

Fish Camp & Fish Health 2023 results

September 2024

Introduction

Following up from the results on fish health shared at the Forum in April, we now have results on contaminants in fish from last year to report back on.

Lab results

At fish camp we collect samples for

- fish age (fish ear bone or fin ray)
- mercury (muscle tissue)
- other metal contaminants (muscle)
- organic compounds (in muscle and liver)
- genetics sample (fin clip)
- isotopes (muscle)

It takes a while to get the results back from the labs.



Are the fish safe to eat?

Community specific limits have been developed to compare fish tissue against (not just Health Canada, Alberta or World Health Organization). Wild fish are an excellent source of protein. These limits help us understand the risk of consuming different foods and drink to our health.

CBM sampling for contaminants (mercury, metals, organics) shows **whitefish are safe to eat**.

2023 data from fish camp for mercury in pickerel/walleye was compared to 2018 to 19 data. **The majority of pickerel are safe to eat. Bigger and older fish (longer than 22 inches) have accumulated more mercury over their life time and have more than younger and smaller fish.**

This is expected given that they have a different diet to whitefish. **If targeting pickerel, consider changing mesh size to target smaller pickerel or eat less often.**

This year we will sample for more contaminants in pickerel.

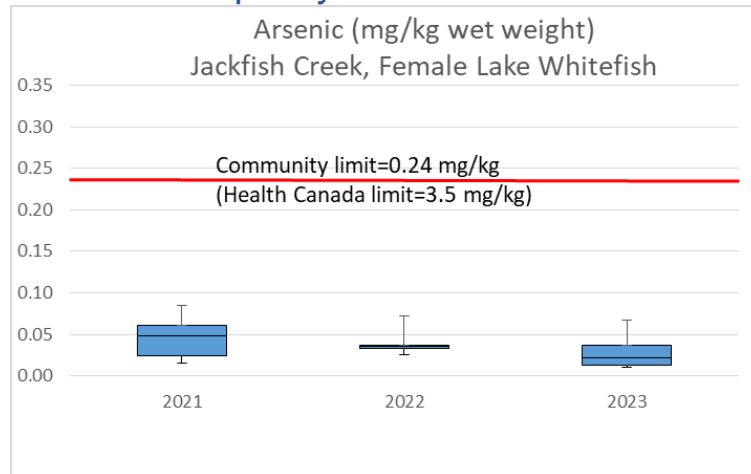
In the future we plan to expand to other harvested species.



How do contaminants in fish compare to water quality?

CBM Water quality sampling has increased in the PAD since the Kearl spill. We monitor the fish to see if we can see evidence of ecosystem change since they travel all over the PAD and live for a long time.

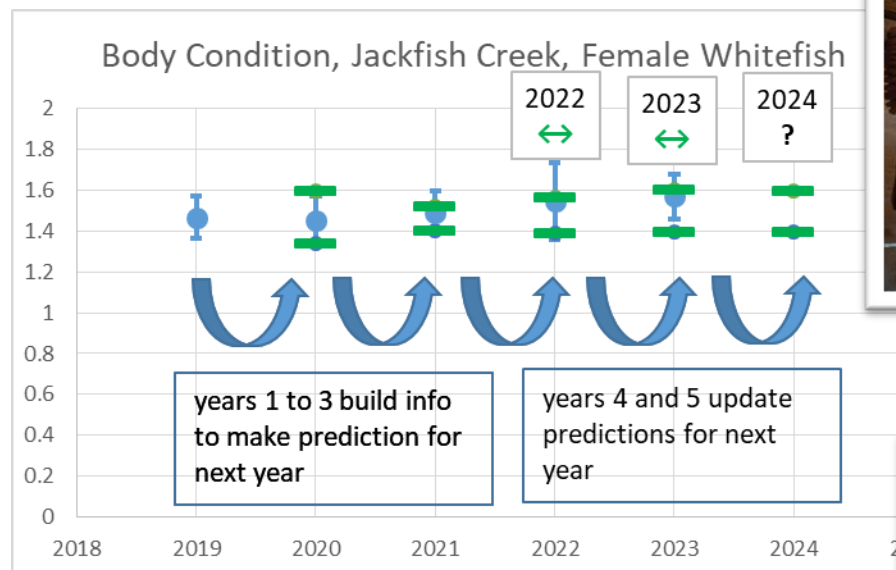
There was **no evidence of the Kearl spill** entering the Athabasca or PAD. Arsenic is one metal that has been consistently higher over the last 3 years. However we don't see the same results in fish and levels are well below the safe consumption limits for Arsenic developed for the community.



How do the results relate to the Integrated Research and Monitoring Program (IRMP)?

The communities, in collaboration with Parks Canada through the Action Plan are developing a monitoring program to monitor the PAD's ecosystems. Fish health will be one of several measures related to access, wildlife quantity and quality.

We will continue to track fish health and are developing management triggers with community input. Proposed triggers have been based on 3 years of data and then updated with each additional year of information.



2019 to 21 set the triggers (green bars). In 2022 and 2023 the blue circles falls within the green bars (stable condition). Where will be in 2024?

Since whitefish are stable, we are moving on to other species but will check back in a few years. This is sneak peak, we will be discussing more at the next workshop.