SUMMER/FALL 2009

ANNUAL REPORT

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Editor's Note: The views expressed by the guest writers in this issue are solely their own and do not necessarily represent the views of the Grand Canyon Trust.

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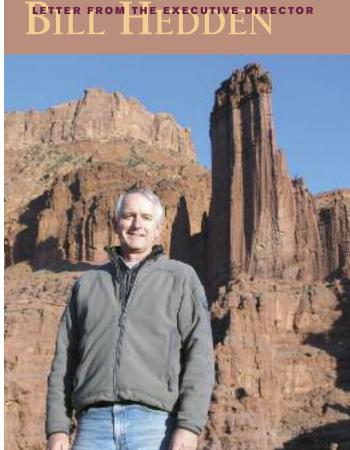
n May 4th this year the U.S. Department of Energy held a celebration on a talus slope above the Colorado River near Moab. Dignitaries assembled at the site where sixteen million tons of uranium mill wastes dug up from their bed beside the river will be loaded on trains for a journey to a safe new disposal cell thirty miles north. Governor Jon Huntsman spoke about the importance of this restoration project to the environment and to the economy of Utah. The twenty year process is projected to cost more than \$1 billion and will create many high paying jobs in this time of economic distress. Already, \$108 million in stimulus money has been targeted for this "shovel ready" job. Along the way, we will remove a major source of contamination of the Southwest's water supply and regain a precious slice of some of the river's most critical habitat.

Public opinion in America today seems divided on the consequences of shifting to an economy featuring green technologies, renewable energy, and restoration of the places that have been damaged during our collective orgy of fossil-fueled development. Where some see creeping socialism and heavy added costs that will wreck our economy, others envision America leading the way on the sustainable technologies that will determine who wins and who loses in this new century. I personally think our dignified survival as a society demands that we make the transition as rapidly as we can thoughtfully do it; but I understand that there will be costs along the way. The Atlas uranium mill is a case in point: we failed to make the company that reaped the profits also save for the clean-up, so the burden is falling on the taxpayers, however much the project will benefit the regional economy. The sting of that is modified somewhat since the mill churned out materials for the Cold War weapons program throughout more than half its life, making the leftover mess an undeniable government albatross.

This issue of the *Advocate* examines several forms of restoration, indicating directly or obliquely the economic consequences of each. Annette McGivney has paddled and tramped the endless labyrinth of canyons that feed into Glen Canyon and that are emerging like lost mariners as drought and climate change shrink Lake Powell. Her book Resurrection, compiled with photographer James Kay, chronicles the startlingly swift recovery of streams and wildlife once the smothering lake waters retreat. She sums it all up with a marvelous observation: "I became convinced that America does not need Lake Powell. What we need is Glen Canyon. A resurrected Glen Canyon serves as a new kind of symbol, not of environmental destruction or of economic might, but of something much greater. It represents the resiliency of life and the hope for a better future." And, for those who think that is woolyheaded, consider that storing the Colorado's reduced modern flows all in Lake Mead will not only give us Glen Canyon back and allow healing natural flows through Grand Canyon, it will also save hundreds of thousands of acre feet of water each year in reduced evaporation as compared to keeping Mead and Powell both half full. That is equal to Nevada's entire allotment of river water.

Ethan Aumack has played a leading role in wrangling all of the stakeholders involved with northern Arizona's ponderosa pine forests into agreement that the forests and communities now depend on forest restoration at a scale that has been economically unthinkable. He describes how he has built on this consensus to reach agreement on where and how restoration should be done and how industry can scale itself to take advantage of the small diameter material that will be produced in abundance. The result will be treatment of 50,000 acres of about-to-burn forest each year for twenty years, and creation of 600 new jobs that will annually pump \$200 million of private money into the economy. This federal albatross has been transformed into a huge business opportunity.

Trust Native America program director Tony Skrelunas spends his life moving between cultures. A traditional Navajo dancer who spends time at the family sheep camp each year, he also has an MBA, hopes his son will play major league baseball, and



served as Director of Economic Development for the Navajo Nation. He is working closely with the Navajo leadership to help stimulate a green economy on the reservation. As he points out, many traditional values and aspects of life that are gradually disappearing are ideally suited to sustainability, and many customary ways of producing foods and goods with care and reverence could easily be adapted to command premium prices in the modern marketplace. It is a culture-straddling task he is ideally suited to fulfill.

THE RESURRECTION OF GLEN CANYON

by Annette McGivney

As Lake Powell has retreated in recent years due to drought and western water demands, "The Place No One Knew" is returning from the grave.

Adapted from Resurrection: Glen Canyon and a New Vision for the American West, by Annette McGivney with photographs by James Kay; March 2009, The Mountaineers/ Braided River, 176 pages, \$29.95; www.braidedriver.org.

ntombed for more than forty years beneath Lake Powell, Glen Canyon once encompassed 170 miles of the Colorado River main channel and nearly 200 side canyons. The vast drainage straddling the Arizona-Utah border was the ecological heart of the Southwest's river systems, where the Green, San Juan, Dirty Devil and Escalante rivers converged.

Unlike the turbulent waters of the Grand Canyon downstream and Cataract Canyon upstream, Glen Canyon's calm main channel and shaded side canyons provided a unique nursery where fish, plant, and mammal species that could not survive elsewhere in the region were able to thrive. The drainage also harbored more Native American archaeological sites than almost anywhere else in the Southwest and was home to numerous sacred Navajo and Hopi sites, all flooded without the informed consent of tribal religious leaders. Among Anglo explorers, ranging from John Wesley Powell to Edward Abbey, Glen Canyon was often described as the most beautiful place in the Southwest, a pristine paradise that surpassed the Grand Canyon. For all these reasons, the flooding of Glen Canyon has been viewed by many wilderness activists as the worst environmental crime of the twentieth century.

Photographs of spectacular Glen Canyon scenery chronicled in the Sierra Club book *The Place No One Knew*—published in 1963, the year the gates on Glen Canyon Dam slammed shut—documented what would soon be buried by the West's insatiable thirst for economic development. "Glen Canyon died in 1963 and I was partly responsible for its needless death," admonished Sierra Club executive director David Brower in the book's introduction. "So were you. Neither you nor I, nor anyone else, knew it well enough to insist that at all costs it should endure. When we began to find out it was too late."

Growing up in the 1960s and 1970s when Lake Powell was filling, I never questioned the existence of the West's massive reservoirs. I reasoned that the destruction of Glen Canyon was collateral damage for the comfortable Southwest lifestyle I enjoy. Yet the tradeoff always seemed bittersweet at best. I wished I could have explored the spectacular twisting slot canyons, paddled the lazy river, and seen the intact Anasazi ruins for myself, but I was born too late. At least that is what I thought until drought and climate change kicked in.

In January 2000, Lake Powell was at 95 percent of capacity with about twenty-four million acre feet of stored water and nearly 2,000 miles of shoreline. By April 2005, after six years of significantly below average precipitation in the upper Colorado River basin, the lake level had dropped a record 140 feet to only 30 percent of capacity. Due to increasing municipal water demands, continued below average precipitation in recent years, and a warming Southwest climate, the lake has remained half empty or less since 2005. There is no scenario—beyond flooding of biblical proportions—in which it would be full again anytime soon. Nearly a decade of drought has shrunk the massive reservoir from 250 square miles to its current diminished state of less than 130 square miles. As the reservoir has shriveled, hundreds of miles of twisting side canyons have emerged and a flowing river channel has replaced the northernmost section of the lake where a shuttered, landlocked Hite Marina sits like a ghost town.

In 2002, I began covering the retreat of Lake Powell and surprise reemergence of Glen Canyon for Backpacker magazine. I interviewed numerous individuals on all sides of western water policy issues and also hiked in dozens of newly emerged side canyons, exploring places that had been buried under 100 feet of water for thirty-five years. These were not the ruined, stinky silt flats filled with boat debris I had expected, but were landscapes in a spectacular state of ecological recovery. I witnessed creeks quickly emerging when Lake Powell retreated, returning to their historical, meandering flows. In just four years, I saw cottonwood saplings sprout along these restored streams and grow to twelve feet tall. Waterfalls, plunge pools, and trickling springs returned; so did neotropical birds, insects, mountain lions, and beavers. Even in the narrowest, darkest restored slot canyons, the water was profuse with tiny fish and the walls sang with a tapestry of tiny frogs.

Journal entry, June 2005

This canyon, it squeezes me. The fluted walls, now three feet apart and 400 feet tall, press in. Close and then closer. I pad my sandals over the white cobblestone floor, exhilarated and intimidated by the intimacy with towering slickrock. Today, my hiking partners and I are exploring Twilight Canyon, a place that five years ago was smothered under more than 100 feet of lake water and thirty feet of sediment. Tomorrow and the next day we'll visit other recovered slots–all stubbornly alive and miraculously scenic.

Glen Canyon encompasses more than one hundred side canyons, and dozens harbor labyrinthine narrows like this one, some still unnamed and uncharted. Each slot has a different personality, a different vibe, depending on how the light plays off the walls and how the walls

play off each other. In Twilight, the light is yellow and descends in heavenly shafts; it swirls and dances and turns the tan walls orange and our pink skin violet. We stumble with our mouths open and our heads back. With churchlike reverence, we are silent as we look impossibly upward to where the canyon is bisected by a narrow sliver of sky.

There is something irresistible about these slots that lures us up narrowing passages. I imagine myself as an ant in a sidewalk crack, hungry for what lies ahead. We see absolutely no sign of the lake except for bright-colored paint streaking the walls where jet skiers once became inconveniently wedged. My body learns to do new things



to get around obstacles-a deep pool or giant chockstoneto keep going. I stem and crawl and wade and climb.

Like moths attracted to a porch light, we venture up a side drainage. It's deeper, narrower, and darker than Twilight's main canyon. Lake water weeps out of the porous sandstone walls as if a sponge is being squeezed. The bonanza of moisture feeds frogs, bugs, birds, Day-Glo green algae, and numerous hanging gardens of ferns. I pause in a hipdeep, copper-colored pool, press my palms against the damp slickrock, and listen for a moment to the echoes of frogs and gurgling water. Here, in the womb of the Earth, I am blissfully at peace.



As I explored the many thriving canyons of Glen Canyon and researched the politics behind western water policy, I became convinced that America does not need Lake Powell. What we need is Glen Canyon.

What started as one story assignment investigating new hiking destinations turned into a life-changing journey. My expedition took me into the most beautiful places that were supposed to have been forever destroyed and it also lead me to investigate the agribusiness industry, federal water subsidies, Native American cultural sites, Grand Canyon ecology, suburban sprawl, public lands recreation, tourism and all the underpinnings of the West's economic machine.

As I explored the many thriving canyons of Glen Canyon and researched the politics behind western water policy, I became convinced that America does not need Lake Powell. What we need is Glen Canyon. A resurrected Glen Canyon serves as a new kind of symbol, not of environmental destruction or of economic might, but of something much greater. It represents the resiliency of life and the hope for a better future. It represents, quite literally, a chance for redemption.

Several regional conservation organizations, including the Glen Canyon Institute (GCI), argue that western water policy must be changed to ensure a

lower Lake Powell regardless of rainfall, urging that laws such as the Endangered Species Act, the Wilderness Act, and the National Environmental Policy Act that arose in part from the damming of Glen Canyon should be tapped to protect the reemerging canyon.

Although a variety of far-reaching water policy and lifestyle changes should parallel the protection of Glen Canyon, keeping the emerged landscape from being inundated again actually boils down to simply using Lake Mead instead of Lake Powell for reservoir storage. The Glen Canyon

Institute and other conservation groups argue that if the West's reservoirs are all going to be half empty from now on, why not just keep Lake Mead full and Lake Powell much lower? This simple change in policy does not mean the dam has to be decommissioned or that lake recreation or hydropower would disappear. These things would just take a back seat to preservation of natural and archaeological resources in Glen Canyon.

"The lake is lower now than anybody ever imagined," notes Dan Beard, former commissioner of the Bureau of Reclamation under President Clinton and now a board member of the Glen Canyon Institute. "It provides a new reality about what is possible. It's time for the federal government to consider operating the dam in a different way so that we can protect what's been uncovered."

Amazingly, Americans are being given a second chance to not only experience Glen Canyon, but to save it. **b**



ARIZONA'S EMERGING SOLAR RENOWN

by APS President Don Robinson

n mid-May, I visited the Grand Canyon to dedicate the solar power facilities on the park's Visitor Center. Like millions of visitors each year, I was filled with awe at the sight of one of the world's great natural wonders. Our state is justly celebrated everywhere as the location for this unimaginable creation.

As President of the electric utility that serves the Grand Canyon, I take very seriously the responsibility of preserving its visual splendor for future generations. That's one of many reasons that APS is rapidly embracing renewable energy and working to make Arizona the "solar capital of the world." It's my hope that one day soon Arizona will be just as renowned for its use of solar energy as it already is for the Grand Canyon.

In May 2009, APS announced three projects that, taken together, mark an extraordinary commitment to solar power, surpassing on a per customer basis that of any other electric utility. We showcased these projects with a whirlwind solar tour around the state—from Flagstaff to the Grand Canyon and finally to Phoenix that played to enthusiastic crowds eager to encourage and support a better, greener and cleaner Arizona.

The "APS Solar Tour—Spring 2009" began in Flagstaff with the launch of the APS Community Power Project, which will offer certain customers the opportunity to join a pilot solar energy program. APS will install solar panels for no charge on up to 300 customer rooftops, in essence building a virtual solar power plant—one rooftop at a time. Flagstaff customers will have an incentive to sign up for the program because participants will receive an attractive 20-year fixed Community Power Rate for the solar portion of their electric bill.

The second stop of the APS Solar Tour tied together two of Arizona's great natural treasures—the Grand Canyon and the sun. An international audience helped us celebrate as the Visitor Center went solar with eighty-four solar panels producing eighteen kilowatts of energy, enough to offset 30 percent of the Center's electricity use. From now on, the Grand Canyon and solar power will be inextricably linked



New solar panels at Grand Canyon National Park Visitor Center.

for the Canyon's 4.5 million annual visitors, as this solar facility provides a compelling visual seminar in renewable energy.

On the final stop of the APS Solar Tour, we saved our best performance for last at the ASU Walter Cronkite School of Journalism in Phoenix with the announcement of a second huge concentrating solar power plant, Starwood Solar 1, which will be built in the Harquahala Valley, approximately seventy-five miles west of downtown Phoenix. This plant, when completed in 2013, will not only assume the title of the world's largest solar power plant, it will provide enough electricity to power almost 75,000 Arizona homes.

Last year we announced our first concentrating solar facility, the 280-megawatt Solana Solar Station. With energy from the completed Solana and Starwood, combined with our other solar projects, the sun will usher in a new era of electricity production in Arizona.

While we're convinced of the benefits of clean energy, we also have to keep the lights on—and APS expects to add another 600,000 customers by 2025. Despite this expected growth, our goal is to meet our state's growing energy needs primarily with additional renewable generation and greater energy efficiency. Together, these efforts will help provide as much as 50 percent of the new energy needs of our customers.

It's an important and meaningful strategy that helps to provide energy security to our nation and preservation of the Southwest's desert environment. It's a long-term commitment that will establish Arizona's place in the sun will secure a cleaner and more sustainable energy future.

COOPERATION DELIVERS NEW UTAH WILDERNESS

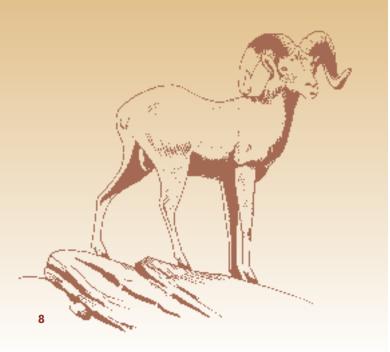
by Jen Jackson, freelance writer

t is a land of red, of heat, of three deserts uniting as one landscape. It is an embattled swath of terra firma, inspiring passionate opinions to match its fierce beauty. It is a land of little water and immense appeal, one whose siren song overwhelms the quieter questions of carrying capacity.

This is Utah's Washington County, now home to the state's newest wilderness areas. Last month, I finally set foot in the Red Mountain Wilderness, greeted by a Carsonite marker announcing its protected status. This narrow, brown sign stilled my feet and accelerated my heart rate. A simple post affected me more than the stunning scenery and the late-season snow seeking to obscure it. Red Mountain Wilderness. Protected landscape. Valued ground.

It was a long and winding path to get here. Yet now, with that first trail blazed into the wilds of land management consensus and cooperation, other Utah counties may soon follow. The designation of wilderness in Utah's southwest corner was a watershed moment in a state otherwise stymied by the wilderness debate.

In a county once known to be vehemently anti-wilderness, community leaders and conservationists found common ground in a bill that set aside 256,338 acres of wilderness.



Washington County has been one of the nation's fastest growing regions for nearly a decade, now experiencing a 4.5 percent annual expansion rate. Newcomers are drawn by the temperate climate and the stunning scenery. Here, the Colorado Plateau sweeps down from the cliffs of Zion National Park to meet the Mojave Desert lowlands and the alluvial fans at the Great Basin's edge. Red cliffs rise from Joshua tree-studded flats. Rows of blue, barren mountains frame the western horizon, serving as home to bighorn sheep, shadowing the endangered desert tortoise below.

This is a distinctive landscape, a unique merging of geologic formations, flora and fauna. And until this spring, Washington County dedicated more acreage to golf courses than it did BLM wilderness. However, the passage of the Omnibus Public Lands Management Act this year found the balance shifting. This bill designated two million acres of new wilderness nationwide, of which the Washington County Growth and Conservation Act was a small part. In a county once known to be vehemently anti-wilderness, community leaders and conservationists found common ground in a bill that set aside 256,338 acres of wilderness, including 94 percent of all BLM Wilderness Study Areas in the county. The legislation also confers Wild and Scenic River status to 165.5 miles of the Virgin River and its tributaries (the first such designation in the state), and establishes two National Conservation Areas totaling 140,000 acres.

Even more unexpectedly in this wilderness-wary state, other Utah counties are now collectively clamoring for their own wilderness bills. Emery County, for one (home to the San Rafael Swell), has been in discussion with the conservation community for over a year now. Beaver and Piute counties have expressed an interest in being the next region under consideration. Conservationists are now reaching out to Grand, San Juan and Wayne counties to initiate a dialog on wilderness. Much of southern Utah is engaged in a topic heretofore taboo—the location and scope of wilderness designation.

Utah's conservative counties support this new model for both the tangibles and intangibles it provides. The Washington County bill authorizes the sale of several



thousand acres of federal lands already identified for disposal by the BLM. This gives the county more room to grow. Such a provision is appealing for counties comprised largely of public lands from which no tax revenue is derived. The legislation also designates an off-road vehicle trail system, which is seen as a route to tourism dollars.

Beyond this, however, the counties get certainty and a voice in defining its terms. Under a wildernessfriendly administration, proactively approaching the wilderness issue is attractive to rural counties. They want a seat at the table of this inevitable discussion. They want to be heard.

The appeal to the conservation community, of course, is the long-awaited designation of wilderness in a clean bill nearly devoid of anti-environmental provisions. And the lack of hardrelease language means that, even if wilderness advocates didn't protect everything they wanted this go-round, there could be future opportunities.

Utah Senator Bob Bennett—not previously known as a champion of wilderness—now gets a legacy. He will be remembered as the man who solved the acrimonious landuse puzzle plaguing Utah for years.

Finally, the Washington County legislation provides a technical framework and clear-cut guidelines for other counties. A five-year process led to the final version of the Washington County Growth and Conservation Act. Now, with one county having made the arduous trek, a path is laid for other counties to follow. There will be less debate and more meaningful discussion of specific areas and the issues unique to them. It allows the conversation to begin from a place of success and optimism; Utahns of all stripes now know

that a wilderness bill built on cooperation and consensus is possible.

In this regard, the Washington County bill provides a template for hope, a framework for belief, the structure upon which we can develop cohesive communities and strengthen our fidelity to home ground. The five-year Washington County process inspired more than just successful legislation; it gave voice to the threads of collective values that silently hold us together and tie us all to this landscape.

This is a land of merging geographies and opinions, of passion and patience, of determination and dialog. It is a point of inspiration in Utah's great wilderness debate. This land contains wilderness. I have walked it. And thanks to this bill—and the ones to follow—so will generations to come.



BUILDING CONSENSUS FOR LANDSCAPE-SCALE RESTORATION IN NORTHERN ARIZONA'S FORESTS

by Ethan Aumack

Ponderosa pine forests stretch almost continuously from the south rim of the Grand Canyon in north-central Arizona, across the vast Mogollon Rim to the White Mountains of eastern Arizona and the mountains of southwestern New Mexico. These forests surround and support communities, and provide invaluable wildlife habitat, recreational opportunities, and ecosystem services ranging from clean water supply to carbon storage. Unfortunately, these forests have become degraded by unsustainable historical land uses such as fire suppression and old-growth logging, and are currently threatened by unnaturally severe fire, invasion by non-native weeds, and climate change.

While many northern Arizona citizens have worked for years to restore ponderosa pine forests, efforts have been relatively small-scale.

Especially within a climate change context, and the likelihood of larger, landscape-scale fires burning in the future, our efforts to restore ponderosa pine forests have been insufficient. We need landscape-scale restoration efforts that adequately protect communities, restore and protect wildlife habitat and watersheds, significantly reduce the size of large fire events, and return more natural, low-intensity fire to these fire adapted forests as soon as possible.

Two primary factors have constrained expansion of restoration efforts from areas around communities to the broader forested landscape in the region. First, until recently, there has not been any agreement, or social contract, regarding the extent and types of restoration efforts appropriate in wildland forests. Second, such treatments have been cost prohibitive: up to \$1000 per acre for mechanical thinning treatments. With some form of treatment needed across hundreds of thousands to millions of acres in the region, costs exceed available financial resources.

BUILDING A SOCIAL CONTRACT

Over the last several years, restoration proponents statewide have been systematically building agreement regarding ponderosa pine forest restoration. Especially within the current Arizona Governor's Forest Health Council and its predecessor, the Governor's Forest Health Advisory Council (both co-chaired by Trust staff), a broad array of stakeholders found consensus around the need for science-based, ecologically appropriate landscape-scale forest restoration. Such agreement was formalized in 2007 in the *Statewide Strategy for Restoring Arizona's Forests*.

As the *Statewide Strategy* neared completion in late 2006, the Forest Service agreed to fund the Analysis of Small Diameter Wood Supply in Northern Arizona—an effort to determine availability of restoration-generated wood and biomass across northern Arizona. Over the course of nine months in 2007, the Forest Ecosystem Restoration Analysis Project convened a wide spectrum of stakeholders including industry, environmental NGOs, community representatives, and others to develop agreement regarding the extent and type of restoration treatments that should occur across the Mogollon Rim over the next twenty years. The group developed consensus agreement describing the nature of such treatments across nearly two-thirds of the 2.4 million acre Mogollon Rim study area. As part of this agreement, the group identified approximately 40 percent of the landscape that should be considered available for some form of mechanical thinning. Small

We have within our grasp, today, the scientific foundation, the social agreement and support, the

partnerships, the vision, and the strategy to implement landscape-scale community protection,

restoration, and fire management in northern Arizona.

diameter tree thinning activities proposed across these acres were estimated to be capable of generating more than 900 million cubic feet of wood across 1 million acres that could be thinned at a rate of approximately 50,000 acres per year (an increase of 30,000 acres per year over current rates) for the next twenty years.

DEVELOPING PARTNERSHIPS WITH SUSTAINABLY DESIGNED INDUSTRY

Expanding status quo restoration-based mechanical thinning treatments (that would be integrated with prescribed burning and Wildland Fire Use treatments across the Mogollon Rim) at a rate of 30,000 acres per year could cost as much as \$300 million over the next ten years. Given the current economic climate, it is unlikely that these funds will come from the federal government.

For restoration to accelerate across the region as environmental conditions and social agreement suggest is necessary, we need reductions in per-acre treatment costs. Substantial efficiency gains can be made by capitalizing on social agreement whenever possible to avoid costly controversy, by working at larger planning and implementation scales, and by using available, relatively low-cost technologies in project planning (see *www.forestera.nau* for a description of such technologies). Finally, efficiency can and must be gained by allowing sustainably-designed industry to utilize restoration by-products to offset overall treatment costs.

We must develop partnerships with industries capable of restoring forest health, honoring existing social agreement, and offsetting per-acre treatment costs. Recently, the Trust and the Center for Biological Diversity signed an unprecedented memorandum of understanding to work collaboratively with Arizona Forest Restoration Products (AZFRP)—an industry partner offering all of these capabilities. AZFRP has committed to utilize—in the process of manufacturing oriented strand board—only small diameter trees, at a rate well within the bounds of ecological sustainability and social acceptability identified within the Small Diameter Wood Supply Study. It has actively collaborated in the process of developing social agreement over the last three years. Finally, it has offered the potential to significantly offset the costs of mechanically thinning up to 30,000 acres per year of small diameter ponderosa pine forest. AZFRP has the potential to help catalyze forest restoration in the region, while creating approximately 600 restoration-generated jobs, and injecting into rural economies up to \$200 million per year in restoration-generated revenue.

STRENGTHENING PUBLIC SUPPORT, AND DEVELOPING LANDSCAPE-SCALE RESTORATION STRATEGIES

Since the completion of the Small Diameter Wood Supply Study, the Trust and other stakeholders have built unprecedented support for moving forward with ecologically, economically, and socially-viable landscape-scale forest restoration across northern Arizona. In addition to support offered by former Governor Napolitano, current Governor Brewer, and Representative Kirkpatrick, all seven northern Arizona counties, the Eastern Arizona Counties Organization, the County Supervisors' Association of Arizona, and the Northern Arizona Council of Governments have signed formal resolutions of support. With this support, stakeholders have begun developing landscape-scale restoration implementation strategies. Over the coming months, we expect these strategies will be adopted by the Forest Service in the process of initiating on-the-ground restoration activities.

OPPORTUNITY FOR SUCCESS

We have within our grasp, today, the scientific foundation, the social agreement and support, the partnerships, the vision, and the strategy to implement landscapescale community protection, restoration, and fire management in northern Arizona. We must translate this unprecedented capacity into long-term contracts that simultaneously offer dependable supply to restoration-based industries, and ensure transparent, collaborative, science-based, and adaptive project planning and implementation over the coming years. Formulating such contracts will require commitment on the part of the U.S. Forest Service, support by communities and civic leaders, and collaborative engagement by a wide variety of invested stakeholders. We have demonstrated, as a community, that we can and must meet this challenge. **b**

UTAH FOREST COLLABORATION SUCCEEDS

by Mary O'Brien

hink of southern Utah and you're likely to picture the stunning redrock canyons of the Grand Staircase-Escalante National Monument, or Canyonlands, Arches, and Zion National Parks. But starting in late 2003, Grand Canyon Trust took under its conservation wing the three Colorado Plateau national forests that stretch across southern and central Utah above the canyons.



A new beaver dam high in the mountains of Fishlake NF.

As a first step, the Trust convened fifteen local, regional, and national conservation organizations to form the effective Three Forests Coalition, which jointly proposes conservation alternatives for essentially every land management decision the Dixie, Fishlake, and Manti-La Sal National Forests make. In 2004, the Coalition developed a comprehensive, Sustainable Multiple Use Alternative for management of all three forests, including logging, grazing, ORVs, roads, archaeological sites, oil and gas, coal, wildlife, plants, monitoring, and public participation. Since 2004, we've submitted applicable portions of the Alternative at every major decision point.

The response has been impressively positive. All three current forest supervisors welcome public participation, assess our alternatives, and accept data we have gathered on conditions within the forests.

STARTING POINT: THREE "WORKING FORESTS"

In 2003 we began engaging with southern Utah national forests that have been historically, culturally, and administratively treated as "working forests." This means they have been valued primarily for their yield of food and water for cattle and domestic sheep; timber; and minerals: coal, uranium, and/or oil and gas. Off-road vehicle (ORV) routes had proliferated exponentially until the Clinton administration required some protection of remaining roadless areas and ordered the forests to make systematic plans to limit ORV use.

The task of the Three Forests Coalition was nothing less than to completely change the Forest Service's philosophy about what these forests are good for.

2009: BIG PICTURE PROGRESS Agreements to address excessive cottonwood, aspen, and willow browsing

In 2008, the Trust surveyed sixty-two sites (twentynine of them both before and after the season's cattle grazing) for the degree to which cottonwood, aspen, and willow youngsters were growing ("recruiting") into overstory adults. The results? Under pressure primarily from cattle and elk, most sprouts of cottonwood, aspen, and willow are annually trimmed to shorter than four feet, and thus unable to replace the few, large, old cottonwood, aspen, and willows. This is crucial, because cottonwood and willow are riparian anchors, and aspen are second only to riparian areas in the West for supporting plant and wildlife diversity.

The three forest supervisors accepted our report, *Cottonwood, Aspen and Willow at Risk from Excessive Browsing on the Dixie and Fishlake National Forests*, and are acting on our proposal to assemble a year-long task force to examine the scientific literature on methods that have successfully restored cottonwood, aspen, and willow recruitment. They agreed to change management in at least one site on each forest during 2009 to feed into the task force research.

Principles for aspen restoration

Following a Grand Canyon Trust and Utah Environmental Congress appeal of a timber sale we believed would not effectively restore aspen, the Dixie National Forest supervisor suggested that a collaborative group develop principles for aspen restoration treatments. As a result, Grand Canyon Trust and Rural Life Foundation Stewardship Center (Kanab) are co-convening the multistakeholder Utah Forest Restoration Working Group with two forest supervisors, Utah Cattlemen's Association, Ute Indian tribe, Utah Environmental Congress, and various state agency representatives. The plan is to develop, by April 2010, principles to guide aspen restoration treatments on all five Utah national forests.

Gold-standard reference areas

In 2007 and 2008 the Trust searched for goodcondition examples of seven commonly-impacted habitats on the three forests: ponderosa pine, sagebrush, aspen, riparian areas, meadows, springs, and beaver sites. In our report, Reference Areas: Ecological Gold Standards for Dixie, Fishlake, and Manti-La Sal National Forests, we nominated twenty-one sites for protection from impacting uses, in order to compare them with similar habitats that are impacted under current multiple uses. The three supervisors accepted the proposal to establish reference areas. During 2009, the Trust will work with the Utah Native Plant Society to characterize six of these sites; with the three forest supervisors to establish reference areas; with the U.S. Forest Service to test methods for rapidly assessing the springs; and with volunteers to assess beaver sites.

Tushar Allotments agreement

In 2007, the Trust and six other conservation organizations resolved an appeal with the Fishlake NF regarding eight cattle allotments. The deal was to assemble a two-year, multi-stakeholder collaboration on two excessively-grazed cattle allotments in the Tushar Range. The Tushar Allotments Collaboration completed its consensus recommendations in April 2009. Agreements include a 60 percent reduction in number of cattle on one allotment, significantly reduced utilization limits on both allotments, fencing of springs and a wetland site, follow-up monitoring, and annual



Transect of narrowleaf cottonwood sprouts.

collaboration meetings. In 2009 we will help assess browse results and build the wetlands fence and permanent monitoring cages.

Dixie Travel Plan

The Trust actively participated in planning for significant ORV route closures in the new (May 2009) Dixie National Forest Travel Plan. The process was a model of transparency and responsiveness to public participation.

Utah's first-ever beaver management plan

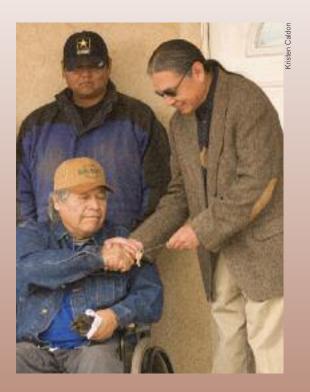
Currently, there are essentially no limitations on beaver trapping in the state of Utah beyond the requirement to obtain a permit. This makes investments in livetrapping and beaver restoration on the three forests a sketchy proposition. The Trust encouraged Utah Division of Wildlife Resources to establish a beaver management plan for the state. The agency agreed, and the Trust is serving on the multi-stakeholder beaver management plan group. If all goes well, Utah will have its first statewide beaver management plan (including education about the positive roles beaver play) in January 2010.

All of these activities are made possible by the Forest Service and Utah Division of Wildlife Resources being responsive to the intensive, positive attention and information of Grand Canyon Trust and the Three Forests Coalition. This is the process by which Utah "working forests" and their beaver may receive some well-deserved rest and recuperation. **1**

Cottonwood, Aspen, and Willow at Risk is available at http://www.grandcanyontrust.org/programs/forests/utah/aspen_willow.php The Reference Areas report is available at http://www.grandcanyontrust.org/programs/forests/utah/reference_areas.php The Tushar Allotments consensus report is available at http://tushar.ecr.gov/

SPRINGERVILLE SETTLEMENT FUNDING CLEAN ENERGY INVESTMENTS

by Roger Clark



"Ahe'hee" was all Lloyd Benally said when Indigenous Community Enterprises handed him the keys to his new 900 square foot, straw bale home. But this simple exchange and "thank you" in the Navajo language belie extraordinary efforts and events that made this day possible.

r. Benally lived all his life in the 200 square foot, wood frame house built by his parents north of the Navajo community of Kaibito. Kerosene lamps lit their home. They burned juniper to cook and to heat their poorly insulated dwelling during months of bitter-cold weather.

On a blustery and overcast day this spring, dozens of neighbors and relatives joined construction workers and tribal officials in a ceremony to dedicate Mr. Benally's new home. Indigenous Community Enterprises' (ICE) executive director Hazel James greeted the gathering and thanked the many individuals and groups who contributed to constructing the first of what ICE plans to be dozens of simple, energy efficient and well-constructed homes built by and for Navajo people living in remote reservation locations.

Director James acknowledged Grand Canyon Trust (Trust) for its role in funding part of the photovoltaic (PV) system that provides electricity to Mr. Benally's new home. On behalf of the Trust, we thanked Tucson Electric Power, Salt River Project, and the Arizona Energy Office for their contributions to Mr. Benally's PV system and explained how our alliance was created and established to support projects such as those developed by ICE.

SETTLEMENT AGREEMENT

In 2001, the Grand Canyon Trust initiated a legal strategy to reduce pollution from the coal-fired Springerville power plant and to prevent Tucson Electric Power (TEP) from adding two new 400-megawatt units to the plant. We were not able to block construction of the new units, but during the four-year effort the owners agreed to reduce the plant's total sulfur dioxide emissions by 44 percent and nitrogen oxide emissions by 23 percent. In addition, Salt River Project (SRP), the owner of the fourth unit, agreed to set aside \$1 million dollars a year for five years to be spent on renewable energy and energy efficiency projects.

As originally conceived in 2005, negotiators of the agreement anticipated investing the funds in a few large projects such as expanding TEP's existing 5-megawatt photovoltaic array next to the Springerville power plant. However, the five-person steering committee that was established to determine the use of the \$5 million Renewable Energy Investment Fund (REIF) decided on a different approach. The committee, consisting of two utility and two Trust representatives who selected the Arizona Energy Office director as the "neutral" fifth member, reached a unanimous decision to fund projects located outside of the utilities' service areas and that will directly benefit Native American communities in northern Arizona and New Mexico.

RENEWABLE ENERGY INVESTMENT FUND

The REIF steering committee decided that grants be restricted to paying only for equipment and hardware.



Lloyd Bennally's new 900 square foot, straw bale home near Navajo Mountain is electrified by eight solar panels donated by Arizona State University and the Arizona Energy Office. A grant from the Renewable Energy Investment Fund paid for batteries and other components of the photovoltaic system.

In addition, REIF recipients must contribute additional funding from other sources. Priority is given to projects that employ people within the community and use native-owned enterprises to increase the benefits to the local economy where unemployment often exceeds 40 percent.

In the case of Lloyd Benally's PV system, five Navajo electricians employed by the Navajo Tribal Utility Authority installed the system, which was paid for with funding from both ICE and the REIF, with solar panels donated by the Arizona Energy Office and Arizona State University. The construction crew for his house was comprised entirely of residents from the Kaibito area. In more than a dozen other off-grid PV installations, REIF grants have been combined with donated panels, tribal installation services, and out-of-pocket payments by home owners to provide electricity in remote areas of the Hopi and Navajo Reservations.

The REIF steering committee has also earmarked funding for larger projects. Funds are available for installing renewable energy systems on community buildings such as schools, museums, tribal offices, chapter houses, and community centers. Grants are limited to a maximum of \$100,000 per project and at least 25 percent in matching funds must be contributed to the overall cost of hardware for the renewable energy system. Systems can be either off-grid or grid-tied and may include solar and wind generators. The Grand Canyon Trust is currently assisting the communities of Shonto, Shiprock, Zuni, and Sipaulovi in developing project proposals.

More recently, the steering committee approved funding to match Department of Energy, Energy

Efficiency and Conservation Block Grants (EECBG) on a dollar-for-dollar basis for up to a maximum of \$100,000 per tribe. Tribes in northern Arizona and New Mexico are eligible to receive more than \$500,000 in REIF matching funds for projects designed to improve energy efficiency and reduce overall energy consumption. In May, the Grand Canyon Trust and the Arizona Energy Office organized a grant writing workshop to assist nearly a dozen tribes in preparing their EECBG applications.

CLEAN ENERGY FOR TRIBAL ECONOMIES

For several decades, coal, uranium, and natural gas development on tribal lands brought some economic benefits to native people in our region. But their toxic residues remain while opportunities elude many of the residents, including Lloyd Benally who never lived in a home with electricity, indoor plumbing, and running water.

Looking out from the north-facing windows of his new home, Mr. Benally can see the pollution plume from Navajo Generating Station, another coal-fired plant that powers millions of homes in distant cities throughout the Southwest. Unlike others who face rising electricity rates due to requirements to reduce harmful emissions of sulfur, nitrogen, mercury, and carbon dioxide, his cost to run lights and small appliances is fixed. His solar source for electricity is free and clean.

The Renewable Energy Investment Fund was created in a settlement with owners of a coal plant. It is stimulating a new energy economy to benefit those whose lands and lives are being damaged by burning coal.

CONSERVATIONISTS CELEBRATE 40TH ANNIVERSARY OF NEPA

by Mary O'Brien

One of the first memoranda Barack Obama issued in January 2009 was titled Transparency and Open Government. The memorandum was a welcome one to the Grand Canyon Trust.

Each of the three major paragraphs began with four words: "Government should be transparent. . . Government should be participatory . . . government should be collaborative." With regard to participation, President Obama noted, "Knowledge is widely dispersed in society, and public officials benefit from having access to that dispersed knowledge." With regard to collaboration, he wrote, "Collaboration actively engages Americans in the work of their Government."

In 1969, when Barack Obama was seven, the National Environmental Policy Act (NEPA) was enacted. Its 40th birthday is worth celebrating. As spelled out in its legally-enforceable implementing regulations, NEPA embodies every sentence of the new President's January memorandum.

Two particular NEPA features have required federal agencies to heed the widely-dispersed knowledge and active engagement of citizens, including members of the Grand Canyon Trust. These are the requirements to "rigorously explore and objectively evaluate all reasonable alternatives" to proposed legislation and other major federal actions significantly affecting the quality of the human environment; and discuss, with scientific integrity, the potential environmental impacts of each alternative. Importantly, citizens as well as federal agencies can develop the "reasonable alternatives" that must be evaluated in environmental impact statements (EISs).

Since the Trust was founded, NEPA has helped us bring aid and comfort to Grand Canyon and the Colorado Plateau. A few examples illustrate numerous such instances:

COLORADO RIVER WATER FLOWS

NEPA was the basis of the Grand Canyon Trust's 1988 lawsuit against the Western Area Power Administration (WAPA). The Trust successfully argued that before WAPA could issue its power marketing criteria affecting Glen Canyon Dam operations and Grand Canyon resources, an EIS needed to be completed. The Bureau of Reclamation was forced to recognize that operation of Glen Canyon Dam was impacting a national park. After winning an injunction limiting the extent to which the government could fluctuate flows through Glen Canyon Dam, the Trust helped turn the debate into the development and passage of the Grand Canyon Protection Act.

In 2008 the Trust initiated further litigation, including the claim that NEPA was violated when an EIS was not conducted on a range of options for experimental flows from Glen Canyon Dam. Instead, Reclamation chose to analyze only one action alternative, even though the park superintendent, Steve Martin, said the government's lone alternative would damage Grand Canyon National Park.

URANIUM MINE TAILINGS REMOVAL

After successfully countering, in 1993, the government's claim that leaving sixteen million tons of radioactive and toxic uranium mining tailings on the banks of the Colorado River would have "no significant environmental impact," then-county councilor Bill Hedden proposed an alternative of moving the tailings inland. The Grand Canyon Trust later pointed out that impacts from capping in place were not being accurately analyzed in the EIS. When Atlas, the private company storing wastes went bankrupt, the site was transferred to the Department of Energy, which did a new EIS and selected the alternative the Trust had developed, namely to move the tailings pile. In May 2009, the first tailings were moved.

UTAH FORESTS

The Trust and fellow conservation organizations (Three Forests Coalition) are systematically submitting conservation-based alternatives, under NEPA, for each major land management action proposed for the three national forests in southern Utah (Dixie, Fishlake, and Manti-La Sal). Whether as a direct response to the coalition proposals or as a result of negotiations following Trust and coalition appeals of EISs and Environmental Assessments we believe to be legally insufficient under NEPA, the forests are agreeing to numerous proposed changes. These include closing



Atlas Mill toxic tailings pile adjacent to Colorado River outside Moab, UT.

many ORV routes; more systematically monitoring livestock grazing; more objectively analyzing the economics of alternatives to livestock grazing; avoiding logging impacts in roadless areas; and figuring out how to restore cottonwood, aspen, and willow recruitment.

ARIZONA FORESTS

Arizona Forests: The Trust is "front-loading" NEPA through its collaborative work with diverse stakeholders to develop the Four Forests Restoration Initiative aimed at accelerating landscape-scale restoration across northern Arizona forests. Formal NEPA planning will eventually be required to analyze restoration efforts aimed at restoring natural conditions across the Kaibab, Coconino, Tonto, and Apache-Sitgreaves national forests. Such planning can proceed relatively efficiently, given the broad stakeholder consensus supporting the scientifically sound proposal.

URANIUM MINING NEAR GRAND CANYON

The Trust is currently challenging a Bureau of Land Management claim that permitting exploratory drilling for uranium near Grand Canyon National Park requires no need for early public input on issues that must be considered. This "scoping" is a mainstay of public participation under NEPA.

Sometimes it is simple, willing compliance with NEPA requirements that makes the difference. Sometimes it is an administrative appeal, or the threat of a lawsuit, or the opinion of a judge that leads the federal agencies who manage most of the Colorado Plateau to "look before leaping" into environmentallydamaging action. Sometimes it is simply

the elegant, ecological, social, and even economic sense of a collaboratively-developed alternative that leads an agency to move out of its old habits, or a decades-old, environmentally destructive trajectory. But scratch the surface of any major shift in a federal agency's administration of its mission, and often you find this forty-year old birthday child of environmental democracy, NEPA, present among the significant players.

As the Colorado Plateau faces the difficulties of global warming, increased population, invasive species, shrinking open space, and ever more desperate water shortages, the consideration of innovative alternatives and the commitment to scientific candor about all options are ever more essential.

The best birthday present we can give NEPA in 2009 is to think big; develop ecologically and socially sound proposals; and strategically advocate for those proposals with all our scientific, collaborative, onground, volunteer, and financial heart. That's what NEPA intended for us to do.

Mary has been devising conservation-based alternatives for NEPA documents since 1982.

NAVAJO NATION GREEN ECONOMY TAKES BIG STEP FORWARD

by Tony Skrelunas

There are many opportunities in the new green economy and, for once, Native people are positioned to benefit from them.



he Navajo Nation Council is currently considering historic legislation to create a Navajo Nation Green Economy Commission aimed at invigorating green economy growth within Navajo communities. The initiative offers the Navajo Nation the opportunity to be fully prepared to participate in President Obama's New Energy for America plan.

The Grand Canyon Trust is a key member of the Navajo Green Economy Coalition. We partnered with Navajo Nation Council Speaker Lawrence Morgan to craft legislation that would create a Green Economy Commission and Community Investment Fund. The effort has secured major support from Navajo Chapters and agency councils.

A green economy is not a new concept to Navajo. The Dine' once had a vibrant green economy; raising and trading goods and services such as sheep, corn and melons, and medicinal plants, while building and living in sustainable homes, all done with prayers, offerings and utmost care for Mother Earth. Sheep were cared for from conception to butchering day with the highest level of environmental and animal stewardship. In today's health conscious market, mutton raised this way would qualify as premium organic meat. It can easily be further processed to meet kosher requirements.

Right now this ancient way of life is in danger of disappearing and, along with it, hundreds of years of knowledge about livestock and land stewardship. There are several reasons for this, the most apparent being that there are no market mechanisms in place for sheepherders to gain maximum value for their efforts and for the average Navajo consumer to go into a marketplace and have confidence that the mutton they purchase is organic and raised the traditional Navajo way. Creating that market mechanism is the exact purpose of the Navajo Green Economy Commission. It is not necessary to reinvent the wheel—a look at Wholesomeharvest.com shows what can easily be done on Navajo land. Investments can be made in human resources and capital improvements to ensure a highly performing organic meat marketplace that is based on appropriate stewardship of land, and by raising animals with no hormones or antibiotics.

Many other green business opportunities align perfectly with the Navajo culture, such as green construction or a solid waste management company. A community may want to start a farmers' market that showcases traditional, organic Navajo foods while others may want to build the first ice cream parlor in a straw bale retail outlet powered by solar energy. Some communities may think bigger and invest significantly to attract a renewable energy manufacturer to produce solar panels or wind generators creating many green jobs and tax revenue. There are many opportunities in the new green economy and, for once, Native people are positioned to benefit from them. Along with the Navajo Green Economy Commission, the Trust introduced Green Economy legislation to the Navajo Nation Council in the spring 2009 session. The Council is now debating the issue and Speaker Lawrence Morgan has demonstrated leadership on moving the legislation. With his oversight, we have received assistance from the Navajo Legislative Services, key staff, and Council delegates. The Nation will continue the debate into the summer Council session in July. We expect to see revisions that strengthen the legislation.

Much positive action has already taken place due to our efforts as part of the Green Economy Coalition. The action taken is an acknowledgement of our efforts over the years to convince the Navajo Nation and other Native American communities to seriously consider diversification of their economies. We are at the heart of the discussion to create a Navajo Nation Green Economy organization. At a recent breakfast caucus, we were asked to present the benefits of green economic development to delegates representing the five agencies of the Navajo Nation. We introduced ourselves and discussed the merits of the proposals. The delegates, sitting in circles around breakfast, debated the legislation and discussed how it fit with their communities. A legislative whip kept the discussion going and, for the first time, the Navajo environment and green economic opportunities were openly discussed and respectfully debated with the Trust and our fellow Navajo non-governmental organizations.

The world is changing fast. We are finding that the traditional Western economy, driven by bottom line profit with the lowest possible production costs, doesn't necessarily work for our Mother Earth and Father Sun. It is time for in-depth debate, discussion, and leadership to find the best solutions. This is how my Navajo ancestors overcame the many obstacles they faced when they settled here within the Four Sacred Mountains. The Navajo must once again institute such processes to build a Native economy that truly values traditional culture while pursuing modern economic development. In this way, we will build a vibrant economy that will sustain future generations while honoring our Navajo ancestors and traditions.

WAYS YOU CAN HELP THE TRUST

IF YOU CAN, GIVE GENEROUSLY. The rewards of saving this wild place—the largest concentration of national parks, national monuments and wilderness areas in the world, are priceless.

IF YOU CANNOT GIVE GENEROUSLY, HELP US CONNECT WITH PEOPLE WHO CAN. People who believe in our mission are our best advocates and fundraisers.

PLEDGE MONTHLY. The Trust has instituted a new program where you can make an annual pledge and have this debited from your checking or credit card accounts on a monthly or quarterly basis.

DONATE YOUR TIME. Volunteer for a habitat restoration project, see the storied landscape you love and meet great people with similar interests.

NAME THE TRUST IN YOUR WILL. You have an opportunity to create a timeless legacy for yourself and your family. And if you've already named the Trust in your will, consider making a cash gift to the Trust during your lifetime. This way you can watch your support spent on a project you care about and confirm for yourself that the Trust is really an organization worthy of your bequest.

DONATE APPRECIATED STOCKS OR REAL ESTATE. If you have highly appreciated stocks or real estate, avoid the capital gain taxes and potential estate tax liabilities by gifting these assets to the Trust. Simultaneously, you'll realize a state and federal income tax deduction equal to the value of the donation. In the case of real estate, this can be important conservation property or it can be property to be sold with the sale proceeds directed toward supporting Trust programs and projects.

INVEST IN THE TRUST. If you have stocks or real estate, consider donating these to the Trust in the form of a gift annuity. A gift annuity involves transferring these assets in return for a contractual fixed income payment over time.

NAME THE TRUST AS A BENEFICIARY IN YOUR LIFE INSURANCE POLICY. Or, if you intend to forfeit a policy you've paid in to for some time, consider transferring it to the Trust and receive a charitable tax deduction and, in some cases, an equitable sharing of the policy's value.

If you are interested in learning more about creative ways to support the Grand Canyon Trust, please contact **Phil Pearl at 928.774.7488 x237** or e-mail him at ppearl@grandcanyontrust.org.

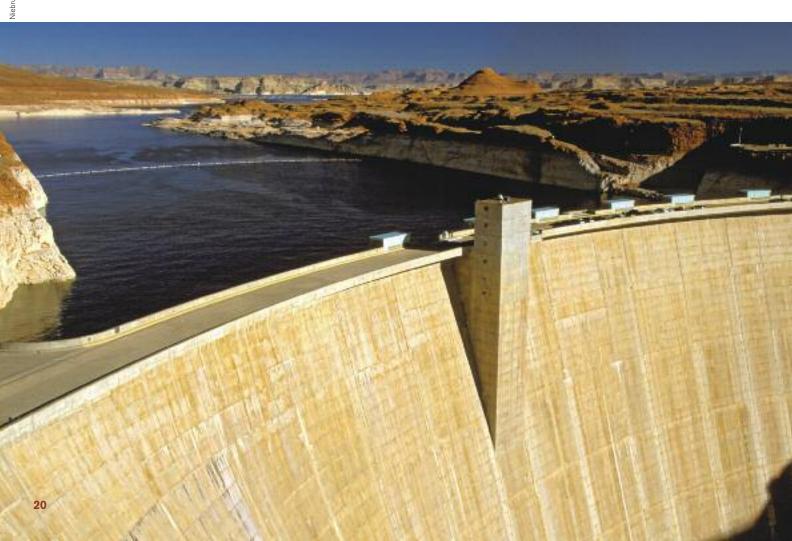
GLEN CANYON DAM ADAPTIVE MANAGEMENT WORK GROUP Neither Working Nor Adapting by Nikolai Lash

f one had never attended a Glen Canyon Dam Adaptive Management Work Group (AMWG) meeting, one would guess that no one on this planet would argue for a compromised Grand Canyon. However, the seven basin states and hydropower interests routinely vote against Grand Canyon and block efforts by the entities dedicated to the protection of the canyon.

The Adaptive Management Work Group was established in 1997 to make recommendations to the Secretary of the Interior on how best to protect park resources below Glen Canyon Dam by changing dam operations and conducting other management actions. At the April 29, 2009 AMWG meeting, the Grand Canyon Trust forwarded a motion recommending that the Secretary of the Interior instruct the federal agencies to finally produce several required documents needed by the AMWG to make informed recommendations to the Secretary. Not surprisingly, the seven basin states and the hydropower interests once again voted against Grand Canyon. As a bloc, they prevented a majority recommendation from going to the Secretary.

On the surface, it is hard to understand why stakeholders in the AMWG would oppose these informational documents and essentially advocate for violating the law. For example, the Grand Canyon Protection Act (GCPA) requires that an annual report be sent to Congress describing resource conditions in Grand Canyon and the efforts being made to improve Grand Canyon. This important congressional report has been blocked for several years, keeping Congress and the larger public in the dark about resource declines and the failure of the AMWG.

Another example is the GCPA requirement stipulating that the Secretary must update Glen Canyon Dam operating criteria every five years. Incredibly, this has never been done even once. This five-year review is important because it is intended to ensure that the AMWG actually engages in "adaptive management"



(*i.e.*, analyze resource conditions and adaptively manage actions to meet goals) at least every five years, and do so with a broad array of interests, including the National Park Service, environmental organizations, the academic and scientific community, recreation interests, and Native American tribes.

For collaboration to work, an overarching objective or mission must be accepted by all participants. Unfortunately, the states and hydropower interests use their numerous seats on the AMWG not to advise the Secretary on how best to protect Grand Canyon but rather how to maintain the status quo and protect the maximum availability of below-market-value hydropower. For the AMWG to be successful, fundamental changes in its structure must be made.

Perhaps the AMWG cannot succeed and should be abolished. Perhaps it can succeed by removing the stakeholders who are not willing to abide by the AMWG Charter and advise the Secretary on how best to protect Grand Canyon resources. Or perhaps it is possible that procedural changes would be sufficient. Here are three possibilities:

- Right now, a super-majority (two-thirds) is required for a motion to be successful. A logical change would be to a simple majority. This would allow the Secretary to see more Grand Canyon motions from AMWG.
- 2) Currently, the Bureau of Reclamation facilitates AMWG meetings and processes. It would make good sense to put facilitation in the hands of the National Park Service, the federal agency directly responsible for Grand Canyon resources.
- 3) Perhaps the AMWG should abolish motions and votes altogether. Instead, the AMWG could become an advisory committee that forwards to the Secretary all of the various options for how best to protect Grand Canyon.

These are just a few ideas for possible change in the Glen Canyon Dam Adaptive Management Work Group. I do not pretend to know what the best solution is, but I do know that the current formulation of the AMWG is a serious problem that is denying the American public the level of care for Grand Canyon that meets legal requirements and expectations for our most beloved park.

LEGACY GIFTS

As you begin your estate planning process, we hope you will consider leaving a legacy gift to the Grand Canyon Trust. These legacy gifts can be left to support the Trust's ongoing operations, or they can be targeted to a specific project, like supporting restoration or volunteer projects.

When meeting with your attorney and/or tax counsel to finalize your estate plan or will, please remember that your gift can make a huge difference to the future of the Trust and to the future of the Colorado Plateau.

For more information on how to make a legacy gift to the Grand Canyon Trust, please contact Phil Pearl at 928.774.7488 x237 or *ppearl@grandcanyontrust.org*.

Membership Gifts

More than ever people are moving away from purchasing material gifts for loved ones, and toward giving gifts that support nonprofit organizations. The next time you wonder aloud about what to get a family member, friend or colleague for a birthday or holiday, consider buying them a membership in the Grand Canyon Trust. You'll never know what this may inspire!

For more information on how to give a gift membership, please contact Darcy Allen at 928.774.7488 or *dallen@grandcanyontrust.org*

WIN A FREE TRIP DOWN THE COLORADO RIVER

The Grand Canyon Trust is offering a free trip down the Colorado River. For your chance to win this adventure of a lifetime, go to *www.grandcanyontrust.org*, click on the button on our home page, fill in the requested contact information and think positive. Meanwhile, the collected information will be used to initiate our electronic newsletter, which will start this autumn. The drawing for the trip will occur on February 15, 2010. Good Luck!

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ANNUAL REPORT 2008

STATEMENTS OF FINANCIAL POSITION for the twelve months ended December 31, 2008

ASSETS	2008
Current Assets:	
Cash and cash equivalents	\$2,049,903
Cash - restricted	457,419
Contributions receivable	400,000
Other receivables	48,505
Notes receivables	4,135
Prepaid expenses	11,292
Total current assets	2,971,314
Property and Equipment, net	1,474,421
Investments	1,795,006
Investment in North Rim Ranch, LLC	880,694
Conservation Easement	1,295,000
Beneficial Interest in Remaider Trust	39,494
Total Assets	\$8,455,929

LIABILITIES AND NET ASSETS

Current Liabilities:	
Account payable	\$54,554
Accrued expenses	49,927
Total current liabilities	150,997
Note Payable:	459,307
Total liabilities	610,304
Net Assets:	
Unrestricted	5,140,115
Temporarily restricted	910,510
Permanently restricted	1,795,000
Total net assets	7,845,625
Total liabilities and net assets	\$8,455,929

STATEMENTS OF ACTIVITY

for the twelve months ended December 31, 2008

CHANGES IN NET ASSETS	2008
Revenues:	
Grants	\$1,897,954
Contributions	1,932,109
Membership income	347,443
Donated materials and services	62,630
Investment income	-456,523
Change in value of beneficial	
interest in remainder trust	-18,072
Equity share of net income/(loss)	
of investee	-586,632
Other income	49,745
Total revenues	3,228,654
_	
Expenses:	
Program services	2,376,997
Education	144,184
Development and membership	385,030
General and administrative	377,652
Total expenses	3,283,863
Net increase in unrestricted net assets	-55,209
Net increase in unrestricted net assets	
Net assets at beginning of year	7,900,834
	1000
Net assets at end of year	\$7,845,625





Tom Moody—who shared his knowledge, optimism, and humor with his fellow staff members at the Trust in the late 1990s—died early this year when his small plane crashed en route to a river restoration project in Yuma, Arizona.

In 1969 Tom's mom took the family on a Grand Canyon rafting trip, the river grabbed him and never let go. In the early 1980s he was deeply involved in studying the environmental impacts of Glen Canyon Dam on the Grand Canyon and he was also instrumental in conceiving and passing the Grand Canyon Protection Act. Tom's environmental bent was tinged with a rare helping of realism and he routinely rose above petty frays and small issues to remind people about the bigger picture.

In 1991 he married long-time friend Stephanie Yard and they formed Natural Channel Design, Inc., a consulting firm devoted to stream restoration. His expertise, energy and ability to educate and find consensus among diverse opinions and objectives quickly established him as a leader in the field of stream restoration and enhancement.

A friend of Tom's recently wrote: "He was a wise man, generous with his wisdom, fearless in his convictions, reflexively honest, possessing a mindboggling range of competencies, and willing to include everyone in his fundamental optimism and clarity of vision. It was our privilege to know Tom Moody and that there is now a hole in the world where one of the best human beings to ever draw breath used to stand."

His leadership, enthusiasm, and smile will be sorely missed.

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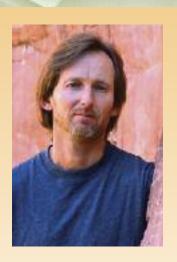
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Specializing in landscapes of Western North America, James has worked as a professional photographer for more than 25 years. He currently serves as a professional advisor to Outdoor Photographer Magazine and his work has been featured in the Nikon Legends Collection. His photographs have been published in magazines, books, calendars and commercial advertising projects around the world. His fine-art landscape prints are currently on display in various galleries and in private and corporate collections. Jim and his wife Susie live in the Wasatch Mountains east of Salt Lake City, Utah. Visit Jim's website at www.jameskay.com to view a selection of more than 300 images available as fine-art framed prints.

Mission

The mission of the Grand Canyon Trust is to protect and restore the Colorado Plateau—its spectacular landscapes, flowing rivers, clean air, diversity of plants and animals, and areas of beauty and solitude.