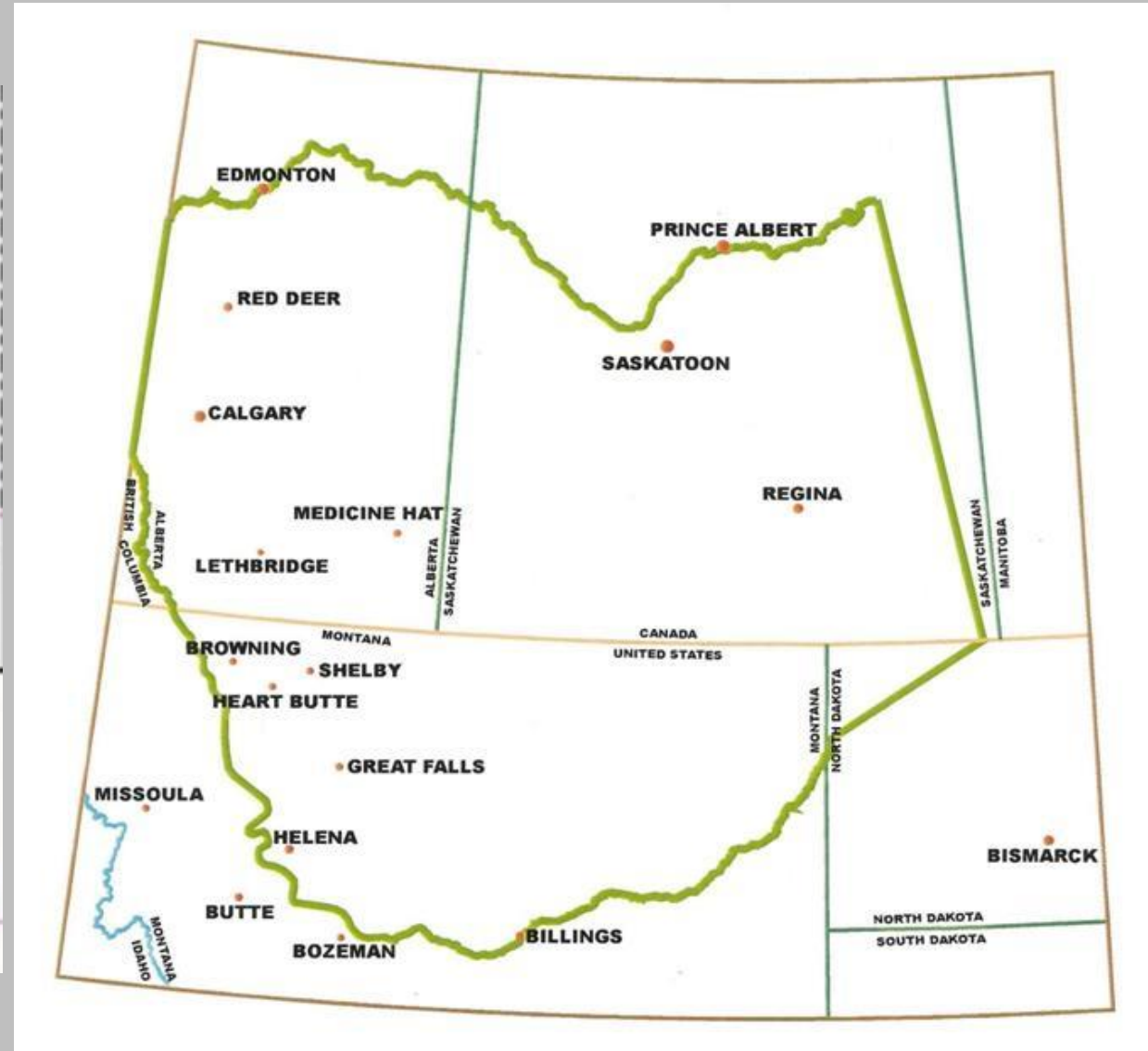
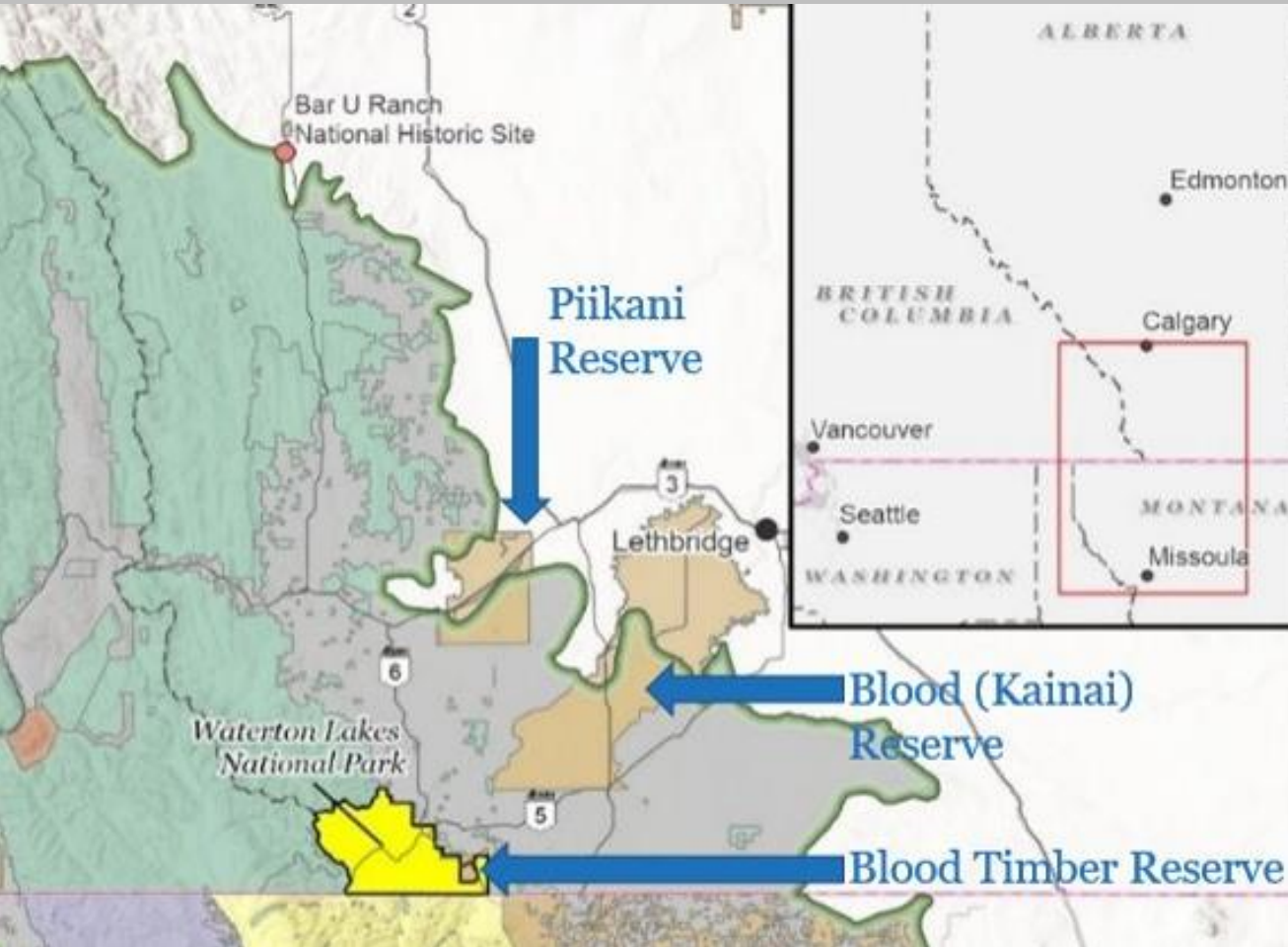


# Working Together to Restore Matsiyíkkapisaa/Northern Leopard Frog at Paahtómahksikimi



Presented by Alvin First Rider, Environmental Technician, Blood Tribe Land Management and Kimberly Pearson, Nature Legacy Ecosystem Scientist, Waterton Lakes National Park

Crown Managers Partnership Forum: Indigenous Leadership in Honoring and Caring for the Crown of the Continent Ecosystem  
Browning, Montana March 15, 2023



# Ecological Significance



# Blackfoot Cultural Significance





**Lot 184: Blackfoot Man's Shirt**

Poncho construction, Blackfoot man's war shirt on native tanned hide. Yellow ochre pigment with tadpole designs painted in black on front and verso, with black painted sleeve stripes. Trimmed in red trade cloth at the collar front and back. Finely executed beaded panels affixed to front of the sleeves and over the shoulders, in light blue, cobalt and pumpkin colored beads. Old, round repair to the front. A striking example of a Plains man's shirt with great "tadpole" symbolism. Circa 1875-80, 48" tall x 60" wide as mounted on custom stand (included).

*Brian Lebel's High Noon Auction - January 23, 2016*

*Sold \$109,250*



*Mátsiyikkapisaiki'somm*

Frog Moon

Lune de la grenouille

# Threats to Amphibians

Disease



Lee Berger Photo

Habitat  
disconnection

Habitat loss

Invasive  
species



Audubon Field Guide Photo

Climate  
change

# Solutions for Amphibians: Preventing Spread of Disease and Invasive Species







Matsiyíkkapisaa  
Northern Leopard Frog







# Collaborative Monitoring



Blood Timber Reserve 2019



Waterton River 2021

# Collaborative Monitoring



Blood Reserve 2021



Blood Reserve 2022

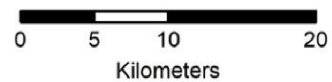
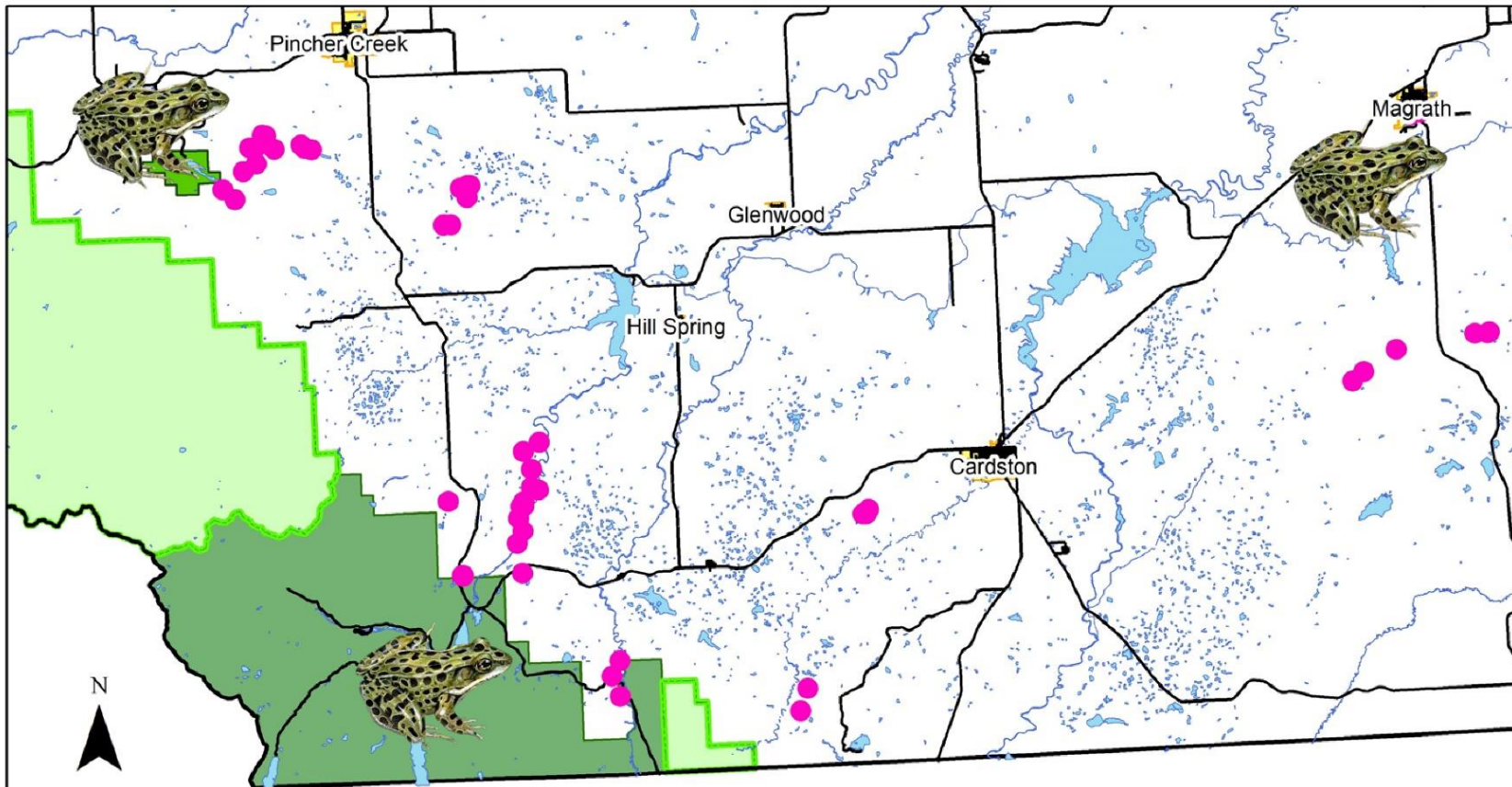
# Environmental DNA (eDNA) Surveys











- Major Roads
- WBRA Field Surveys 2017-2019
- Waterbodies
- Provincial Crown Land
- Beauvais Lake Provincial Park
- Waterton Lakes National Park

Three primary northern leopard frog (NLF) populations are known within the Waterton Biosphere Reserve, in the areas of Beauvais Lake Provincial Park, Waterton Lakes National Park, and the Town of Magrath. These have been re-established through conservation efforts. In 2017-2019, WBR staff and partners surveyed other areas to search for NLF and other amphibian presence. Please see our project website at <https://www.watertonbiosphere.com/projects/northern-leopard-frog/> or contact us at [nleopardfrog@watertonbiosphere.com](mailto:nleopardfrog@watertonbiosphere.com) for additional information.

Map Created by Andrea Morehouse, March 3, 2020.

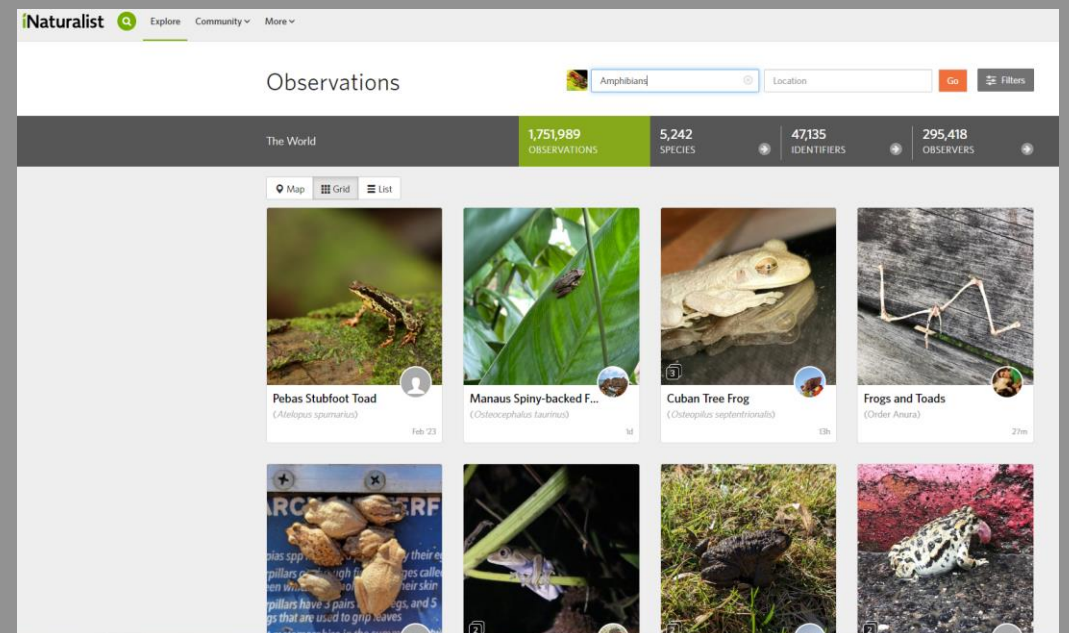


# Solutions for Amphibians: Contributing to Citizen Science



[Submit Observations or Sign Up](#)

The Alberta Volunteer Amphibian Monitoring Program (AVAMP) is a citizen science program that encourages participants to learn about frogs, toads, and salamanders and help conserve their populations by reporting observations. Observations of Alberta's reptile species can also be submitted through AVAMP, including snake hibernaculum (den) information as part of the [the Alberta Snake Hibernaculum Inventory](#).





A woman with blonde hair, wearing a dark green jacket, khaki pants, and a backpack, standing on the left side of the group.

A man wearing a red and white patterned jacket, a red baseball cap with a white logo, sunglasses, and khaki pants, standing second from the left.

A woman wearing a dark blue hoodie with "ENVIRO SCIENCE" and "LEITCHBRIDGE COLLEGE" printed on it, dark pants, and a blue visor, standing in the center.

A man wearing a dark green jacket and khaki pants, standing fourth from the left.

A man with a mustache, wearing a dark green jacket, khaki pants, a blue baseball cap, and a backpack, standing on the right side of the group.



Western Toad

# Amphibians of the Crown of the Continent Ecosystem



Rocky Mountain Tailed Frog



Long-toed Salamander



Columbia Spotted Frog



Great Plains Toad



Striped Chorus Frog



Sierran Tree Frog



Tiger Salamander



Plains Spadefoot



Northern Leopard Frog

