WOOD BUFFALO NATIONAL PARK

Action Plan Newsletter

2025

Field Station Construction

Construction of the Field Station near Dog Camp is coming along well at about 80% complete. The Field Station is located on the Quatre Fourche River about 20 minutes from Fort Chipewyan. It will be a place for on-the-land learning and sharing for knowledge holders, scientists, elders, and youth. The main hall is almost built as well as the cabins, lab, washrooms, and boardwalk. The building interiors are in-progress. The site is expected to be ready for use by September 2025.

Water Control Structures in the Peace-Athabasca Delta

Design Phases Complete

The current design phases for two proposed water control structures in the Peace-Athabasca Delta are complete. This is a big milestone for the Action Plan! The information generated will inform future discussions on the potential to advance either project.

Dog Camp Water Control Structure

The conceptual design for the proposed Dog Camp Water Control Structure on the Quatre Fourches River is complete. Indigenous partners, Parks Canada, Environment and Climate Change Canada, and consultants worked together on this. The structure would enable areas of Lake Claire and Mamawi Lake flood more often, benefitting the environment and helping access for traditional use. The conceptual design, impact assessment, and Structured-Decision-Making process summary are complete and were shared with task teams and community representatives. Parks Canada determined that the project is not likely to result in any significant adverse environmental effects.

If the project were to proceed, additional funding would be required and a detailed design would follow. More information is available on the Canadian Impact Assessment Registry project site: https://iaac-aeic.gc.ca/050/evaluations/proj/88702

Big Egg Lake Water Control Structure

The detailed design and impact assessment for the Big Egg Lake water control structure is also complete. This proposed structure would be located on Athabasca Chipewyan First Nation reserve land, south of Fort Chipewyan, and east of Wood Buffalo National Park. It would include dredging a channel and adding a flap-gated culvert, to help replenish water in the Big Egg Lake area. Based on the impact assessment, Parks Canada determined that the project is not likely to result in any significant adverse environmental effects.

Environmental Flows (E-Flows)

A bathymetric (river bed) survey of the Peace and Slave Rivers from Fort Smith to Peace Point was conducted by AHYDTECH Geomorphic Ltd. in the fall of 2024. This work, funded by Parks Canada, will provide useful data for local land users and help develop hydrological/hydraulic models of the Peace-Athabasca Delta system.

Strategic Flow Release Protocol

Parks Canada is working with the Government of Alberta and BC Hydro to study the usage of strategic flow releases from the Bennet Dam to enhance the likelihood of ice jam flooding in the Peace-Athabasca Delta. The Government of Alberta launched a flood hazard study for the community of Garden River last fall. It will provide baseline information about flood risks during open water and ice jam flooding. The risks and benefits of a flow release will be considered using the results from this study and the 2020 Peace-Athabasca Delta flood report. Future actions and decisions on flow releases will depend on agreement by Indigenous partners and jurisdictional authorities.

Indigenous Knowledge & Science

The Monitoring, Science, & Indigenous Knowledge Task Team is continuing to develop a comprehensive monitoring program based on Indigenous knowledge and science. The program will help detect cumulative effects on the Peace-Athabasca Delta, inform land-use management and help regulatory decision making. The Integrated Research and Monitoring Program (IRMP) will guide future park management plans.

The annual muskrat camp was held in March, where Elders, land users, scientists and youth came together to consider muskrat health and abundance in the Peace-Athabasca Delta. Muskrat are a key species for understanding the health of the delta and this on-the-land camp is a great place for sharing Indigenous Knowledge and science. It also provides an opportunity for local interpretation of the data being collected and communicated.

Gen-Fish Project Update

The Gen-Fish Pilot Project finished in 2022. Research is now focused on the genetic stock assessment of lake whitefish and pickerel. The genetic stock project has been a huge success thanks to community members sharing information and providing fin clip samples from their catches.

eDNA Research

- ·The Gen-Fish project was a pilot project that tried to use environmental DNA to identify fish species. Researchers found that the methodology would have to be changed for success in the Peace-Athabasca Delta. The stomach content results were useful when combined with other data collected to confirm feeding behaviours of whitefish. No further research is planned on this subject.

Genetic Stock Results

Lake whitefish and pickerel genetic stock:

1. There are at least two main stocks of lake whitefish and pickerel in the Peace-Athabasca Delta fishery.
2. Fishers harvest them at almost equal rates.
3. More locally spawning pickerel (from the Maybelle River) are caught in the Peace-Athabasca Delta than pickerel that spawn in the Athabasca River upstream of Fort McMurray

Contaminants:

1. Both lake whitefish and pickerel were found to be safe to eat for mercury levels, in the parts of the fish people eat (like muscle or fillets).
2. The lake whitefish that spawn in the lake have slightly more contaminants than the Whitefish that spawn in the Athabasca River upstream of Fort McMurray; this might be because the fish that spawn in Lake Athabasca are older.
3. Pickerel from the Maybelle River have fewer contaminants than pickerel that spawn in the Athabasca River. Researchers think this might be related to their eating habits.
4. Pickerel have about five times more contaminants than lake whitefish because pickerel eat fish, while lake whitefish eat mostly aquatic bugs, snails, and clams.

Update on Action Plan Implementation Progress

Parks Canada submitted a State of Conservation report to the World Heritage Committee on December 1, 2024. It reported that 83% of actions in the Action Plan are completed or underway. It also highlighted many collaborative works, including the work with Indigenous partners towards a shared governance model for Wood Buffalo National Park. Thank you to everyone who contributed to the report!

Contact

Parks Canada invites you to share questions and feedback to the following email address:
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