



PUBLIC LANDS
FOUNDATION

GENERAL SESSION
MEETING

SEPTEMBER 12, 2019

SUSTAINABLE ENERGY AND
MINERALS MANAGEMENT

*Peppermill Resort
Reno, Nevada*

The 2019 General Membership meeting of the Public Lands Foundation (PLF) focused on the theme of *Sustainable Energy and Minerals Management*, which was addressed from many different perspectives by thirteen energetic and knowledgeable speakers (inset).

Ms. Naomi Duerr..... Vice Mayor of Reno, Nevada
Senator Jacky Rosen (video)..... United States Senator
Mr. Kurt Englehart Regional Representative for Senator Catherine Cortez-Masto
Mr. Jon Raby..... BLM Nevada State Director
Mr. David Bobzien.....Nevada Governor’s Office on Energy
Mr. Rich PerryNevada Department of Minerals
Mr. Kelly McGowan Nevada Department of Conservation and Natural Resources
Mr. Paul ThomsenORMAT
Ms. Jaina Moan..... The Nature Conservancy
Ms. Annie Huhta.....Mackay School of Mines, University of Nevada, Reno
Mr. Dwight FielderExperienced Service Program
Mr. Ed Arnett and Mr. Carl Erquiaga.....Theodore Roosevelt Conservation Partnership
Congressman Mark Amodei United States Representative

Minerals and energy management is a large component of BLM’s portfolio. It is an important multiple-use of America’s public lands and is important to local economies as well as the Nation’s energy independence.

Mr. Ed Shepard, President of the Public Lands Foundation, opened the general session by expressing his and the PLF’s appreciation for those individuals involved with organizing the meeting and, in particular, the previous day’s excellent tour of the Couer Rochester silver mine east of Lovelock, Nevada. In addition to what each person learns from presentations at meetings, one of the most important and rewarding aspects of attending PLF’s annual meetings is the social interaction, opportunity to visit with old acquaintances, and making new friends!

Ms. Naomi Duerr

Ms. Duerr welcomed everyone to Reno, which is commonly referred to as Nevada’s “Biggest Little City” Ms. Duerr fell in love with Reno while visiting her father and never left. With her professional geologist experience and her political life as Reno’s current Vice-Mayor, Ms. Duerr is a political person with a science background, which is a rarity.

Ms. Duerr provided an overview of the company she founded and manages with her husband, which is a research and development company focused primarily in the United States. Over the years, Ms. Duerr and her husband have taken strong positions of support for many public land issues such as sage-grouse, wilderness, withdrawal of lands for Navy bases, etc., but offered a word of caution in moving in a direction that could eventually make mineral development and extraction financially impossible, thus increasing the United States dependence on other countries. Her firm encourages policies that are oriented and friendly to the environment and that provide funding and research to agencies that support the minerals industry.

Recognizing that the BLM’s work is often challenging, Ms. Duerr applauded the agency for its efforts in relation to minerals and energy development. Personally, Ms. Duerr’s business has received tremendous service from the BLM Nevada State Office in relation to keeping their mineral claims current, and stressed the importance of maintaining a BLM office in the Reno area.

In closing, Ms. Duerr addressed the benefits received from the Lyon County lands bill, and an effort currently underway to develop a lands bill in Washoe County where she personally has advocated for the funds derived from the bill to be reinvested locally into recreation resources, including development of a recreation corridor in the Reno area.

United States Senator Jacky Rosen

Senator Rosen was unable to attend the meeting but provided a video presentation that is available at https://s3.amazonaws.com/sdmc-media.senate.gov/ROSEN/091019_ROSEN_3_WEBHD.mp4.

United States Senator Catherine Cortez-Masto

Mr. Kurt Englehart, Senator Cortez-Masto's Rural Northern Nevada regional representative, expressed the Senator's appreciation for the invitation to address the PLF general session. Unfortunately, she had to return to Washington, D. C., just after the August recess to address the nation's business.

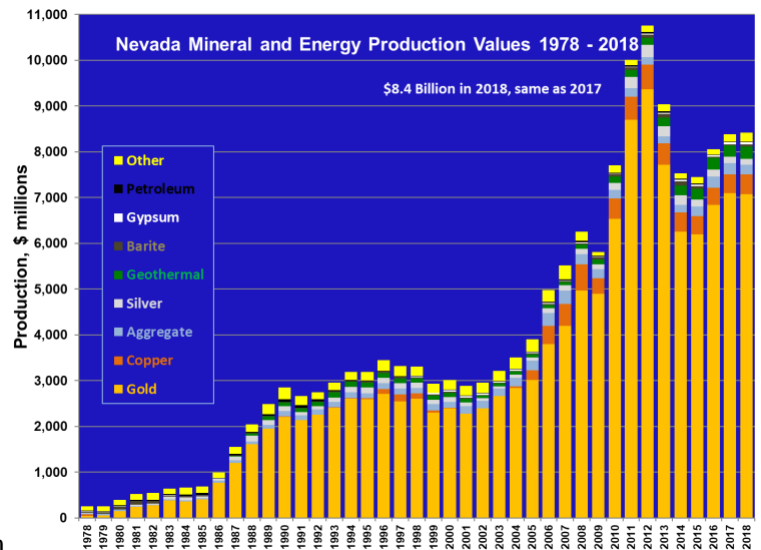
Mr. Jon Raby

Mr. Jon Raby, BLM's Nevada State Director, provided an overview of the mineral and natural resources managed by BLM on 48 million surface acres and 59 million subsurface acres of public land in Nevada. These lands provide an economic benefit of \$7.2 billion to Nevada's budget. He discussed BLM Nevada's priorities, fluid minerals (primarily oil/gas and geothermal) with a revenue of \$8.2 million and disbursements of \$5.3 million to the State of Nevada and counties, solid minerals with 205,000 mining claims and \$8.2 billion in total value, fire and fuels management including hazardous fuels management and emergency stabilization and burned area rehabilitation efforts, rangeland management which includes five of BLM's 11 outcome-based grazing pilot projects and one of two landscape-scale demonstration projects, wild horse and burro management, outdoor recreation (specific mention was given to the 2019 Burning Man event), special areas including two National Conservation Areas and two National Monuments, renewable energy development and transmission, wildlife, fish, and plants.

Mr. Rich Perry

Mr. Rich Perry, Administrator for the Nevada's Division of Minerals, provided a historical perspective of production trends for several locatable minerals including gold, silver, copper, barite, limestone, diatomaceous earth, lithium carbonate, silica sand, magnesite, salt, and perlite. In addition to the locatable minerals, Mr. Perry addressed fluid mineral development including geothermal, oil, and dissolved minerals (i.e., lithium). In total, Nevada's mineral and energy production value was \$8.4 billion in 2017 and 2018 (inset) of which gold represents 88 percent.

In addition to historical mineral production, Mr. Perry also addressed the history of land withdrawals in Nevada from 1930 to present day, which has averaged approximately 177,000 acres per year or 1.8 million acres withdrawn from mineral entry per decade. If the withdrawal trend continues, land withdrawals could eventually significantly adversely impact development or extraction of "critical minerals" which have been determined to be "vital to the Nation's security and economic prosperity." Nevada contains known occurrences or deposits of 20 of the 35 identified "critical minerals".



Mr. David Bobzien

Mr. David Bobzien, Director of the Nevada Governor's Office of Energy, described the nexus between Nevada's climate policy and public lands by addressing Nevada Governor Steve Sisolak's climate urgency and protection of public lands, the U. S. Climate Alliance, the 2019 Nevada legislative session, State Bill 254 identifying climate targets, Nevada's energy history and future, Nevada's greenhouse gas emissions profile, transportation electrification, the relationship between batteries and strategic minerals, and marrying the concept of natural and working lands with public land management to increase carbon sequestration and reduce greenhouse emissions.

Nevada is one of 24 states and one territory involved with the United States Climate Alliance, which was founded in July 2017 when President Trump pledged to withdraw from the Paris Agreement.

In light of his commitment to address climate change, Governor Sisolak signed Senate Bill (SB) 358 increasing Nevada's renewable energy portfolio standard to 50 percent by 2030, and SB 254 which calls for a reduction of greenhouse gases to nearly zero by 2050.

Efforts are being made to reduce Nevada's dependence on use of coal by increasing use of natural gas and renewable energy sources such as solar and wind for electricity generation.

Nevada is working to expand the *Nevada Electric Highway Program* by placing electric charging infrastructure on five major highways in the state as part of the multi-state *Regional Electric Vehicle Plan for the West* program.

Lithium is a strategic mineral required to support development of lithium batteries which is now a top ten export from Nevada at \$131 million in 2018. To meet this need, there is increasing pressure to increase production of lithium from public lands across the West.

Mr. Kelly McGowan

Mr. Kelly McGowan, Program Manager for the Sagebrush Ecosystem Technical Team, addressed the State's Sagebrush Ecosystem Council and the Conservation Credit System (CCS) which focus on (1) mitigating threats (e.g., fire, invasive plant species, anthropogenic fragmentation) to the Greater Sage-grouse and (2) protecting the State's sagebrush ecosystem. Areas addressed in the presentation included common challenges of compensatory mitigation, development of the CCS program, and the status of mitigation implementation in Nevada.

Mr. Paul Thomsen

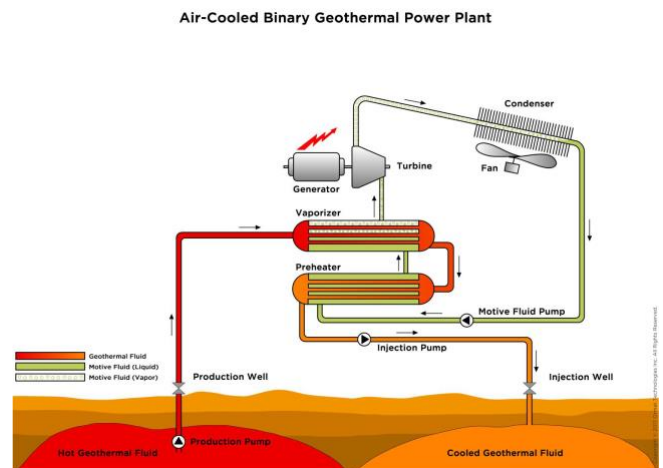
Mr. Paul Thomsen, Vice-President for Business Development for ORMAT Technology, provided an entertaining presentation addressing an overview of ORMAT - the world's only vertically integrated geothermal company addressing all phases of geothermal development, its economic impact, use of the air-cooled binary geothermal power plant approach (inset), ORMAT projects in the Western United States, and more specifically projects in Nevada.

With a mission of becoming a leading global renewable energy provider, ORMAT operates 140 power plants, 40 recovered energy generation plants, four solar photovoltaic projects, and five energy storage projects in 30 counties generating over 2,900 megawatts of power.

ORMAT's economic impact includes paying \$2.6 million in royalties and \$923,448 in rental to BLM in California, Nevada, New Mexico, and Utah. In Nevada, ORMAT has 205,442 acres under lease and paid \$2.3 million in royalties in 2018.

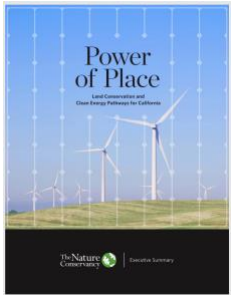
WE HAVE SOME OF THE NATION'S MOST AMAZING PUBLIC LANDS IN OUR STATE. THESE LANDS CONTRIBUTE TO THE STATE'S UNIQUE BEAUTY, CONNECT US TO OUR PAST, AND ARE THE DRIVING FORCE BEHIND OUR THRIVING ECO-TOURISM INDUSTRY. WE MUST CONTINUE TO PROTECT THESE IRREPLACEABLE TREASURES.

Governor Steve Sisolak – inaugural State of the State Address



Ms. Jaina Moan

Ms. Jaina Moan is the External Affairs Director and Climate Action Lead for *The Nature Conservancy* (TNC) - a global non-profit organization that uses a science-based approach with collaboration to accomplish its mission to “conserve the lands and waters on which all life depends”. Ms. Moan’s presentation addressed smart siting of energy infrastructure and two TNC projects – the *Power of Place* in California and *Mining the Sun* in Nevada.

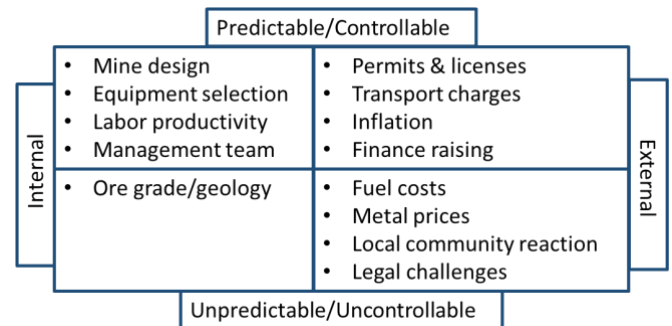


Using California’s electric sector in 2050, the California chapter of TNC modeled several scenarios and pathways to determine the optimal avenue for achieving the State’s clean energy goals while limiting impacts to California’s ecosystems. The *Power of Place* project found that with proper planning it is possible to scale up the clean energy infrastructure needed for deep decarbonization while limiting impacts to natural and agricultural lands across the West. The project identified five major recommendations for implementation.

The goal of the *Mining the Sun* project is to “accelerate renewable energy development on mine lands and Brownfields in Nevada”, which when successful could be scaled up across the West and eventually to a global scale. Ms. Moan addressed several opportunities resulting from the project as well as challenges that will need to be overcome.

Ms. Annie Huhta

Ms. Annie Huhta, Director of the Mackay School of Earth Sciences and Engineering (also known as the Mackay School of Mines) at the University of Nevada, Reno, addressed a brief overview of the Mackay School of Earth Sciences and Engineering, her personal mining experience, facts and figures addressing mineral production in Nevada and its importance in world markets, challenges to permitting mineral development, internal and external factors affecting mining investments (inset), and strategies to improve U. S. critical mineral and metal development.



Source: SNL Metals & Mining

When addressing permitting challenges, Ms. Huhta referenced a 2016 report entitled *Permitting Economic Value in Mining in the United States* by SNL Metals and Mining, which suggested three areas requiring reform – developing a clearly defined timeline for permit processing, clearly defined agency goals, and shared responsibility between industry and government. The Department of the Interior and the BLM have successfully addressed the first two areas requiring reform with issuance of Instruction Memorandum 2018-016¹ and Secretarial Order 3355.²

Successful strategies used to successfully permit expansion of the Greater Phoenix mining project south of Battle Mountain, Nevada included (1) supporting timely interaction with regulatory agencies through early engagement, transparent communication, and building strong partnerships to develop a trusting relationship, (2) enlisting the assistance of a third-party consultant, and (3) providing alternative options for project permitting.

Mr. Dwight Fielder

Mr. Dwight Fielder from the *National Older Worker Career Center* (NOWCC), a 501(c)(3) nonprofit organization addressed the *Experienced Services Program* (ESP), a cooperatively managed program between NOWCC and BLM, which serves as a tool to help federal agencies combat the high level of retirements that have occurred over the past five to ten years and expected to occur in the future where 40 percent of BLM’s workforce is over the age of 50.

¹ <https://www.blm.gov/policy/pim-2018-016>.

² (https://www.doi.gov/sites/doi.gov/files/uploads/3355_-_streamlining_national_environmental_policy_reviews_and_implementation.pdf).

The ESP program may be relatively new to BLM but similar programs have been in place since the 1960s (Table 1).

Table 1 – Existing ESP Type Programs

Year	Department/Agency	Program Name
1965	Department of Labor	Senior Community Service Employment Program
1984	Environmental Protection Agency	Senior Environmental Employment Program
2008	Department of Agriculture – Natural Resources Conservation Service	Agriculture Conservation Experienced Services Program
2014	Department of Agriculture – United State Forest Service	Agriculture Conservation Experienced Services Program
2018	Department of the Interior	Experienced Services Program
2018	Department of Agriculture – Research, Education & Economics	Experienced Services Program

The ESP is a key part of BLM’s program of work, and is not a replacement for career federal employees. Individuals eligible to participate in the ESP program must be 55 years of age or older, meet agency scarce skill needs, and may be from the federal, state, local and/or private sectors.

BLM’s ESP program is overseen by a National ESP Core Team and implemented on-the-ground by a National ESP Program Officer, State and Center Directors, State ESP Program Officers, Grants and Agreement Specialists as well as ESP Technical Advisors. Salary for individuals involved in the ESP program fall within one of four levels depending on the person’s level of experience and the degree of oversight and training required.

U. S. Congressman Mark Amodei (R-NV 2nd District)

Congressman Amodei gave an entertaining presentation addressing personal experiences, funny stories, and topics of interest to PLF members. Having grown up in Nevada and being a member of the United States House of Representatives for eight years, Congressman Amodei clearly recognizes the federal estate in Nevada, how it evolved, and the challenges of addressing natural resource issues and the environment. In particular, Congressman Amodei acknowledged that nearly 20 million acres in Nevada have burned within the past 20 years, which is a large (if not the largest) threat to the Great Basin ecosystem. Regardless of the natural resource a person is interested in, losing 20 million acres becomes a major focus in identifying avenues for minimizing additional loss in the future.

When considering the effect of urban development on natural resources, one can’t help but address the Southern Nevada Public Land Management Act (SNPLMA), which turned 21 years old this year. SNPLMA was a public lands bill authorizing the sale of approximately 70,000 acres of public land in and around the Las Vegas Valley – one of the fastest growing metropolitan areas in the United States. Despite numerous natural resource issues (e.g. Desert Tortoise), over the life of the Act, approximately 35,000 acres have transferred from public to private ownership using an open transparent process. Other public land bills in Nevada haven’t been quite as successful. Reality, responsibility, and responsible resource policy always falls somewhere in the middle between the extreme positions taken by some on resource issues.

PLF members are in a unique position of serving as leaders with important experience, lessons learned, and perspectives. Political people come and go but the people who work on and address issues day in and day out are those at the locations (i.e., Field Offices, District Offices, and State Offices). PLF represents a tremendous resource in terms of perspective – what has and hasn’t worked in the past.

When addressing the Department’s proposal to relocate the BLM Headquarters office to Grand Junction, Colorado, Congressman Amodei indicated that “when someone dares to tell me what it is, I’ll be happy to share my thoughts with you”.

Congressman Amodei relayed a story about a trip made to Nevada by Congresswoman Betty McCollum, ranking member of the House Interior Appropriations Committee, who toured the Palomino Valley Wild Horse Adoption facility north of Reno. Later, during a vote to remove the slaughter amendment, Congresswoman McCollum did not ask for a “roll call”

vote, which Congressman Amodei indicated was a significant change of protocol in a political driven arena. Congressman Amodei is optimistic there may be some movement in the wild horse and burro program.

With renewed focus on the Intermountain West and its large federally managed natural resources, Congressman Amodei believes there is opportunity to address many resource issues where both sides win.

Mr. Ed Arnett and Mr. Carl Erquiaga

Mr. Ed Arnett, Chief Scientist, and Mr. Carl Erquiaga, Nevada Field Representative for the *Theodore Roosevelt Conservation Partnership* (TRCP) addressed the importance of balancing multiple uses, federal land management and State wildlife population objectives, having synergy in wildlife conservation, Secretarial Order 3362 addressing big game winter range and migratory corridors, and key threats to wildlife migration.

The TRCP's mission is to "guarantee all Americans quality places to hunt and fish". With a partnership of over 60 sporting and conservation organizations, the TRCP serves as a single collective voice on public land policy as well as energy, wildlife, and conservation issues.

While wildlife migration has become a primary topic of interest today in many states, wildlife migration patterns are not new. Tools for identifying and monitoring wildlife movement have improved as have policies addressing protection and conservation of wildlife migration routes. With 350 species of plants and animals dependent on the sagebrush ecosystem, the Greater Sage-grouse provides the focus for achieving a synergy of conservation opportunities for providing avenues for conservation opportunities for wildlife migration corridors.

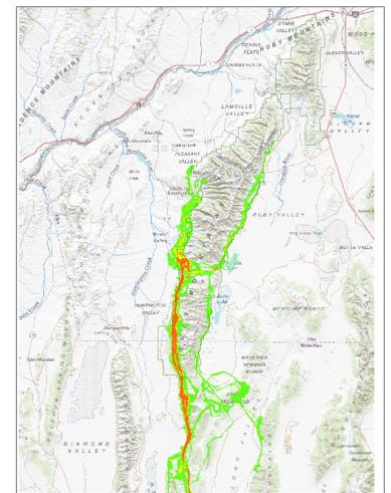
One such opportunity was the signing of Secretarial Order 3362³ addressing site-specific management activities to conserve or restore big game habitat, which helped TRCP focus on ensuring conservation durability over the long-term, balancing energy development and competing policies, etc.

Other synergy efforts include states assuming a larger role in conducting appropriate research and management including establishment of a Governor's Advisory Committee in Wyoming, which has provided recommendations to Governor Gordon. In addition, the Western Governors' Association signed a resolution addressing corridors and winter habitat.

Non-governmental organizations have also taken an active role such as the National Wildlife Federation partnering with TRCP and the Western Landowners Alliance to conduct three state-based workshops focused on identifying avenues for wildlife conservation.

In closing his portion of the presentation, Mr. Arnett addressed a significant threat to wildlife migration which are roads and highways. To address this threat, an *Ungulates and Highways* workshop was held in January 2019 with 80 participants representing state highway departments and wildlife agencies, federal agencies such as the Department of the Interior and the Natural Resources Conservation Service, non-governmental organizations, and various foundations.

Mr. Carl Erquiaga addressed a recent proposal to conduct oil and gas exploration of approximately 54,000 acres, which was later expanded to include an additional 88,000 acres, in the Ruby Mountains in northeast Nevada. The Ruby Mountains are rich in wildlife including big horn sheep, mountain goats, mule deer with a migration corridor over 100 miles long (inset), ruffed grouse, Dusky grouse, and the Greater Sage-grouse. The Rubies also are the only place in the United States where the Himalayan Snowcock can be hunted.



³ <https://www.blm.gov/policy/ib-2019-005>.

With the threat of oil and gas development and the need to protect the Ruby Mountains, TRCP and Trout Unlimited formed a coalition of 14 sporting organizations to show a unified front against the oil and gas threat. In addition, Senator Cortez-Masto introduced the *Ruby Mountains Protection Act* in Congress which received its first hearing by the Senate Subcommittee on Public Lands, Forests, and Mining.

Mr. Mike Ferguson and Ms. AnnaFaith Jorgensen

In closing the day's activities, PLF Board member Mike Ferguson and Ms. AnnaFaith Jorgensen, a graduate of the PLF Student Congress provided an overview of the Student Congress program, which was first identified in 2012 during the *General Land Office Symposium* in Boulder, Colorado.

The three goals of the Student Congress are:

1. Further engage youth in natural resources and public land management;
2. To provide BLM with recommendations from a demographic that might not otherwise be heard from; and,
3. Facilitate the agency's hiring process.

To date, four Student Congress events have been held involving 96 students. Typically, a Student Congress is held every other year.

Ms. Jorgensen highlighted that after the 2018 Student Congress, she joined PLF's Board of Directors for a two-year period. Students participating in the Student Congress take what they've learned back to their local communities and are sharing what they've learned about BLM, multiple uses, etc. Ms. Jorgensen expressed her appreciation for being involved with the Student Congress as well as the PLF.

A video of highlights from the 2018 Student Congress in Baker City, Oregon was shown.

Following each presentation, speakers addressed questions from the audience. PowerPoint presentations and videos are available on the PLF website at www.publicland.org.