen Jettmar's *Hell and High Water*, the tale of a river trip in which nearly everything but the boat was forgotten!

In putting together this collection, Michael has done the river community, and all lovers of the lighter side of nature writing, a great service. Putting these stories together is an idea many have had in passing, many thanks to Michael for making it a reality. Whether breaking the tension above rapids at high water, or simply reveling in the glory and mishaps of those who have gone before, this book is a must have for book shelves and ammo can's alike.

Kealan Partlow

Three Poems By Deborah Hughes

LIVING LIQUID

Many people are not aware of the fact that the volume actually occupied by water molecules in a glass of water is very small, perhaps 1% or less of the total volume...the rest can be considered as empty space. Because of this large, empty space, the molecules of water enjoy large movement. – Luigi Luisi, Chemist, from “Gentle Bridges”

I would live like water

Always moving downstream
To satisfy the virginal void
That binds my bones.

As I open wider, grow lighter
I would be sucked and nursed into sky.

I would accumulate, condense
With white grasps then gray
To fall once more through my own emptiness.

I would gurgle and swirl down gullies
That gather the trickles from torrents,
Fill depressions and overflow,
Chase gravity through the lap
Of this liminal landscape
Back to the river.

VIRGA

Leaving lay the heavy,
Carving pseudonyms in sandstone,
Rain gives up to gravity
In its desire to join with river.

Wearing only sandals,
Carrying only water,
I wander down dry washes
In my desire to join with river.

I am just another veil
The river wears
To woo the rain
Into its bed.

FEMME FATALE

Listening beneath the surface –
Gravely voice
Never quiet, babbling, bubbling,
She channels, floats, levitates
Inflated water craft,
2 foot draft.

Reaching flood stage,
Cycling back
Never holding back
Her indelible current,
She moistens, envelops, laps
High water mark
20 feet above.

A search for the spring –
Divining rod –
Never yields her source or depth.
She disappears underground, dark
Cave dwellings
2,000 years ago.

The river,
Never satisfied
To be a lake,
Composes, carves pseudonyms
In sandstone at
20,000 cubic feet per second.

Two poems by Brett LeCompte

Cobble Tales

Like ancient black seeds
clustered together
on high, blond, alien sandstone,
lost cobbles
strain o recall
a jagged, icebound homeland
known as
Mountain.

In hushed whispers
beneath a sun too hot and dry,
they speak of their savior,
a mythic being
of thick, cool, liquid wind
called
River.

The cobbles remember
the pilgrimage:
tumbling together,
smoothing youthful rawness,
collecting wisdom.
They cry,
“Why have you abandoned us,
O’ Blessed River?
Return
and take us into your arms
again.”

Insolent sandstone mocks
the mournful cries
of the odd, rounded Old Ones,
yet also dreams of an afterlife of oneness
with
Ocean.

Sleeper

You first appear
as a distant ripple
in the placid river
stretching before me.

Curious
I row over.
Yet, the upwelling reveals
little of it’s core.
Rock of water?

Forsaking safety,
I surrender
to the powerful current
and enter
the turbulence.

I drop into swirling water
and submerge
and surface,
dazzled and drenched,
happy and scared,
fully alive.

I seek an eddy,
yet the current
tugs me downstream,
There is no return.

Looking back,
the broken waters
catch the sunlight
and the roar chases me
as I drift
away.

River at Heart

There is nothing
ordinary
about this evening

There is nothing
small
about this thin edge of time

of sleepy smiles
tumbling across a sleeping bag
and a river roaring by

there is nothing
ordinary
about this journey

there is nothing
ordinary here
just kisses and carresses and sighs

a few teardrops too
and
a river at heart

Doug Oblak

Four Poems by Greg Trainor

Rippling Brook

There is
a cool, steep place
where pool, green, and deep clear
draws fool to swim without clothes, Ripp
Ling Brook

Rivers.

I think I need a river, lover, friend.
Voice of quiet, soothing bend
Embracing, flowing, surrounding trend.
Rock in the rill, I wait
Silent.

January 29, 2001

Poet's Lyric

Withdrawn from their times persons, not the
same, each with a romance to be wooed or a
whim to be amused, take their hand, cast by
fortune, and play. Not to hide but to seek.

Deep in the tortured canyon realm, a thread of
water too flowing to be wooed or amused.
Stitch lives together and carry each to their
answer sought. A

Poet's lyric, Two's union, a Rower's fancy, a
Father's dream, a Friend's mending, a
Career's ambition.

To find an opening in the punished wall, an
opening almost always in one's own mind,
may be helped by Canyon's rift along water's
thread and fall.

September 8, 2002

Grand Canyon, June 1 -June 18, 2002

Tapping to Time

Some call it the blues
tapping to time in shiny, worn shoes.
Delirious like Bush's "Stingray" mirth,
or sober like Monroe's "My Last Days on
Earth".

Fingers on the mandolin's taut strings
thoughts of heroes and friends they bring.
Visions of canyon water or mountain cliffs,
deep down or lost in the mist.

Whirling feelings or brooding meditation
from twisted fingers incantation.
Soul's earthy connection bound,
or of mind's confusion peace be found.

The minor chord, its haunting shade,
conjuring magic of euphoric plans made.

Status of the Campaign To Decommission Glen Canyon Dam

by John Weisheit

The 20th century has been noted in many scientific papers, concerning the study of tree-rings (dendrochronology) and the reconstruction of the historic flow regime for the Colorado River, as the wettest century of the past millennium. Other papers cite the present drought of the Colorado River basin, which began in the fall of 1999, is not the most severe drought on record. Even the surprisingly dry year of 2002 pales in the comparison.

The big reservoirs behind Glen Canyon and Hoover Dam continue to draw down. Now, besides impacts to endangered fish and to our federal reserve lands such as the Grand Canyon, human cities and farms are at risk.

It is possible that the reservoirs will refill. But looking forward to such an occurrence is irrelevant because in terms of measuring of Colorado River time in decades and centuries, the river will behave statistically as it has for the last millennium. Climate change, as scientists have forecasted, will increase the odds that the Colorado River will become less productive on the supply side. And if climate change doesn't stress the system, then human growth in metropolitan cities surely will. And then comes the bigger reality: the dams will need to be decommissioned because they are old or water storage has been replaced by sediment storage.

Decommissioning isn't a choice and it never was. It is something we have to deal with and it has to become part of the management plan for the users of the Colorado River. This is why the campaign to decommission Glen Canyon Dam is legitimate and this is why it will continue.

Right now the Bureau of Reclamation is performing an Environmental Impact Statement (EIS) on the operations of Glen Canyon Dam and Hoover Dam. The only proposal that addresses the need for long-term management was submitted by the staff of Living Rivers. The document is called "The One-Dam Solution" and has 70 citations.

I recommend that you read this report (and the others) and get ready to provide comments yourself when the Draft EIS comes out sometime at the end of 2006. Please visit these web pages to download the comments that were submitted during public scoping. The EIS is called "Shortage Criteria" or more succinctly, the Development of Management Strategies for Lake Powell and Lake Mead Under Low Reservoir Conditions. Here are the downloading urls:

<http://www.usbr.gov/lc/region/g4000/strategies/list.html>
<http://livingrivers.org/pdfs/TheOne-DamSolution.pdf>

Following is the letter written to BoR by Living Rivers and Colorado Riverkeeper with the support of 144 groups both non-profit and profit (200 groups support a Glen Canyon Dam Supplemental EIS).

November 30, 2005
Mr. Bob Johnson
Regional Director
Bureau of Reclamation, Lower Colorado Region
Attention: BCOO-1000
P.O. Box 61470
Boulder City, NV 89006-1470

Mr. Rick Gold
Regional Director
Bureau of Reclamation, Upper Colorado Region
Attention: UC-402
125 South State Street
Salt Lake City, Utah 84318-1147

Dear Mr. Johnson & Mr. Gold,

Living Rivers, Colorado Riverkeeper, and the 144 undersigned organizations submit the following report, The One-Dam Solution, as scoping comments for the development of management strategies for operations at Lake Powell and Lake Mead, on the Colorado River, under low reservoir conditions.

With current demand for Colorado River water nearly at the river's historical annual flow of 13.5 million-acre feet (MAF) and rising, and government-sponsored scientists anticipating average annual flows to decline 18 percent by 2040, the prospect of ongoing low water conditions for Colorado River reservoirs is a near certainty. The average flow of 60 percent into the system for the past six years is firm evidence of this.

For more than 25-years, government scientists and administrators have warned that shortages would be occurring now. This action is the first to reexamine the flawed operational strategies that have been in place as far back as 1922 when the Colorado River Compact allocated 11 percent more water than the Colorado River has to give.

Reexamining these two reservoirs is critical, as they constitute more than two-thirds of the system's storage capacity, which with declining inflows and increased demand are proving excessive.

Meanwhile, these two reservoirs can cause the loss of upwards of ten percent of the river's average annual flow due to evaporation—valuable water for critical habitats and water users downstream.

Furthermore, the challenges facing the future operations of these reservoirs go beyond water allocation and storage inefficiencies. Sediment entering Lake Powell will eventually compromise Glen Canyon Dam's safety. Despite recent warnings that this could happen sooner than the 40-year-old estimate of 2060, there has been no comprehensive monitoring or analysis conducted to address this inevitable problem.

Lastly, despite more than \$200 million already spent, no gains have been made to restore the critical habitat for endangered species in Grand Canyon National Park impacted by Glen Canyon Dam's operations. The mandates of the Grand Canyon Protection Act and the Endangered Species Act in particular are being ignored to maintain Lake Powell even though it is proving to be both wasteful and

unnecessary for water storage.

It is therefore critical that the Bureau of Reclamation broadly reexamine the operations of these facilities in accordance with preparing an Environmental Impact Statement to address the following:

- 1) Pursue transfers of Lake Powell and Lake Mead storage to groundwater aquifers.
- 2) Develop a sustainable sediment management program for Lake Powell and Lake Mead.
- 3) Determine the costs and benefits of decommissioning Glen Canyon Dam to restore natural flows through Glen and Grand Canyons.
- 4) Identify new water allocation guidelines to reflect the amount of water the Colorado River actually provides, how it should be distributed and what amounts are needed to protect critical habitats in Grand Canyon and elsewhere.

A water management crisis is looming on the Colorado River. The federal government, as Water Master, has the responsibility to help avert this. Most of the issues addressed in the attached report are not new, but continuing to ignore them will only worsen the impacts once the crisis arrives.

Thank you for the opportunity to submit these comments. We look forward to assisting the Bureau of Reclamation in developing this Environmental Impact Statement concerning the protection of water resources from the Colorado River in times of shortage.

Sincerely yours,
John Weisheit
Conservation Director, Living Rivers
Colorado Riverkeeper

Attachment: The One-Dam Solution
Submitted July 26, 2005 at Henderson, Nevada

On behalf of the following groups:

A Critical Decision, Alabama Environmental Council, Alaska Coalition, American Wildlands, Animas Riverkeeper, Appalachian Forest Coalition, Audubon Society of Greater Denver, Ballona Institute, Black Warrior Riverkeeper, Blackwater/Nottoway Riverkeeper, Bluewater Network, Boulder Regional Group, Buckeye Forest Council, Californians for Western Wilderness, California Save Our Streams Council, Casco Baykeeper, Castle-Crown Wilderness Coalition, Center for Biological Diversity, Choqueyapu Riverkeeper, Citizens of Lee Environmental Action Network, Citizens Progressive Alliance, Coalition for Jobs and the Environment, Coastal Law Enforcement Action Network, Cold Mountain & Cold Rivers, Coloradans for Utah Wilderness, Colorado Plateau River Guides, Colorado White Water Association, Columbia Riverkeeper, Conservation Northwest, Coosa River Basin Initiative, Devil's Fork Trail Club Dogwood Alliance, Earth Action Network, Ecology Center, Electors Concerned about Animas Water, Endangered Habitats League, Erie Canalkeeper, Flagstaff Activist Network, Forest Guardians, Forest Watch, Forests Forever, Foundation for Global Sustainability, Four Corners School of Outdoor Education, Free the Planet, Friends of Living

Oregon Waters, Friends of the Animas River, Friends of Blackwater Canyon, Friends of the Earth, Friends of the Eel River, Friends of the Estuary at Morro Bay, Friends of Hurricane Creek, Friends of the Milwaukee River, Friends of the Nanticoke River, Friends of Yosemite Valley, Gifford Pinchot Task Force, Glen Canyon Institute, Goods From The Woods, Grand Canyon Private Boaters Association, Grand Riverkeeper, Great Egg Harbor Watershed Association, Great Old Broads for Wilderness, Greenaction for Health and Environmental Justice, Green Delaware, Green Party of Utah, Green Party of York County, Hells Canyon Preservation Council, Hudson Riverkeeper, Hurricane Creekkeeper, Indiana Forest Alliance, Inland Empire Waterkeeper, International Rivers Network, International Society for Preservations of the Tropical Rainforest, Johnson County Green Party, Jumping Frog Research Institute, Kern Valley River Council, Kettle Range Conservation Group, Land Institute, London Canalkeeper, Lone Tree Council, Los Alamos Study Group, Louisiana Bayoukeeper, Lower Neuse Riverkeeper, Maricopa Audubon, Milwaukee Riverkeeper, Montana River Action, Morava Riverkeeper, National Organization for Rivers, National Water Center, New Riverkeeper, New River Foundation, Northwest Rafters Association, Northwoods Wilderness Recovery, Neuse River Foundation, Ogeechee-Canoochee Riverkeeper, Orange County Coastkeeper, Oregon Natural Desert Association, Outdoor Adventure River Specialists, Outward Bound West, Patapsco Coastkeeper, Patrick Environmental Awareness Group, Puerto Rico Coastkeeper, Raritan Riverkeeper, Red Rock Forests, Restore: The North Woods, Ridgeline & Open Space Coalition, River Runners for Wilderness, Riverhawks Rocky Mountain Peace and Justice Center, Russian Riverkeeper, Sacramento River Preservation Trust, Salt Creek Watershed Network, San Diego Coastkeeper, San Luis Obispo Coastkeeper, Santa Monica Baykeeper, Satilla Riverkeeper, Save the Illinois River, Siskiyou Project, Snake River Alliance, South Riverkeeper, South Yuba River Citizens League, Southern Appalachian Forest Coalition, Southern Utah Wilderness Alliance, Spirit of Sage Council, Swan View Coalition, Taking Responsibility for the Earth and Environment, Taxpayers for the Animas River, The Clinch Coalition, The River Project, Umpqua Watersheds, Upper Coosa Riverkeeper, Upper Neuse Riverkeeper, Ventura Coastkeeper, Virginia Forest Watch, Waterkeepers of Australia, West/Rhode Riverkeeper, Western Lake Erie Waterkeeper, Western Lands Project, Western Watersheds Project, Wetlands Action Network, Wild South, Wild Virginia, Wild Wilderness, Wilderness Watch and Wildlaw.



Press Release

November 8, 2005

For immediate release

Contact: John Weisheit, 435-259-1063

Dr. Robin Silver, 602-246-4170

Federal Government Notified of Intent to Sue Grand Canyon Fish v. Glen Canyon Dam

Living Rivers and the Center for Biological Diversity today notified the Bureau of Reclamation and Fish and Wildlife Service of their intent to sue over violations of the Endangered Species Act resulting in the demise of endangered native fish in Grand Canyon National Park.

For more than a decade the Bureau of Reclamation has been required to modify the operations of Glen Canyon Dam on the Colorado River to reverse the dam's downstream impacts on Grand Canyon's famed river ecosystem. However, as outlined in a letter sent to Department of Interior officials today, these efforts have failed.

"Since the Fish and Wildlife Service issued its Biological Opinion on the dam's operations in 1994, the Bureau of Reclamation's actions have merely made things worse," says Living Rivers Conservation Director John Weisheit. "One more fish species is effectively extinct in the Canyon, and another is on the verge."

Just eight native fish species once lived in Grand Canyon's desert river corridor, six of which could not survive anywhere else in the Colorado River. Now only four species remain, one of which, the Humpback Chub, has declined to just a few thousand fishes.

In 1992 Congress passed the Grand Canyon Protection Act to reverse this decline. Following the completion of an Environmental Impact Statement, three years later, the Glen Canyon Dam Adaptive Management Program was established to guide the Bureau of Reclamation in implementing recovery guidelines set forth by of the Fish and Wildlife Service.

Now, some 13 years later, the United States Geological Survey has evaluated this program and has confirmed what many scientists have been saying for years, that recovery is not being achieved. Released on October 25, their 220 page "The State of the Colorado River Ecosystem in Grand Canyon" report states:

"...it is clear that the restrictions on dam operations since 1991 have not produced the hoped for restoration and maintenance of this endangered species

"Overall, about 15% - 20% of the adult humpback chub are dying each year. If this mortality rate and the dramatically reduced recruitment rate of young chub experienced since the early 1990s remain unchanged, there will be a decline in the adult population of humpback chub from the present 3,000 - 5,000 fish to a level of 1,500 - 2,000 adult fish over the next 10 - 15 yr.

"...the MLFF [Modified Low Fluctuating Flow] operating alternative has not effectively mitigated the influence of regulation with respect to either the thermal and hydrologic changes or the fine-sediment supply limitation of the

downstream ecosystem."

"It's outrageous that the public has invested more than \$200 million to help the Bureau of Reclamation restore the river habitat in Grand Canyon, and all they have to show for it is fewer fish." says Dr. Robin Silver, Board Chair of the Tucson-based Center for Biological Diversity. "It's time they re-tool their strategy before Grand Canyon's river ecosystem is lost forever."

The groups are demanding that in light of the mounting evidence of no progress, the Fish & Wildlife Service is compelled by law to immediately reinstate consultation and devise a new strategy to ensure recovery of Grand Canyon native fish, particularly the Humpback Chub. Key issues that must be addressed are:

- * Restoring a water temperature regime that once fluctuated seasonally from near freezing to 80 degrees Fahrenheit, but now is a constant 47 degrees year-round.

- * Restoring river flows that fluctuated seasonally from 3,000 to 100,000 CFS (cubic feet per second), but now can fluctuate daily from 8,000 to 20,000 CFS.

- * Restoring the sediment and nutrients that nourished Grand Canyon's aquatic habitat, 95 percent of which is now trapped by the dam annually.

- * Controlling non-native fish which have flourished in this new environment, competing with, and preying on, the native fish.

"The Colorado River through Grand Canyon is one of this planet's most precious gifts, but the Bureau of Reclamation remains hell-bent on destroying it," adds Weisheit. "This ecosystem may not survive much longer with that dam in operation, but we could certainly survive were that dam not there."

More than 200 groups from across the country now advocate the decommissioning of Glen Canyon Dam as the best alternative for restoring the river ecosystem in Grand Canyon National Park.

For more information:

60-day notice letter

http://www.livingrivers.org/pdfs/CBD_LR_Notice.pdf

Biological Opinion: Glen Canyon Dam

<http://www.livingrivers.org/pdfs/BOgcd.pdf>

USGS SCORE Report, released on October 25, 2005

The State of Natural and Cultural Resources in the Colorado River Ecosystem

<http://www.gcmrc.gov/products/score/2005/score.htm>

LR Press Release, October 24, 2005

Grand Canyon Restoration Program, a Failing Grade

<http://www.livingrivers.org/archives/article.cfm?NewsID=690>

Glen Canyon Dam Adaptive Management Program

<http://www.usbr.gov/uc/rm/amp/index.html>

Living Rivers

<http://www.livingrivers.org/>

Center for Biological Diversity

<http://www.biologicaldiversity.org/swcbd/>