

**TESTIMONY TO THE SUBCOMMITTEE ON  
NATIONAL PARKS, FORESTS AND PUBLIC LANDS  
OF THE HOUSE NATURAL RESOURCES COMMITTEE HEARING ON  
THE GRAND CANYON WATERSHEDS PROTECTION ACT OF 2008  
H.R. 5583  
JUNE 5, 2008**

Roger Clark  
Air and Energy Program Director  
Grand Canyon Trust  
2601 N. Fort Valley Road  
Flagstaff, AZ 86001  
928-774-7488  
[rclark@grandcanyontrust.org](mailto:rclark@grandcanyontrust.org)

Good afternoon and thank you. It is an honor to testify before you Mr. Chairman and before the distinguished members of this subcommittee.

My name is Roger Clark. I am here to speak in support of The Grand Canyon Watersheds Protection Act of 2008, H.R. 5583. I am the air & energy director for the Grand Canyon Trust, a regional conservation group founded in 1985 dedicated to protecting and restoring the Colorado Plateau. Our region encompasses more than 120,000 square miles of spectacular canyon country formed by the upper Colorado River and its tributaries. It is located in northern Arizona, northwestern New Mexico, southwestern Colorado, and southeastern Utah.

The Colorado Plateau includes the largest concentration of Native American nations and national parks, monuments, and recreation areas in the United States. It is also home to some of our country's most diverse and vulnerable populations of plants and animals. Most of the Colorado River system's native fish are now either endangered or extinct due to dams, diversions, and development. The Colorado River is the primary source of water sustaining more than 25 million people now living in the Southwest.

First, thank you Chairman Grijalva for introducing this bill. Your commitment to conservation is especially heartening in light of Mo Udall's extraordinary legacy of national leadership while representing much of what is now your congressional district. Your sponsorship of H.R. 5583 follows in a great tradition, where a few elected visionaries have championed the cause of protecting Grand Canyon for future generations.

President Theodore Roosevelt inaugurated this tradition in 1908. During his first visit, he was so struck by the Grand Canyon he asked fellow citizens "to keep it for your children, for your children's children, and for all who come after you." When Congress passed the Antiquities Act, Roosevelt immediately established Grand Canyon National Monument under its authority.

This year marks the 100<sup>th</sup> anniversary of Roosevelt's proclamation. According to historian Donald Hughes, the "primary effect" of establishing the monument "... was to forbid prospecting and mining on all lands in the Grand Canyon." Regrettably, the antiquated 1872 Mining Law continues to permit unrestricted access to mineral interests requiring such targeted withdrawals to protect Grand Canyon.

The principal purpose of H.R. 5583 is to protect America's crown jewel of national parks from further contamination by uranium mining. It is needed to protect Grand Canyon's seeps, springs, streams, and river, as well as the people, plants, and wildlife that survive on these threatened waters.

H.R. 5583 would prevent new mineral entry on fewer than one million acres of federal land surrounding the Grand Canyon (please refer to appended map). The entire area to be withdrawn from mineral entry is located within Arizona and encompasses less than five percent of Arizona's Coconino and Mojave counties.

H.R. 5583 is supported by our region's residents and elected officials. Arizona Governor Napolitano wrote to the Secretary of Interior requesting that federal lands adjacent to Grand Canyon be withdrawn from mineral entry. Earlier this year, Coconino County's board of supervisors passed a unanimous resolution opposing new uranium development near Grand Canyon and asking Congress to withdraw lands immediately south of the Park from mineral entry. Arizona's Game and Fish Commission wrote to Senator McCain to express its concerns about uranium mining's effect on wildlife. To prevent uranium pollution from contaminating his city's source of drinking water, the director of the Metropolitan Water District of Los Angeles also wrote to support the bill.

H.R. 5583 would nearly complete the creation of a buffer zone for protecting the Grand Canyon's watersheds that President Roosevelt's proclamation began in 1908. This is analogous to what foresighted leaders did more than a century ago when establishing watershed preserves to prevent development from contaminating drinking water supplies for Manhattan and New England communities. The Grand Canyon Trust encourages Congress to apply similar wisdom in considering future generations by enacting The Grand Canyon Watersheds Protection Act of 2008.

### Uranium Mining Threatens Grand Canyon National Park

Concerns about water contamination in the Grand Canyon mushroomed during the past three years as the price for uranium ore shot from \$7 per pound to over \$100. In the last three years, more than 3,000 uranium claims have been filed within a few miles of Grand Canyon National Park. The Kaibab National Forest reported earlier this year that more than 2,100 claims have been filed in the Tusayan Ranger District. Hundreds more claims have been staked on Bureau of Land Management Lands north of the Grand Canyon in Kanab Creek drainage and House Rock Valley (please refer to appended map).

Uranium in the Grand Canyon region is found in sedimentary layers where the Coconino and Redwall formations serve as significant regional aquifers. Mining disturbs and mobilizes uranium and other elements that have been mineralized and encased in these rocks for millions of years. Once uranium is oxidized, it dissolves readily and becomes a persistent poison that can easily enter ground and surface water and move rapidly through faults and fractures, eventually discharging into springs within the Grand Canyon. Large aquifers such as those feeding Pipe Creek at Indian Gardens, Thunder River, and Havasu Creek then flow into the Colorado River.

Springs and seeps occur in less than 1/100<sup>th</sup> of one percent of the Grand Canyon's parched landscape. The number of plant and animal species living near springs is 500 times more abundant than those surviving in spring-less surroundings. The National Park Service notes: "Without water not much would survive the rotisserie of Grand Canyon."

How water behaves beneath the surface is fraught with uncertainty, allowing those who benefit from drilling more uranium mines within the region to claim that such activities "will do no harm." But in the final analysis there is no way to ensure that new uranium development will not contaminate aquifers discharging into Grand Canyon, a result that could be catastrophic for the Park and its resources.

We have learned enough from past experiences to proceed with caution, before allowing another bunch of uranium prospectors to plunder Grand Canyon's pristine aquifers. When asked to comment on the H.R. 5583, Grand Canyon National Park Superintendent Steve Martin said:

*There should be some places that you just do not mine. Uranium is a special concern because it is both a toxic heavy metal and a source of radiation. I worry about uranium escaping into the local water, and about its effect on fish in the Colorado River at the bottom of the gorge, and on the bald eagles, California condors and bighorn sheep that depend on the Canyon's seeps and springs. More than a third of the canyon's species would be affected if water quality suffered.*

### Past Practices Pose Severe Risks

Radioactive residues from our nation's nuclear policies and practices have been accumulating in and around the Grand Canyon for more than five decades. Starting in 1951, our government began detonating 126 atomic tests in the nearby Nevada desert. Federal officials claimed that there would be no health risks associated with this above-ground atomic testing. According to published reports, within a decade, "an unusually high number" of children living along Kanab Creek in Fredonia, Arizona were diagnosed with leukemia. Eventually, the fallout from atomic testing caused thousands of people throughout the region to become ill or die.

Leonard Heaton, the custodian of Pipe Springs National Monument during the 1950s, kept a journal about the lives and events among rural residents living in the Kanab Creek watershed. He noted "...a lot of prospectors going and coming through the monument

hunting for that rare metal, uranium....Several hundred acres have been staked to the west and southwest of the monument.”

That first wave of prospectors led to opening six uranium mines above Kanab Creek. In 1984, a flash flood washed tons of high-grade uranium ore down Kanab Creek and into the Grand Canyon. On the South Rim, the Orphan Mine continues to contaminate creeks below it, prompting the park service to post signs warning backpackers along the Tonto Trail not to use water from two drainages.

The uranium industry walked away from the 16-million ton Atlas uranium-mill tailings pile that will cost taxpayers more than \$600 million to remove from the Colorado River’s floodplain. The abandoned mill is an imminent threat to Arches National Park in Utah, and a severe flood event would jeopardize Canyonlands and other downriver parks. This is only one example of the poisonous filth left behind during the last big uranium boom. Federal lands surrounding both of these iconic parks are also experiencing exponential growth in new uranium claims. It seems only fair to ask those responsible to clean up previous messes before imposing more risk on those of us who live here.

In 1979, an earthen dam breached, releasing eleven hundred tons of radioactive mill wastes and ninety million gallons of contaminated water into a tributary of the Little Colorado River. The Nuclear Regulatory Commission acknowledges that many additional toxic tailings have been washed into our region’s watercourses. Collectively, these events correlate with documented risks and harm to people’s health.

“Because the health effects can take so long to materialize, it’s difficult to pin down the cause of any particular illness,” said the editor of *High Country News*. “That’s one of the frustrating things about dealing with the legacy of the West’s nuclear age,” he concluded in reference to new research showing that cancer clusters are now appearing among people who live in the vicinity of uranium mines and mills. “They warn us that we still don’t know all the costs of the West’s last big nuclear push. And until we do, we may want to proceed very cautiously with the next one.”

Today, the National Park Service advises against “drinking and bathing” in the Little Colorado River, Kanab Creek, and other waters in the Grand Canyon where excessive “radionuclides” have been found. While it is difficult to attribute contamination to any specific activity, there can be little doubt that the cumulative effects of mining, milling, transporting, and detonating radioactive materials are causing long-term, adverse effects on water and water users within the Grand Canyon region.

In 2005, the Navajo Nation outlawed uranium mining and processing on its 27,000 square-mile reservation. At Chairman Grijalva’s recent field hearing in Flagstaff, Navajo President Joe Shirley said:

*The tragedy of uranium’s legacy extends not only to those who worked in the mines, but to those who worked and lived near the mines that also experienced devastating illnesses. Decades later, the families who live in those same areas continue to experience health*

*problems today. The remnants of uranium activity continue to pollute our land, our water, and our lives. It would be unforgivable to allow this cycle to continue for another generation.*

Hopi, Kaibab Paiute, Hualapai, and Havasupai leaders joined President Shirley in testifying to support legislation that would withdraw from new mineral development most of the remaining federal lands surrounding the Grand Canyon.

Abe Springer, Professor of Hydrogeology at Northern Arizona University, stated in a letter to the hearing committee, "Because there is potential harm to one of the most important natural wonders in the world, and to tribes which count on the water from the aquifers as a sole source of water, it makes good sense to exercise the precautionary principle."

Using precaution in this case would mean preventing more damage, even though we are uncertain how water winds its way through regional aquifers. It would require proponents to bear the burden of proof to show that mining uranium will not contaminate springs in the Grand Canyon or risk the well-being of lives they support.

The Arizona Department of Environmental Quality (ADEQ) recently denied Denison Mines permits to operate two mines on the Tusayan Ranger District because it "proposed using outdated, 20-year-old liners and impoundment ponds to capture uranium mine-related runoff." The company is moving quickly to reopen the controversial mines that threaten ground and surface waters of the Havasupai and Grand Canyon. ADEQ director Steve Owens said, "The burden is on them to prove to us that there will not be an impact on groundwater."

We have learned enough about the uranium industry's dismal record to reject their current claims that "uranium mining is much cleaner now." We should not permit these companies to continue to plunder our drought-stricken region's sources of clean water, nor should we risk poisoning our children or the Grand Canyon. It's just not worth it.

Thank you Mr. Chairman and members of the subcommittee for allowing the Grand Canyon Trust testify at today's hearing. We are proud of our record in working effectively with Congress to pass legislation to protect Grand Canyon National Park. For those interested, I have appended to my testimony a current list of our Board of Trustees and a brief summary of our work and accomplishments.

We look forward to collaborating with you in passing H.R. 5583. I would be pleased to try to answer any of your questions.

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