I n September, John Hadder, Ian Bigley (see more about Ian p. 7) and I were awarded scholarships to attend the Western Mining Action Network (WMAN) international conference in Kamloops, B.C.

The conference resonated for us especially this year because of GBRW and PLAN’s (Progressive Leadership Alliance of Nevada) environmental justice fellows focus on the impacts of mining on tribal people in the Great Basin. For indigenous people everywhere as in the Great Basin, we were reminded at the conference, the landscape itself is sacred, including water and the animals whose bodies give life to human coinhabitants.

Said Jacinda Mack of the Xat’sull Nation (B.C.) at WMAN, “My body is made of deer and salmon.” Her village and its centuries long relationship to the salmon were nearly destroyed by the 2014 Mt. Polley mining disaster, when the earthen tailings dam upstream failed, dumping 25 million cubic feet of toxic waste into the creek and Quinnell Lake (The government has yet to charge anyone for this crime).

Why does GBRW attend to mining’s effects on Great Basin tribal people? It’s our mission to work with all communities to protect their air, land and water. Our founders included Western Shoshone representatives. There’s a very serious lack of legal protection for Native American sacred lands. For example, the Native American Religious Freedom Act is narrowly interpreted by the courts; so long as an action is not forcing Native people from doing something against their religion, then their religious freedom is not being affected despite the loss of a cultural area. And, “They [sacred lands] are not only sacred to us as Native Peoples. These places are sacred as ecosystems. Without the preservation and continuation of these places, ecosystems will also wither and die.” *

Nevadans can become numb to mining's effects when aware of them at all; modern mining alters the landscape at a scale many residents do not imagine. Now, in the pursuit of riches though microscopic gold deposits, the landscape is changed irrevocably. Some Great Basin places under threat:

The Long Canyon Mining Complex: GBRW traveled to Long Canyon (north of Wells in the Pequops Range) this fall to meet with the Confederate Tribes of the Goshute and Chairman Rupert Steele about the Long Canyon mine expansion. It will involve extensive groundwater pumping, affecting springs in the area and significant artifacts. Said Chairman Steele: “Water is the most sacred resource we have here. It’s sacred because everything depends on water, even humans...without water we would not be able to live on good old Mother Earth, the source of all our medicine and food...whatever we use out there, so do our four legged brothers, the antelope and deer, and our winged brothers...”

Tosawihi Complex: Earlier this year we visited the Tosawihi Complex in north central Nevada (see, Bristlecone 2016). Sacred to the Western Shoshone for millennia, it’s impacted severely by mining, government policy and a pipeline running through it. Thousands of artifacts have been removed from the land and these are inaccessible to tribe most of the time.

With Western Shoshone place monitors as guides, GBRW staff and board members and PLAN staff Ian Bigley and Beverly Harry were ushered into the landscape with prayers and smudging at Rock Creek. What a surprise to see a creek running free and clear in gold country, with live fish swimming about!

Continued on page 6
GBRW’s New Logo

Great Basin Resource Watch has a new beautiful logo thanks to Katherine Case, who is a poet, printmaker and former Peace Corps Volunteer. I came across her striking block print of a bristlecone pine last year and asked her if GBRW could use the image for our logo (our existing logo image was of low resolution that poorly reproduced and GBRW was looking to replace it). Katherine’s bristlecone captures the resilience and simple beauty of the Great Basin, and projects the character of GBRW standing up to protect the Great Basin. Katherine has taught book arts and letterpress printing for nearly a decade at the Academy of Art University, the Nevada Museum of Art, The San Francisco Center for the Book and Sierra Nevada College. She owns and operates Meridian Press in Reno, Nevada, where she publishes poetry chapbooks, broadsides, stationery and limited-edition linoleum-cut prints. Thank you to Katherine for her contribution. Learn more about her work at meridianletterpress.com

The Critical Role of Public Interest Consultants

Mining today is contentious. Operators seek maximum profit; locals appreciate a healthy environment along with mining’s high-paying jobs, and environmental organizations that prioritize clean water and air, pristine habitat, and human health may not want new or expanded mines at all. Plus the scale of modern mining is immense, routinely extracting groundwater for decades, and spreading hundreds of million tons of waste rock and tailings over tens of square kilometers.

Understanding how a mine project will affect communities and the environment rests almost entirely upon the technical analysis. The mining companies pay technical consultants to determine how air, land, and water will be affected, and thus the environmental footprint of a proposed mine or mine expansion. Communities on the other hand do not have the resources of the mining companies. Consultants follow scientific fundamentals—chemistry and physics and such; but there’s a financial incentive to produce outcomes favorable to the operator. As a result, mining consultants typically won’t conduct independent analyses—a problem for citizen groups or tribes.

Fortunately, permitting deliberations are well framed by environmental laws: It’s illegal to pollute groundwater, kill fish in streams, or endanger people or wildlife with toxic mine lakes. So mine operators hire technical consultants to forecast their environmental effects.

Fortunately, permitting deliberations are well framed by environmental laws: It’s illegal to pollute groundwater, kill fish in streams, or endanger people or wildlife with toxic mine lakes. So mine operators hire technical consultants to forecast their environmental effects. Public interest consultants, or P.I.C.s are science or engineering specialists who know mining and will work for non-mining nonprofits, communities and organizations. They often offer communities the only good independent assessment of how a project will affect the environment and the community.

Dave Chambers, president and founder of the Center for Science in Public Participation (CSP2.org), thinks there are “about a dozen [P.I.C.s] who do this full time for mining, another dozen who do it part time, and a couple dozen others who do it on an occasional basis (like university professors).” In 2018, a conference of 45 mining P.I.C.s that Chambers organized produced a framework for improving consulting effectiveness (one theme was “pro science, not anti-mining”), and designs for a mining P.I.C. association.

If you seek a public interest consultant, there’s social media and Google, plus CSP2 maintains an informal list. In the next year or so, expect an association of mining-focused P.I.C.s, where you’ll be able to consult specialists with specific skills and experience.

Houston Kempton is a staff geochemist at GBRW with a background consulting on water quality effects related to chemical and mining industries.
ROBINSON MINE EXPANSION DESPITE IMPACTS

Stories by John Hadder

It was clear and cold on November 6, 2018 in Ely, Nevada as GBRW and PLAN staff prepared for a brief tour of the Robinson Mine Expansion area by KGHM mining, current operator of the mine. At the mine we were met by community members Ron Munson and Jack Cooper who own property nearby, and two members of the Ely Shoshone Tribe, Buck McQueen and Hawk Dumont. KGHM took us to portions of the mine relevant to the expansion, which will deepen the Ruth pit by about 250 feet and use waste rock material to cover over (i.e. overdumping) the existing historic Keystone waste rock dump. According to KGHM an increase in dewatering will not be needed and at the end of mining the Ruth will fill with water forming a pit lake with some water flowing from the lake into the aquifer. There is the potential that lower quality water in the pit lake will degrade groundwater, which KGHM states is highly unlikely. GBRW has seen other mine facilities become pollutants that were also considered by the company to be highly unlikely to pollute. In our view the jury is still out on the Robinson Mine.

The overdumping is an attempt to reclaim and encapsulate the excavated rock that are likely to cause acid mine drainage (AMD)*. AMD has been an ongoing problem at the Robinson mine for many years, and has to be captured and treated. Nevada law does not allow for AMD to be released into the environment. In general, Nevada requires mining facilities to be zero discharge, which does not apply to extra water from dewatering, although any discharged water must meet applicable water quality standards. GBRW is concerned that the mine will be a source of pollution for hundreds of years. In our comment letter to BLM on the expansion preliminary environmental assessment (EA) we stated that BLM must determine if the Robinson mine will require perpetual active treatment.

There has been mining activity at the Robinson location for over 100 years, the town of Ely is only a few miles away in Steptoe Valley. The community has become very dependant upon the mine for employment and support of the local economy.

Dewatering by the mine has significantly affected the water resources in the area. Murry Springs was once an artesian spring located just with the old Lincoln Highway marker. Robinson Mine waste rock piles in the background. (Ian Bigley - 2018)

GBRW CALLS FOR REGULATION ON PERPETUAL POLLUTION

As a result of our experience with the Phoenix Mine as well other mine sites in Nevada such as the Rain, Robinson and Jerritt Canyon, to name a few, GBRW believes that the state of Nevada should have the authority to require mining companies to make a clear and convincing case that treating pollution forever will not occur. The Phoenix mine plan was approved in 2003 by BLM, yet it was known that the site contained significant potential for acid mine drainage (AMD*). According to the Final Environmental Impact Statement (2002 p. 2-48), “BMG (Battle Mountain Gold, wholly owned by Newmont Mining, Inc.) has developed a contingent long-term management plan to address potential ground water impacts associated with the proposed Phoenix Project waste rock facilities.” Nevada Department of Environmental Protection also granted permits for the Phoenix mine. Despite recognition that water pollution was a likely prospect and that long-term active treatment would be needed, the project was allowed to go forward. What if Newmont had been required to demonstrate with “clear and convincing evidence” that perpetual treatment would not be needed in order to receive a permit to open the mine? Would the situation at the mine be better off today or not?

GBRW has come to the conclusion that a greater standard is needed to prevent more “Phoenix-like” scenarios. The state needs authority to deny a mine plan that is likely to require water pollution treatment indefinitely and to have specific authority to require mining companies to provide “clear and convincing evidence” that perpetual care will not be needed. GBRW recognizes considerable uncertainty in the determination of future water quality at a mine site. We view clear and convincing evidence as a reasonable requirement and a more effective standard than is currently being applied.

We will be working to build support for changes to the Nevada Revised Statutes that constrain existing perpetual care mines and prevents new mines from opening that will need perpetual care.

We will need your help.

*AMD—acidic mine drainage is caused by a chemical reaction between certain rock types (typically containing sulfur), water, and air. The reaction is nearly impossible to stop once it starts and is catalyzed by available bacteria. The only hope is to exhaust one of the reactants which could take centuries to a millennium.

Photo: Acid mine drainage (AMD) at the abandoned Rio Tinto mine in northwestern Nevada. (GBRW - 2007)

Photo: Ron Munson (left) and Jack Cooper on Ron’s property

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**DRAFT EIS FOR BARRICK’S DEEP SOUTH EXPANSION INADEQUATE**

This fall the BLM released the Draft EIS for the Deep South Expansion Proposal. As mentioned in last year’s *Bristlecone* every mine in Barrick Gold Corp’s Crescent Valley (Cortez complex) operations is expanding. The Proposed Action would cause overall groundwater pumping to increase to about 32,000 gallons per minute (gpm) (51,200 acre-feet/yr) by the early 2020s (~50% increase). The expansion will affect four water basins with drawdown extending nearly 40 miles, from Carico Lake Valley to Pine Valley and persist for hundreds of years after mining.

For Western Shoshone the water replacement scheme proposed by Barrick and allowed by BLM does not “mitigate” the affect on the sources of springs and streams. Protection of the waters in the region, but especially in and around Mt. Tenabo (at the geographic center of the dewatering) is not just a matter of water rights as defined by the state of Nevada, but rather as Carrie Dann (Western Shoshone elder) expresses it, “The loss of these irreplaceable waters, and the spirits and religious values of these waters, constitutes irreparable damage to them, as to the fundamental religious practices and beliefs of myself and other traditional Western Shoshone.” The replacement scheme treats water as a commodity, and disrespects the Western Shoshone view, and underscores a key conflict between mining (extraction) and Western Shoshone culture.

According to the state Water Engineer mining use of water is “temporary in nature,” even though the aquifer will take over a hundred years to recover, and some springs may never return. According to Tom Myers, who reviewed the hydrology and related issues for GBRW, there will be 282,283 acre-feet of water cumulatively lost over the four water basins. This is equivalent to 5.4 years of the total available water (called perennial yield) in all four basins and the annual water use of half a million city dwellers.

The DEIS failed to adequately address how mining has affected the region. Deficiencies in the analysis largely follow from a lack of determination of specific affects on all surface waters on the part of the BLM. In the document, BLM claimed that due to, “...the complexity of the hydrogeologic conditions in the region and the inherent uncertainty in numerical modeling predictions ... it is not possible to conclusively identify specific perennial stream reaches or springs that would or would not be impacted by future mine induced groundwater drawdown.” As a result the general approach to surface waters is a “wait and see” method, which is not preventative. GBRW’s understanding of the law requires BLM to do better and make the attempt to elucidate specific effects.

In our comments to the Draft EIS, we will be requesting BLM to provide an accounting of how Western Shoshone culture has been effected by mining around Mt. Tenabo with current interviews of Western Shoshone, provide alternatives that will not damage stream and spring sources and protect cultural values, provide an estimation of how dewatering will affect all surface waters within a one foot drawdown, and fully assess effects on wildlife.

Our comments can be found at gbrw.org/publications. Watch out for future actions on the Cortez complex.

**VICTORY FOR RESIDENTS IN THE COMSTOCK**

Folks around Silver City, NV enjoyed a victory last year in their efforts to deter Comstock Mining Inc. (CMI) from further destroying the Comstock Historic District and their neighborhoods by mining for gold and silver.

In March, the Nevada Supreme Court handed down a 7-0 ruling affirming public access to government officials’ personal communication devices and email accounts when used to conduct the public’s business. Lyon County refused, and a district court judge denied Comstock residents’ petition to compel them to do so. That denial was reversed by the Supreme Court and Lyon County was ordered to turn the disputed files over to a judge. The emails and phone records have been scrutinized, revealing a pattern of secret intercommunications between CMI and Lyon County officials, both staff and elected. Commissioners Hastings and Keller in spite of having received donations from CMI-related people, did not recuse themselves from the decision to allow open pit mining within the town limits of Silver City. Collusion anyone?

In spite of share prices dropping to levels twice that nearly triggered delisting on the NY Stock Exchange, CMI still claims they will be mining the Dayton open pit by 2020, which is a few hundred feet from homes in Silver City. If that pit becomes active, it will virtually ruin the small town with extreme noise, dust, industrial lighting, trucks and earth moving equipment.

If you want to help the Silver City community, you can make a donation at savesilvercity.org. Working with mining reform activists to reform the Mining Law of 1872, which still holds mining to be the best use of public lands, could keep potential disasters like this from happening to other communities. Go to our website at gbrw.org to learn more. Thanks again to Nevadagram (nevadagram.com) for details in this report.
In February 2018 the US EPA signed a deferment agreement with the State of Nevada regarding the abandoned Anaconda copper mine. According to EPA the mine is still a Superfund site, but has been deferred from listing on the National Priorities List, which is necessary for funding and further action. Under the agreement the Nevada Division of Environmental Protection (NDEP) becomes the lead agency managing the cleanup. They must update the EPA annually on their activities.

The transfer of primary oversight to Nevada has been fraught with complications. The main problem has been that EPA acting under authority of Superfund has a trust relationship with the Yerington and Walker River Tribes. There were numerous government to government agreements and processes between EPA and the tribes that did not exist with the State of Nevada. To our knowledge almost ten months after the agreement went into effect protocols between Nevada and the tribes are not resolved.

The Yerington Community Action Group (YCAG), the primary citizens’ group near the mine, was also disappointed by the shift from EPA to Nevada control and generally felt abandoned; the group has effectively disbanded. GBRW will continue to connect with the directly affected community and advocate for maximum transparency in the process. We remain concerned that the goal of “aquifer restoration” as stated by EPA will ultimately not be honored.

By October 2018 NDEP was overdue in setting up the first public meeting since the deferment was signed. A public meeting was eventually held in November, which turned out to be a poster session with no presentation or collective discussion. NDEP needs to provide a process so that the community can discuss issues with each other. We recommended there be a poster session and a facilitated presentation/discussion in the near future.

Last summer GBRW documented most of the springs that BLM has filed as Public Water Reserves (PWR) and were part of our legal challenge to the Mt. Hope Molybdenum Mine Proposal. The Ninth Circuit Court vacated the federal mine permit based largely on the deficiencies in the air quality analysis and also directed the BLM to clarify the status of the PWRs. Our documentation shows that all of the springs are viable; however, not all may qualify as a PWR. The volume of flow and the number of livestock and/or wildlife that the spring will support is a factor in the determination. We expect that when or if the Supplemental Environmental Impact Statement on Mt. Hope is released there will be a position by BLM on these springs, which we will evaluate at that time. The documentation is important so that we have evidence of the springs and an estimation of how much livestock/wildlife each can support.

In the meantime, Eureka Moly LLC (subsidiary of General Moly) applied again for water rights for the mine, which are primarily in Kobeh Valley. Eureka County, Etcheverry Ranches, and Diamond Natural Resources Protection and Conservations Association (DNRPCA) filed protests to the applications, and there was a hearing in Carson City on the protests this past September. Apparently, General Moly had been negotiating with Eureka County and DNRPCA leading up to the hearing and both decided to sign an agreement with General Moly, nd withdrew their protests to the water applications. Etcheverry Ranches proceeded with their protest and a decision by the Nevada Water Engineer is pending.

During the spring of 2018 the Water Pollution Control Permit from the state of Nevada came up for renewal. GBRW submitted lengthy comments arguing that the state should not renew the permit. We have been concerned about the mine plan since it was first released to the public in 2007, culminating to our legal action in federal court. Since then we have done additional analysis further solidifying our concern that the mine as planned will require active treatment of water pollution for hundreds of years. Following the State’s decision to renew the permit GBRW filed an appeal to the State Environmental Commission.

Our appeal argues that waters of the State will be degraded by the mine pit lake, the pit lake has the potential to harm wildlife, and that the mine will require perpetual water treatment. On these grounds the mine should not be permitted.

The hearing is currently scheduled for February 26, 2018. Public comment is allowed at these hearings and we will need any support on this. Details about the mine and our concerns are on our website.
Confronting Mining by Walking on Two Legs

By Susan Juetten

When we attended WMAN in Kamloops B.C. in September (see lead article), the gathering was hosted by the Stk’emlupsemc te Secwepemc Nation (SSN).

We learned of the remarkable work of the SSN communities who state unequivocally that “they do not give free, prior and informed consent to the development of the lands and resources…for the purposes of the KGHM Ajax open pit mine project.”*

Composed of the elected leadership of Tk’emlups te Secwepemc and Skeetchestn Band and Elders, youth and families, The SSN Joint Council withheld consent after engaging in a first-ever process in North America: They produced their own environmental assessment of the proposed project to protect their Indigenous Peoples, the environment and the residents of the city of Kamloops.

The assessment was built on the principle of “Walking on Two Legs”—traditional and Western scientific knowledge as equal sources. The wisdom coming from living with the land, and especially their cultural keystone place of Pipsell, the location of the proposed mine, including hundreds of significant plant species and the water there, goes back millennia and includes a long-term view of intergenerational impacts.

Much grassroots effort went in to defeating the proposal, including citizen groups from downriver Kamloops.

Besides the environmental factors and intertwined cultural/historical/spiritual aspects of this place that make it wrong to mine there, the tribes pointed out the economic infeasibility of mining at Pipsell; low grade copper and gold and its location upriver from a major city (the company that proposed opening the mine, KGHM, owns the problematic Robinson Mine in Nevada).

The SSN Joint Council decision document on the KGHM Ajax open pit mine proposal was signed in March 2017. In June 2018 Canada’s government rejected the proposed Ajax Mine because the project is “likely to cause significant adverse environmental effects that cannot be justified in the circumstances.”

*Free, prior and informed consent principle from United Nations Declaration on the Rights of Indigenous Peoples. Information regarding Ajax from stkemlups.ca.
In 2015, the State Engineer designated Diamond Valley as a Critical Management Area (CMA). By law, this designation provides 10 years for groundwater rights holders to develop a Groundwater Management Plan (GMP) to remove the basin from CMA designation.

A portion of the proposed Mt Hope mine lies in Diamond Valley, and Eureka Moly LLC., the mining company, has been attempting for many years to obtain sufficient water rights to begin operation. Thus, GBRW has been monitoring any water related activities in the region.

The proposed Diamond Valley GMP (DVGMP) uses a water market approach, which is a significant departure from standard Nevada water law and groundwater management. We wondered what might be the implications of introducing a water market based plan and specifically will access to water be changed for mining. To address these questions we commissioned Advocates for Community and Environment to conduct a public interest analysis (digital version at gbrw.org/publications) of the Diamond Valley GMP.

Meet Environmental Organizer

Ian Bigley

My name is Ian Bigley (second from left in photo), and as the new Mining Justice Organizer for PLAN, I spent the summer working with GBRW on a film on mining impacts to water in Nevada. Through many dusty drives we have interviewed communities who are faced with drying wells and contaminated water. Our trip to the abandoned Anaconda Mine showed what happens without regulation, as the Yerington Paiute Tribe finances their own water treatment while politicians and corporations argue about the cleanup from offices with complimentary water and decorative fountains.

Yet issues are present at sites that have been built under regulations. The Phoenix mine’s operator, Newmont, has proposed treating acid mine run-off until there are no humans to do so. This not only poses health risks, and the ethical dilemma of leaving a livable world for our children, but is an potential economic burden to the state. Treatment will last hundreds to thousands of years; longer than any western institution has existed. So, the question is not if the company will fail leaving treatment costs to communities, rather when.

These examples are two of many ongoing mining impacts to water that must be addressed. Such mines are distant from the offices of policy makers. Legislators see reports from mines with quantifiable data, and too rarely hear the voices of those affected with qualitative information concerning what mining means for their daily lives. The film GBRW and PLAN are making will bring the faces, voices, and stories of mining impacted people into the chambers of power.

This winter marks the end of my undergraduate education in Anthropology at UNR, so I’ll have more time to dedicate to organizing before grad school. I don’t plan on running away though! I intend to remain in the Great Basin and continue to honor the relationships I’ve begun to develop on those dusty drives filming folks impacted by mining.

According to our report, “The GMP not only contemplates relinquishment and conversion of groundwater rights and allocations from irrigation uses to other uses, it appears to facilitate and perhaps incentivize conversions to mining uses in particular,” potentially opening the door for Eureka Moly to access the water needed for mining. GBRW submitted oral comments and the report at the October 30, 2018 hearing by the state of Nevada Water Engineer in the Eureka Opera House.

The DVGMP may be a good way to manage water in the future, especially in the arid west, which is predicted to become drier. It can allow for flexibility in how to allocate water, but with this flexibility comes greater responsibility. Overall, the report concludes that the DVGMP is in need of additional requirements or constraints to ensure that all of the goals set forth in the plan as agreed by the Diamond Valley community.

Some of you have been our contributors since the beginning in 1994. Some of you have joined up for recently. Sincere thanks to all of you—the individuals, businesses and foundations who make our work possible.

ío Bernice Malotte Lalo passed away in April 2018. Bernice, a member of the Battle Mountain Band of Western Shoshone, was on the first Board of Directors of Great Basin Resource Watch. Glenn Miller, also on that first board, remembered her as “cheerful and smart, always in good spirits, and really worked for Native American issues.”

“I recall Bernice as a strong voice for protection of Shoshone culture and asserting sovereignty and land rights as laid out in the Treaty of Ruby Valley,” said John Hadder. “There was no nonsense around Bernice, if you screwed up she would let you know. Back in 2007 I accompanied Shoshone folks on a ‘cultural’ tour of Mt. Hope by the mining company. Bernice said to me as we headed back through the piñon pine trees, ‘I don’t understand this attitude of destruction.’ Indeed, Bernice was a protector.”

Her involvement with environmental and justice issues was lifelong. She was one of the Western Shoshone who participated in GBRW’s activities, including demonstrations, around the suit against Barrick Mining regarding the destruction of sacred Mt. Tenabo in central Nevada. She was also the EPA Coordinator for the Battle Mountain Band.

Thank you Bernice, for your service to GBRW, your community and the earth.

In Memorium: Bernice Lalo

Susan Orr, lifelong organizer for peace and justice, passed away in September 2018 in Sacramento. She was a major force in the battle over nuclear storage at Yucca Mountain north of Las Vegas in the 70’s, for bringing the Cold War MX missile proposal* to citizens’ attention in Nevada and western Utah, and for the creation of Citizen Alert, a highly effective activist organization, among other involvements. Stories about Susan deserve more space than we can provide here, but one example of her creativity and commitment was relayed to us by fellow activist Katharine Hale, with whom Susan travelled all over the state in the mid seventies showing an informative film and speaking to groups of citizens about nuclear issues (at the time the Yucca Mountain proposal was not just to store domestic but also waste from other countries to whom the US had sold nuclear fission reactors).

In addition to decades of other good works, Susan was a founder of the David Samuel Orr Fund for the Earth, and recently co-founded the Sacramento Buddhist Dharma Center. Her life proved the adage that there is no limit to what an engaged citizen can accomplish.

*The MX was a proposed intercontinental ballistic missile system that would be deployed on a circular railroad track so that more than 200 missiles could be moved into 4,600 shelters along the track; it would be catastrophic to a wide area if Russia attacked.

Great Basin Resource Watch Donors… Thank you!

In Memorium: Susan Orr