

COLORADO CANYONS NATIONAL CONSERVATION AREA
River Corridor Working Group Meeting Minutes
January 23, 2003

Attendees:

| | | | |
|--------------|---------------------|------------------|---------------|
| Doug Hall | Travis Baier | Wade Johnson | Paul Merluzzi |
| Russ Walker | Bennett Boeschstein | Tom Kleinschnitz | Jerry Nolan |
| Greg Gnesios | Lowell Clark | Scott Larson | Jane Ross |
| Gene Arnesen | Ted Howell | Mel Lloyd | |

Greetings and Introduction

Russ Walker, the River Corridor Working Group Leader and a member of the Colorado Canyons National Conservation Area (CCNCA) Advisory Council, opened this evening's meeting at 6:05 p.m. Russ asked everyone to introduce themselves and distributed a copy of the agenda (see attached).

Working Group Discussions

Russ requested that Bureau of Land Management (BLM) staff attending tonight update the group on CCNCA visitor numbers for the River Corridor during the year 2002. Gene Arnesen, BLM Outdoor Recreation Planner for the CCNCA, reported that data obtained within a 12-month period from the trail registers showed that 3,803 individuals in private parties and 1,527 individuals in commercial groups signed the River Corridor register. There were another estimated 1,266 individuals, from private parties, that did not register. Of the more than 5,000 visitors who signed the River Corridor register, the majority of users were from the state of Colorado, with out-of-state visitors ranking second and Mesa County residents ranking third in visitation. Very few of these individuals—approximately a 4-to-1 ratio—declared themselves as first-time visitors to the River Corridor. The months of May and June claimed the peak number of visitors, while November through February had the least.

Gene went on to cover data gathered from the two visitor surveys conducted, first in 1995 and then again in 2002, by Northern Arizona University (NAU). A handout, comparing the various statistics, was discussed (see attached). Greg Gnesios, CCNCA Manager, added that additional valuable information would be gathered this spring during a survey, focusing on visitor attitudes toward paying fees, to be conducted by the United States Geological Survey (USGS).

Jane Ross, CCNCA Planning Team Leader, addressed benefits-based management (BBM), which focuses on visitors' recreational experiences, the direct benefits they personally derive from those experiences, as well as the subsequent indirect benefits

enjoyed by the community at large. Jane pointed out that, while the Ruby Canyon Plan utilized the BBM concept extensively, the CCNCA plan would put less emphasis on it. The survey information remains valuable in monitoring not only the planning area's levels of use and its visitors' levels of satisfaction, but also in guiding the BLM in its management actions.

Lowell Clark expressed concerns over BBM. Jane then covered the handouts summarizing the River Corridor's experiences and benefits and explained some of the examples listed (see attached).

Several comments included: using a GPS and reliable map to assist even first-time users in easily finding campsites, the "leave no trace" ethic does not support campsite signs, and most visitors are making repeat trips and thus already familiar with campsite locations.

Paul Merluzzi questioned whether fire pans must be required year-round, and after some discussion, the group agreed that fire pans have become an important element of river etiquette. Just as you take your groover and life jackets, fire pans are standard gear. Even in mid-summer heat, an emergency fire may be needed and carrying a 12-inch diameter fire pan should not be an issue.

Another member emphasized that not just river runners should be required to carry a fire pan, or propane heater, and human waste disposal systems. If motorized and mechanized users access the river, they should also be held to these requirements.

Discussions turned to river access, and Jane stated that per the Ruby Canyon Plan, motorized and mechanized access is prohibited direct access to the river. The CCNCA plan will carry this stipulation forward. Just as other Working Groups had previously agreed, tonight's attendees felt that access to within ¼ mile of the river, with walking required for the remaining distance to the shoreline, would be acceptable as long as vehicles could not be viewed from the river.

The BLM's management philosophy does not include creating any new access to the river. Throughout the other Working Group sessions, no strong sentiment favoring additional access to the river was voiced. More so, members want to preserve and reduce impacts to the resource.

Jane also mentioned that other groups plan to recommend a total ban on target shooting—not to be confused with hunting—in the CCNCA south of I-70. One member expressed some concern in seeing target shooting slowly shut out of the area and would support a designated shooting area.

Travis Baier pointed out where Doggone Island is located, and BLM staff explained that the island is closed to camping because it is a valuable habitat for special status species.

Russ addressed limits regarding the number of individuals allowed in a group when visiting the arches, a topic recently discussed during the Advisory Council meeting. Group sizes, hiking in from the river, were recommended to be limited to 25 individuals or less. Groups hiking in from the Rattlesnake Arches Trailhead will have proposed limits set at 12 individuals or less.

The group wants to see BLM work closely with Colorado State Parks to monitor and enforce existing laws regarding river use. Jane reported that the Colorado Department of Wildlife (CDOW) recently commissioned BLM law enforcement officers and this will strengthen enforcement. At a minimum, the group would like BLM to formally communicate to State Parks officials that more regulation may be needed if use within the River Corridor continues to grow.

The question arose on what “desired future conditions” the group would like to see in the River Corridor, and the majority agreed that most important is keeping the area as pristine as possible. Two determining indicators for implementing management action would be 1) using periodic surveys for measuring visitor satisfaction and 2) continually monitoring impacts to the resources. One member stated that all the things they do not want to see happen (in managing the resource) will have to happen, if use increases dramatically.

One effective way for monitoring the resource is by holding periodic (annual would be best) River Corridor Working Group meetings, after the boating season is over. Scott Larson reported that the WATER (Western Association to Enjoy the River) Club is hoping to develop a post-season clean-up trip from Loma to Westwater, something already being done on the Westwater stretch of the river. Combining these two events would be a good opportunity for the group to evaluate the year’s impacts.

Jane emphasized that forming partnerships with user groups will be critical to BLM in effectively managing the CCNCA. The more active individuals become now can potentially influence future restrictions.

Jane asked members what other physical actions they might consider for the River Corridor, and initiating intense control of tamarisk—targeting specific areas—was mentioned. One member stated that, to be successful, both tamarisk and noxious weed control would require the cooperation of Mesa County, associated federal agencies, as well as private landowners.

Also discussed was the Loma boat launch. While there is currently no room to expand the area, it is a critical user-education point and road improvements are needed.

City of Fruita Community Development Director Bennett Boeschstein spoke briefly about Fruita’s desire to partner with the BLM, and Fruita’s role as the gateway city to the CCNCA. Two current city initiatives include housing an inter-agency visitor information center in the existing Dinosaur Museum, and acquiring and restoring the Snooks Bottom property. A number of entities have a keen interest in saving the Snooks Bottom area

from development, but Greg explained that, while BLM would like to partner in acquiring Snooks Bottom, acquiring in-holdings (located within the CCNCA) were more urgent management priorities. Gene explained that, given BLM's budget and regulatory limitations in making offers, landowners are usually attracted to higher offers made by land developers.

Jane prepared members attending tonight for the possibility of being approached when the USGS survey begins this spring. Some questions would broach the topic of paying fees for recreational opportunities in the area. Jane emphasized that they are questions only, and no fee demo program is planned at this time. However, if and when user restrictions are needed in the planning area, the River Corridor will most likely be the first point for such a program.

Tom Kleinschnitz voiced his concern that, as a commercial outfitter paying user fees to the Westwater District, it is unfair for Ruby/Horsethief river runners to be allowed to use the Westwater facilities without paying some kind of fee. It was pointed out that a significant number of boaters continue down Westwater Canyon, rather than taking out at that point. Therefore, a number of Loma-to-Westwater users do contribute to maintaining those parking and toilet facilities through their fees.

Russ asked Lowell to present his proposal for accurately assessing user satisfaction in the River Corridor (see attached). Because Lowell felt that past survey questions were both abstract and unrealistic, those surveys have not produced a truthful reflection of user experiences. As a result, Lowell developed a method for quantifying user satisfaction with dollar amounts. This proposed method would more fairly determine what activities should be restricted by BLM management actions.

Recognized as valuable information for those developing the USGS survey, the BLM will send Lowell's proposal to USGS staff for consideration. Jane felt that the entire proposal could potentially be integrated into the CCNCA draft resource management plan.

Russ added that an important perspective could come from those *not* using specific areas any more. Finding out why could guide the BLM in its management for those areas, as well.

Jane commented that, in reviewing past meeting minutes, the most common thread was that the group wants to maintain spontaneity in deciding to get on the river.

The group reached consensus on several issues:

- No permit system and no reserved or designated camping.
- No signposts marking campsites on the river.
- Leave the river as pristine as possible.
- Utilizing a trail register for voluntary reservations of campsites is acceptable.
- Encourage using technology (GPS), rather than signs, to establish location on the river.

- Educate through trailhead kiosks and brochures, rather than signs along the River Corridor.
- Propane *heaters* could be carried as an alternative to fire pans. Day-use would require one or the other from November 1 through April 30. Overnight river runners would require one or the other on a year-round basis.
- Do not promote new access to the river.
- No target shooting (not to be confused with hunting) south of I-70.
- River groups hiking in to view the arches are recommended to include 25 or less individuals.
- Encourage BLM partnership with Colorado State Parks to enforce existing laws and regulations on river use.
- Practice intense tamarisk and noxious weed control.

Russ indicated that he would develop the group's recommendations discussed tonight and present them to the Advisory Council at the next meeting, scheduled for February 6. Russ will send members a draft copy for review prior to the meeting.

Ted Howell reminded the group that proceeds collected from the fee program at the National Park Service's Colorado National Monument go toward eliminating the backlog of maintenance projects in the Monument itself. Ted feels that this type of fee program is a big help in assisting federal agencies in managing public lands.

The meeting was adjourned at 8:05 p.m.

**Colorado Canyons National Conservation Area
River Corridor Working Group**
January 23, 2003

Agenda

1. Introductions (if necessary)
2. Update on 2002 user numbers for river corridor (Jane)
3. Update on results from user survey by Northern Arizona University (Jane)
4. Benefits-Based Management (Jane)
5. Proposal for managing user numbers (Lowell)
6. Finalize recommendations for Advisory Council (All)

Northern Arizona University (NAU) Survey Information

| DEMOGRAPHICS | Phase 1 | Phase 2 |
|--|---------|---------|
| Ethnic Group: White | 96.4% | 98.3% |
| Hispanic | 1.5 | 0.5 |
| Asian or Pacific Islander | 1.2 | -- |
| American Indian or Native Alaskan | 0.6 | -- |
| Other | -- | 1.2 |
| Social Grouping: Married with children | 40.3 | |
| Married - no children | 20.8 | |
| Single - no children | 31.8 | |
| Single parent | 7.1 | |
| Actual Visiting Social Group: 2 or more friends | 32.9 | 29.3 |
| Family and friends | 12.7 | 22.1 |
| 2 or more families | 3.9 | 2.3 |
| Family with children | 14.3 | 5.9 |
| Couple only | 18.2 | 18.5 |
| Alone | 10.7 | 16.4 |
| Organized Groups | -- | 4.0 |
| Commercial Outfitters | -- | 1.4 |
| Area of Residence: Foreign country | 0.7 | 1.1 |
| Out-of-state | 25.8 | 15.8 |
| Other within Colorado | 32.3 | 44.1 |
| Grand Valley | 41.2 | 39.2 |
| Age: 20 or younger | 1.5 | 1.1 |
| 21 - 30 | 17.5 | 18.6 |
| 31 - 40 | 38.2 | 26.6 |
| 41 - 50 | 27.2 | 32.3 |
| 51 - 60 | 9.1 | 14.0 |
| 61 - 70+ | 5.1 | 5.5 |
| 71 and older | 1.5 | 1.9 |

| DEMOGRAPHICS cont. | Phase 1 | Phase 2 |
|--|----------------|----------------|
| Education: Post graduate degree | 25.8% | 28.1% |
| Some post graduate | 10.3 | 7.1 |
| College graduate | 29.1 | 34.9 |
| Some college | 22.5 | 18.2 |
| High school graduate or GED | 11.2 | 11.1 |
| Some high school | 0.9 | 0.7 |
| Eighth grade or less | 0.3 | -- |
| Income: \$100,000 or more | 3.7 | 14.1 |
| 90,000 - 99,999 | 4.6 | 4.4 |
| 80,000 - 89,999 | 8.5 | 4.4 |
| 70,000 - 79,999 | 11.8 | 6.3 |
| 60,000 - 69,999 | 16.6 | 22.9 |
| 50,000 - 59,999 | 16.6 | |
| 40,000 - 49,999 | 13.9 | 12.9 |
| 30,000 - 39,999 | 9.9 | 15.4 |
| 20,000 - 29,999 | 6.5 | 9.0 |
| 10,000 - 19,999 | 1.1 | 7.1 |
| Less than 10,000 | 6.8 | 3.4 |
| VISITOR DATA | | |
| Most Satisfying Activity: | | |
| Mountain biking | 31.4 | 43.5 |
| Hiking/walking | 17.2 | 15.7 |
| Rafting | 7.8 | 6.8 |
| Canoeing/kayaking | 6.0 | 1.7 |
| Horseback riding | 4.7 | 7.7 |
| Viewing dinosaur fossils | 4.7 | 1.0 |
| Sightseeing/driving for fun | 4.6 | 2.2 |
| Four wheel drive/ATV | 3.9 | 3.1 |
| Camping near vehicle | 2.5 | 1.0 |

| VISITOR DATA cont. | Phase 1 | Phase 2 |
|--|----------------|----------------|
| Motorcycle | 2.0% | 8.0% |
| Nature study | 2.0 | 0.5 |
| Fishing | 1.3 | -- |
| Photography | 1.3 | 0.7 |
| Wildlife viewing | 1.1 | -- |
| Rock Art viewing | 1.1 | 0.7 |
| Viewing arches | 0.8 | 1.2 |
| Rock collecting/prospecting | 0.8 | 0.2 |
| Rock climbing/bouldering | 0.7 | -- |
| Wildflower viewing | 0.5 | -- |
| Camping away from vehicle | 0.5 | 0.7 |
| Digging dinosaur fossils | 0.3 | -- |
| Target shooting | 0.3 | -- |
| Partying | 0.3 | 0.2 |
| 10 MOST SATISFYING ACTIVITIES (by zone) | | |
| Rabbit Valley Zone: | | |
| Hiking/walking | 24.0 | 15.1 |
| Mountain biking | 17.8 | 18.3 |
| Viewing Dinosaur fossils | 13.0 | 3.2 |
| Horseback riding | 7.2 | 15.1 |
| 4 wheel/ATV | 5.8 | 7.9 |
| Camping near vehicle | 4.8 | 2.4 |
| Motorcycling | 4.8 | 25.4 |
| Sightseeing/driving for pleasure | 4.3 | 4.8 |
| Nature study | 3.4 | -- |
| View Indian rock art | 2.9 | -- |
| Camping | -- | 4.0 |
| Road Biking | -- | under 1 |

| 10 MOST SATISFYING ACTIVITIES (by zone) cont. | Phase 1 | Phase 2 |
|--|----------------|----------------|
| Mack Zone: | | |
| Mountain biking | 86.8% | 96.1% |
| Horseback riding | 4.1 | -- |
| 4 wheel/ATV | 1.6 | under 1 |
| Hiking/walking | 1.6 | 2.0 |
| Camping near vehicle | under 1 | -- |
| Rock collecting/prospecting | under 1 | -- |
| Hunting | under 1 | -- |
| Picnicking | under 1 | -- |
| Watching wildlife | under 1 | -- |
| Road biking | under 1 | -- |
| View Indian Rock Art | -- | under 1 |
| Walk My Dog | -- | under 1 |
| River Zone: | | |
| Rafting | 33.1 | 61.4 |
| Canoeing/kayaking | 29.0 | 15.9 |
| Fishing | 4.8 | -- |
| Mountain biking | 4.8 | 2.3 |
| Sightseeing/driving for pleasure | 4.0 | 4.5 |
| Watching wildlife | 4.0 | -- |
| Nature study | 2.4 | -- |
| Photography | 1.6 | 2.3 |
| Rock collecting/prospecting | 1.6 | 2.3 |
| 4 wheel drive/ATV | 1.6 | -- |
| Hiking/walking/running | -- | 2.3 |
| Motorcycling | -- | 2.3 |
| Motor boating | -- | 2.3 |
| Rattlesnake Arches/Pollock Canyon | | |
| Hiking/walking | 35.1 | 51.5 |
| Mountain biking | 28.4 | 7.4 |

| 10 MOST SATISFYING ACTIVITIES (by zone) cont. | Phase 1 | Phase 2 |
|---|----------------|----------------|
| Rattlesnake Arches/Pollock Canyon cont. | | |
| Sightseeing/driving for pleasure | 9.0% | 1.5% |
| 4 wheel/ATV | 5.2 | 1.5 |
| Horseback riding | 4.5 | 17.6 |
| Camping near vehicle | 2.2 | 1.5 |
| Rock climbing/bouldering | 2.2 | -- |
| Nature Study | under 1 | -- |
| Viewing dinosaur fossils | under 1 | -- |
| Motorcycling | under 1 | -- |
| View Arches | -- | 5.9 |
| Walk my dog | -- | 4.4 |
| Photography | -- | 2.9 |
| Wilderness backpacking | -- | 1.5 |
| Mee/Knowles/Jones Canyons ii = insufficient interviews | | |
| Hiking/walking/running | ii | 26.7 |
| Mountain biking | ii | 13.3 |
| Sightseeing/driving | ii | 6.7 |
| Camping away from vehicle | ii | 6.7 |
| 4WD/ATVing | ii | 6.7 |
| Mountain biking | ii | 6.7 |
| Rafting | ii | 6.7 |
| Hunting big game | ii | 6.7 |
| Wilderness backpacking | ii | 6.7 |
| Viewing Indian rock art | ii | 6.7 |

| VISITOR DATA | | Phase 1 | Phase 2 |
|--|-------------------|----------------|----------------|
| Number of Visits: 1 - 3 times (Phase 1) | 2 - 3 (Phase 2) | 29.6% | 20.0% |
| 4 - 8 times (Phase 1) | 4 - 10 (Phase 2) | 20.7 | 27.0 |
| 9 or more (Phase 1) | 11 - 20 (Phase 2) | 49.8 | 16.0 |
| | 20+ (Phase 2) | -- | 37.0 |
| Watercraft: (ii = insufficient information) | | | |
| Canoe, raft & kayak | | 8.9 | ii |
| Canoe & kayak | | 3.5 | ii |
| Motor boat | | 0.9 | ii |
| Kayak | | 5.3 | ii |
| Canoe | | 30.1% | ii |
| Raft | | 49.6 | ii |
| Cataract | | 1.8 | ii |
| Zone where most of time spent: | | | |
| Rabbit Valley Zone | | 35.3 | 31.1 |
| Mack Ridge Zone | | 20.2 | 37.6 |
| River Zone | | 21.2 | 10.8 |
| Rattlesnake Arches/Pollock Canyon | | 21.9 | 16.9 |
| Mee/Knowles/Jones Canyons | | 1.4 | 3.6 |

RIVER CORRIDOR

EXPERIENCES AND BENEFITS

| ACTIVITIES | EXPERIENCES | BENEFITS | B & E – '95 | PROBLEMS |
|--|---|--|--|---|
| Rafting (61.4%) (Rafting – 33.1%) | Savoring Area Canyon-Country and Wilderness Aesthetics | Restored mind from unwanted stress | Enjoy natural scenery Enjoy smells and sounds of nature | Presence of human waste and litter |
| Canoeing/Kayaking-15.9% (Canoeing/Kayaking- 29.0%) | Escaping Everyday Responsibilities | Renewed human spirit | Get Away from Crowds of People Experience solitude | Preferred campsite found occupied |
| Sightseeing/ Driving-4.0% (Sightseeing/ Driving- 4.0%) | Enjoying Easy Access To Diverse, Primitive And Unconfined Outdoor Recreation Environments | Increased quality of life | Get away from the usual demands of life | Evidence of past campfires |
| (Results from 1995 survey in parenthesis) | Enjoying mental and physical rest | Greater sense of overall wellness | Rest mentally Enjoy a happier frame of mind | People having parties and being noisy |
| | Enjoying the closeness of family and friends | Enhanced sense of freedom in being able to get to this special place | Experience a sense of personal freedom | People riding ATVs and 4WDs |
| | Enjoying exploration | Greater cultivation of outdoor oriented lifestyle | Be with other people who enjoy the same things | Seeing evidence of livestock grazing |

RIVER CORRIDOR ZONE

GOALS: Manage the Colorado River corridor for camping, hunting and day-use and to preserve and protect the outstanding natural resources encountered by river users along corridor and into the Colorado Canyons National Conservation Area.

Maintain the naturalness of the Colorado River experience.

| Benefits | Experience | Activities |
|--|---|--|
| Greater Sense of Overall Wellness -Increased Quality of Life -Restored mind from unwanted stress -Renewed Human Spirit | *Releasing or reducing some built-up tensions *Enjoying Mental and Physical Rest *Escaping Everyday Responsibilities *Enjoying the Closeness of Family and Friends | Manage for visitors to have the opportunity for sightseeing, camping, hiking and hunting while enjoying activities on the Colorado River corridor. |
| Greater Cultivation of outdoor oriented lifestyle - Greater environmental awareness and sensitivity - Enhanced sense of freedom in being able to get to this special place | *Savoring Area Canyon-Country and Wilderness Aesthetics *Enjoying easy access to diverse recreation environments *Enjoying exploration | |

Physical Setting (Character of the landscape)

Preserve the existing landscape of the river corridor to the greatest extent possible, while allowing modifications to the CCNCA landscape bordering the river to benefit all river users and minimize impacts to natural resources.

Implementation Actions

Require all river users to carry portable solid human waste disposal systems (currently only campers are required to carry these).

Require all river users to carry and use firepans from November 1 – April 30.

Keep Chow Doggone Island closed to camping to protect threatened and endangered species habitat.

Prohibit motorized and mechanized access to the river bottom on the trail in the eastern Mack Ridge area near Rustlers Loop.

Social Setting (Character of use and users)

Manage the area to provide users the opportunity to achieve a greater sense of well-being, whether through solitude or among friends and family, while engaging in river-oriented activities

Implementation Actions

Develop a river etiquette and education program with emphasis on:

- Respect for other users and the quality of their experience
- Proper use of fire
- Appropriate campsite size to group size
- Leave No Trace philosophy for all users – trash, micro-trash, fire remnants
- Sensitivity to wildlife and cultural resources
- Human solid waste disposal system

Refrain from implementing any type of user control for as long as possible

Administrative Setting (How managers and partners care for area and manage use and users)

Manage area to develop and maintain opportunities for direct and indirect benefits, foster partnerships among user groups, local businesses and government agencies and to optimize ecological health.

Implementation Actions

Implement a monitoring system for user benefits and land health.

Sponsor an annual river meeting to discuss issues, concerns and recommendations.

Based on results of the annual meetings determine if river use is to the point that visitors' experience and land health decline significantly. Discuss management options such as:

- Designating campsites, eliminating dispersed camping along the river.
- Implementing voluntary reservation system at campsites; acknowledging the system may become mandatory.

-Implementing a fee system.

Indirect benefits

Family – The benefits of achieving a sense of increased quality of life, reducing stress and cultivating an outdoor oriented lifestyle extend beyond the user to others, such as the family, and ripples outward to those in contact with each family member resulting in positive impact to the community as a whole.

Community – In addition to positive psychological benefits, the community also benefits from its association with the area. As people cultivate a an aesthetic appreciation for the area and an outdoor lifestyle, the gateway communities to the recreation areas earn recognition and become a desired destination for local and non-locals alike.

Economy – As an activity such as rafting on this stretch of the Colorado River becomes increasingly popular, earns renown for the caliber of the experience achieved on the river, people invest in the activity by purchasing equipment, supplies, food and lodging all of which result in increasingly positive impact to the local economy.

**A PROPOSAL FOR ACCURATE ASSESSMENT
OF USER SATISFACTION
IN THE RUBY/HORSETHIEF RIVER CORRIDOR**
By Lowell Clark

After a protracted series of meetings including a field trip through the subject area, there appears to be a consensus that the river corridor working group recommendation to the BLM ought to be a moratorium on major changes for a period of five years. By major changes is meant restriction on entry. Minor changes that have been recommended (which might be characterized as housekeeping enhancements to the river experience) have been recommended.

At issue are interim actions to be taken in contemplation of eventuality of restricting access. These may be conveniently divided into two categories. The first is partial restriction on the operation of motorized watercraft to ameliorate concomitant noise and safety concerns. The second category is overall headcount limitation in order to minimize impact on the natural environment and enhance user satisfaction with the river experience.

With respect to the first category, the BLM has stated in its record of decision on the Ruby Canyon Management Plan of 1998 that they don't think they have the authority to restrict motorized watercraft and further that they like to use the motors on their own patrol craft. The duck hunter constituency seems to view any restriction of motorized traffic as a threat to their perceived right to use the river. This stance appears to be a reaction to persistent and long-standing rumors of total ban of motorized watercraft. There is no evidence that anyone is opposed to unlimited motorized access in the dead-of-winter hunting season. On the philosophy that our recommendation should be independent of what the BLM thinks they can do, and in view of the fact that the primary concern in user surveys is noise and safety issues related to the operation of motorized watercraft, there appears to be no opposition in our group to recommending a noise level and/or horsepower limitation (including an outright ban of personal watercraft) during the primary float season.

Increased usage of the Ruby/Horsethief waterway over the past ten years has led to serious questions about if and when access should be limited. To address this issue the BLM has lobbied extensively for a benefits-based management approach as adumbrated in their 1998

Ruby Canyon Management Plan proposal. Under this protocol, users would be surveyed to determine their extent of dissatisfaction with problems caused by crowding on the river. The management responses would then be determined by the BLM in accordance with a hierarchy outlined in the aforementioned 1998 proposal.

At least one view in our group thought that this approach negates the doctrine of informed consent, that is to say, that a user's response might well be altered if he or she understood the consequences. According to this view, the resulting disconnect threatens the concept of user satisfaction maximization. Another problem with this survey method is that it tends to over-represent those who used the river on crowded days.

According to a proposal discussed at some length in our final meeting in May 2002, this disconnect could be addressed by a revised survey which would focus on the values of the remedies to the user. This is a natural and logical extension of the benefits-based management approach described hereinbefore. A possible protocol would be to inform the user (in neutral terms) of the permit system paradigms on the other western rivers and to state that in projecting the historical increase in usage of Horsethief/Ruby that a headcount limitation is a distinct possibility. Quantification of the limitation would be based on some combination of environmental impact and user satisfaction as indicated by this survey. The surveyees could then be asked to imagine a hypothetical baseline with an `a priori headcount limitation wherein permits would be issued free (perhaps a small administration fee?) if the demand were less than the limitation on a given night. If the demand is greater than a set limit then the applicants would have to submit competitive bids (an auction) in order to displace some or all of the free applicants. The surveyee would then be asked to state the maximum amount they would consider paying at an auction (per person per night) to use the river on a date or dates of their choice in a variety of different scenarios.

The use of these responses is based on the concept that a user's benefit or satisfaction is very closely related to the amount he or she would bid and pay for a trip down the river with a limit on numbers of people. Taking an average of the responses times the headcount limit for the hypothetical limitation is tantamount to gauging global satisfaction. As an example, consider the following choices given to prospective surveyees:

How much would you be willing to pay for the privilege of running the Colorado River through Ruby Canyon?

1. with a headcount limitation of 100 people? \$_____
2. with a headcount limitation of 50 people? \$_____
3. with a headcount limitation of 25 people? \$_____
4. with a headcount limitation of 15 people? \$_____

Now assume we analyzed the data and found the following response pattern:

| Headcount Limit | Average bid \$/person/night | Total Revenues |
|------------------------|--|-----------------------|
| 100 | \$2 | \$200 |
| 50 | \$5 | \$250 |
| 25 | \$12 | \$300 |
| 15 | \$15 | \$225 |

That the revenue (read *satisfaction*) is highest for the 25-person night would give considerable credence to a BLM decision to use a number in that vicinity as the basis for management action. Note that even though the average bid for 15 person night does not indicate maximum satisfaction, there might be enough people willing to pay \$20 per person per night that some 15-person days be offered at auction because the impact (running total headcount) would be reduced. Similarly a few 100-person nights might be offered for those who might be priced out of the less-crowded dates. It is to be expected that there would often be cheap seats available because not every date would be bid up to capacity at the highest bid price (reservations would be filled by working down the bid list for a given date in order of descending bid). This auction method could easily be programmed and placed on Internet in a user-friendly format. Avid boaters could monitor the crowdedness and price bids. An individual could then make a decision based on their own satisfaction levels and ability to pay. In addition, this method becomes a self-regulating device (using economic theory) and will require minimal staffing to administer.

The same survey could be used to explore the perceived benefits of other management actions as diverse as limitation of say personal watercraft or limitations of tamarisk. If the perceived dollar benefit of the changes is not commensurate with the appropriately amortized cost of the change, then the action should likely not be undertaken. Through this quantification method the surveyees can be asked to dollarize their own preferred enhancements to the river experience. If the proposal matures to the point of an actual auction where all users are required to bid and the type of variations discussed above are offered, the survey automatically updates

with nearly real-time response.

A common gut response to the above approach is that it is un-American because it discriminates against poor people. It may be argued that the lottery-permit systems currently in use elsewhere are not likely to be any cheaper. With lottery the success rates are as low as 10% and application fees as high as \$20. In order to be successful a boater must submit at least 10 applications to 10 lottery-managed rivers and pay approximately \$20 for each application. That is a total of \$200 per successful application; the average cost (in both time and money) to the persistent applicant is considerable. Because of other costs, the floating contingent does not include many indigents. The problem (if any) might be addressed by issuing free permits to those willing to work (with the BLM) on clean up or enhancement projects.

Comments or questions about the proposed survey method should be addressed to clark@curecanti.com.

Our group urges the Advisory Council to advocate fresh, innovative, attention-getting and equitable (to both private boaters and outfitters) solutions to a common problem on western rivers (fairness of the permit allocation system).