“Since Powell is going to lose more and more hard-to-get water as time goes by, it will save all hands a lot of waste and pollution — and frightful ecological and economic chaos — to let the river run through Glen Canyon Dam as soon as possible... So let the river run again on its old schedule. Simply agree to measure the flow as it passes Lee’s Ferry and store it as Upper Basin water, with an invisible label on it, at Lake Mead.”

— David Brower, c. 1963

In 1922, the Colorado River Compact was signed by the seven states in the Colorado Basin and the federal government. The Compact allocated water rights between the states of the upper (New Mexico, Utah, Wyoming, and Colorado) and lower (Arizona, California, and Nevada) Colorado River Basin. This paved the way for Hoover and Glen Canyon dams, which impound Lake Mead and Lake Powell, as well as the entire Colorado River water management system.

Today, the Colorado River Basin is facing a water supply crisis. We now know that the Colorado River Compact was based on flawed projections that seriously over-estimated actual future river flow and seriously underestimated future water demand. As a result, rapidly growing water use, relentless drought, and climate change are creating a water deficit of almost 1 million acre-feet a year in the Colorado River system. Both Lake Powell and Lake Mead reservoirs are around half empty, and scientists predict that they will probably never fill again. The water supply of more than 22 million people in the three Lower Basin states is in jeopardy.

The region is also facing an environmental crisis. The ecological health of the Southwest is tied to the fate of the Colorado River. A century ago, the Colorado was one of the world’s wildest rivers. Its extraordinary variations in water flow, temperature, and sedimentation created a unique ecosystem that was once home to 16 endemic fish species — the largest percentage of any river system in North America.

The construction of more than a dozen dams during the last century has critically damaged the integrity of the Colorado River. Hundreds of miles of canyon and countless archaeological sites have been flooded, and dozens of wildlife species have been endangered. Glen Canyon Dam is one of the largest contributors to these problems, with major impacts that stretch from above Glen Canyon, through the Grand Canyon, all the way to the Colorado Delta in Mexico. In 1992, Congress passed the Grand Canyon Protection Act, which sought to modify Glen Canyon Dam operations to “protect, mitigate adverse impacts to, and improve the values for which Grand Canyon National Park and Glen Canyon National Recreation Area were established.” Unfortunately, efforts to implement the act have been only partially successful.

GCI believes the time has come to change Colorado River management to address today’s new realities. This is the goal of our Fill Lake Mead First Project. Since Glen Canyon Dam was completed in 1963, the goal of water managers has been to keep both Lake Powell and Lake Mead full. Now, with two half-empty reservoirs, this policy no longer makes sense. Through our Fill Lake Mead Project, GCI is advocating a new approach that consolidates most of the water from both reservoirs in Lake Mead, with Lake Powell used as a backup in flood years.
The Fill Lake Mead First strategy would benefit the people and ecosystems of the Colorado River Basin and beyond. This approach would help to maintain a reliable water supply for millions of people who depend on Lake Mead, in major cities such as Las Vegas, Phoenix, Los Angeles, and San Diego, as well as on farms across the region. It would also help to restore Colorado River ecosystems. Water would be permitted to flow more naturally through Glen Canyon Dam, helping to heal the damage done by the dam to the Grand Canyon. A lowered Lake Powell would expose many more portions of Glen Canyon that have been flooded under the reservoir, allowing them to recover their natural beauty and integrity. This would all be done without infringing on the water rights and needs of the Upper Basin states.

GCI has been researching, analyzing, and discussing these issues with policy makers, scientists, conservationists, and others across the Colorado Basin. We have been educating the public through our Glen Canyon Road Show, conferences, the news media, and newsletters. Our goal is to convince key decision makers to further study the Fill Lake Mead First idea and consider implementing it in the next few years.

The time for action is now, before the more serious effects of climate change appear. The steps we need to take will be difficult. However, a 2008 report by scientists at the Scripps Institution of Oceanography starkly points out that the consequences of delay would probably be much worse:

“There is danger that litigation, associated with water right claims and environmental issues, will compound and put off any rational decisions on this matter until serious damage has been done to the diverse users of the Colorado River. Much of this litigation might be avoided if time dependent water solutions are crafted to reflect today’s and tomorrow’s water realities…. The alternative to reasoned solutions to the coming water crisis is a major societal and economic disruption in the desert southwest.”

The Fill Lake Mead First Project is an expansion on an idea that has been proposed before — including by David Brower, who helped to found Glen Canyon Institute. In the past, this strategy was considered “politically unrealistic.” Now, in the face of unprecedented water supply and environmental challenges, the various people and institutions involved in Colorado River water policy are increasingly open to new ideas that they never would have considered before. GCI is optimistic that this will lead to unprecedented, positive change in the next few years, for the benefit of the people and ecosystems of the Colorado River Basin.
Glenn Canyon Institute, a part of “The Nature of Things”

Glenn Canyon Institute was recently a cosponsor of the Utah Museum of Natural History’s 2010 lecture series “The Nature of Things.” These public lectures explored the interconnected relationships between humans and nature, with a particular emphasis on environmental protection and preservation.

Speakers at this series included Gary Hirshberg, CEO of Stonyfield Farms, Brian McPherson, associate professor of engineering at the University of Utah and an expert on climate change, and environmental attorney and activist, Robert F. Kennedy, Jr., who gave the keynote lecture, “Our Environmental Destiny.”

“The Nature of Things” was concluded with a lecture by James Kay and Annette McGivney, co-authors of the 2009 book, Resurrection: Glen Canyon and a New Vision for the American West. This inspiring book — also cosponsored by Glen Canyon Institute — was the product of a five-year project that documented, through photos and writings, the natural restoration of Glen Canyon accompanying the declining Lake Powell reservoir.

Attendees at this event were privileged to listen to both authors recount their personal experience and firsthand witness of the restoring Glen. Following their lectures, Jim and Annette showed a moving documentary about the Canyon’s restoration, which was based on their book.

Having personally attended, I felt fortunate to learn about the increase in wildlife, the reducing levels of sediment, and the natural growth and restoration occurring within Glen Canyon.

Of particular interest to me was their ability to dispel concerns expressed by some in the audience about the natural restoration of Glen Canyon. For example, some people were concerned that the Glen would not be able to restore itself as Lake Powell reservoir declines. Some fear that sediment deposits in the irregular side canyons will remain, and not diminish as hoped. Others worry that invading tamarisk and other foreign plants will overrun the Canyon’s ecosystem. Still others believe that the white bathtub ring that marks the sandstone may not go away. The most common concern is that the degrading marks of Lake Powell reservoir will forever be apparent within the Glen.

Through their lectures and presentations, Annette and Jim provided the reassurance that nature can recover, despite past damage. The inside front cover of their book begins by saying, “Forcing nature to our will does not always produce the results we envisioned.” The experiences these journalists had while on their project provided strong evidence of the truth of this statement.
Annette and Jim related experiences of hiking down side canyons once drowned by flood waters, and witnessing running water, blossoming flowers and growing willows. More often than not, they found themselves being greeted by animals and energetic wildlife. They observed returning cottonwood trees and clean sandstone walls. It was as though no reservoir ever existed there.

They told of their approach to the shore of Lake Powell reservoir and the hopes they had of finding another kind of environmental beauty. What they found instead was decaying logs, litter floating upon stagnant water, and an odor in the Southern Utah air. It was as if two separate worlds resided within mere yards of each other— one plagued with the remnants of man’s attempt to control nature, and the other showing the perfect balance of nature’s design.

The event was well attended and I was grateful to see the interest and support of dozens of people. I took the opportunity to speak with many who told me of how moved they were by the imagery in the film and the information provided. I was glad that Glen Canyon Institute was able to be a part of this wonderful event.
As part of Glen Canyon Institute’s ongoing efforts to reach out to the public and raise awareness about the restoration of Glen Canyon, we have teamed up with photographer James Kay and journalist Annette McGivney to create the film, *Resurrection: Glen Canyon and a New Vision for the American West*. Based on the GCI book of the same name, the film combines historical video clips of Glen Canyon before the dam along with narrative and images from the book. It’s an inspiring documentary of the reemerging Glen Canyon and a hopeful message for the future of the Glen and the Colorado River.

GCI has already presented the film to audiences at REI in Santa Fe, New Mexico; Patagonia in Reno, Nevada; and REI in Boulder, Colorado. We are planning additional presentations for the spring and summer, including in California and Utah. For more information about upcoming Road Show events, call GCI at (801) 363-4450 or visit our website at www.glen-canyon.org.

GCI was also pleased to be able to cosponsor the 2010 season of the Utah Museum of Natural History’s lecture series, “The Nature of Things.” These public lectures explore the interconnected relationships between humans and nature. The final lecture of the series was based on the *Resurrection* film, and was presented by Jim Kay and Annette McGivney. GCI staff and volunteers participated in the event, and had the opportunity to distribute information and interact with the attendees.

These presentations have given us a great opportunity to meet our members in person, spark interest from new members, and coordinate with other organizations. We’ve been able to engage in meaningful discussions with audiences and fill people in on the facts about Glen Canyon. It’s also offered a unique chance to hear first-hand stories from audience members who experienced Glen Canyon before it was damned.

If you want us to give a presentation in your town, please let us know!
As a GCI employee, it is a rite of passage to take a trip down the Colorado River, specifically Cataract Canyon. I finally earned my stripes, completing the big and tough rapids of Cataract on August 3rd.

I have always supported GCI and its logical solution to the issue of water in the Southwest. Logically, Lake Powell reservoir makes no sense. We lose about as much water to evaporation from the shallow, warm reservoir as Los Angeles uses in that same year – water that would be more appropriately stored in a deep, cold Lake Mead reservoir.

I have also visited the monstrous Glen Canyon Dam, and boated around some of the side canyons that are uncovered during parts of the year. A bathtub ring on the rock walls above the water indicates a shrinking Lake Powell reservoir, but so much is yet to be uncovered. The level of beauty of these inundated side canyons makes one wonder what hidden splendors lie below in the drowned canyon.

That being said, nothing has made the case stronger for restoring Glen Canyon and a free-flowing Colorado River quite like rafting down Cataract Canyon. A group of 25 put in at Potash early August 1, 2009. For two days we motored down the calm river, admiring the looming red cliffs and huge boulders that are so precariously balanced far above the Colorado. We took many side hikes to visit Anasazi granaries and petroglyphs. Resident geologist, Bill, educated us on the rock formations and how they got there, asking us to search for fossils indicating what type of aquatic environment each sandstone layer was formed in. We ate, played in the river, and had many squirt gun battles.

There was a buzz in the camp on the morning of August 3rd. Today was the day that we would run the renowned rapids of Cataract Canyon. I had only heard a few things about Cataract, and the most common words used in those descriptions were: “big,” “scary,” and “challenging.” I asked the guides which of them were planning on flipping – I immediately gravitated towards Franklin, who nonchalantly promised he wouldn’t flip. I prayed that he stayed true to his word, but in Cataract Canyon, you can’t bank on anything.

The rest of the day was filled with amazing rapids and fast water. At one point, all of the kids (I am including myself in this category) had a chance to float one mellow rapid on our backs. It was like a roller coaster floating down those big, deep waves. I was mentally and physically preparing myself to get flipped into this great river – the last thing I wanted to do was panic, if I somehow found myself floating sans raft through Big Drop 3.

Despite all my preparation, I had fortuitously chosen a great guide, and our boat made it through the whole day without incident. I would like to think that it is because of all of the people on the boat, diligently digging our oars deep into the churning water when we heard
the sound of Franklin yelling “left,” “right,” “back,” or any other variation of stroke pattern we had been taught earlier in the day. Franklin did praise our success on our synchronization – I will call him on that, and raise him one great guide.

With our adrenaline buzz still at an all-trip high, we were now able to relax and float leisurely to our third night of camping on the banks of the Colorado. Until that point, the banks of the river had offered amazing visions of imposing rock formations, dense vegetation, and awesome geological features (much to Bill’s delight). Due to the all-day thrill of the rapids, I had not been paying much attention to how my surroundings were changing. The lull in activity afforded me an opportunity to again look around, expecting to see the same beauty I had witnessed for the previous three days. Much to my dismay, instead of banks of splendor, I saw a 20-foot high wall of dried dirt and clay. The beauty in the distance was still incredible, but it was marred by the leavings of a shrinking Lake Powell reservoir.

We arrived at our final camp site for the trip, a nice sandy embankment with several flat spots for tent placement. I stepped out of my raft expecting to feel the delicious cool water and sandy bottom on my feet – down I went to my knees in muddy, dark, decaying debris. Unloading the boats was a feat unto itself as we all navigated the growing craters in this sticky sludge – slurp, plop, repeat went my footsteps. Of course, the mud did have one perk. I made sure to place a heaping mound of it on my little brother’s head, only to have the favor reciprocated five minutes later.

So this was what Lake Powell reservoir had done to the Glen. Instead of gaping skyward at impossibly beautiful natural features, I had to keep my eyes down, making sure I didn’t topple into the disgusting layer of muck. Immediately across the river was a bank of abandoned sediment, void of vegetation or beauty. And below me was a formerly-free canyon, drowned beneath the waters of an antiquated ideology of infinite supply.

My last day in Cataract Canyon trip was spent motoring. We motored, and motored, and motored for eight hours on the stagnant water of the reservoir. The one side hike we were able to take into Clearwater Creek required an initial battle with thigh-deep mud. But after that little adventure, it was more motoring. Rich Ingebretsen, president of Glen Canyon Institute, informed us all that in 2005, the reservoir had been low enough that there had been an additional day of rapids, aside from just the one.

Another day that could have been spent enjoying the splendor and excitement of a free-flowing Colorado River was instead spent baking under the hot desert sun. A canyon that once boasted diverse wildlife, flora and fauna, is lost under hundreds of feet of water – water filled with sediment that will never make it down the Colorado, and which is needed to sustain the ecosystems of the Grand Canyon and the Colorado River Delta. Aside from the environmental destruction caused by Glen Canyon Dam and loss of heritage caused by the drowning of Glen Canyon, the staggering evaporative loss from Lake Powell reservoir should be argument alone to begin filling Lake Mead reservoir and allowing the recovery of the Glen.

My trip down Cataract Canyon, and seeing first-hand the destruction that lies under Lake Powell reservoir, has only enhanced my dedication to restoring this lost natural wonder. Taking this trip was one of the most memorable things I have done in the outdoor world – something that you should experience for yourself!
Images and news of the recovery of Glen Canyon featured in *Resurrection* continue to draw enthusiastic response – most recently, from the Lone Star State. In late October, I was invited to speak at the Texas Book Festival (the second largest book festival in the country) about *Resurrection* and Glen Canyon. The “Parched” water panel discussion I participated in also included Texas author David Baxter who recently wrote a book about the Rio Grande and its water issues.

The room at the Texas Capitol where the panel discussion was held had a seating capacity of approximately 150 and it was packed, with people sitting in the aisles and standing in the back. The fire marshal actually had to come in and ask some people to leave the room so that the fire code would not be violated. The crowd was overwhelmingly positive and passionate about preserving Glen Canyon. At least half those attending lingered long after the official discussion was over in order to continue talking about water issues in the West and ask questions about what it would take to permanently preserve the recovery taking place in Glen Canyon.

Even as the levels of Lake Powell fluctuate and rise and retreat this spring, undoing some of the ecological recovery since 2005, I find it heartening that the enthusiasm across the country for the resurrection of Glen Canyon can not be undone.
On Tuesday, April 20th Floyd Dominy passed away at his farm in Boyce, Virginia at 100 years plus four months. To most of the people associated with the Glen Canyon Institute, Dominy was viewed from his work as Commissioner of the Bureau of Reclamation and from the construction of Glen Canyon and the other major dams and reservoirs on the Colorado River system. He did all of that and more.

I came to know Floyd Dominy over the years. Anyone even faintly interested in water in the West knew of the Commissioner and the work that impacted those very waters of the West. I met Floyd for the first time when Marc Reisner was working on Cadillac Desert and we were doing the PBS TV special on the book. At that time I was working for Reclamation and felt that I needed to know the man that built Glen Canyon Dam. It was hard not to be impressed by his passion for the job, even 30 years after he had left Reclamation. We had a common thread that began our long-running conversation - James Watt. He figured in at the end of Floyd’s career and one of the more interesting chapters of mine.

In the mid-90s Floyd and I often found ourselves in public debates over Glen Canyon Dam. He often mentioned to me how he appreciated the Glen Canyon Institute getting him back on the water stage. Our venues shifted from environmental to engineering friendly crowds and they always ended up at the bar with a good stiff drink in front of us. After a few years of this, Floyd invited my wife and I back to his home in Virginia and we carried the conversation into his living room. Dominy’s house was like a museum of pictures and artifacts for water projects around the world. While I never agreed with him on some of his decisions, I did grow to admire how this man of the prairie developed his life around what he passionately believed in. Right or wrong, he was never indifferent about anything.

Over the last couple of years, as the challenge of making it to 100 years became his principle goal, we spent more and more of our time talking about the past and his role in developing water. Most important to me was understanding his relationship with the changing times of the 1950s and 60s as the environmental movement emerged. Having sat and listened to both David Brower and Floyd Dominy talk about their epic dialogues, I was led to believe that as much as they were different, there was also a great deal of similarity in their passion and drive.

This past December we hosted Floyd’s one-hundredth birthday party here on Capitol Hill in Washington, D.C. As the guests filed through and paid their respects to the Commissioner, it was interesting to step back and listen to Dominy regale the crowd with his stories of the past and his remarkable ability to recall speeches and people. I can only hope that if I reach 100 that I am as lucid and cogent.

Dominy and I developed a friendship based on a shared belief that the balance between development and the environment is a tenuous one. He loved the outdoors and his farm and garden. We had a ritual – every Friday I would call him and give him an update on the status of the river systems around the West. We would start in the NW and work our way around to the Plains states. While he left Reclamation, Reclamation never left him. His last words to me were Dave, keep stirring the pot. Thanks Mr. Commissioner. I will keep doing that. Adios and safe journey.
Staff Changes at GCI

Glen Canyon Institute’s administrative assistant, Paris Latham, recently left us to pursue her education at the University of Utah. She has done a superb job for the past two years and we want to thank her for the countless hours she contributed to our efforts to restore Glen Canyon. Along with her education, Paris is also preparing for a summer internship doing Geographic Information Systems (GIS) work for the Southern Utah Wilderness Alliance. Thank you Paris for all of your hard work! You will be missed.

We also welcome Tyler Coles, who is GCI’s new administrative assistant. Tyler worked for us as an intern last fall, which involved writing a grant proposal for us. Now, he is a part of our staff. We hope you have a chance to become acquainted with him, as he will be actively involved in mailings, articles, and newsletters, and coordinating office activities. Welcome Tyler!

Join GCI for a Special Showing of the film **MONUMENTAL!**

Come celebrate David Brower’s birthday with a screening of the award-winning film *MONUMENTAL: David Brower’s Fight for Wild America*. This year marks the 98th anniversary of Brower’s birth and this movie is a testament to his amazing life’s work. We hope you will join us on July 1 at the Salt Lake City Public Library for this event!

**July 1, 2010, 7 pm**
Salt Lake City Public Library
210 East 400 South • Salt Lake City UT 84111
(801) 524-8200

For more details, visit GCI’s website at [www.glencanyon.org](http://www.glencanyon.org), or call our office at (801) 363-4450.

*MONUMENTAL* is a stirring portrait of America’s greatest environmentalist. Director Kelly Duane explores the dramatic and lyrical story of Brower’s unrelenting campaigns to protect and establish some of our most treasured National Parks.

Using primarily Brower’s own footage, MONUMENTAL tells the story of this true American legend. Glen Canyon plays a prominent role in the film. Footage taken by Brower on a raft trip before the dam, reminds us of the wonders of the Glen and the tragedy of allowing this globally important landscape to be flooded. Brower considered his failure to stop the dam to be the greatest regret of his life.

Brower was the first executive director of the Sierra Club, and later founded both Friends of the Earth and Earth Island Institute. He was also one of the founding trustees of Glen Canyon Institute.

Glen Canyon Institute is now on Facebook and Twitter!

Be sure to follow GCI on Facebook and Twitter for the latest news, event and project updates, as well as special bookstore offers.

You can post pictures, share stories, and give us feedback on what we’re doing on our Facebook page. We already have more than 200 fans, and we hope you will join them!

We also hope you will follow our tweets at GlenCanyonInst. There are now more than 500 people following us for news, events, and other information. We look forward to staying connected with you!
Who hears the rippling of rivers will not utterly despair of anything.
- Henry David Thoreau