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Campaign Rolls On!

There's a new wave of awareness rippling through the Colorado River watershed concerning the critical need for its restoration. The Sustainable Water Project Tour, organized by LIVING RIVERS, brought the message to the basin's seven states as the activists gripped the river-dependent communities. With a rally cry, "One Percent for the Delta!", the tour promoted water conservation as the means to restore the once-mighty Colorado, with a focus on securing a very modest contribution for the delta's dying ecosystem.



LIVING RIVERS water truck at Hoover Dam

From March 5 to 15, LIVING RIVERS focused attention on river restoration by touring the area in an empty water truck emblazoned with banners that exclaimed, "Revive the Colorado! An Ecosystem, Not a Plumbing System." At each stop LIVING RIVERS delivered letters to agencies and major water users requesting one percent of their allocations for delta

restoration. The activists covered 2,500 miles, held rallies in five major cities, caught the attention of local, regional and national media, raised awareness among the water authorities, and piqued the interest of the general public.

More than 130 groups representing twelve million people from the US and Mexico joined the campaign. "This informal cooperation of diverse organizations calling for Colorado River delta restoration has succeeded in elevating the issue," said Jennifer Pitt of Environmental Defense in Boulder, Colorado. Bob Barrett, communications director for the Central Arizona Project, told LIVING RIVERS, "We recognize three things about the delta situation: it's a serious matter; it's not going away, and if we don't get together to work this out we will have a solution imposed upon us. So we are a willing participant to help make this happen."

This fall, the campaign shifted to the delta region for a series of organizing meetings with delta communities. "It's time for one percent plus," says Javier Mosqueda, director of the Association for the Río Hardy and Río Colorado. The seventeen groups he works with in the delta region want water of sufficient quantity and quality to immediately begin flowing to the delta.

LIVING RIVERS also took part in the first official delta symposium convened under the auspices of the US and Mexican governments in Mexicali, September 11-12. Unfortunately, the gathering yielded few results. Larry Anderson, director of the Utah Division of Water Resources summed it up well: "If we have an environmental problem in the United States, there's no way we are going to get Mexico to give us some of their water, so why should we consider giving them water?"

> P.O. BOX 466, MOAB, UT 84532 LIVING RIVERS CURRENTS

On June 17, 1902 Congress passed the Newlands Reclamation Act. This 1,800-word legislation gave birth to the Bureau of Reclamation (BuRec) and caused the transformation of rivers across 17 states. By selling federal land with a commitment to deliver irrigation water, BuRec played a major role in settling the West. But some 99 years and 600 dams later, many believe the agency has gone too far.

BuRec has not proven to be a mechanism for building family farms as was intended. Instead, it primarily provides subsidies for industrialized and marginal agriculture. Nor have BuRec's programs ever fulfilled the Newlands Act requirement of being self-supporting. On the contrary, these programs have been an ongoing burden to taxpayers. BuRec is now negotiating with the State of Arizona to eliminate \$700 million in repayment from the nearly bankrupt Central Arizona Project (CAP), while at the same time seeking yet another \$780 million from Congress for its 2002 budget, \$31 million for more work on the CAP.

Despite growing concerns about the effects of population growth and global warming on water availability in the West, BuRec continues to allocate more water on paper than the rivers can realistically deliver. This issue made national headlines this summer when desert farmers in Oregon, who have not received their full allocations for three years, tangled with environmentalists and fishermen who wanted BuRec to keep sufficient water in the river for an endangered fish. In the end, BuRec diverted some water anyway, yielding only enough water for 17 percent of the farms. The long-term solutions being proposed are not water conservation, but major trans-boundary water projects to drain Canadian

rivers.



John Keys, Bureau of Reclamation Director, swears to keep water flowing to wasteful irrigation projects

"A hundred years of dam building, canal digging, tunnel blasting, and flood irrigation have created benefits but also many problems," says Shawn Cantrell, the Seattle-based northwest director of Friends of the Earth. "Leadership is sorely needed in the Bureau at this time to reassert federal control over Western rivers and begin dismantling fishkilling dams.

Friends of the Earth recently joined LIVING RIVERS, the Center for Biological Diversity and the Utah Environmental Congress in welcoming BuRec's new commissioner John Keys, and seeking his cooperation in celebrating the agency's upcoming centennial with a ten-point program for reform.

"We wanted to give Mr. Keys the benefit of the doubt before we began further organizing to put his agency under the public microscope during its 100th anniversary," explained LIVING RIVERS executive director Owen Lammers. "But Keys' two-page response demonstrated little interest, and his comments to the media were in 180-degree opposition to what more and more people are requesting."

Keys told the Salt Lake Tribune that he had no interest in having the federal government assert its authority to revamp water allocations to restore rivers. Quite to the contrary, Keys will be directing BuRec to meet all existing allocations and "squeeze every drop of water out of our projects." Keys did not rule out building more dams.

"It's time we 'Reclaim the Bureau' and decommission the ideological concrete standing in the way of reform," adds Lammers. That's the message LIVING RIVERS and others will be taking to the media, BuRec, water agencies and the streets in conjunction with the upcoming anniversary. We will be promoting alternative water management strategies that are available now to both meet the West's water needs and to restore its rivers. Keep tabs on the campaign at www.livingrivers.net.

GRAND CANYON

Standing on the rim of the Grand Canyon, a visitor to this premier national park and World Heritage Site peers into the mile-deep abyss, viewing mostly rock walls and catching, at most, a glimpse of the river which carved the canyon far below.

Down on the river, the canyon is a very different place. Thousands of adventurers come each year to experience some of the greatest whitewater on the North American continent. But the greenish, cold water carries a dark secret downstream with it. This river—its ecosystem—is on death row. The sentence, handed down forty years ago when Glen Canyon Dam was constructed, must be commuted soon, before there's nothing left to restore.

When Glen Canyon Dam was completed in 1963, the once-mighty river was allowed to run nearly dry at times. When electric power generation began, peaking-power surges sent waves through the canyon, disrupting biological and geological processes, and inconveniencing river runners as well. The Colorado through Grand Canyon became a regulated canal between Hoover and Glen Canyon dams, no longer an ecosystem but a plumbing system controlled by machines, engineers and lawyers.

Gone are the 100-pound "Colorado River white salmon" that once migrated upstream from the warm reaches of the lower river into Glen Canyon to spawn. Sandbars that once filled the visual horizon of river runners are today reduced to little piles. Huge mats of driftwood have long since disappeared. Shores that were scoured and rejuvenated annually are now armored by dense, choking vegetation imported from another continent.

Uniquely adapted native fish that once writhed and wriggled in the backwaters are now strangers in a homeland of alien predator species.

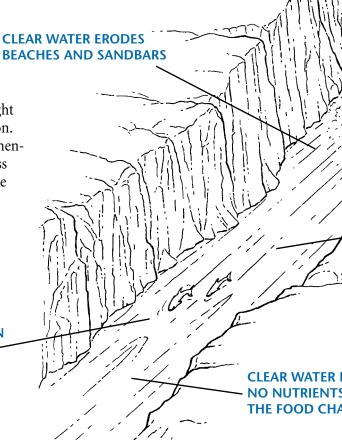
The pre-dam Colorado was considered one of the world's siltiest rivers. Carrying vital nutrients in its thick sediment load, the Colorado was truly a living river. But the tremendous floods that carved the canyon are now a thing of the past; the river has been entrained. Scientists confirm that these changes brought on by the dams, and by Glen Canyon Dam in particular, are having profoundly negative effects on the canyon.

The impacts of Glen Canyon Dam on Grand Canyon attracted international attention in March, 1996. Then-Secretary of Interior Bruce Babbitt stood at the foot of the dam and turned the knobs that opened the bypass valves, releasing a surging torrent of water into the canyon below. For the first time in the dam's history, large volumes of water were intentionally allowed to bypass the electric generating turbines as part of an experiment to reduce the dam's environmental impacts on the Grand Canyon downstream.

Bureau of Reclamation (BuRec) officials proclaimed the experiment a success, but others—including scientists who worked on the project—expressed reservations. The scientists hoped that high flows would mobilize river-bottom sediments to build beaches and sandbars, thereby recreating lost habitat for young native fish. Environmental studies and planning for this grand experiment cost more than \$100 million and took about a decade to complete.

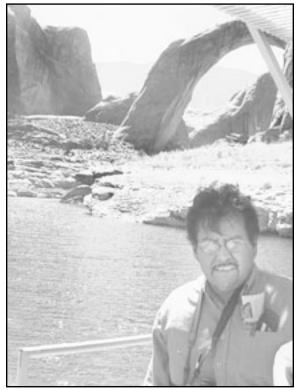
"The artificial flood was a great learning experience, but we learned that it alone could not accomplish what was needed," said David
Wegner, former head of the Glen Canyon Environmental Studies program, and now a consulting ecologist in Durango, Colorado. "New beaches were formed by the flood, but within six months, they had mostly eroded away again." Wegner concluded that the inherent limitations of such management meant that the river's problems probably can not be solved without decommissioning the dam.

Under growing pressure to comply with federal endangered species and other environmental laws, BuRec pressed on. In 1996, the Secretary of Interior established the Grand Canyon Adaptive Management SANDBAR-BUILDING SEDIMENT IS STORED IN RESERVOIR —



DEFENDING CULTURAL HERITAGE LIVING RIVERS Welcomes Medicineman and Peacemaker

A group of reporters and environmentalists gathered around the talkative dark-haired man, standing before the world's largest natural bridge. The animated discussion centered on the impacts of Glen Canyon Dam and other federal water projects on the sacred sites and traditional cultural properties of the Colorado Plateau's indigenous people. As crowds of tourists passed by on their short hike to the camera station overlooking Rainbow Bridge, they hardly noticed the man or his audience.



Philmer Bluehouse at Rainbow Bridge

Philmer Bluehouse, a Navajo Indian and Secretary of the Diné Medicinemens Association, Inc. (DMAI), was a visitor to Rainbow Bridge that Memorial Day weekend with Thomas Morris, Jr., DMAI President, to hold a blessing ceremony for the protection and restoration of the countless sacred sites flooded by Lake Powell reservoir.

"We are here to communicate with the spiritual side and to sing a traditional blessing song," said Bluehouse, LIVING RIVERS' newest associate. "A lot of damage has occurred, but we can restore places like Glen Canyon and heal the spiritual harms through peacemaking to make the world a better place."

The special trip to one of the Navajo's most sacred sites was organized by LIVING RIVERS. It was also the beginning of a new phase in Phil Bluehouse's career. Having spent 17 years on the tribal and BIA police forces on the Navajo Nation, Bluehouse has seen his share of the social problems on the reservation from a law enforcement perspective. Yet he has been on the forefront of efforts to break away from the standard approach in dealing with these human challenges. Rather than rely on force and criminality, Bluehouse has emphasized reliance on traditional Navajo peacemaking efforts. His success in this area led to recognition by the tribe and the founding of the Bluehouse Peacemaking Institute in his hometown of Fort Defiance, Arizona.

At Rainbow Bridge, Morris and Bluehouse quietly slipped into a side canyon adjacent to the bridge, where they conducted their ceremony, which included a beautiful song that echoed off the towering red sandstone walls, streaked with thousands of years of desert varnish.

Later, as Bluehouse walked back to the boat dock for the long ride back home, he smiled as the tourists continued streaming along the pathway, cameras in hand and children in tow.

"Today the rocks here at Rainbow Bridge talked," he said. "Whether all these people could understand that language yet, only time will tell."

Bluehouse may well have been referring to the larger issue in which he is now engaged: working to preserve and restore the cultural heritage of his people and the natural world on which all of us depend.

LIVING RIVERS is very pleased to be associated with Phil and with the traditional indigenous perspective he will bring to the organization. Phil is currently working on issues relating to Navajo Nation water rights. He will be active in efforts to organize support for environmental restoration on the Navajo Nation and other reservations in the region.

Reviving the Dying Heart of the Colorado

Working Group to recommend dam operational changes to mitigate the environment. The working group included park and dam officials, water and power interests, and representatives of the recreational industry and environmental groups, working with scientists in developing, on an annual basis a set of recommendations.

Many problems with this approach have been identified. First, not all variables that affect native fish survival can be regulated by dam operations. While flow rates and water temperature of dam releases can be managed within a limited set of constraints, the flow of sediment and nutrients cannot. Neither can migratory fish surmount the barriers imposed by large dams such as Glen Canyon.

POWER-GENERATION SURGES ACCELERATE EROSION DOWNSTREAM

MIGRATION ROUTES

OF SPAWNING FISH

WATER DISCHARGE IS 45° F,

TOO COLD FOR SPAWNING

ENDANGERED FISH

BLOCKED BY

CONCRETE

NO REJUVENATING FLOODS

CARRYING SILT OR NUTRIENTS

"It's necessary to articulate the full range of possibilities for restoring the ecosystem, which includes taking a hard look at the extreme end of the spectrum, such as what would happen if the dam were not there," said Dr. Philip Williams, a California-based professional engineer and consulting hydrologist. "The probable result is that the more the dam is managed as if it were not there, the greater the ecosystem benefit."

The second constraint is that this working group is not allowed to investigate how well the conditions in Grand Canyon could improve, were the dam to be decommissioned. Many scientists and citizens groups have called for a decommissioning study of Glen Canyon Dam, to analyze and evaluate the potential benefits of returning the Grand Canyon to a non-dam influenced environment. The working group has avoided any discussion of the politically sensitive topic of decommissioning, which has some scientists puzzled.

Third, the committee has been reluctant to seriously address the problem of non-native fish as predators, another major obstacle in recovering these endangered species. Dr. Rich Valdez of Logan, Utah, an expert on Colorado River native fish, is concerned about competition and predation by introduced fish such as catfish, carp, striped bass, and several species of trout found in Grand Canyon. These species—trout and catfish in particular—are known predators of young humpback chub. Scientists generally agree that removing these exotic species can help to increase native fish survival rates. The recreational fishing industry continues to lobby for retaining the trout, especially in the reach below the dam.

Lastly, and most critical, is that the working group is not a committee of scientists conducting unbiased research, but a disparate mix of political and economic interests pushing agendas that are often in conflict. As water and power interests dominate, the parameters under which the scientists work are narrowly restricted to what these economic constituencies will accept in terms of operational changes of the dam.

"The jury is still out for those places where adaptive management has been used," said Dr. Williams. "We should be realistic about what we can accomplish; we may not be able to recover fish if the continued operation of the dam presents too many constraints on that goal."

BuRec has received its share of criticism from environmentalists for alleged foot-dragging in promoting ecosystem restoration, yet it continues to argue that recommendations are just that. For example, even as the working group was preparing its most ambitious strategic plan to date, BuRec was releasing peak-power surges on high-demand days to supply additional power to Arizona, in violation of operating critieria established to mitigate the effects of such flows.

LIVING RIVERS is quite concerned that the new strategic plan, as well intentioned as its preparers may be, will also fall short. While we wish to give BuRec and the National Park Service the opportunity to demonstrate that adaptive management can work, endangered fish can't wait for politics. Resolution of these problems may ultimately lead to litigation.

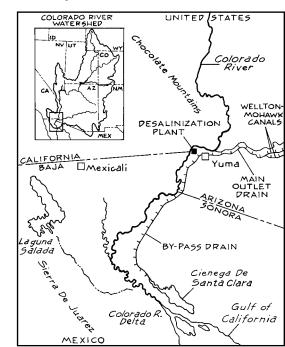
HOLD THE SALT! Reclamation Plan Threatens Mexican Wetlands

An impending threat to an important marsh in Mexico known as the Cienega de Santa Clara, one of the last surviving wetland areas within the Colorado River delta complex, awaits the call from US decision-makers. The problems originate north of the international border near Yuma, Arizona, with a desalinization plant constructed by the Bureau of Reclamation (BuRec) in 1992 to reduce salinity of agricultural wastewater entering Mexico and to meet international treaty obligations. Throughout much of its existence, however, the plant has been mothballed because of the high price of desalting drainage water — estimated at between \$350 and \$600 per acre-foot. Some farmers in the region pay as little as \$13 per acre-foot. Municipal users in Arizona pay about \$50 per acre-foot. Operating the plant would not only be expensive, it would exacerbate serious existing environmental problems as well. The water targeted for treatment currently flows across the border in a canal that terminates in Mexico's Cienega de Santa Clara, a 50,000-acre

marshland in the delta complex. Diverting this water through the desalting plant would likely cause the Cienega to dry up. Much cheaper, environmentally beneficial alternatives to desalting exist that would allow the Cienega to continue receiving water while Living Rivers and a coalition of 130 other groups organize grassroots support for a comprehensive, large-scale delta restoration program.

Decades ago, when flows to the delta were cut off by upstream Colorado River dams, storage projects, and diversions, the Cienega and most of the delta's wetlands virtually dried up. Ironically, the Cienega was saved from total destruction by agricultural runoff. In 1977, BuRec began diverting salty irrigation drainage from Arizona's Wellton-Mohawk Irrigation District into Mexico, sending water into the Cienega for the first time in years. The runoff slowly and partially revived the ecosystem. Today, even though, at 50,000 acres — a mere one percent of its former size, the Cienega is one of the most biologically critical — and fragile — wildlife areas in the region. Even a brief disruption of flows causes serious impact. "Over the past decade, researchers from Mexico and the US have studied the Cienega de Santa Clara and its dependence on the brackish bypass flows from the US," says Mike Cohen of the California-based Pacific Institute. "In 1993, researchers documented that an eight-month disruption in these flows, because of repairs to the canal, caused the loss of more than two-thirds of the Cienega's habitat."

With Colorado River water supplies under ever-greater demand, BuRec is considering ways to making the desalting plant's operation viable. "Running the desalter would be a death warrant for the Cienega and the wealth of species it supports," Cohen says. "It would eliminate the water the Cienega currently depends upon, and replace it with toxic brine. If the Cienega were in the US, nobody would even consider such a move." LIVING RIVERS is currently working with a coalition of environmental



Map of the Colorado River delta

groups to protect the Cienega by advocating fallowing or retirement of some agricultural lands near Yuma, to reduce the amount of saline flows returned to the Colorado River.

For information on LIVING RIVERS' work on the YDP, contact Arizona Program Director Lisa Force at lforce@livingrivers.net, or call 480-990-7839.

RIVER DESTROYING ANIMAS-LA PLATA PROJECT Returns from the Dead

For 21 years, fierce opposition has kept the Bureau of Reclamation (BuRec) from building the Animas-La Plata (A-LP) water project in southwestern Colorado. Organizations from the Sierra Club to the Southern Ute Grassroots Organization have fended off one incarnation after another of this ill-conceived pumping and storage scheme on the Animas River — one of the last free-flowing streams in the Colorado River watershed.

Despite environmentalists' best efforts, however, authorizing legislation sneaked through Congress last year without a

hearing, forcing river defenders to shift tactics, to dissuade Congress from funding the project and, eventually to de-authorize it. Litigation may slow or halt work, but citizen organizing is as critical as ever.

LIVING RIVERS' Reclaim the Bureau Campaign is working with regional and national groups to stop A-LP project funding, once and for all. The coalition is sponsoring a "Save The Animas River" event Friday, November 9, 2001, in Durango. Contact LIVING RIVERS for more information.

"Like a cheap Hollywood monster, this project just keeps coming back to life," said John Weisheit of LIVING RIVERS. "Despite BuRec's mission 'to manage, develop, and protect water and related resources in an environmentally and economically sound manner,' there's nothing about this project that can be construed as environmentally or economically sound."

On the eve of BuRec's second century, many wonder whether the agency has the vision to see A-LP as a vestige of an outmoded approach to managing water. Former Reclamation Commissioner Dan Beard once declared, "the era of big dam-building is over." But newly appointed Commissioner John Keys seems not to feel bound by such pronouncements. Keys has politely but firmly refused LIVING RIVERS' requests to commit to a policy against building new dams.

Retired BuRec environmental planner Philip Doe called A-LP "one of the most destructive boondoggles in agency history."

The project would pump one givth of the river's appual flow more than

The project would pump one-sixth of the river's annual flow more than 500 feet uphill, into a new, off-stream reservoir near Durango. Sixty-seven

million-kilowatt hours of electricity would be required to pump water into the picturesque mountain valley known as Ridges Basin.

More than \$200 million has already gone into planning, and final project costs are conservatively estimated to add at least another \$340 million, funded mostly by federal taxpayers.

"A-LP is a solution in search of a problem," said Michael Black of Taxpayers for the Animas River. "We don't know yet how much we'll have to pay but we know it will be way more than they're telling us."

BuRec refuses to reveal important details of A-LP financing. A lawsuit filed in September 2001 seeks to force the agency, under the Freedom of Information Act to release documents that may reveal violations of federal law.

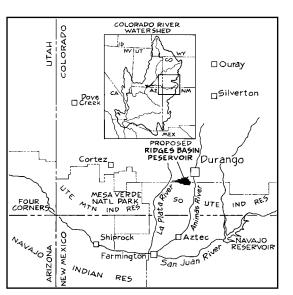
"A-LP is a black hole — swallowing water, power, money, the environment, and public confidence," said Steve Cone of electors Concerned About Animas Water, lead plaintiff in the FOIA suit. "Why won't they produce the requested public documents? What are they hiding?"

The cost of pumping water over the mountain will be borne by taxpayers, and the energy required will almost certainly come from fossil fuels.

"We need to burn less coal, not more," said Gwen Lachelt of the Oil and Gas Accountability Project. "It makes no sense to pollute the air to dewater a river."

The health of the San Juan River ecosystem downstream in New Mexico is closely tied to that of the Animas, the San Juan's largest tributary. A-LP diversions would reduce San Juan River flows below the confluence, further imperiling native fish. Habitat conditions in the San Juan are so degraded that endangered fish have not bred in the river for many years.

The San Juan River is in crisis; building A-LP will only exacerbate it. The river and the native fish need more water, not less. BuRec is preparing a draft environmental impact statement (DEIS), due in early 2002, to address the impact of Navajo Dam operations on fish recovery in the San Juan basin. LIVING RIVERS is calling on BuRec to study decommissioning Navajo Dam as a necessary and important step to restoring the health of the San Juan River.



Map of the area affected by the Animas La Plata Project

ANTELOPE POINT A Lone Investor Hangs On

Last December, LIVING RIVERS and a coalition of activists and traditional Diné (Navajo) people put pressure on six potential bidders not to pursue a joint National Park Service /Navajo Nation marina development on Lake Powell. Citing the need for further study of the project's environmental, economic, and social impacts, the groups sought to dissuade investors. All but one, GMF Antelope, LLC, backed out.

Navajo activists are proposing that the Navajo Nation take over existing tourist concessions at nearby Wahweap Marina marina, rather than construct the new infrastructure. "We stand in solidarity with the traditional Diné and others fighting the Antelope Point development," said David Sherman of the Sierra Club. "Lake Powell Reservoir will be drained. Building yet another marina, and promoting more motorized, polluting recreation, only ignores the inevitable."

Public input in this process is vital Send comments to: Superintendent, Glen Canyon National Recreation Area, PO Box 1507, Page AZ 86040. Email: GLCA_AntelopePoint@nps.gov. Ask NPS to conduct a full Environmental Impact Statement, and evaluate alternative Navajo economic development programs, including acquiring Wahweap Marina, and building educational or health care facilities at Antelope Point.

BULBS NOT DAMS

Several times in the past nine months the generators at Glen Canyon dam were turned up for a few hours to produce additional power to meet high demand. The 330 MW of power provided by Glen Canyon Dam represented, less than one percent of California's demand. (A Megawatt is enough power to supply 750 average US homes.) Glen Canyon is capable of generating nearly four times this amount, but not full time, as that would drain Lake Powell in about one year.

Initially, California paid \$250 per MW hour for this power, more than 14 times the \$17.63 per MW hour charged to Glen Canyon Dam's regular customers. In contrast, California and other consumers could be spending about \$7 per MW hour by replacing incandescent light bulbs with compact fluorescent lights and avoid the need for power from Glen Canyon and many other power plants.

Replacing Glen Canyon power with compact fluorescents represents a fifty-eight percent annual savings by utilities on their power purchases.

But, according to a former employee of the Western Area Power Administration, the federal agency selling this power, "WAPA is more concerned with keeping the plants running, than encouraging investment in conservation to allow for their decommissioning."

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