National Indian Health Board

Tribal Climate Champions: Spotlight on Blackfeet Nation

May 29, 2018

The National Indian Health Board (NIHB) has funded three Tribal climate health projects as part of the Climate Ready Tribes Project with support from the Centers for Disease Control and Prevention (CDC). NIHB is currently highlighting each of these Tribes and their climate health efforts through email spotlights.

Iconic glaciers bordering Blackfeet Nation – melting due to climate change

Today's spotlight highlights the project work from Blackfeet Nation. The Blackfeet Reservation is headquartered in Browning, Montana, bordering Glacier National Park and Canada. It is the third largest reservation in Montana, encompassing approximately 1.5 million acres (2350 square miles). The reservation is home to 75% of the enrolled Tribal members and is the largest American Indian population in Montana. Blackfeet people have lived on the Rocky Mountain front lands for more than 10,000 years. Their traditional lifestyle was nomadic and cyclic in nature. The Blackfeet groups followed the cycles of the four seasons and the buffalo. There were originally four major bands - Blood, Siksika, North Piegan, South Piegan. The South Piegan are the ancestors of most Blackfeet Tribal members in the United States today. To this day, they use the land for cultural and spiritual purposes. Their personal relationship with Creator (Nah-doo-si), Indian culture, religion, tradition, language, and living on the 'red path' of their ancestors is who the Blackfeet People are today. To continue on, this way of life depends upon the future generations of children. This way of life has been continually passed down from Elders across many generations.

The Blackfeet Nation has always lived closely with the natural environment. The Blackfeet people are traditional hunter-gatherers, farmers, and ranchers and their harmony with the ecosystem has promoted physical and mental health for the Tribe. Subsistence activities are still very important for food security, recreation, and cultural activities. As climate change causes seasonal shifts, growing cycles change and gathering techniques and schedules are affected. Water is the lifeblood of the West and is critical on the high, arid plains of the Blackfeet Reservation. However, nowadays the Tribe is experiencing issues with drought, extreme weather, and water contamination.

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Water is one of the natural elements that the Blackfeet people hold sacred. Waterways, wetlands, and associated groundwater are important for the large number of ranchers, farmers, and all Tribal members in general. Water is also fundamentally important for fish and wildlife species, and watersheds in the area host threatened species including the grizzly bear, Canada lynx, piping plover, and bull trout. Unfortunately, climate change is bringing significant changes to the Blackfeet water supplies, including decreased snowpack in the mountains, melting glaciers in the Glacier National Park, and precipitation changes ranging from additional precipitation in winter and spring to a decrease in late-summer rain. Because of these changes, water is becoming scarce in some areas or seasons and over-abundant in others, leading to both drought and flooding. As flood risk increases, so do risks of storm surges that can contaminate water and food supplies. Additional precipitation, including wet and heavy snow, is damaging residences and infrastructure. Excess moisture is leading to mold, breathing problems, stress and worry, and financial difficulties and can also increase standing water, leading to increased issues with vector-borne disease. Exposure to pathogens like norovirus, Giardia, and others are expected to increase. Increased run-off may expose more people to contaminants like heavy metals, herbicides, and pesticides as they move into freshwater systems used for drinking and recreation. Meanwhile, droughts also pose problems with water treatment by increasing concentrations of pathogens in discharged sewage. Changes in water availability for plants, wildlife, and human consumption have caused the Blackfeet people to change their seasonal hunting, gathering, cultural and spiritual uses. Climate change is also predicted to increase harmful algal blooms. Additionally, community members have noticed changes in wind and less moisture in the forest areas, as well as impacts on agricultural production. Dangerous animals and invasive species such as rattlesnakes, brown recluse and black widow spiders, aquatic zebra mussels, and milfoil are also moving onto the reservation.

2018 snowstorm that left residents snowbound

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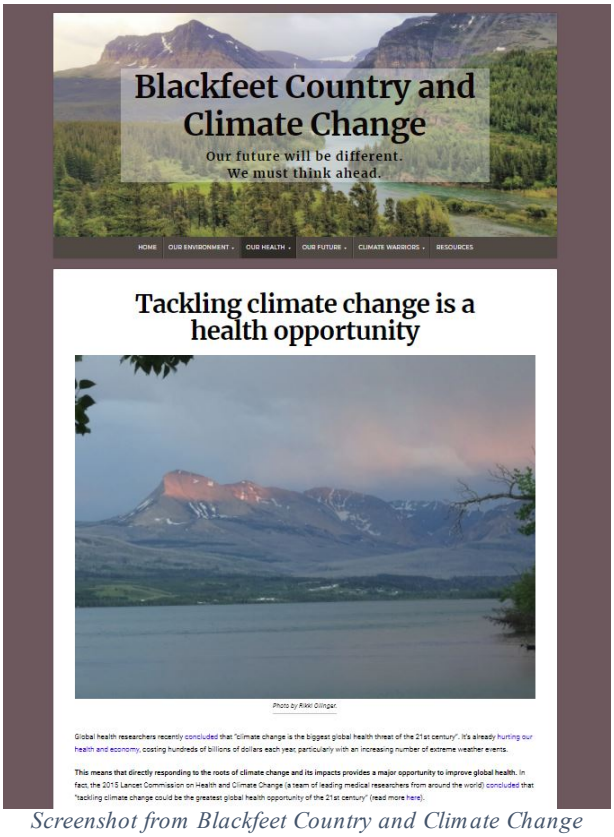

Screenshot from Blackfeet Country and Climate Change Website

The Blackfeet Tribal Environmental Office has been working to address climate change related issues. The following highlights describe work conducted for their 2017 NIHB project and other related climate change work. First, the Tribe has worked to research and catalogue relevant climate change-related resources and communicate climate change impacts and existing and ideal adaptation opportunities, sharing these online and through the Blackfeet Climate Change Adaptation Plan (funded by a different grant). The Tribe has also assembled a Blackfeet Climate Health Advisory Team (focus group) made up of Tribal representatives and other partners. With help from the focus group, Blackfeet has so far completed a climate change communications plan to guide outreach as well as ten handouts that each emphasize a different focus of climate-related health concerns (e.g. water quality, air quality, heat, food security) and identify impacts, vulnerable populations, and adaptation opportunities within each theme. Blackfeet also completed a public website called Blackfeet Country and Climate Change focusing on health and environmental impacts and youth involvement in Blackfeet climate change initiatives. This website shows links between health (the focus of NIHB's grant) and broader climate change issues. To ensure the broadest reach possible, this website is public so that Blackfeet Tribal members and also interested others can benefit from this important information. View the website here: https://blackfeetclimatechange.com/. Additionally, Blackfeet offers an internship program for young Climate Warriors.

Blackfeet Climate Change Interns met with Tara Luna, a botanist, and learned about climate change impacts to medicinal plants

Blackfeet Nation hopes to adapt by continuing and expanding water quality monitoring, especially after high levels of precipitation; upholding high drinking water standards and practices; issuing advisories if water contamination is suspected or confirmed; keeping drinking water, wastewater, and stormwater infrastructure in top condition and prioritizing replacing aging infrastructure; and restoring and protecting wetlands to reduce impacts from high precipitation events. The Tribe has shown commitment to moving this important work forward and plans are underway to continue additional climate health activities. Moreover, already completed activities allow excellent opportunities

to sustain this work beyond the project period and funding. Connections forged through the Climate Health Advisory Team allow ongoing partnership, the website and other materials developed will continue to educate the community, and providing opportunities for young people to learn and grow can help plant a seed of promise to raise the next generation of climate activists.

Gerald Wagner is the Project Director and the Director of the Blackfeet Environmental Office. He has worked in the Blackfeet Environmental Office for 26 years and has served as Director for 23. Gerald is directly overseeing the Climate Change Health Impact project but the project is really a combined effort involving several groups and individuals whose interests are bringing climate change concerns to the Blackfeet community. The following are interested staff and groups that have assisted or are assisting with the project: two ¼ time environmental staff people, Jenna Loring and Ron Ingraham, one ¾ time staff, Kim Paul, and two summer interns JoVonne Wagner and Shawn Davis, as well as consultants from the Center for Large Landscape Conservation.

Learn more about NIHB's Climate Ready Tribes project here.

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