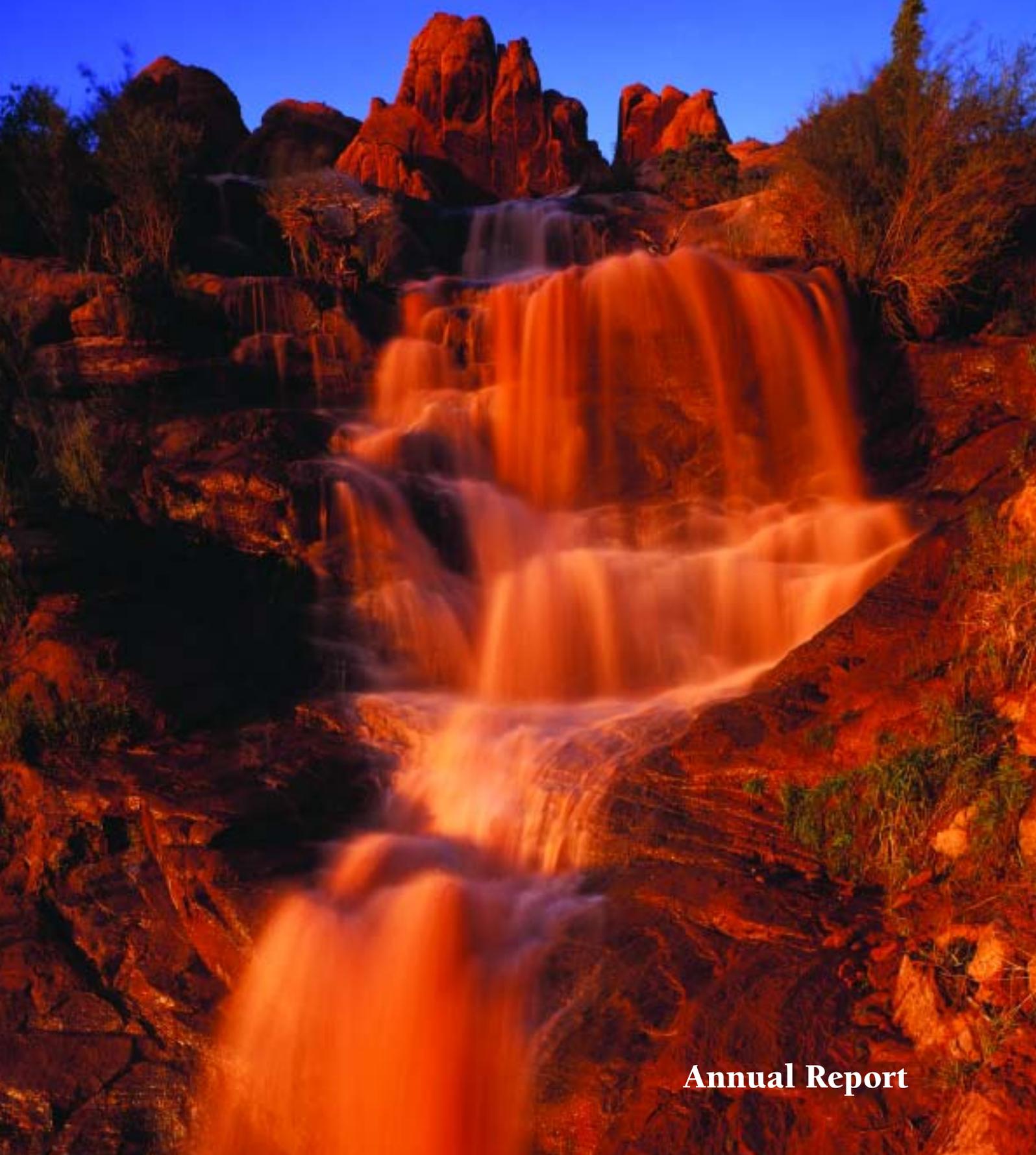


COLORADO
PLATEAU

SUMMER 2006

Advocate

GRAND CANYON TRUST



Annual Report

Contents

| | |
|---|----|
| What's the Grand Canyon Trust Doing in Utah? | 2 |
| At Work in Our Backyard | 4 |
| Good News for Glen Canyon Restoration | 6 |
| Conservation and Collaboration in Utah | 7 |
| The Aquarius Plateau | 8 |
| Betting on Cleaner Energy Futures | 16 |
| Water in the Greater Grand Canyon Region | 18 |
| Preserving Cultural Heritage on the Ranches | 20 |
| North Rim Ranch News | 21 |
| Volunteer Program Rises to New Heights | 22 |
| Searching for Sage Grouse | 23 |
| Grand Canyon Trust Contributors 2005 | 24 |
| Annual Financial Report | 26 |
| Staff Notes | 27 |

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.

WHAT'S A GROUP CALLED THE GRAND CANYON TRUST DOING IN UTAH?

The Trust was founded in 1985 as a science-based, solution-oriented group to help protect the Grand Canyon. Within a year, Board member Stewart Udall argued passionately that the Canyon does not exist in isolation and the group should work on issues affecting air, water, land and wildlife across the entire Colorado Plateau. The Trust's first Long Range Operating Plan in 1987 adopted this view. Utah was firmly on the map, though several more years passed before the Trust was able to begin conservation programs there.

Utah conservation gained national prominence when Congressman Wayne Owens introduced the Utah Wilderness Bill in 1989. The Trust joined the Utah Wilderness Coalition shortly thereafter to urge protection of 5.7 million acres of wild canyon country. Though we later withdrew from the Coalition to work more effectively with southern Utah communities, we continue to collaborate with our colleagues who concentrate on wilderness.

At the same time the Wilderness Bill was introduced, the Grand Canyon Visibility Transport Commission held its first meeting, where the Trust argued that the Commission's mission should include air quality at all Plateau parks and wilderness areas. This followed our success in negotiating major anti-pollution retrofits of the Navajo Generating Station and presaged more impressively effective work reducing air pollution from the region's coal-fired power plants.

In 1993 the Trust opened a St. George office to work on conservation of the Greater Zion region. Among its notable accomplishments were the formation of the Grafton Heritage Partnership, which bought and protected the historic Grafton Townsite along the Virgin River in 2000, participation in the establishment and management of the Grand Canyon-Parashant National Monument, and a legal victory compelling planners to address the effect St. George's new airport will have on Zion National Park.

Throughout the mid-90s the Trust worked to protect the Colorado Plateau's archaeological legacy, publishing *Preserving Traces of the Past* in 1994 and hosting a series of cultural resource management training sessions across the region in 1995. This work was

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.

LETTER FROM THE CHAIR

Lou Callister



recognized when the Society for American Archaeology presented us with its 1996 Public Service Award.

Also in 1996, the Trust's Southeast Utah office was opened to practice our unusual brand of community-based conservation from Moab. Its first success came later in 1996 when we teamed up with The Conservation Fund to retire grazing from 55,000 acres along the Green River adjacent to Canyonlands National Park. This grazing program eventually became a national model, closing critical wildlife habitat to grazing in Arches and Capitol Reef National Parks, Glen Canyon National Recreation Area, and the Grand Staircase-Escalante National Monument, including the entire Escalante River canyon. Over the years, this program has evolved from a strict grazing retirement program to one where conservation objectives are achieved by multiple means, including the purchase and continuation of grazing operations in an environmentally sustainable manner. The purchase of the 850,000-acre Kane and Two Mile ranches was a direct outgrowth of this work.

In 1997 the Utah office began two successful programs: the first, which came to fruition the next year, was to expand Arches National Park along natural boundaries by adding a system of five spectacular canyons north of Delicate Arch; and the second, which did not conclude until 2005, was to get 12 million tons of radioactive uranium mill wastes removed from the Colorado River flood plain near Moab. This river protection was augmented in 2004 when our lobbying culminated in the *Three Rivers Withdrawal*, closing 250 miles of the canyons of the Colorado, Green and Dolores rivers in southeast Utah to mining.

President Clinton's designation of the Grand Staircase-Escalante National Monument in 1996 accomplished much, but left many unanswered questions. Scores of private inholdings, and widespread oil, gas, and mineral leaseholds threaten wildlands with development; and intensive grazing is permitted almost everywhere. The Trust has engaged in solving a few of the most pressing problems, through the grazing work described above and the 2004 purchase and protection of ten parcels of commercially-zoned

land along the Escalante River at Calf Creek. Finally, we teamed up with an oil company to retire oil and gas leases from 50,000 acres of land on the remote Kaiparowits Plateau, where development would have been terribly destructive.

When southern Utah's Dixie, Fishlake and Manti-La Sal National Forests began developing new twenty-year comprehensive management plans in 2003, the Trust took the lead in forming the Three Forests Coalition, a group of fourteen conservation groups working to assure that forest management focuses on maintaining and restoring healthy populations of native species and protecting the marvelous high country wildlands.

The Trust has also been a key player in a highly successful effort to protect open space along the Colorado River. Working with The Nature Conservancy and Utah Open Lands, we purchased thousands of acres of development-prone State Lands and are supporting legislation that will trade 80,000 acres of State and BLM land to protect wilderness quality recreational lands while increasing revenues to benefit Utah schools.

The challenge of protecting parks, rivers, forests and wild places will become even more important as Utah grows, and the Grand Canyon Trust will be in the center of that visionary effort. 🌀

AT WORK IN OUR BACKYARD

—by Laura Kamala

Tom Till

***“The idea that you can have a sound economy of money or stocks
and bonds with a degraded landscape underneath it is preposterous.”***

— Wendell Berry

I met Wendell Berry at Edward Abbey’s 1989 memorial service in Arches National Park. Hundreds of people made the pilgrimage along the park’s old entrance road and gathered near the site of Abbey’s trailer—Arches original visitor contact station—a sort of shrine for Ed’s fans. I worked at the park many years ago, when Abbey was still living, and his devotees would appear at the new visitor’s center asking for directions to the site so they could pay homage.

Wendell Berry—the poet, novelist, essayist, conservationist and farmer—had traveled to Moab to eulogize and celebrate Abbey’s life along with Terry Tempest Williams, Barry Lopez, Ann Zwinger, Katie Lee, John DePuy and others. My friend Kate Kitchell and I were invited to sing *Amazing Grace* and *Will the Circle Be Unbroken* for the service, songs Ed’s wife Clarke said he would like. Later that day I spoke with Berry at Ken and Jane Sleight’s ranch outside Moab, where an Irish wake was in progress. His quiet grace

dignified a scene in which many people (myself included) were smoking cigars, holding whiskey bottles aloft and making merry in tribute to Abbey’s life.

Wendell Berry’s writings have influenced my work as a conservationist and community activist since I started reading them in the 70s. Berry believes, as I do, that we’re *required* to protect our own backyard and that if enough people did this, “bad innovations wouldn’t be in anybody’s backyard.” His vision for sustainable communities and economies appeals to me, although his idea that we should limit our crass consumerism remains unpopular to many people even as we approach “peak oil” and the inevitable end to our fossil fuel based lifestyle.

It’s somehow not human nature to voluntarily live with less, circumstances must force us to do so. That tells me our perception of what constitutes a good quality of life may be skewed. As I write this on my PC, I’m aware that my hero, Wendell, does not own a computer.

I live in Castle Valley near Moab, and in my backyard are 5,280 acres of Utah State Trust Lands (SITLA) proposed to be traded to the Bureau of Land Management (BLM) through the Utah Recreational Land Exchange Act of 2006, recently reintroduced in Congress by Senator Bob Bennett. Grand Canyon Trust has worked to help design and support this bill for nearly three years. The benefits to my immediate community include the preservation of 5,280 acres of open space, which would otherwise be privatized and developed, and protection of the municipal watershed and essential winter range for the La Sal Mountain deer herd.

This legislation provides for a much greater benefit in the exchange of approximately 80,000 acres of SITLA and BLM lands in Grand, San Juan and Uintah counties. The trade will protect a vast landscape of valuable recreational lands, critical watersheds, and wildlife habitat and lands in Wilderness Study Areas located in the Colorado River corridor. The area is currently a checkerboard of state-owned sections of land which SITLA is mandated to manage for the benefit of Utah's school children by raising money for the Permanent School Fund. This is accomplished primarily by leasing the lands for minerals development or selling the lands to developers.

The land trade is the only viable way of protecting a cherished landscape from fragmentation since conservation dollars cannot keep pace with the disposition of these lands. Through the exchange SITLA will acquire mineral development properties in the Uintah Basin, which do not conflict with America's Red Rock Wilderness Act or contain protected plant and animal species habitats. These lands will more appropriately serve SITLA's mission.

Passage of the Utah Recreational Land Exchange Act will break the logjam in Congress for doing legislative land trades in effect since 2002, when a Utah proposal to create a new national monument in the San Rafael Swell failed. Legislative land trades are a necessary conservation tool in our current economy and the Trust is working to support a successful model that can be used in future exchange proposals throughout the West. In defending our own backyard we are also helping to defend everybody's backyard.

Wendell Berry lives in Kentucky and has spoken out against mountaintop removal for extracting coal. He says, "We are destroying permanent values to get

to almost inconceivably transient values." We may be doing the same thing in Utah with the current feeding frenzy for mineral resources on western public lands propelled by the Bush Administration. Grand Canyon Trust is working to get oil and gas leasing closures on some of the lands being conveyed from SITLA to the BLM. We have partnered with the Town of Castle Valley to protect their municipal water supply.

The town's watershed has a Sole Source Aquifer designation from the Environmental Protection Agency and a Pristine Water designation from the Utah Department of Environmental Quality. Recent hydrological studies show that the water supply is vulnerable to contamination due to fractured geology. The watershed is threatened by the potential development of existing oil and gas leases issued by SITLA on their lands in Castle Valley. All of these lands and leases will be conveyed to the BLM in the trade, since valid existing rights are a provision of the exchange. The Trust has an opportunity to purchase existing leases to prevent development. At the same time we are working with the BLM to include closure of minerals leasing as they prepare a new Resource Management Plan.

In a recent interview Wendell Berry said, "Try to imagine an economy without fertile land or drinkable water or breathable air. You won't get very far." We are unfortunately facing the loss of these basic human needs due to our frantic attempts to suck every drop of oil and gas out of the ground. My friends across the state line in Silt, Colorado have newly diagnosed cases of bronchitis and asthma resulting from the dense air pollution spewing from the oilfield that has infiltrated their community. The infamous Divide Creek seep has polluted water wells, turning water into a flammable liquid and kitchen faucets into incendiary devices.

When these things happen, we cannot all flee our homes after being bought out by the culpable corporations or suffer great loss of property value and leave empty homes behind. We must insist that oil and gas development is absolutely *not* a suitable use for public lands in municipal watersheds. Both Ed and Wendell would agree it's time to stand with our own communities and defend the backyard.

For current information on the exchange legislation please visit our website: www.grandcanyontrust.org. 🌱



James Key

Restored pool along Smith Fork Canyon located 50 feet below full-pool elevation of Lake Powell.

GOOD NEWS FOR GLEN CANYON RESTORATION

—Richard Ingebretsen, MD, PhD
President, Board of Trustees, Glen Canyon Institute

The Salt Lake Tribune's April 2, 2006 banner headline read, "*Lake Powell May Never Be Full Again.*" The subtitle said, "*New accord means it will not go so low, nor reach full pool in the future.*"

The article reported that the Bureau of Reclamation (BOR) acknowledged there is not enough water in the river to fill both Lake Mead and Lake Powell. Hoping to keep both lakes at maximum levels, an "accord" was reached allowing more water to pass through Glen Canyon Dam to keep Lake Mead full in "wet" years and hold on to water in "drier" years.

Only millennial type floods could actually fill Lake Powell again. In fact, best-case projections based on a BOR study using predicted flows and river use indicate an elevation of around 3630 feet, which is approximately 60% of capacity and 70 feet below full pool. This study does not account for further water development or water transfers to the lower basin. It also does not factor in global warming; predicted to decrease inflow to Lake Powell by 30% or more over the next several decades.

When the Western water debate was raging in the early 1950s, the upper basin states recognized that most of the time the Colorado's actual flow would be sufficient for the upper basin to make its required annual water delivery to the lower basin. The problem was that the lower basin would not credit the upper basin for those years where the upper basin was able to deliver more water than required. Therefore, a huge reservoir was needed to store the lower basin's allocation.

However, this new accord credits the upper basin for future water delivery in order to keep Lake Mead full now. This flies in the face of Lake Powell's stated purpose, accentuates the colossal mistake of segregating the west's water into two basins at Lees Ferry, and begs the obvious question: What is the purpose of Lake Powell?

The BOR is nervous about low water flows and admits that if global warming and development projections are accurate, then Lake Powell will drain. Should the Colorado River have less than normal flows for the next several years, the new accord may collapse.

It is clear that whole sections of Glen Canyon, many of which are now permanently out of the water, will continue to be restored naturally. This increases the need to consider elevating Glen Canyon National Recreation Area's status to that of a National Park; affording the area the protection and management practices that accompany this designation.

Western water policy is rapidly changing. The concept of keeping Lake Mead full at the expense of Lake Powell has been accepted by decision makers. Lower basin states are crediting upper basin states for future water deliveries and difficult issues such as regional drought, global warming, growth, and changing politics are converging.

The Glen Canyon Institute believes we now have an unprecedented opportunity to guide the ecological future of Glen Canyon. Lake Powell, which has flooded the Canyon since the mid-1960s, is at its lowest level in history. For the first time in decades, more than 40 miles of the main stem of Glen Canyon's hidden landscape have been exposed, along with hundreds of miles of its 125 major side canyons.

Currently Glen Canyon National Recreation Area is managed by the National Park Service primarily to provide for motorized recreation and marina development on Lake Powell, and maintenance of grazing and mining claims. It is the Institute's opinion that upgrading Glen Canyon to a National Park is essential to redirect the area's administrative focus toward the preservation of its rich biological diversity, unique wilderness values, and irreplaceable cultural sites.

Never has the prospect of restoring Glen Canyon been more promising. Will you please join us? Log onto www.glencanyon.org to learn how you can help. 🌱

CONSERVATION AND COLLABORATION IN UTAH

—by Scott Groene, Executive Director, Southern Utah Wilderness Alliance

I moved down from Colorado's high country two decades ago, ending an unpromising career as a ski bum in order to suffer three miserable years at the University of Colorado law school. The bright spots there were public land and Indian law classes taught by Professor Charles Wilkinson, a long-time Grand Canyon Trust board member. His classes helped inspire me to take a job on the north edge of the Navajo Nation representing indigent residents, working from an office perpetually coated in red sand near Mexican Hat, Utah. I hoped then to someday be part of the great citizens' work to protect the Colorado Plateau, along side wonderful people like Charles and Grand Canyon Trust executive director Bill Hedden.

The Trust and the Southern Utah Wilderness Alliance represent to me a model of how conservation organizations should work together. Our missions fit together like interlaced fingers of two hands. We collaborate where it makes sense, for example with our joint efforts on legislation now moving through Congress to protect the Colorado River Canyon upstream from Moab.

But more often we work on separate issues, avoiding duplication while focusing on what we each do best. For example SUWA seeks to influence BLM land management plans now underway that will affect 6 million acres of potential canyon country wilderness. The Trust is focused on similarly important plans the Forest Service is now preparing for the higher country. The Trust has done great work to reduce the coal-fired power plant pollution that fouls the air, while SUWA has stopped coal mines from being built deep in the backcountry. The Trust has gone far to eliminate the poisons leaking from the tailings pile along side the Colorado River outside Moab, while SUWA has prevented new mines that would have created more toxic waste in proposed wilderness. In this way our two organizations get more work done. And we're fine with the missed opportunities for conference calls and email fests that can waste too much of the environmental community's time.

Like any family, we've squabbled in the past. But then our common love of the Plateau united us again in cause.

SUWA's goal is the protection of nearly 10 million acres of Utah BLM wilderness through congressional designation. And until we do, we're committed to defending these lands from threats such as off-road vehicles, bogus property claims under R.S. 2477, and oil, gas and coal development.

Working with our partners in the Utah Wilderness Coalition and the Grand Canyon Trust, and despite the difficult politics of Utah, we've probably protected more BLM land over the past decade than in any western state. Some of the gains have been through administrative work, where we've achieved some sort

Working with our partners in the Utah Wilderness Coalition and the Grand Canyon Trust, and despite the difficult politics of Utah, we've probably protected more BLM land over the past decade than in any western state.

of protection for approximately 1.5 million additional acres. We helped the Redrock through litigation, such as getting Salt Creek in Canyonlands National Park closed to off-road vehicles. Through legislation we've secured land exchanges that increased the amount of land with Wilderness Study Area protection from 3.2 million to nearly 3.5 million acres. And just months ago President Bush signed legislation designating over 150 square miles of the Cedar Mountains as wilderness. In total, we've gained some form of protection for approximately 5 million acres of proposed wilderness. These lands still need designation as part of the National Wilderness Preservation System, but Utah wilderness advocates are rightfully proud of their accomplishments.

I'd rather float the Plateau's rivers and streams in my kayak than wade them for fish as Bill Hedden does. But the common love of wild canyon country drives us and the organizations we serve. At SUWA, we look forward to a long friendship with the Trust. 🐾

Rising to elevations of 10,000 and 11,000 feet at the headwaters of the Escalante River canyon system, the forest-carpeted and lake-dotted Aquarius plateau hovers like a magic carpet a vertical mile above the intricate maze of slickrock canyons and desert badlands that surround it to the east, south, and southwest. It is the highest of Utah's high plateaus and premier rooftop balcony view-point for all southern Utah. To stand anywhere along the edge of its vertiginous southern wall is an Olympian experience.

THE AQUARIUS PLATEAU

© 2006 photos and article by Ray Wheeler

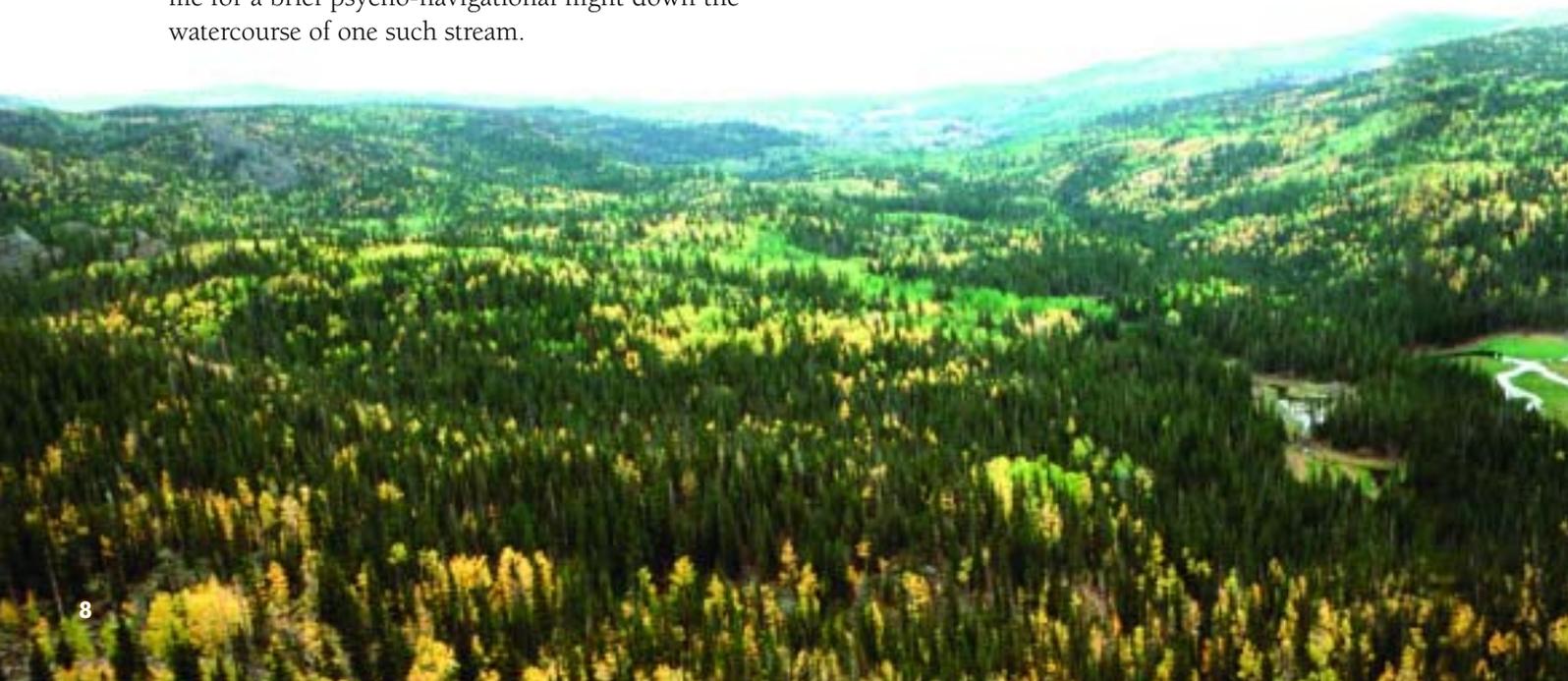
On every side the Escalante river basin is ringed by gargantuan land forms and formidable travel barriers. To the west lie the 10,000 foot-high ramparts of Escalante Mountain and Table Cliff Plateau—the southwestern extremities of the Aquarius. To the south, a 2,000 foot-high escarpment called the Straight Cliffs spans the horizon for fifty miles, pointing like a semaphore at the 10,000-foot high dome of Navajo Mountain. To the east, the strange purple domes of the 11,000 foot-high Henry Mountains tower above the even stranger, thousand foot-high, hundred-mile long, sandstone dome-capped “hogback” called Capitol Reef. And at the center of the vast amphitheater formed by these encircling cliff walls lies the thousand-mile labyrinth of the Escalante.

The story of this heroic landscape is best told in the water-music of the thirty named streams that rush down its flanks into the headwaters of the Sevier, Fremont, and Escalante river basins. I invite you to join me for a brief psycho-navigational flight down the watercourse of one such stream.

Boulder Creek's memorable journey, like my honeymoon hike, begins at the summit of Boulder Mountain, the far-eastern extremity of the Aquarius Plateau highlands. The 50,000-acre summit of the mountain, known locally as “Boulder Top,” is a green and gold mosaic of spruce, fir, aspen and meadow, about 12 miles in diameter and 11,000 feet high, ringed on all sides by towering basalt cliffs, sprinkled with gigantic basalt boulders and dotted with hundreds of small lakes and ponds.

In Greek mythology, “Aquarius” was the water-bearer to the Olympian gods. The name is most fitting. After a wet winter its snowpack may be up to ten feet deep. In springtime the snowmelt fills hundreds of shallow, glacier-scoured lakes and ponds, each one a perfect jewel in a still more perfect setting. Many of these lovely sheets of water are hidden deep in the forest, inaccessible by any road or trail. Their names reflect their infinite variety of shape and color, just as the lakes themselves hold up their mirrors to reflect the immense diversity of nature. There is a Purple Lake, a Blue Lake, a Black Lake, and at least two Green Lakes, as well as Circle, Crescent, Half-Moon, Horseshoe, Crater, Long, Round, Ledge, Rain, and Auger lakes—a total of 834 lakes and ponds visible to the meticulous reader of topographical maps as a galaxy of small blue dots sprinkled across the green that says “forest.”

Throughout spring and well into early summer, the Aquarius snowpack melts slowly, spreading out across meadows, percolating down into the porous basalt bedrock that underlies the plateau, and finally bursting out at the base of its great southern wall in a series of copious, roaring, ice-cold, spring-fed trout streams.



All across the eastern and southern escarpments of the Aquarius, stream erosion has undermined the great cliffs to carve a series of huge natural amphitheaters. At the head of each amphitheater, waterfalls sift down the cliff face, while talus slopes and bonsai aspen groves cling precariously to its sides. The east and west forks of Boulder Creek rise in two such amphitheaters, nestled side by side along the southern wall of the Aquarius, and separated by a spear-tip of land called Trail Point. Each is a place of primordial wildness—a marvelous jumble of stream, wetland, boulder pile and forest. Across the floor of each amphitheater, the bubbling spring waters gather into shallow streams, meander across luxuriant meadows, seep through networks of beaver ponds, then finally collect to form the east and west forks of Boulder Creek.

In the 122-mile journey from the highest point-sources on Boulder Top to the confluence of the Escalante and Colorado Rivers in the heart of Glen Canyon, the waters of Boulder Creek descend 7,400 feet, passing through seven major vegetative zones, and incidentally supplying electrical power and irrigation water for the town of Boulder, surrounding ranchlands, and other communities.

Roaring furiously and dancing among moss-covered boulders, the stream passes in succession under a high, closed canopy of an old-growth aspen forest, a ponderosa pine forest and a pinyon-juniper woodland zone as it drops off the sloping shoulder of Boulder Mountain into rugged sandstone-walled canyons.

Near the town of Boulder, Utah, the stream temporarily diverges into a network of irrigation canals and

slides quietly underneath Utah's Highway 12, the only paved highway to cross its path—or that of the Escalante River downstream, in the 122-mile journey from its source to the mouth of the Escalante in Glen Canyon.

Downstream from the town of Boulder, the stream meanders briefly across farmland and then suddenly disappears into a landscape of naked, white Navajo sandstone—huge, pillow-shaped domes and hump-backed ridges spotted with ponderosa, pinyon pine, and Utah juniper.

Soon it is flowing swiftly but quietly between sheer canyon walls, braiding across clean sandy shallows, ponding behind occasional rock-slides, tumbling over small waterfalls, and gurgling through smooth chutes carved into its sandstone floor.

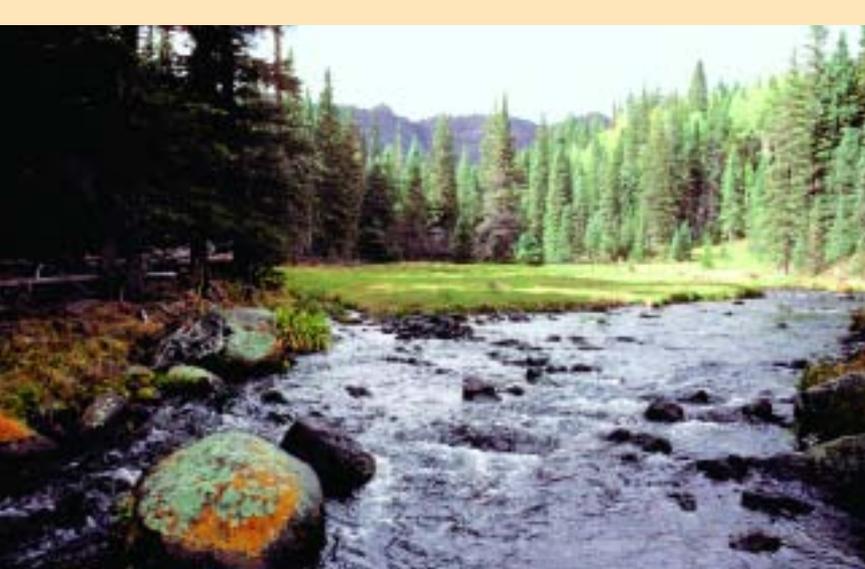
Twenty-six miles downstream from its source on Boulder Top, Boulder Creek joins its parallel sister stream, Deer Creek, at a spectacular convergence of two narrow slot-canyons. Swollen with the additional water, Deer Creek plunges another four miles through a series of chutes, pools, and small waterfalls to its confluence with the Escalante River.

The Escalante! Archetypal wild river of the Utah canyon lands! From here it's another 87 miles of twisting and turning through the thousand foot-deep Escalante canyon system, turning again and again between gracefully sculpted walls of cream and rose-colored sandstone, before the waters of Boulder Creek, heavy now with silt, arrive at the confluence of the Escalante with the Colorado River. And from there, the waters travel hundreds more miles through Glen Canyon, the Grand Canyon, Arizona, California and Mexico, to the Gulf of California.

CONTINUED ON NEXT PAGE



So what have we learned by following the waters of Boulder Creek from its source to its mouth? For one, we have rediscovered what is said to be the last-discovered and last-named river system in the continental United States. We have penetrated the mysterious dark heart of the 20-million acre core wilderness of the Colorado Plateau, a landscape as intricate as any on earth. We have explored a natural area which, due to its mostly undisturbed character, sheer size, forest cover, elevation, and relative abundance of water and variety of vegetation and habitat, serves as a crucially important sanctuary for plant and animal life—preserving ecosystem integrity, biodiversity, and large-scale natural systems and processes.



Perhaps the most important story told by Boulder Creek is that of the interrelation of all parts to the whole. In any desert landscape, water is the life-blood, and riparian areas are the avenues upon which most forms of life travel from one place to another. Streams like Boulder Creek and the narrow canyons they have carved are the major arterial systems that link, for example, critical summer range for deer, elk, and cougar, with critical winter range high above in the headwaters.

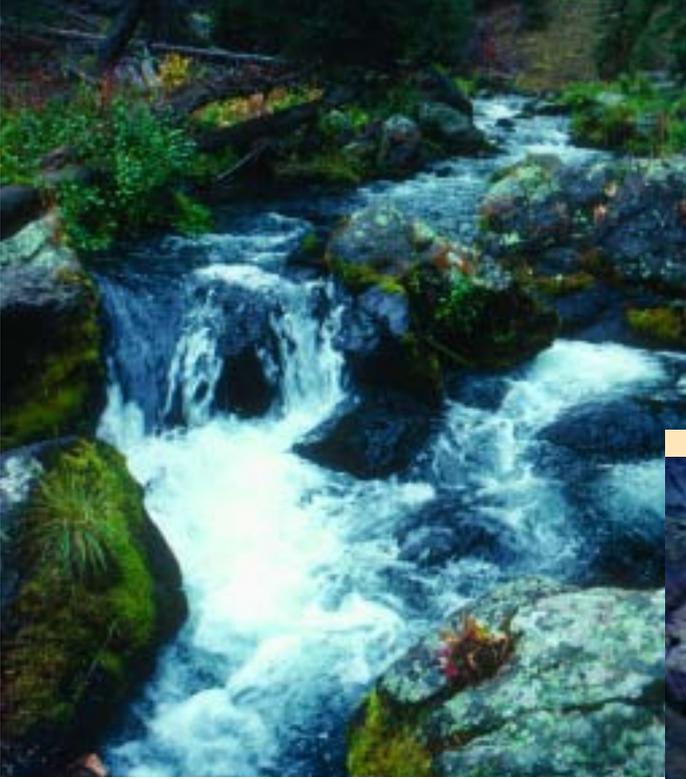
As it wanders through this vast landscape, Boulder Creek also demonstrates beautifully how natural systems—stream courses, watersheds, riparian corridors, wildlife pathways—inevitably cut across and tran-

scend all political and jurisdictional boundaries. In Utah, as in much of the West, the jurisdictional division between federal land management agencies is vertical: a layer-cake consisting of Forest Service lands at the highest elevations where trees can grow in an arid climate; National Park Service lands occupying the lowest elevations along the scenic corridors of the Green and Colorado river canyons; and between them, Bureau of Land Management (BLM) lands occupying the arid bench lands, canyon lands and badlands in the middle zone.



The million-acre Escalante river basin, like most watersheds in Utah and throughout the west, spans all three jurisdictions—the Dixie and Fishlake National Forests at the headwaters, the BLM lands of the Grand Staircase-Escalante National Monument, and the National Park lands within Capitol Reef National Park and Glen Canyon National Recreation area.

Such a large concentration of undeveloped public land is today extremely rare anywhere in the industrialized “first” world, and its ecological value is therefore enormous. The proposed Aquarius wilderness harbors most of the 183 species of forest-dwelling birds and mammals found on the Dixie Forest. Its alpine forests and meadows provide prime summer habitat for deer and elk while its lower slopes accommodate one of the largest concentrations of critical deer and elk winter range and crucial elk calving habitat in all of southern Utah. A long-term cougar study conducted here by Utah State University has identified the south slope of Boulder Mountain as prime cougar habitat. Black bear and bobcat roam throughout its dense forests and valleys; goshawk,



Left to right: Boulder Creek in spruce forest; Henry Mountains from Bowns Point; Cascades, eastfork Boulder Creek; Confluence of Boulder Creek and Deer Creek.



wild turkey, and several species of owl zoom through old-growth conifer and mature aspen forest; peregrine falcon, golden and bald eagle soar along its massive cliff walls; migrating ducks, geese, heron, egret, shorebirds and other waterfowl flock to its countless lakes and ponds; and beaver and exotic invertebrates thrive in its streams and intricate wetlands. Here, and perhaps here alone in southern Utah, it may still be possible to successfully reintroduce large, wide-ranging animal species, such as grizzly, wolf, and Rocky Mountain bighorn sheep that were extirpated throughout much of the American Southwest.

Prairie dogs, nearly driven to extinction across the American West, today are thriving on the windswept table-lands of the Awapa plateau, at the northwestern border of the Aquarius. Rocky Mountain elk, virtually eliminated from most of Utah at the dawn of the twentieth century, were successfully reintroduced on Boulder Mountain in the late 1970s, a herd that now numbers in the thousands. According to the 1985 Dixie Forest Plan, an “extremely successful” transplant of pronghorn on the Awapa Plateau is now the source for pronghorn transplant stock to other areas. California condors, recently reintroduced in Vermilion Cliffs to the south, are so far thriving in the wild and occasionally soar as far as 100 miles north to comb the long southern wall of the Aquarius. Recent computer modeling by conservation biologists suggests that the core wildlands of the Aquarius could potentially support both wolf and grizzly bear with potential wolf habitat connectivity links extending a

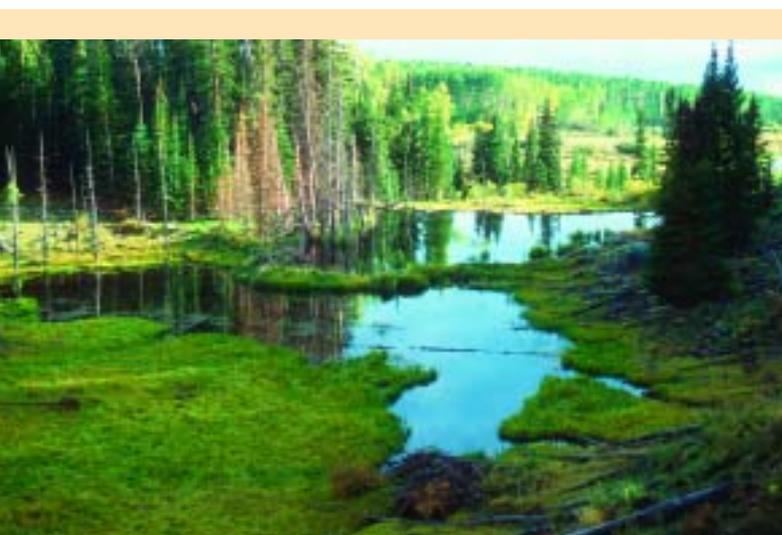
hundred miles north and east, across the Fishlake Plateau and the San Rafael Swell to another large potential wolf core area centered over the Book Cliffs and Desolation Canyon, and on still further north to the High Uintas in the northeastern corner of Utah.

While reestablishment of wolf and grizzly may be controversial here in Utah, the mere fact that restoration of such powerful wild creatures is still possible in our state is inspiring, not only because of the ecological importance of top predators and highly interactive species to the entire ecosystem, but also because of its larger message: that restoration of the natural splendor of the American west is still possible in our last remaining large “islands” of undeveloped public land—if (and only if) we are willing to protect them from further human impact and fragmentation.

If we succeed, no one will benefit more than Utahns. In our evermore crowded and polluted world, places like the Aquarius Plateau are incredibly important to all humanity, and especially to those fortunate enough to live within a few hundred miles of them. The scenic, recreational and spiritual power of the Aquarius wilderness is second to no other wild place in America. Hundreds of miles of historic Forest Service pack trails criss-cross the plateau’s forests and

CONTINUED ON NEXT PAGE

wind down through the cliff walls into the canyon lands below, providing a wealth of hiking, backpacking, and packhorse opportunities that rival those of any national park or wilderness area in America. Two trans-national hiking trails, the American Discovery Trail (which runs from San Francisco to Chesapeake Bay) and the Great Western Trail (which runs from Canada to Mexico), intersect on Bowns Point at the heart of the Boulder Mountain roadless area.



Beaver dams on Boulder Mountain.

A CALL TO STORYTELLERS

Ray Wheeler's "The Aquarius Wilderness" launches the Forest Stories Project of the Three Forests Coalition. The Coalition, which Grand Canyon Trust helps lead, encourages Utahns and the Forest Service to value and restore the native species and systems of the Dixie, Fishlake, and Manti-La Sal National Forests. Nothing motivates such care more than personal stories.

Anyone who knows and loves some native animal, plant, or special place on the aforementioned forests is invited to tell its story for the Forest Stories Project. The "story" can be any combination of words, photos, drawings, or other graphics, and will be displayed on the Three Forests Coalition website (www.threeforests.org). Click on "Forest Stories" on the homepage for guidelines.

Fishing, hunting and birding opportunities are all world-class. The clarity of the air, expanse of views, the color and intricacy of the landscape are unsurpassed anywhere in the world. On a clear day one can see as far as Shiprock, New Mexico, nearly 200 miles distant.

If the Aquarius country existed today anywhere in Europe, it would have long ago been protected as a national park, national monument, or world heritage site. Several large pieces of the Escalante river basin have already been protected within Capitol Reef National Park and the recently created 1.8 million-acre Grand Staircase-Escalante National Monument.

But the crucially important and biologically rich Forest Service lands at the headwaters of the Escalante river watershed remain totally unprotected (except for 32,000-acre Box-Death Hollow Wilderness Area). They are severely threatened by a host of development proposals ranging from massive timber sales and deforestation projects to oil and gas development, geometric expansion of legal and illegal off-road vehicle use, and the cumulative ecological devastation caused by a century of misguided fire control and overgrazing by livestock.

Without protective status, continuing past forest management practices will inexorably shred this magnificent wilderness into ribbons of mined, logged, and roaded land, ultimately destroying both its natural beauty and the integrity of the web of life that inhabits it.

And that's why Forest Planning matters.

As my wife and I continued on our two-month walk along the southern edge of the high plateau country, from Boulder Mountain to Bryce Canyon National Park, we marveled at the beauty of the high plateau country—but were also appalled at its condition. Time and again we dropped down from the aspen belt into the ponderosa belt only to be confronted with large-scale destruction of old-growth forest: for example, vast timber sale areas criss-crossed with timber roads and skid trails, bark-beetle infested piles of logging slash, roads running across and down stream beds, roads and skid trails carrying muddy water straight down-slope, once crystal clear trout streams now clouded with silt from timber-sale runoff, meadows shredded by off-road vehicles, extensive so-called "salvage" logging of dead trees,

vast areas of “chainings” where thousands of acres of pinyon-juniper forest were torn out of the ground by bulldozers, soil compaction, abundant evidence of massive erosion due to overgrazing by livestock (trampled, collapsed stream banks and deeply entrenched streams), rapid expansion of new mining exploration roads and drilling pads, and alpine meadows chewed to the bone—to borrow a John Muir metaphor—by “hooved locusts.”

All these are abundant evidence of current national forest management practices.

Is this what we want for the future? More and still more timber sales, mineral exploration and production; an ever-increasing ancillary network of logging and mining roads, existing trails widened into roads, existing dirt roads graveled and then paved, evermore dense concentrations of off-road vehicle routes, ferociously intense off-road recreational vehicle traffic across fragile alpine meadows, wetlands, and in stream-beds; resulting loss of soil and vegetation; penetration along all new road corridors of non-native, “invasive”, species of plants, insects and animals; pollution of water, soil and air; reduction of forest cover, conversion of forests into drab, biologically barren and unproductive monocultural tree farms; damming of streams, over-utilization by domestic livestock, continued pulverization of stream beds and stream banks by cattle and off-road vehicles, loss of wetlands to water diversions, depletion of the water storage capacity of whole watersheds and aquifers due to soil loss, and soil compaction, erosion and landslides?

To answer the previous question: it’s not what I want nor do I believe it is what Utahns, Americans, or the region’s legions of foreign tourists want.

That’s why, for the past eleven years, I’ve been a committed forest planning activist and a contributor to the Three-Forest Coalition’s “alternative” forest plans for the Dixie and Fishlake National Forests. Every National Forest is required by the National Forest Management Act to rewrite its overarching management prescription every 10 to 15 years. For the Dixie and Fishlake National Forests, which encompass the headwaters described here as the “Aquarius Wilderness,” the Three Forest Coalition’s forest planning alternative embodies a radically different vision for the future of the forest.

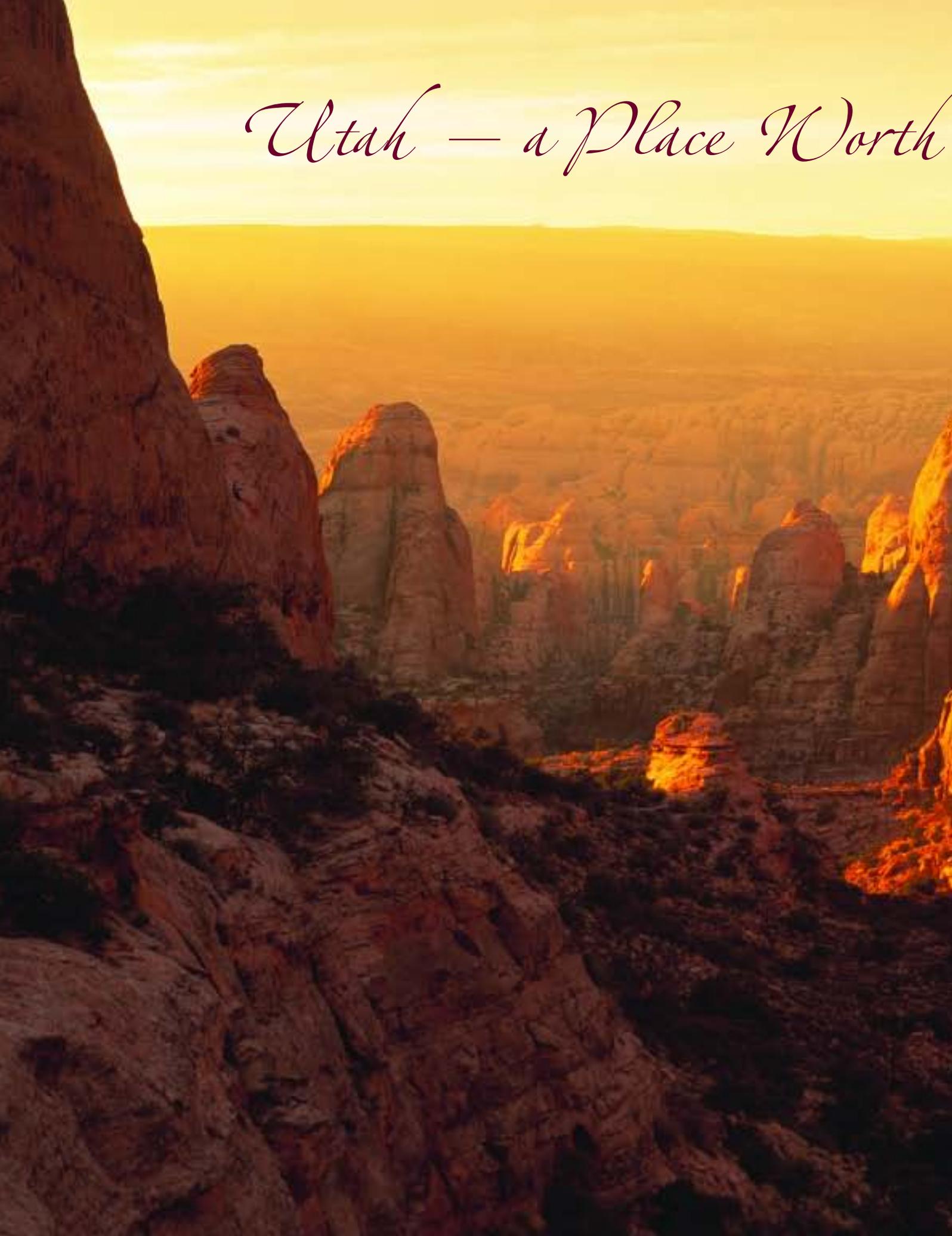
Our proposal would establish as the foundational principle of forest planning the regular and continual monitoring of critical ecosystem health parameters, such as range condition, soil and water condition, and the populations of key “management indicator” species of plants and animals. It calls for not only the full protection of all existing natural and roadless areas, but also for across-the-board improvements in range condition, wildlife habitat, water quality, and forest health.

Instead of targeting remaining natural areas for ever-more intensive logging, grazing, road construction, and mining activities, it would protect nearly all existing roadless areas that still qualify for wilderness designation from new road building and other forms of development. In addition, it would reclaim some formerly logged areas, such as those in the ponderosa pine belt on the south and east slopes of Boulder and Escalante mountains. On Boulder Mountain alone, putting an immediate and permanent halt to taxpayer-financed “deficit” commercial timber sales (federal funding pays for the building of timber roads, mitigation of impacts and management of the forest, while logging companies remove the timber and scoop up the profits) would save a million dollars a year—enough to pay local loggers to restore the forest rather than continuing to chop it down (Garrity, 1994, Garrity and Wheeler, 1998).

We firmly believe (and as opinion polls consistently demonstrate, most Utahns strongly agree) that the management of all public lands in our state should embody the Mormon pioneer traditions of reverence for the land, love for its natural beauty, and a maximum commitment to the restoration and preservation of our state’s natural heritage. We believe that land use planning imbued with that spirit will enhance, not impair, both our economic prosperity and our quality of life for many generations to come. 🌲



Utah — a Place Worth



Saving





Just Transition Coalition members at the California Public Utilities Commission on January 11, 2006. (left to right) Marshall Johnson and daughter, Roger Clark, Nicole Horseherder, Wahleah Johns, Enei Begaye, Robert Tohe, Andy Bessler, and Leonard Selestewa.

BETTING ON CLEANER ENERGY FUTURES

—by Roger Clark

Marshall Johnson grasps the air as he explains how pollution credits are traded. He reaches to find meaningful words in Navajo to describe why the owners of Mohave Generating Station will be paid tens of millions of dollars for shutting down the coal-fired power plant. But the idea clashes with the customs of people who have, for generations, lived frugally on the southern edge of Black Mesa.

Chairman Percy Deal stands up to offer his assistance. He begins to draw pictures of two traditional Navajo homes on a white-board easel mounted in front of the crowded chapter house in Hard Rocks, Arizona. He sketches a column of smoke rising from the hogan on his left and dollar signs coming out of the one to the right. Narrating in Navajo, he then erases the smoke with his left hand and draws an

arrow from right to left. Completing the example, he draws dollar signs over the left hogan and sketches a plume of smoke over the hogan on his right.

Laughter erupts as a grandmother scoffs at Deal's illustration. Although incredulous, his audience pays attention. He and Marshall patiently describe the process at length, answering questions as children stroll in and out among family members seated on metal folding chairs. Slowly, chapter members begin to get the idea that Mohave owners will be paid big bucks by owners of other power plants who are willing to purchase Mohave's rights to pollute somewhere else. Marshall later translates to me that the grandmother had uttered something like "those white people trade money for smoke."

Nicole Horseherder, a young mother from the neighboring community of Forest Lakes, continues the presentation. She says that smoke from Mohave has been polluting the air for more than three decades. It burns coal that is stripped from the mesa just a few miles north of where we are meeting on this blustery day in March.

Community members nod in agreement as she recalls how mining has uprooted families and how springs and wells have dried up as billions of gallons of groundwater are pumped from their arid homeland each year. A 273-mile pipeline carries a slurry mixture of water and coal to the power plant, nestled next to the Colorado River and the casinos of Laughlin, Nevada. By day's end, the Hard Rocks chapter votes overwhelmingly to approve a resolution supporting the *Just Transition Coalition*.

Three months earlier, Hopi farmer Leonard Selestewa traveled to San Francisco with other members of the *Just Transition Coalition* to submit a motion to the California Public Utilities Commission. He presented commission chairman Michael Peevey with a gourd of water, a pouch of corn seeds, and a digging stick. "These items and respect for earth's gifts are all that we need to live prosperous lives," Leonard explained. "We come here to ask the commission's help in restoring harmony to the land and to our people."

Spokeswoman Enei Begaye added that the *Just Transition Coalition* is comprised of regional residents who are seeking funds from the closure of Mohave to invest in renewable energy projects to benefit Hopi

and Navajo people. Cheap electricity from Mohave has fueled decades of economic growth and prosperity for Southern California Edison's rate payers. "That is why today we are filing a motion to request that the CPUC set aside Edison's windfall profits from the sale of pollution credits and to consider proposals to reinvest those funds in clean energy options with native people whose land and water have been used to profit others," she said.

Fees paid to both tribes for coal and water totaled a modest \$20 million per year. More than twice that amount each year will be paid to Mohave's owners, of which Edison is the majority shareholder, for deciding to shut the plant and sell their pollution credits. For the final year of Mohave's operation, Edison posted a net income of \$1.1 billion, up 24% from 2004's net income. It also paid chief executive John Bryson a \$1.16 million salary and \$9.8 million in stock and other benefits in 2005.

Mohave closed at the end of last year because negotiators did not reach an agreement on coal and water supplies needed to keep the power plant running. A groundswell of local opposition to the industrial use of scarce drinking water to move coal has been building for years. All of the domestic water used annually by Hopi people amounts to less than one percent of what Peabody uses to export coal.

Anna Frazier, another Navajo mother-activist, said that she joined a recent protest against secret negotiations to allow Mohave to keep operating because "Navajos pay the price with their health and lives so corporations can reap the benefits by producing electricity for non-Navajos in the Southwest. We have to pay for gasoline and wear and tear on our vehicles to haul water. What does that tell us? We live in the United States of America, a country that is supposed to be the richest nation in the world; but here we are indigenous peoples with natural resources making other people rich and providing electricity in other states, but we are the poorest nation. That is wrong."

The Just Transition Coalition's motion is gaining momentum. It was initiated last year by the Grand Canyon Trust, a principal signatory of the 1999 consent decree that enforced Mohave's closure. The California Public Utilities Commission ruled unanimously in May

on our motion to intervene in Edison's rate case and ordered it to sequester Mohave's pollution credits until the future of the plant is determined.

In this unprecedented decision, the CPUC set a January 1, 2007 deadline for Edison to present its plan for investing Mohave's sulfur credits. On June 19 Edison announced that it had "reluctantly decided" not to continue its efforts to reopen the plant due to a "number of significant challenges that, when taken together, became insurmountable." The utility opted not to gamble more than a billion dollars to rebuild a leaky, water wasting slurry line and to install pollution controls.

We live in the United States of America, a country that is supposed to be the richest nation in the world; but here we are indigenous peoples with natural resources making other people rich and providing electricity in other states, but we are the poorest nation. That is wrong.

The Trust is collaborating with diverse interests to identify more cost-effective investments that don't require native people to subsidize a dirty, old coal-fired power plant that wastes their drinking water, exploits their land, and threatens the planet with greenhouse gasses. Several viable projects to generate electricity from wind are under development. Revenues from pollution credits are only one potential source for jump-starting a just transition toward more equitable alternatives.

The bright lights of Las Vegas didn't dim when 1580 megawatts of electricity dropped off line in December. Jackpot bells didn't miss a ding in Laughlin's refrigerated gambling halls. Edison's shareholders didn't suffer bankruptcy.

But impoverished Navajo and Hopi people did take a huge economic hit when Mohave closed. That's why we're working to improve their odds on developing sustainable, profitable, and cleaner energy futures. 🌱

PROVIDING WATER IN THE GREATER GRAND CANYON REGION

—by Nikolai Ramsey

Grand Canyon Seeps and Springs

The fragility of Grand Canyon seeps and springs epitomizes the water issues sprinkling the arid landscape of the Greater Grand Canyon region. What will become of the vulnerable springs, the ecological crown jewels, of Grand Canyon?

While covering only a tenth of one percent of the canyon's land area, riparian zones fed by the springs are crucial to the survival of diverse plant and animal life. Regional scientists confirm that these habitats hold the highest density of biological diversity anywhere in the canyon. Unfortunately, numerous wells south of Grand Canyon pump water from the aquifer that feeds these seeps and springs. The blue-green jewels of Grand Canyon must be protected through the development of alternative water supplies that replace the harmful groundwater pumping.

The Grand Canyon's south rim springs are fed largely by the Redwall-Muav aquifer, a sea of ancient water over 2,000 feet below the surface. Small springs, especially, are extremely sensitive to changes in aquifer equilibrium. Unfortunately, water levels in the aquifer are projected to decline due to deep-well groundwater pumping fueled by regional growth and park gateway development. Presently, seven wells south of Grand Canyon pump water from the aquifer at a collective rate totaling approximately 800 acre-feet per year. A recent paper by hydrologists Errol L. Montgomery & Associates, Inc., concluded that "groundwater pumping from the R-aquifer [the Redwall-Muav] . . . will eventually result in less discharge at the principal springs. . . along the South Rim of Grand Canyon."

Grand Canyon and Tusayan officials are now working together to develop water supply alternatives that will eliminate some of the groundwater pumping closest to the south rim. One of the alternatives being considered is pumping water from an infiltration mechanism below the surface of the confluence

Christa Saetler



Elves Chasm at GCNP.

between Bright Angel Creek and the Colorado River. This water would be moved through a buried pipeline to the south rim and then to Tusayan.

Water Supply Challenges

For centuries, Native American societies in the arid Southwest have cherished water as the sacred lifeblood of Mother Earth, a reverence that is also a straightforward acknowledgement of fact in the desert. Today, explosive growth is putting tremendous pressure on the region's water systems, challenging the historic conservation ethic and the age-old wisdom it embodies.

How will that demand be met? Some have suggested a Colorado River pipeline. This raises three problems: (1) diverting yet more water from a river system already overburdened by demands from seven states and Mexico for municipal, industrial, agricultural, recreational, and environmental needs; (2) the potential for encouraging even more growth in the region; and (3) the environmental consequences attending a huge regional water pipeline.

What is the answer? No silver bullet solution appears to exist. Future water supply alternatives may well need to include a Colorado River pipeline, at

least to Native American lands. But a judicious use of regional aquifers and water conservation technologies will also be necessary to address burgeoning water demand needs.

Effective water conservation programs across the country have shown that water efficiency and conservation should be considered a “supply” of water—an already developed resource that when tapped can help defer, downsize, or avoid altogether costly new water supply infrastructure. Aggressive implementation of water conservation technologies such as efficient faucets and toilets, water reclamation, recycling, gray water reuse, and rainwater harvesting have been shown to reduce water demand as much as 30 to 50 percent.

Water delivery schemes should also be fair as well as sustainable. Addressing Native American water requirements must be prominent in any equitable regional water solution. Navajo and Hopi tribes have severe water delivery problems with per-capita use in many areas on the reservation at just 40 gallons per day (Flagstaff’s per-capita use is 130 gallons per day). Tribal water development is a compelling environmental and social justice issue.

Population and Water Demand Projections

The Coconino Plateau Water Advisory Council, a regional water study and policy group, has overseen the development of several recent studies, including those of population and water demand needs in the future. By 2050, Flagstaff is expected to grow from its current population of 63,000 to between 114,000 and 125,000. Coconino County is expected to nearly double to 236,000 during the same time period.

Consistent with population increases, water demand in the region is expected to roughly double by 2050. The Bureau of Reclamation estimates that 2050 water demand for the region will be 40,000 acre-feet per year.

Water Conservation

As the drought continues, communities across the plateau have been implementing ever-stingier water conservation measures. The city of Flagstaff has set up the following:

- an inverted block rate structure where the price goes up as you use more water,

- mandatory water-use restrictions (based on the level of water supplies) which restricts outdoor water use,
- rebate programs for low-water toilets, low-flow shower heads, efficient washers, hot water re-circulators, turf removal, and rain barrels,
- xeriscape demonstration garden,
- waterless urinal retrofit project covering every school in the city (estimated to save over 5 million gallons per year),
- various water conservation education programs,
- reclaimed water projects, including a 141-million-gallons-per-year system at NAU.

Tusayan has also implemented aggressive water conservation measures. The community uses the runoff from the airport to supply six percent of their total water usage. All new development now requires double plumbing (gray water reuse). Reclaimed water constitutes between 40 and 50 percent of Tusayan’s total water usage.

The Search for Solutions

The Coconino Plateau Water Advisory Council is considering several possible alternatives for supplying water to this rapidly growing region. One of the most comprehensive alternatives developed so far has the following components:

- Lake Powell water to the Navajo and Hopi.
- Coconino (C) aquifer water from ranchlands near Winslow to the city of Flagstaff.
- Redwall-Muav (R) aquifer water to Williams.
- Bright Angel Creek water to Grand Canyon National Park and the community of Tusayan.

This alternative is expected to cost well over \$500,000,000, perhaps as much as a billion dollars.

Growth in the region appears to be ceaseless. Accordingly, care must be taken of the water already developed and new supplies of water, judiciously created. To do this without harming environmental resources, like riparian habitats along spring drainages, will require good science and thoughtful decision making. This intimidating challenge floats dauntingly upon the aridity of the Coconino Plateau. 🌀

PRESERVING ARCHEOLOGICAL HERITAGE ON THE RANCHES

—by Rick Moore

In 1915, a young archaeologist named Neil Judd visited Kane Ranch and noted that “Several ruins lie within a quarter-mile of Cane Spring (now spelled Kane), all but their larger stones have gone into the construction of the ranch buildings and corrals.” Judd—who became one of the most well-known archaeologists in the Southwest—returned in 1918 and explored the Kaibab Plateau, House Rock Valley, and the Paria Plateau, the same lands that comprise the grazing allotments held by the Kane and Two Mile ranches.

While the stones mentioned by Judd can still be seen by visitors to Kane headquarters, they are far from being the only evidence left by the people who lived in the area during the past 10,000 years. Some spots, particularly those with a fine view or a bit of shade, may be littered with rock chips left from making spear points and arrowheads. Fallen stone walls and potsherds mark sites where families lived long ago. Pictographs, sometimes haunting and sometimes fanciful, are painted on canyon walls in rich, earthtone colors. Petroglyphs of stylized animals, people wearing headdresses and necklaces, and abstract designs are pecked into sandstone cliffs burnished with desert varnish.

While evidence suggests that the area was sparsely populated prior to AD 1,000, there was a major and unprecedented expansion into the area by Ancient Puebloans that occurred from about AD 1050 to 1150. Hundreds of small and medium-sized pueblos were constructed during this time. The scattered remains of these structures and their inhabitants piqued the interest of many early explorers including John Wesley Powell, who wrote: “Only the foundations were left, but irregular blocks, of which the houses were constructed, were scattered about. In

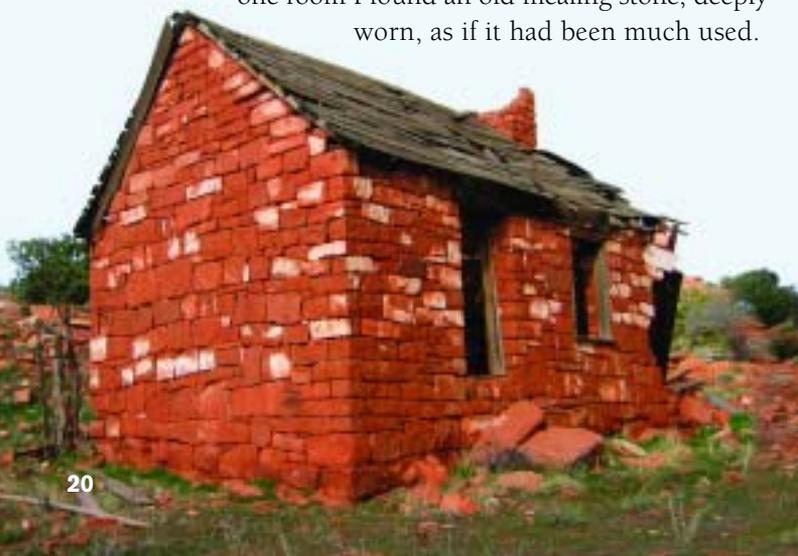
one room I found an old mealing stone, deeply worn, as if it had been much used.

A great deal of pottery was strewn about, and old trails were seen, which in some places, were deeply worn into the rock.”

The puebloans left the area in the 1200s and a new group—the Paiutes—moved in. When the Dominguez-Escalante expedition came through in 1776, a small group of Southern Paiutes called Pagampachi provided the starving explorers with rabbit and piñon nuts. Based on interviews with Southern Paiutes, ethnographer Isabelle Kelly wrote in 1932 that: “Fall was a time of plenty; then most households made trips to the plateaus to collect yucca fruit, harvest pine nuts, and hunt deer. Late winter and especially spring were times of near famine. With the approach of summer, the people returned to what they considered home base, at the foot of the plateaus to resume residence at their privately owned springs.”

In the mid-1800s, Mormon pioneers arrived to find the lands occupied by the Paiutes, but within a few years the new arrivals transformed the area by building small towns, constructing roads, and establishing farms and ranches. Lee’s Ferry, at the mouth of the Paria River, established a firm link to northern Arizona and significantly increased trade and travel. Hundreds of recently married Mormon couples living in Arizona made the arduous trek on the Honeymoon Trail along the base of the Vermilion Cliffs to have their marriage sealed in the temple in St. George.

Paleo-Indian hunters, archaic hunters and gatherers, ancient puebloans, nomadic Paiutes, and Mormon pioneers all left traces of the past scattered across the landscape. These fragile and irreplaceable reminders of earlier inhabitants need to be better understood, managed, and protected. To that end, Grand Canyon Trust, the Bureau of Land Management, the Forest Service, the Museum of Northern Arizona, the Park Service, Northern Arizona University and others are forming the Kaibab-Vermilion Cliffs Heritage Alliance. The Alliance will promote surveying, recording, documenting, researching, interpreting, and protecting cultural resources in the best way possible. Hopefully, through this effort, we can better understand how people used to live on these extraordinary lands and help ensure that this irreplaceable heritage remains in place for future generations. 🌀



Early Mormon pioneer dwelling near Two Mile Spring.

—by John Heyneman

The Grand Canyon Trust and The Conservation Fund jointly own North Rim Ranch LLC, which in turn, owns the Kane and Two Mile Ranches. The purchase of the “base property” (deeded land and water rights) for the Kane and Two Mile Ranches was completed in September 2005. That purchase allows North Rim Ranch to hold grazing permits for 320,000 acres of BLM land, 17,500 acres of Arizona State Land Department land, and just over 500,000 acres of Forest Service land.

Kane Ranch

One of our first challenges came in December when the Forest Service required us to remove 30-some maverick cattle that had been running loose on the Kaibab Plateau for the past several years before they would allow the grazing permit to be transferred to us. The cattle were left over from the previous owner and though we had not planned on being in the business of catching wild cattle, it provided an opportunity to learn our way around the plateau. On horseback. At high speeds. The Forest Service was pleased with our efforts and the permit has been transferred to North Rim Ranch.

In April Justun Jones was hired as foreman of the Kane Ranch. For the past few months he has been repairing the many miles of fences that divide the Kaibab Plateau summer pastures. Later this spring he will begin repairing the miles of water lines that provide stock water for the winter pastures on the west side of the Kaibab and in House Rock Valley.

Because of the stock water system’s condition, we did not use the spring pastures and plan to ship livestock directly to the Kaibab Plateau summer pasture. We initially planned to purchase yearling cattle, but adult cow availability is greater than we expected, so we’ll likely purchase some adults to try to calm the rambunctious yearlings.

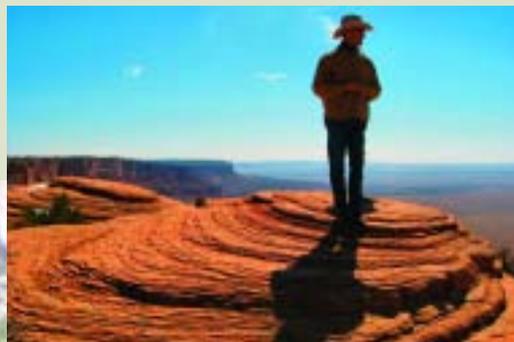
We hope to hire several more cowboys to herd cattle this summer. Keeping an eye on cattle in a 129,000 acre pasture will be a big challenge, but we plan to work hard to control cattle movement and distribution this summer to minimize ecological impacts, particularly on the meadows and near water sources. It also should make for an easier roundup this fall.

As a new Forest Service permittee, we are required to validate our permit this year by running 90 percent of the number of livestock authorized by the permit, which means we’ll be grazing about 720 head. In March the Forest Service alerted permit holders that it was contemplating a stocking level reduction unless the forest received significant precipitation. Shortly thereafter, the Kaibab Plateau received heavy snow and given that an ample supply of standing forage exists from several years of no grazing, the Forest Service is requesting permit validation this year. We will be assessing the water situation as we move forward with grazing plans.

Two Mile Ranch

We are now negotiating an agreement with a local rancher to graze cattle on the Two Mile Ranch, which is located on the Paria Plateau. We have a very good relationship with him on another grazing permit and are pleased with the results of his grazing regime. Any agreement for grazing on the Two Mile Ranch will include conditions to ensure we are meeting our conservation goals based on our ecological assessment and monitoring program results. The agreement will require the rancher to work with us to create a plan not only for grazing, but also to protect the Paria Plateau’s cultural resources. We hope to finalize an agreement soon.

The breadth of this project continues to inspire us and we look forward to facing the many challenges ahead. It has been an exciting winter and spring and we look forward to an even more interesting summer and fall. 🌍



VOLUNTEER PROGRAM RISES TO NEW HEIGHTS

—by Kari Malen and Maria Clementi

The Trust's Volunteer Program is spreading its wings. Program expansion combined with enthusiastic land managers, site leaders and volunteers is lifting the effort to new heights. While this year's primary focus is on the Kane and Two Mile ranches, we also continue to provide day-long community enhancement projects in the greater Flagstaff area.

This season our volunteers are tasked with a soil assessment project, preparing the soil samples collected in a baseline assessment of the ranches conducted last year. We established a soil lab in the office, allowing volunteers to participate in group or individually

scheduled projects. Our on-the-ground ranch work is now keying on mapping invasive woody plants like tamarisk and Russian olive, reconstruction of cattle fences to assist pronghorn migration, fencing of natural water sources to prevent trampling by cattle, and the construction and installation of bat and bird escape ramps in cattle troughs.

Last year we began asking volunteers to offer their constructive criticism or praise through an evaluation form, which is then incorporated into future project planning. The best assessment of the program comes from volunteer testimonials such as these excerpts:

"Having the chance to work alongside people that care as much about the environment as I do on a project with tangible results was much more rewarding than I ever expected it to be. On this project I had the pleasure of working with two very knowledgeable young ladies...I trust that you realize their value to the organization and hope to see both of them leading future trips. Your volunteer program is a great resource for both the Trust and the public; I hope to see it grow even more in the coming years." —Will Jordan

"I had no idea we would accomplish so much in 1 1/2 days!"
—Joe Watkins, Kane Ranch Cleanup

"I really admire the way you both were devoted to the environmental missions that we had, which you always expressed to us... I've always been passively compassionate about the environment, but my trip with you helped me understand the importance of actively promoting change.

I truly feel like this trip has changed me in some profound way that I am only in the beginning of understanding. So thank you so much for everything, I will never forget how wonderful last week was. —Brenna, University of Virginia

"It was especially rewarding to be part of a real scientific data collection project, not just a pair of hands doing 'keep the volunteers busy'." —Paul Tombouljian

"I just wanted to reiterate how great the site leaders were. I feel we could have been stuck on the moon and still had an amazing time. Overall, the program gave me a view of an area and a cause I previously had known nothing about, all the while having a great time with really dynamic people. Thank you so much." —Tom Albert, University of Virginia

When a frequent Trust volunteer was asked why he works with us so much, his response was simple:

"Honestly? The food! Actually, I love the hiking, getting out and doing something useful that helps the environment. It's a good time, with great people." —Val Malutin

We continue to reach new heights on every trip, displaying our concern for the environment and informing people about how the decisions we make and actions we take make a difference. If you are interested in learning more about the program or to sign up for a trip, visit our website at www.gcvolunteers.org

SEARCHING FOR SAGE GROUSE

—by Mary O'Brien

You might think searching for sage grouse droppings wouldn't be a great vacation, but then again...

Last summer, three curious souls spent five days poking around southern Utah with a biologist who has spent years walking sagebrush country throughout the West. For 30,000 years, sagebrush dominated vast areas of the West, and sage grouse, sage thrashers, sage sparrows, Brewer's sparrows, and pygmy rabbits have come to wholly depend on it. For the last 150 years, however, we Westerners have been industriously plowing, chaining, spraying, burning, and grinding it up.

As a result, once vast sagebrush communities have been reduced by 50% to 90%, and the big sagebrush communities that remain aren't safe. One of the biggest problems is the loss of understory native plants from livestock overgrazing, followed by invasion of cheatgrass, an exotic annual. Cheatgrass burns as often as every 2–3 years instead of the 50–100 year fire intervals to which big sagebrush is adapted. Also, from the early 1950s to the 1990s federal land managers purposely replaced sagebrush with forage grasses like crested and intermediate wheatgrass. Not surprisingly, approximately 90% of the West's sage grouse have disappeared.

Thus we found ourselves last summer standing in the midst of a seemingly vast, hot sagebrush sea with no sage grouse in sight. Ah, but then our biologist finds one grey and black miniature “Cheeto” on the ground. We break it open to see pale green, chewed-up sagebrush leaves inside. It is a sage grouse dropping, typically found amid rocks, shrubs, grasses, and forbs.

Partway up a sagebrush ridge, we find more droppings indicating that a sage grouse has roosted here for the night. We find a caecal dropping, which comes from a sage grouse's second intestine-like organ and looks like an inch of shiny black tar, rounded at one end and pointed at the other. Further up the ridge we find a “clocker,” seemingly about six little “Cheetos” in one, which a sage hen unloads after a lengthy nest-sit.

We see a few droppings by an open ditch on ranch land. The ditch has less shrub cover than sage grouse prefer, but has the green forbs and insects young chicks need. Further along the ditch, our concern over shrub cover is confirmed: a pile of sage grouse feathers. A few yards beyond that, the almost-smoking gun: a golden eagle feather. Grouse must use irrigated

Wendy Shattil/Bob Rozinski



meadows like this because many springs have been fenced for cows or piped for humans. (Grouse can't take flight vertically, often crashing into fences). Two sage grouse flush from nearby juniper trees and sagebrush.

In a dried stream bed we find tiny sage grouse droppings with ant parts inside: Chicks were here. There's a dropping with one yellow petal, as well as sagebrush leaves inside—a reminder that, while never forsaking sagebrush, adult sage grouse expand their plant diet during summer. Higher up we find a Forest Service sagebrush-bordered meadow of the type late-summer grouse must find when forbs, with their insects, have dried up below. We find lots of droppings there, where we're startled by the sudden explosion of sage grouse taking flight from near our feet, lifting their pointed tail feathers over our heads.

The lesson: Provide good habitat, and they will come. 🐦

A Sage Grouse Assessment is one of several Trust and Three Forests Coalition projects documenting conditions on Utah's Dixie, Fishlake, and Manti-La Sal National Forests.

With the Coalition's Strategic Watching and Tallying (SWAT) Teams program, volunteers can help gather evidence for Coalition recommendations. Click on the “Join a SWAT Team” link at www.threeforests.org for more information.

The Trust is developing a Reference Areas project to encourage forest planners to use least-impacted, most-healthy “reference areas” when assessing impacts from mining, off-road vehicles, grazing, and other activities. For more information, contact Mary O'Brien at: mob@uoregon.edu.

2005 GRAND CANYON TRUST CONTRIBUTORS

John Wesley Powell

\$1,000 and up

Judith and Alan Appelbaum
John H. Austin
James and Helene Babbitt
Carter F. Bales
Brian and Kathleen Bean
Peter and Nancy Benedict
Bruce Berger
Anne Bingaman
David Bonderman
Bill Budinger
Lou and Ellen Callister
David and Katherin Chase
Ty Cobb
Bert Cohn
Michael and Rosey Collier
Laura Cotts
J. Taylor Crandall
Bill and Dale Crisp
Jean M. Cuce
Kelvin L. Davis
Lyle and Vera Dethlefsen
John Durham and Lisa Jobin
Elizabeth and Harry Easton
Rob Elliott
Henry and Kate Faulkner
Nathan Faulkner
Bert Fingerhut
Bill and Carolyn Franke
Jim and B.J. Freeman
David Getches
Eugene Grant
William and Jean Graustein
John and Chara C. Haas
Glen and Pam Hait
Mary O. Harper
John and Rebecca Hildebrand
Thomas and Caroline Hoyt
Dale and Frandee Johnson
John Leshy
Therett Lewis
Vincent Mai
John and Laurie McBride
Meridee Moore and
Kevin King
Frank and Susan Morgart
Lucia Smith Nash
Paul and Antje Newhagen
Edward H. Norton
Owen and Janyce Olpin
Roy and Tonya Olpin
Bruce and Cody Oreck

Dhanajay Pai
Jonathan and Biba Parker
Duncan and Eva Patten
William Peabody
Thomas and Jamel Perkins
George Perkins, Jr.
William S. Price
John and Lisa Pritzker
Patricia Rouse
John Sall
Tom Schrickel
David Schwarz
Janice Shaffer
Sallie Shatz
Philip Smith
Garry and Sharon Snook
Jennifer Speers
Jenepher Stowell
Caryn Straus
Peggy Taylor
Michael Trauscht
Jim Trees
Stephen White
Edward Witten
Jeffrey Wright
Reed Zars



Patrons

\$500 - \$999

Cynda Arsenault
David Black
Eugene L. Bliss
Guy M. Blynn
Richard and Damaris Booth
Barbara L. Brown
Richard and Margaret J.
Cronin
Elizabeth and Joseph K.
Davidson
Stasia Davison
Barbara DeMuth
Marilyn and Paul Duncan
Adam Frampton
Dale and Jane Genung
Richard A. Goldman
L. Dale Griffith
Ginger Harmon

Susie Harrington
Bill Hedden and
Eleanor Bliss
Willard and Betty Hedden
Denise Hudson and
Chuck McDougal
Al Kisner
James and Renee A. Knight
Joseph Kotzin
Michael S. Kurtz
Kenneth and Dorothy Lamm
Richard Lane
Max Licher
Janis Lyon
John Molenaar
William Mooz
Richard and Cynthia Nigro
Richard Ordway
Brooks and June Pace
Margaret Paul
Norm and Melinda Payson
Margaret Piety
Michael Quinn
Kim Reichert
Peter Sartin
Jacob Sigg
Jerry and Elizabeth Starkey
Norman Tanner
Jim Lindheim and
Jim Tharp
Lynde B. Uihlein
Robert A. Whitehorne, Jr.
Dock Williams
Thomas Wootten
Tod Young
James R. Yurchenco and
Amy Lauterbach



Guardians

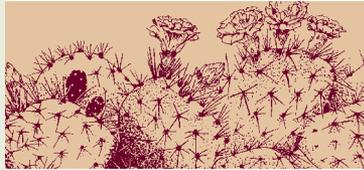
\$250 - \$499

Susan Ahearn
Philip and Barbara Albright
Valerie Amerkhail
Homer and Catherine
Anderson
Grace Denison Arter
Steven V. Asadorian

Tom Atwood
Carol and Jon Avent
Peter Belmont
William and Cheryl Bennett
David and Sarah Bodney
Lyman Brainerd, Jr.
William Butler, Jr.
Jim and Ginny Carlson
Marcia Carlucci
John and Theresa Cederholm
Ann and Doug Christensen
Wes and Julie Clelland
Mark and Linda Colville
Steve and Karen Conway
Andrew and Wendy Cookler
Jean Cooper-Joyce
Warren and Patricia Corning
Donna Cosulich
William and Virginia Cowles
Mr. and Mrs. Richard Davis
Robert Dawson
Ann and Robert Dunlap
Florence Eckstein
Frank Ellis
Charles Erhart
Thomas Feldenheimer
Bob and Jane Gallagher
Henry and Sandra Gentry
Nicholas and Patricia
Giordano
Aline K. Goodman
Mary Goodman
Carol and Kurt Grow
Gary and Connie Grube
Edwin P. Guinn
Jana Gunnell
Martha Hahn
Arthur Hilt
Arthur and Katharine Hirsch
Kara Horner
Carol Taylor and
Ben Hufford
Pam Hyde-Nakai
Gloria and William Jackson
G. Arthur Janssen
Robert Jonas
Dennis G. Keith
Fred Kolar
Robert Koppe
Paul and Carol H. Lamberger
Linda Leckman
Daniel Lentz
David Livermore

Lyman and Dorothy Manser
 Lois Mansfield
 Michael Marks
 Ed McGehee
 Warren McNaughton
 James and Kathy Merrill
 Carol Mimless
 Maria Molnar
 Ellen Morton
 Allen Nafziger
 James Nelson
 Madeline Nelson
 Richard Neubauer
 Harry and Darlene Newman
 Bruce and Joan Nordstrom
 Dan Norton
 Clayton and Annabelle Parr
 Sue and Bill Porter
 Thomas Prose
 Richard H. Reventlow
 Douglas Rhodes
 Chris Richter
 John R. Rockwell
 Alice Roe
 Mary Rosenfeld
 William A. Roskin
 Eve Ross and
 Michael Marsteller
 Joan Healey Ross
 Richard Ruh and
 Wendy Palmer
 Allen and Mary Anne
 Sanborn
 Bob and Margaret Sanderson
 Bill and Valeria Schiemann
 Lee Schmidt
 Paul Shaphren
 Gordon Shaw
 Ted Shen
 Richard Shepherd
 Linda Sheppard
 Katherine D. Skinner
 Susan Small
 Anne & Bruno Sommariva
 Amy and Alan Stephenson
 Carol Swarts-Milburn
 Richard and Patton Tabors
 Eileen Tsai
 Amy and Steve Unfried
 Richard and Laura
 Van House
 Stephen Verkamp
 James and Judith Walsh

F. Helmut and Caroline
 Weymar
 Dolores and John Whiteman
 Charles Wilkinson and
 Ann Amundson
 Alan and Dayna Williams
 Anne Wilson
 John D. Wright
 Elisabeth Zall



Foundations

Alfred T. Stanley Foundation
 American Express
 Foundation
 Arizona Community
 Foundation
 Bank of America Foundation
 Beagle Foundation
 BF Foundation
 Blum Feinstein Family
 Foundation
 Compton Foundation
 The Energy Foundation
 Frieda and George Zinberg
 Foundation
 Fogelman Charitable Trust
 GAG Charitable Trust
 General Mills Foundation
 George S. and Delores Doré
 Eccles Foundation
 Grand Canyon Conservation
 Fund
 The HSUS Wildlife Land
 Trust
 IBM International
 Foundation
 J.W. Kieckhefer Foundation
 Liz Claiborne and
 Art Ortenberg Foundation
 Margaret T. Morris
 Foundation
 New-Land Foundation
 Nina Mason Pulliam
 Charitable Trust
 Ordway 1991 Charitable
 Lead Trust
 The Rodel Foundations

Ruth Brown Foundation
 SB Foundation
 Shifrin Family Foundation,
 Inc.
 Susan and Ford Schumann
 Foundation
 Sperling Foundation
 Thaw Charitable Trust
 Vanguard Charitable
 Endowment
 Wallis Foundation
 Warren and Katharine
 Schlinger Foundation
 Weeden Foundation
 Wiancko Charitable
 Foundation
 Wilburforce Foundation
 William and Flora Hewlett
 Foundation
 The Wyss Foundation



Corporations

APS
 Arch Chemicals, Inc.
 AzRA
 Bank of America
 Boeing Company
 CNA Insurance Companies
 EBSCO Industries, Inc.
 Environmental Fund for
 Arizona
 Grand Canyon Exchange Ltd.
 Partnership
 Honeywell Hometown
 Solutions
 I.N.C.A.
 Maricopa County
 MBA Non-profit Connection
 National Parks and
 Conservation Association
 New York Times
 Orange Tree Productions
 Tramontane Inc.
 Verizon
 Verkamps
 Zinpro



In-Kind Services

All GCT Volunteers!
 America West
 Ed and Thelma Andrewjeski
 James and Helene Babbitt
 Jayne Belnap
 Susan Bischoff
 Barbara Brunner
 Business Consultants
 Associates
 Joan Carstensen Design
 Glenn Clark
 James Corning
 Bobby Craven
 Earthjustice
 Fabian and Clendenin
 (Cullen Battle)
 James Garrett
 Jean Hockman
 Hogan and Hartson
 Lynn Kasai
 Rob Klinger
 Matthew Loeser
 Marian Lopez
 Mark Miller
 Ron Pulliam
 Tom Sisk
 Tom Stohlgren
 Tom Till
 Western Resource Advocates
 Tom Whitham



Memorials

Dr. John Andrewjeski
 Martin Fink
 Lois Hamer
 George Linn
 Roger Olpin
 Paula Schiewe
 Brent Wallis

STATEMENTS OF FINANCIAL POSITION
for the twelve months ended December 31, 2005

| ASSETS | 2005 |
|--|------------------|
| Current Assets: | |
| Cash | 1,154,580 |
| Contributions receivable | 102,577 |
| Prepaid expenses | 8,083 |
| Deposits | <u>1,469</u> |
| Total current assets | <u>1,266,709</u> |
| Property and Equipment: | |
| Land - Office | 119,500 |
| Land - Program | 770,580 |
| Land improvements | 75,433 |
| Building | 701,189 |
| Office equipment | 136,347 |
| Vehicle | <u>49,775</u> |
| | <u>1,852,824</u> |
| Less accumulated depreciation | <u>-313,687</u> |
| Net property and equipment | <u>1,539,137</u> |
| Investment - PNC Bank | |
| Permanent Sustainable Fund | 1,353,368 |
| Alice Wyss Fund | 500,000 |
| North Rim Ranch, LLC | <u>965,312</u> |
| Total investment | <u>2,818,680</u> |
| Other Assets | |
| Beneficial interest in remainder trust | 58,853 |
| Conservation easement | <u>1,295,000</u> |
| Total other assets | <u>1,353,853</u> |
| | <u>6,978,379</u> |

LIABILITIES AND NET ASSETS

| | |
|----------------------------------|------------------|
| Current Liabilities: | |
| Account payable | 64,767 |
| Accrued expenses | <u>39,600</u> |
| Total current liabilities | 104,367 |
| Net Assets: | |
| Unrestricted | 4,527,065 |
| Temporarily restricted | 551,947 |
| Permanently restricted | <u>1,795,000</u> |
| Total net assets | <u>6,874,012</u> |
| Total liabilities and net assets | <u>6,978,379</u> |

STATEMENTS OF ACTIVITY
for the twelve months ended December 31, 2005

| CHANGES IN UNRESTRICTED NET ASSETS | 2005 |
|---|------------------|
| Revenues: | |
| Grants | 428,965 |
| Contributions | 962,710 |
| Membership income | 356,332 |
| Donated materials and services | 132,376 |
| Investment income | 143,183 |
| Change in value of beneficial interest in remainder trust | -2,241 |
| Equity share of net income/(loss) of investee | -101,928 |
| Other income | 74,468 |
| Net assets released from restrictions | <u>1,978,061</u> |
| Total unrestricted revenues | <u>3,971,926</u> |
| Expenses: | |
| Program services | 2,067,704 |
| Education | 134,676 |
| Development and membership | 270,014 |
| General and administrative | <u>337,079</u> |
| Total expenses | <u>2,809,473</u> |
| Net increase in unrestricted net assets | <u>1,162,453</u> |

CHANGES IN TEMPORARILY RESTRICTED NET ASSETS

| | |
|--|-------------------|
| Grants and contributions | 933,654 |
| Net assets released from restrictions | <u>-1,978,061</u> |
| Net (decrease) increase in temporarily restricted net assets | <u>-1,044,407</u> |

CHANGES IN PERMANENTLY RESTRICTED NET ASSETS

| | |
|---|------------------|
| Gain on investments | <u>7,792</u> |
| Increase in permanently restricted net assets | <u>7,792</u> |
| Increase in net assets | 125,838 |
| Net assets at beginning of year | <u>6,748,174</u> |
| Net assets at end of year | <u>6,874,012</u> |

STAFF NOTES

Lisa Force

Lisa Force, long-time environmental activist and Program Manager for water and state land issues for the Trust departed in February. Lisa joined us in 2003 after highly successful tenures at the Center for Biological Diversity and Living Rivers.

Lisa is well known in conservation circles for her successful campaign to decommission two hydroelectric dams in central Arizona and for her success in building the international Delta Restoration Coalition to protect the Colorado River delta in Mexico. While at the Trust she produced a significant report titled *The Colorado: A River at Risk*, which outlined the potential impacts of drought for those relying on the Colorado River for water.

Lisa moved to Las Vegas where she is working on a gubernatorial campaign and continues to promote conservation issues as a Board Director for the national Sierra Club.



Greg Ireland

This June, the Trust said farewell to Greg Ireland, our colorful Grants and Membership Manager. Greg joined the team in 2000 and during his tenure he managed many of the Trust's major fundraising efforts, including the coordination of foundation proposals and the execution of our spring and year-end membership appeal campaigns. Greg was also instrumental in establishing a volunteer distribution system across the Colorado Plateau for this magazine.

Greg has moved on to the greener pastures of Vermont to begin an exciting new chapter in his life. Later this fall, he plans to use his skills to help animal non-profits and shelters. Greg's high-energy and wonderful sense of humor will be missed at the office.

Staff Members

Board of Trustees

Headquarters Office

Bill Hedden
Executive Director

Darcy Allen
Director of Administration

Ethan Aumack
Director of Restoration Programs

Roger Clark
Director of Air and Energy Program

Maria Clementi
Volunteer Assistant

Steve Fluck
GIS Analyst

Martha Hahn
Associate Director

John Heyneman
Manager, North Rim Ranch, LLC.

Kari Malen
Volunteer Coordinator

Richard Mayol
Director of Communications

Rick Moore
Director, Kane and Two Mile Ranches Program

Kim Phelps
Development Assistant

Nikolai Ramsey
*Senior Program Director,
Water Issues*

Evelyn Sawyers
Director of Finance

Becky Schwartz
Program Assistant

Tony Skrelunas
Director of Native America Program

Vanessa Vandever
*Native America Program
Manager*

Moab, Utah Office

Eleanor Bliss
Executive Assistant

Laura Kamala
*Program Director,
Southeast Utah*

Louis H. Callister
*Chairman,
Salt Lake City, UT*

Pam Hait
Vice-Chair, Phoenix, AZ

Ty Cobb
*Secretary-Treasurer,
Washington, DC*

James E. Babbitt
Flagstaff, AZ

Carter F. Bales
New York, NY

David Bonderman
Fort Worth, TX

Bill Budinger
Aspen, CO

Robert Elliott
Flagstaff, AZ

Jim Enoté
Zuni, NM

Bert Fingerhut
Aspen, CO

John Leshy
Washington, DC

Ivan Makil
Scottsdale, AZ

Bud Marx
Laguna Beach, CA

Owen Olpin
Teasdale, UT

Eva Patten
Bozeman, MT

Amy Redford
New York, NY

Garry Snook
Aspen, CO

Jennifer Speers
Salt Lake City, UT

Charles F. Wilkinson
Boulder, CO

Susan M. Williams
Albuquerque, NM

Hansjörg Wyss
West Chester, PA

Jim Trees
*Founder and Emeritus Chair
San Francisco, CA*

N. Scott Momaday
*Poet Laureate
Santa Fe, NM*

Stewart L. Udall
*Counselor
Jemez Springs, NM*

The Colorado Plateau Advocate

... is a publication of the Grand Canyon Trust, a non-profit organization dedicated to protecting and restoring the Colorado Plateau

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

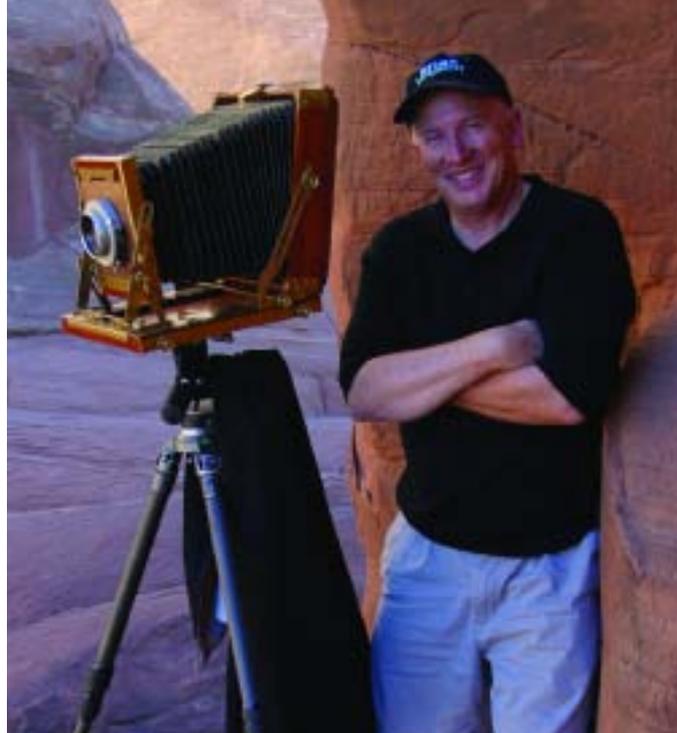
Illustrations © Zackery Zdinak
www.lifedraw.com

This publication is printed with soy based inks.



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).

The stunning cover photo depicting a flash flood waterfall in Flat Pass, Utah and the center section image (pages 14-15) of Utah's Behind the Rocks Wilderness Study Area are the work of Tom Till, one of America's most published photographers. He has been the sole photographer for over 30 books including his latest, *Plateau Province*. Till received the prestigious Fellow Award from the North American Nature Photography Association this year. He was also recently inducted into the Iowa Rock and Roll Hall of Fame. He lives near Moab, Utah with his wife Marcy and son Bryce.



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.

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

NONPROFIT
ORGANIZATION
U.S. POSTAGE
PAID
Flagstaff, AZ
Permit No. 43

Visit our website at
www.grandcanyontrust.org