

Aaniiih & Nakoda Environmental Newsletter

FEATURED IN THIS ISSUE:

- ➤ Fort Belknap water rights bill introduced to U.S. Senate...... 1
- Tribes, Conservation Groups Seek Intervention in Enforcement Action Against Little Rocky Mountains Miners4
- ➡ FBEPD Welcomes Temporary Employee 7
- ⇒ Nonpoint Source Program.... 10
- → PREVENTING AN OPIOID OVER-DOSE11
- Biden-Harris Administration Outlines Strategic Priorities to Support Communities Impacted by Wildfires Across the Nation12
- **⊃** Earth Day Returns in 2023... 13
- Exclusive: EPA administrator talks AI, environmental justice16
- ➡ YOUR FULLY ACCREDITED 'GROW OUR OWN' NURSING PROGRAM IS NOW SEEKING NATIONAL ACCREDITATION! 17
- A Grandmother's Wisdom 18
- → Updates from Aaniiih Nakoda College STEM Programs...... 19

- Private Wells23
- Microplastics in our Environment
 24





The United States Senate announced a new settlement for the Fort Belknap Indian Community water Wednesday.

(Photo by Tasos Katopodis/Getty Images)

Fort Belknap water rights bill introduced to U.S. Senate

By Patrick Johnston | Last updated 6/15/2023 at 11:24am https://www.havredailynews.com/story/2023/06/15/local/fort-belknap-water-rights-bill-introduced-to-us-senate/542600.html

Montana Senss Jon Tester, a Democrat, and Steve Daines, a Republican, introduced the Fort Belknap Indian Community Water Rights Settlement Act to the Senate Wednesday, a potentially historic bill that will secure the Fort Belknap Indian Community's Indian water rights.

The bill would invest \$1.3 billion in water infrastructure and provide economic opportunity across the Hi-Line as well as help to avoid costly litigation over water rights in the area, a release from Fort Belknap said Wednesday.

The bill also includes congressional ratification of the 2001 Water Compact between Fort Belknap, the State of Montana and the federal government, which passed by the state Legislature with overwhelming bi-partisan support as well as support from Milk River water users and surrounding counties.

The Rocky Mountain Tribal Leaders Council as well as Republican Reps. Matt Rosendale and Ryan Zinke and Montana Gov. Greg Gianforte, also a Republican, have also voiced their

Fort Belknap water rights bill introduced to U.S. Senate

(Continued from page 1)

support for the bill along with many conservation groups around the state.

The introduction of the bill comes after more than a decade of negotiations.

Fort Belknap's Tribal Council approved its Water Compact with the State of Montana in 2001 and the Montana Legislature approved the compact later that spring.

The Compact and Settlement must now pass through Congress, be approved by a simple majority vote of FBIC members, and the compact must be submitted to the Montana Water Court and be entered into the Montana Water Court as a final decree to take effect.

The release from Fort Belknap said ratification of this compact will affirm Indian water rights and will provide federal funding to settle over a century of mismanagement by the federal government of Fort Belknap's water.

The bill will would settle the 1908 U.S. Supreme Court case, Winters v. United States which held that treaties and agreements between tribes and the U.S. to establish Indian reservations included the water rights needed for the tribes to make permanent homelands.

Under this "Winters Doctrine," tribes across the U.S. have entered into water rights settlements as a means to define and secure legal recognition of their water rights, as well as funding for water development projects.

"We are grateful to Sens. Tester and Daines for introducing our Indian water rights settlement bill and appreciate the work of Gov. Gianforte and the rest of the Montana delegation for their support," Fort Belknap Tribal Council President Jeff Stiffarm said in the release. " ... This bill would benefit the Fort Belknap Indian Community (FBIC) for generations to come and boost the regional economy with funding for infrastructure projects."

Stiffarm said Fort Belknap's southern and northern communities will have updated irrigation projects funded that will provide safe drinking water, and the ability to provide services such as stock water and agriculture projects, which will benefit future generation.

"Specific projects planned for the Southern Communities include: bringing new water from the Missouri River; clean domestic water with new sewers; ground water development for domestic and agricultural projects; and, rehabilitating the historical irrigation projects," the release said.

The bill would also improve the efficiency of the U.S. Bureau of Reclamation Milk River Project, which furnishes water for the irrigation of about 121,000 acres of tribal and non-tribal land. The bill will also restore tribal management to 37,582 acres of state and federal land for the Fort Belknap.

"Passing our water rights settlement bill is critical to our members and communities," Stiffarm said. "... The Act will help to heal our communities and we ask Congress to take action and pass this important legislation."

The bill's introduction comes after more than a decades of negotiation and Montana's congressional delegation, including the delegation's sole Democrat, have all voiced their hope for the bill's swift approval.

"As a third-generation Montana farmer, I know how important water is to folks in north central Montana for everything from irrigation to economic development," Tester said in a press release. " ... I'm proud to reintroduce this revised FBIC water settlement which will give certainty to all water users in the region. This is a made-in-Montana solution, and I'm looking forward to getting this long overdue settlement across the finish line."

Daines also lauded the bill, praising the years of good faith negotiation held between the tribes, state and federal government as well as input from other entities across Montana.

"I am grateful to Montana tribes and communities, our farmers and ranchers, local leaders and diverse water users in the region for their input dur-

(Continued on page 3)



Fort Belknap water rights bill introduced to U.S. Senate

(Continued from page 2)

ing this process that helped us arrive at a solution that will provide certainty, much-needed infrastructure improvements, and protection of the rights of all water users in north-central Montana," he said in a release.

Rosendale said this compact doesn't just benefit the tribes, but Montana as a whole.

"I'm glad to see the Fort Belknap Indian Community, farmers, ranchers and local leaders come to an agreement that will strengthen Montana's economy," Rosendale said in a release.

The newest member of Montana's delegation expressed similar sentiments.

"I am proud to be a part of the Montana delegation working together and keeping our promises," Zinke said in a release.

Gianforte said the process for making a compact like this is long and complex and cannot be done without help from many communities and groups.

"This bipartisan bill is the result of extensive coordination between the State of Montana, the Fort Belknap Indian Community, and the federal government, with valuable input from local leaders, farmers, ranchers, and other water users over many years," Gianforte said in a release. "It's time we get this done for the benefit of the tribes, our farmers and ranchers, and all water users in north-central Montana."

2023 Fort Belknap Head Start **Poster Coloring Contest**

Submitted by Lonette Blackcrow, Administrative Assistant

The Fort Belknap Environmental Protection Department hosted it's annual Head Start Poster Coloring Contest with the local Head Start Centers during Earth Day Month in April. Deadline to turn in the coloring posters was May 8th, 2023. All of the posters were taken, displayed and judged by the community at the following locations: Hays Clean-up Day (John Capture Center, Hays, Montana) on May 12th and at the Fort Belknap Tribal Administration Building (Agency, Harlem, Montana) on May 17th. Community members are always delighted to see the little kids' colorings. It's a great way for community engagement and a time for us to celebrate our little ones.

Each community's Head Start was represented well with an estimated 100 students from the three centers: Three Strikes Center, Lodge Pole; Ramona King Center, Hays; and Gilbert Horn, Sr. Early Childhood Center, Agency. It's exciting to see how big these classes are and the potential impact they will have on our communities.

It's always fun to see what creativity our young artist's come up with. They are all great pieces of art and are judged subjectively by all who came out and participated. We also have to commend the Teacher's for helping us out and letting the children participate in our endeavor.



Certificates and prizes for the top three scored for 1st, 2nd & 3rd place were awarded to the students in their respective Centers. All the kids did an amazing job and we are extremely grateful for the communities' help in picking out winners. Each student who won received a ball, kite, watch, Earth Day Activity Book & Certificate. The prizes were delivered to each center on May 23, 2023.

Congratulations to the following winners of the 2023 Fort Belknap Environmental Department Head Start Poster Coloring Contest.

Gilbert Horn Sr Early Childhood Center (GHSECC):

1st—Jayson Reyes 2nd—Kylee Sullivan 3rd—Samuel Cochran

Ramona King Center (RKC):

1st—Skyden Brockie 2nd—Carson Lecheler 3rd—Kylee Doney

Three Strikes Center (TSC):

1st—Azaeliah Kirkaldie 2nd—Bianca Lonebear 3rd—Destiny Stiffarm



Tribes, Conservation Groups Seek Intervention in Enforcement Action Against Little Rocky Mountains Miners

Intervention defends Montana DEQ in its challenge to illegal mining at Zortman gold mine

For Immediate Release: June 21, 2023

https://earthjustice.org/press/2023/tribes-conservation-groups-seek-intervention-in-enforcement-action-against-little-rocky-mountains-miners#:~:text=The%20Fort%20Belknap%20Indian%20Community.in%20public%20funds%20have%20been

Malta, Montana – The Fort Belknap Indian Community and three conservation groups today filed a motion to intervene in defense of a Montana Department of Environmental Quality (DEQ) enforcement action against two miners who illegally mined within the Zortman-Landusky Reclamation Area, where tens of millions in public funds have been spent to address ongoing pollution from the defunct Zortman and Landusky Mines in the Little Rocky Mountains. This mining activity threatens to exacerbate environmental harm in an area of profound cultural significance to the Fort Belknap Indian Community. The Gros Ventre and Assiniboine Tribes have faced an extreme environmental justice burden from the mines for decades.

"The Fort Belknap Indian Community Council has continuously monitored the activities near our sacred sites and were forced to take legal action in Luke Ployhar's and Owen Voigt's latest effort to mine the area. Their intentional and deliberate disregard of the state's mining permitting process further shows their bad faith efforts and determination to push their profit driven agenda. There is no regard for the letter of the law, the environment, or spiritual beliefs," said President Jeffrey Stiffarm of the Fort Belknap Indian Community. "Our Gros Ventre and Assiniboine beliefs and responsibilities are to protect our traditional and spiritual lands and react as good stewards of the land. Even though the current boundaries are drawn by non-Indian laws, our ancestral lands include the mined area, and the pollution created by mining will flow onto Fort Belknap Indian Reservation lands. We, as a Council, are entrusted and charged with the responsibility to protect the land."

DEQ brought an enforcement action in April 2023 against Luke Ployhar, Owen Voigt, and their respective companies after Ployhar and Voigt attempted to circumvent the Montana permitting process by illegal-

ly mining at the former Zortman mine site. DEQ has requested \$512,767 in fines and permanent injunctive relief, and to prohibit Ployhar, Voigt, and their companies from future mining until the disturbances are reclaimed and the penalties are paid. In 2022, DEQ required Ployhar to complete an environmental impact statement (EIS) on the cultural impacts of mining the Zortman site, but later discovered that Ployhar and Voigt had already charged forward without the requisite authorization. Tribes and conservation groups had previously challenged DEQ's approval of a different mining exploration license of Ployhar's at the site, which is currently stayed in Phillips County District Court.

"There must be consequences for this type of irresponsible and dangerous behavior," said Bonnie Gestring, Northwest program director at Earthworks. "They've demonstrated complete disregard for the decades of reclamation work to control acid drainage and improve water quality for downstream communities."

The Zortman mine is part of the broader Zortman-Landusky mining complex in the Little Rocky Mountains. The site has left a legacy of persistent toxic pollution, disproportionately impacting tribal members' land and water for decades. The Little Rocky Mountains were once entirely within the boundaries of the Fort Belknap Indian Reservation, but when gold was discovered in the 1880s, the federal government pressured the Tribes to cede the gold-bearing areas to the United States. The Zortman and Landusky mine sites are currently surrounded on three sides by the Fort Belknap Indian Reservation.

"Montana has laws regulating its mining operations for a reason," said Amanda Galvan, senior associate attorney with Earthjustice's Northern Rockies Office.

(Continued on page 5)



Tribes, Conservation Groups Seek Intervention in Enforcement Action

(Continued from page 4)



"This site is home to one of the worst environmental justice disasters in our state history, and for a miner to come in and illegally charge forward without a permit is both brazen and intolerable. DEQ is right in bringing an enforcement action against Ployhar and Voigt, and we will stand alongside the agency in demanding accountability."

"We're glad to see that DEQ is pursuing an enforcement action against the reckless and unlawful conduct by these fly-by-night miners," stated **Derf Johnson, Deputy Director of the Montana Environmental Information Center.** "Hopefully this also sends a signal to other hardrock miners in the state: follow the laws or have them enforced against you."

"Flagrantly breaking Montana's mining laws is unacceptable, especially when this type of violation harms significant cultural, fishery and clean water resources, as well as undermines decades and millions of taxpayer dollars worth of reclamation work," said David Brooks, executive director of Montana Trout Unlimited. "We fully support DEQ's enforcement, as it helps protect FBIC and public resources."

The Zortman and Landusky mines were operated for nearly three decades as open-pit, cyanide heap-leach mines. The heap-leaching process occurred at two locations in the Little Rocky Mountains and destroyed much of the land. When in operation, cyanide and acid mine drainage contaminated surface and ground waters hydrologically connected to the mines. In 1998, the mine operators declared bankruptcy and left behind a drastically underfunded clean-up effort, which has largely been shouldered by taxpayers.

Now that mining has ceased, acid mine drainage and other contaminants like cyanide, selenium and ni-

trates continue to pollute the surface and groundwaters connected to the mines, including waters flowing into the Reservation. The contaminants will perpetually pollute surface and groundwaters if the water is not continually treated. Even with treatment, a plume of contaminants continues to creep into Reservation lands, including near key cultural sites and the Fort Belknap Tribes' powwow grounds.

Earthjustice is representing the Fort Belknap Indian Community, Montana Environmental Information Center, Montana Trout Unlimited, and Earthworks in the intervention.



Dean Stiffarm of Fort Belknap, Mont., holds a glass of water contaminated by the Zortman-Landusky mines. (Earthworks)

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\$EPA

FACT SHEET

Proposed Federal Baseline Water Quality Standards for Indian Reservations

May 2023

EPA is proposing a rule to establish federal baseline water quality standards for waterbodies on Indian reservations that do not have Clean Water Act standards to protect people and the environment. Water quality standards describe the desired condition of waterbodies to ensure the water is safe for activities like swimming and fishing, and to protect the plants and animals that live in the waters, now and in the future. EPA's proposed action will protect an estimated 76,000 miles of rivers and streams and 1.9 million acres of lakes and reservoirs on Indian reservations that lack Clean Water Act standards.

Goals for Proposal

Fifty years ago, Congress established the goal in the Clean Water Act that our waters should support fishing and swimming wherever attainable. Consistent with that vision, all states and 47 tribes have adopted water quality standards in effect under the Act that specify the desired conditions for their waters. However, for a variety of reasons, most Tribes with Indian reservations lack such water quality standards. EPA's proposed baseline water quality standards would safeguard water quality for over half a million people living on over 250 Indian reservations. Beyond protecting human and environmental health, attaining and sustaining clean and safe water is essential for many Tribes' cultural and traditional activities.

Water quality standards describe the desired condition of a waterbody and the means to protect it. The proposed baseline water quality standards would provide a common set of designated uses (e.g., fishing and swimming), establish pollution limits to advance progress toward clean and safe water, and include antidegradation policies to protect Tribal waters from becoming more polluted. The proposal also includes builtin flexibilities to enable EPA to work with Tribes and other stakeholders to tailor the water quality

standards where needed to best protect local communities. This action represents a key commitment in the EPA Office of Water's 2021 Tribal Action Plan for partnering with Tribes to address water quality challenges in Indian country.

Through implementation of this rule, EPA will develop numeric limits for specific pollutants. To do that, EPA will rely on descriptive, narrative criteria included in this proposed rule that will be translated to specific pollutant values that consider, for example, EPA's national water quality criteria recommendations, Tribal and location-specific information, and water quality standards for neighboring waters. Additionally, Tribes would be able to nominate specific waters for added protection as Outstanding National Resource Waters. Finally, this rule would provide a public process for EPA to revise designated uses and issue water quality standard variances where warranted. These are important flexibilities to accommodate natural differences and the variety of potential uses for different waterbodies.

Details of the Proposal

This proposed rulemaking reflects EPA's experience working with the Tribes that already have water quality standards in effect under the Clean Water Act. The proposed rulemaking also comes after decades of consultation and coordination with the Tribes. These federal baseline standards would be in effect until Tribes replace them with their own Clean Water Act standards.

Water quality standards are central to restoring and maintaining the quality of the Nation's waters. They are the foundation for developing, implementing, and enforcing water pollution control programs at the federal, state, and local levels, including:

Establishing water quality-based effluent lim-

(Continued on page 7)



Proposed Federal Baseline Water Quality Standards for Indian Reservations

(Continued from page 6)

- its in National Pollutant Discharge Elimination System (NPDES) permits under Section 402,
- Performing Section 401 certifications of federal licenses and permits,
- Analyzing Section 404 permits for dredged or fill material, and
- Identifying waterbody impairments and developing total maximum daily loads under Section 303(d).

Water quality standards also provide a basis for measuring progress in improving water quality and protecting people and the environment. The proposed federal baseline water quality standards will allow EPA to better implement these Clean Water Act programs for the protection of Indian reservation waters.

EPA is proposing to apply the baseline water quality standards to all U.S. waters on Indian reservations except:

- Where EPA has approved the Tribe's water quality standards (47 Tribes),
- In specific cases where EPA has expressly approved a state's water quality standards for such waters or where EPA has promulgated other federal water quality standards, and
- Where a Tribe requests and receives an exclusion from baseline water quality standards coverage of this rule.

The proposed baseline water quality standards would not apply in off-reservation Indian allotments or dependent Indian communities.

Definitions of Terms

Water quality standards are an essential and widely

used tool to advance progress toward the goal Congress established in the Clean Water Act: that our waters should be swimmable and fishable, wherever attainable. All 50 states and 47 tribes have established water quality standards for their waterbodies. These standards define the goals for a waterbody by designating its uses, setting water quality criteria to protect those uses, and adopting policies that protect existing water quality from degradation.

- Designated Uses. Water quality standards specify goals and expectations for how each waterbody is used. Typical designated uses include fishing, recreation, public drinking water supply, agricultural, industrial, navigational, and other purposes.
- Criteria. Water quality standards include water quality criteria that protect the designated uses of a waterbody. Water quality criteria can be numeric (e.g., the maximum pollutant concentration levels permitted in a waterbody) or narrative (e.g., a criterion that describes the desired conditions of a waterbody being "free from" certain negative conditions).
- Antidegradation. One of the principal objectives of the Clean Water Act is to "maintain the chemical, physical and biological integrity of the Nation's waters." Antidegradation requirements provide a framework for maintaining and protecting clean water that has already been achieved.

Where can I find more information?

Learn more about the proposed baseline water quality standards rulemaking at: https://www.epa.gov/wqstech/promulgation-tribal-baseline-water-quality-standards-under-clean-water-act.

FBEPD Welcomes Temporary Employee

By Lonette Blackcrow, Administrative Assistant

The Fort Belknap Environmental Protection Department is pleased to introduce Austin After Buffalo. Austin is stepping in as our Climate Outreach & Education Assistant which is under the Climate Change Program called the Resilience MT: Montana Rural and Tribal Community Program.

He began his job on May 22, 2023 as a Temporary

employee. His office is located upstairs in the Environmental Department and can be reached at (406) 353-8348 or 8384. We are looking forward to working with him.

Climate Change Program Highlights

By Dennis Longknife, Climate Change Coordinator

Hello Climate Change Warriors! I have been busy as a Beaver this year and looking forward to this summer's climate activities. What a great time to be a Duck! Our tribes are blessed by Mother Nature, to finally have wet, spring weather, especially since the Severe Drought that plagued us the past three years. Precipitation is normal to above normal for our region and the prairie fields are once again green with lush native plants growing very vigorously. I had to go out into the field to capture some of the native plant growth, Wild Onions and Turnips are doing very well, as well as the Sage and other plants. What a great time to be a Buffalo, over 1,000 strong, in one of the most pristine, intact shortgrass prairies in North America! The precipitation that kept coming in late May and June, was the million-dollar storm that crops, range and forest needed so badly, as we approach summer.









I went in to the field to do some Phenology observations at a few wetland sites that were dried out the past two years and seen good improvements, as they are holding water again, mostly from the winter snow pack and spring rains which seem to never quit, Great Right! Bring on the rain! I surveyed a few Northern Leopard Frog Breeding sites and these wetlands were functioning normal, the Northern Leopard Frog after a three-year hiatus, is back and they are reproducing.



(Continued on page 9)



Climate Change Program Highlights

(Continued from page 8)

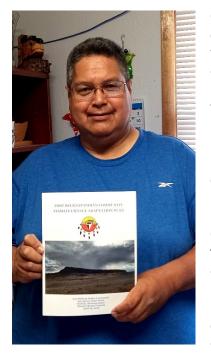


The most important bit of news I have is our Climate Change Adaptation Plan, the Fort Belknap Indian Community Council's, Natural Resource Committee, unanimously approved the Climate Change Adaptation Plan on April 24, 2023. The plan captures seven sectors where our tribes have observed impacts from climate change, Emergency Services, Fish and Wildlife, Forestry, Health, Land Use, The Way (Culture), and most importantly Water. The climate plan also identifies the strengths, where our tribes actions and resilience, and able to respond to impacts, are noted.

Another task of the BIA Tribal Climate Resilience funding we got is to complete a climate adaptation feasibility study and partner with our Tribal Historic Preservation Office (THPO), to assess how climate change will impact our Little Rocky Mountains, and determine the feasibility of native species reintroduction. Subalpine Fir is of cultural significance to our tribes, and historically was in the Little Rocky Mountains (cit. Elder Interviews). A major wildfire in the late 1930's burned close to half of our Forest back then, so sourcing our needs for Sub Alpine Fir for ceremonial practices has to be found in other places. Eventually we want to restore the Subalpine Fir to our home range, thus making ourselves less dependent and more resilient in the process.



The plan was developed with funds from the BIA Tribal Climate Resilience Program. An updated climate change adaptation plan is already in the works as we intend to capture Traditional Ecological Knowledge and incorporate more community input into our updated, climate plan.



One of my climate change activities I am working on is the Resilience: MT Project. We partnered with the University of Montana's, **Environmental Studies** Program and Robin Saha, Associate Professor of Environmental Studies, and secured funding to collaborate on a Climate Mobile Exhibit that will showcase what our tribe's climate impacts are, and how we intend to make our community more resilient. The most im-

portant part of this project is getting to hire a climate staff person, part-time, who will assist in developing the mobile climate exhibit, and work with our area schools. The students will be the ones developing this exhibit, and since they are our future leaders,

why not, our "Climate Resilience Warriors".

Let me welcome you to Austin After Buffalo, my new Climate Education and Outreach Assistant. that's him standing by that waterfall. this young man is of Blackfeet descent, and recently graduated from High School, however he has already made an impact here in our community, working parttime in other areas in natural resources.



Nonpoint Source Pollution Program

By Jaclyn Blackbird, Nonpoint Source Coordinator (Temp)

Fort Belknap's Environmental Department was awarded a Tribal Competitive 319 Grant for the years 2020 through 2025 for Nonpoint Source pollution. As part of the grant, the Nonpoint Source Program Coordinator manages the components of a work plan, which includes implementing on-the-ground projects at King Creek and South Big Horn. A long-term outcome, as part of the overall Environmental Department's water quality goals, is to stabilize King Creek to keep from further transporting tailings downstream with the planting of native willows and trees, with the goal of improving the habitat and potentially attract beavers that once made the stream their home.

On May 18th and 19th, 2023, Fort Belknap Environmental staff teamed up to plant Plains Cottonwood and Sandbar Willow along King Creek on the south end of the reservation. Cody Shambo, Kermit Snow and Adrian Kulbeck assisted the NPS Program in the planting of ninety-five trees and willows. Additionally, the Nonpoint Source Pollution Coordinator, Jackie Blackbird, partnered with Montana's Department of Natural Resources (DNRC), Urban and Community Forestry staff, Jamie Kirby to procure the trees and willows for the planting project. Future plans include purchasing additional plants for the South Big Horn location.













What is Nonpoint Source Pollution?

Nonpoint source (NPS) pollution unlike pollution from industrial and sewage treatment plants, comes from many diffuse sources. NPS pollution is caused by rainfall or snowmelt moving over and through the ground. As the runoff moves, it picks up and carries away natural and human-made pollutants, finally depositing them into lakes, rivers, wetlands, coastal waters and ground waters.

Types of NPS Pollution:

- Agriculture
- Abandoned Mine Drainage
- Forestry
- · Hydromodification & Habitat Alteration
- Highways and Bridges
- Urban Areas
- Wetlands/Riparian Management

FBIC NPS Pollution Concerns

- Acid Mine Drainage (Abandoned Mine Drainage)
- Agriculture
- Hydromodification & Habitat Alteration

Things you can do:

- Practice good waste disposal to protect water quality from urban runoff
- Learn how low impact development can reduce urban runoff and improve water quality
- · Report possible agriculture runoff
- Explore EPA's website for more information about NPS pollution www.epa.gov/nps



PREVENTING AN OPIOID OVERDOSE

Know the Signs. Save a Life.

Opioid Overdose Basics

Prescription opioids (like hydrocodone, oxycodone, and morphine) and illicit opioids (like heroin and illegally made fentanyl) are powerful drugs that have a risk of a potentially fatal overdose. Anyone who uses opioids can experience an overdose, but certain factors may Increase risk including but not limited to:

- Combining opioids with alcohol or certain other drugs
- Taking high daily dosages of prescription opioids
- Taking more opioids than prescribed
- Taking illicit or illegal opioids, like heroin or illicitly-manufactured fentanyl, that could possibly contain unknown or harmful substances
- Certain medical conditions, such as sleep apnea, or reduced
- ♦ kidney or liver function
- ♦ Age greater than 65 years' old

Death from an opioid overdose happens when too much of the drug overwhelms the brain and interrupts the body's natural drive to breathe.

Learn more about opioids to protect yourself and your loved ones from opioid abuse, addiction, and overdose: www.cdc.gov/drugoverdose

Signs and Symptoms of an Opioid Overdose

During an overdose, breathing can be dangerously slowed or stopped, causing brain damage or death. It's important to recognize the signs and act fast. Signs include:



- Small, constricted "pinpoint pupils"
- Falling asleep or loss of consciousness
- Slow, shallow breathing
- ♦ Choking or gurgling sounds
- ♦ Limp body
- ♦ Pale, blue, or cold skin

What To Do If You Think Someone Is Overdosing

It may be hard to tell if a person is high or experiencing an overdose. If you aren't sure, it's best to treat it like an overdose—you could save a life.

- 1. Call 911 immediately.
- 2. Administer naloxone, if available.
- 3. Try to keep the person awake and breathing.
- 4. Lay the person on their side to prevent choking.
- 5. Stay with him or her until emergency workers arrive.

Ask your doctor about naloxone – a safe medication that can quickly stop an opioid overdose. It can be injected into the muscle or sprayed into the nose to rapidly block the effects of the opioid on the body.



U.S. Department of Health and Human Services Centers for Disease Control and Prevention

Biden-Harris Administration Outlines Strategic Priorities to Support Communities Impacted by Wildfires Across the Nation

Contact: lnterior Press@ios.doi.gov | Date: Wednesday, June 14, 2023 |
https://www.doi.gov/pressreleases/biden-harris-administration-outlines-strategic-priorities-support-communities-impacted

WASHINGTON — Secretary of the Interior Deb Haaland and Agriculture Secretary Tom Vilsack today issued a joint memo to federal agency leaders with wildfire responsibilities outlining their vision and goals for managing wildland fires this year.

The memo's release follows a recent briefing that President Biden held with cabinet officials and agency leaders on the nation's preparedness for wildfires and the hurricane season, and comes on the heels of record wildfires in Canada that have caused dangerous levels of air pollution across the East. Last week, the Biden-Harris administration provided details on support for communities impacted by the Canada wildfires.

In addition to fire suppression investments from President Biden's Investing in America agenda, the memo highlights other strategic priorities to reduce wildfire risk, restore ecosystems, engage in post-fire recovery, and make communities more resilient to fire.

The memo also references the National Cohesive Wildland Fire Management Strategy as a guide to working with partners to restore and maintain resilient landscapes and help communities become fire adapted. The recently updated cohesive strategy reinforces the need for cross-boundary collaboration to meet today's wildland fire management challenges, including climate change; workforce capacity; health and wellbeing; community resilience; and diversity, equity, inclusion and environmental justice.

"Climate change is driving a devastating intersection of extreme heat, drought and wildland fire danger across the United States, creating wildfires that move with a speed and intensity unlike anything we have ever seen. I know firsthand the impact this is having across the West," said Secretary of the Interior Deb Haaland. "We must use every opportunity provided by

President Biden's Investing in America agenda to support the wildland firefighters who put their lives on the line to keep communities safe."

"Wildland firefighters perform physically demanding, rigorous and dangerous work that is essential to protect people and communities," said Agriculture Secretary Tom Vilsack. "We need to better support our firefighters and that's why President Biden has proposed long-term reforms that will provide permanent pay increases, better housing, better mental and physical health resources, and better work-life balance."

USDA and the Interior Department aim to have more than 17,000 wildland firefighters on board by the end of this year to help support communities increasingly impacted by wildfires. Air resources, heavy equipment and other support personnel also are ready to respond as wildfire activity increases. The President's fiscal year 2024 budget and accompanying legislative proposal would enable the departments to provide the country's federal wildland fire workforce with improved and well-deserved benefits.

As of the most recent pay period, more than 14,000 Forest Service and 5,000 Interior Department wildland firefighters have received a total of more than \$381 million in temporary pay supplements provided by President Biden's Bipartisan Infrastructure Law. Firefighters face a pay cliff if Congress doesn't implement a permanent pay increase soon as the remainder of these funds will run out around September 30. Without congressional action, in fiscal year 2024, firefighters' base salaries will return to their previous levels, in some cases only \$15 per hour.

The Administration remains committed to working with Congress to implement the workforce reforms

(Continued on page 13)



Biden-Harris Administration Outlines Strategic Priorities

(Continued from page 12)

proposed in the FY 2024 President's Budget and accompanying legislative proposal. These reforms build on the temporary pay increases in the Bipartisan Infrastructure Law by authorizing and funding permanent pay reforms, increasing the number of permanent firefighters, providing mental and physical health support, and expanding housing options.

Historic investments from the President's Bipartisan Infrastructure Law and Inflation Reduction Act have expanded efforts to reduce wildfire risk, including increased hazardous fuels treatments, post-wildfire restoration, and funding for wildland fire science.

Both Departments have made substantial progress toward completing fuels treatments on 6.1 million acres this year.

Last year, nearly 69,000 wildfires burned more than 7.5 million acres across the United States with many acres burning at high severity. Like many recent fire years, the reported number of wildfires nationwide was higher than the ten-year average, up by more than 10,000 fires from 2021. These fires have overwhelming impacts on the American people — many were displaced, homes were destroyed, and lives were lost.

Earth Day Returns in 2023

Kermit Snow Jr, BTRP Compliance Officer



Wahey Neetine, hello my relatives. It's been three years, but we are back to Honor Mother Earth, educate our students, and have fun in the process. I know myself and our Department, along with our Presenters, have missed interacting with the students on this important day and event. The weather on this day, snow & icy roads, was not partici-

pating or making it easy for our kids to participate. Two of the schools had backed out, for safety reasons, but we were not going to let that stop us from welcoming the other two schools. Then we heard back, that one of the schools that backed out were coming, thanks to the lobbying of the students. This is something the students look forward to every year and why we do this for them and Mother Earth. There is so much damage that has been done to Mother Earth and it is up to us and future generations to give back and help her heal in any way we can help. One way to do that, is to educate our Youth about why we have Earth Day and hope they carry on what they learn, for their families and the health of Mother Earth. We also hope that in this process of informing the youth about Mother Earth through our presentations, we might point some of them in the right direction and that maybe this is something they might want to pursue in the future. Although I was excited to be participating in Earth Day again, the presenters were all over it as well, you could see it in how they were all talking and setting up their Learning Stations with the anticipation of all the kids showing up for what they had in store for them.

Just like everything else around the world, the pandemic has affected us as well, but we did get some good Learning Stations set up. We try and make our Learning Stations not only educational, but try to throw some fun activity in the presentations, if possible. Some of the activities are fun type games and some are educational activities to help you see how things are done, such as the wildfires from space activity. We ended up with eight Learning Stations, which worked out well, as we had to go inside the Red Whip Gym to set up and space was limited. One of our Learning Stations did have an activity that took them outside, so the kids did get to go outside and learn something, thanks to the Water Quality Program. We had Learning Stations from: Fort Belknap Tribal Health-Nutrition, U of MT/Spectrum-Climate Resilience Bird Beak Adaptation, Climate Change Program-Climate Impacts, U of Maryland-Wildfires from Space, Water Quality Program- Water Quality, ANC-USDA Extension, Brownfields Tribal Response Program-Brownfields Cleanups, Tribal Health Department/Health Education. We have to give a huge shout out to the U of Maryland for making the trip from the east coast and setting up their Learning Station and showing our students the project they are working on. Although we had only eight Learning Stations, they all were very informative and fun for the young students, and I believe the Teacher's took

(Continued on page 14)

Earth Day Returns in 2023

(Continued from page 13)

home some good ideas for their classroom.

The moment we were waiting for, for the past three years, came bursting through the doors of the Red Whip Gym. The students of Hays Lodge Pole Elementary, with all their joyful smiles and energy, came through the doors to remind us of what had been missing the past three years. This is what we strive for on this day, the chance to share our knowledge with young students eager to learn and have fun while participating in learning how to help Mother Earth. The students from the White Clay Immersion School came next, followed by the Harlem Elementary School. It was awesome to see the bleachers almost full with our students, teachers, and bus drivers. We were definitely back and the fun was about to begin. I love Earth Day and interacting with the students, it makes our job all the worthwhile. It was fun going around to each station to see what was happening and to see the students crowding around the presenters to listen, see, and involve themselves in the process of what each station had to offer. It was great to hear all the noise of the students filling the air in Red Whip, a sound Mother Earth most likely enjoyed herself. It did quiet down a little during lunch break, the students all in the bleachers eating and all the presenters enjoying a pot luck kind of lunch by the Environmental Department. After lunch, the fun began again, with each group of students picking up where they left off on their last station. As the day started winding down, we had to get ready for the door prizes, a prize for all

(Continued on page 15)































Earth Day Returns in 2023

(Continued from page 14)

who came. We cannot do this part, without the help of all the business', Programs, presenters, and individuals who donate prizes for all the students. We make sure every student who comes to this event, leaves with something. It was a great day and I cannot wait til next year, where we will be in the Mission Canyon in Hays. Although all the students had come and gone, we were not finished, we did not forget those that could not make it because of weather or testing that was going on. We made sure we brought prizes and gift bags to the Harlem 4th Grade Elementary class and the Dodson 4th-6th Grade classes. See you all next year! A'HO

We would like to thank the following for making this a great Earth Day for our Students:

Vendors

Havre:

Bing & Bob's Ben Franklin's Dairy Queen Rod's Drive In Pizza Hut Taco Treat Subway

<u>Harlem</u>: Albertson's Clothing Company

Fort Belknap:

FB TERO FB Casino **FB** Credit

Colleges

University of Montana University of Maryland

Individuals

Liz McClain Lonette Blackcrow Jackie Blackbird Kermit "Dale" Snow, Jr.

Exclusive: EPA administrator talks AI, environmental justice

By Ayurella Horn-Muller | Jun 12, 2023 - Energy & Environment https://www.axios.com/2023/06/12/epa-regan-artificial-intelligence-environmental-justice

Environmental Protection Agency administrator Michael Regan tells Axios the Biden administration is focused on decarbonizing the economy using advanced technology like AI.

Why it matters: The EPA's renewed push to engage with the private sector on issues of climate and environmental justice — which Regan promoted with a visit to a Google campus last week — comes amid mounting criticism facing the agency.

Driving the news: Before heading to a Silicon Valley clean energy summit Thursday, Regan stopped by Google's campus to talk with chief sustainability officer Kate Brandt about tech innovation and how the private sector is pushing the envelope on equity and climate action.

 He spoke with Axios after the visit about AI as well as the administration's broader environmental justice initiatives.

What he's saying: Although no official partnership between Google and EPA has been disclosed following the visit, Regan tells Axios his team "definitely saw the power of artificial intelligence at Google" and took a "very strong look" at how some of the ways the tech giant is applying Al could be "beneficial" to the agency.

 "As an administration, we want to harness the power of artificial intelligence, but we want to do it in a correct way, a way that benefits, and not hamstrings, all of the problems that we're trying to solve," says Regan.

The intrigue: All is at the center of a regulation debate emerging in Congress, with lawmakers beginning to discuss some of the concerns surrounding its expansion.

- "The President is also leading the way in looking at the advantages and some adverse impacts of artificial intelligence," says Regan.
- The U.S. signed a "first-of-its-kind" agreement with



Regan (center) arrives to testify at a congressional hearing May 3. *Photo: Tom Williams/CQ-Roll Call, Inc via Getty Images*

the U.K. on Thursday to partner on Al and clean energy, among other economic relations, reports Reuters.

The big picture: Under the Biden administration, EPA hasn't shied away from a public commitment to environmental justice from the top down. According to Regan, the federal agency has "integrated it into our very DNA."

Approximately \$3 billion of IRA funding was earmarked last year for environmental and climate justice initiatives at EPA, a portion going to the September launch of the Office of Environmental Justice and External Civil Rights.

Yes, but: The administration's approach to climate and environmental injustice — a centerpiece of the president's re-election campaign — has been drawing criticism from advocates.

- One example: Activists converged outside of EPA headquarters in April to protest the agency's "slow pace of new climate and clean air regulations" per Inside Climate News.
- Plus, concerns have been raised over the exclusion of race in screening protocols in a White House tool unveiled last year created to identify investments for communities in historically disadvantaged areas.
- "I wish that all of these problems could have been solved yesterday," says Regan. "We definitely rec-

(Continued on page 17)



Exclusive: EPA administrator talks AI, environmental justice

(Continued from page 16)

- ognize the sense of urgency, and we're acting with a sense of urgency."
- He noted that EPA's budget "continues to reflect the need for more staff in that area," citing "significant cuts" to the budget under the Trump administration.

Meanwhile: Last month, the EPA administrator testified before a Senate panel in a bid for a substantial

increase in fiscal year 2024 funding, where he said the declining budget has adversely impacted staffing, in what he described in a prior hearing as a "catch-up game."

 Regan cited the staffing issue in his interview with Axios: "We really need the resources and the people power to really ensure that we're protecting public health while we combat the climate crisis."

YOUR FULLY ACCREDITED 'GROW OUR OWN' NURSING PROGRAM IS NOW SEEKING NATIONAL ACCREDITATION!



By Liz McClain, Aaniiih Nakoda College

Why? One of the reasons is because it opens greater funding opportunities for the program, which could lead to more financial aid for students, as many granting agencies require such a step beyond state accreditation. We take great pride in the pro-

gram as it has been grounded in the community desire- 'taking care of our own'.

The nurse graduates are all working with excellent praise for the cultural safe, professional work they do. For a Tribal College, Aaniiih Nakoda College, to have its very own nursing program is like 'hen's teeth'. We are currently in the process of producing required documents that will be sent to The Accrediting Commission for Education in Nursing (ACEN) which is the agency that oversees such a national process.

AFTER REVIEWING THE 'NUTS
AND BOLTS' OF THE IN DEPTH SUBMITTED PAPERWORK A SITE TEAM WILL
COME TO VISIT AND WILL BE ON CAMPUS
AUGUST 22, 23, 24 OF THIS YEAR. THEY WILL
WANT TO MEET THE COMMUNITY THAT DESIRED AND HELPED TO DEVELOP THIS
UNIQUE PROGRAM OF USING THE MEDICINE
WHEEL PARADIGM TO ENSURE CULTURALLY

SAFE CARE FOR THE FORT BELKNAP INDIAN COMMUNITY.

There will be time set aside for community members to come to campus to talk to the committee about the nursing program.

Written comments are also welcome and should be submitted directly to: Dr. Nell Ard, Interim Chief Executive Officer Commission for Education in Nursing 3390 Peachtree Road Northeast, Suite 1400 Atlanta, GA 30326 or one can email nard@acenursing.org. This is probably a rare venture for them, coming to a Tribal College in a frontier geographic site located on an American Indian reservation. How can it even be that such an iso-

lated place has a nursing program?

YOUR INPUT, IN ATTENDING A COM-MUNITY MEETING OR GIVING WRITTEN IN-PUT ON THE NURSING PROGRAM IS VITAL TO THE SUCCESS OF THIS VENTURE.

More information closer to the visit in August will be forthcoming. If questions, feel free to contact Brigit Hemmer, Nursing Program Director at bhem-mer@ancollege.edu or 406-353-3931.

A Grandmother's Wisdom

Sara Adlington is the MSU Extension Editor and Publications Coordinator



In the middle of the Hays Community Garden is Newah's Garden, which grows in the dedicated care of local grandmothers. Overall, the Hays Community Garden provides plots for local residents to grow their own vegetables and fruits, and fosters a sense of community and connection among gardeners.

MSU Extension Fort Belknap agents Liz Werk and Hillary Maxwell turned to help from local grandmothers to plan and maintain Newah's garden and care for the central gathering place.

Newah is spelled like it sounds or reads in English, and means grandmother in the Gros Ventre language, where it is spelled níiiwcchuh.

Joanie Racine, Tammy Werk and Lorraine Brockie took on the project mid-season in 2021, and in summer of 2022, they planned to integrate native culture and heritage through plants.

"We were in total agreement, all three of us grandmas, because we know some things about the plants, especially the native plants, we have had knowledge passed down to us by our ancestors for thousands of years. We know when to harvest and when to plant all of it and how to preserve it after it's picked," said Racine.

She is very passionate about the garden and explained the reason for its design, "The garden has an arbor in the shape of a medicine wheel, circular, it has four colors, four directions and also is represented by four animals. The medicine wheel represents the cycle of life, everything flows in a circle. My husband, Don Racine Jr., made the arbor that encompasses the garden."

The grandmothers transplanted some local, native plants into the four sections of the garden and collected local rock and resources to support the plants that can be used in the community. They knew what plants they wanted as the plan came together for sharing the garden.

The grandmas and MSU Extension received funds through a Reimagining Rural Grant to make and install five new concrete benches at the garden. The Blue Heaven Harnessing Hope Project, managed by Toby and Liz Werk, helped provide building materials and supplies.

"Our goal is to educate the children about plants as medicine, as foods, for ceremonial uses, we want to share our knowledge. Our grandchildren want to learn. And the garden can be a gathering place where people can visit, and we can educate them about the plants, their history, and their importance to our culture."



Photo: Joan Racine

"The medicine wheel represents the cycle of life, everything flows in a circle."

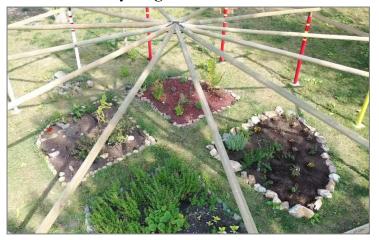


Photo: image from Montana PBS video

To invite all ages to spend time at the garden, the grandmas hope to raise funds to add smaller benches for children in the future.

"We are grandmothers, and we really want our grandchildren to feel like they have a spot in the garden as well," said Racine.

A Grandmother's Wisdom - MSU Extension | Montana State University Lives & Landscapes - Fall 2022 (montana.edu)



Updates from Aaniiih Nakoda College STEM Programs

COLLEGE

Submitted by Rebecca Bishop - Aaniiih Nakoda College

ANC held its second Environmental Science-Aaniiih Nakoda Ecology Community Advisory Board Meeting in Billings, June 3-4, 2023. Over 40 members of the board participated in the meeting. Following up on topics discussed at last year's retreat, the large group was broken up into four groups, focusing on curriculum and instruction, workforce development, cultural inclusion, and community outreach. The basic premise of the groups was to look at the different needs of the community and the natural resources on the Fort Belknap reservation. The group came together to discuss and plan on how to best serve the needs of the people, wildlife, land and water. One idea discussed was hosting a community seminar series offering relevant information on a wide variety of topics, including agricultural production, livestock grazing, access to resources, and buffalo research and preservation.

Ideas related to cultural inclusion included developing a list of individuals who could serve as guest speakers about the Aaniiih and Nakoda culture and lifeways and those who have Traditional Ecological Knowledge (TEK) that can be presented in various courses. Participants suggested that the college reestablish a council of Elders who would be available to interact with students, faculty and staff; they also suggested that the college host more community events for all community members.

Employment and workforce development needs were also discussed. Advisory board members suggested that college personnel should assess the number of jobs currently available for college graduates and trades people in order to get a clearer picture of the area's current and future job market.

Aaniiih Nakoda College strives to bring educational offerings that fill the needs of the community, to partner with other organizations and educational institutions, and to bring forth the most valuable offerings to the people of Fort Belknap and outlying areas. The input provided by advisory board members during the retreat will help the college more effectively achieve these important goals.



Now Is the Time to Stop Drug Overdose Deaths

https://www.cdc.gov/drugoverdose/featured-topics/overdose-prevention-campaigns.html#print



In the United States, drug overdoses have claimed over 932,000 lives over the past 21 years, and the drug overdose crisis continues to worsen. In 2020, the rate of drug overdose deaths accelerated and increased 31% from the year before. Synthetic opioids, such as illicitly manufactured fentanyl, continue to contribute to the majority of opioid-involved overdose deaths.

To save lives from drug overdose, the Centers for Disease Control and Prevention (CDC) launched four education campaigns to reach young adults (ages 18-34) who use drugs. The campaigns provide information that can save the lives of people who use drugs or are struggling with substance use disorders and highlight actions the public can take to help prevent overdose.

Specifically, the campaigns provide critical information about these topics:

- Dangers of fentanyl
- Risks and consequences of mixing drugs
- Life-saving power of naloxone to reverse an opioid overdose
- Importance of reducing stigma to support treatment and recovery

More about CDC's education campaigns to stop drug overdoses:

The Dangers of Fentanyl

Fentanyl's increased presence in the drug supply is a key contributor to the increase in overdose deaths. Fentanyl can be up to 50 times stronger than heroin and up to 100



times stronger than morphine, so even small amounts of fentanyl can cause an overdose.

Many illegal drugs, including counterfeit prescription opioid pills, heroin, cocaine, methamphetamine, and ecstasy, can be mixed or laced with fentanyl with or without a person's knowledge, as they would not be able to see, taste, or smell the fentanyl.

CDC's campaign on fentanyl provides information about:

- Illicitly manufactured fentanyl
- Dangers of fentanyl
- Fentanyl's roles in overdoses in the United States

To learn more about CDC's campaign on fentanyl, visit Fentanyl Facts: https://www.cdc.gov/stopoverdose/fentanyl/index.html.

Risks of Polysubstance Use

People who use drugs may use multiple substances together or within a short time period. The use of more than one drug, also known as pol-



(Continued on page 21)



Now Is the Time to Stop Drug Overdose Deaths

(Continued from page 20)

ysubstance use, is common and can be intentional or unintentional. Whether intentional or not, mixing drugs is never safe because the effects from combining drugs may be stronger and more unpredictable than those of one drug alone and can even be deadly.

For example, mixing stimulants—like ecstasy and cocaine—increases the risk of stroke and heart attack, while mixing opioids with other depressants—like benzodiazepines ("benzos") and/or alcohol—can slow breathing, which could lead to severe brain damage or death

CDC's campaign on polysubstance use provides information about:

- The dangers of polysubstance use
- What to do if you think someone is overdosing

To learn more about CDC's campaign on polysubstance use, visit Polysubstance Use Facts: https://www.cdc.gov/stopoverdose/polysubstance-use/index.html.

Reversing Opioid Overdoses with Naloxone

Naloxone is a nonaddictive medicine that can reverse an opioid overdose if administered in time. Carrying naloxone and using it on someone who is overdosing on opioids



could immediately help save a life. One study found that in most cases of overdose deaths, a bystander was nearby who could have helped prevent the death.

In most states, Good Samaritan laws to protect those who are overdosing and anyone assisting them in an emergency from arrest and criminal prosecution on drug-related charges. Naloxone is available in all 50 states; Puerto Rico; and Washington, DC, and often without a prescription.

CDC's campaign on naloxone provides information about:

- The lifesaving benefits of naloxone
- ♦ How to use naloxone
- Who should carry naloxone
- Naloxone availability in the United States

To learn more about CDC's campaign on naloxone, visit Lifesaving Naloxone: https://www.cdc.gov/stopoverdose/naloxone/index.html.

Stigma Reduction

Addiction is a treatable disease that can happen to anyone. Recovery from addiction is possible, but the stigma related to using drugs remains a significant barrier to getting



help. Showing compassion for people who use drugs can help reduce the shame, or stigma, that people feel when seeking help. Friends and loved ones can offer support and help their loved ones who live with a substance use disorder find a treatment and recovery plan that works for them.

There are many paths to recovery and treatment. Recovery is not always a straight path forward, but a strong support system can help each person take steps toward recovery.

CDC's campaign on stigma reduction provides information about:

- The effects of drug use on the brain
- Recovery and treatment options including medications for opioid use disorder (MOUD)
- Supporting a loved one on their path to recovery

To learn more about CDC's campaign on stigma and recovery, visit Stigma Reduction: https://www.cdc.gov/stopoverdose/stigma/index.html.

Together, we can stop drug overdoses.

Everyone can take action to help end the overdose epidemic in the United States. Use and share the information and materials for CDC's drug overdose prevention campaigns to increase awareness of how we can work together to save lives from overdose and support people who use drugs to find a path toward treatment and recovery.

April-June, 2023

So Here's A "Plug" For Fire Hydrants...!

by Jeffrey Kormann

https://www.map-inc.org/uploads/5/2/2/1/52214049/source spring19 final.pdf

See what we did there? In all seriousness, and whether you choose to call them fireplugs, fire cocks, fire pumps, Johnny pumps, or even something else, hydrants are a major component of water distribution systems and represent a key element of the firefighting infrastructure which society depends on today.

The Hydrant in History

Records show that the Chinese may have been the first to develop a concept of storing water for use in fighting fires. (Perhaps there is a connection to the fact that the Chinese also invented gunpowder.) Iron cauldrons were placed in strategic locations and kept filled with water in case of need. In other parts of the Asian world, fire cisterns are still used which store water below ground for



better access in the event of an earthquake.

Although scholars differ on the true origins of the modern fire hydrant in America, credit for its invention is widely attributed to Frederick Graff, Sr., in 1801. Mr. Graff, as Chief Engineer of the Philadelphia Water Works, wanted to improve on the bucket brigade concept and apparently patented a design for a

wooden post or pillar type of appurtenance that connected to the wooden water mains of the day. The following year, the first cast iron hydrants were being manufactured by

cannon maker Foxall &
Richards and became
standard equipment in
conjunction with the cast
iron mains in use for most of
the next 150 years. The
Mathews Improved model, patented in 1858, was widely
used after that and supposedly some examples can still be
found in service today. Later

modifications advanced the basic concepts of wetbarrel and dry-barrel hydrants, along with flush hydrants that have generally been used for distribution system maintenance. Another offshoot of the basic concept has been the development of nonpressurized "dry" hydrants, which are installed adjacent to lakes and ponds which a pipe runs below the standard water line. When needed, fire fighters simply connect to the barrel end of the hydrant and draft water into the pumper engine or tank through the principle of suction.

Ironically, history indicates that all records pertaining to Mr. Graff 's original fire hydrant designs were lost in an 1836 fire that destroyed the U.S. Patent Office building.

Today's Uses

Most people associated with the water industry are aware of how fire hydrants are opened and connected by fire departments to pumper trucks when fighting fires. Other legal purposes for accessing their bounty include the temporary permits



issued to construction contractors until such time that a service line can be installed to a property, the filling of in-ground swimming pools and water tank trucks, and the local wastewater department when cleaning out collection lines. Of course, fire hydrants play a key role in the periodic flushing of the water distribution systems they are connected to, which is recommended maintenance for both the lines and hydrants. Valves that are frozen or rusted shut, and not easily opened by fire departments when needed, could jeopardize both life and property.

A more exotic function is that hydrants supply a source for water cannons that are sometimes used to break up riots and other civil disturbances.

(Continued on page 23)



(Continued from page 22)

Fun Facts for You

Most members of the general public are unaware as to the meaning behind the color-coding of hydrants. In a nutshell, the color of the bonnet or cap provides information for the fire department (which in the case of large blazes, can include units from other municipalities called in to assist under



mutual aid who may not be as familiar with the local system) as to the flow that can be expected. These four basic color codes are as follows:

- ⇒ BLUE—1500 gallons or more per minute
- ⇒ GREEN—between 1000 and 1499 gallons per minute
- ⇒ ORANGE OR YELLOW—between 500 and 999 gallons per minute
- ⇒ RED—below 500 gallons per minute

According to Wikipedia, hydrant bodies are also supposed to be color-coded. These colors and their meanings are as follows:

- ⇒ WHITE—public system hydrant
- ⇒ YELLOW—private system hydrant, connected to public water main
- ⇒ RED—special operations hydrant, often intended

- to identify flush hydrants for system maintenance only
- ⇒ VIOLET—non-potable source of supply, such as a pond or lake

Of course, municipalities have been known to deviate from these standards and often use their hydrants as promotional artwork, similar to the concept of painting the town's water tower in school colors. Many towns and some rural supply districts marked the nation's Bicentennial in 1976 by painting their hydrants in a red, white, and blue motif. An example of how this backfired in one small community was when an old abandoned house was razed. Clearing away the nearby brush revealed a fire hydrant that had been missed when the other hydrants in town had been repainted many years previously. The embarrassing oversight revealed the need for a cataloged inventory of all hydrants on the local system along with complete service records, a good practice in asset management which could be assigned jointly to the water system personnel and the local fire department.

A Closing Thought

Although no longer an "Ancient Chinese Secret", fire hydrants in some form have been around almost as long as humans have lived in proximity to one another and assumed common responsibility for sharing the essential element of water. It appears likely that the same basic concept will continue to be an often-overlooked but vitally important part of our lives for many generations to come.

Private Wells

By Jesse Campbell

https://www.map-inc.org/uploads/5/2/2/1/52214049/source spring19 final.pdf

You walk into the kitchen and draw a glass of water from the sink to quench your child's thirst. You do not question if the water is safe to drink because you believe someone else is responsible for providing you with safe, clean drinking water. But, what happens when you are the owner, operator, and consumer. Who is responsible for ensuring the water is safe to drink? If you can't figure it out, looking in the mirror will give you a hint!

that rely on private well water as their primary source of drinking water. These water systems are not regulated by the U.S. EPA, states or local regulatory agencies. The individuals maintaining these private systems are not licensed water operators or utility managers; they are the rest of us. In most cases, they do not know, what they do not know; so they are unaware of the risks associated with managing their private well.

This is reality for the over 15 million U.S. Households

(Continued on page 24)

Private Wells

(Continued from page 23)

Having a private drinking water source can be very rewarding but it is also a major commitment. It is definitely not a file and forget system. There are finan-

cial, maintenance, and testing reguirements which must be planned for, completed, and followed up on to maintain a safe well. Something as simple as a missing well cap or a mismanaged piece of treatment could contaminate the system and cause major health concerns. Without proper testing and follow up maintenance or treatment your friends and family may be exposed contaminants without to knowledge of their presence. Furthermore, when a piece of the system breaks it can be costly to repair or replace. Without proper financial planning you may be leaving your family without access to any water for an extended period of time. As a private well owner, obtaining as much knowledge as possible about where your water

comes from, how your well and distribution system works, the components of the system, and how to maintain the water quality is essential. Knowledge about your system is a key step to maintaining that piece of mind that your water is safe and healthy.

Don't gamble with your friend's and family's health with each glass of water that comes out of the tap.



You are responsible for your well and your own drinking water when it comes from your private well. But that is not the only danger. You share your ground water source, the aquifers. It takes everyone in the community to protect the groundwater that is within the aquifers. When contamination occurs it does not only effect the private well in question but also the neighboring wells. Every well, regardless of its intended use, irrigation, drinking, or livestock poses a potential risk to the groundwater of an area. As a community, it is essential there is continued education and efforts made to ensure everyone is protecting the groundwater. This begins with proper well care, maintenance and testing and continues through proper waste

disposal, public health and conservation programs. A proactive approach to groundwater protection at the community level helps support the individual home owner's efforts, promotes public health and protects the drinking water for future generations.

"It would be fair to say that we didn't even know what we didn't know in regards to well ownership, usage, and safety."

- Well Owner John Walter

Microplastics in our Environment

From: Simpson, Karen (she/her/hers) Simpson.Karen@epa.gov | April 26, 2023 5:29 PM

Here is some basic information about what they are, the impact they have on our environment, and what we can all do to help prevent them from entering our environment in the first place.

How do microplastics end up in the environment?

 Primary and secondary microplastics enter and move around the environment in a variety of ways. They can result from littering, water runoff, and wind that blows trash out of trash bins. The smaller particles can also be picked up by air currents and transported miles away.

Since these particles take a very long time to break down, the microplastics end up accumulating in soils, water, and sediments. The wildlife in those environments is then exposed to these particles through ingestion, inhalation and dermal contact (through the skin), and those particles can then accumulate in the bodies of those organisms.

(Continued on page 25)



Microplastics in our Environment

(Continued from page 24)



Caption: Two hands holding many broken plastic pieces. Image from: https://www.epa.gov/water-research/microplastics-research

What is their impact to the environment?

- The toxicity of microplastics is still being studied but some evidence suggests that the chemicals that leach from them may interfere with the growth and reproduction of organisms that ingest them. One chemical that is often found in plastics and is getting a lot of attention these days are per- and polyfluoroal-kyl substances, or PFAS.
- Another concern is that microplastic particles serve as vectors for other harmful contaminants such as polycyclic aromatic hydrocarbons (PAHs) and polychlorinated biphenyls (PCBs).

What can you do to help prevent microplastics from entering the environment?

One thing you can do to prevent microplastics

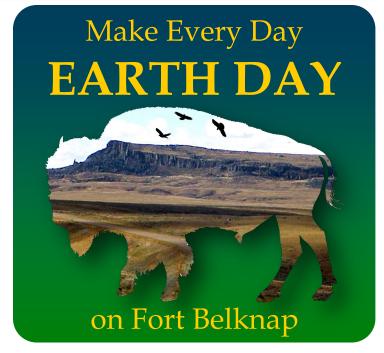
from entering the environment is to reduce your personal plastic footprint by using less single-use plastic. By using reusable water bottles instead of plastic ones, or reusable bags instead of single-use plastic grocery bags, you can significantly reduce the amount of trash you produce.

 Another thing you can do is to opt for products that are made with natural and sustainable materials, such as wood, cotton, hemp and bamboo, instead of ones that are made with plastic.

What is EPA doing to address microplastics in the environment?

- EPA's Trash Free Waters program is working hard toward preventing trash from entering waterways by helping to prevent waste generation at the source, removing trash from waterways through clean up efforts, and researching the impacts of aquatic trash (including microplastics) on the environment and public health.
- EPA's Office of Research and Development has also made microplastics a research priority. This research will focus on developing methods for measuring microplastics, learning more about how they move around the environment, and assessing the level of toxicity from different types of exposure.





Squeal on Pigs! North American Partnership Asks For Help Protecting Agriculture, Land, Water and Resources

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HELENA-The message is clear. Squeal on Pigs! A North American partnership formed to prevent the spread and establishment of feral swine have released a new campaign promoting awareness and reporting of feral swine.

"Across North America feral swine are also known as wild pigs, wild boar, hogs, or other names," said Liz Lodman, administrator of the State of Montana Invasive Species Council and U.S. co-chair of the Transboundary Feral Swine Working Group which works to address feral swine between the United States and Canada. "Regardless of what you call feral swine, they are a big problem and pose a significant threat to our economy and environment."

Within the United States, feral swine are known to cause over \$2.5 billion in damage and control costs to agriculture, property, and natural resources.

Additionally, potential introduction of foreign animal diseases such as African swine fever (ASF), foot and mouth disease, or classical swine fever (CSF), pose a substantial risk to the livestock industry, trade, and food security.

To address these risks and damages, the U.S. National Feral Swine Damage Management Program, led by the U.S. Department of Agriculture, Animal and Health Inspection Service, Wildlife Services, was established in 2014. Congress allocates funds annually to support the program in feral swine disease surveillance, population monitoring, and damage management efforts across 38 states and territories.

"The threat of feral swine is vast. Their impact is farreaching, harming agriculture and livestock, wildlife and ecosystems, human health, and safety, and more," said Jeanine Neskey, Extension Specialist for the National Feral Swine Damage Management Program. "In some regions, feral swine have existed for centuries, making eradication a substantial challenge. However, in regions where feral swine are not yet well established, we have an opportunity to stop their population spread. Squeal on Pigs! Is how we will keep regions feral swine free."

In Canada, feral swine are expanding quickly.

While occasional sightings are reported in British Columbia, Quebec and Ontario, established populations are now found in Alberta, Saskatchewan and Manitoba and present a huge risk of introducing African swine fever which would devastate Canada's pork industry (Canada is the world's third largest exporter of pork) if it became prevalent in commercial swine.

"In Canada, there is a massive ongoing effort with implementation of Canada's Wild Pig Strategy to provide Canada-wide leadership to facilitate eradication of feral swine by enhancing the understanding of the problem, educating on best practices, coordinating efforts across regions, provinces, territories and with Indigenous organizations and partners, and systematically tracking progress toward shared goals." said Kellie Sherman, Operations Supervisor with the Canadian Council on Invasive Species and Canadian Co-Chair of the Transboundary Feral Swine Working Group. "The Canadian Council on Invasive Species is excited to play a key role in education and awareness on this important topic with the new Squeal on Pigs! Program."

Early Detection is key.

North American agencies agree that early detection of newly introduced feral swine is key to triggering quick and effective management. To raise public awareness and promote reporting of feral swine, a new campaign titled Squeal on Pigs! and associated reporting tool have been released which are available now.

(Continued on page 27)



Squeal on Pigs! North American Partnership Asks For Help

(Continued from page 26)

The Squeal on Pigs! campaign is tailorable for use across North America. The campaign includes templates in French, Spanish, and English. Campaign graphics include logos, stickers, social media assets, and other educational elements that are customizable for local, state or provincial/territorial, and national use, including Indigenous territories, to aid programs and harmonize public communications. Partners are invited to join the Squeal on Pigs! partnership, that will include a North American website and upcoming management workshops and policy summits in summer of 2023 and beyond.

"Invasive species, including feral swine, do not respect jurisdictional boundaries such as international borders." Said Lodman. "To be successful in protecting or economy and environment we must work in harmony across those same borders."

Get the Mobile App.

In addition to campaign resources, the University of Georgia's Center for Invasive Species and Ecosystem Health developed a Squeal on Pigs! mobile application for Android and iOS devices that function as a digital field guide to identify signs and damage, scat, and hoof prints. In the event you spot a pig out of captivity, the app also creates an alert that is integrated into the Early Detection and Distribution Mapping System (EDDMapS), a North American invasive species database. The report also triggers an alert to managers which aids in rapid response.

"Data and information sharing are key to successfully understanding and stopping invasive species." said Chuck Bargeron, Director of the University of Georgia's Center for Invasive Species and Ecosystem Health. "The Squeal on Pigs! app is an educational tool that also informs a North American understanding of the distribution and spread. This data will help create long-term solutions."

Download the Squeal on Pigs! mobile applications by visiting the Apple App Store or Android Google Play Store.

Funding for the Squeal on Pigs! campaign and reporting application are provided by the U.S. Department of Agriculture National Feral Swine Damage Management Program through the State of Washington Invasive Species Council.

Learn more about feral swine in the United States. Learn more about feral swine in Canada and become a Squeal on Pigs! partner.

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U.S. Department of Agriculture

Animal and Plant Health Inspection Service Public Affairs Wildlife Services Media Contact: Tanya Espinosa 301-851-4092

U.S. Department of Agriculture National Feral Swine Damage Management Program Staff Contact: Jeanine Neskey 970-222-1287

Resources for Media

USDA-APHIS Feral Swine Flickr Page USDA-APHIS Wildlife Services Feral Swine in America Video Series USDA-APHIS Wildlife Services Feral Swine B-roll Squeal on Pigs! Media Graphics Squeal on Pigs! Mobile Application Graphics U.S. Feral Swine Distribution Maps Canadian Map (Aschim, R.A., Brook, R.K. Evaluating Cost-Effective Methods for Rapid and Repeatable National Scale Detection and Mapping of Invasive Species Spread. Sci Rep 9, 7254 (2019). https:// doi.org/10.1038/s41598-019-43729-v)

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