## COLORADO PLATEAU WINTER/SPRING 2009

# Contents

- **2** Letter from the Executive Director
- **4** Two Stones in My Pocket
- 6 Reclaiming Lost Ground in Northern Arizona Forests and Rangelands
- 8 Yes Clean Energy Can
- **10** Tiny Ledge Spawns Utah Project
- 14 Change Coming to the Colorado River in Grand Canyon
- 16 Obama Election Signals New Era for Native America
- **18** Land Management Nightmare in Utah
- 20 Adapting to Crisis on the Colorado Plateau: Yes We Can
- 22 Keeping Our Members Informed
- 23 Volunteer Utah!



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.

You can help the Grand Canyon Trust by taking action on any of the issues presented in this magazine by going to the *"Take Action"* section of our website at: www.grandcanyontrust.org; by writing a letter to the editor or an opinion-editorial piece for your local newspaper; by circulating a petition or writing a letter for presentation to your elected officials; or by organizing a forum and speaking out in your community. ne scene from Election Day made me realize the extraordinarily high expectations people have for the Obama administration: scores of people in rural Kenya were clustered around a tiny house that had a television reporting the vote tallies in America; and when a woman in the throng was asked about the intense interest she did not mention his historic candidacy as a black man, or that his father was Kenyan, but said instead that Barack Obama is going to build roads for them. The President and his staff will be busy people, indeed, with all the problems in the world.

Of course, like everybody else, the Grand Canyon Trust has an agenda of things we hope the federal government will do on the Colorado Plateau, and this issue of the *Advocate* explores those pressing issues. The Kenyan cautionary tale, though, leads me to believe the new administration will do most to help those who help themselves. That is the meaning of the vow made by Terry Tempest Williams at the end of her beautiful meditation in these pages about sacrifice and service on the occasion of Obama's election. I second her pledge by hoping that I can do half so much as she will do on behalf of wild beauty.

This challenge is good news for an organization like ours that has a long history of bringing workable solutions to federal agencies. To cite just a few examples, as a fledgling group twenty years ago the Trust negotiated an agreement with the Salt River Project and EPA to install sulfur dioxide scrubbers on the Navajo Generating Station, and in recent weeks we reached agreement on tighter carbon monoxide emissions from the new low-nitrogen-oxide burners that will soon be installed there. Along the Colorado River, we found a solution to allow the Department of Energy to clean up the Atlas uranium tailings when that company's bankruptcy left the Nuclear Regulatory Commission helplessly responsible for an orphaned mill site. In the Grand Staircase-Escalante National Monument, existing mineral leases were grandfathered, posing serious danger to the wildest parts of the monument, but the Trust worked with mining companies



to relinquish 50,000 acres of leases for retirement by the BLM. And, around the Grand Canyon, our dedicated volunteers are carrying out research and restoration projects the federal agencies cannot do themselves. Teamwork of this kind is our preferred mode of working and we look forward to much more of it in the years ahead.

Mary O'Brien and her interns have been tramping the national forests of southern Utah to find the remaining sweet spots where remoteness, quirks of topography, or agency actions have preserved beautiful examples of the most important habitat types. These "reference areas," whose simple existence is a treasure, can serve as living laboratories where we keep tabs on climate change and touchstones against which we can measure the effects of human actions across the rest of the forests. The key now is in getting the Forest Service to acknowledge and protect them.

Eli Bernstein has looked square in the face of climate change predictions that make most of us in this region of the country blanch, and he has come away with a vision of the advantages we can capitalize on here in the Southwest. One key advantage is that Native American communities here have deep histories of living with the land without importing much food and energy and water from elsewhere. Tony Skrelunas and Roger Clark further explore how the Hopi and Navajo are preparing to generate renewable energy and develop "green" jobs in keeping with their ethic of long term inhabitation of this place.

Perhaps the most ready-made solutions we offer the new administration are those involving forest restoration. As Ethan Aumack describes it, the Trust and many partners have forged broad scientific and social agreement on a realistic plan for bringing northern Arizona's forests back to a healthy state. Forest Service endorsement and a minimal federal investment could leverage private money and work in the forests at the enormous scale necessary. President Obama, when you get done with those roads in Africa, we have a few great ideas for you in the wildlands of the Southwest.





I would feel more optimistic about a bright future for man if he spent less time proving that he can outwit Nature and more time tasting her sweetness and respecting her seniority.

-E.B. White

## **TWO STONES IN MY POCKET**

by Terry Tempest Williams

Barack Hussein Obama has been elected the 44th President of the United States of America. I want to sing and dance on the edge of the Colorado River. It has been a long eight years under the Bush-Cheney administration, an era of immeasurable destruction to the integrity of the Interior West. That we have held on to what we love in the Colorado Plateau is the measure of those working inside the Grand Canyon Trust and other sister organizations within the conservation community.

Oil and gas leases are now up for grabs spurred on by devastating management plans from the Bureau of Land Management, who seem to have forgotten their "multiple use" mandate on public lands. This is the ultimate outcome of the soiree between the former Secretary of Interior Gale Norton and Utah's then governor Michael O. Leavitt. Behind closed doors, they privately agreed that no more public lands anywhere would be inventoried for their wilderness character and no more wildlands would be protected as Wilderness Study Areas. When they shook hands, three million acres of Utah wilderness were released from protection. Add another three million acres to those disregarded, and we now have six million acres of Utah's exquisite redrock desert open for business. Parts of Desolation Canyon, Negro Bill Canyon, and Millcreek Canyon are slated to be sold to the highest bidders. To look at the BLM's map of potential gas leases on the borders of Arches and Canyonlands National Parks, alone, is to bear witness to a governing mind wedded to war not peace. Short term gain with long-term consequences: the loss of beauty, both ecological and spiritual.

My husband Brooke and I have been living in Wyoming for the past three years. We have witnessed first hand, the oil and gas boom in Sublette County, where a small town like Pinedale, located at the base of the Wind River Mountains, is no longer home to a night sky of stars, but ozone alerts, water wells contaminated with benzene and oil derricks lit up like a thousand Eiffel Towers. The Halliburton Hotel is the new gathering place in town for the thousands of temporary workers with "man camps" tethered tentatively



to sage flats where pronghorn antelope no longer run, but sit as an act of both defiance and fatigue.

If you walk out on to the oil patch, it has the feel of a military base with heightened security and American flags snapping in the wind. The workers aren't to blame, nor am I against the oil and gas industry. My family is part of that industry. What troubles me is the greed and rapidity of the development, alongside the blatant disregard for federal regulations on public lands, ranging from violating EPA clean air standards to ignoring public process. Just recently, 4000 more new gas wells have been approved for the infamous Jonah Field, in spite of hundreds of thousands of letters in opposition. I hear the words of a resident in Rawlins, Wyoming, another community facing their own oil boom, "We in Wyoming will be held accountable for what we choose to sacrifice And right now, we are sacrificing both the people and the land."

This fever is rapidly moving south to America's Redrock Wilderness.

President-elect Barack Obama has held up two words for us to embody: sacrifice and service. How do we choose to define these words? What are we willing to sacrifice? And what do we choose to be in the service of? I am holding these words in my hands as stones, two stones I picked up along the river.

There is a canyon not far from here from a raven's point of view, that houses some twenty-three figures, female, pecked on to the flat face of stone, who stand watch, some with eyes closed and others with eyes open. I see them as witnesses born out of desire to serve something beyond ourselves. They are adorned with necklaces and bracelets, headdresses and aprons with animal accomplices standing near, a reminder that we are not alone. They are both art and artifact, creation and creators of the world that has been given to us in this short expanse of time as humans, past to present.

I am willing to sacrifice my time, my talent, my comfort in the name of a larger, sustaining vision for the future. I am not willing to sacrifice the health of the land and the life it supports for a vision tied to the past, serving the corporate self not the communal self.

"Select your servitude," writes Albert Camus. "It's a strange and insufferable certainty to know that monumental beauty always supposes servitude, that servitude is beauty and one cannot help but desire beauty...Perhaps it's for this that I put the beauty of a landscape above all else-it's not paid for by any injustice and my heart is free there."

Standing on the river's edge before these magnificent sandstone cliffs, the day after this historic, transformative election, I am reminded how everything has changed and nothing has changed. The erosional

wisdom of the desert speaks to the nature of endurance.

Rock, Wind, Water, What remains and what gets carved and carried away? I have been carried away by the euphoria of change, wanting so badly to project all the ills of our world on to one man, while transferring all the hope of the world on to another man.

This is my folly as a voyeur rather than a participant, permission to sit back and watch one vision erode, as another takes root. Willows and tamarisks continue to compete for space along the river. Cottonwoods withstand seasonal floods. The ecotone along the Colorado River is dynamic and

Climate change. The personal is now not only the political but the geophysical, as well. Within the Colorado Plateau, temperatures are rising. Drought is familiar. Fires more frequent. Recreational pressures in the form of off-road vehicles are leaving the land looking like an exposed nervous system with roads becoming arroyos when the rains finally come. Even in this enduring landscape of staggered horizons, change is everywhere, natural and unnatural.

Climate change. The only change I am really capable of managing is my own. How can I become a more full participant in the world? Maxine Hong Kingston says, "In times of war, create somethinga poem, a vow, a moment of peace."

On this day, on the banks of the Colorado River flowing clear not muddy, with a new president that



Desolation Canyon, Utah.

fluid, not fixed. Last year, the beach was exposed, this year it is underwater. We know what is native and we know what has been introduced and reintroduced through time. But in truth, the organism with the greatest capacity to adapt to change is the one that survives.

is bringing forth "a new dawn of change," I make my vows to be part of a life-enhancing change by working for wild beauty, believing beauty is not optional, but a strategy for survival, beginning at home, here, now, returning to the stillness and vitality of Castle Valley after a very long absence. Ray Bloxham/SUWA

## **Reclaiming Lost Ground in Northern Arizona Forests and Rangelands**

by Ethan Aumack

he outgoing Bush administration has left a fairly distinct trail of public and not-so-public environmental poison pills as it moves out of our lives. Environmental advocates have offered manifesto upon manifesto documenting the social and environmental wounds incurred over the last eight years, and are preparing for an expected rollback during the first 100 days of an Obama administration.

Northern Arizona's vast public rangelands and forests have largely remained a few steps removed from the twenty-first century's most prominent environmental battles. Our rangelands have not been overrun by oil and gas drilling, nor have our forests been overrun by sprawling subdivisions. Each has, however, been neglected to a degree that cumulative environmental degradation may soon become irreversible. Livestock pervasively graze our rangelands, depending on water drawn from scarce and imperiled natural spring sources. Noxious weeds thrive, but their distribution, abundance, and rate of spread are poorly understood. Overall, effects of livestock grazing throughout the region are little known due to virtually absent monitoring. Our ponderosa pine forests are overstocked with smaller trees that combust violently, causing unnaturally severe and destructive, landscapescale forest fires. Roads continue to proliferate across our rangelands and forests, degrading wildlife habitat and causing widespread damage to watersheds. The list could and does go on.

Recognizing the need to address the neglect threatening our rangelands and forests, citizens from across northern Arizona have been working over the past eight years to find collaborative solutions to longstanding environmental challenges. Such solutions are aimed at bolstering land managers' capacity to manage lands with the best available science and an explicit conservation and (when needed) restoration focus.

In this context, the Trust has over the past several years directed its northern Arizona rangeland and forest conservation efforts towards building out the Kane and Two Mile ranches project, and substantially increasing capacity for landscape-scale forest restoration across the Mogollon Rim. Even in an adversarial political climate at the national level, each initiative has thrived, and each is at a critical tipping point. With support formalized at the national level, these initiatives stand on the verge of ensuring significant and continuous conservation and restoration progress for years to come. Without such support, however, we stand to slowly but continuously lose hard-fought gains made.

As we trade the legacies of the Bush-Cheney era for the hope of Obama-Biden change, the Trust will be seeking support from the new administration on several fronts.

#### BUILDING CAPACITY FOR LANDSCAPE-SCALE FOREST RESTORATION

Over the last five years the Trust has assumed vital leadership roles in efforts to build forest restoration agreement and capacity across the state. Working with key partners and under the auspices of the Governor's Forest Health Council, the Trust spearheaded in 2007 the completion of the Statewide Strategy for Restoring Arizona's Forests—a first-of-its-kind comprehensive action plan outlining strategies necessary for restoring forests across the state.

Since the Statewide Strategy's publication, the Trust has led efforts to bring community representatives, forest product industry representatives, environmental groups, and land managers together to more explicitly identify the type, extent, and location of necessary forest restoration treatments across the entire Mogollon Rim from the San Francisco Peaks to the New Mexico state line: an area 2.4 million acres in size. With this level of agreement in hand, we are currently working to identify the economic mechanisms whereby socially viable, ecologically effective, and significantly accelerated forest restoration can be implemented across the Mogollon Rim.

Under an Obama administration, we need bolstered support for consensus-based, landscapescale forest restoration treatments from the U.S. Forest Service. The agency should integrate consensus agreements into all planning processes, develop stewardship contracting mechanisms that





Trust volunteers taking a break from native plant re-seeding and seed collection activities on west side of the Kaibab Plateau.

support long-term restoration initiatives, allocate funds necessary to complete such restoration initiatives, and commit to ongoing, collaborative, multi-party monitoring.

With continued hard work, and sufficient support from the new administration, the U.S. Forest Service, and many others, we are confident that on-the-ground, consensus-supported forest restoration activities totaling hundreds of thousands of acres over the next two decades will commence in the coming year.

#### BUILDING CAPACITY FOR PUBLIC-PRIVATE RESTORATION AND STEWARDSHIP PARTNERSHIPS

Since 2005, the Trust has been working with a network of partners to bolster conservation and restorationoriented rangeland and forest management capacity across the Kane and Two Mile ranches. During this time, we have built a world-class volunteer stewardship program that brings more than 250 volunteers into the field each year. We have built a close working relationship with the Sisk Applied Ecology Lab at Northern Arizona University to initiate critically important restoration monitoring, assessment, and research efforts. We are running a very conservative livestock grazing program across the ranches within an explicit conservation and restoration context. We have also fostered close working relationships with the U.S. Forest Service, Bureau of Land Management, National Park Service, and Arizona Game and Fish Department. In an era of ever-declining agency budgets, we believe we have crafted a model public-private

partnership that provides much needed research, monitoring, assessment, and on-the-ground support to our agency partners, who are in dire need of such support.

As we enter into our fourth year of the Kane and Two Mile Ranches project, we are investing nearly \$1 million per year to fulfill our responsibilities in a critically important public-private partnership. To ensure that this partnership continues, we will need strong, reciprocal support from land managers in the region.

In this vein, under an Obama administration, we need from the U.S. Forest Service and Bureau of Land Management strong staffing support for an ongoing public-private partnership. Each agency should adopt streamlined planning processes that allow broadly-supported research, assessment, monitoring, and on-the-ground restoration efforts to proceed as efficiently as possible. Each agency should develop more effective venues for stakeholders to have collaborative discussions aimed at building consensus around land management priorities. Finally, each agency should make available a modest amount of federal matching funds that will allow collectively prioritized projects to proceed with all due haste.

As our efforts to restore degraded forests and rangelands move forward, we will continue to build and honor local support. We now look forward to complementing this backing with critically important legislative and executive branch support. **a** 

## YES CLEAN ENERGY CAN

by Roger Clark

#### PRESIDENT OBAMA BELIEVES THAT WE CAN STOP CATASTROPHIC CLIMATE CHANGE:

"Now is the time to confront this challenge once and for all. Delay is no longer an option. Denial is no longer an acceptable response. The stakes are too high, the consequences too serious."



(L-R) Debby Tewa, Arizona Energy Office; homeowner, Denise Lomatska; and Hopi utility specialist, Ken Lomayestewa pose before newly installed photovoltaic panels.

e also believes that solutions to global warming can revitalize our economy. Clean energy and prosperity can go hand-in-hand. But daunting challenges face our transition from a dirty to a clean energy economy. Change starts with individual decisions, as illustrated by a Hopi woman living in northeastern Arizona. Denise Lomatska stands inside her modest concrete block home, recently electrified by solar panels. "I just decided to go for it," the single mom says of her investment to power a few lights and energy efficient appliances. "Growing up, we never had electricity, so we don't need much to get by."

We step outside. Sunlight sparkles off sand surrounding her home located on the outskirts of the traditional village of Hotevilla. "We have lots of sun out here," she says as we shade our eyes and gaze toward distant mesas magnified by the morning's crystal clear air.

Her photovoltaic system was made possible by a partnership between the Hopi Tribe and the Arizona Energy Office. Late last summer, they teamed up and taught a solar energy workshop with Hotevilla residents. Denise's home was targeted for hands-on instruction in how to install solar panels, batteries, control panels, and conduit.

Denise paid one-third of the cost for the \$12,000 system. The solar panels were donated by Arizona State University's testing laboratory, and the remaining balance was covered by a grant from a renewable energy investment fund. The fund was created by a unique settlement between the Grand Canyon Trust and the owners of two new, coal-fired units at Springerville Generating Station.

Pathways to clean energy include enforcing existing environmental laws. In this case, the Clean Air Act empowered the Trust to negotiate stricter pollution controls on a coal plant and to establish an investment fund of \$5 million to help offset its greenhouse gases. It is one small instance showing how we can begin to transition away from coal and to create new economic opportunities with native communities.

The Navajo community of Shonto offers another example. It is located about 100 miles northwest of Hotevilla and on the flank of Black Mesa where coal has been strip-mined for more than four decades. It is burned to generate cheap electricity for millions of businesses and residents in California, southern Nevada and Arizona.

Tribal communities located on Black Mesa were promised prosperity when mining proponents forced residents to relocate. Today, however, tens of thousands of homes surrounding the mines, power plants, and transmission lines are without electricity and running water. Unemployment chronically hovers above 40 percent.

Shonto Chapter Chairman Jones Grass lost his job as a master mechanic at the coal mine. He is joining several generations of Shonto leaders in developing a solar energy company to supply their area with jobs and affordable electricity. They are also planning an energy efficient complex of offices, training centers, and stores. Their dream is to ditch their dependence on coal mining and to determine their own future through community-based economic programs.

Sharing similar motivations but on a larger scale, President Jimmy Carter sought energy and economic independence for our entire nation during the 1970s. He called for a massive investment in clean energy and set a goal of supplying 20 percent of our electricity from solar power by the year 2000. But vested interests and unforeseen events stalled the transition. Today, the sun supplies about 1 percent of our electricity, and our nation has grown ever more dependent on coal-fired power plants.

The time has come to turn our backs on these behemoths of a bygone era and to replace them with clean energy. One of the principal barriers to deploying utility-scale renewable energy is access to the transmission grid. High voltage lines traversing tribal lands are currently clogged with coal-generated electrons. With new national priorities, these lines can begin transmitting power from clean energy sources. As former Hopi Chairman Vernon Masayesva said, "We have the technology, the sun, the land, and the power corridor. It should be a piece of cake."

Black Mesa supplied coal to the now closed Mohave Generating Station. Three years ago, a small group of Native American activists joined the Grand



(Foreground, L-R) Shonto Chapter Chairman, Jones Grass; Navajo Councilman, Jonathan Nez; and Shonto business manager, Robert Black discuss plans to end their dependence on coal.

Canyon Trust in a campaign to have revenues from the power plant's pollution credits invested in renewable energy projects to benefit those who have been harmed by the plant's operation and closure. Momentum is mounting in support of our call to replace the coal plant with clean energy.

At a benefit concert by the Indigo Girls, former vice presidential candidate Winona LaDuke said: "We need to create a just transition strategy. We need to create a way of life where a community is not forced to cannibalize their mother in order to live. They say Indian reservations could produce half of the presently installed US electrical capacity. We are the richest and most powerful country in the world. We have no absence of resources or technology to do the right thing. What we have is the absence of political will."

Our region's people are ravaged by pollution and poverty but bolstered by hope. We elected a president who dares us to dream that we can affect the crises we've created. Together, we can rekindle our economy by making a systematic transition to clean and renewable energy. We can reduce greenhouse gases while investing in sustainable communities. And, we can empower people who were left in the dust by a dangerous and dirty, coal-based economy.

> Thank you, Mr. President, for believing. Now it's up to us. **b**

## Tiny Ledge Spawns Utah Project

by Mary O'Brien

The ledge was just three feet by two feet and it was dangerous. Not dangerous to climb up to, because it was a piddling ten feet above the creek bed. It was dangerous to ponder, because it revealed what we have done to its canyon in the last hundred years. It showed us a world we had depleted-perhaps permanently.

BUT THE LITTLE LEDGE WAS ALSO EXHILARATING: IT REMINDED US WHY THE TRUST WORKS WITH DIVERSE PARTNERS TO PUT MAIMED ECOSYSTEMS BACK TOGETHER AGAIN, AND IT SHOWED US WHAT TO AIM FOR IN THAT WORK.



he day I saw this ledge was the second day of a four-day field trip reading streams for past and present beaver activity. My October 4, 2005 field notes understate the emotional impact this ledge had on me:

This section, south of the junction with Corral Hollow, contains signs of past [beaver] dams—linear mounds across the creek with dense willow where livestock cannot easily reach, and sticks in the mounds. The reach is heavily grazed, and cattle have trampled the banks back. One tiny perched spot inaccessible to cattle is thick with a diversity of native grasses. Hardly any bare ground on this ungrazed perch.

Most of the following summer I assessed habitat conditions for greater sage grouse on Forest Service and other public lands in southern Utah. It was dispiriting because the habitat conditions were awful. During spring and summer, sage grouse depend on tall grasses and forbs (wildflowers) beneath sagebrush, and access to water near sagebrush cover. Throughout that summer, I never found a sage grouse site that wasn't over-grazed by cattle and/or elk, and the skimpy sage grouse numbers reflected it. I swore I wouldn't spend another summer wholly immersed in such devastation.

The tiny ledge and sagebrush summer were the genesis of the Trust's Reference Areas Project. With this project, we are searching for sites that demonstrate the best remaining conditions for seven key habitats that are generally overused and often depleted on Utah's Colorado Plateau national forests, the Dixie, Fishlake, and Manti-La Sal. The seven are riparian, meadow, spring, aspen, ponderosa pine, and sagebrush habitats, and beaver systems.

The goal of the Reference Areas Project is for the three national forests to: (1) acknowledge the value of these "gold standard" sites; (2) commit to retaining them free of mineral extraction, logging, water diversions, livestock grazing, and off-road vehicle use; (3) observe them to comprehend the impacts of current management on these habitat types elsewhere on the forests; and (4) use them to formulate restoration goals for these habitats throughout the forests. Noxious weed or hazardous fuel removal would not be prevented in the reference areas.



#### Key habitats that are generally overused and often depleted: RIPARIAN • MEADOW • SPRING • ASPEN • PONDEROSA PINE • SAGEBRUSH HABITATS • BEAVER SYSTEMS

We began the project by asking ecologists and other staff on the three forests for their ideas of potential reference sites. The summer seasons of 2007 and 2008 have seen Trust staff and interns searching for potential sites; some we inadvertently located while on the ground for other Trust projects. In one case, a day-off hike in the La Sal Mountains located a reference site.

Sometimes we've been disappointed. For example, one forest ecologist suggested a particular aspen stand that had sprouted thickly after a wildfire a decade earlier. When we reached the site, we found a single-height aspen stand with an understory of seeded, exotic, smooth brome grass, lupine (toxic to and avoided by cattle), browsed new aspen sprouts, and not much else.

Sagebrush reference conditions, as we learned in the summer of 2006, are particularly hard to find. We had high hopes for sagebrush in Cottonwood Allotment, a large Fishlake National Forest allotment that has been closed to livestock grazing for over thirty years. When we arrived at a broad area mapped as sagebrush, we found that cattle from the allotment to the south continued to graze the sagebrush by regularly wandering through a poorly maintained fence.

We were delighted to find a roadless site in the Manti-La Sal National Forest that contained multiheight aspen, sagebrush with native grasses, and a dense riparian meadow. We quickly inquired about use of this area by livestock, because it was an active allotment that was apparently not being grazed. Two months later the range manager responded, saying he had authorized sheep to graze the site for the first time in many years, about two weeks after we had visited. This is the type of site that could and should be maintained as a reference site.

We have found fifteen good sites to recommend for status as reference areas, and reported on them to a meeting with the forest supervisors and Regional Forester in January 2009. For five years we've been talking with the three forests' managers and the regional office about the need for reference areas, and we are hopeful for a positive response to our set of specific areas. We expect additional sites will be located and acknowledged in future years. In 2009 we hope to work with the Forest Service on logistics for continuing reference conditions on these sites. We will count on volunteers, such as members of the Utah Native Plant Society, to help us characterize each reference site in more detail. One member has expressed interest in helping us run some pollinator transects. Bird, mammal, and drought response surveys and other comparisons with impacted habitats are all possible in coming years.



opposite page: Beavers are returning home to work their engineering miracles on Tasha Creek, Fishlake National Forest. above: Unfenced, untrampled Tasha Spring provides headwaters habitat for a special set of species, Fishlake National Forest.

In the end, reference areas are a *sine qua non* for science-supported management of our national forests. All experiments need a "control" where the experimentation is *not* occurring. The maintenance and study of reference areas is a key contribution the Forest Service can make to its mission of caring for the land while serving its entire nation of people.

The Trust is grateful to the Wilburforce and Beagle Foundations for their generous support of the Reference Areas Project.



**GRAND CANYON TRUST'S WORK** PROMOTES SCIENCE-SUPPORTED MANAGEMENT OF UTAH'S NATIONAL FORESTS.

Mary O'Brie





As we find and describe southern Utah's forest places that are still intact—what we call reference areas—we provide the Forest Service with the best guides for what these national forests can and should be now and in the future.

Dave Gard

## CHANGE COMING TO THE COLORADO RIVER IN GRAND CANYON

by Nikolai Lash



Open jets at Glen Canyon Dam, March 2008.

#### BUSH ADMINISTRATION'S DAMAGE TO GRAND CANYON

Without a doubt, the Bush administration has treated the Grand Canyon shabbily. Beholden to powerful energy interests, Secretary of Interior Dirk Kempthorne has contributed to a petty legacy no one could be proud of. Interior officials under Bush have damaged Grand Canyon and undermined the National Park Service's authority to protect Grand Canyon and other national parks.

Through the Bureau of Reclamation's operations of Glen Canyon Dam, the Department of Interior is knowingly supporting dam operations that violate federal law and go against \$100 million worth of agency science. Earlier this year, Reclamation initiated a five-year plan of dam operations that maximize the production of cheap, peaking power at the expense of Grand Canyon resources. Current dam operations violate several federal laws and ignore conclusions made by numerous federal scientists who have been silenced or made to change their analyses for political purposes. Further, Reclamation's chosen dam operations ignore stated opposition from National Park Service spokesperson, Superintendent Steve P. Martin.

#### **GRAND CANYON PROTECTION ACT**

Several federal laws have been passed to protect Grand Canyon, prominent among them the Grand Canyon Protection Act (GCPA), signed into law on October 30, 1992. The GCPA states: "The Secretary shall operate Glen Canyon Dam in accordance with the additional criteria and operating plans specified in section 1804 and exercise other authorities under existing law in such a manner as to protect, mitigate adverse impacts to, and improve the values for which Grand Canyon National Park and Glen Canyon National Recreation Area were established, including, but not limited to natural and cultural resources and visitor use."

The intent of the GCPA is unambiguous: to operate the dam in a manner that protects park resources, notwithstanding impacts to hydropower generation. FLUCTUATING FLOWS ERODE SEDIMENT FASTER THAN STEADY FLOWS; DIMINISHING BEACHES, HARMING NATIVE FISH HABITAT, ERODING CENTURIES-OLD CULTURAL SITES, AND JEOPARDIZING THE EXISTENCE OF THE **3**-MILLION-YEAR-OLD HUMPBACK CHUB, AN ENDANGERED FISH FOUND ONLY IN THE **C**OLORADO **R**IVER.

Senator John McCain, co-sponsor of the bill, stated: "The erratic release of water from the dam to meet peak electric power demands [has] destroyed Colorado River beaches, and harmed other natural, cultural, and recreational resources. Somewhere along the line, we forgot our obligation to the canyon and to [t]he future generations for whom we hold it in trust."

#### "ERRATIC RELEASES"

The destructive "erratic releases" Senator McCain refers to are the ceaselessly fluctuating flows from Glen Canyon Dam that generate cheap peaking power but, in the bargain, unravel the health of Grand Canyon. Fluctuating flows erode sediment faster than steady flows; diminishing beaches, harming native fish habitat, eroding centuries-old cultural sites, and jeopardizing the existence of the 3-million-year-old humpback chub, an endangered fish found only in the Colorado River.

The Grand Canyon has suffered resource declines for years. The U.S. Geological Survey found in its 2005 SCORE Report that Modified Low Fluctuating Flows (the flows coming through the dam since 1996) have been destroying Grand Canyon beaches, native fish habitat, and archaeological sites. U.S. Fish & Wildlife Service's 1994 Biological Opinion determined that these fluctuating flows jeopardize the existence of the humpback chub, destroy its critical habitat in Grand Canyon, and impede the chubs' recovery. If we are to retain sediment and improve conditions for native fish in the Colorado River through Grand Canyon, high flows and steady flows are an absolute necessity.

#### NATIONAL PARK SERVICE UNDERMINED

The Bureau of Reclamation's dam operations ignore stated opposition from the National Park Service (NPS), which has the authority and responsibility to protect the Park against any destructive federal activity, such activity technically known as "impairment."

In his public comments to Reclamation regarding their five-year dam operations plan, Superintendent Martin stated:

Analysis of [Reclamation's] proposed action (including strict limitations on future flows, a short-duration steady

flow regime in the latter part of the monsoonal period, and other key factors) indicates these measures would likely result in impairment of the resources of Grand Canyon National Park. The [Plan] as written appears to be in conflict with NPS 2006 Management Policies, may not be consistent with CEQ guidelines, and is significantly in conflict with our understanding of the science and inconsistent with the intent of the Grand Canyon Protection Act...

Even though the Park Service has the responsibility to protect the Park from illegal and damaging federal activities, Reclamation has refused to include the Park Service as a cooperator. Officials at the Department of Interior, including Deputy Assistant Secretary Jim Cason, Solicitor David Bernhardt, and staff attorney Bob Snow, have tried to intimidate Park Service employees from voting for motions that would improve Grand Canyon resources.

#### WHAT IS NEEDED

Science and law confirm that the following is needed to improve Grand Canyon resources:

- Regular high flows under sediment-enriched conditions to rebuild beaches and nearshore habitat for native fish
- Seasonally-Adjusted Steady Flows to preserve beach volume and provide for humpback chub spawning and rearing in the mainstem
- Temperature control and non-native fish removal to create more favorable conditions for native fish
- Reclamation to return to the National Park Service their authority to protect Grand Canyon National Park

#### A GRAND WONDER

The Grand Canyon is among the Seven Wonders of the World, its suggestive name an understatement for a place indescribably beautiful. Things have been hard lately for this beloved place but change is in the air and the effects of the new administration are expected to reach international proportions. Wouldn't it be grand to see a re-empowered National Park Service and actions taken that restore Grand Canyon to a state that matches our captured imaginations?

## **OBAMA ELECTION SIGNALS NEW ERA FOR NATIVE AMERICA**

by Tony Skrelunas



THE ELECTION OF BARACK OBAMA SIGNALS A POSITIVE NEW ERA FOR NATIVE AMERICAN COMMUNITIES AND GOVERNMENTS.

As a Native American, I sometimes drive across our lands and wonder what can be done to help us diversify our economies, especially in ways that honor our cultures and protect our lands. For too long we have built economies that are stagnant and are dependent on natural resource extractive industries—in large part due to the federal government's insistence that this is the most viable option for us. Consequently we have very little retail, manufacturing, and tourism related industry.

Previously, I served seven years as the Economic and Government Development Executive Director for the Navajo Nation. When I left I was fortunate to be given an opportunity by the Grand Canyon Trust to help the Hopi and Navajo economies diversify into several sustainable development tracks.

At first there was little interest so initially we worked to educate Hopi and Navajo communities about their current economic situation and outline alternatives. We offered assistance to any that wanted it and agreed to be helpful in a new way—a fresh approach based upon respect for the communities' vision and values that offered longer, more focused assistance. The first to buy in to our new strategy were the Shonto Chapter, Sipaulovi Village, the Monument Valley community and the Navajo Nation Parks and Recreation Department, Cameron artists, and the Navajo Nation Natural Resources Division. We helped these entities pursue sustainable retail and other development including visitor centers, resorts, and renewable energy projects (from small to utility-scale) for their community members as well as for distant markets.

At that time we were four years away from an Obama administration and saw no light at the end of the tunnel. There were few champions of this type of approach so we had to search far and wide to find information on how to plan, conduct cost/benefit analyses, and determine the options for appropriately structuring ownership for sustainable economic development. For example, in the work on utility-scale renewable energy development, we quickly learned the Tribes were interested in a new paradigm. They not only supported renewable energy development on their lands, they wanted to consider equity ownership in such projects in order to capture the long-term, stable returns that market offered. Elders attending our community presentations confirmed their support of this kind of development, deemed it appropriate for the future and recognized the need to invest.

The Mohave Generating Station closed in 2006, which created an opportunity to build on this important initial work. We labored to engage the Tribes and nongovernmental organizations (NGOs) and to help them understand the need to create sustainable economic development. We informed them about what is possible in the renewable energy marketplace and convinced them of the viability of Hopi and Navajo lands to create such projects, jobs, and revenue. At first the Tribes were again hesitant to commit to a new direction since coal extraction was the foundation of their economies ever since the creation of the Tribal Councils.

Several years later, we are at an incredible juncture. Much has changed. Tribal leaders, executives, NGOs, and community leaders have now realized what is possible and that we can participate in the new administration's proposed "Green Economy." The Navajo Nation currently has a dozen utility-scale renewable



energy projects in the works and several communities, including Shonto, are engaged. They are structuring major projects in which they will have substantial equity. Tribal enterprises like the Dineh Power Authority are key participants and are partnering with us in seeking federal legislation and formal incentives to make it easier for Tribes to co-own such projects.

Shonto and Sipaulovi now have master-planned, LEED certified, "green" marketplaces and communities in the works. The Trust is making a major difference in helping the Tribes and communities realize their goals and seize opportunities now. We have moved forward on providing up to 75 percent of the costs for renewable energy installation at Tribal facilities and homes.

We have partnered with a coalition of NGOs, Black Mesa Water Coalition leadership, and with Lawrence Morgan, the Speaker of the Navajo Nation, to establish a Green Economy Fund and Commission. It now appears likely that the Navajo Nation will begin making a significant investment in order to match available federal "green jobs" dollars in 2009.

#### "Yes we Can" was President Obama's slogan as he campaigned across the nation. This is also the belief of Tribal communities.

I see several key opportunities for the Obama administration to help the Tribes progress. Tribes want to co-own renewable energy projects. It is an industry perfectly aligned with Tribal values and is a stable investment once a power purchase agreement is negotiated. There are several challenges—because Tribes don't pay federal taxes they are not eligible for the production tax credits that serve as incentives for investors. New, creative legislation is needed to encourage businesses to partner with Tribes on renewable energy projects on their lands. It's the only way tribally owned projects can be economically competitive and on even footing with private industry.

Additionally, Tribes need to secure earmarks for clean industry bonds and new market financing. Tribes also need to seek additional funds through the Department of Energy for pre-development work, due diligence on partners and technologies, and for actual investment in the hardware.

In the "green jobs" sector Tribes are poised to diversify their economies into retail, tourism, and green manufacturing, but will need guidance and assistance to create secure partnerships and attract solid ventures. Tribes also need help in resolving complex investment barriers such as the dual tax issues with neighboring state governments.

The Navajo Nation Council has already granted the Shonto Chapter, one of the most progressive "Local Governance" communities, the authority to manage their business site leases. This is a major incentive. Not only can the Chapter negotiate and manage leases, it also collects the lease payments and sales taxes, which creates opportunities for financing future projects.

We think the Obama administration can look at this northern Arizona community as a model for the "Yes We Can" mantra. **b** 

## LAND MANAGEMENT NIGHTMARE IN UTAH

by Liz Thomas, Southern Utah Wilderness Alliance



hile many of us were costuming our little goblins for Halloween, Bureau of Land Management (BLM) planners were loosing their own nightmare the long-term land use plans for upwards of 11 million acres of Utah public lands.

The plans earmarked over 8 million acres for the oil and gas industry and essentially surrendered Utah's stunning backcountry to off-road vehicles (ORVs). The agency can't hide what the plans are meant to do: cement for the next 20 years and beyond the Bush administration's reprehensible record of Utah landscape destruction.

Three days after releasing the plans, the BLM unveiled the lands it would offer in its December oil and gas lease sale. In all, 360,000 acres of canyons, mesas, buttes, and slickrock domes throughout canyon country would be auctioned. Sensitive lands adjacent to Arches National Park and in Nine Mile Canyon—touted as the world's longest gallery of prehistoric rock art—were offered up along with others, including Labyrinth and Desolation Canyons along the Green River.

The proposal caused national outrage and a few weeks later the BLM agreed to remove from the list a scant few of the most high-profile parcels near national parks. The majority of sensitive areas and lands proposed for wilderness protection remain on the auction block—Hell Roaring Canyon, White River, Desolation Canyon, Deep Creek Mountains, Labyrinth Canyon, Tusher and Bartlett Canyons near Arches National Park, and many more.

How could this happen? The answer is cold, ideological calculation.

#### BUSH ADMINISTRATION SCRAPS MANDATE TO PROTECT PUBLIC LANDS AND VALUES

Although headlines blasted the BLM's lease plans, the true root of the problem is the land use plans themselves, which drew little national media attention.

The plans flow from the Federal Land Policy and Management Act (FLPMA) that charged the BLM with managing these lands so that grazing and mining would be balanced with other values—historic, prehistoric, scenic, wildlife, watershed, wilderness, and recreation. To aid that directive, Congress required the BLM to develop resource management plans and to periodically revise them based on continually updated inventories of the lands' resources and values.

## Hell Roaring Canyon Labyrinth Canyo White River Deep Creek Mountains Bartlett Canyo

The BLM produced the land use plans FLPMA demanded but over the past 30 years the Utah BLM never revised the plans as mandated. That changed when the Bush administration took office. The BLM began revising the plans with a single goal in mind: to impose the administration's anti-conservation, antipublic lands policies on canyon country in a way that would keep them in place long after the administration departs. With the Utah congressional delegation in lockstep with the administration, the deck was stacked heavily against Utah's public lands.

The BLM was solely focused on prioritizing energy development (a 2002 Washington BLM memo directed Utah BLM to make oil and gas its "No. 1 priority") and motorized recreation (the BLM incorporated rural counties' near-infinite wish list of routes into the plans' early drafts in contradiction of federal law). The Bush administration's disdain for science was again displayed when the BLM ignored concerns of the Environmental Protection Agency and other scientific experts regarding air and water quality, archaeological artifacts, wildlife habitat, and the unquestionable effects that climate change will bring to these high desert lands. It likewise ignored the public's request to preserve some places for their outstanding naturalness and quiet beauty.

The BLM's dreadful plans made 80 percent of the 11 million acres they manage available to the oil and gas industry, exactly what the Bush-Cheney energy policy envisioned. The plans gave the green light to auction leases near Arches, Canyonlands, and Dinosaur National Parks, Desolation and Labyrinth Canyons, and dozens of other places equally inappropriate for industrial development.

The plans are a sop to rural Utah counties and their quest to control federal lands and prevent wilderness designation. The BLM seeks to "legitimize" nearly every dirt track the counties requested, blanketing the landscape with 20,000 miles of off-road vehicle (ORV) routes. Of course, if the first definition of "wilderness" is "roadless," surrendering 85 percent of these lands to motorized vehicle use is a sure way to disqualify them for eventual wilderness designation. There was a one bright light in the gloom: the BLM identified nearly three million acres of roadless areas ("lands with wilderness characteristics," in BLM-speak) in the 11 million acres the new plans covered. The agency should have identified these lands during the initial wilderness inventories that followed the enactment of FLPMA, then protected them as wilderness study areas for the intervening 30 years.

Better late than never? Not really. The BLM extinguished this ray of hope, decreeing that oil and gas drilling and ORV use trump the protection of wild, unspoiled landscapes. Incredibly, BLM intends to preserve wilderness characteristics on only 16 percent of the areas the agency itself identified as roadless.

Had the agency sought balance and moved to protect at least the agency-identified roadless areas, it could still have given the industry 86 percent of proposed oil and gas wells and given rural counties and ORVers 92 percent of proposed ORV trails.

As one pundit has it, the Bush administration is forgotten but not gone. But it will be a very long time before those who love southern Utah can forget it. These plans will dictate the uses and management of 11 million acres of the American public's most scenic lands for the next two decades. If they stick, hundreds of special places will be scarred and battered beyond any hope of the wilderness protection they so surely deserve.

**THE OBAMA ADMINISTRATION SHOULD FIX THESE PLANS** Conservationists, including the Grand Canyon Trust and the Southern Utah Wilderness Alliance, are challenging these plans in federal court. We believe they violate FLPMA, the National Environmental Policy Act, the National Historic Preservation Act, the Clean Air Act, and other laws and regulations that govern public land and resource management.

But litigation takes time. The next Interior Secretary, whose department includes the BLM, must promptly review these radically skewed plans and reverse their most egregious provisions—delaying what can be delayed, uprooting what can be uprooted. In the face of the BLM's onerous Utah land use management plans, time is not our friend.

## ADAPTING TO CRISIS ON THE COLORADO PLATEAU: "YES WE CAN"

by Eli Bernstein

e currently face multiple crises on the Colorado Plateau and around the world including economic recession, an energy crisis, diminishing natural resources, threats to biodiversity, instability of climate change, and burgeoning human population growth. Overcoming these crises will demand coordinated efforts at all levels of human society—from individuals to communities, regions, states, and nations. This is the real meaning behind the "Yes we can" Obama campaign slogan ...we must all be part of the solution!

We must think and act both globally and locally. Why? Because if we've learned one thing in the last few years it's that global economies, fuel prices, biodiversity, climate change, and housing markets are inextricably intertwined. As Al Gore said, "We're borrowing money from China to buy oil from the Persian Gulf to burn it in ways that destroy the planet. Every bit of that has to change."

We are confronted with an unprecedented necessity to reform our economy and move energy production and consumption, built infrastructure, agricultural systems, and natural resource use in a more sustainable direction. While this might seem daunting, we should be encouraged by the well-accepted scientific theory of "punctuated equilibrium," which suggests that throughout geologic history, today's plant and animal life (humans included) have made their largest evolutionary leaps very rapidly, in response to extreme environmental pressures. This capacity for radical change is our planetary birthright; a remarkable gift that our ancestors have passed down to us. Quite possibly it is the biggest asset humankind currently holds in its collective savings account.

Climate scientists predict that over the next 100 years, mean temperatures on the Colorado Plateau are likely to rise between 4.5 and 7 degrees centigrade, which along with predicted declines in precipitation, could lead to worsening drought, severe forest fires, increased snowmelt, reduced snow pack, and other undesirable effects. Moreover, although the Plateau itself is extremely rural, it is hemmed in by five of the fastest-growing megapolitan areas in the country, which are quickly dividing up the last drops of already over-allocated water. While the future doesn't exactly look rosy, the Colorado Plateau has at least four important things going for it.

#### WILD LANDSCAPES

Wild landscapes might very well be the banks of the future: sequestering carbon, and delivering valuable ecosystem services such as clean air, clean water, and agricultural productivity. The Plateau has an abundance of these wild places. The first ever federal economic policy to address climate change, America's Climate Security Act of 2007, suggests that a U.S. carbon trading market will be created soon. If market mechanisms for carbon offsets and sequestration projects were expanded to protect biodiversity (replacing monoculture tree-farms with native landscapes), there would be a real economic incentive to protect and restore wild landscapes. Creating such markets and jobs around ecosystem services would grow the American "green economy" and help offset the current recession.

#### **ALTERNATIVE ENERGY**

Abundant wind and sun on the Plateau will be valuable assets in the renewable energy economy of the future. The Western Governors' Association 2008 policy proposal, the Western Renewable Energy Zones policy initiative is already investing in these assets. Native American tribes are also taking a leadership role in renewable energy development. For example, a proposal is in the works to transfer revenues from sulfur-dioxide pollution credits from the recently closed coal-fired Mohave Generating Station to develop renewable energy projects on Navajo and Hopi lands.

#### **RURAL COMMUNITIES**

The Colorado Plateau is defined by rural communities with close ties to the land. The Hopi people, who represent the single longest human inhabitation in North America, maintain decades-old agricultural practices that are highly co-adapted with the particularities of this place. Additionally, a variety of ranchers and small-scale agriculturalists also raise animals or grow food on the Plateau. The grass-fed livestock operations and indigenous agriculture common to the



region, if managed to protect native habitats, represent some of the last nearly 100 percent solar-powered agricultural systems in America. Such agricultural models will likely play an important role in future U.S. agricultural policy, since reducing fossil fuel use in food production will be necessary not only to benefit agriculture, but will assist in resolving the health care crisis, achieving energy independence, and mitigating and adapting to climate change.

#### **STRONG SCIENCE**

Scientific research on the Colorado Plateau stands out because it often employs a socially collaborative approach to protecting some of the most wild and arid landscapes in the contiguous United States, while also investigating ways to provide human communities with essential natural resources. The questions that we as scientists engage across the Plateau are also globally relevant. They include, but are not limited to, downscaling climate change predictions and anticipating the resulting aberrations within biological communities, producing superior techniques for water management and riparian restoration, restoring forests threatened by catastrophic fire, and identifying the most productive and environmentally appropriate sites for renewable energy projects.

In summary, the crises we face on the Colorado Plateau call for a protean effort to coordinate government, private industry, academia, and citizenry to achieve the following: (1) use cutting-edge science to predict the regional effects of climate change; (2) partner with government and industry to create jobs minimizing risk, and developing mitigation and adaptation strategies for human and biological communities; (3) create new jobs and production systems in renewable energy at both local (decentralized) and regional (interconnected) scales; (4) develop new markets for sustainablyproduced, local food involving young farmers, tribes, and seasoned growers/ranchers; (5) implement regional planning and development strategies that can be sustained by the aforementioned economic, energy, and agricultural systems.

To say, "yes we can" to the serious challenges we face requires us to move boldly forward as a region. Working together is essential. By doing so we will show the country and the world that this period of enormous difficulty is also a time of remarkable opportunity.

#### KEEPING OUR MEMBERS INFORMED, BUT WITH LESS PAPER...

The Grand Canyon Trust typically mails its members two *Colorado Plateau Advocates* per year, and two letter updates on the status of various issues, programs and projects. The feedback we've received in recent months suggests that our members want to stay even more informed, so we've decided to produce an e-newsletter and distribute this electronically three to four times per year.

An e-newsletter will allow us to keep members better informed and provide voluntary opportunities for our members to get directly involved in Colorado Plateau

advocacy. In the process we'll use less paper and not incur additional postal expenses.

There's one small hitch though. While we have made an effort to collect e-mail addresses from our members over the years, there are still many of you who have either not provided this or, you have not kept us up to date on any changes to your e-mail address.

So that we can all move into the twenty-first century with relative ease, we have set up a simple system. To provide us with your e-mail address, or to update any changes just send us an e-mail with your name in the subject line to *info@grandcanyontrust.org*. We'll update your membership information and automatically subscribe you to the e-newsletter. You may opt out of the e-newsletter by calling or emailing us and requesting removal. Thanks for your cooperation!

#### **CHALLENGING TIMES**

The current financial crisis has been a wake–up call for nonprofit organizations. Discretionary spending, charitable giving and investment income are all down significantly. Likewise, foundation portfolios have declined resulting in a reduction in the number and size of grants foundations are positioned to make next year.

Fortunately, the Trust has carefully managed its financial resources and major donor and foundation relationships. Membership remains strong, our major donor base is growing, and the foundations that have supported us over the years assure us that our good work will continue to be rewarded.

However, a successful past does not guarantee a successful future. With uncertainty in charitable giving, the Trust is reducing budgets and focusing on our most critical projects and programs in order to make scarce dollars go as far as possible and to strengthen the organization. In addition to the new e-newsletter we will also begin a series of day and weekend trips to get more of our members out in the field to see first-hand some of the issues and projects we are working on.

Rest assured that we do not take our members or supporters for granted. We understand there are many worthy organizations out there and that we have to continuously *earn* your support.

> Suffice to say that when renewal or appeal time arrives we want our results and successes to be so clear and concrete that your support is unwavering.

> Thank you for believing in the work we do and maintaining your support during these challenging times.

#### **MONTHLY PLEDGING OPTION**

Did you know that there is now a hassle and paper free way of supporting the Trust through a monthly pledging option? Simply provide us with some basic information and tell us how much of a monthly pledge you wish to make and whether or not you would like to receive the *Colorado Plateau Advocate* and e-newsletters. Based on your preference, the pledged funds are debited on a monthly or quarterly basis from your checking or credit card accounts and an annual, cumulative acknowledgement is mailed to you at year's end. No checks to write, no stamps to lick and a few good trees left standing. It's a great, hassle free way of investing in Trust programs and projects. For more information, call Darcy Allen at 928.774.7488 x 207.



#### Staff Members

#### **Board of Trustees**

### 

#### Headquarters Office

Bill Hedden Executive Director

Christine Albano Restoration Program Coordinator

Darcy Allen Associate Director: Administration

Ethan Aumack Kane & Two Mile Ranch Director

Shannon Baker Finance Manager

Eli Bernstein Restoration Program Associate

Lauren Berutich Volunteer Program Coordinator

Roger Clark Air and Energy Program Director

Steve Fluck GIS Analyst

Rick Johnson Colorado River Science Director

Nikolai Lash Water & State Trust Lands

Program Director Neil Levine Staff Attorney

Richard Mayol Communications Director

Rick Moore Associate Director: Programs

Phil Pearl Associate Director: Development

Adrianne Sanchez Administrative Assistant

Evelyn Sawyers Associate Director: Finance

Tony Skrelunas Native America Program Director

Kate Watters Volunteer Program Manager

Travis Wiggins Volunteer Program Coordinator

Tom Sisk, PhD Senior Science Advisor

Brett Dickson, PhD Postdoctoral Fellow in Conservation Biology

#### Moab, Utah Office

Eleanor Bliss Executive Assistant

Laura Kamala Utah Program Director

Mary O'Brien Utah Forest Project Manager

#### North Rim Ranch, LLC.

John Heyneman General Manager, North Rim Ranch

Justun Jones Foreman, Kane Ranch

Andy Butler North Rim Ranch Facilities Manager Louis H. Callister Chairman Salt Lake City, UT

Pam Hait Vice-Chair Phoenix, AZ

Ty Cobb Secretary-Treasurer Washington, DC

Kevin Albert Malden Bridge, NY

James E. Babbitt Flagstaff, AZ

Carter F. Bales New York, NY

Anne Bingaman Washington, DC

David Bonderman Fort Worth, TX

Bill Budinger Aspen, CO

Ty Burrell Salt Lake City, UT

Robert Elliott Flagstaff, AZ

Jim Enote Zuni, NM

Matthew G. Garver Atlanta, GA

Kevin Gover Washington, DC

John Leshy San Francisco, CA

Bud Marx

Laguna Beach, CA John Milliken

Salt Lake City, UT Owen Olpin

Teasdale, UT Eva Patten

Bozeman, MT Amy Redford

New York, NY

Garry Snook Aspen, CO

Jennifer Speers Salt Lake City, UT

Rebecca Tsosie Phoenix, AZ

Charles F. Wilkinson Boulder, CO

Hansjörg Wyss West Chester, PA

Jim Trees (deceased) Founder and Emeritus Chair San Francisco, CA

N. Scott Momaday Poet Laureate Santa Fe, NM

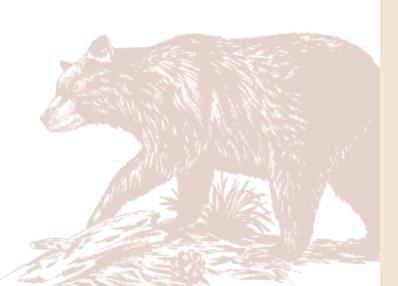
Stewart L. Udall Counselor Jemez Springs, NM

#### Volunteer Utah!

The Trust's work on southern Utah's national forests is getting a major, twofer boost in 2009. First, we're establishing a Utah extension to the Trust's energetic volunteer program that is headquartered in Flagstaff. Second, the coordinator of the Utah program will be Season Martin, an outstanding summer intern with the Trust in Utah in 2007 and 2008. A geology graduate of Whitman College, Season is also a river trip leader (she's just rowed through Grand Canyon for the second December in a row), a great cook (she organized cooking by 22 Whitman College students August through November as they traveled throughout the Southwest), intrepid field scientist (rain doesn't faze her), and a computer whiz (e.g., she turns masses of field data into graphs like magic).

By late February, look for the new Utah program on the Trust's volunteer website. There you'll find such offerings as documenting the work of busy beavers, tracking pollinators in "gold standard" reference areas, and measuring sedges near creeks. Those who volunteered in Utah during 2008 will vouch for (1) Season Martin and her meals; (2) the value of the work; and (3) the fun of bringing care to the northwest edge of our Colorado Plateau.

#### http://www.gcvolunteers.org/index.html



#### The Colorado Plateau Advocate

#### Advocate Staff

Editor: *Richard Mayol* Design: *Joan Carstensen Design* Printing: *Arizona Lithographers* 

> Headquarters 2601 N. Fort Valley Road Flagstaff, AZ 86001 (928) 774-7488 (928) 774-7570 Fax

> > Moab, Utah Office HC 64, Box 1801 Moab, Utah 84532 (435) 259-5284

Front cover photo: Tom Till Back cover photo: Tom Till © Illustrations by Zackery Zdinak



This publication is printed with soy based inks.

	BARREN B	W LEAP PA		œ
di ten den te	ar air an proces	Pleasannian tea ad colorer that A strate black of the	ing reason	
8715		map	sold sease	8191

Permission is hereby granted to reprint sections of the *Colorado Plateau Advocate* for non-commercial purposes provided that nothing is altered or edited in any way and that an appropriate credit line and copyright notice are included (©Grand Canyon Trust).

**Grand Canyon Trust** 2601 N. Fort Valley Road Flagstaff, Arizona 86001 (928) 774-7488



#### 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.

#### Vision

We work toward a region where generations of people and all of nature can thrive in harmony. Our vision for the Colorado Plateau one hundred years from now is:

- A region still characterized by vast open spaces with restored, healthy ecosystems and habitat for all native plants and animals.
- A sustaining relationship between human communities and the natural environment.
- People living and visiting here who are willing and enthusiastic stewards of the region's natural resources and beauty.

