

Circle Speaker

APRIL—JUNE, 2022

WHITE CLAY & NAKODA ENVIRONMENTAL NEWSLETTER

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Brownfields projects. L-R: Former Sacred Heart Church (aka Pink Church); Former Agency Treatment Plant; Former Lodgepole Elementary School; and Agency Dump.

Fort Belknap Indian Community receives \$500,000 grant to cleanup and reuse properties

Fort Belknap among 265 communities nationwide to receive Brownfields Cleanup, Assessment and Revolving Loan Fund Grants to help build a better America while advancing environmental justice

Contact Information Richard Mylott (mylott.richard@epa.gov) | 720-237-8119 | May 12, 2022
<https://www.epa.gov/newsreleases/fort-belknap-indian-community-receives-500000-grant-cleanup-and-reuse-properties>

Harlem, Mont. – Today, the U.S. Environmental Protection Agency (EPA) is announcing the Fort Belknap Indian Community in Harlem, Montana will receive a \$500,000 Brownfields assessment cleanup grant to remove contaminants from several properties targeted for reuse.

The Fort Belknap Indian Community will use the EPA grant funds to clean up four targeted properties: a former school in Lodgepole, a former Water Treatment Plant, the Sacred Heart Catholic School in Harlem, and the Old Agency Dump on the Fort Belknap Indian Reservation.

Plans for property reuse include solar

energy production, new tourism opportunities, a disaster response center, and a youth center. Grant funds also will be used to conduct community involvement activities.

“EPA is proud to support the cleanup of these abandoned and underused properties so they can be transformed as assets that serve the Fort Belknap Indian Community,” said EPA Regional Administrator **KC Becker**. “I applaud the Community Council for prioritizing cleanups that will pave the way for solar energy development and new community amenities that will benefit residents for years to come.”

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Fort Belknap Indian Community receives \$500,000 grant to cleanup and reuse properties

(Continued from page 1)

“When industries change and communities develop, Montana’s towns and cities are often left to foot the bill on cleanup efforts,” said **Senator Jon Tester**. “My bipartisan infrastructure law will help to change that by reinvesting in the communities that have been most affected by leftover contamination and pollution. By working across the aisle with five Republicans and four other Democrats, we were able to secure critical funding to repurpose old or abandoned properties in the Treasure State and create good paying Montana jobs in the process.”

“The Fort Belknap Indian Community Council is extremely pleased to receive EPA Cleanup Grant funding to cleanup four important sites in two communities on the Fort Belknap Reservation,” said **Jeffrey Stiffarm, President of the Fort Belknap Indian Community**. “The funding will enable the Gros Ventre (Aaniiih) and Assiniboine (Nakoda) Tribes to clean up contaminated properties for redevelopment and reuse. This unique investment opportunity by EPA will help increase economic development and independence, assist in the creation of solar energy for new housing, increased tourism opportunities, and reuse of properties for a disaster response center and a youth-focused center.”

The Brownfields Program advances President Biden’s Justive40 Initiative, which aims to deliver at least 40 percent of the benefits of certain government programs to disadvantaged communities. Approximately 86 percent of the communities selected to receive funding as part of this announcement have proposed projects in historically underserved areas. EPA’s Brownfields grants and other technical assistance programs like the RE-Powering America’s Land Initiative are also helping to build the clean energy economy.

Today’s announcement includes approximately \$180 million from the historic \$1.5 billion investment from President Biden’s Bipartisan Infrastructure Law to help turn brownfield sites across the nation into hubs of economic growth and job creation, along with more than \$75 million from fiscal year 2022 appropriations.

The funding includes:

- \$112.8 million for 183 selectees for Assessment

Grants, which will provide funding for brownfield inventories, planning, environmental assessments, and community outreach.

- \$18.2 million for 36 selectees for Cleanup Grants, which will provide funding to carry out cleanup activities at brownfield sites owned by the recipient.
- \$16.3 million for 17 selectees for Revolving Loan Fund grants that will provide funding for recipients to offer loans and subgrants to carry out cleanup activities at brownfield sites.
- \$107 million for 39 high-performing Revolving Loan Fund Grant recipients to help communities continue their work to carry out cleanup and redevelopment projects on contaminated brownfield properties. Supplemental funding for Revolving Loan Fund Grants is available to recipients that have depleted their funds and have viable cleanup projects ready for work.

The list of selected applicants is available here: <https://www.epa.gov/brownfields/applicants-selected-fy-2022-brownfields-assessment-rlf-cleanup-arc-grants-and-rlf>

Since its inception in 1995, EPA’s investments in brownfield sites have leveraged more than \$35 billion in cleanup and redevelopment. This has led to significant benefits for communities across the country. For example:

- To date, this funding has led to more than **183,000 jobs** in cleanup, construction, and redevelopment and more than **9,500 properties** have been made ready for reuse.
- Based on grant recipient reporting, recipients leveraged on average **\$20.43** for each EPA Brownfields dollar and **10.3 jobs per \$100,000 of EPA Brownfield Grant funds expended** on assessment, cleanup, and revolving loan fund cooperative agreements.
- In addition, an academic peer-reviewed study has found that residential properties near brownfield sites increased in value by 5% to 15% as a result of cleanup activities.
- Finally, analyzing data near 48 brownfields, EPA found an estimated **\$29 million to \$97 million in additional tax revenue for local governments** in a single year after cleanup—2 to 7 times more than

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Fort Belknap Indian Community receives \$500,000 grant to cleanup and reuse properties

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the \$12.4 million EPA contributed to the cleanup of those brownfield sites.

Additional Background

A brownfield is a property for which the expansion, redevelopment, or reuse may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Redevelopment made possible through the program includes everything from grocery stores and

affordable housing to health centers, museums, greenways, and solar farms.

The next National Brownfields Training Conference will be held on August 16-19, 2022 in Oklahoma City, Oklahoma. Offered every two years, this conference is the largest gathering of stakeholders focused on cleaning up and reusing former commercial and industrial properties. EPA co-sponsors this event with the International City/County Management Association (ICMA).

Tester Secures \$15 Million To Clean Up Montana Pollution Sites, Support Economic Growth Through Bipartisan Infrastructure Law

EPA's Brownfields Grant Program to award funding to 11 Montana projects

https://www.testersenate.gov/?p=press_release&id=9099#:~:text=As%20a%20part%20of%20his,pollution%20and%20spur%20economic%20development

As a part of his bipartisan *Infrastructure Investment and Jobs Act*, United States Senator Jon Tester today announced that he secured \$15,148,199 in Environmental Protection Agency (EPA) Brownfields grant funding for 11 Montana projects to clean up pollution and spur economic development.

“When industries change and communities develop, Montana’s towns and cities are often left to foot the bill on cleanup efforts,” said Tester. **“My bipartisan Infrastructure Investment and Jobs Act is helping change that by reinvesting in the communities that have been most affected by leftover contamination and pollution. By working across the aisle with five Republicans and four other Democrats, I was able to secure critical funding to repurpose old or abandoned properties in the Treasure State and create good paying Montana jobs in the process.”**

EPA’s Brownfields Program provides grants and technical assistance to communities, states, Tribes and others to assess, safely clean up and sustainably reuse contaminated properties. A Brownfield is a property, which the expansion, redevelopment, or reuse of

may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Funding for Montana’s Brownfields projects will be delivered in the form of Assessment grants, Cleanup Grants and Programs, and Revolving Loan Funds.

Montana recipients include:

Snowy Mountain Development Corporation; Hilger, Winnett, Roundup, Fergus and Lewistown:
\$3,900,000 Revolving Loan Fund

- Snowy Mountain Development Corporation, on behalf of the Central Montana Brownfields Coalition, plans to perform several cleanups throughout a six-county area in Central Montana. Cleanups will help clean up legacy contamination, provide affordable housing and eldercare and stimulate economic development in the towns of Hilger, Winnett, Roundup, Fergus and Lewistown. A priority site will be the Crowley Block in Lewistown, which when completed will provide 14 affordable housing units. SMDC has already leveraged revolving loan funds to clean up asbestos at the Crowley Block with \$4.5 million in state, local, and federal resources to bring the One Health Com-

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Tester Secures \$15 Million To Clean Up Montana Pollution Sites

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munity Health Center into the formerly vacant building. The project will result in the creation of 132 new jobs while addressing two critical housing and rural health care needs. Over the past 10 years, EPA has provided SMDC \$3.8 million in funding to complete 23 cleanups throughout Central Montana.

Great Falls Development Authority; City of Great Falls and Cascade County: \$2,650,000 Revolving Loan Fund

- Great Falls Development Authority plans to use supplemental funding under the Brownfields RLF program to provide cleanup loans and grants at multiple properties throughout the City of Great Falls and Cascade County. A priority site for the funding is the Baatz Building, a historic vacant downtown building planned for a multiuse development with permanent, affordable supportive housing. Two cleanups currently underway include a \$50,000 subgrant to clean up the Great Falls Rescue Mission Women's Shelter and a \$424,000 subgrant for the Rocky Mountain Building. After 12 years of vacancy, Alluvion Health will clean up and begin a complete restoration and remodel of the Rocky Mountain building for their Health Care Center. Over the past 16 years, EPA has provided GFDA \$2.9 million in funding leading to the completion of seven loans and 12 subgrants for cleanup. A few highlights include the West Bank Landing, True Brew Coffee Shop, Miracle Mile, Arvon Block and the Great Falls Community Food Bank.

Bear Paw Development Corporation of Northern Montana; Havre, Chinook and Chester: \$2,150,000 Revolving Loan Fund

- Utilizing RLF Coalition grant funds, Bear Paw plans to perform cleanups in Havre, Chinook and Chester.

Headwater Resource Conservation & Development Council; Anaconda-Deer Lodge, Beaverhead, Butte-Silver Bow, Granite, Jefferson, Madison, and Powell counties: \$1,000,000 Revolving Loan Fund

- Headwaters Resource Conservation & Develop-

ment Council (HRDC) plans to capitalize a revolving loan fund from which the HRDC will provide loans and subgrants to support cleanup activities. HRDC will use funds to oversee site cleanups, plan redevelopment, and conduct community involvement activities. RLF activities will focus on the seven-county region in southwest Montana that includes Anaconda-Deer Lodge, Beaverhead, Butte-Silver Bow, Granite, Jefferson, Madison, and Powell counties. Priority sites are located in old, blighted commercial corridors and include former gas stations, auto repair shops, a former hotel building, and a former junkyard located in a federally designated floodplain. Coalition members are the Butte Local Development Corporation and the Anaconda Local Development Corporation.

Montana Department of Environmental Quality; Anaconda, Billings, Libby: \$2,000,000 Assessment Grant

- Funds will be used to conduct 38 Phase I and 19 Phase II environmental site assessments. Grant funds also will be used to develop ten community brownfield site inventories and five reuse plans or market studies. The target areas for this grant are the town of Anaconda, the City of Billings, and the Town of Libby. Priority sites include the 20-acre Anaconda Railyard, a 45,000-square-foot underutilized former paper company building in Billings, and the Libby Food Pantry.

Big Sky Economic Development Authority; East Billings: \$500,000 Assessment Grant

- Funds will be used to conduct nine Phase I and seven Phase II environmental site assessments and develop four cleanup plans. Grant funds also will be used to prepare a Community Involvement Plan, conduct public meetings, and conduct other community outreach activities. The target area for this grant is the East Billings Urban Renewal District (EBURD). Priority sites include eight brownfields within the EBURD in old commercial and industrial areas, including an auto repair shop, a trucking business, steel facilities, and a warehouse.

Fort Belknap Indian Community: \$500,000 Cleanup Grant

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Tester Secures \$15 Million To Clean Up Montana Pollution Sites

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- Funds will be used to clean up a former school in Lodgepole, a former Water Treatment Plant and the Sacred Heart Catholic School in Harlem, and the Old Agency Dump on the Fort Belknap Indian Reservation. The former Lodgepole School is a vacant 16,225-square-foot building contaminated with metals and inorganic contaminants. The former Water Treatment Plant was closed in 2010 and is a vacant 3,750-square-foot building. There are vault tanks and drums inside and near the building containing known and unknown chemicals. The Sacred Heart Catholic Church is a 3,322-square-foot building contaminated with inorganic contaminants. The Old Agency Dump is a 24-acre site that became an unofficial dump for debris such as concrete, pipes, and cars after its closure in the 1980s; its soil is contaminated with organic contaminants. Grant funds also will be used to conduct community involvement activities.

Harlowton: \$500,000 Cleanup Grant

- Funds will be used to clean up the Harlowton Roundhouse and Railyard located at 308 A Avenue in the City of Harlowton. The cleanup site was a former railyard and depot that included a 17,000-square-foot roundhouse, an office, switching yards, track, and repair and refueling operations. The 180-acre vacant brownfield is contaminated with metals and organic and inorganic contaminants. The condition of the site restricts access to the Musselshell River. Grant funds also will be used to develop a community relations plan, update an existing project website, and conduct other community involvement activities.

Headwaters Resource Conservation and Development; Anaconda-Deer Lodge, Beaverhead, Butte-Silver Bow, Granite, Jefferson, Madison, and Powell counties: \$1,000,000 Revolving Loan Fund Coalition Grant

- The grant will be used to capitalize a revolving loan fund from which the HRDC will provide loans and subgrants to support cleanup activities. Grant funds also will be used to oversee site cleanups, plan redevelopment, and conduct community involvement activities. Priority sites are located in

old, blighted commercial corridors and include former gas stations, auto repair shops, a former hotel building, and a former junkyard located in a federally-designated floodplain. Coalition members are the Butte Local Development Corporation and the Anaconda Local Development Corporation.

Missoula County: \$500,000 Assessment Grant

- Funds will be used to conduct seven Phase I and 11 Phase II environmental site assessments. Grant funds also will be used to develop three cleanup plans and one reuse plan and to support community outreach activities. The target areas for this site are the neighborhoods of East Missoula, Bonner, West Riverside, Milltown, Piltzville, and the Fort Missoula/Target Range. Priority sites include the East Missoula Town center complex, which includes former fueling stations, a truck repair facility, and a junk vehicles yard; a former school building that has been vacant since 2004; a 108-acre former sawmill and industrial landfill; and an 86-acre former gravel mine complex.

Northern Cheyenne Tribe: \$448,199 Assessment Grant

- Funds will be used to inventory sites and conduct eight Phase I and eight Phase II environmental site assessments. Grant funds also will be used to develop three cleanup plans and support community outreach activities. The target areas for this grant are tribally-owned lands within the Northern Cheyenne Indian Reservation. Priority sites include three vacant and unutilized fueling stations in the Town of Lame Deer that contain underground storage tanks, and a site consisting of 16 residential units donated by a military base.

Tester worked across the aisle for months to negotiate the Infrastructure Investment and Jobs Act with a group of five Republicans, four Democrats, and the White House, and he was the only member of Montana's congressional delegation to vote for it. Tester's law is projected to create **more than 800,000 American jobs** and lower costs for businesses by making targeted investments that will strengthen our nation without raising taxes on working families.

'SPIRIT MOUNTAIN': CRUSHED AND SOAKED IN CYANIDE, HAVE WE FORGOTTEN WHO WE ARE?

Submitted by Liz McClain – Aaniiih Nakoda College | Researched by Donna Young, Bill Bell, Anna Doney, Chirstabelle Christenson and all the Interns at ANC

In the Little Rocky Mountains (Island Mountains (E ya X wa Xu-Holy Mountain) (Sacred Fur Capped Mountains-bátaa' bííθótó) there is a mountain called 'Spirit Mountain' which was turned upside down and soaked in cyanide as a way of extracting bits of gold and silver from crushed rock. This was done by the now defunct Zortman/Landusky mines.



Figure 1 - Little Rocky Mountains with Spirit Mountain in the background looking down on the Fort Belknap pow-wow grounds



Figure 2 - Landusky mine site before reclamation indicating sample locations sites

In this process a solution drains away, is trapped and various methods occur which culminate in the gold being separated. It is a failed technology, due to huge environment damages, and Montana has banned the method from use. The environmental devastation and water contamination, especially of heavy metals, has rendered this spiritual mountain a moonscape, a spiritual holocaust for Aaniinen and Nakoda people that live on the Fort Belknap Indian reservation in Northeastern Montana. The land on which the defunct cyanide heap leach Zortman/Landusky mine sits was coerced from the Aaniinen and Nakoda peo-

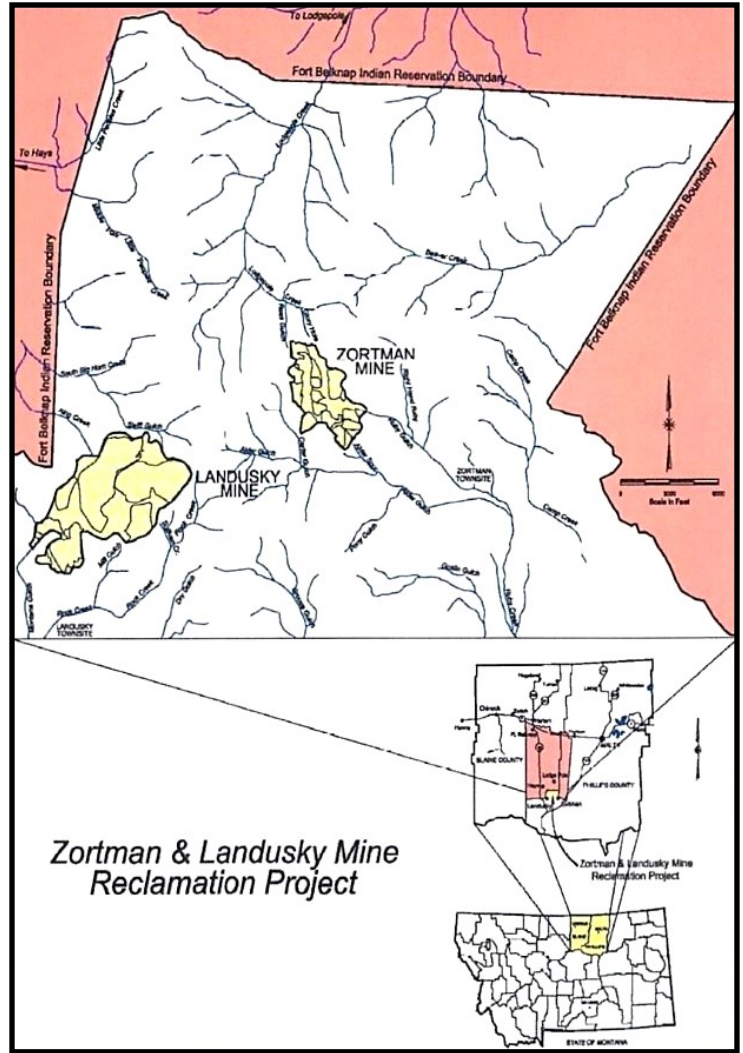


Figure 3 Zortman/Landusky mines location in notch where gold was discovered and land removed through coercion

ple by the U.S. government long ago (1895). More importantly there reside, century old Sun Dance grounds, for both Tribes and pow-wow grounds all still in use today. The Little Rocky Mountains are Sacred to the people and so much of their life is tied to these mountains. Tribal members live, farm, hunt, fish, obtain drinking water, irrigation water and engage in ceremonial practices down from the Zortman/Landusky mines. The opposition to the heap leach Zortman/Landusky mines since its inception has been opposed vehemently through the years by various Tribal Community Councils, grassroots organizations (Islands Mountain Protectors, Red Thunder) and concerned environmental groups. Not to mention the many lawsuits filed by Tribes in seeking restitution.

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'SPIRIT MOUNTAIN': CRUSHED AND SOAKED IN CYANIDE, HAVE WE FORGOTTEN WHO WE ARE?

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For example, the water coming off the leach pads is so contaminated it must pass through water treatment plants (forever) into perpetuity. The streams that have been affected by the mines that flow onto the Fort Belknap reservation in the Peoples Creek Drainage, include King Creek, Swift Gulch, and Lodgepole Creek have carried toxic chemicals with their concomitant health hazards making the community members environmental refugees on their own land! In 2004 the Zortman/Landusky mines were given a CERCLA designation (Comprehensive Environmental Response Compensation and Liability Act or 'Superfund') and the reclamation efforts have restored most of the heap leach area topography with a kind of top soil and grasses have been planted. This reclamation has paid no heed to soil restoration which include ecosystem functions, and microbial ecology that make soils resilient. Our study focused on these aspects for which cyanide heap leach mines have been little researched and would lend credence to better understanding the dynamics of 'life' being re-established after such severe disruption from mining. The Aaniiih Nakoda Colleges Water Laboratory linked up with University of Wyoming and Professor Peter Stahl, a leader in mine restoration. He led the five year work which included faculty, staff and students from ANC on the structure and function of Microbial Communities in the cyanide heap leach mine impacted areas as compared to an undisturbed environment located at the base of Mission Peak. Healthy soil is the foundation of stable, productive terrestrial ecosystems. It is in the soil that many important ecological functions such as nutrient cycling, and energy transfer occur, and plant roots make their homes. But in disturbed lands, especially in a mine that used the cyanide heap leach process on crushed rock, how is re-establishment to happen for a microbial habitat to bring about the level of soil health that was originally present? How long would the process take for the microbial community to rebound? This is a dynamic process in the availability of nutrients in soils as well as cycling of nutrients. Without the decomposition processes and nutrient catalyzed by soil microorganisms, most nutrients such as nitrogen and phosphorus would become tied up in plant litter and generally unavailable to plants. What kinds of microbial organisms are present and how are they functioning in the disturbed area? Several standard microbial procedures and assays can be used to determine microbial community composition, nutrient cy-

cling and potential for bacterial sulfate reduction in soils. For example, toxic acid mine drainage (AMD) has always been an omnipresent problem since inception of the cyanide heap leach process began in 1979 until 1998 when the mines went bankrupt. The mines have been idle for over 20 years as reclamation and water treatment continues daily. The mere fact of active mining frees up a lot of pyrite (FeS₂) rock. When oxidized upon exposure to water and oxygen produces sulfuric acid, ferric hydroxides and mobilizes other minerals. For which sulfate-reducing bacteria, acting upon these mobilized minerals like arsenic make them more mobile in freshwater and groundwater thereby creating potential water quality and health issues with, for example, arsenic exceeding water quality standards. The five-year study (2002-2006) focused on assessing the soil microbial biomass, the degree of nutrient cycling, identifying the microbial community composition and determining the potential for bacterial sulfate reduction in selected leach pads as compared to the undisturbed Mission Peak site. Three sample site locations were chosen on the Landusky side of the Zortman/Landusky mines, in proximity to the continuous toxic mine drainage affecting the Fort Belknap Indian reservation.



Swift Gulch drainage below the Zortman/Landusky Mine
Figure 4 - Swift Gulch drainage showing discharge pipe effluent with toxic acid mine drainage-heavy metals and low pH water

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'SPIRIT MOUNTAIN': CRUSHED AND SOAKED IN CYANIDE, HAVE WE FORGOTTEN WHO WE ARE?

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Figure 5 - Undisturbed Mission Peak study area



Figure 6 - L80/82 heap leach site, soil being sampled and reclamation underway in year 2000



Figure 7 - GPS transect and soil sampling from 87/91 site, reclamation started in 2002

The two mined sites provided a time zero or 'birds eye view' into how 'life' (microbial community) is re-established after 'Spirit Mountain was crushed and soaked in cyanide. The Aaniiih Nakoda College water quality laboratory personnel, Donna Young, Bill Bell, Anna Doney, Christabelle Christenson and college

interns assisted Professor Peter Stahl in setting up transects at the project sites and collecting soil samples during three sampling events per year for the duration of the project. In depth microbial analysis and identification of the organisms were done at the University of Wyoming in Peter Stahl's laboratory or with Carole Reifschneider the microbiologist at Montana State University at Northern. Results obtained during the first two years of the study indicate that the structure and function of microbial communities in so called reclaimed soils at the Landusky Mine site were very different than in undisturbed soils in the area of Mission Peak.

Soil microbial biomass carbon in Mission Peak and Leachpad soils

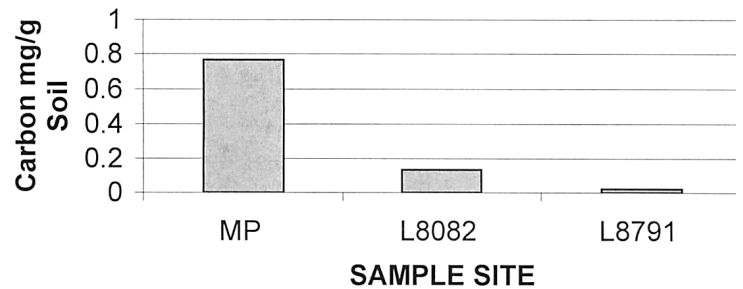


Figure 8 - Soil microbial biomass carbon in Mission Peak and Leach pad soils

These two sites are still in the early stages of recovery from disturbance. Analyses of soils on these two sites, 80/82 and 87/91 indicate that they contain minimal levels of organic matter (Figure 8) to support microbial activity as well as sustain plant growth and nutrient recycling. It is important to monitor these sites in successive years to determine if a better outcome in microbial biomass is established. Results of this and other studies have led us to the hypothesis degraded soil structure resulting from disturbance is involved in this problem. Assaying the amount total nitrogen in these soils will indicate nitrogen availability for the microbial community that is directly tied to nutrient recycling and microbial activity. The total Kjeldahl nitrogen from the sample years 2002, 2003, 2004 are shown in Figure 9. The data indicates that the Mission Peak soil (undisturbed soil) has at least four times as much Nitrogen in it than the reclaimed soils and contains much more organic matter which is the most important cycling pool of nitrogen.

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'SPIRIT MOUNTAIN': CRUSHED AND SOAKED IN CYANIDE, HAVE WE FORGOTTEN WHO WE ARE?

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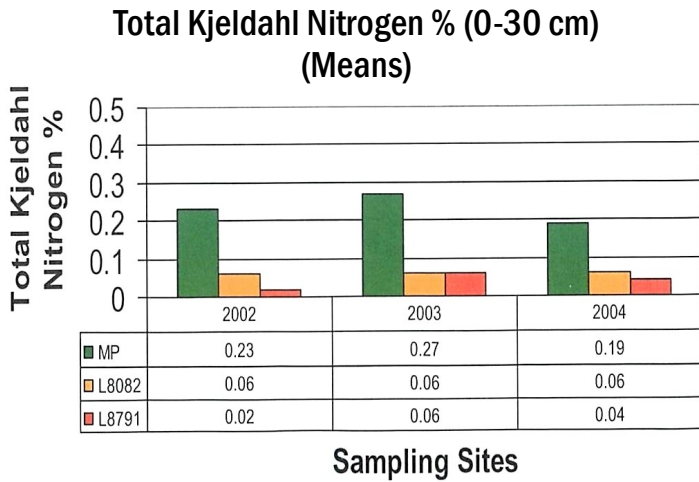


Figure 9 - Total Kjeldahl Nitrogen % in soil

In addition to the microbial biomass carbon and total Kjeldahl nitrogen other soil parameters were assayed. The community structure was analyzed using the Phospholipid fatty acid (PLFA) method, based on the uniqueness of the various species in taxa cellular membranes. These membranes have great structural diversity coupled with biological specificity. Different microorganisms use different phospholipid fatty acids in construction of their cellular membranes.

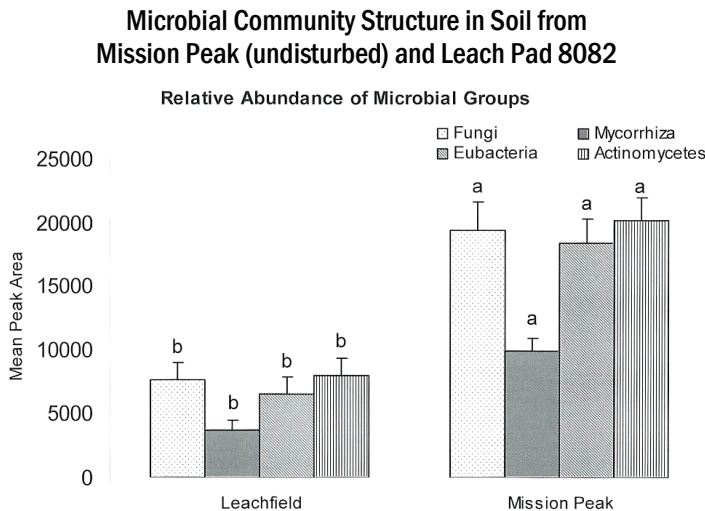


Figure 10 Microbial Community Structure in soil from Mission peak and Leach pad (80/82)

Some of which are particular to microbial taxa and can be used as distinct biomarkers. Hence phospholipid fatty acid (PLFA) profiles provide a broad diversity measurement of microbial community structure. The microbial community structure in the soil from Mission Peak (undisturbed) and in the leachfield of the L80/82 pads is compared for the relative abundance of microbial groups. In all microbial groups, fungi, eubacteria, mycorrhiza and actinomycetes the

undisturbed site had greater amounts of each of these microbial groups than found in the L80/82 leach pad soil. The undisturbed Mission Peak study site would have an established functioning microbial community. In the disturbed soils the microorganisms are challenged by many factors, environmental, transformational in cycling the breakdown of nutrients, or the synthesis of others, that can disrupt energy transfer in maintaining the microbial soil ecosystem.

As mentioned above the Zortman/Landusky mines exposed rock that upon contact with oxygen and water produced chemical reactions that produced copious amounts of sulfur and can exist as sulfide. For example, this soup creates substrates for microorganisms to act in various ways one of which sulfate reducing bacteria (SRB) in soils that convert sulfate to sulfide or other reactions that free chemicals normally found in the rock to become soluble in water and are toxic.

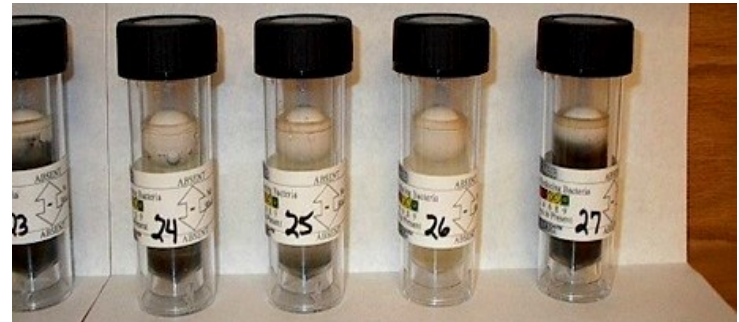


Figure 11 - Results of Sulfate reducing bacteria (SRM) black color positive for SRM

Figure 11 shows a dark color in the vials indicating sulfate reducing bacteria in mine impacted soils. It is paramount to continue monitoring the chemicals in these leach pads through time in evaluating the restoration process towards recovery.

Have we forgotten who we are when Spirit Mountain was destroyed, were we blind to the cycles of life?

We know soil microorganisms are there but has the damage to the land and water been irreversible?

Just as the Little Rocky Mountains, and Spirit Mountain, amongst them, are Sacred and remain so, the soil microbial community, that little known world under our feet is there too helping to restore what we have alienated ourselves from.

Climate Change, Drought, Water Conservation & Gardening

By Mitchell Healy, WQ Coordinator | May 6, 2022

The drought season is still on-going and as the hot spring and summer months arrive, we have to prepare for this. The seasons are changing and the climate is warmer, and this means water is a priority. We no longer get to enjoy the water like we have, many of us probably noticed reservoirs drying up slowly from the past couple years, more fires happening, water restrictions, grasshopper populations increased, and the list goes on. These things are occurring because of lack of precipitation and warmer temperatures, and this is the cause of anthropogenic impacts from greenhouse gases that go back to the Industrial Revolution that began in 1750. Anthropogenic in the Merriam-Webster Dictionary means, “of, relating to, or resulting from the influence of human beings on nature”. So, we are talking over 200 years of impacts to the climate, and since at least the 1980s, this is when it was discovered that global temperatures increased greatly.

Now, all over the world, all levels of government, are making efforts to limit human activities that have caused this, but it's not going to be a speedy solution, the damage has been done and we will be enduring this for generations. So, just thought I'd share a little history with you. Today, water is especially critical. There's places in the world that have no more water sources and are in constant need of drinking water. River networks are a key water source and they are also beginning to dry up. It's a scary time if you think about it. Here on the Fort Belknap Indian Reservation, there's water source issues happening and this is putting a great burden on our local ranchers and producers to make critical changes and decisions for their livelihoods. The Agency area gets their water from the Milk River, which is a shared water source along the hi-line. The Hays and Lodgepole areas use groundwater as the water source. Maybe we are not experiencing the major water issues happening elsewhere, but it's a great idea for us to do our part and conserve our water, minimize our needs, make sacrifices for the greater good. Here's a list of suggestions that you can begin doing to help.

For Indoor Water Use

- ◆ Rather than bathing, take short showers. This greatly reduces your consumption of water.
- ◆ Turn off the water when brushing your teeth, shaving, or washing your face.
- ◆ Replace shower heads and sink faucets with low flow versions.
- ◆ If possible, replace appliances that are more energy and water efficient.
- ◆ Try to wash clothes whenever you have enough for a full load that your washer capacity can handle.
- ◆ If possible, limit toilet flushes. If you ever watched *Meet The Fockers*, there's a scene where Burney Focker tells Jack Burns, “if it's yellow, let it mellow, if it's brown, flush it down”!
- ◆ Have your local maintenance or plumber check your water infrastructure and pipes for leaks.

For Outdoor Water Use

- ◆ Use a commercial car wash rather than recycling water, rather than washing your vehicle yourself at your house.
- ◆ Follow all water restriction honestly. There's a reason why a water restriction is in place, even if it means no filling up swimming pools or wasting water with sprinkler system. I know it's difficult to do, especially when you have little kids that want to play in the water, but you have to consider the water use that is occurring. Maybe take the kids out to the lake or mountains to play in the water.

For Gardening

- ◆ Maybe purchase a couple rain barrels that can be easily connected to rain gutters. The more common size is 50 gallons and do fill up fast during a good rain event, but this water can be used to water your gardens. There's a hose connection and a

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Climate Change, Drought, Water Conservation & Gardening

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valve, but not ideal for sprinklers or spray guns because there is no pressure like if you connected a hose to the outside faucet on your house. Decent rain barrels range from \$100-\$200, but is a worthwhile investment for any time, especially during the drought.

- ◆ Maybe purchase 40%-60% shade cloth for your garden. This greatly helps protect all of your plants and vegetables from the hot temperatures, and if your garden boxes are shaded well, this helps keep the soil moist longer, and less watering.
- ◆ Mulch your garden with wood chips or straw. This also helps the soil retain moisture after watering.
- ◆ Water your garden or lawns in the early mornings for a set amount of time. Do not over water. I've seen many sprinklers on during the day when it's the hottest, and during this time, much of the water evaporates and does not get to the plant roots. So, it's a waste of water.
- ◆ Do not water in the evenings. The water stays on the plants and grass, allowing for lawn diseases to occur because the water did not dry. However, if your lawn or garden is suffering from lack of water, then water as you see fit.

For grasshoppers problems

- In my opinion, the safest option if people are worried about using chemicals, is to use a combination of NOLO Bait, which is a biological control and Neem Oil, which is an organic application. Set NOLO Bait traps out in small PVC pipe, staked into the ground, when the baby grasshoppers emerge (by June), the grasshoppers will eat the bait and be infected with *Nosema locustae* spores that kill baby hoppers quickly and older hoppers will cannibalize the dead hoppers and become infected causing them to be lethargic and eventually starve to death. This also affects the eggs, if the females do lay eggs in the soil. This method greatly gets you ahead of the game in managing grasshopper problems, and greatly helps protect your garden from these vicious eaters from annihilating your garden. This is not going to eliminate the grasshoppers totally, there's still going to be enough left that will be attacking your garden, and so this is where Neem Oil comes into play.
- Neem Oil is a unique fungicide and pesticide, safe

for your garden and pets, just rinse off your vegetables thoroughly before consuming. Maybe use a vegetable spray to clean them off. But, Neem Oil repels grasshoppers from eating your plants and inhibits their egg-laying process and disrupts their life-cycle, so the following year, you may not have any grasshoppers or at least see a considerable difference in numbers. Neem Oil does not harm birds or beneficial insects. HOWEVER, I recommend to not spray directly on your garden plants, even though you can, it can cause damage to the leaves, which are needed for photosynthesis to help the plants grow. Instead, mix a solution of Neem Oil, water, and dish soap, and spray a perimeter around your garden and spray directly on grasshoppers that are away from your garden.

- I have to add this in the mix! But, no kidding, I was unprepared for the grasshopper infestation last season, I did not expect the horde because all the other years, there were no grasshoppers. Anyway, I and my Chihuahua killed thousands of grasshoppers! While my dog was picking them off the house foundation and catching them, I was smashing them by the handful with my hands, smashing them with my swatter, and spraying them with soap and vinegar, but this did nothing at all, as fast as I thought I decimated an area, the grasshoppers infiltrated the area like nothing happened. One thing I learned, was my little partner did not eat for days, his dog food bowl stayed full because he was full of grasshoppers. I have many funny stories about him, maybe next issue I'll do a story telling piece. But on this note, chickens are a great pet to have for grasshopper control, so if you're capable of having chickens around your house, they do have other benefits besides eggs and nice, juicy, air fried chicken strips.

In closing, I hope that these tips on water conservation and garden care have given you ideas, helped you out, and inspired you to do your part during the difficult times that drought causes. It's just a matter of making little changes that go a long way. Thank you for reading my article. Hope your year so far has been healthy and safe. Until next time....



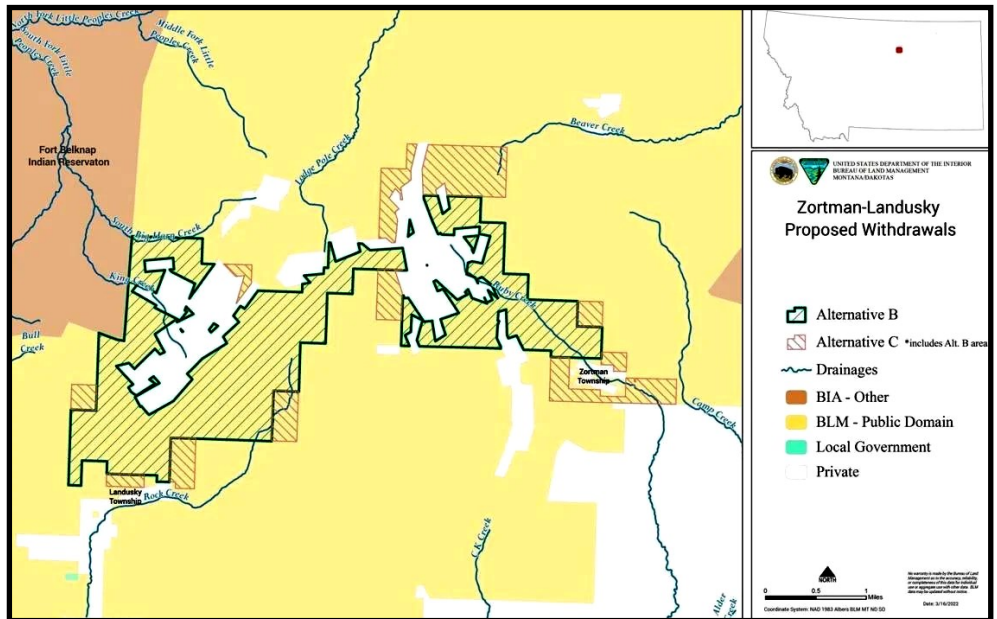
BLM release environmental assessment of Zortman-area mining withdrawal

This article originally ran on billingsgazette.com | Apr 4, 2022 Updated Apr 4, 2022

https://www.kpvi.com/news/national_news/blm-release-environmental-assessment-of-zortman-area-mining-withdrawal/article_ae727103-a2a8-5f8c-8c45-baf2f020fb46.html

In a historic mining district in the Little Rocky Mountains, the Bureau of Land Management is seeking comments on its environmental assessment regarding the possible withdrawal of up to 3,600 acres of federal lands from hardrock mining for 20 years.

The document offers three possibilities: no action; a withdrawal of 2,688 acres or a larger withdrawal of 3,600 acres. Both of the action alternatives would include the designation of an Area of Critical Environmental Concern. The ACEC designation would close BLM public lands to off-road vehicles.



This map shows the two areas proposed for withdrawal from mining in the Little Rocky Mountains. Courtesy of BLM

More than 3,500 of the same acres were withdrawn from mining development in 2000 for 20 years, so the proposed actions are nothing new. Public recreation use has been restricted in the area for more than 20 years for safety reasons.

There are 10 unpatented mining claims located within or adjacent to the ACEC.

The BLM received a total of 1,706 public comments via email. Of these, 1,692 were the same form letter. Only 10 of the submitted comments were unique.

All public comments received by the BLM expressed support for the proposed withdrawal, although some commenters requested that the withdrawal be made “permanent,” and that the withdrawn area be increased in size.

The Zortman-Landusky Mine has undergone extensive reclamation work to treat toxic runoff that includes heavy metals, nitrates, selenium and cyanide, but more work remains. The BLM estimates “reclamation contracts will total about \$70 million and involve moving millions of tons of waste rock and treating hundreds of millions of gallons of water over the next 20 years.”

Cleanup is in the hands of the state and federal agencies because the mine operator, Zortman Mining Inc., filed for bankruptcy protection in 1998. The company’s reclamation bond covered only a portion of the work needed to repair the area after years of cyanide heap leaching, a way to extract small amounts of gold from tons of rock using cyanide. When the state took over cleanup at the site the work was estimated to cost \$100 million and could be required forever.

Although the 20-year withdrawal would halt any hard rock mining, it would not preclude the BLM from allowing mining for materials like sand and gravel.

A Bozeman man has proposed removing rock for testing from private mining claims inside the boundary of BLM’s proposed withdrawal area. He is awaiting approval from the Montana Department of Environmental Quality before proceeding on one proposal while the agency has already approved another.

The environmental assessment and a link to provide electronic comments is available by visiting the BLM’s ePlanning website at <https://>

(Continued on page 13)

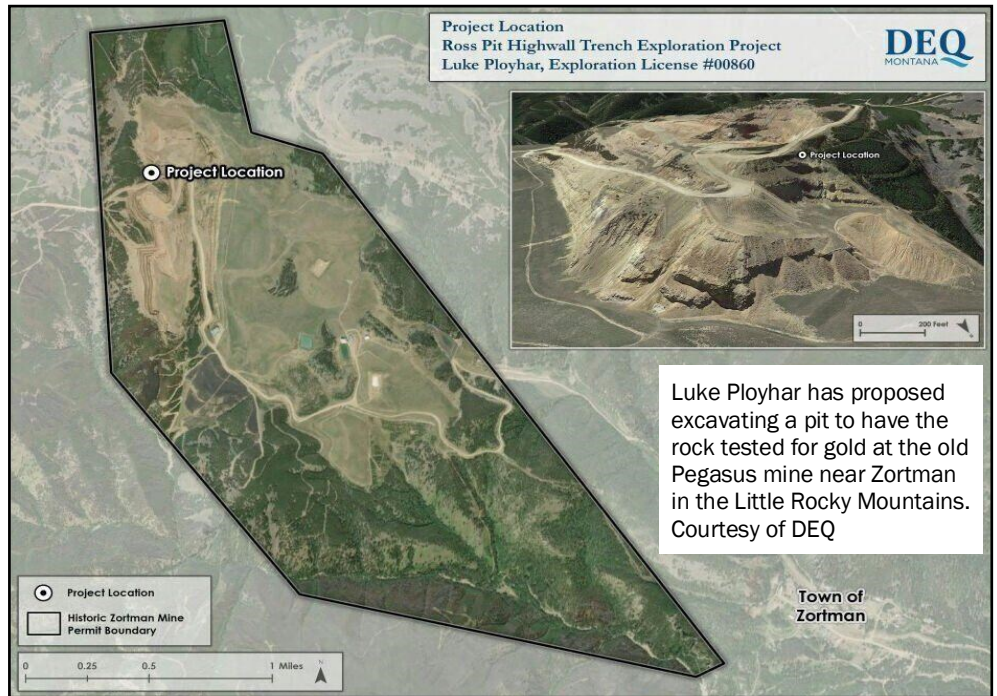
BLM release environmental assessment of Zortman-area mining withdrawal

(Continued from page 12)

eplanning.blm.gov. Search using the National Environmental Policy Act number: DOI-BLM-MT-L010-2021-0003-EA. Public comments may also be submitted via the U.S. Postal Service addressed to: BLM Malta Field Office; Re: Z-L Withdrawal; 501 South 2nd Street East; Malta, MT 59538.

The public comment period was open until May 3.

A virtual public meeting was held on Zoom at 2 p.m., Tuesday, April 19, 2022. Once comments are reviewed, the BLM will send a letter to the Secretary of the Interior recommending the withdrawal.



Please Help Keep the Transfer Sites Clean!

**Fort Belknap
Agency
Transfer Site**



**Hays
Transfer Site**



**LodgePole
Transfer Site**



Take Pride in Our Communities

Tribes Take the Lead in Climate Change Planning

<https://largelandscapenews.org/2021/07/13/fbic-climate-change-planning/>



Dennis Longknife, Jr.

The Little Rocky Mountains in Montana form an island range in a sea of prairie. As a result of their isolation, they are home to plant and wildlife species that are not found anywhere nearby, leaving them especially vulnerable to climate change impacts. In the shadow of the Little Rockies, the Aaniiih and Nakoda peoples of the Fort Belknap Indian Community are taking a

bold stand to protect this mountain ecosystem to help preserve their traditional ways of life. The Center is supporting this effort by assisting them in restoring forest health and planning for a rapidly changing climate.

Led by Fort Belknap Indian Community's (FBIC) Climate Change Coordinator Dennis Longknife Jr., FBIC is moving to complete a comprehensive climate adaptation plan to protect the Tribe's natural resources in the Little Rocky Mountains of north-central Montana. The Center is working with Longknife to provide technical expertise to the community to help them both develop this plan and also identify key implementation actions such as the forest health project. This builds on the Center's earlier, similar work with the Blackfeet Nation to support the development of their Climate Change Adaptation Plan.

Longknife has an extensive background in forestry and natural resources and as a forward-thinking leader he has served as climate change coordinator for the Tribes since 2015. As a result of their climate adaptation planning process, Longknife, the Center for Large Landscape Conservation, and Longknife's colleagues in the FBIC Fire Management Office and the Bureau of Indian Affairs (BIA) Forestry Program identified a crucial need for climate adaptive forest management in the Little Rocky Mountains.

"The Aaniiih and Nakoda people have a long history of using fire to manage forests for game, production of food and medicinal plants, and open residence sites," explains Longknife. "But the suppression of natural fires following colonization of the western US interrupted these patterns and led to a buildup of



The Little Rocky Mountains, Fort Belknap Indian Community, Montana.
Photo: Dennis Longknife.

flammable growth, leaving the Little Rocky Mountains at risk of devastating wildfire."

Longknife adds that such fires threaten not only wildlife and hunting but also cultural and recreational opportunities. The forest is home to the Tribes' powwow grounds and a large, out-of-control fire would be disastrous for the community.

In addition to increased fire risk, cooler habitat at the top of these mountains will heat up in the coming decades and some native plant and wildlife species will no longer have suitable habitat in the Little Rockies. Without careful planning and intervention, climate change will reduce species viability and harvest opportunities for the Aaniiih and Nakoda communities. Preserving suitable habitat in the only mountains on their reservation lands by preventing widespread wildfires is crucial for maintaining species important to these communities.

Protecting Forests and Biodiversity for a Healthy Future

The Little Rockies Forest Resilience (LRFR) project seeks to increase forest resilience and keep carbon that has been captured from the atmosphere stored in the trees of the Little Rocky Mountains. The Fort Belknap Indian Community will do this by applying adaptive management techniques, such as thinning, and restoring ponderosa pine forests. Thinning over-

(Continued on page 15)

grown stands will reduce the risk of catastrophic fire.

The forest thinning project operates through a partnership of the FBIC Environmental Department, FBIC Fire Management Department, BIA Forestry, and the Center for Large Landscape Conservation, who are collaborating to restore up to 300 acres of forest in the Little Rocky Mountains.

In addition to forest thinning, another action identified during climate adaptation planning was to address the climate impacts on a traditional food source—wild berries.

“The Aaniiih and Nakoda Tribes heavily rely on our serviceberry for our diets and cultural ceremonies. Our Tribes call them Juneberry, and we make Juneberry soup,



Serviceberry (Juneberry).
Photo: Dennis Longknife

which is offered at ceremonies and community gatherings,” explains Longknife. “With climate change, our gathering times have changed over the years, including having our berries affected by fungus, blight, frost, hail, and late-season snowstorms.”

Longknife says that future plans include developing a nursery for the Tribes to grow their own serviceberries and other berries, so they can continue being resilient in the face of climate change.

The efforts of the Fort Belknap Indian Community highlight how imperative it is for communities across the globe to take the lead in climate adaptation planning and climate mitigation strategies in order to remain healthy and resilient in our changing world.

As EPA moves to block Pebble mine, supporters and opponents look to details

By Isabelle Ross, KDLG - Dillingham - May 31, 2022

<https://www.alaskapublic.org/2022/05/31/as-epa-moves-to-block-pebble-mine-supporters-and-opponents-look-to-details/>

In late May, the U.S. Environmental Protection Agency announced it wants to veto development of the Pebble Mine — a vast deposit of copper and gold at the headwaters of Bristol Bay.

The proposal is a step toward permanently blocking development of the proposed open-pit mine in the Bristol Bay watershed. Mine opponents have pursued a veto for more than a decade.

The EPA said mining the Pebble deposit would result in unacceptable loss of salmon habitat, both at the site and further downstream. Using its authority under the Clean Water Act, the agency proposes to prohibit the discharge of mining materials in waters and wetlands at the Pebble site. That could make it impossible to extract minerals from the deposit.

The executive director of the United Tribes of Bristol Bay, Alannah Hurley, opposes the mine and said the



The proposed site of the Pebble Mine (Photo by Jason Sear/KDLG)

(Continued on page 16)

As EPA moves to block Pebble mine, supporters and opponents look to details

(Continued from page 15)

EPA's move is a step in the right direction.

"Today is a really big day for Bristol Bay — for us to get back on track in this process, and for the Biden administration to be committed to finishing the job to stop Pebble Mine once and for all is very exciting," she said. "But we're not there yet. We definitely need to get through the rest of this process."

She said her organization will closely read EPA's proposal, which it has released for public review.

The mine would result in the loss of almost 100 miles of stream habitat, 8.5 miles of salmon habitat, and 2,113 acres of wetlands and waters at the mine site, the EPA notes, drawing from the mine plan.

If finalized, the EPA's decision would ban digging and dumping material in the area delineated in Pebble's 2020 mine proposal. That could kill the project. The EPA also wants to restrict the use of waters as disposal sites for any future mine proposals that are as big or bigger.

The EPA has used its "veto" power under section 404 (c) of the Clean Water Act just 13 times in the law's 50-year history. It allows the agency to nix projects that would significantly damage habitat or recreational areas.

Hurley said she hopes the EPA's proposal will ban the mine forever, but she's been here before. The Obama administration proposed vetoing the mine, too. That was in 2014 — three years before Pebble submitted its proposal.

"As many remember, those got held up in court," Hurley said. "And when the federal administration changed [with the election of Donald Trump], they eventually were withdrawn."

Meanwhile, the U.S. Army Corps of Engineers denied Pebble a federal permit in 2020. The company that wants to build the mine, Pebble Limited Partnership, has appealed that decision.

Pebble, for its part, called the EPA's proposal a step backward not just for the mine, but for President Biden's climate goals. Minerals like copper are used to make batteries and in other renewable energy

technologies. Pebble said the administration shouldn't hinder domestic production.

Pebble Spokesperson Mike Heatwole said the company will give the EPA proposal a close look to see which areas it's placing restrictions on.

"Reading between the lines on the EPA action here — that's upwards of 400 square miles of state of Alaska land that the federal government is proposing taking off the table," Heatwole said. "There's just a lot of details within what the EPA is proposing that really needs to be scrutinized to know how it's all going to work."

Heatwole said the company will examine how the EPA incorporates the U.S. Army Corps of Engineers' environmental findings.

"Which are very clear in terms of both the fishery not being impacted and on the water resources as well," he said.

The company has consistently maintained that the mine would bring jobs and wealth to the region without significant harm to Bristol Bay's fishery.

The scope of the EPA's proposal only extends to the discharge of materials associated with the Pebble deposit. While Pebble is the largest mining claim in the region, it's not the only one.

Hurley, with the United Tribes of Bristol Bay, said Tribes and mining opponents in the region and around the country want broader protections of the area.

"How do we make sure that our future generations aren't fighting these types of proposals 20 years from now?" she said. "That includes finalizing this EPA process to protect what we hope will be the entirety of the headwaters of our region up near the Pebble mining site."

Public hearings on the EPA's proposal will take place in June. The EPA will also accept written comments until July 5.

Wildflower Explosion

Photos taken near Monument Peak, at the site of the Pine Grove Fire

By Dennis Longknife, Jr., Climate Change Coordinator



Traffic Safety Information



A friendly reminder that it's that time of year where everyone is out and about enjoying the beautiful weather!

As more of our children are playing outside, **PLEASE slow down and drive safely**, especially through neighborhoods and residential areas.

Remind young drivers **to be safe** for themselves and others.



Keep Our Children Safe!



Help Save Lives by Obeying Posted Speed Limits

Our goal is to save lives. Please join us in reminding all drivers to be alert, watch for speed limit signs and obey those signs, especially in school zones, in residential neighborhoods and on secondary roads.

Drivers need to remember that there is a reason for posted speed limits. The roadways are a dangerous place and the speed limits are designed to protect everyone – drivers, passengers, pedestrians – everyone!

Please remember, **Stop Speeding Before it Stops You.**

For more information, visit <http://trafficsafetymarketing.gov/>



EPA Proposes to Protect Bristol Bay's Salmon Fishery, Subsistence Fishing for Alaska Natives

Contact Information EPA Press Office (press@epa.gov) | May 25, 2022

<https://www.epa.gov/newsreleases/epa-proposes-protect-bristol-bays-salmon-fishery-subsistence-fishing-alaska-natives>

SEATTLE (May 25, 2022) – Today, the U.S. Environmental Protection Agency's Region 10 Office announced, for public review and comment, a revised Proposed Determination under Clean Water Act Section 404(c) to prohibit and restrict the use of certain waters in the Bristol Bay watershed as disposal sites for the discharge of dredged or fill material associated with mining the Pebble Deposit. If finalized, EPA's Section 404(c) determination would help protect the Bristol Bay watershed's rivers, streams, and wetlands that support the world's largest sockeye salmon fishery and a subsistence-based way of life that has sustained Alaska Native communities for millennia.

"The Bristol Bay watershed is a shining example of how our nation's waters are essential to healthy communities, vibrant ecosystems, and a thriving economy," said EPA Administrator Michael S. Regan. "EPA is committed to following the science, the law, and a transparent public process to determine what is needed to ensure that this irreplaceable and invaluable resource is protected for current and future generations."

"Bristol Bay supports one of the world's most important salmon fisheries," said Regional Administrator for EPA Region 10 Casey Sixkiller. "Two decades of scientific study show us that mining the Pebble Deposit would cause permanent damage to an ecosystem that supports a renewable economic powerhouse and has sustained fishing cultures since time immemorial. Clearly, Bristol Bay and the thousands of people who rely on it deserve protection."

The Proposed Determination issued by EPA's Region 10 evaluates an extensive record of scientific and technical information that spans nearly two decades. The Proposed Determination finds that the discharge of dredged or fill material associated with mining the Pebble Deposit could result in unacceptable adverse effects on salmon fishery areas in certain waters within the Bristol Bay watershed. One example of an

adverse impact is the permanent loss of 8.5 miles of streams, which would result in fish displacement, injury, and death. The Proposed Determination takes into consideration information that has become available since the Agency's 2014 proposal – including new scientific analyses and the Pebble Limited Partnership's 2020 Mine Plan.

Bristol Bay's salmon resources have significant nutritional, cultural, economic, and recreational value, both within and beyond the region. The total economic value, including subsistence uses, of the Bristol Bay watershed's salmon resources was estimated at more than \$2.2 billion in 2019. The Bristol Bay commercial salmon fishery generates the largest component of this economic activity, resulting in 15,000 jobs and an economic impact of \$2.0 billion in 2019, \$990 million of which was in Alaska.

The Proposed Determination proposes to prohibit discharges of dredged or fill material associated with mining the Pebble deposit into waters of the United States within the mine site footprint for the 2020 Mine Plan located in the South Fork Koktuli River, North Fork Koktuli River, and Upper Talarik Creek watersheds. It also proposes to restrict discharges of dredged or fill material associated with any future plan to mine the Pebble deposit into certain waters of the South Fork Koktuli River, North Fork Koktuli River, and Upper Talarik Creek watersheds that would result in adverse effects similar to those associated with the 2020 Mine Plan. The prohibition and restriction in the revised Proposed Determination only apply to discharges of dredged or fill material associated with mining the Pebble Deposit. This action does not apply to any other resource development projects in the state of Alaska.

EPA Region 10 will solicit public comments on the revised Proposed Determination at public hearings in June and by written submissions through July 5. For more information, visit: www.epa.gov/bristolbay.



EPA Awards Rebates Totaling \$17 Million to Fund Clean School Buses that Reduce Diesel Emissions and Protect Children's Health

First American Rescue Plan Funds to Reach School Districts to Help Them Buy Electric School Buses

Contact Information: EPA Press Office (press@epa.gov) | March 7, 2022

<https://www.epa.gov/newsreleases/epa-awards-rebates-totaling-17-million-fund-clean-school-buses-reduce-diesel-emissions>

WASHINGTON (March 7, 2022) — Today, at an event with Vice President Kamala Harris, the U.S. Environmental Protection Agency (EPA) is announcing the winners of two school bus rebate opportunities: the 2021 American Rescue Plan (ARP) Electric School Bus Rebates, and the 2021 Diesel Emissions Reduction Act (DERA) School Bus Rebates. The \$7 million in ARP funding is directed toward school districts in underserved communities to replace old diesel buses with new, zero-emission electric models, and the \$10 million in DERA rebates will assist with 444 school bus replacements across the country.

In addition to the \$17 million announced today, in the coming weeks, EPA plans to announce a new Clean School Bus rebate program under the Bipartisan Infrastructure Law, which provides an unprecedented \$5 billion over five years, to replace existing school buses with low- or zero-emission school buses.

“The historic investments in clean transportation resulting from President Biden’s leadership will have lasting impacts on protecting clean air for children for generations,” said EPA Administrator **Michael S. Regan**. “This round of school bus grants from the American Rescue Plan is just the beginning. The unprecedented \$5 billion investment that’s on the way for clean and zero-emission school buses from the Bipartisan Infrastructure Law will transform how millions of children get to school and help build a better America for a new generation.”

The two rebate awards total approximately \$17 million in combined funding for schools and bus fleet owners to replace older, high-polluting diesel school buses. Replacing these buses will improve air quality in and around schools and communities, reduce greenhouse gas pollution, and better protect children’s health overall. Since 2012, EPA’s school bus rebates have awarded, or are in the process of awarding, over \$73 million to replace more than 3,000 old diesel school buses.

This program will also prioritize projects that help achieve the goals of President Biden’s Justice40 initiative, which aims to ensure that federal agencies deliver at least 40 percent of benefits from certain investments to underserved communities.

2021 American Rescue Plan Electric School Bus Rebate Awards

The first rebate awards are the 2021 American Rescue Plan (ARP) Electric School Bus Rebates. This new \$7 million program provides funds to replace old diesel school buses with new, zero-emission electric school buses. The funds are reserved exclusively for school districts in underserved communities, Tribal schools, and private fleets serving those schools. This program will award funding for 23 electric school bus replacements and associated charging infrastructure.

List of Awardees:

State	Selectee Name	Region	Funding	# of Buses to be funded
AZ	Theodore Roosevelt School	9	\$300,000	1
CA	Terra Bella Union Elementary	9	\$600,000	2
MI	Dearborn Public School District	5	\$300,000	1
MO	Charleston R-1 School District	7	\$900,000	3
MT	Lame Deer Elementary School	8	\$300,000	1
NJ	Holcomb Transportation, Inc – (Camden City School District)	2	\$300,000	1
OK	Heavener Public Schools	6	\$300,000	1
RI	First Student Inc – Providence School District)	1	\$1,200,000	4
SC	SC DOE Orangeburg CSD	4	\$1,200,000	4
TN	Bledsoe County Board of Ed	4	\$600,000	2
VA	Petersburg City Public Schools	3	\$900,000	3

(Continued on page 20)

EPA Awards Rebates Totaling \$17 Million

(Continued from page 19)

2021 Diesel Emissions Reduction Act (DERA) School Bus Rebate Awards

The second rebate awards are EPA's latest round of funding for longstanding DERA School Bus Rebates. This year's program awards approximately \$10 million to fund the replacement of old diesel school buses with new electric, diesel, gasoline, propane, or compressed natural gas (CNG) school buses meeting current emission standards. This program will award funding for 444 school bus replacements. To see a complete **List of Awardees**, go to <https://www.epa.gov/newsreleases/epa-awards-rebates-totaling-17-million-fund-clean-school-buses-reduce-diesel-emissions>

Bipartisan Infrastructure Law Clean School Bus Program

The Bipartisan Infrastructure Law provides an unprecedented \$5 billion over five years for the Clean School Bus Program to replace existing school buses with cleaner models. In Spring 2022, EPA plans to announce a new Clean School Bus rebate program

for applicants to replace existing school buses with low- or zero-emission school buses. EPA may prioritize applications that replace school buses in high need local educational agencies, low-income and rural areas, Tribal schools, and applications that provide cost share. To learn more about the upcoming Clean School Bus Program, please visit <http://www.epa.gov/cleanschoolbus>.

To learn more about the rebate programs, applicant eligibility, and selection process, visit <https://www.epa.gov/dera/rebates>.



Biden-Harris Administration Announces \$33 Million Infrastructure Investment to Address Legacy Pollution, Spur Good-Paying Jobs on Public Lands

New resources from President Biden's Bipartisan Infrastructure Law will create jobs, address environmental justice, fund remediation of 277 orphaned oil and gas wells across the country

Contact: Interior_Press@ios.doi.gov | Date: Wednesday, May 25, 2022 | Last edited 5/27/2022
<https://www.doi.gov/pressreleases/biden-harris-administration-announces-33-million-infrastructure-investment-address>

WASHINGTON — The Department of the Interior today announced a \$33 million investment through President Biden's Bipartisan Infrastructure Law to put people to work plugging, remediating and reclaiming orphaned oil and gas wells in national parks, national

forests, national wildlife refuges, and on other public lands. Four bureaus within the Departments of the Interior and Agriculture will address 277 high-priority polluting wells that pose threats to human health and

(Continued on page 21)

Biden-Harris Administration Announces \$33 Million Infrastructure Investment

(Continued from page 20)

safety, the climate and wildlife.

“I have seen firsthand how the orphaned oil and gas wells left behind by extractive industries lead to hazardous pollution, water contamination, and safety hazards for our communities,” said **Secretary of the Interior Deb Haaland**. “Through President Biden’s Bipartisan Infrastructure Law, we are making the largest investment in tackling legacy pollution in American history and taking an all-of-government approach to addressing the environmental impacts from these legacy developments while creating good paying jobs in states across the country.”

“Millions of Americans live within a mile of hundreds of thousands of orphaned oil and gas wells. These wells jeopardize public health and safety by contaminating groundwater, seeping toxic chemicals, emitting harmful pollutants including methane, and harming wildlife,” said **Principal Deputy Assistant Secretary for Land and Minerals Laura Daniel-Davis**. “We are grateful that investments from the Bipartisan Infrastructure Law will enable the federal government to do our part to address this legacy pollution.”

Today’s allocation is part of a total of \$250 million provided through the Bipartisan Infrastructure Law for cleaning up orphaned wells and well sites on federal public lands, national parks, national wildlife refuges and national forests. Funding will be distributed to four agencies for work in California, Kentucky, Louisiana, Ohio, Oklahoma, Pennsylvania, Texas, Utah and West Virginia. The agencies are expected to immediately begin the process to acquire plugging and reclamation services through contracts and grants.

Agencies receiving funding will measure methane emissions before and after plugging using a methane measurement protocol developed by the multi-agency Technical Working Group. The Department of the Interior is also working on developing a database to collect information as wells are plugged and to capture these measurements for future Congressional reporting. The agencies have also prioritized wells that impact disadvantaged communities in keeping with the Administration’s Justice40 initiative to deliver at least 40 percent of the benefits of climate and clean energy investments to disadvantaged communities.

See below for a list of funded projects slated for this year:

State	Location	# of wells
California	Channel Islands National Park	2
	Bakersfield Field Office BLM Lands	8
Kentucky	Daniel Boone National Forest	24
Louisiana	Atchafalaya National Wildlife Refuge	9
	Black Bayou Lake National Wildlife Refuge	6
	Darbonne National Wildlife Refuge	68
	Jean Lafitte National Historic Park	10
	Lacassine National Wildlife Refuge	11
	Upper Ouachita National Wildlife Refuge	59
Ohio	Cuyahoga Valley National Park	3
Oklahoma	Deep Fork National Wildlife Refuge	24
Pennsylvania	Allegheny National Forest	18
Texas	Angelina National Forest	9
	Big Thicket National Preserve	7
	Guadalupe Mountains National Park	2
	Sabine National Forest	2
Utah	Glen Canyon National Recreation Area	*
	Moab Field Office BLM Lands	14
West Virginia	Gauley River National Recreation Area	1

*Glen Canyon National Recreation Area is funded for an inventory and assessment of the wells present in the park.

This allocation comes on the heels of the Interior Department’s announcement of \$775 million in grant funding to states made earlier this year to address orphaned oil and gas wells on public and private lands in FY22; an investment that will create jobs plugging wells, and drive future job growth through new economic development opportunities on rehabilitated sites.

When Science Wins

By Paul Boyer

<https://nativesciencereport.org/2022/05/when-science-wins/>

For more than twenty years, researchers at Aaniiih Nakoda College and the Fort Belknap Reservation’s Environmental Protection Department have worked to document the harm done by an abandoned gold mine adjacent to the reservation. Their findings are now helping block efforts to restart exploration within the mine site.



South Big Horn Creek, which flows from the Zortman and Landusky Mines onto the reservation, is stained red from acid mine drainage. Aaniiih Nakoda College researchers found that the water was no longer able to support life. Photo courtesy of Aaniiih Nakoda College

For decades, a massive open pit gold mine on the southern border of the Fort Belknap Reservation of Montana methodically transformed a forested mountain landscape sacred to the Aaniiih and Nakoda people into a moonscape of craters and crushed rock. Highly acidic water, tainted by cyanide used to extract particles of gold and silver from ore, flowed down the mountains and onto reservation land, turning streams red and killing aquatic life.

The Zortman and Landusky Mines closed in 1997 when the value of gold dropped and Pegasus Gold Corp, its parent company, went bankrupt, but the damage remains and may be irreparable. Declared a federal Superfund site, millions of dollars are spent every year by the state of Montana to treat polluted water draining out of abandoned pits and leach fields. Experts say this work will continue “in perpetuity,” meaning, for all practical purposes, forever.



One of two water treatment plants constructed to neutralize acidic water draining from the mine. Because there is no way to stop the exposed rock from generating acidic runoff, mitigation must continue around the clock and “in perpetuity.” Photo by Paul Boyer

(Continued on page 23)

But the urge to squeeze profit from the land, despite its grim history and lasting harm, also remains. An effort is now underway to restart exploration and potentially renew mining on privately owned land within the mine's boundaries and a short distance from the tanks, pipes, containment ponds and water treatment plant working around the clock to mitigate the damage already done.

This incongruous turn of events was triggered by a seemingly small bureaucratic oversight when, in 2020, a five-year federal moratorium on issuing mining claims expired 48 hours before a new moratorium, also known as a "mineral withdrawal," was issued. During this two-day gap, according to a 2021 complaint filed by the Fort Belknap Indian Community and several conservation groups, ten claims were filed in the Zortman Landusky Reclamation Area by Blue Arc LLC, a mining exploration company owned by Luke Ployhar, who purchased mine claims totaling over 1,000 acres after Pegasus declared bankruptcy.

At first, it looked like Montana's Department of Environmental Quality would give the green light to Blue Arc's proposal to dig an exploratory trench in anticipation of renewed mining. That's what many community members expected. Between 1979 and the mid 1990s, state and federal regulators approved eleven requests to expand mining operations with only minimal environmental review. These expansions happened despite strong opposition from the Fort Belknap Community.

But then something unexpected happened: In the wake of a public meeting held on January 4, 2022, the DEQ announced that it would require additional analysis of Blue Arc's request, citing strong community opposition and what it called "conflicting evidence from credible and potentially expert sources."

"This evidence raises substantial questions regarding whether significant impacts could occur to historical, archeological, social and cultural resources as a result of the proposed actions," according to a DEQ statement. "Based on the current information before us, DEQ cannot say with certainty that potentially significant impacts do not exist."

To say that the tribe and other mine opponents were surprised by this favorable ruling is putting it mildly.

As a story in the Havre Daily News put it, "this decision came as a shock to many on Fort Belknap"—not simply because the project was at least temporarily blocked, but because tribal members were heard, and their arguments carried weight. Perhaps for the first time, they were called a "credible" and "potentially expert" source of information by an agency that many tribal activists had long viewed as their adversary.

Of course, the battle is not yet won, but this particular victory is evidence, some say, of the tribes' growing capacity to fight back. Initially, the Fort Belknap Community, constrained by limited resources, relied on the work of local environmental groups, recalled tribal Environmental Manager Ina Nez Perce. "They were fighting the fight," she said, but it was a lopsided battle against what was, for a time, the world's largest cyanide heap leach mine.

In the early 1990s, however, the work of citizen-activists was strengthened by leadership from the tribal government, Nez Perce said. The tribes' environmental protection office now has more staff and resources to monitor water quality and habitat conditions, and elected officials are also vocal advocates for the reservation's water quality and water rights.

But essential to this activism and political leadership is the growing research capacity of Aaniiih Nakoda College, the local tribal college, which has been gathering data on water quality for over twenty years and recently established, with \$3.5 million in funding from the National Science Foundation, the interdisciplinary Nic?Mní (Water) Center to expand its research and share findings through an annual forum. Data collected by STEM faculty and Nic?Mní staff provide compelling evidence of ongoing environmental damage to waterways, groundwater and ecological systems.

In a statement provided to the Daily Montanan following the DEQ ruling, Luke Ployhar, owner of Blue Arc, appeared to argue that the Zortman and Landusky Mines had not impacted tribal watershed, asserting, "Any and all claims by the Tribes of bad water extending onto their lands is a blatant falsehood. The water treatment facilities put in place by Pegasus Mining are able to capture and contain and process any his-

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torical elevated acidic waters.”

In fact, data collected by the college paints a very different story. Examining water from streams flowing out of the mine’s land and onto the reservation, tribal and college scientists have filled boxes with evidence documenting significant damage to several key waterways.

A paper coauthored by college scientists and students in the natural resources program, recently published in the White Clay and Nakoda Circle Speaker Environmental Newsletter, summarized findings from a years-long aquatic study managed by the college’s EPA-funded Water Laboratory, a research program that predates the new Water Center. Purposefully following EPA procedures and protocols so that findings could be presented in court, the study found significant damage to key waterways, even years after mining ended.

King Creek, which has its headwaters in the mine, “remains a severely impacted drainage,” according to the paper. Another stream, Swift Gulch, “has been totally disrupted by mining activity and reclamation efforts.”

“With extensive field and laboratory studies we found that the contamination from the mine, as it continues toward the reservation, is rapidly moving downstream with rain or storm events,” the paper reported, turning the water in some creeks bright red. Tailings and sediment collected along the drainages of these and other creeks found “heavy metal contamination with some exceeding health levels allowed in surface water.”

“We have the water quality data to back up that water coming onto the reservation is impacted,” said Mitchell Healy, the tribes’ water quality coordinator, who holds an associate degree in natural resources from Aaniiih Nakoda College and a master’s degree in environmental management from the University of Maryland University College. “It’s from the mines. It’s obvious. There are no ifs, ands or buts about it.”

Additionally, data collected by Aaniiih Nakoda College faculty member Dan Kinsey and natural resource students also document the impact of polluted water on invertebrate life. Using fine-mesh kick nets to collect

larvae and insects from several streams, he and the students report that most impacted streams are nearly lifeless.

“All of those drainages are polluted,” said retired faculty member Liz McClain, summarizing findings from the accumulating data at the January 4 public meeting. “And the water is so polluted nothing will live in it.”



Aaniiih Nakoda College faculty member Dan Kinsey (right) with students Teeha Roberts, Doug Anderson and Tia Zander collecting macroinvertebrates from North Fork of Little People’s Creek.

Researchers also investigated the mine’s impact on the larger ecosystem, including land that has been “reclaimed.” Before mining, the mountainous region was forested and supported a rich variety of animal and plant life, with equally complex microbial life in the topsoil. Mining stripped away the soil, leaving deep cavities and acres of bare ground and crushed rock.

Much of this remains, but some parts have been covered with dirt and planted with grass, reflecting a longstanding approach to land reclamation that focuses more on covering an eyesore than on restoring a habitat. While this work softened the edges of excavated cavities, research conducted between 2002 and 2006 by Water Lab personnel, supported by funding from the USDA Tribal Colleges Research Grants Program and carried out in partnership with restoration ecologists at the University of Wyoming, found that soil in these reclaimed regions cannot break down organic matter as efficiently as soil in undisturbed parts of the surrounding mountains.

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When Science Wins

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Analysis of two test sites found that soil contained “minimal levels of organic matter needed to support microbial activity as well as sustain plant growth and nutrient recycling,” compared with undisturbed test sites, according to a paper published in *Circle Speaker*. College scientists caution that it is important to continue monitoring the soil to better understand the process of regeneration, but their work provides more evidence that the mine’s harm is systemic, long term, and may require many years—possibly generations—to restore what was lost.



A view into the Landusky mine pit. Collectively, the Zortman and Landusky Mines encompass 1,200 acres of land that formerly belonged to the Fort Belknap Reservation. Photo by Paul Boyer

This evidence, combined with a history of mistrust toward state and federal officials, is shaping the response to the proposed exploration. State DEQ officials, speaking at the January 4 public meeting, argued that Luke Ployhar was only requesting approval for a relatively small exploratory trench. Tribal leaders and state environmental organizations who spoke at the meeting rejected this reassurance.

To insist that the proposal is only about a trench the size of a city bus and will have no environmental impacts “only serves the purpose of ignoring reality,” said Derf Johnson, a staff attorney with the Montana Environmental Information Center. “Mining exploration leads to mining. It’s the first step in what could be a whole range of activities and impacts.”

Multiple speakers also emphasized what they characterized as the DEQ’s track record of minimizing po-

tential risk, inadequately investigating the damage done and failing to seek input from the tribe.

“Fort Belknap opposes this new mining permit that you guys are looking at for Luke Ployhar, based on the fact that, first of all, you guys didn’t consult the Tribes,” asserted Fort Belknap Community Tribal President Jeff Stiffarm. The only time that you did consult the Tribes was when we filed a lawsuit against you guys for not following your laws.”

Stiffarm also pressed the DEQ officials to explain how Ployhar was able to complete and submit all of the paperwork required for approval of excavation during the brief 48-hour gap in the moratorium. “Maybe it was you guys that notified Mr. Ployhar about this two-day window,” Stiffarm said. “There’s a lot of unanswered questions that you guys are not answering for us.”

At a deeper level, opposition to mining is guided by the spiritual significance of the Little Rocky Mountains, which are known, respectively, as Biiθ oto? (Fur Cap) and Jyahe widá (Island) Mountains by the Aaniiih and Nakoda nations.

“These mountains are our churches,” Stiffarm said. “That’s how sacred they are to us.”

In his statement made following the DEQ’s decision, Luke Ployhar charged that the Fort Belknap Community opposes his bid only because the tribes want to profit from the land. “Make no mistake, the tribes are interested in this area due to its significant economic possibilities and not cultural heritage.”

It’s a claim strenuously rejected by tribal members fighting renewed mining.

“Mr. Ployhar is mistaken, President Stiffarm said. “The Aaniiih and Nakoda people have zero interest in any more gold mining on or near our reservation... For years, we bathed in and ingested the chemical remnants of more than a century of gold mining. We are now continuously fighting to clean up and restore the safety of the waters flowing to our permanent homeland.”

The land where the mine now sits was originally part

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of the reservation, but sold to the federal government when prospectors discovered gold in the late 19th century. The acreage removed from tribal lands, known as the Grinnell Notch, is named after George Bird Grinnell, the federal government's negotiator, who, many tribal members say, coerced tribal leaders into relinquishing the land.



The North Fork of Little People's Creek, which is not impacted by mining, is used by college researchers as a control site. This is what all reservation streams should look like. Photo courtesy of Aaniiih Nakoda College.

Fort Belknap Community Environmental Manager Ina Nez Perce said it is her hope—one shared by many—that the land will be returned to the tribes and that, to the greatest extent possible, the damaged landscape will be restored and returned to its traditional cultural and spiritual uses.

The land is usable, she agreed—but not for mining. “That’s out of the question.”

For decades, the tribes had only limited ability to fight mining companies and their allies in government. The finding from the state DEQ, which acknowledges credible opposition to the planned exploration, suggests that a new era of empowerment is emerging, led by the continuing work of community activists, tribal leadership, and the growing research capacity of both Aaniiih Nakoda College and the tribal environmental protection office.

Even if mining companies and state officials don't understand the cultural significance, said retired science faculty member Liz McClain, “science can beat them.”

Little River Trading Post- UST Project

By Kermit Snow Jr, BTRP Compliance Officer

There is no longer a Kwik Stop in Fort Belknap. As of December 1, 2021, the Fort Belknap Indian Community (FBIC) did not renew their Lease to Ezzie's and took over through Island Mountain Development Group (IMDG) and is now known as the Little River Trading Post (LRTP). When I heard that IMDG was taking over, I sought out who all was involved in the new management of the former Kwik Stop, as there would be a lot of information they would need to know. They would not only be taking over the store, but the Underground Storage Tanks (UST's) and all that goes with them. I was told by the former Manager that the Tribe was taking over on Dec. 1, 2021 and she was not going to stay on. With that, I figured we had our hands full with whoever was going to manage the take over and run the store. The store and UST's are two totally separate endeavors and whoever was going to step in, would need to know what they are about to tackle. I learned that Michelle Desjarlais (General Manager, Island Mountain Enter-

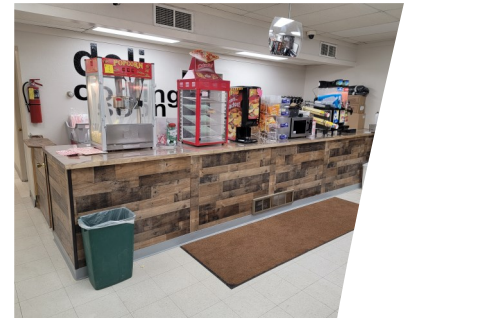
prises LLC) and Eddie Moore (Business Development Officer IMDG) would be the main contacts that I would need to develop a relationship with, along with Amy Main (Store Manager), so that I could guide them through the maze of information and regulations that they would have to learn to get their store in compliance. When dealing with UST's, that means EPA, as opposed to AST's (Above Ground Storage Tank's), who deal with the State Fire Marshall's Office. Being in the Fort Belknap Environmental Department, I am more familiar with EPA and have made a lot of friends who I can look to, to help in this transition. One thing I have learned in my 21 ½ years working in environmental, there is help out there, you just have to ask. Once I let Michelle and Eddie know what they were dealing with, they had a lot of questions, some of which I could not answer. I then got hold of my friends on the Tribal UST side and friends that are in this industry, that would be able to help them out. I

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Little River Trading Post-UST Project

(Continued from page 26)

first introduced them to Vicki Flowers (Oneida Nation), who I met when I took my first UST Bootcamp in Green Bay, Wisconsin on the Oneida Reservation. I believe we had our first call back on Oct. 29, 2021. I remember Michelle telling me afterward how overwhelmed she was, after listening to all that Vicki had to offer, and that was just the beginning. For those of you who don't know Vicki, I believe she is one of the foremost leaders in Indian Country when it comes to UST's and their regulations. We would go on to have many more calls with her, Jeff Dzierzanowski (Jeff D) of Source University, Ben Thomas (UST Training), and many more colleagues of Vicki who are in the UST business. I also informed them all that they would need to have someone with a UST Class A certification, the manager would need a Class B, and the Shift Leaders would need a Class C certification. I am happy to say that Eddie has attained his Class A. I have my Class B and will be going after my Class A, I do not need these, but will get them in case something happens where there is the A or B vacant and I can cover until someone attains theirs. We will also be attending our first UST Bootcamp together in July. One of the biggest problems concerning UST's at this site is that they are over 33 years old and insurance companies do not like to insure any tanks over 30 years old. That problem, along with the dispensers that were damaged in a big wind event back in February and need replacing, are just some of the problems IMDG are dealing with. They are redoing/remodeling the whole store and bigger things are yet to come. With the backlog in getting Tanks, thanks to the pandemic, we are looking at anywhere from 1 ½ to 2 years before we can get new tanks. We are still moving forward and hope to get a Contractor who can remove/install the new tanks when they arrive. There could be a change in how the outside looks, as we are looking at a different site for the new tanks and therefore rearranging the fuel dispensers with a new canopy. We still have a ways to go, but it is looking good and will provide the community with a great place to shop and get fuel. So, we ask the community for your patience and to stop in and see the changes being made and ask questions. I also want to welcome Michelle, Eddie, and Amy to the UST world. A'ho.



Fort Belknap Kwik Stop wind damage 2.22.2021

Partner Spotlight: Gerald Wagner

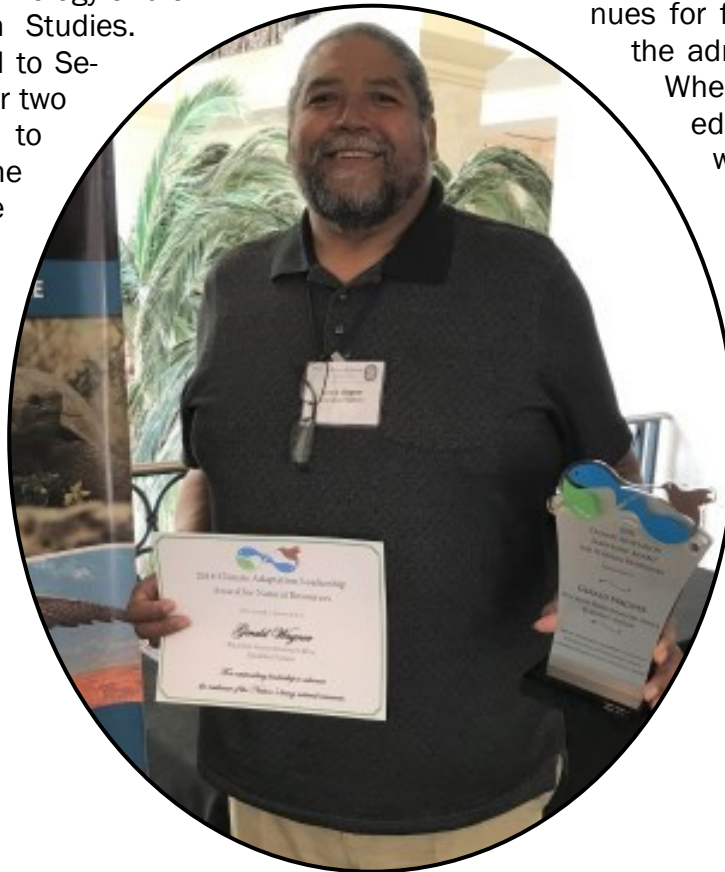
<https://largelandscapenews.org/2021/06/15/gerald-wagner/>



Gerald Wagner is the Director of the Blackfeet Environmental Program and Director of Blackfeet Nation’s Drinking Water, Wastewater, and Solid Waste Program. We sat down with Gerald to discuss the insights he’s gained from his extensive work in conservation and his advice for conservation groups who want to partner with Tribal Nations and Indigenous Peoples.

Rising Through the Ranks

Gerald began his career at Montana State University, earning a degree in Biology and a minor in Native American Studies. After graduation, he moved to Seattle to conduct research for two years before moving back to Browning, Montana where he worked as a substitute teacher in the public school system. When a position opened with the Blackfeet Tribe’s Environmental Program, Gerald jumped at the opportunity to work as the Wetlands Program Manager. He quickly rose through the ranks of the Environmental program, becoming Active Director after just two years. Gerald has held the title of Director three times over the past 28 years, each tenure lasting 5 years.



Gerald Wagner won the Blackfeet Nation’s 2018 Climate Adaptation Leadership Award for Natural Resources.

Gerald’s accomplishments and titles transcended the boundaries of the Blackfeet Nation. He represented 28 Tribes in leadership roles with the Region 8 Tribal Caucus and the National Tribal Caucus, in the roles of Secretary, Vice Chair, and Chair—the latter of which he still holds. Gerald also works with the American Indian Environmental Office at the Environmental Protection Agency (EPA) in Washington D.C. to elevate the concerns of tribes and help prioritize actions and policies that address the needs of Indigenous communities.

ships were paramount in accruing funding from the EPA and receiving climate change specific grants to grow the Blackfeet Environmental Program. Gerald was quick to adapt and identify new avenues for funding and resources when the administration shifted in 2016. When funding from the EPA halted, he developed a relationship with the Center for Large Landscape Conservation and continued to build the Climate Program through private grants. Gerald remarked, “At a time when it was taboo for federal agencies [to address climate change], we were doing great work.”

Gerald chose the environmental field for its cross-program relevance. The Environmental program exists at the intersection of every other Tribal program. Gerald noted, “Environmental work touches on a lot of different areas. I’m in on our forestry program. I’m in on our fish and wildlife

program. I’m in on planning. I’m in on land.”

A Roadmap for Success

Looking back over his career, Gerald credits his staff for the accomplishments of the department. He acknowledges, “When you have longevity of staff people, the program tends to prosper and does well. It’s not just me, I have good staff people.”

These connections and interdepartmental partner-

(Continued on page 29)

In branching out, Gerald has developed partnerships with the Department of the Interior, conservation non-profits and landscape collaboratives like the Roundtable on the Crown of the Continent. Next, he would like to work with other Tribal environmental directors in the state that need guidance. Gerald believes “We are only as strong as our weakest link. We have some Tribal Nations that are struggling so we need to help them become as strong as the rest of us so we can keep our circle connected and keep everybody moving in a positive direction. If we can do this regionally, we certainly can do the work nationally.”

With plans of retirement around the corner, Gerald’s priority is creating a smooth transition for his successor. “I want there to be a road map for someone so they can see what’s been done and take it further. I want to complete a comprehensive management plan that shows where we overlap with other programs and agencies so other tribes that have high turnover can see a good example.”

“There’s work that can be done. If you come here and we’re able to develop something, we learn from each other and both sides can benefit. We can live in two worlds as long as we understand both worlds.”

GERALD WAGNER

Turning points

When asked about significant turning points in his career, Gerald reflected on the significance of the Climate Change Program.

“In the environmental arena, you can feel sometimes like you’ve reached a stalemate and you’ve done all you could but when I hooked in with the Center for Large Landscape Conservation and the Crown of the Continent work, it opened up a whole other arena.

“It opened my eyes and turned on the lightbulb. I just knew there was a segment of the environmental work that I had been overlooking. I was able to work with some good people and develop this Climate Change Adaptation Planning document to work on health impacts of climate change, to bring the young people in. It was good timing. It reinvigorated me.”

Advice for outside partners

Gerald has worked extensively with non-tribal partners throughout his career and has advice for those interested in engaging with Tribal Nations. “Look and see where there’s a need. Approach tribal leadership and program directors and explain what you have to offer.”

While Tribal Nations are rich in knowledge, they are often resource poor, so Gerald advises that organizations “come with resources to get things started.” Approach a potential partnership with an idea that benefits the land, the Indigenous people, and those that are non-Native as well. Demonstrate the compatibility of working together and forming a partnership—a partnership that’s genuine.

“There’s work that can be done. If you come here and we’re able to develop something, we learn from each other and both sides can benefit. We can live in two worlds as long as we understand both worlds.”

Resources

If you are interested in learning more about the Blackfeet Nation, please visit blackfeetclimatechange.com for information about the culture and traditions of the Blackfeet Tribe. Additionally, the Climate Change Adaptation Plan includes historical narratives that tie Blackfeet tradition, culture, and history to stewardship and highlight the land-based nature of the Tribe. The Blackfeet Community College is another excellent resource for learning about the Tribe’s history.

Exploring these online documents is a great place to start, but it’s just that. Gerald commented that “By using technology, you can learn a lot about a group of people, but it takes conversating with someone and sitting down one-on-one to really get to know the people.”

Swift Fox Update

By Camille Stein, camille.stein@ftbelknap.org

Spring is in the air, so keep your eyes peeled for swift fox pairs! We may soon have the chance to see tiny pups born at Fort Belknap again, much like this one photographed with its parents last year. In coming weeks, you may see pairs of male and female foxes resting outside of the dens where pups will emerge around the first week of June. We are hopeful that this newly reintroduced population continues to reproduce and grow.

Teams from the ȚítanónȚí /Tatag'a Buffalo Research and Education Center, Smithsonian Institution, Clemson and George Mason Universities, and Fort Belknap Fish and Wildlife will be searching for swift fox den locations this spring and summer.

If you are lucky enough to see a swift fox outside of a den, and especially if you see a pair, you can aid their efforts by sharing your sighting at this link <https://arcg.is/0uua1e> or through a short phone call with the Fort Belknap Fish and Wildlife Department (406-353-8471).

Any information on when and where you are seeing a fox helps us all learn more.



We do not inherit the earth
from our ancestors,
*we borrow it
from our children.*

Native American Proverb



Earth Day is the day of celebration and making promises. To make it a happier, healthier and greener planet for generations to come.

**HAPPY
EARTH
DAY!!
April 22nd, 2022**

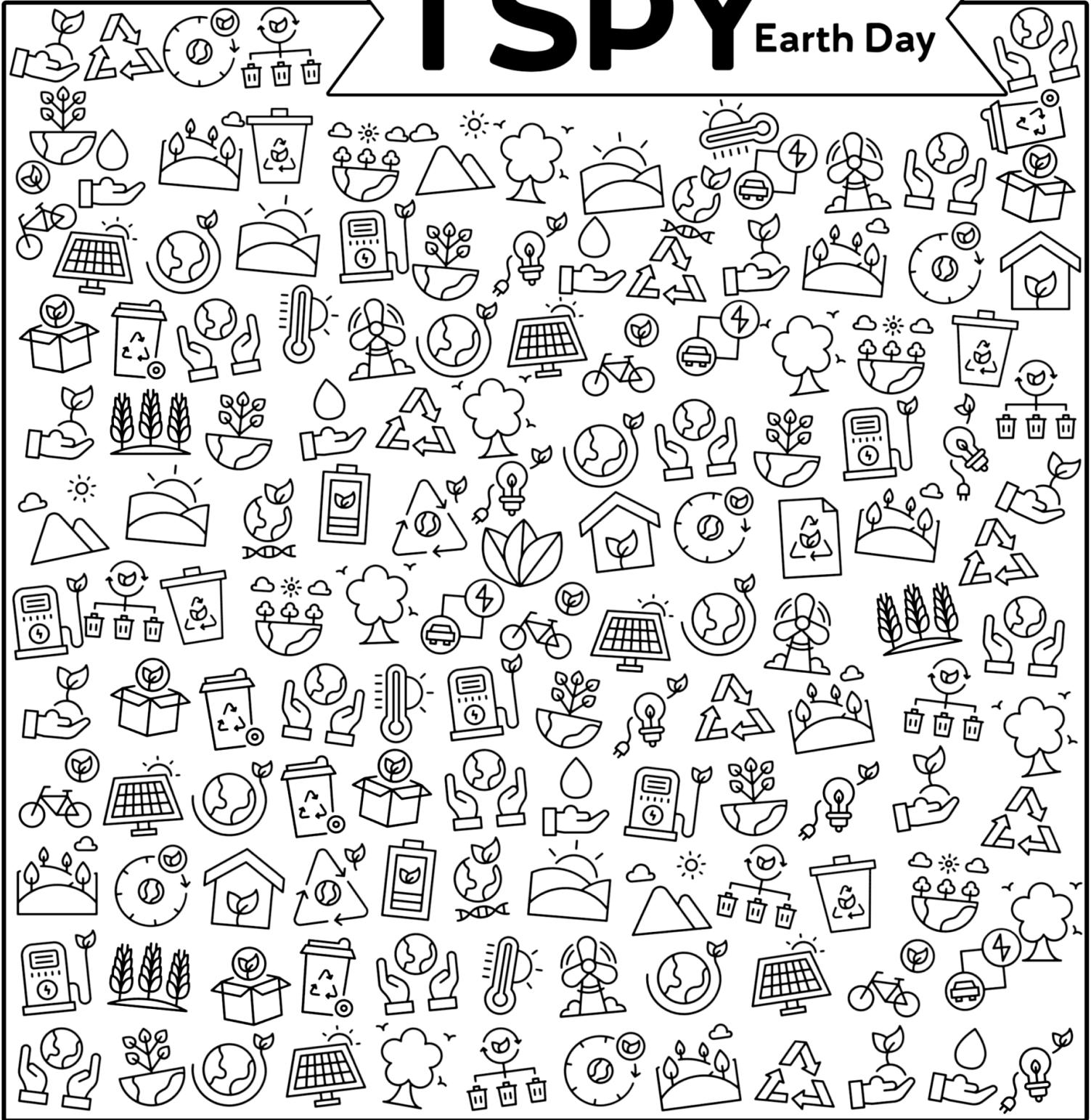
Fort Belknap Environmental Protection Department **ALUMINUM & METAL CAN DRIVE RESULTS**

On Thursday, April 28th, 2022 we had...

4 Participants and a total of 124 lbs of aluminum cans!

Thank you to those that participated and we look forward to the next Can Drive.

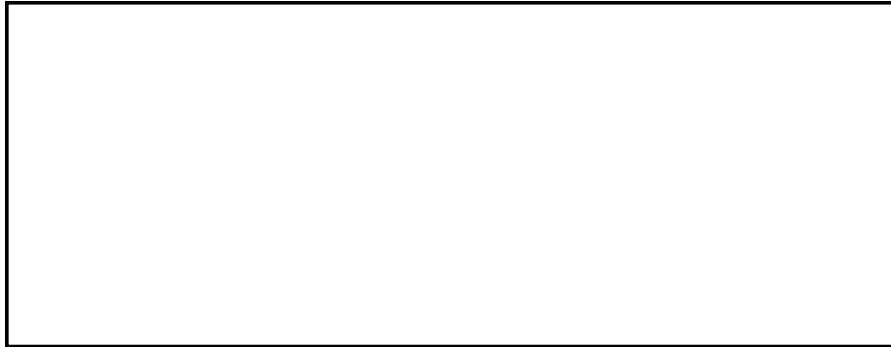
ISPY Earth Day



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Fort Belknap Indian Community
ENVIRONMENTAL PROTECTION DEPARTMENT

Fort Belknap Agency
656 Agency Main Street
Harlem, Montana 59526



Please Help Keep Fort Belknap Clean!

 Find us on Facebook:
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www.ftbelknap.org

If you'd like to be put on our Circle Speaker emailing list, or if you wish to be taken off, please email lonettebc@ftbelknap.org.

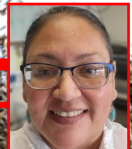
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