



Conservation Photographer to Keynote Annual Meeting *Michael Forsberg to Speak in Sheridan on Nov. 3rd*

Award-winning conservation photographer and author Michael Forsberg will highlight Powder River's 46th Annual Meeting, *Our Water, Our Land, Our Legacy*, on Saturday, Nov. 3rd at the Sheridan Holiday Inn. Forsberg will present his work on Great Plains conservation.

Additionally a selection of his photographs will be on display at the Sheridan County Fulmer Library throughout the month of November. Powder River will hold a reception for the exhibit on Thursday, Nov. 1st from 5 pm – 7 pm at the library. Don't miss this opportunity to view his photographs in person.

Forsberg is a Nebraska native whose 25-year career as a photographer and conservationist has been dedicated to wildlife and conservation stories in North America's Great Plains, once one of the greatest grassland ecosystems on Earth. His images have been featured in publications including *Audubon*, *National Geographic*, *Nature Conservancy*, and *Outdoor Photographer* magazines. His photographic exhibitions have traveled nationwide.

In 2017, Forsberg received the *Ansel Adams Award for Conservation Photography*, and the *Environmental Impact Award* from



Michael Forsberg at the Powder River

the North American Nature Photography Association. Mike is the author and photographer of *On Ancient Wings – The Sandhill Cranes of North America* published in 2005, and *Great Plains – America's Lingerin Wild*, published in 2009. He was featured in the NET Television documentary *Crane Song*, and co-produced *Great Plains – America's Lingerin Wild*, based on his book of the same title, released on PBS in 2013. In 2011, Mike co-founded the Platte Basin Timelapse project (PBT) in partnership with the University of Nebraska–Lincoln and NET Television. Today it operates as a long-term multi-media documentary project to inform scientific research, educate, and tell stories of a Great Plains watershed in motion. A documentary film for PBS, titled *Follow the Water*, based on the project and Forsberg's traverse across the Platte Basin watershed was released on PBS last August.

Currently, he serves as contract faculty with the University of Nebraska where he teaches and is a Fellow with the Center for Great Plains Studies and is a faculty fellow with the Daugherty Water for Food Institute.

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Wyoming Takes Steps to Limit Self-Bonding

At their meeting in September, the Land Quality Advisory Board approved an important set of new standards to improve Wyoming's coal mine financial assurance requirements. The Department of Environmental Quality's (DEQ) proposed rules will significantly limit the controversial practice of self-bonding by mining companies.

The DEQ's proposed rules: 1) limit self-bonding to companies with strong credit ratings; 2) require self-bonds to be guaranteed by the parent company; and 3) limit self-bonding so no company can self-bond more than 75% of their reclamation amount. While the rules do not prevent self-bonding, most coal companies operating in the state will be unable to qualify given their poor credit ratings, partly resulting from the sustained down market the coal industry faces as utilities



Powder River Basin coal mine
Photo credit-Ecoflight

across the country retire coal plants in favor of cheaper, cleaner energy alternatives.

The September meeting followed a board meeting in March where concerns from coal companies sent the rules back to DEQ for more review. The DEQ came back to the board in September with a stronger message supporting its set of rules, which were not significantly weakened from previous versions.

The only member of the five-person board to vote against the proposed rules was Phil Dinsmoor, who works for Peabody. Echoing claims from the Wyoming Mining Association that credit ratings are not an accurate reflection of corporate financial health, Dinsmoor tried unsuccessfully to argue that merely changing the requirement related to the parent company would fix all of the problems and that the financial fitness tests currently in the rules are a better measure of whether a company is qualified to self-bond.

DEQ staff pushed back on Dinsmoor's claims, raising the question that if the current rules worked, why didn't Peabody come forward and replace its self-bonds prior to filing for bankruptcy. DEQ's bonding specialist, Kimber Wichman, added that the current rules won't catch problems "before it's too late."

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Message from the Chair



Whether it is irrigating a garden, washing the family laundry, splashing from a center pivot, or filling a tall glass amid ice cubes, water plays a significant role in our lives. Yet how often do we stop to consider this vital fluid, so critical to our comfort, our economy, and our very being? The folks who live just east of the Wyoming border, on the lower reaches of the North Platte have recently been given notice that they must start paying attention, not just to the amount of water that flows down the river, but to the potentially deadly chemicals and elements that are mixed into it. Several Nebraska cities and towns, and at least one Wyoming town, have watched their water tests coming back with alarming figures for nitrates, uranium and arsenic.

Engineers to the rescue! A group of engineers, hydrologists, and the Army Corps of Engineers have worked for several years to devise a plan to provide cleaner water to the downstream population, or, at least to those who live within municipal jurisdictions. Their best solution lies in obtaining water from the last storage reservoir upstream, Glendo, piping the water into a treatment facility, then piping it all the way to Lake Minetare in Nebraska. Towns along the way will be able to hook into the system and receive clean drinking water. The plan is still embryonic, with costs and logistics still uncertain, but, to my way of thinking, this is a lot of effort to solve a problem that may be at least partially preventable.

The pollution of a river, the Platte or any other river, is a cumulative result of the practices that occur along that river. It seems fairly obvious that waste from every use goes into the river, and what is not filtered out through natural processes flows to the next user. While the upstream users may not directly suffer the consequences of their behavior, we all do bear a certain amount of responsibility for what we do. Going to incredibly complicated and expensive lengths to make our river water potable seems a bit overboard, when a more reasonable solution might be found by identifying the sources of the problems and working to mitigate them.

Quality concerns may be huge, but it is possible that quantity issues may make pollutants seem minor. A few weeks ago, I visited the upper reaches of the North Platte in Carbon County, just over the border from the high Colorado country where the river heads. I am sure this is the driest I have ever seen the country this time of year. Leaves were curled; the ground was crunchy, and the wild critters hugged the dwindling streams. Even beaver ponds were dry. If this is a peek into the future, the future is mighty bleak. If little water falls as precipitation, little will make its way to the reservoirs and little will be available for any use, including drinking.

Water conservation makes sense, even when there is plenty available. A few years at a remote Park Service facility in Utah taught me to hone my already-healthy conservation skills. Water had to be trucked in over terrible roads, and it simply could not be brought in during certain times of the year. There was no natural source of potable water, so we learned to make total usage of every drop. Dish water washed the cupboards and the floor; rinse water went to the house plants or to flush the toilet. Buckets sat in every shower and caught anything too cold for our quick "Navy" showers. Meters kept track of usage, and there were informal contests to see who could use the least. We were a smug and smelly bunch. To this day, I catch any extra water in a dish pan and use it on the house plants or outside ornamentals.

It is easy to be complacent about our water, but it is wise to be aware of it and to appreciate what we have. Recently there was a "imagine a day without water" event, and it should become our ordinary practice to consider that possibility more often. As a group, we must make every effort to keep our water clean and to use it with good judgement. Or, as a group, we will be very thirsty.

Conservation Photographer...Continued from page 1

To pre-register for the Annual Meeting, call Powder River at 307-672-5809 or purchase tickets online until Oct. 31st at www.powderriverbasin.org and click the Donate button at the top of the page. Tickets will be available at the door the day of the event, though pre-registering guarantees a meal.

Powder River Staff

Michael Forsberg biography courtesy of www.michaelforsberg.com

Powder River Basin Resource Council (Powder River) is a grass-roots organization of individuals and affiliate groups dedicated to good stewardship of Wyoming's natural resources. Powder River was formed in 1973 and stands for the preservation and enrichment of our agricultural heritage and rural lifestyle; the conservation of Wyoming's unique land, minerals, water and clean air consistent with responsible use of these resources to sustain the livelihood of present and future generations; and the education and empowerment of Wyoming's citizens to raise a coherent voice in the decisions that will impact Wyoming residents' environment and lifestyle.

Powder River is a member of the Western Organization of Resource Councils (WORC). WORC member groups are Dakota Resource Council, Dakota Rural Action, Idaho Organization of Resource Councils, Northern Plains Resource Council, Oregon Rural Action, Western Colorado Congress, Western Native Voice and Powder River Basin Resource Council.

The services provided by Powder River include public education, community organizing and lobbying as permitted on behalf of its membership. Powder River is a non-profit, 501 (c)(3) tax-exempt organization.

Membership dues: \$30 for individuals, \$50 for families and \$20 for students and senior citizens. Powder River is dependent on contributions for its work; contributions, large and small, are welcomed.

Active Affiliate Organizations

- Cheyenne Area Landowners Coalition(CALC)
- Pavillion Area Concerned Citizens (PACC)
- Ranchers & Neighbors Protecting Our Water (RNPOW)
- Sheridan Area Resource Council (SARC)

Board of Directors

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Staff

- Executive Director-Jill Morrison
- Executive Administrator-Stephanie Avey
- Organizers-Shannon Anderson, Robin EH. Bagley, Hesid Brandow, Sheridan, WY and Monika Leininger, Laramie.

Powder River Offices:

Main Office:
934 North Main St
Sheridan WY 82801
Ph: (307)-672-5809
Fax: (307) 672-5800
Email: info@powderriverbasin.org
Web: powderriverbasin.org

Laramie Office:
203 S. 2nd Street, Laramie WY 82070
PO Box 2074, Laramie, WY 82073
Ph: (307)-286-5531

Powder River Breaks

Editor: Robin EH. Bagley
Layout: Stephanie Avey
Photos by Powder River staff and members.

Forum on Pavillion Area Water

Contamination Digs into Problems & Solutions

Three independent scientists who investigated oil and gas contamination in the Pavillion area and two landowners facing the consequences of that contamination presented their analysis and stories at a forum in October. Powder River organized the public event, held in Riverton, in order to update the community on the history of the contamination, the status of clean-up, and the future supply of drinking water to the community.

Regulators from the Wyoming Oil and Gas Conservation Commission (WOGCC), Department of Environmental Quality, and the Bureau of Land Management were invited to attend but declined to participate or discuss both their ongoing investigations and the status of well-plugging and ongoing pit contamination monitoring. Empty chairs at the forum represented these regulatory agencies.

Sue Spencer, a Wyoming hydro-geologist who spent years investigating the Pavillion area oil and gas field noted, “The discovery of oil and gas contamination in the EPA monitoring wells should have been the beginning of a focused site investigation into the extent of contamination in the Pavillion area of the Wind River Aquifer. Instead, the state took control of the investigation and seems to be trying to sweep the problem under the rug. We still have a poor understanding of the nature and extent of contamination, and there are still many unanswered questions.”

Spencer also pointed out the lack of cement below surface casings in 52% of gas wells, which likely allowed stimulation fluids of gas to enter drinking water wells. Spencer noted that according to WOGCC records, approximately 11 million gallons of stimulation fluids were used in the area, and the tight spacing in the field (40-acre spacing) exacerbated the problem. Spencer warned that we need to place a higher value on protecting our groundwater resources up front.

Impacted Pavillion area landowner Evelyn Griffin, whose

family has several gas wells on their property, talked about losing her sense of taste and smell after fracking took place in the area. She noted that, “After the 2011 EPA report came out documenting groundwater contamination and implicating the oil and gas industry, Wyoming took over the investigation, and the door was slammed in the landowners’ faces. Since then, the state disbanded the Pavillion Working Group, and we have not been involved or well-informed about what is happening with the clean-up, plugging, or the extent of contamination in our area.” Griffin also expressed concern about whether there will be a future supply of clean water and why Fremont County has raised their property taxes under these circumstances.

Dr. Dominic DiGuilio, a former EPA environmental engineer and senior research scientist who conducted subsequent research work at Stanford University, focused on the impacts of the 57 unlined production pits in the area where diesel fuel, drilling fluids, and fracking flowback water were dumped. These unlined pits were within 2,000 feet of 48 domestic wells. According to documents filed with agencies and reviewed by DiGuilio, approximately 530,000 gallons of diesel fuel and another 350,000 gallons of stimulation fluids were disposed of in unlined pits. These practices resulted in high levels of benzene, toluene, ethylbenzene, and xylenes (BTEX) found in the soils and shallow groundwater in the area.

DiGuilio also pointed out the need for more investigative work because the state used inadequate criteria when investigating the extent of contamination from several pits and subsequently deciding which locations should be placed in the Voluntary Remediation Plan, the state’s clean-up program.

Pavillion area landowner Jennifer Murdock also told her story, “The impact of the Pavillion area water situation has been devastating

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Delinquent *Ad Valorem* Taxes Hurt Counties & Schools

Most of our members are probably familiar with *ad valorem* mineral production taxes and why they matter in Wyoming. However, for those who have not been following this topic, here is an overview.

What Are *Ad Valorem* Mineral Production Taxes?

Ad valorem taxes on mineral production are property taxes on the minerals and are collected by counties rather than the state. *Ad valorem* taxes are currently collected an average of 18 months after minerals are produced...enough time that a lot can happen in the minerals markets. This collection schedule differs substantially from state-level collection of mineral production taxes (severance taxes), which are collected on a monthly basis.

Ad valorem taxes are used to fund a variety of county services, such as emergency response and road maintenance. In addition, a significant portion of these taxes are also redistributed to all Wyoming school districts, providing a major portion of school funding for every district in the state.

Bankruptcies, Downturns, and *Ad Valorem*

During recent years, several large mineral companies operating in Wyoming have entered bankruptcy protection due to downturns in mineral sales. When this happens, secured lenders, such as banks, are at

the front of the line when companies begin to pay off their debts. Currently counties are not considered secured lenders, so debts owed to them do not take priority. In order to recapture any of the debts companies owe them, counties frequently have to hire legal experts to represent them in bankruptcy court.

When counties do enter the bankruptcy process, there is still no guarantee they will be able to recoup all debts the company owes them. In the Alpha Natural Resources bankruptcy, Campbell County spent close to \$1 million on legal fees. They were able to collect all but about \$4 million of the \$19 million Alpha owed them.

In addition to bankruptcies, a new reason for concern over the *ad valorem* collection schedule has recently arisen. Oil and gas company Vanguard Natural Resources is suing seven Wyoming counties and the state for a refund on taxes the company already paid. The company claims they paid the taxes without permission and in error of bankruptcy rules, which goes back to counties not having secured lender status. This is being referred to as a “clawback.” If the company is successful in getting those taxes back, it could set a dangerous precedent for future bankruptcies. If *ad valorem* taxes were collected monthly, the impact of such clawbacks would be greatly reduced as companies would be more

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The Niobrara Continues to Boom, but at What Cost?

As the price of oil continues to rise, areas located within the Niobrara Formation, like Cheyenne, are seeing an increase in high-density oil and gas development. Powder River has heard concerns from residents and landowners outside Cheyenne related to air, noise and light pollution, as well as concerns about water safety, diminishing property values, and the ability to make a living.

Campstool Road lies east of Cheyenne's city limits, off Interstate 80. This once pristine and spacious landscape is now sprinkled with flares from oil and gas drilling operations. As the temperature begins to cool around sundown, you can see the air become denser as you look across the horizon of oil rigs. One landowner in the area has complained that the air gets so polluted that she is unable to see her truck in the driveway in the early morning hours and has decided to move away due to growing concerns over her family's health.

Impacted areas like these are not only in need of greater air quality monitoring and compliance, but also stricter rules and regulations on how much companies are able to flare and release hazardous pollutants and methane gas into the atmosphere. The state's continued laissez-faire attitude toward this flaring and pollution comes at the cost of more squandered severance tax money and jeopardizing the health and well-being of Wyoming residents.

In other areas around Cheyenne, drilling operations seem to appear out of thin air. The state of Wyoming has a setback distance of 500 feet from drilling infrastructure; however, amongst Wyoming's open skies and sparse landscape, 500 feet is incredibly insufficient, and industry is placing rigs just beyond 1,000 feet (less than that distance

would require notice and mitigation of noise, lights, etc.). Despite the close proximity of drilling operations at just over 1,000 feet from homes, companies such as EOG Resources still fail to provide minor mitigation measures such as hay bales to protect nearby residents from noise and light pollution.

Other safety issues arise for residents that live near oil and gas development, including increased semi-truck traffic as nearby oil and gas operations produce traffic with tanker trucks and other large vehicles speeding along residential dirt roads and neighborhoods. This increased traffic endangers individuals, livestock, and children.

Powder River affiliate, the Cheyenne Area Landowner Coalition (CALC), is taking action to address several of these concerns. Most recently at the Department of Environmental Quality's Air Quality Advisory Board meeting about controlling methane and hazardous air pollution, often referred to as Leak Detection and Repair monitoring and Best Available Control Technology guidance, Cheyenne area landowners expressed their concerns and asked the state to do everything possible to ensure their health and well-being (see article "Strong Air Pollution Controls on Oil & Gas Needed to Protect Public Health"). Additionally, CALC continues to voice their concerns to their county commissioners about taking additional measures to ensure that operations do not negatively impact residents' lifestyles and health.

Monika Leininger
Powder River Staff

Strong Air Pollution Controls on Oil & Gas Needed to Protect Public Health

Powder River members have been pushing Wyoming to require the oil and gas industry to implement stricter air pollution controls on oil and gas facilities. The failure of industry to control the release of methane and many other hazardous air pollutants is having serious impacts on people's health and is becoming a growing problem around the state. Additionally, the release of methane gas wastes hundreds of millions of dollars for royalty owners and the public.

Earlier this year Powder River wrote to Governor Mead and Wyoming Department of Environmental Quality (DEQ) Director Todd Parfitt asking for stronger leadership to control oil and gas air pollution. Subsequently, the DEQ did propose new guidelines for the oil and gas industry, which were released this fall for public review and comment. In late September, Powder River staff and leaders from our affiliate, Cheyenne Area Landowners Coalition, testified in a hearing before the DEQ and Air Quality Advisory Board to push for tighter air quality controls.

Cheyenne area leaders presented the most compelling testimony of the day with stories about impacts from oil and gas pollution giving people asthma and causing headaches, bloody noses, sleepless nights, and triggering smoke alarms inside homes at night.

Cheyenne area impacted landowners Wayne and Myrna



As evening falls, haze caused by air pollution from the oil and gas field settles over the land.

Brautigam both testified at the hearing. "We've got to use the best technology available. Our county commissioners say they can't do anything; they've been legislated out of the process. We've come up here to talk to the Air Quality Advisory Board; hopefully these people have enough sense to do something that can help the individuals," said Wayne during his testimony.

Myrna told the board members and DEQ about her son's asthma and how the pollution threatens his life, saying, "We have to do something about the air pollution. There's flaring from the well across from us, flaring from the wells two miles north of us. We beg you, please, do something."

Unfortunately, the DEQ proposal for oil and gas air pollution controls is weaker than we had hoped, and while it will do a little to improve the situation, it will fail to significantly reduce health impacts and prevent wasteful practices in the oil and gas industry. In fact, the DEQ admitted during the hearing that they had compromised with the Petroleum Association of Wyoming in coming up with the final weaker proposal.

Cheyenne landowner Dawn Dungan, whose family has been feeling the impacts of oil and gas air pollution for the past few years, said, "This is not safe. My neighbor had the same issues as me. I have seizures from breathing this stuff; I have rashes, and my hearing is

Financial Tools for Solar System Installation

Solar Financing

Reliant Federal Credit Union's CEO, Steve Higginson, sat down with Powder River to film a video highlighting the solar system installed at their main office in Casper. Reliant installed their solar system in 2009, and (no surprise) it has worked flawlessly ever since. The board chose to install solar panels in order to do their part to help the environment.



The credit union will continue its commitment to renewable energy by offering financing options for members who are interested in solar power. The credit union also has offices in Glenrock and Douglas. Higginson said the bank welcomes the chance to work with members on financing options for solar projects. Please visit our website's Renewable Energy page to see our video with Reliant's CEO.

Does your bank or credit union finance solar systems? If so, please let us know so that we can alert other members to financing options!

Federal Residential Renewable Energy Tax Credit

The federal tax credit is still available to assist with the costs of solar installation; however, it won't be around much longer. The last year to claim the full 30% tax credit will be 2019. In 2020, a 26% tax credit will still be available. Then it will be reduced to 21% in 2021, after which the credit will no longer be available.

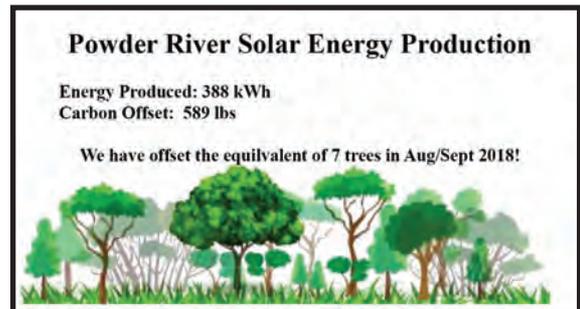
The credit can be claimed for solar systems, small wind systems, solar hot water installations, and battery backup systems. In order to claim the credit, the renewable energy system must be installed on the system owner's principal residence. If you are thinking about installing a solar system, timing your installation with the tax credit in mind will help to reduce your upfront costs.

Hesid Brandow
Powder River Staff

RENEWyoming Solar Videos

Stories from homeowners & businesses across the state

Check out all of our solar videos on our website, www.powderriverbasin.org, and click on What We Do, then Renewable Energy.



Delinquent Ad Valorem....Continued from page 3

current on their debts when entering bankruptcy.

Powder River's Work on Ad Valorem Taxes

During the past year, Powder River has published two reports detailing *ad valorem* collection issues and potential solutions. In compiling the reports, we collected information on mineral tax delinquencies from 13 Wyoming counties with high levels of active mineral extraction. All told, our research uncovered \$55 million in delinquent mineral taxes from 2006 to 2016. That total does not include debts written off by several counties as uncollectable, nor does it include any debts on the books prior to 2006. During that same period, the state was owed less than \$3 million, a difference caused largely by the state's monthly tax collection schedule.

In our reports, Powder River has offered four suggestions to help with county collection of *ad valorem* taxes. These include:

- Changing county collection of mineral production taxes to a monthly schedule, matching the state's collection of severance taxes;
- Attaching automatic and perpetual liens to mineral property when it is produced, giving counties a higher standing in bankruptcy court;
- Creating a fund to assist counties that do not have the upfront capital to hire bankruptcy lawyers, and

- Implementing automatic tax status checks by the Wyoming Department of Environmental Quality and the Wyoming Oil and Gas Conservation Commission prior to allowing the transfer of assets, meaning that companies must pay their taxes before selling mineral property.

In addition to our research, we have testified in Joint Revenue Committee meetings, presented to the Wyoming County Treasurer's Association, and kept in touch with county attorneys. Our efforts are paying off. Currently, the Revenue Committee is considering legislation that would change *ad valorem* tax collection to a monthly schedule, an adjustment that would greatly reduce outstanding debts on the books at the time of a company bankruptcy.

In September, when we presented our proposed solutions to the *ad valorem* tax issue to the Treasurer's Association, we recommended that the organization be involved in the crafting of any legislation involving county collection of *ad valorem* taxes.

Hesid Brandow
Powder River Staff

DELINQUENT MINERAL PRODUCTION TAXES BY COUNTY UPDATED JULY 2018

Campbell-----	\$32,740,475.11
Carbon-----	\$10,386,688.94
Sheridan-----	\$7,457,659.00
Natrona-----	\$926,682.79
Sweetwater-----	\$910,792.09
Johnson-----	\$779,723.93
Crook-----	\$500,352.57
Fremont-----	\$124,449.62
Converse-----	\$297,331.00
Sublette-----	\$214,180.00
Hot Springs-----	\$392,268.00
Laramie-----	\$116,882.43
Weston-----	\$75,957.99
Total-----	\$54,923,443.47

Proposed Pipeline Water Discharge Troubles Landowners

In a move echoing the days of unfettered discharge of produced water coming from thousands of coalbed methane wells, the City of Gillette has proposed dumping almost one million gallons of water down ephemeral streams near Carlile in Crook County. The discharged water would be associated with treatment and testing of new wells for the Madison Pipeline – a multimillion dollar project bringing water from its neighboring county to Gillette in response to the dewatering of the Fort Union Formation by oil, gas, and coal development.

To say local landowners are not too pleased with Gillette's proposal is an understatement. Dozens showed up to a public meeting hosted by the Department of Environmental Quality (DEQ) in Moorcroft in mid-September to voice concerns and ask questions. Of particular concern is that the proposed discharge would run through a rural subdivision, near homes and water wells. Flooding, erosion, and long-term damage to the land and vegetation are all likely outcomes of the city's proposal. Potential impacts to water quality is also on everyone's mind as landowners in the area still grapple from a recent situation of water wells going bad or dry. While the DEQ has ruled out the Madison Pipeline wells as a direct cause of the water contamination, it has identified previous discharges of produced water and its

interaction with local geological conditions as a possible contributing factor to the water problems.

Another concern is Gillette has yet to get approval from landowners for the discharge. Negotiations for surface access have been sparse – or nonexistent – and landowners fear the city will end up using its eminent domain powers to condemn its way on to the land.

In response to these concerns, DEQ worked with Gillette on an alternative proposal to pipe the water directly to Keyhole Reservoir. This alternative would address the landowners' concerns and would prevent the impacts, but of course it costs a bit more so the city is not yet on board.

The two proposals have been released by the DEQ in the form of dueling draft permits. Interested landowners and the public can submit comments to Jason Thomas, WDEQ - Water Quality Division, 200 West 17th Street, Cheyenne, WY 82002 or by fax (307-635-1784). All comments must be received by November 2, 2018.

Shannon Anderson
Powder River Staff

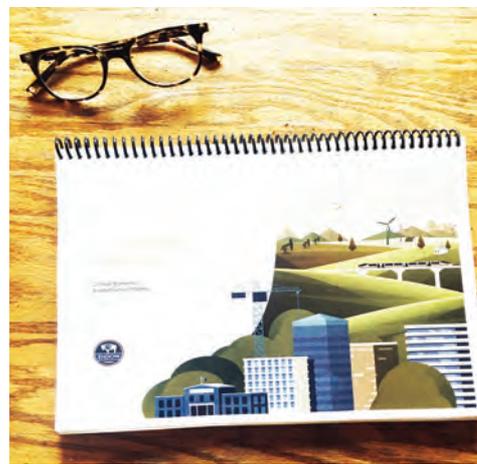
ENDOW Report Released - What's Next?

In August the ENDOW Executive Council released the 20-year Economic Diversification Report outlining future strategy and actions to diversify Wyoming's economy. Following the 2017 Legislative Session, Governor Mead formed the Council to drive our state's economy forward and move beyond the boom-and-bust cycles that our state has historically experienced.

The report estimates ENDOW recommendations will grow the state economy by \$12 billion, create 104,000 more jobs, add 108,000 more people to the state's population, and increase wages up to 20%. Initiatives mentioned in the report are key to Powder River's work such as a focus on renewable energy and empowering the agricultural sector of our economy.

In the Natural Resources section of the report, ENDOW refers to wind and solar as "untapped resources" and aspires by 2038 to "increase solar generation to be 11th in the nation, matching the state's ranked potential." The report also aspires to have at least two wind or solar energy component manufacturers in Wyoming by 2038. In a section on barriers to implementation of these aspirations, ENDOW's report states "restrictive net-metering regulations and other policies are barriers to growth."

In the Sustainable Harvest section of the report, ENDOW aspires by 2038 to "elevate Wyoming's brand to a trademark of excellence," by empowering young people in the agricultural industry, promoting Wyoming meat products, building USDA-inspected facilities, and creating a state-branded website to enhance the market's



development. In the appendices of the report, ENDOW notes, "the high cost of entry and general transition and succession challenges are barriers to young people getting started in the agricultural industry in Wyoming."

In December 2017, ENDOW released its preliminary recommendations which included increasing air service, improving broadband technology, creating computer science standards for K-12 ages, developing workforce training programs, and providing a grant fund for emerging business startups. Six ENDOW bills also were passed at the 2018 Legislature on those subjects, and ENDOW supported a variety of bills that would increase Wyoming's access to blockchain activities.

However, this year ENDOW isn't aiming to take such legislative action. The only bill that ENDOW will be pushing in the 2019 General Legislative Session is the appointment of a Chief Economic Diversification Officer and a Commission for Economic Diversification. ENDOW Chairman Greg Hill presented this piece of legislation in August at an interim legislative Minerals, Business, and Economic Development Committee meeting and said, "We've done 1% of the work, the other 99% is up to you." Additionally, ENGAGE, which is a collaboration of young people in Wyoming under the age of 35, continues to stay involved in economic diversification activities and hold ENDOW accountable by pushing for future legislation that will create an ecosystem for the private sector to thrive.

Monika Leininger
Powder River Staff



Dead Farm Bill, Zombie Animal ID, and NAFTA 2.0

Congress Fails to Pass a Farm Bill

The shadow of the September 30th deadline loomed over the Farm Bill proceedings as they ground along all summer. With the House and Senate passing radically different bills, it was uncertain whether or not the conference committee would be able to iron out a final bill before the current bill expired. In the end, they didn't reach a deal, and the clock ran out.

The committee reached agreements on some of the conservation programs and commodity titles as well as the Rural Energy for America Program (REAP). But the two bills' broad gap on the Supplemental Nutrition Assistance Program (SNAP) could not be bridged, ultimately dooming a final agreement.

With the expiration of the 2014 bill and no extension approved by Congress, only permanently funded programs, including SNAP, are funded through Dec. 7th. Other programs, such as those addressing local foods, beginning farmers and ranchers, REAP, and certain conservation initiatives are now "orphaned" until a new bill is passed. The conference committee staff is still working on the bill, and the committee may come together again after the election in hopes of reaching an agreement. We will keep you posted on developments.

USDA Revives Animal ID

Late September brought unpleasant tidings from USDA announcing they have revived animal identification, in a manner of speaking. In a rather backdoor-move, they announced that they will stop distributing the free brucellosis tags in 2019 and instead require ranchers to purchase electronic identification tags at a reduced cost.

Since not all cattle ranchers use the tags, this won't apply to everyone. USDA will not initiate rulemaking, so using the electronic tags will not be mandatory, except at some point, the brucellosis tags won't be available, and producers will be forced to buy the electronic tags.

Problematically, there is no evidence that USDA will assist states with implementing the necessary infrastructure to read the tags. This will be a challenge for sale barns and meat processing plants, which will need equipment and software to read the tags.

At this point, Powder River and other groups are researching the best way to get ahead of USDA on this matter. Even though it seems innocuous at this point, ranchers who have been fighting the national animal identification system (NAIS) for years are skeptical about USDA's motives, and are reluctant to let the agency get a foot in the door when it comes to animal ID. Stay tuned for updates!

NAFTA 2.0

The administration released the text of the newly negotiated United States-Canada-Mexico-Agreement (USMCA) but it's just NAFTA with new initials. While there are some small improvements over the first NAFTA, the deregulatory language regarding food safety and chemical use (language migrating from the Trans Pacific Partnership) and the heavily pro-business slant of the agreement mean that it won't be good for farmers and ranchers, workers, consumers, or the environment in any of the countries.

Furthermore, country-of-origin-labeling (COOL) was not included in the agreement. This was a big disappointment to a number of groups who had been advocating for its inclusion. However, the

.....continued on page 11

Local Foods Committee Sows Seeds for 2019 Growth

In October, Powder River's Local Foods Committee met to plan for 2019. Members brainstormed ideas and shared updates on this year's local foods efforts.

The Sheridan Food Forest continues to grow and flourish, and members are eager to tackle projects next spring. Carol LeResche, who chairs the Food Forest Committee, said that ideas for next year include raising funds for pathway paving stones as well as building a gazebo so the food forest can be better utilized as a gathering place. During the 2018 season, several trees in the forest bore fruit for the first time.

Members also discussed the recent Harvest Celebration & Potluck as both a fundraiser and a connection to local foods, noting the importance of maintaining and strengthening this connection. Local Foods Committee Chair Rachel Bourgault agreed to serve on the Harvest Celebration Committee in 2019.

The committee discussed the Sheridan Seed Library, which continues to see low usage in the community. Our recent partnership

with Sheridan 4H is helping to spread information about the seed library. Collaborations to date include a new mobile seed library that 4H kids can take to the Thursday farmers' market during summer months and a joint Seed Saving Workshop held in October (see Seed Saving article on page 8). Another seed-related workshop will be held in the spring in an effort to boost community awareness. Additionally, this winter members will hold a workday to refresh the library's seed inventory.

Other topics to be explored in greater detail at the next committee meeting in December, included: soil workshops, Supplemental Nutrition Assistance Program (SNAP) at local farmers markets, and in-state meat processing.

Anyone interested in joining the Local Foods Committee can contact either Robin or Hesid at the Powder River office at 307-672-5809.

Robin EH. Bagley & Hesid Brandow
Powder River Staff

Powder River Objects to Contura Coal Mine Bonding

In early October, Powder River filed objections to the Department of Environmental Quality's (DEQ) proposed renewal of Contura's permit for the Belle Ayr coal mine south of Gillette. Specifically, we objected to Contura's use of ranchland as collateral to guarantee its reclamation bond.

We questioned the value of the approximately \$27 million ranch and challenged DEQ's treatment of the real estate appraisal as a confidential document. Since DEQ is not disclosing the appraisal document, we're not sure why the ranchland got valued as high as it did. But based on a comparison of rural property for sale in Northeast Wyoming we reviewed before filing our objections, it seems unlikely that the fair market value of Contura's land could be \$27 million.

You may be wondering why we are objecting to Contura's bond at all, when it was widely announced at the end of last year that Contura basically gifted its Powder River Basin mines of Eagle Butte and Belle Ayr to a company called Blackjewel. Contura is involved because the permits have yet to be transferred over to Blackjewel. While the transfer was supposed to go smoothly, it got held up as DEQ grappled with a number of outstanding permit violations by Blackjewel's owners in other states and as Blackjewel delayed posting new reclamation bonds



The Belle Ayr Mine. Courtesy of Shane Moore, 2018.

for the mines. This leaves Contura still on the hook for reclamation bonding and other liabilities associated with the permits. Moreover, according to records we reviewed from DEQ, Blackjewel is proposing to carry forward the real estate collateral bond when the permits transfer to them.

We are objecting to raise serious questions about the valuation and transparency of the use of the ranchland to guarantee coal mine cleanup costs – questions that will become even more

important as Blackjewel looks to take over the permits.

We are also objecting because as companies find it more difficult to use self-bonding under the new DEQ rules (see story on page 1 in this edition), real estate collateral bonds might be the next bonding loophole companies will exploit. As the only community group working to address the impacts of coal mining in the state, it is vital that we weigh in on these important issues to prevent problems for the state.

Shannon Anderson
Powder River Staff

Seed Saving Workshop Highlights Importance of Biodiversity

On Sunday, October 14, Sheridan County 4-H and Powder River Basin Resource Council held a Seed Saving Workshop at the UW Extension Office on the campus of Sheridan College.

Presenters Rachel and Luc Bourgault own Lower Piney Heirloom Vegetable Gardens, a popular provider of a wide variety of produce at local farmers' markets.

Rachel explained to a group comprised mainly of kids that you can't save seed from most vegetables bought at the store. This is because most commercial produce farms use hybridized strains. In order to harvest viable seeds, the vegetable needs to be an heirloom variety.

According to the Bourgalts, preservation of biodiversity is the most significant reason for seed saving. Rachel said that some vegetables, such as the artichoke, have only a couple remaining varieties. She mentioned the potato famine in Ireland as a dramatic demonstration of the dangers of losing crop diversity.

While many people have heard of the potato famine, the importance of access to a variety of seeds is far from merely historical. Recently, Syria lost all of their seeds during their civil war and they had to access seeds from the Svalbard Seed Bank in Norway.

Aside from those larger reasons, Rachel highlighted more



personal motivations for using heirloom seeds. She said that, although they aren't as pretty as many hybrids and frequently do not have the shelf-life of hybrids, heirloom vegetables are more flavorful and nutritious.

Also, in very particular climates like Sheridan County, it is important to save seed as commercial seeds are not specialized to our climate. However, seeds saved from local sources will acclimatize to the local region after several generations, leading to better yields.

Rachel ended the presentation with some hands-on advice for those wanting to start saving seeds:

- When you buy seeds from the store, look for heirloom and open pollinated seeds. Those are the ones you can save.
- When saving seeds, look for the best specimen you have to save seeds from. It will have the best traits.

The Powder River Basin Resource Council maintains a seed library with free seeds at the Watt Agricultural building on the Sheridan College campus.

Written by Kevin Knapp, reprinted from County 3 News on Oct. 15, 2018.

Interior Needs to Reform Oil and Gas Policies to Benefit Taxpayers

More than year ago, individual landowners in Campbell County, the Powder River Basin Resource Council, former Montana Department of Revenue Director Dan Bucks and others joined in a petition urging the federal Department of the Interior to update how they manage oil and gas leasing. The petitioners were hoping to gain a fairer return for the American people from leasing publically owned resources and to come into compliance with existing federal laws.

The petition asked Interior to meet its legal obligation to ensure a fair return of revenues to the public in the following ways:

- **Charging higher, market-tested royalty rates** (such as those used by states and the private sector), instead of the inadequate fixed 12.5 percent rate – which was established nearly a century ago, in 1920.
- **Updating bonding requirements**, which exist to insure funds are available for reclamation and restoration of lands when oil and gas production ceases. The petition called on Interior to increase these financial assurances to reflect current costs of restoring public and private lands developed for federal oil and gas.
- **Increasing rental rates** on federal leases to a level that incentivizes oil and gas production. Today only 50 percent of federal leases in the Rocky Mountain states are producing, and the rest are being held for speculation.
- **Increasing minimum lease bids**, as recommended by the Congressional Budget Office, to deter further speculative lease purchases.
- **Reforming lease suspension practices** to force undeveloped oil and gas leases to be either diligently produced or cancelled so that the land can be managed for other beneficial uses, and
- **Stopping the leasing of lands** with low potential for oil and gas production and managing those lands for other purposes of greater benefit to Americans.

Together, these policies could generate billions of dollars annually for the American people, and for states like Wyoming and local

communities that benefit from federal oil and gas production. For years, economic studies have indicated that higher royalty rates generate large amounts of additional revenue with negligible impact on production. Yet, today Federal lease bids and royalty rates lag behind those earned by private landowners for private leasing, and even by the State of Wyoming for state leasing.

The proposal would also address Wyoming’s debilitating orphan well problem. While our state has taken steps to increase bonds required to ensure cleanup, Interior has not acted to address thousands of orphan federal wells left abandoned on federal lands and private “split estate” lands. Interior should deal with the last bust in coalbed methane before going full speed ahead with the next boom. Requiring adequate bonding up front is the only way to prevent future taxpayers from paying for orphan well reclamation, but Interior is ignoring the problem.

Unfortunately, it’s now been over a year and Interior has ignored this important petition. The agency hasn’t even responded to say, “Thanks, but no thanks.” Instead, Secretary Zinke has not only refused to respond, but has made things much worse, by ordering Interior to fast-track oil and gas leasing using decades-old, bargain-basement lease and royalty rates. Since the groups filed the petition, he has issued nearly 822,000 acres of leases to the oil and gas industry in Wyoming—all with royalty rates lower than charged by private landowners and the State of Wyoming.

Our federal minerals are held in trust for all Americans, and must be managed in a way that provides a fair return to all of us as owners. Interior needs to consider common sense approaches to benefit American taxpayers, Wyomingites, our local governments, and our public lands.

Bob LeResche is Vice Chair of the Powder River Basin Resource Council. He is a former Commissioner of Natural Resources for the State of Alaska, Executive Director of the Alaska Energy Authority, investment banker and CEO. With his wife Carol he operates a ranch and organic heirloom vegetable farm near Clearmont, Wyoming.

Wild & Scenic Film Festivals

Powder River, along with the Wyoming Outdoor Council and the U.W. Environmental & Natural Resources Club, hosted two Wild & Scenic Film Festivals this fall in Cheyenne and Laramie. Ten short films on the outdoors and public lands were screened, including two films that featured Wyoming

Powder River Staff



Limit Self Bonding...Continued from page 1

When Dinsmoor next tried to argue that Wyoming needs self-bonding to be available to companies to be “competitive” (apparently claiming that without self-bonding coal companies either wouldn’t mine or mine as much in the state), DEQ’s Land Quality Administrator Kyle Wendtland responded that self-bonding was largely phased out after the three big coal company bankruptcies, and yet the state is still by far the largest thermal coal producer. He added that Wyoming has special risk, too, stating, “You have to consider the physical size of the mines in Wyoming. Nowhere else in the country are they talking about \$250, \$350 million liability.”

In response to a board member’s questions about carving out an exception for rural electric cooperatives, Wendtland replied: “Wyoming is not a bank. We’re not in the business of bankrolling reclamation...If

you cannot make that minimum, self-bonding just isn’t the right choice.”

Board Member Micky Shober, Campbell County Commissioner, moved to affirm the proposed rules, with Board Member Jim Gampetro from Buffalo seconding. Board Members John Hines (rancher from Campbell County and former President of the Wyoming Senate) and Teton County Commissioner Natalia Macker voted in favor. The proposed rules now move to the Environmental Quality Council.

Shannon Anderson
Powder River Staff

Strong Air Pollution...Continued from page 3

gone from the loudness of the oil and gas rigs at night.” Dungan pleaded with DEQ to do more saying, “Only you can stop this. We are sick from this; we are sick.”

Powder River told the DEQ:

- 1) To recommend that the same air pollution controls that are required in the Jonah Pinedale area should be applied to the rest of the state;
- 2) The requirement that new or modified facilities implement low, intermittent, or zero-bleed controllers is fair and / reasonable;
- 3) The burden should be on the oil and gas industry, not DEQ, to demonstrate that increased emissions will not occur without control devices;
- 4) The proposal to allow industry to revert to higher 2010 pollution thresholds is an arbitrary concession to industry, is not Best Available Control Technology, and the higher threshold will lead to more air pollution and must be rejected;
- 5) Changes to the definition of modified facilities would be

- problematic since both new and existing sources would contribute to exceeding the threshold, and
- 6) DEQ must reduce emissions as much as technology and economics will allow, and they should require quarterly leak detection and repair inspections because the cost and performance of a proven control device does not change from one part of Wyoming to another, and quarterly inspections will serve to reduce emissions statewide.

Powder River leader and Cheyenne landowner Marilyn Ham stated, “It’s a waste for the state of Wyoming that we are flaring a lot of gas that should be captured and should be among our own economic benefit rather than put in our air to breathe.”

The DEQ will review all comments and issue a decision before the end of the year. Powder River and our members will continue to work to reduce oil and gas air pollution and waste as well as work to protect public health and safety.

Jill Morrison
Powder River Staff

Pavillion...Continued from page 3

for us as landowners. While we are located in the middle of the area most impacted area, we have no contamination of our shallow artesian water well, but we have not been able to sell our property. Potential, committed buyers can’t find lenders willing to finance them under the ongoing circumstances in our area.”

Murdock said her family purchased the small farm when looking for a good place to raise their family, but now that her sons are grown and serving in the Marines, they have been unable to sell their farm. Murdock also explained that even though they have a cistern and reverse osmosis system, the bank still refused to approve the loan for their willing buyer because of the stigma in the area.

Mike Wireman, a hydro-geologist and former EPA national groundwater expert, concluded the forum by focusing on more recent studies on domestic water wells in the area and where we need to go in the future. Wireman discussed the presence of widespread methane, which results in the growth of bacteria that feeds on the methane and impacts water quality. He pointed out that the DEQ’s consultant report concludes that methanotropic bacteria “were detected in notable

numbers throughout the area and may be considered ubiquitous.” Wireman also indicated that numerous poorly constructed gas wells leaked methane gas in the aquifer. “The problem of methane and methane-eating bacteria is difficult to address, is widespread and is difficult to remediate,” he said.

Wireman also discussed that fact that the problems with oil and gas contamination will likely grow because we fail to regulate oil and gas fields as major industrial sites. He recommended that a sustainable water supply be provided for Pavillion area impacted homeowners, plus the state and federal agencies must be more transparent regarding their work to remediate contamination, including their plugging and abandonment activities in this field.

Powder River will continue to work with landowners, agencies and others to get to the bottom of Pavillion area contamination and find solutions for homeowners.

Jill Morrison
Powder River Staff

Dead Farm Bill....Continued from page 6

investor state dispute settlement (ISDS) is out of the agreement—this is an improvement over the original. But it's overshadowed by heavy deregulation and still allows companies to declare that other countries' laws (including state and local ones) are trade barriers. So the end result of eroding local control may be the same, even though the process is more transparent.

Lastly, there was some news about better market access for US wheat and dairy farmers, but the results may fall short of the promises. The market shares for both wheat and dairy may be too small to make a difference for US farmers.

Overall, NAFTA 2.0 is rife with problems that won't help anyone except multinational corporations, just like the first one. The agreement will have to be signed by Nov. 30th and then Congress will have to vote up or down on the agreement, no amendments allowed, as Fast Track rules apply. It's important to tell the Wyoming Congressional Delegation to oppose this agreement as it won't help our ag producers and further erodes our local control.

Robin EH. Bagley
Powder River Staff

Powder River Basin Resource Council
46th Annual Meeting
Saturday, November 3, 2018

Our Water, Our Land, Our Legacy



Keynote Speaker

Award-winning conservation photographer

Michael Forsberg

Presenting his work on Great Plains Conservation

Holiday Inn
1809 Sugarland Drive
Sheridan, WY

4:00 Social Hour, Music and Live/Silent Auction
7:00 Dinner and Keynote: Michael Forsberg

Members \$45 Non-Members \$55

Call 672-5809 by October 26, 2018 to guarantee a meal.



Michael Forsberg Art Exhibit

**Sheridan County Fulmer Library –
Throughout the month of November**

Explore the diversity of Northern Great Plains ecology through Michael's spectacular photographs.
Reception Thursday, Nov. 1st from 5 – 7 pm,

Sheridan County Fulmer Library.
Refreshments served. Free & open to the public.

13th Annual Harvest Celebration

The 13th Annual Harvest Celebration was held on Sept. 8th at the Big Horn Woman's Club. Powder River raised over \$7,000 from the event! We would like to thank all of our sponsors, attendees, pie makers, and volunteers. And thank you to everyone who brought food; as always, the food was bountiful, delicious, and local! We also want to thank everyone who donated raffle prizes. A special thank you to Powder River Angus for the beef and Barlow Ranch for the lamb, and to the Sheridan American Legion for grilling the burgers!

Sponsors: Sheridan Meat Market, Prariana Farms, Landon's

Greenhouse, Good Health Market, Barlow Ranch, Robert & Nancy Sorenson, Durham Ranch, American Legion, Sheridan Implement, Muddy Paw Prints, First Federal Bank & Trust, Heartland Kubota, and The Business Center.

Raffle winners: 1) Durham Ranch Bison Burger – Bruce Kuehne, 2) Heartland Kubota Equipment Rental – Chris Carter, and 3) Local Foods Basket – Sara Evans-Kirol.

Powder River Staff





934 North Main
Sheridan, Wyoming 82801

Encouraging Responsible Development Today... _____ For Tomorrow...

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Save the Date

- November 3rd, Powder River Annual Meeting, Sheridan
- November 4th, Board Meeting, Sheridan
- December 6th, Annual Meeting Raffle Drawing

Planned Giving and Estate Planning Gifts: Don't Forget Powder River Basin Resource Council

The Powder River "family" has been thinking a lot about the future lately, because, as the saying goes, "We aren't getting any younger." We want to make sure this organization remains viable for future generations in the same way it serves today's members. For this reason, we are inviting you, our extended family of members and donors, to consider including Powder River in your estate plans.

More specifically, we are asking that you consider designating Powder River Basin Resource Council as a beneficiary in your will. Your gift will create a living legacy allowing Powder River to continue our work far into the future and helping to ensure that Wyoming remains the place we know and love for our kids and grandkids.

As one long time Powder River member, Digger Moravek stated, "I want to raise Hell long after I'm gone." You, too, can do this with a

generous bequest to Powder River.

Please consult your legal and financial advisors about how you can use a variety of estate planning tools to support Wyoming's most effective grassroots member organization, and how you might benefit. For example, there is a tax exemption for estate tax rates of up to \$5 million.

Thank you! If you have any questions, please give Powder River a call at 307-672-5809

**Powder River Basin Resource Council
Fundraising Committee**

Wyoming Delegation Contact Information

Barrasso, John (R)
307 Dirksen Senate Office Building
Washington, DC 20510
Website: barrasso.senate.gov
Phone: (202) 224-6441
Fax: (202) 224-1724

Enzi, Mike (R)
379A Senate Russell Office Building
Washington, DC 20510
Website: enzi.senate.gov
Phone: (202) 224-3424
Fax: (202) 228-0359

Cheney, Liz (R)
416 Cannon House Office Building
Washington, DC 20515
Website: cheney.house.gov/
Phone: (202) 225-2311
Fax: (202) 225-3057