

The Confluence

The Journal of Colorado Plateau River Guides

Volume 2, Number 3. Summer/Fall 1995



ACTION ALERTS!
on
**Utah Wilderness
Animas-LaPlata
Uranium Waste**

The Prez Says

Overflights

Droughts

Stories

Poetry

What a Summer!

USGS Stateline Gauge

The Cutler Group



Gnarley boatmen Ken DeVore and Robert Deglas in debrief below Rapid #27 in Cataract Canyon. Photo courtesy of Michele Reaume.

The Confluence

...is the quarterly journal of Colorado Plateau River Guides, Inc. Colorado Plateau River Guides is a 501 (3) (c) non-profit organization dedicated to:

- * Protecting the rivers of the Colorado Plateau.
- * Setting the highest standards for the river 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 rivers of the Colorado Plateau.

Membership dues:

- \$20 per year.
- \$100 for 6 years.
- \$195 for life.
- \$295 Benefactor.

General Meetings and Board of Directors Meetings will be announced.

Officers

President Susette DeCoster-Weisheit
Vice President Tim Thomas
Secretary/Treasurer John Weisheit

Directors

Bluff Tom Rice
Green River Sean Brown
Moab Steve Young
Vernal Penny Elder

Colorado Plateau River Guides
P.O. Box 344
Moab, UT 84532-0344
(801) 259-8077

We need articles, artwork, poetry, photos, stories, and opinions. This journal is composed with Word Perfect 5.1 on an IBM PC. If you use a word processor, we can translate most programs at CNHA/CCV, which uses IBM and Macintosh programs with various disc drives. Otherwise, please send your text double-spaced. Please include useful photos, charts, diagrams and artwork. There really is no deadline, but the beginning of each quarter works best.

A 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 Colorado Plateau River Guides, nor Canyon Country Volunteers. If you have an opposing or supporting viewpoint please send your comments to: **Editor, CPRG; P.O. Box 344; Moab, Ut 84532.**

ACTION ALERTS!

In this issue we have published "action alerts" for the Animas-LaPlata Project, Utah Wilderness and the Atlas uranium waste pile. Please take the time to write some well-constructed letters this winter. Your voice does make a difference!

ALSO IN THIS ISSUE -- STORIES AND POETRY

It is interesting that some of the guide contributions made for this issue dealt with literary expressions in the form of stories and poetry. This is what The Confluence too is about -- to record the unique experience and spirit of the river running community. The membership should be aware that The Confluence is archived in universities and museums and will be read by the generations to come. This is a good reason for members to contribute more information to this journal -- to preserve our river experience, our concerns and our community spirit.

GRAND CANYON RIVER GUIDES MEETING

The CPRG board went to the GCRG meeting at the Tour West warehouse in Fredonia, AZ, on October 28 and 29. We would like to thank GCRG and Tour West for their kind hospitality. We had a really good time and enjoyed a very productive meeting. The CPRG board felt it was important to continue the tradition of meeting together in the Fall, remembering that this is how CPRG began and these roots should not be forgotten. Glen Canyon Dam is only a physical barrier between us -- not a spiritual barrier.

RIVER RENDEZVOUS

In view of the above statement, we are proposing to have a Fall Meeting for CPRG and GCRG at the Cunningham Ranch in the Book Cliffs. Beside formal meetings we will have seminars and a one day Westwater float trip. Field trips to discuss human and natural history will be conducted in Sego Canyon, the John W. Powell Museum and Crystal Geyser. The tentative date is the last week of October or the first week of November. We would appreciate hearing from members who can volunteer time and equipment.

Action Alert!

FROM: COLORADO RIVERS ALLIANCE THE ANIMAS-LAPLATA PROJECT

by Nancy Jacques

Over thirty years ago, when the Bureau of Reclamation was in its heyday of dam building, the Animas-La Plata Project was conceived in order to bring water to the "dry side" ranchers in the high desert of southwest Colorado. Water rights on the La Plata and Mancos rivers were already over-appropriated. There simply wasn't enough water to develop the area.

The idea was hatched to pump Animas river up 1,000 feet, over two ridges, and into drainages on the other side, but there were and are challenges. Design is still not completed due to unsatisfactory solutions to various geological, environmental, recreational, aesthetic and technical dilemmas. Still, despite earth faults, archeological finds, endangered species, and questionable design, the project got validation through the Indian Water Rights Settlement Act in the late 1980s. This Act intended to ratify delivery of water to Native American (and non-Indian) wanting to develop the "dry side" of Colorado within the project area.

Now, under current existing Reclamation policy requiring users to assist in paying for water used, the project water would be too expensive for farming by the non-Indian interests. Thus, once built, the project would remain subsidized by the American taxpayer.

Further, the project itself is designed in two phases with the majority of facilities that would deliver water to meet the Indian Water Rights Settlement Act included in Phase Two. But the government is obligated to build only Phase One. This means that the agreement that was to satisfy the needs and rights of Native Americans is not being met through this project as designed...nor is there any obligation to do so.

The project doesn't seem to die despite its gross inequities because of its *imposed* link to historical and real social injustice done to the native American, but can we really settle 100 years of disgraceful events and attitudes in the symbol of a half-built undeliverable water source?

There are alternatives that are more environmentally sound and would fully deliver water that has been promised...*thus meeting those obligations!*

The Bureau of Reclamation is changing, but politics are not. A number of Reclamation projects built from the 30s through the 60s are being dismantled because of lessons learned about poor economic theory and the expense of trying to restore environmental damage. Despite this trend, political pull in the right places have kept the Animas-La Plata on the "to build" list.

"I call it Jurassic Pork," says Phil Doe, a Bureau of Reclamation environmental compliance officer in Denver. "They say it's for the Indians, but it's clearly a developer's project, and taxpayers are going to pay for it."

For further information, see High Country News, "The Dam that Won't Die", March 22, 1993.

Colorado Rivers Alliance is asking concerned citizens to send a letter or post card to key congressional members with the following sentences as examples:

1) "I have just floated the Animas River and I do not want to waste one billion dollars plus subsidies on the building of the Animas-La Plata Project. There are viable alternatives."

2) "The Animas River is beautiful and no dam diversion project costing one billion dollars plus subsidies should be built. Congress needs to look at the alternatives that exist to the Animas-La Plata Project."

3) "I have visited the site of the Animas-La Plata Project and I do not support it being built. I believe the cost of one billion dollars is not keeping with the Federal agenda and that there are sound social and environmental alternatives."

You can write your own member of Congress by using the following zip codes [See page four of this issue for further letter assistance]:

Honorable...
U.S. House of Representatives
Washington, D.C. 20515

Honorable...
United States Senate
Washington, D.C. 20510

SENATORS

Chairs of key committees:

Pete Dominici (Budget) 20510-3101
Mark O. Hatfield (Appropriations) 20510-3701
John McCain (Indian Affairs) 20510-0303
Frank Murkowski (Energy and Natural Resources) 20510-0202
John H. Caffer (Environmental and Public Works) 20510-3902

Area Senators:

Jeff Bingaman (D-NM) 20510-3102
Hank Brown (R-CO) 20510-0604
Ben Nighthorse Campbell (R-CO) 20510-0605

HOUSE OF REPRESENTATIVES

Chairs of key committees:

Bob Livingston (Appropriations) 20515-1801
John R. Kasich (Budget) 20515-3512
Don Young (Resources) 20515-0201

Area Representatives:

Scott McInnis (R-CO 3rd) 20515-0603
Bill Richardson (D-NM 3rd) 20515-3103

Action Alert!

FROM: SOUTHERN UTAH WILDERNESS ALLIANCE

Legislation introduced by the Utah Congressional delegation -- H.R. 1745 and S.884 -- would take Utah's 22 million acres to be drilled, mined, dammed and stripped. Even the remaining 1.8 million acres that would be called wilderness under this legislation could be subjected to off-road vehicles, a gas pipeline, new dams, reservoirs and roads, and communication towers.

Further, H.R. 1745 and S. 884 would impose "hard release" language on lands not currently designated as wilderness. This "hard release" would hogtie future generations by preventing the U.S. Interior Department from protecting these lands for possible wilderness status in years to come, a restriction that has never before been imposed on any wilderness bill. This ploy, if successful, will undermine the original Wilderness Act of 1964, an honored law that has provided the foundation for our nation's entire wilderness system. Thousands of Utah citizens oppose this giveaway. At hearings held across the state and on Capitol Hill, through countless petitions, phone calls and letters, they have voiced their passionate objection to the sacrifice of southern Utah. Even the Salt Lake Tribune called the delegation's proposal a "dissapointment" that "has simply not offered enough protection for Utah's wild land."

We have another choice. The *Citizens Proposal for Redrock Wilderness*, as outlined in H.R.1500, the Redrock Wilderness Act sponsored by Rep. Maurice Hinchey, offers a balanced, reasonable plan for conserving America's natural heritage while providing for solid economic opportunity. While H.R.1500 would designate 5.7 million acres of southern Utah as part of the National Wilderness preservation System, it still makes 16.3 million acres available for development. That's almost three times more land to exploit than conserve. Shouldn't that be enough?

The *Citizens Proposal* will protect 5.7 million acres of unparralled redrock wilderness, a world-renowned region of slickrock canyons, stunning cliffs, splendid mountains and startling rock formations that may be found only in southern Utah -- but belong to all Americans.

Action Alert!

FROM: GRAND CANYON TRUST

Congress is currently considering legislation that would damage millions of acres of critical wildlands in Utah. Under the guise of a "wilderness" bill, the Utah Public Lands Management Act - H.R. 1745 and S. 884 -- would forever foreclose wilderness protection for hugh areas of public lands in Utah. Introduced by Utah Senators Hatch and Bennett, and Representatives Hansen and Waldholz on June 9, the act is being pushed through Congress on a fast track. Hearings in the House of Representatives were completed just days after the bill was introduced without time for adequate review and comment. By the time you read this letter the bill may actually have passed the House! Our best chance to stop it now is in the Senate. Letters to your Senators are needed to halt this unfortunate legislation. The bill as written is flawed for a number of reasons:

** It includes only 1.8 million acres of the 5.7 million acres of wilderness-quality BLM lands in Utah, and would **redefine wilderness by allowing uses and impacts that have never before been permitted in any previous Congressional designations.** Specifically, the bill would allow:

* construction of dams and transmission lines in the proposed Red Mountain, Canaan Mountain, Parunuweap and Cougar Canyon Wilderness areas;

* construction of new roads through wilderness areas to service future water projects;

* construction of a gas pipeline through the proposed Desolation Canyon Wilderness area;

* construction of new communications facilities in the proposed Fifty Mile Mountain, Mount Ellen, Deep Creek, and Swasey Mountain Wilderness areas;

* permit future upstream water claims to dry up rivers and streams in wilderness areas.

** In unprecedented "hard release" language, it would permanantly prevent the BLM from protecting the wilderness values of any lands not designated as wilderness in this bill, and from ever again recommending any of these lands to Congress for wilderness designation, essentially eliminating wilderness as one of many options in "multiple use" land management.

WHAT MEMBERS OF COLORADO PLATEAU RIVER GUIDES CAN DO TO CONTEST S. 884:

1) Write to your U.S. Senators and the Utah Senators to vote against S. 884, the Utah Public Lands Management Act as proposed by members of the Utah delegation.

2) Write to key Senators, such as:

Bennett Johnston, Louisiana

Dale Bumpers, Arkansas

Tom Daschle, Senate minority leader, South Dakota

Daniel Akaka, Hawaii

3) Write to Secretary of the Interior Bruce Babbitt and urge him to recommend that President Clinton veto this legislation if it is passed by Congress in anything like its present form.

Addresses:

The Honorable [1. your U.S. senator]
[2. Utah Senator Orrin Hatch and Robert Bennett]
[3. The key Senators]

U.S. Senate
Washingon, D.C. 20510

The Honorable Bruce Babbitt
Secretary of the Interior
1849 C Street, NW
Washington, D.C. 20240

Action Alert!

Reclamation Plan by Atlas Mineral Corporation
Victimize's the Colorado River!

by Rebecca Martin

The time has finally arrived for river guides to be able to do something about the clean-up of the Atlas Mineral Corporation's uranium tailings pile which is sitting unlined in the flood plain of the Colorado River at the north end of Moab. Because Atlas ran different processing circuits at various times, there is a long list of pollutants that include left over reagents, different ores, and heavy metals, such as: chromium, molybdenum, selenium, and arsenic. Plus a whole range of radioactive isotopes like: thorium, radium, bismuth, and others. The pile is an 11,000,000 ton mountain of such waste materials, built up from 1956 to 1984, and left exposed on the banks of the Colorado River, whose annual floods will saturate the base of the pile and transfer these pollutants into our ground water and the river.

Knowing this, do you feel it is safe to boat or swim in the river? Do you think it is safe to drink the river water, even if you use a filter, which is unable to extract heavy metals? Did you know that the proposed reclamation project to cap the pile in place will involve 14,000 to 15,000 truckloads of rock that will be excavated from Round Mountain in Castle Valley and then transported along the River Road (Hwy 128) over the next five years? Have you considered the danger this heavy equipment traffic will cause? Maybe we should put out a little effort and try to have the piled removed!

The first step, it seems, would be to find out the real status of things and to inform ourselves properly. It just so happens that a hard-working, well-informed contingent is out there, ready to help us out with this step. All we have to do to get started is to attend future public information meetings, such as the one that occurred on November 16th at Star Hall in Moab. Other hearings will follow where our voices can be heard, but timing is critical. A new EIS is scheduled for release in January, with a mere 30 days expected for public comment. The scuttlebutt is that there are numerous important points which can be made effectively in the effort to have the tailings pile moved during the clean-up. Letters can be sent now as well as then. The more letters, the better.

TO BE EFFECTIVE, WE HAVE TO FORMULATE OUR OPINIONS AND BE READY TO EXPRESS THEM IN EARLY JANUARY.

Obviously, I am advocating that we get together on this and see if our voices can't make the all-important difference. It is my opinion that we owe it to this mighty and precious river, we call home, to do what we can. Let's show up at all future informational meetings as a first step in preparing ourselves to speak out with an accurate and effective approach to back our feelings. See you there!

For copies of the EIS contact:

Myron Fliegel
Project Manager
United States Nuclear Regulatory Commission
Washington, D.C. 20555-0001

Write comments to:

Governor Michael Leavitt
State Capitol Building
Salt Lake City, UT 84114

Senator Orrin Hatch
6317 Dirksen Senate Office Building
Washington, D.C. 20510

Senator Robert Bennett
6317 Dirksen Senate Office Building
Washington, D.C. 20510

Congressman Bill Orton
1129 Longworth House Office Building
Washington, D.C. 20510

A letter of thank you and encourage continued support to:

William Sinclair
Division of Radiation Control
Department of Environmental Quality
State of Utah
168 North 1950 West
P.O. Box 144850
Salt Lake City, UT 84114-4850

THE SOUND OF SILENCE

by Tim Thomas

"Silence is something more than just a pause; it is that enchanted place where space is cleared and time is stayed and the horizon itself expands." Herman Melville

Eloquent words about that which is the absence of noise, a space in which one can hear one's blood pulsing, or an animal's breath, the wind in your ears -- or maybe aircraft. Where does one find silence or natural quiet? Then once found, how do we protect and preserve it?

On September 22, 1994, the Sierra Club Legal Defense Fund (SCLDF) filed suit in Federal Court in an attempt to force the Department of the Interior (DOI) and the National Park Service (NPS) to issue a report to Congress on the noise impacts of aircraft overflights in national parks. The study and subsequent report were mandated by Congress in 1987. The report due by August of 1990, was released eleven days after the SCLDF filed suit. The title of the report was Report on Effects of Aircraft Overflights on the National Park System and was used as a primary source for this article.

On April 5, 1993, H.R. 1696 was introduced to provide for "the management of airspace over NPS lands in the state of Hawaii by the Federal Aviation Administration (FAA) and NPS and for other purposes". A year later on March 24, 1993, H.R. 4163 was introduced to "enable the NPS to regulate, or prohibit, scenic commercial overflights at units of the NPS". On August 25, 1994, Senate bill S. 2428 was introduced to "provide for the management of airspace over the units of the NPS and for other purposes". Most recently on June 25, 1995, David Skaggs of Colorado introduced H.R. 1954 to "amend the NPS Concessions Policy Act to enable the Secretary of the Interior to authorize scenic commercial overflights at units of the NPS and for other purposes".

From the amount of proposed Congressional legislation on regulating either airspace of aircraft over national parks, one might assume that first, the Nation's national parks are a source of natural quiet or silence, and second, that there are problems with the quiet and how to best protect it. Indeed there has already been non-regulatory action taken by the FAA to help address noise and safety concerns at a few national parks, and last December a DOI and Department of Transportation (DOT) Interagency Work Group was established by Secretary Pena and Secretary Babbitt to help address noise concerns in the national parks. So far, there have been no easy answers, some attempts at mediation, if not solutions, and little progress in actually culminating noise from overflights in our national parks.

The NPS is the focus of an attempt to try to address the noise problem for a reason. National parks were formed around area of unique and outstanding

physical or cultural features. To assist in protecting and managing the parks, the NPS was created by Congress to "promote and regulate the use of Federal areas known as national parks.. [so as to] conserve the scenery and the natural and historic objects and the wildlife therein and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations".

In 1978 the NPS Organic Act was amended by the Redwoods Act that clearly defines resource preservation as the primary responsibility of the NPS. Natural quiet is one such resource that is also clearly defined as the natural ambient sound conditions found in a park.

Parks contain both tangible and intangible resources. Intangible resources include such things as solitude, space, scenery, clear night skies, sounds of nature, and natural quiet. In managing the numerous goals of the Organic Act, the NPS also attempts to provide the opportunity for visitors to experience solitude or nature in a state unaffected by civilization. In the case of natural quiet, preserving the quiet is directly related to how quiet it is. Natural ambient sound varies considerably depending on the physical characteristics of the park. The pounding beach surf at one park and the arid, sparsely vegetated desert type environment of another park exemplify two extremes. Humans are not always aware of the audible sounds, depending on the activity and or intensity level of their actions. Additionally, first time and "frontcountry" (vs. backcountry) visitors to parks are generally less affected or aware of overflight noise than are repeat or backcountry visitors.

Considerable time and effort were required to produce the Report on Effects of Aircraft Overflights on the National Park System. Visitors and management responses to impacts associated with aircraft overflights show it is likely that as many as 50 to 100 units of the park system currently may have overflight problems. Of the parks with perceived overflight problems, most manager's rate aircraft as one of their more important management problems. About 70% of the managers identified aircraft as a potential sound problem. However, passenger satisfaction with air tours coupled with visitor interest in seeing the park from the air, imply that the demand for air tours will continue and hence the number of tour overflights and the number of parks affected will increase in the future.

Aircraft overflights have injurious effects on resources other than natural quiet. Cultural and historical resources, sacred sites, and ceremonies are also affected. Audible and visual intrusions of aircraft impact on visitor's abilities to experience authentic historical settings and ceremonies. Sound vibrations from certain types of aircraft can damage archaeological resources and structures, especially sonic booms and helicopter "blade slap" or "thickness". Wildlife may also be adversely affected by aircraft overflight by disturbing habitat, breeding, mortality, and feeding. A park visitor's

experience is affected by aircraft overflights differently depending on a number of variables. Visitors come to parks for different reasons: to view the scenery, enjoy the quiet, engage in specific activities individually, or as a group, and to learn. Park visitors seeking experiences away from "civilization" (primarily backcountry users) are affected greater than are frontcountry visitors. Visitors engaging in activities around motors or motor vehicles are less likely to be affected by aircraft overflight noise. However, enjoying the natural quiet is about as important as viewing natural scenery as a reason for park visitation cited in two NPS studies (McDonald, et. al., 1994; Anderson, et. al., 1993).

According to these studies, one fifth of all visitors to the national parks (approx. 80 mil./yr.) remember seeing or hearing aircraft during their visit to the park and about 2 to 3 percent of all visitors (approx. 10 mil./yr.) report having their enjoyment interfered with, being annoyed, or having their appreciation of natural quiet interfered with by the sound of aircraft. Visitors also report negative reactions to the sound of aircraft at specific sights, and these negative reports increase as exposure to aircraft sounds increase. Aircraft overflight in national parks comes in a variety of forms in terms of the type of aircraft and overflight purpose. Overflights include commercial, military, sightseeing, emergency, management and general aviation. Commercial overflights are almost twice as numerous as either sightseeing or general aviation overflights, with commercial and sightseeing operations being more prevalent than all other types of overflights. Sightseeing customers surveyed said their primary reason for flying was to get a unique perspective of the park. The second reason was that an air tour afforded a fast means for seeing large expanses of the park. Based on industry reports, the air tour industry across the nation accounts for 1/2 to 3/4 of a billion dollars per year. The Grand Canyon alone accounts for approximately 1/4 of a billion dollars. All tolled, the FAA estimates that there are at least 187 air tour operators across the nation.

Restoration of natural quiet in the national parks so far has not met with great success. The NPS and the FAA have attempted through SFAR 50-2 (Special Federal Aviation Regulations) to substantially restore natural quiet in Grand Canyon National Park. SFAR 50-2 was a major accomplishment in that it is the first attempt by the FAA to regulate airspace for environmental and safety reasons over a national park. SFAR 50-2 established four flight-free zones covering 45% of the park and have a ceiling of 14,499 feet above sea level. Four flight corridors were established to help aircraft avoid the flight-free zones. However, acoustic monitoring studies conducted at 23 sites in the Grand Canyon in 1992 revealed that aircraft, especially tour aircraft, are audible high percentages of the time. Aircraft of all types may still be heard for some percent of the time at virtually all areas where sound data were collected, notable within a few miles of the edges of some of the flight-free zones. These results suggest that

a substantial restoration of natural quiet has not been achieved for large segments of the Canyon. The Grand Canyon policy of restoring natural quiet states that substantial restoration requires that 50% or more of the park achieve "natural quiet" (i.e., no aircraft audible) for 75% - 100% of the day. Thus, there has not been a substantial restoration of a natural quiet in Grand Canyon and the NPS recommends that SFAR 50-2 be revised to effect a greater restoration of natural quiet.

There are a number of alternatives or methods for addressing the aircraft overflight problem in national parks. To date, a variety of both regulatory and non-regulatory actions have been implemented with varying degrees of success. Available options include:

Quieter aircraft or retrofitting existing aircraft. This option involves significant expense so incentives would need to be developed. P.L. 102-581, an "Act to Amend the Airport and Airway Improvement Act of 1982..." requires the FAA to identify "any measures to encourage or require the use of quiet aircraft technology by commercial air tour operators".

Spatial zoning or the establishment of flight-free zones and flight corridors help to preserve or restore natural quiet. However, flight-free zones must be quite large in extremely quiet places, approx. 20-30 miles.

Altitude restrictions or setting minimum altitudes have some effect on reducing decibel levels of aircraft noise, but the altitudes necessary to significantly reduce impacts may defeat the purpose of the overflight. The current FAA "advisory" for national park overflights is 2,000 feet minimum altitude and is useful, but should not stand alone as a solution to the park overflight problem.

Greater payload aircraft can decrease the number of overflights and hence duration of noise intrusion.

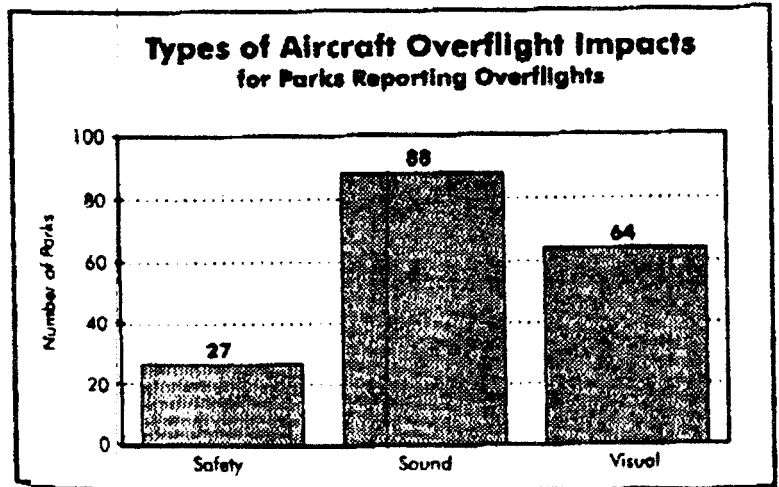
Noise budgets have been used at airports (e.g., Denver-Stapleton) to allot responsibility for and control of noise among operators. This assumes noise can be quantified and each operator can be allocated an amount of "noise" based on previous or existing levels of operation. Drawbacks include monitoring and tracking air operations and not directly addressing adverse impacts on visitor experience.

Limits of air tour operations as concessions enables the NPS to provide visitors that conform to minimum standards, are not priced unreasonably, and are consistent with park values. It also enables the NPS to regulate number and types of visitor activities in the parks in order to preserve resources and ensure quality visitor experiences. The possibility also exists of generating revenues for the parks to help offset management costs.

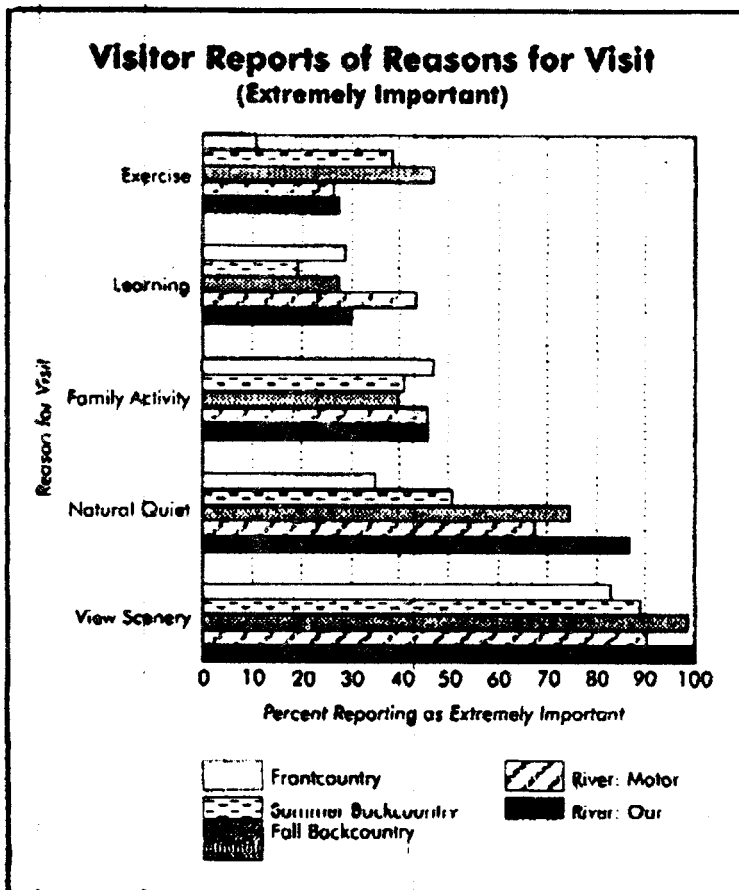
Perhaps the biggest question or controversy involving the NPS and the aircraft overflight problem is whether or not the NPS should involve itself in a realm that so far is the sole sanctity of the FAA, that of controlling airspace.

There is obvious resistance from both the FAA, air tour operators, and even the NPS itself, as to whether the NPS has the time, resources, and expertise to involve itself in managing the airspace over the national parks. Efforts thus far have not gone to this extent, but neither have they sufficiently addressed the problems with aircraft overflights in national parks.

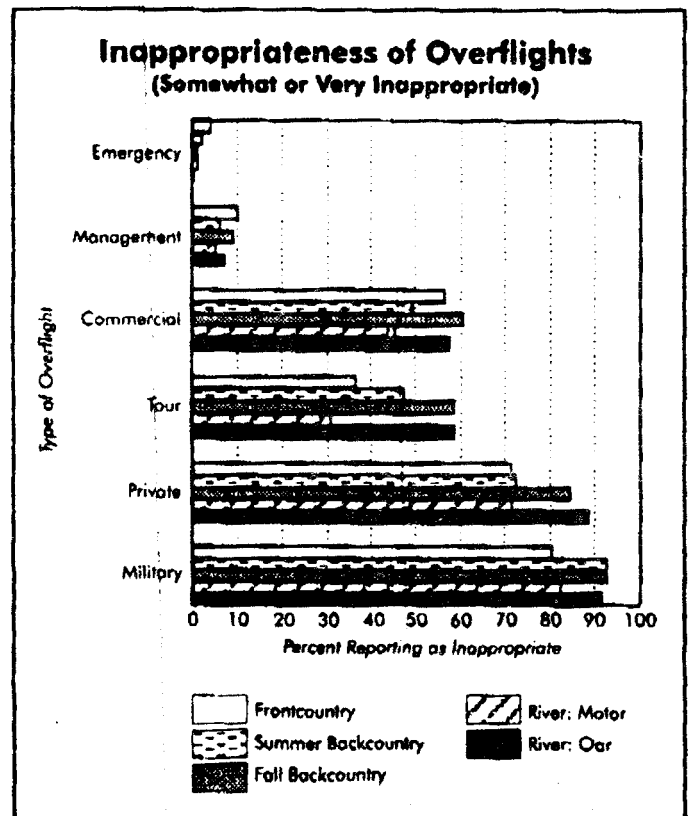
A somewhat tenuous balance exists between continuing on the current path of studies, non-regulatory actions, and Federal agency cooperation, and that of whether or not to legislate the problem [meanwhile the number of park aircraft overflights increase, as to the number of park visitors seeking natural quiet]. I would encourage the reader to consider the variables and issues involved with the aircraft overflight problem, and come to a decision on whether or not Congressional legislation is the preferred alternative to this dilemma. Either way, action needs to be taken on the part of the general public to either inform Congress of the public concerns over this issue in favor of legislation, or in favor of increased cooperative efforts by the DOT, DOI, FAA, NPS, and the greater public. The sound of silence is getting harder to hear.



Park Manager Judgements of Types of Impacts



Visitor Reports of the Most Important Reasons



Inappropriateness of Overflights

What a Summer!

Commentary by Steve (T-Berry) Young

Well the summer seems to be finally over -- and imbedded into the history and minds of the people who found themselves in the thick of good water flows. Like good books, the tales of '83, '84 and '93 have been closed -- numbered, filed into a card catalog, and put upon a shelf for now. The book of tales for '95 is in the process of becoming something -- kind of like being on a computer disk, being proof read, edited and rewritten. Like all good river stories, certain details will be forgotten and other details will grow into the '95 book until another moderate/high water season creates the scenario and cause for a new version. Unfortunately, this version will differ drastically from the previous books -- it marks the coming of a new age of rules, issues and dilemmas. In the article that follows, I tried to cover quickly some of the topics at hand.

THE PARK FOLKS

How about the folks from the park service this year? It was really nice that Jim Braggs and crew were camped-out below the Drops to pick-up all the private and commercial parties swimming by. It was a great service -- even though most companies are able to deal with self-rescues -- that Zodiac makes it quicker and allows for that much more of a rescue net. Hearing two 60 horsepower Mercurys working effortlessly in the current, preparing themselves for a rescue, can be very comforting if you are the rescued. So thank you Jim and crew!

THE FAT CITY FOLKS

I think a mention should also be given to Roger and the folks at Fat City Smokehouse. This September, Roger cooked an incredible meal to say thanks to the boatmun who refer clients to his fine eating establishment. About 40 people showed up at Big Bend for food and stories at this boatmun bash. I wonder if Roger realizes that tourists don't go to his business just because their referred, but because it has the best food in town. Thank you Roger for your support!

THE WILDERNESS PROBLEMS AT WESTWATER

It seems that most people partially know what is up with the Utah wilderness dilemma that started last March with Governor Leavitt. Anyhow, H.R. 1745, the bill that asks for 1.8 million acres, has been submitted to Congress. The problem with this bill is that Desolation and Gray Canyons were left without any protection; which makes it easier for the state to sell the river bottom mining rights to private industry. The bill is also missing an originally proposed 1,800 acre piece, thanks to Grand County council member Ray Pene, who was looking out for his brother, Ron Pene, who has mining claims in the acreage deleted. This bill is bound for a presidential veto for other reasons -- rather than a symbol of how corruption can be overlooked -- no matter how obvious it is. Enid Waldholtz, a republican representative from Utah is looking into adding the Westwater piece into a 300,000 acre amendment she intends to add to the bill when it gets to the house. To add Desolation and Gray canyons as bill H.R. 1500 prescribed, a bill originally formed by Wayne Owens of Utah, supports 5.7 million acres which is now being sponsored by Rep. Maurice Hinchey, Democrat from New York. So please people, get informed and write letters to help our river and occupations.

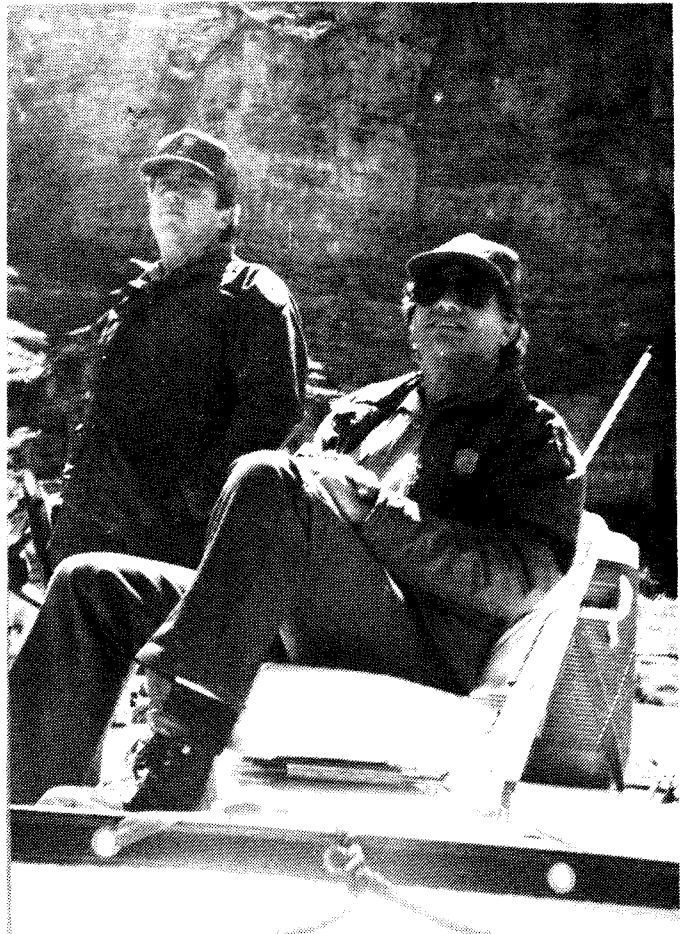
THE INEVITABLE CHANGES

This fall I'm sorting through the tid-bits of information and rumors filed in the back of my brain from all the conversations, meetings and articles acquired this summer. In the process I'm beginning to realize the river guiding industry is going to change. The amount of change I fear will be drastic, yet who really knows this soon in the game. Management plans and concession permits are being reshaped and rewritten in Grand Canyon National Park (GCNP). As of Friday, October 27th, GCNP will know if the previous 16 river concessions are still

concessioners. Several new and previously existing companies bid on the present permits of all the companies currently operating in GCNP. This bidding system for the permits every seven years and numerous other changes are outlined in the new Prospectus of GCNP. Now Canyonlands will follow, not only in the order of time but also in the type of changes possible in their Prospectus. The new Canyonlands concession plan is due out sometime in December, and who knows maybe it will go off the deep end and help create a base or system that will lead to something better for guides, like health benefits?

Oh yeah, the Coast Guard! Their up to some type of licensing requirements by now I'm sure. What are those requirements? I don't know yet, but how does yearly physicals, peeing in a bottle in front of drug dogs at the boat ramp and more expensive classes to fulfill our requirements to get a license to work sound? I doubt if we'll see stuff as mentioned above, but regardless I don't think we should let the changes happen without the voice of the guides being heard. We are professionals that have to play by the rules that the office jocks hand out. Why not be there and voice our opinions at the table to help form the rules. I know of a lot of guides who call themselves professionals, yet they don't care enough about the future of their occupation to join this organization giving it the strength to substantially voice our concerns as professionals.

What can the readers of this article do? Talk to people and get yourself and them involved before it's too late. The BLM ranger who everyone remembers and liked so well at Westwater years ago is on the battle for helping Westwater to win against the present hurdle (see recent High Country News article). We need these type of people who have a love for the rivers and for the profession that we all have spent enormous amounts of time acquiring skills for to join and help direct with an intensified voice the things to make our jobs better in every way.



Jim Braggs and Paul Cowan in the NPS Zodiac.
photo by Michele Reaume.

THE PREZ SEZS

by Susette DeCoster-Weisheit

I can not begin to write about the 1995 season without getting that funny feeling in my stomach (no, not this giardiasis that I'm battling) -- that adrenalin rush reminder that makes you feel like you are once again above the Big Drops. High water was very kind to me this year. As I ran Cataract Canyon, Westwater and Desolation/Grey Canyons at varying water levels, I was constantly reminded of the beauty of the river's soul. Pardon me if I wax poetic on the subject occasionally. Although I was there in high water 1993, this was my first full season at +45,000 operating a boat; therefore, I was "paying my dues" training with fellow boaters and just plain being too nervous to appreciate many of the beauties at those volumes. By mid-season I was in Cataract full-time and I did have my fair share of "the nerves" but the water was so high for so long that it allowed for some adjusting to its intensity and provided the enjoyment of study. It seemed the more trips I ran the more I began to notice. Could it have been a heightened sense of perception due to stress? Maybe. From the extremes to the subtle. Like the wave that literally exploded downstream over the back of my boat, to my first left run in Big Drop II at 67,000 where I slid gracefully over a wave and dropped in behind the Red Wall with hardly a splash. I was being constantly amazed at the contrast of power and gentleness. One day while waiting at lower #5 camp for a boatman to complete her rigging, I stood in my motor well watching the water pulse against the opposite shore. As I watched, the pulses would rise, fall, rise, explode, and I noticed the water lapping at the base of a large limestone rock. Each time the pulse would reach the rock it would explode into multicolored droplets and fall back to the river only to be slammed back with the next pulse, creating yet another beautiful display, but still unable to escape. I am sure that similar observations can be found at low water levels, but in most situations I would not have seen it. My observation and subsequent lesson came from the fact that I was waiting. For that moment I was concentrating on my own thoughts, fears, nerves. I was not hurrying to the next rapid in an attempt to beat time. I was not involved in a interpretive dialogue. I was listening, watching, feeling the river. I think on another day I will find myself writing about the exciting and beautiful moments experienced this year, but for now I will move on.

After a long season, commercial boating has finally ended for the year and left us river rats with a life. Some of us have been seen gathering our private boats and heading to put-ins with a different type of trip in mind. Some of us have headed to ski areas to start phase two of yearly employment. Some of us are hiking, biking, working on personal projects or just plain sleeping and relaxing. Personally I've been doing a combination of most of the above. Whatever the goal, it is nice to decide for myself whether to sleep in or get up and get moving and not having a group of 20 or so people expecting me to wake them and feed them.

The end of the season found me sitting in many meetings listening and commenting on guide issues, river issues, lake issues, outfitter issues and agency issues. I will attempt to update you from my perspective.

The first meeting I attended this fall was a CPRG board meeting in route to the GCRG meeting in Fredonia. Tim, John, Steve and I took the time to have our board meeting over dinner and breakfast prior to the GCRG meeting. Little did we know that the GCRG meeting would bring up so many new ideas and issues. Had time been available we could have held yet another meeting, instead we tabled the ideas until the CPRG Fall Meeting.

The GCRG's meeting brought us up-to-date on some issues that we will soon face here in the upper basin. Their agenda read like a book, but somehow each item listed managed to get discussion in the two days of meeting time. Probably the most interesting topic was the Prospectus. For those of you who have not been keeping up on the concession reform, Congress has required the NPS to include a lot of new requirements for concessions. The Grand Canyon Prospectus is standard 8.5 X 11 sheet paper, is about 2 inches thick and is full of

legal language. I attempted to digest a portion of the document and found myself referring instead to the Boatman's Quarterly Review (Volume 7, number 1) for Brad Dimock's shortened version of guide concerns. The prospectus is basically a bidding process for concessions in the park and anyone can bid or attempt to out-bid on any of the contracts. Experience and background, conformance to terms and quality of service, and financial capability, are the three factors included in the process for the prospectus. The bidding process requires a new fee that will be paid into the *Colorado River Fund* which provides funds that will remain in the park for improvements. What kind of improvements and who will decide what improvements are needed is still undetermined. By agreeing to pay into the fund at a higher rate than required can be considered an asset in the bidding process. Is this extortion?

Here are a few of the new requirements that will affect guides. The Prospectus asks the outfitters how they will: *establish pre-employment screening, hiring, training, termination, and other policies; initiate and carry out a drug-free environment and eliminate substance abuse in (the) work force; identify individuals who abuse drugs or alcohol; hire people of integrity who are both interested in serving the public and national park environment and interested in being positive contributors to the park; go about setting standards and training to standard?* The list goes on and on. Failure to respond to any aspect of the document is considered non-compliance and will eliminate the bid for that contract. The Canyonlands concessionaires are told they will be given their Prospectus in December or January after approval at the regional office. The requirements and conditions are not expected to be much different than the Grand Canyon's and they will have 60 to 90 days to respond. After the Prospectus is issued for Canyonlands you can call me for information, as I will be reviewing it to the best of my abilities. If there are any law students out there who want a challenge call me for a copy and help me out.

Some may ask why I am even bothering to involve CPRG in this mess? The fact is that this process can either hinder or help guides depending on how it is being handled by the agency and the outfitters. Ask yourself just these two questions alone and you decide if we should be interested. *If all on-river employees will be expected to attend formal training, when will the training be available and who is going to pay for it? If we are required to have a drug test for employment, who is going to pay for it?* So as those questions strike the brain consider the past record in this business. It may seem that we are doomed; but, I don't necessarily think we need to be. I think that if we work closely with the process we can see a river interpretive training trip re-established, funding allocations for continued education of guides, physical improvements such as toilets at Potash, and maybe even access to building facilities for some indoor training. Of course, these things can be over looked unless we show interest and support. Foreseeing the eventuality of guide requirements CPRG members have discussed the possibilities of a guide certification system in past meetings. Whether we want to take on that responsibility as a whole or whether we want to help set standards for certification, we need to decide what those standards will be and work with the outfitters and the agencies to ensure that our concerns are voiced. To become recognized as professionals in the industry we need to verbalize the set of standards that each of us live by on the job. I need to hear from all of you so that when I am representing the guide issues I can respond with accuracy.

Important issues discussed at the Utah Guides and Outfitters meetings were presented at the fall meeting for comment. Those of you who were unable to attend will want to know about the following items on BLM and NPS issues respectively:

1. BLM is in serious threat of budget cuts that will endanger the jobs of key field staff. Imagine Westwater without Chad or San Juan without Linda. These cuts would require an already overworked office staff to commute to the put-in for check outs. Write your representatives to tell them how badly we need the field personnel.

2. The pouring of concrete at the Cisco ramp is now under way.

3. In Desolation Canyon there were complaints and citations issued on different occasions because of commercial outfitters camped illegally at Rock Creek. Rock Creek is closed to camping.

1. NPS is finally ready to begin the Colorado River Management Plan. Guide comments and suggestions are welcome and can be mailed to CPRG or feel free to call and discuss them with Dave Wood (NPS Resource Management Planner) at (801) 259-3911 Ext. 2133.

2. A primary topic of concern was camping along the river corridor in Glen Canyon. After much discussion Superintendent Joe Alston has committed to replacing the buoyed sign on the Colorado River Canyon discouraging upstream travelers from camping in the corridor. They are unable to prohibit such camps as there is "no reservation camping in Glen Canyon;" however, they will try to assist us by replacing the sign. The major concern addressed by CPRG was the fact that such boaters are not required to carry toilet systems and fecal content in the beaches is increasing. For this reason guides need to be very careful while camping on the lake.

3. Discussion on the spillway enhancement project for Glen Canyon Dam was introduced. CPRG provided details on the project and although the discussion was limited, there seemed to be concern from some outfitters.

4. The River Interpretive Training/Clean up in Cataract Canyon was discussed and a committee was formed to initiate its renewal.

5. The ongoing discussion regarding emergency operations took up an hour and a half to discuss protocol, language, and intentions. As is most everyone, I am tired of hearing this same old argument. In the next issue, I personally pledge to publish the guide's guide to dealing with an emergency at Hite and other base areas.

One point not discussed at the NPS meeting was that the private river use in Canyonlands has increased significantly. This year over 150 permits were granted from the commercial allocation. I foresee some future discussion on reallocation. Write me or phone me with your comments.



T-Berry punches the Sockdolager in Grand Canyon. Photo by Steve Young.

The Boatmun's Private

by Michele Reaume

Here the professional guide goes holiday...bellhop, boatmun, holiday. By the way, boatmun is not a typographical error. Long ago, in response to feminists appalled by the abundance of *man* in the naming of roles (pigeon holes), the spelling boatmun surfaced. The spelling is meant to be non-gender specific. Plural, it is *min*. My spelling, meant to amuse these personalities, accumulated an understanding.

In the river industry there are individuals who prepare, preside over, and clean-up river trips for a paying public. They do it repeatedly! The individual may be female or male -- whichever -- either has to accomplish identical tasks to result in a commercial river trip. Of course, there are varying levels of ability. Individuals are not equal. (This ideology farts on the feminist haranguing.) One individual may be proficient at entertaining, but delivers an abbreviated, although adequate, safety speech. One individual may be extraordinary with Red Cross and patient care, but unable to co-ordinate the details of a five boat trip. We're just people. I wish those feminists would quit emulating their ideas of man and get on with being an individual.

I am boatmun. I *love* rowing. It happens, I surpass many individuals in this skill.

That, at last, brings me to a high water story:

June 5th, 1995. The permit is filed under DeVore. This is the highest indulgence of the high water pool I can think of. Ken DeVore wagers the Colorado River peaks this week. He'll be there. Michele Reaume and Robert Deglas will operate their own rafts, a Riken Miwok and an Avon Spirit, respectively. DeVore patched the two tube J-rig [22 foot snout] in his yard. Hauled it to the Potash ramp. As is consistent with DeVore in Cataract Canyon (Cat) on a private ticket, the rafts were lashed together and the pod beelined for Brown Betty for a layover camp. There is one stop for the Lathrop hike. Tex's Riverways has their big jet boat moored in the shade at the trailhead when the DeVore party arrives.

Two of the 3D's are aboard. Tex's Riverways is owned by three brothers. Each brother's name begins with a D. So, Dirk, Darren and their passengers are the recipients of the private's antics. Part of that? Oh -- there is a guitar. The guitar is offered to Tex's Riverways' passengers. The passengers exclaim, "there's a musician among us." The fellow tinkles the guitar. He didn't have long because the group also is "doing" the hike. DeVore's group receives the guitar in tune. Solves a problem for the guitar owner.

Brown Betty. The shoreline at Brown Betty is violent. The rafts jerk and cavort. The river reclaimed two yards of beach. The river rises. Day 2 -- some hike. Others remain in camp to witness the rising water. Tex's

Riverways was in the area. Billy Schroeder and Dirk hiked from below Spanish Bottom to Brown Betty to get a glimpse of the raging river in rapid formation.

There was celebration that night. Red Buddha chicken and two worm mescal made it into the bellies of the celebrating. Brad Hanson, donating to the clean-up of the evening's fare, waded into the river to scoop up a pail of water. He stepped on a catfish! Fortunately, his foot bled voluminously, washing the noxious bacteria from the wound. Brad mended without complications. Some think it was due to Captain Morgan.

Day 3. Way A.M. Michele Reaume wakes before the usual early risers. She wanders to the kitchen. She starts the coffee water. Notices the DeVore's feet are hanging over the edge of the beach. She knows they drug their bedding inland once already. The river is rising. It is not as drastic as during Colonel Birdeye's survey of the Grand Canyon in 1923. However, the magic lies in being present to witness it and tell about it.

Further survey of the vicinity, Michele notices the Miwok is so full of river water it is brimming. She strips; saunters to the rafts and bails. No easy task. The raft rushes and bucks and threatens to empty her, not it's river contents. Maybe because the bailing wasn't routine, maybe because the activity was so feisty, she dries off, dresses, continues the coffee thing, but spouts devil horns. The two worm mescal bottle lies askew. The fluid is gone. The worms remain.

Molly Martin hitched onto this trip last minute. Molly flipped during her commercial trip the prior week. She clamored aboard the Miwok at Potash ramp bearing foodstuff. In particular, doughnut holes.

Michele fetched the doughnut holes from the Miwok storage box that morning following the bailing shore. Determined the chopsticks in DeVore's utensils were necessary to tool a womb in the doughnut holes. She shook those worms out of the bottle. Cut each into several pieces and stuffed the doughnut holes with the pieces. It is not known whose devil horns were the most prominent that morning, but Deglas and DeVore had been attentive to the kitchen commotion. They were encouraging everyone to have a doughnut with coffee.

Boats are rigged for the flip. The DeVore party takes it down to Tea Pot (Calf) Canyon or Big Drop I camp. Chris Orem and Joe Kiffmeyer paddled inflatable kayaks (duckies). Chris didn't clear the high haystacks in #7, or the "North Sea". Joe corralled Chris's duckie. Michele swooped into the eddy to relieve Joe of that burden. Chris managed to get to shore, hike upstream, rendezvous with the Miwok to reclaim his boat. He swam again -- twice (!), in the "South Sea" [Mile Long]. Chris was toppled by one wave. Midstream he affects a self-rescue. The duckie is righted. He is hauling himself up and onto ... whop! Another wave takes him over. Chris is able to recover and tuck into that left eddy at "Been Hurt". That eddy is a keeper. Chris would have been

Carnage Fest '95

by Eric Trenbeath

better off swimming; missing that dadblasted locale. He is pretty near tuckered when he arrives at camp. Chris rolled the duckie up the next day. He joined the J-rig assemblage.

The scout of Big Drop II takes place this evening. The marker rock is covered, however there is a marker wave dimpling the surface above the marker rock. It is noticed that the water continues to rise, yet no one cares to scout the next day.

Rigged for the flip. There is the usual taunting about Deglas' worn rigging. The party goes downstream. Michele passes Joe Kiffmeyer. He sits in his duckie in the high right eddy below the entrance to Big Drop I. Approaching Big Drop II, Michele is three boat lengths across from the slightly trailing Robert Deglas. Her chosen run is between "Little Niagara" and the right shore. She *Powells* into an eddy along the right shore. Michele hears Molly repeating loudly, "keep rowing Michele, keep rowing Michele." Michele focuses on the Avon Spirit. It flows to the left edge of Little Niagara. Flip! WoW!

The Miwok chases the Spirit. All passengers ride the overturned Avon clear to the slacker water below "Ten Cent" [#26]. Bumps the left shore. J-rig shows up. Avon is turned up right. It is raining. Robert said the marker wave wasn't there and he got lost. If he had been eight feet farther left, the raft would have breezed outside and beyond Little Niagara. As it was, the drop into Little Niagara was three hundred feet deep. This is Robert's first flip in twenty five years of river running.

No sign of Joe or his duckie. A chat with Western River Expeditions reveals he is on the left shore at "Repeat Rapid" [#25]. Western has erected a lunch kitchen to warm up their folks with hot food and drink. They are at Ten Cent proper. A hike is undertaken to locate Joe. He has been napping. Joe went out of his duck in Big Drop II 1/2. His swim was long. Below Big Drop III he saw boats on the right shore. Through the deluge of waves, he thought those boats were his party. It was Worldwide. He stopped to warm up from his swim and waited for the rest of his group. All were glad he was safe.

Camp is scratched-out in the sagebrush (Apache plume, tammies or willows?) where the Avon is righted. Everybody is safe. A rain storm drives everyone to tents. Some enjoy a nap. Some enjoy sex. However you look at it, everyone is enjoying a three-letter word: fun.

Finally, upon the Lake Powell stretch the following day, the DeVore pod meets the Canyonlands National Park rangers. Jim Braggs and Dave Walton report the official cubic feet per second (cfs). (Cfs is the measurement for river water levels in Utah.) They say 55,000. DeVore and Deglas will argue that figure. Their double decade boatmin (sic) experience measures the level at the mid to late 60,000 cfs range.

Well everyone, this year we got to see it all. High water aplenty in the Colorado River Basin. Cataract Canyon in particular came out in all it's glory with sustained flows of over 50,000 cfs for well over a month and a peak somewhere in the low 80's. For those of us lucky enough (or unlucky enough) to have spent the spring down there, we definitely know what all the fuss is about Cataract Canyon.

From a personal standpoint, I had guided through five years of drought, missed the runoff of 1993 (foolishly opting to attend spring quarter), and heard nothing from old timers in the Rio except, "*Christ, back in 83*", I now feel fulfilled in terms of seeing "*High Water Cat*". I spent seven weeks down there in a single oar boat, five of which were over 55,000 cfs and now feel like I've seen and been a part of it all.

My own experience down there last spring included two flips, and the witnessing of a whole lot more in all types of boats. One week in particular which I like to refer to as "Carnage Fest 95" had flows of around 62,000. I came through the drops right side up (thank the river gods) with an upside down boat in front of me and what appeared to be one in every eddy below. Just to dispel the rumors however, it was not six out of seven but four out of ten flipped rowboats. And most will agree that it was about the gnarliest level.

I also saw and had some lucky runs, some incredible runs, and some incredibly lucky runs. These I witnessed in just about every type of craft down there and I want to hand it to everyone who came through right side up or not. The place is gnarly!

I would also like to take this opportunity to defend my co-workers whom I ran with all spring. We've all been the talk of the town for how many flips we had down there and that is fine, but don't forget we were running single rowboats, and a lot of them. Cataract Canyon has also flipped snout rigs, pan-caked triple rigs, and thrashed s-rigs, not to mention dories, catarafts and everything else. So stick that in your boat and float it!

I also saw some pretty incredible rescues, one of which I got to be an integral part of only on the wrong end! My third trip of the season, somewhere around 55,000 cfs, I did the unmentionable. I flipped a boat (my first commercial) in Mile Long at Rapid #18.

You can imagine my surprise, and already blossoming shame yet it only took me about 10 seconds to get my folks on the bottom of my boat. Then as we floated through the rest of the huge haystacks of the "South Sea" I thought to myself, "Hmmm, now we are going for the big ride".

My leashed oars floated out from beneath the boat, so I cut them free and hoisted them up. Using them like paddles, we almost made the left eddy above "Been

Hurt" [#20] but we struck a domer and pivoted off down toward Big Drop I.

As we floated past the camp at Big Drop I, I was jumping up and down on the bottom of my boat yelling "Motor! Motor!" I could see an S-rig tied up and a few row boats, but none of the thirty or so people milling around the beach even noticed us floating by.

Then I saw two guys running up the beach toward the S-rig. Without any verbal communication, one jumped on and headed straight for the motor. The other untied and pushed off. By then I was well on my way to Big Drop I. The S-rig motored out into the current and circled around beneath me. Then I saw Stewart from World Wide running down the shore with a throw bag. Literally in the tongue of Big Drop I, the S-rig nosed into me. He pushed me into throw bag range, Stewart threw me a line and together they got me to shore. To Stewart from World Wide and Shane from Moki Mac, I'm deeply indebted. Thanks a bunch dudes!

After that exhilarating ride and totally hairball rescue, there was nothing left to do but right the boat, whip out some lunch, and go scout The Drops. Yee Haw! From "Poop Rock" I had the benefit of seeing an S-rig get clobbered by the ledge wave followed by two row boats, one of which flipped.

You can imagine how long the walk back to my boat was. I had already flipped and The Drops were still below me. All I could do was visualize my run, putting extra emphasis and focus on the soft spot of the marker wave just left of center. Fortunately, all went well for me and the rest of the boats in our trip. Came to find out however that a J-rig [22 foot snout rig] flipped behind us. Gnarly!

My final and seventh trip of the cycle was at around 55,000 cfs and proved to be the pinnacle experience of my career. Six boatman stood at Poop Rock pondering the scene we had witnessed for weeks. The high water that wouldn't leave. I remembered thinking at the Mile Long scout "Maybe I'll get snake bit and flown out of here". No such luck. Anyhow, three oarsmen and a J-rig driver decided to thread the needle in Big Drop II. The other J-rig driver and myself opted for the left to right run. Incidentally, I had gone left to right four times successfully this season and had threaded the needle twice.

We four oarsman watched the J-rigs run. One made a successful needle run, the other made it left to right. We all stuck with our plans.

Walking back to our boats, I felt firm in my conviction to be the lone left to right runner among the row rigs. I pulled away from shore as sweep boat with six successful high water runs through The Drops under my belt. With a downstream ferry angle left, I drifted down the wave train of Big Drop I just right of center. When I reached the soft spot I took maybe three strokes and I was on the eddy line above Big Drop II. I spun my angle right, stood up to see the marker wave and began to drift toward it. So far so good.

As I drifted towards the marker wave I watched it building and crashing and made a couple of strokes for adjustment. I drifted closer, watched it crash and saw the soft spot appear. I pulled hard on the oars. One stroke was all it took and I was in the slick water behind the marker. By God I was in there!

Then a strange yet incredible thing happened. Time stood still and all was calm in the eye of the storm. I looked over my shoulder and saw the slick shimmering highway rising up maybe forty feet to the window between the ledge and Niagara and it was wide open! I was mesmerized. Never before had I experienced such awareness. Let alone in the middle of a rapid -- but anywhere! And then it happened. I went over. It probably broke on me just then, but I'm still attributing it to a failure to act. I was so awed by the whole scene. I missed my stroke.

The rest went as you would imagine. I rode the bottom of my boat with a passenger to the reservoir. J-rigs picked up the rest of my swimmers. Two of them eddied out above the Gut, climbed up to shore and left an inscription. And there you have it.

Now that its all over I'm trying to figure out what sort of twisted dementia makes us all want to return. I mean to give truth to its critics, there is an awful lot of flat water. The rapids in low water don't rate particularly high on the excito-meter. When high water does come it's downright scary. And the reward for making it through the most treacherous stretch of the Colorado, a float trip through the most beautiful canyon on earth, has been taken away from us. So why return to Cataract Canyon?

I suspect it's a hidden magic within the place. A magic everyone will experience sooner or later as they drift past the confluence. Also the magic of a flowing, silt laden, drift filled river that rises fat with snow melt in the spring, and recedes in the summer to leave miles of sandy beach around every bend. And there is of course the awesome power of the rapids in high water. First glance at the North Sea, and one can scarcely believe it's a river they are looking at. So I guess its all this and probably more that brings us back. You all probably have your own reasons. But whatever they are, as the saying goes, "You are never below The Big Drops"! And who really wants to be?

LODORE

Anonymous

Prickley pear lizard calisthenics
Red rock striations, encrustations
June gentle rains seduces

Trees trickle, a creek dribbles
Oily city tears into ant lion sands
Thus did the water
Come down at Lodore

REFLECTIONS OF: A GNARLY OLD BOATMAN

by Gene Stevenson

(Updated and modified from a "Hotwater" article that appeared in the July edition of **Canyon Echo**, the Bluff newspaper).

"If you can only see what light reveals and hear only what sound announces, then in truth you do not see nor do you hear". Kahlil Gibran

As the 1995 river season rolls to a close, I find myself thinking about my own experiences that have accumulated over the past 27 years since my first trip in March, 1968. Now, I certainly have not had a back-to-back 27 year boating career, but it's been close.

We use to call ourselves "boatmen," but in this age of being politically correct, the profession is now referred to as "river guide." Whether one refers to themselves as a boatman or river guide is a personal choice. To call yourself a professional river guide is a rather interesting self-definition, since river guides come from all walks of life, and are not **exclusively** employed in this line of work because it simply doesn't pay enough to live on year round -- never has, and probably never will. I'm almost certain that there are as many stories as to "how one got started in this business" as there are guides, so with that understanding, here's my story:

In March of 1968 I boated the San Juan River from Sand Island to Mexican Hat for the first time. I was an undergraduate geology student attending Ft. Lewis College in Durango, Colorado and was taking a field trip with eleven other students and our professor, Dr. Donald L. Baars. I had no concept of what the river was about, much less the incredible geologic and cultural history that is laid open like a book for the inquiring mind. Even though I was a 19 year old college student on a weekend outing, I had begun to realize that I really liked the geology courses I had taken thus far, and was in the early stages of developing a long working relationship with my mentor, Don Baars.

So, I've always seen these canyon walls through geologist's eyes. And my "eyesight" has only gotten better through time, and will hopefully continue to do so. On that fateful trip, I met Kenny Ross for the first time; he was our guide. I remember Kenny as a seasoned ole dog, scruffy and rough talking, but loaded with information about the river, and the ancient culture that thrived along the banks of the San Juan -- the Anasazi.

This trip was also the first time I took a pair of oars in my hands and began learning how to navigate rivers. I learned quickly how to "read the water" and to work with its forces, rather than fight it -- I had discovered an awareness of self and place. I also remember nearly

freezing to death in a dilapidated old sleeping bag that prompted me to get a decent bag for future trips, and Kenny motoring along in the J-rig [22 foot snout], talking and story-telling his way down the creek.

My professional career has developed, somewhat by accident, into being a geologist and a river guide. During my college days at Ft. Lewis, and later as a graduate student at Northern Arizona University, I took advantage of numerous opportunities to go on river trips, first as a swamper, and later as a guide. Geological river trips in Grand Canyon, Cataract Canyon, the canyons of the Yampa, Green, and San Juan rivers allowed me to see the Colorado Plateau in all its splendor, and, for the most part, I listened to "experts" describe the incredible geological history recorded in the canyon walls. Although my early jobs as a petroleum geologist took me to New Orleans and later, Denver, I never gave up my contact with the rivers of the Colorado Plateau. As it turned out, I became increasingly committed to being a full-time student of Colorado Plateau geology, prompting me to write or co-author a number of technical publications concerning the geology of the region. Today, I find it somewhat amusing, and rewarding that I am quoted by the next generation of geology students.

So far, I've been able to make a career of studying and playing in the various river basins of the Four Corners area. Besides being able to see and comprehend the incredible wealth of geological information exhibited in the canyons of the region, I have developed a far better awareness and appreciation of the human history of the area. Furthermore, I can see the impact we "modern" humans are having on our western rivers.

Although I've been down just about every stretch of navigable riverways on the Plateau, and several other rivers in the West, a large percentage of those trips have been here, on the San Juan. It's a river of which I have first-hand knowledge; watching subtle changes that, over only a 27 year time span, have become dramatic. The myriad of rock falls in the canyons, the flash floods of tributaries and the creation of new rapids and obstacles, are examples of natural change. Conversely, the steady encroachment of tamarisks, Russian olives and other non-endemic plants, the unnatural entrenchment of channels in the braided stream segments of the river, the silt infilling the river corridor from Slickhorn Gulch to Copper Canyon, the waterfall below Clay Hills, and the construction -- followed by the demise -- of the Paiute Marina, are hardly subtle changes when viewed in hindsight. And all of these changes are directly attributable to humans.

The controlled, clean-water releases from Navajo Dam serve as an example of how man is modifying his environment. The diminution of suspended and bottomload sediments along with unnatural flow regimes have modified the streambed geometry resulting in fewer sand waves, and less energy to naturally modify the floodplain through erosion of riverbanks and deposition of

new beach sands. Riverbank thickets of non-indigenous plants have thrived in this artificial environment, while some native fish species have been threatened to near extinction (first the bureaucrats tried to kill all the "trash fish" and now they are studying them, before they pull the plug on the Animas River and divert its flow UP into Ridges basin near Durango).

Whether it's cows pounding down the river banks and polluting the beaches, or the flippant attitude of many western bureaucrats who see free-flowing rivers serve only as aqueducts for urban sprawl, mankind is the biggest problem river ecosystems have today. River running has almost gone ballistic in numbers of people who want to experience the rivers and canyon country. But, I'm afraid that most are only seeking a cheap thrill, out of tune with the melody of a river, out of sync with Mother Earth, ignoring the feelings of being held by "Ma."

These days as a professional river guide, I have to take written tests, CPR and first aid training, as well as navigate a boat safely, yet the rank and file private "rafter" doesn't have to qualify with anything more than a credit card. I am a big supporter of apprenticeship, and it is a practice that is falling by the wayside. And I'm not just talking about private river running. I'm sure truck driver's feel the same way about RV's. Skill development necessitates training - that's all there is to it.

But on the ole San Juan, cluelessness abounds. You see it every day, whether it's a ridiculously overloaded boat (we call them "California flip-rigs" or "stern-rigs"), an out-of-control boat landing, or not tying ones boat up at night and having it drift away. Combine this with ignorance of how to conduct oneself or one's group in exploring cliff dwellings and petroglyph sites, camping etiquette, or bringing ole "Fido" along for the ride, and you might see the need for some "training."

Many of the most popular stops are truly getting a pounding, and this newest wave of clueless boaters are really making their mark. River House (Snake House to many older river rats) is approaching a rapid demise. Every week I see new rocks pulled from the walls, and increasingly more digging around walls and floors. The large petroglyph panel at Butler Wash was vandalized several years ago, and the feeble eradication attempt by the bureaucrats "managing" the area has only led others to try and "help" by further desecrating this fabulous site. Obnoxious four-letter words carved into the rock have been modified by the do-gooders, and in the process, additional petroglyphs are being destroyed.

SOMETHING DIFFERENT

As a riverman, high water delivered by spring runoff from the snow clad mountains is always something to look forward to, and this year was no exception. All the rivers of the Colorado Plateau were running bank full in mid June, and I wanted to do something different, so my wife Theresa and friends Milt, Marcus, John and Clay joined me for an 84 mile "day trip" from Sand Island to

Clay Hills. Milt, John and I split up the rowing, and did it in ten and a half hours, making numerous stops along the way. After all, we all work at **Wild Rivers**, and this was our day off. It was exhilarating to cruise the entire canyon corridor in one day, and to do something a little different. With continued talk about the Animas-La Plata diversion dam, and the increasing demand for San Juan River water, I'm not sure just how many more times I'll be able to ride the crest of a high-water year on this river.

So now it's back to business as usual, taking newcomers and old on river trips down the San Juan, sharing my acquired knowledge and love of the region with those who care. The high desert canyon country is perceived by many as both spectacular and stark, but it is very fragile and requires compassion and education for it to survive. I think that, above all other matters, my role as a river guide is to provide these insights to visitors of the area. My reward is to witness the gleam in someone's eye when they finally begin to SEE and FEEL this country for the first time.

So, I'm a gnarly old boatman, cussing and stomping around about some issues, and yet still able to witness and feel the awe of nature. And I thought old Kenny Ross was a scurvy old dog, just wait another 20 years, or less.....

HIGH WATER REMEMBERED

by John Weisheit

My first high water experience occurred on the Dolores River in 1983 with a flow of about 8,000 cfs (the record is 9280 cfs) just before the diversion tunnels of McPhee Dam were closed. The roar of Snaggletooth Rapid, to this day, seems comparable to no other in my memory. In 1984, I was in Desolation when the river started its rise to a peak of 45,000 cfs. I remember live cottonwoods breaching like whales and the hydraulics at the Green River diversion dam looking like the sine waves on an oscilloscope screen. While camped at Honacker Trail in 1985, when emergency Navajo Dam releases brought the San Juan up to about 15,000 cfs, an eroding sand bank calved into my boat and buried it. In 1985 I was in the Grand Canyon on the center boat, first row, of Georgie's big rig at 55,000 cfs. I have never felt quite so thrashed about since. Somehow I missed the big peaks in Westwater, with 17,000 cfs being my maximum flow experience, but then again the Westwater teens are known to be the gnarliest.

On the Salt River, I once managed to do a 10,000 cfs trip in early March. I also remember once camping at Quartzite Falls to find driftwood 75 feet above the river. I thought to myself that the Salt River may very well be the champion high water section of the American West and have often wondered if anybody ever boated through like when it was flowing 100,000+ cfs in the late

1970s.

Seems Frank Wright and the Mexican Hat Expeditions crew in 1957 got to experience the Colorado River at a flow of 100,000 cfs and held that record until 1984, when many a commercial river guide caught the peak in Cataract Canyon at 110,000 cfs. Twenty-seven years is a long passing of time to break such a record making opportunity.

With all this experience in mind, I think Cataract Canyon is the place to be for a high water experience on the Colorado Plateau. It is somewhat comforting to know that despite all the emplaced dams on the Colorado River system, you can still find a section that runs with snow melt, silt, driftwood and dead animals, much like it did in Frank Wright's day. The key is that you have to be patient, as it only comes once or twice per decade and flows over 100,000 cfs seem to occur only every twenty-five years or so. Consensus for the gnarly stage in Cataract seems to be between 60,000 to 70,000 cfs and the old timers say once again as it approaches the 100,000 cfs range. I saw the 60,000 - 70,000 stage at least six times in 1993; it flipped me in a sportboat on my fifth visitation. In 1995, I saw Cataract at 80,000 cfs in a row boat. Even though the "Red Wall" is bigger at 80,000, it was more benevolent than 60,000 to 70,000. I was the only row boat on the day it peaked, June 19, 1995. Here is my story:

I psyched myself into reality during my rig at the Tag-A-Long boat yard for a six-day row boat trip with three passengers. I picked the best boat, which was a Havasu III, a Waterman frame and two drop bag trailers. All hard gear would be stored low and all soft gear would surround me like an egg in a nest. I decided to tie the frame in with ropes rather than straps and not to leash my oars. I tied my spare oars in such a way as to release them with a quick pull of a cam strap near the oar lock. I fashioned a flip line that was tied to the corners of my frame in an "electricians knot". I eliminated danglies and stowed the bow line in the duffle pile. My passengers were Kathy and Tanny from the New England area and Francois, a French Canadian. I took my time on this trip: rarely rowed -- drifted mostly -- geologized -- philosophized -- did all the hikes. On the third night I camped at "Brown Betty" (#1), wanting to let my folks hike into the Doll House. We camped on a narrow sliver of sand with the water coming up, as was the case with each passing day. I led Kathy and Tanny to Spanish Bottom (the trail was underwater in parts) so they could go into the Doll House. I went back to my boat to clean-up, load and bomb-proof the rig. I was not expecting my motor support co-workers until the next day and had resolved to go solo to Tilted Park (Upper Y West). Saina showed up just as I was about ten minutes from leaving Brown Betty. We camped together at Lower #5 that night to wait for Eve and Steve, who would arrive on the following day. I walked from camp to #7 to scout the wave train of the North Sea. It was a good thing I did

not go to Tilted Park that day. The run I had in mind, which was to do a downstream ferry into the right eddy, would surely have flipped my boat.

Eve and Steve showed up the next morning and we were off; three 22 foot 2 1/2 snout rigs and a Havasu III on 80,000 cfs. I decided to run the tongue in the North Sea. One would think that such a run would put one into the wave train, but this did not occur as I had anticipated with my scout. The tongue behaved as a left-handed passing lane and the big wave train was to our immediate right. We didn't even really have to bail much when it was all over with.

Mile Long was just as easy; same strategy. I just went down the middle of the river and bobbed over the waves until I decided to eddy out above Been Hurt. That was a mistake. I will never eddy out of a wave train again in high water. It was a pointless maneuver and it took me three tries to get back into the current and continue my downstream progress.

We scouted the Drops from "Poop Rock" and I proceeded to mumble about how much I appreciated my co-workers, as if I would never see them again. Big Drop I was washed out, the Red Wall was BIG, and Big Drop III looked really choppy.

In the 60,000 to 70,000 range there are windows to make a left or right runs around the Red Wall. At 80,000, I decided that any such maneuver would surely flip my boat, much like I had observed at the North Sea. The eddy lines were just too turbulent and too close to the standing waves of the train. There seemed no apparent way to maintain any positive momentum by doing a window "cheat". I decided to run the Red Wall head on and take my chances.

My plan was this: First, if I lost an oar(s) at anytime, I would high side until it was safe to go for a spare(s). After running Big Drop One, I would stay with the current and maneuver to the left side of the marker rock. Once there, I would turn around to do a hard Two O'Clock downstream ferry angle to confront the Red Wall's 10 O'Clock angle and then tuck into my seat when I got to the top so as not to get knocked out of the boat by the curling wave. After that, I would maintain my boat angle and pull hard until the second wave was completed, and then I would pivot to face my danger and ride the wave train; which should place me just right of the pour-over at Satan's Gut. After a session of fervent prayer this is exactly what I did, and despite losing my left oar after the pivot, all went according to plan. Jim Braggs and crew, of the park service, retrieved my lost oar at the bottom of Big Drop III with their Zodiac and issued a hearty congratulations for a great run. I was jubilant!

I learned two things on that trip of 80,000: 1) never eddy out of a wave train, 2) don't cheat. And, I wonder one thing: Will I ever see 100,000? I hope so!

The Dreaded River Toilet

by Julie Gillum

Let me confess at the outset that I am not a guide. My lack of gills, fragile brain casing, greater-than-average fear of death, and incidentally, full-time job, have prevented me from acting as more than a professional passenger in big water or technical rapids. My motto, honed by many years of surviving doing stupid things, remains: "Sometimes it's OK to be a cupcake." But that doesn't mean that a cupcake can't admire godlike boating skills. You people are awesome (and I'm not just saying this so you'll continue to invite me on your trips, although it might be appropriate to point out that my brownies will make you whimper). I didn't realize exactly how awesome until this past summer, when I spent several days in Cataract Canyon during high water.

The crushing waves, the jagged rocks, the cyclonic whirlpools--all these I took for granted. I saw and was afraid, but I had expected these hazards. (Perhaps all of you, after years of contemplating the head vs. sandstone scenario, or the fact that, in an evolutionary sense, we humans are inferior to catfish for water travel, grow immune to excessive fear). But before I had completed 24 hours of my trip, I was confronted with a completely unexpected danger. Yes, it was the Dreaded River Toilet.

I am not inexperienced, or even uninitiated, in technologically advanced portable toilet systems. They are convenient and ecologically responsible. I know that when you use one, you are implementing untold river management plans, complying with goodness knows how many government regulations, protecting the health of the riparian corridor, and showing respect for your measly role in the ecosystem. It's a downright noble thing to do. But this was no ordinary river toilet. On the lid, in bold red letters, were written the words, "MISUSE OF THIS TOILET CAN CAUSE SERIOUS INJURY OR EVEN DEATH. HAVE A NICE DAY." Or something like that.

This cupcake took a step back. All these years, I had unwittingly cheated death . . . My entire life of flossing twice daily, looking both ways before crossing the street, and not using my fax machine while bathing instantly flashed before my eyes. Suddenly, any need to implement the river management plan became less urgent, while I pondered the multitudinous ways in which to be snuffed by a toilet.

If we discount the obvious, how many ways can you misuse, abuse, insult, or generally hurt the feelings of your average toilet? It boggles the mind, even a mind scrambled by one-too-many collisions with geologic formations. And does the toilet merely act in self-defense, or does it seek revenge for all insults, real or imagined? Perhaps a discreet toilet surveillance program is in order,

until we receive all of the facts. I'm convinced that surveillance needs are what motivated an unnamed commercial group to set their groover directly across from my campsite on the Colorado last month. You may be sure that my friends and I took our responsibilities seriously. Concerned for the safety of those who fell into the clutches of the Toilet of Doom, we made frequent status checks. ("Hey, how're you doing? Nice day, eh? Great boxers!")

A friend of mine told me a story involving a couple in an eastern city. For reasons unknown, the female half of this couple decided that, before disposing of her old hairspray cans, she needed to empty their contents. The toilet was her plumbing receptacle of choice. Maybe you are aware that the flammability quotient of hairspray is slightly greater than that of jet fuel. I can add few details to this story, except that this woman's unfortunate husband was a smoker, and that the resulting conflagration was reminiscent of a shuttle launch. I believe that the poor man stopped smoking, at some point after the fire department arrived. If I were not feeling faint, I would tell you more.

In conclusion, I would like to say that my brownies are made with all-natural ingredients--no, wait, I would like to say that, after my high-water Cat experience and my subsequent research, however pathetic, into the Lethal Toilet Syndrome, I am doubly impressed with all of you who make your living on the river. After a full day of flirting with death in the rapids, you relax in your campsite while preparing an eight-course meal for three zillion people, secure in the knowledge that even if you survive the river, you may be injured or even killed by plumbing components. You have my undying respect. And you may be certain that if you ever place your groover directly across from my campsite, I will assist with all of your surveillance needs.

MEETING THE BOATMEN by Karen Pulliam

Flying in to the boats,
Landing on a mesa
(the airstrip isn't one),
I thought, I'm going to die.
But I didn't.

And the desolate, lifeless mesa
was awash with wild flowers
when I kneeled and looked.

RIVER POETRY

An interesting perspective of the river community will come from those who shuttle boatmen around the Colorado Plateau. Emmett Mays is such a driver.

THE BOATMAN'S CHILD by Emmett Mays

As I was slowly passing
A boatman's ramp one day
I stopped there for a moment
Just to watch the children play.
Alone a girl was standing
And when I asked her why
She turned with eyes that could not see
And she began to cry.

"I'm no boatman's child.
I'm no boatman's child
I'm like the rapids, just runnin' wild.
I need my mommy's kisses
And my daddy's smile
The boatmen just can't take me
I'm no boatman's child "

"When the boatmen load the children
They take them for their own
But they all had to pass me by
And I'm left here all alone.
The rapids are swift and gnarly they said
We can't keep you safe and dry
I know they're right so I'll just wait
And I'll try hard not to cry.
I'll wait because I know it's true
And no one will deny
God takes little blind kids rafting with Him in
the sky."

"I'm no boatman's child.
I'm no boatman's child.
I'm like the rapids, just runnin' wild.
I have my mommy's arms to hold me
And sooth me when I cry
But I still get so lonely here
I wish that I could die.
Then I'd walk the beaches of heaven
Where all the blind can see.
And then like any other child
I'd shout, Boatman!...take me! take me!"

"I'm no boatman's child.
I'm no boatman's child.
I'm not like the rapids just runnin' wild.
I'll miss my mommy's kisses
And my daddy's smile
The BOATMAN is here to take me
I am the BOATMAN'S child!"

GOD BLESS THE LITTLE CHILDREN

Karen Pulliam was a customer on a Desolation Canyon trip this year. A great trip in May with six relaxing days at 20,000 cfs, wonderful warm sunshine by day and cool pleasant moonlit nights. Karen is one of those relatively rare customers who comes back from a river trip changed. So did the boatmen.

VACATION HAIKU by Karen Pulliam

*night is white with stars
in Desolation Canyon
on the Green River*

*claret cup cactus
flowers: red wine on the bleached
carpet of tan sand*

*Boatmen tell the truth,
know loneliness, and trust fear,
from time on rivers*

*yellow swallowtail
tiger butterflies flitting
among the cactus*

*Rising moon whitens
steep cliffs above black canyons
roaring with river*

*The Green River is
Brown; she pulls the Colorado
Plateau to the sea.*

*desert vision quest:
a rock resting lizard spoke
to me of rainbows*

*time on the river:
silence heals city-wrecked wounds
with sounds of quiet*

*the pounding drums beat,
crash, echo red sandstone
cliffs, across water*

*a rainbow over
the Green River; no big deal
(unless you're from LA)*

Park Service Report High Water Cataract Canyon

by Jim Braggs

Cataract Canyon peaked on June 19 at 80,100 cfs. The Colorado River peaked on June 19 at 51,800 cfs and the Green River peaked on June 19 at 28,300 cfs. The flow in Cataract went over 50,000 cfs on June 6 and stayed that way, with the exception of one day, until July 17. Essentially there was a 41 day period when the flows in Cataract Canyon were above 50,000 cfs. This compares with 1993 when Cataract peaked at 69,500 cfs on May 29 and had flows above 50,000 cfs for 10 days.

The River District sent a patrol boat upstream from Hite into Cataract Canyon on June 9, and set-up a temporary rescue operation based at Ten Cent Rapid on June 11. That operation was in effect until July 18 for a total of 39 days. During that time there were eight crew changes.

During this time there were four evacuations: two by helicopter (a possible concussion and a crushed foot caught in a frame) and two by ambulance from Hite (a possible broken nose and a blunt trauma with suspected spinal injuries). We feel strongly that five lives were saved by the rescue operation. Had the swimmers been in the water much longer, their chances of survival would have been pretty low (rough estimate of swimmers is 120 persons).

I feel that everyone involved during this high water season did an excellent job. It's obvious that because of your concern for the visitors you all stepped-up your operations a notch and put on your best guides and equipment. You have every right to be proud of all your employees and guides. I think that considering the conditions involved, the safety record was excellent and injuries and loss of equipment were minor, especially when you consider that there were three fatalities during high water in 1993 [over 50,000 cfs]. Job well done.

FLIPS

	<u>Commercial</u>	<u>Private</u>
Rafts	8	5
Cataracts	0	3
Dories	2	0
Sportboats	2	0
Snout rigs	4	0
Triple rig	1 (pancake)	0
S rig	1	0

LOCATION OF FLIPS

<u>Rapid</u>	<u>Amount</u>
Rapid 7	5
Big Drop 1	1
Big Drop 2	17
Big Drop 3	1
Rapid 24	2

COST FOR THE OPERATION

Programmed time	872 hrs.	\$10,913
Overtime	470 hrs.	\$11,781
Travel		\$ 763
Supplies		\$ 625
Equipment		\$ 1,398
Total		\$25,480

Note: Paid by park through regional office in Denver. Special Search and Rescue (SAR) account.

RETURNING TO THE CITY by Karen Pulliam

I traveled to Utah to see the night stars
I-remembered from trips out West
with my father when I was a child.

I've been twenty years without the stars.
I've moved among the cities and
never stopped to look above me.

Leaving L.A., I feared what I'd find:
Were there still stars at night?
Did I remember right?

I found the stars in Utah, a white milky
mass against the black desert sky
above the Colorado and the Green.

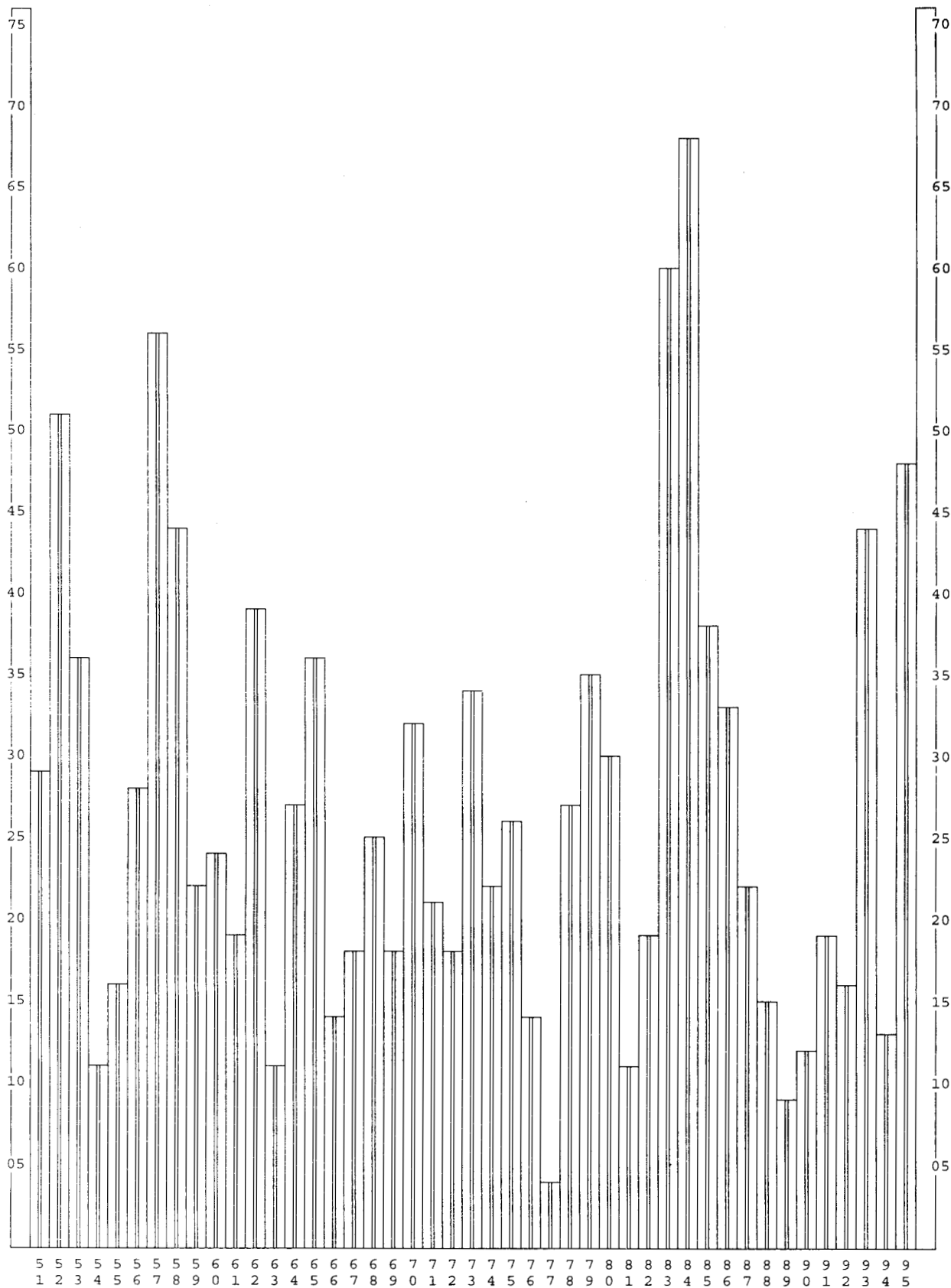
Flying back into L.A. at night,
I see stars here as well, all fallen neatly
to earth, laid out upon the ground in rows.

An endless grid of grounded stars
are waiting as we land.
tamed stars, lowered from the sky.

But it's okay. I can go home.
Stars are still out there in the wild
where they do not pave the rivers.

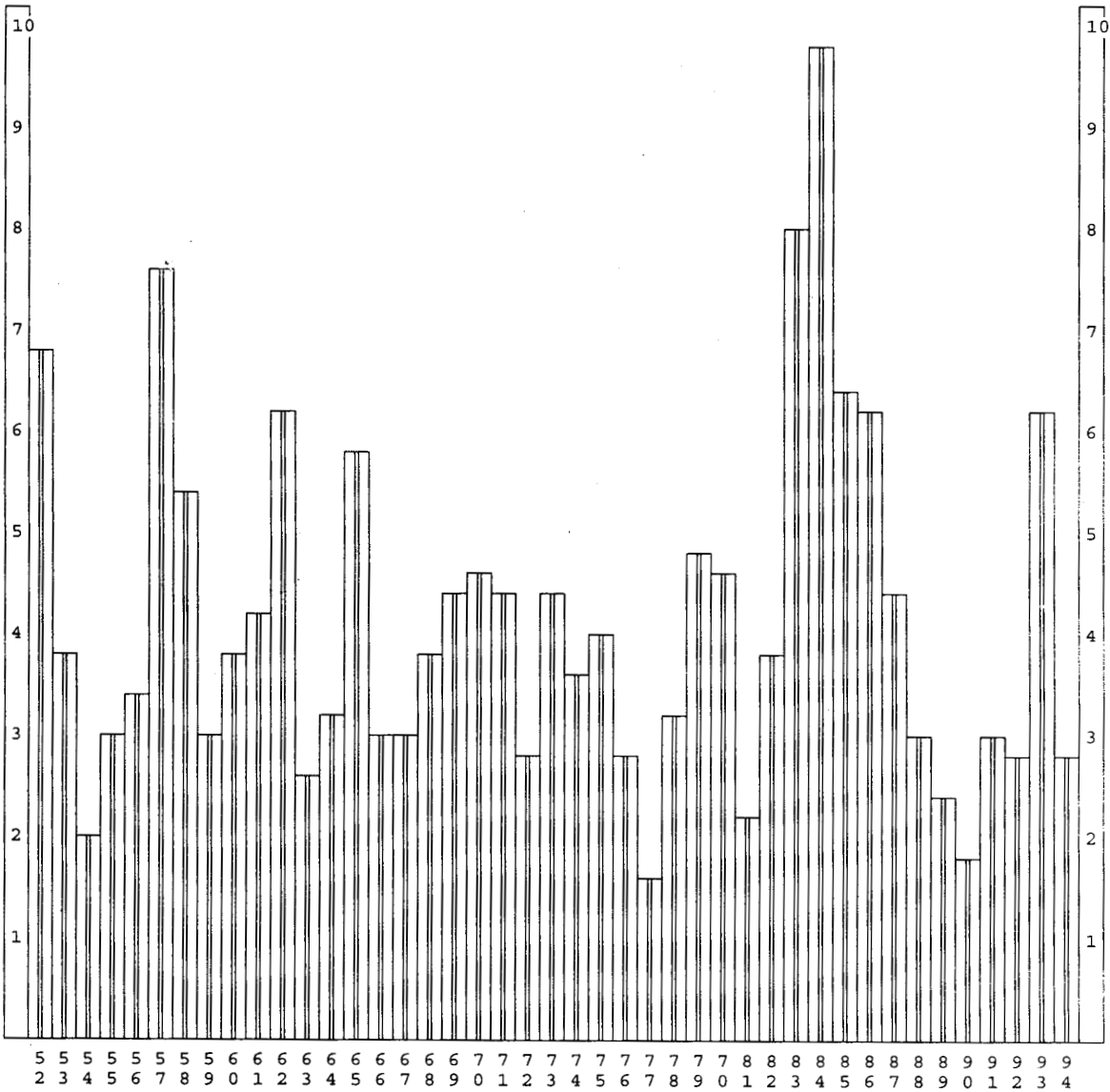
THE COLORADO RIVER

RIVER FLOW PEAKS AT THE COLORADO/UTAH STATE LINE USGS GAUGING STATION FROM 1951 to 1995. This would be an accurate flow for Westwater Canyon. Does not include the Dolores River flow. The Gunnison River was impounded circa 1963. Estimated flows are in thousands of cubic feet per second. This gauge was installed in 1951.



THE COLORADO RIVER

THE COLORADO/UTAH STATE LINE USGS GAUGING STATION FROM 1952 to 1994. Total of acre feet in millions from October to September. The year represents the end of the report in September. Does not include the Dolores River flow. The Gunnison River was impounded circa 1963. This gauge was installed in 1951.



1954: Wengerd & Strickland note Rico beds are transitional between Honaker Trail marine & Cutler continental beds. Rico in Monument Valley is not mappable and should not be called a formation.

1957: Momper notes the DeChelly grades into the arkosic facies of the Cutler Formation.

1958: Wengerd & Matheny raise Cutler to Group status; raising its members to formations.

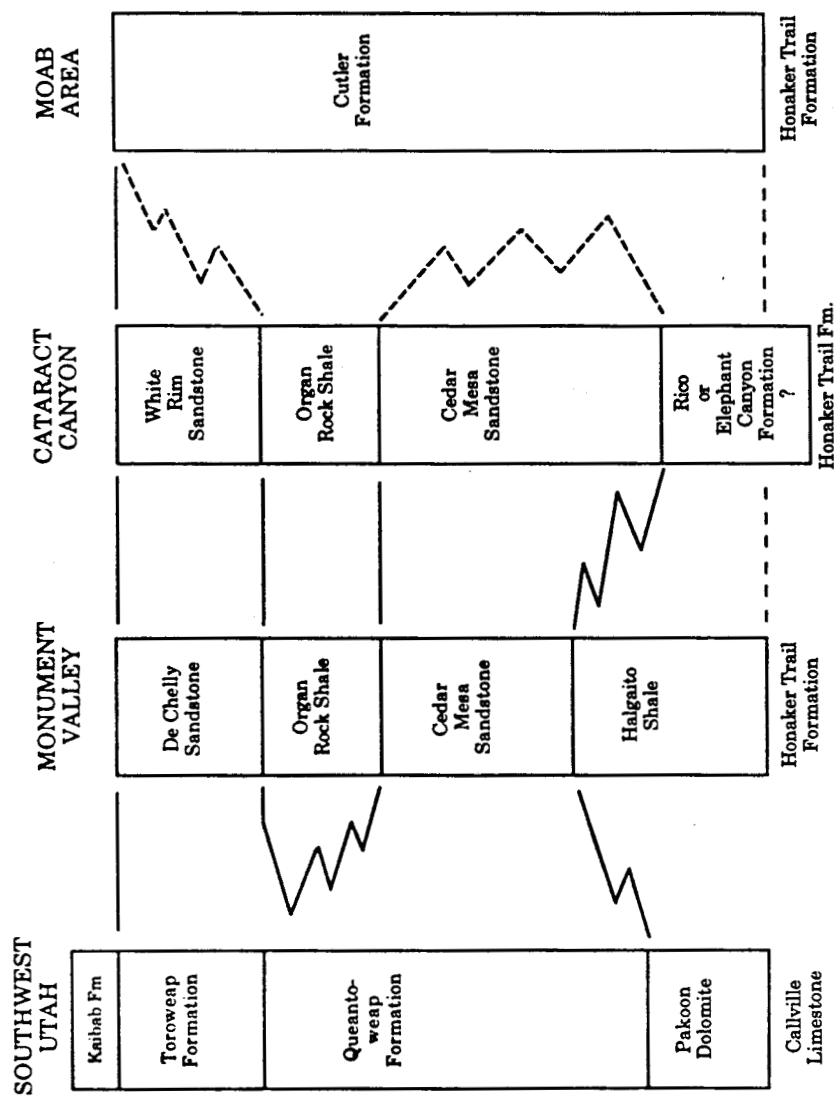
1961: Baars says that rocks formerly assigned to the Rico transition facies should not be called Rico. He names the Elephant Canyon Formation as exposed in upper Cataract Canyon and notes it is Wolfcampian in age (earliest Permian).

The lower contact of the Elephant Canyon is similar lithologically to the Honaker Trail Formation so many geologists believe the Elephant Canyon should be included in the Hermosa Group.

1990: Loope and others, indicate the name Elephant Canyon Formation should be abandoned because it contains Upper Pennsylvanian fusulinids.

1994: Doelling & others map Permian part of former Elephant Canyon Formation as the lower Cutler Formation in the Potash amphitheater. Pennsylvanian part of former Rico transitional facies is included with Honaker Trail.

CUTLER FORMATION CORRELATIONS AND TAXONOMY



1899: Cross names Rico Formation for exposures in the Rico Mountains, Colorado.

1905: Cross & Howe name Cutler Formation for exposures on Cutler Creek abt 4 miles north of Ouray, Colorado.

1915: Gregory names DeChelly Sandstone after exposures located along Canyon de Chelly, Apache County, Arizona.

1929: Baker & Reeside subdivide the Cutler in the Monument Valley area into four members: DeChelly or White Rim Sandstone (WR named after prominent escarpment between Green & Colorado Rivers); Organ

Rock Shale named after a monument south of San Juan River between Moonlight & Copper Creeks, San Juan County, Utah; Cedar Mesa Sandstone named for Cedar Mesa, a high area north of the San Juan River, west of Mexican Hat; and the Halgaito Shale for exposures near Halgaito Spring, southwest of Mexican Hat.

1948: Henbest indicates at least part of Cutler red beds at the type locality are Pennsylvanian in age. Also, Rico near Moab is Virgil (latest Pennsylvanian) and is Desmoines (middle Pennsylvanian) in age at the type section.

Colorado Plateau River Guides
P.O. Box 344
Moab, UT 84532
(801) 259-8077

To preserve the integrity of your CONFLUENCE, please make a photocopy of this page.

I would like to join CPRG. Enclosed are my dues.

I would like to renew my membership to CPRG. Enclosed are my dues.

I would like to give a gift membership to a friend.

Membership dues:

(Please check and write a check:)

- () \$20 per year.
- () \$100 for 6 years.
- () \$195 for life.
- () \$295 Benefactor.

Membership status:

(Please check:)

- () Guide Member (Must have worked in the river industry.)
- () General Member (Must love the Colorado Plateau.)

Name/Organization: _____

Company/Freelancer: _____

Address: _____

City _____ State _____ Zip _____

Phone: _____

Comments and suggestions:

Colorado Plateau River Guides
P.O. Box 344
Moab, UT 84532
(801) 259-8077