

# Innavik Hydroelectric Project

## Fish and Fish Habitat

## Survey in September 2008

- 10 fish species captured  
(most abundant were brook trout and longnose sucker);
- No species at risk;
- Spawning, nursery and food supply habitats

## Survey in July 2019

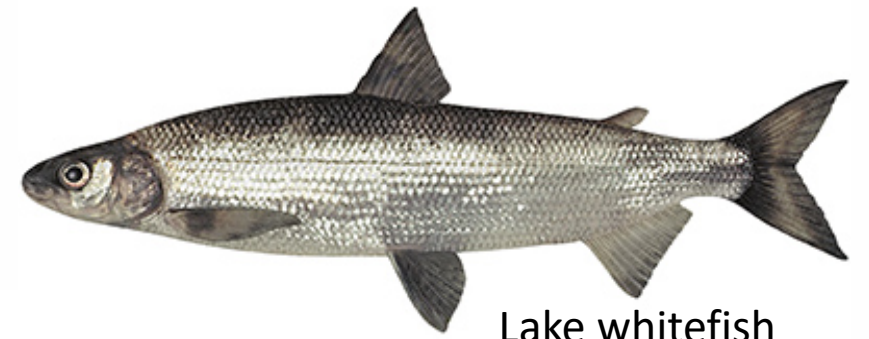
- 9 fish species captured (already confirmed in 2008)  
(most abundant were longnose sucker and lake whitefish);



Round whitefish



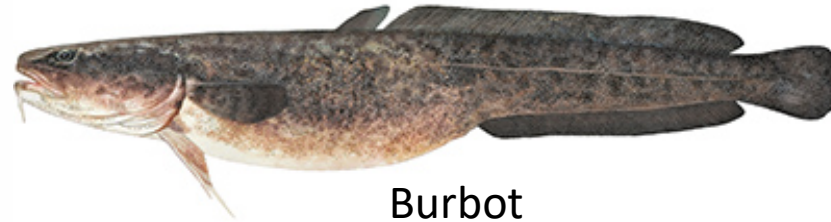
Threespine stickleback



Lake whitefish



Shallow-water cisco



Burbot



Lake chub



Brook trout



Landlocked atlantic salmon



Longnose sucker



Lake trout

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# Headpond delineation



Qattaakuluup  
Tasinga  
Lake

Inukjuak River

0 240 m



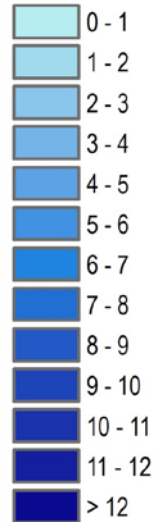
# Headpond Water Depth



Qattaakuluup  
Tasinga  
Lake

Inukjuak River

Estimated Water Depth (m)



0 240 m









# Fish Habitat

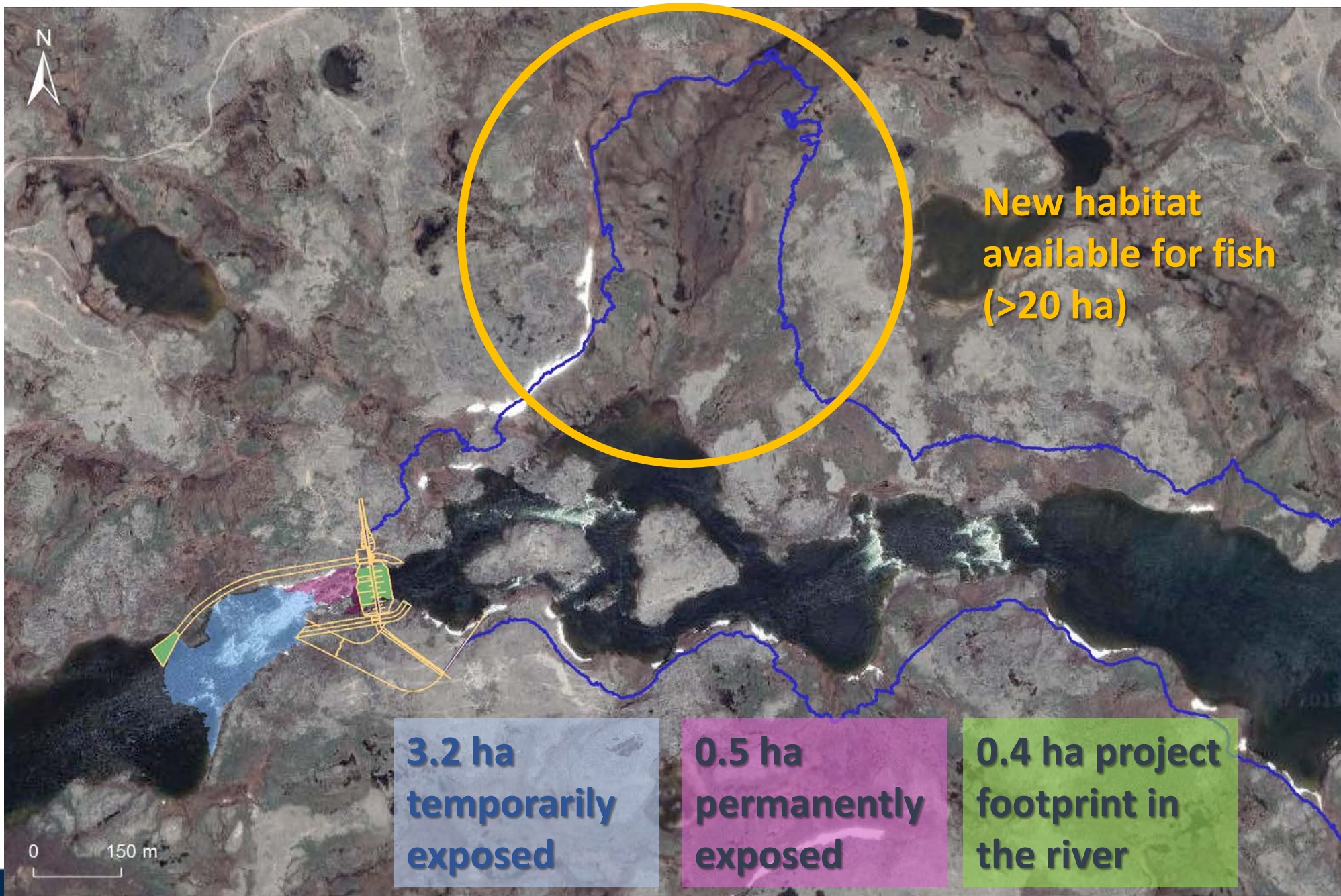
0 60 m

**3.2 ha  
temporarily  
exposed**

**0.5 ha  
permanently  
exposed**

**0.4 ha project  
footprint in  
the river**







# Potential impacts

Impact assessment reviewed by KEQC, DFO and MFFP

- Construction : loss of fish habitat
- Operation : disruption of habitat and potential fish mortality

Measures during construction and operation to minimize effects on fish and fish habitat



# Example of mitigation

- Use of clean material
- Monitor water quality
- Limit travel close to the river
- Conduct excavation in non-sensitive times
- Install a fish screen
- Compensation plan



# Post-construction monitoring

Conditions of the authorization delivered by DFO :

- Fish community in the headpond (over a 10-year period)
- Fish passage through the turbines (first 2 years of operation)

No compensation measures required by DFO because new habitats for fish counterbalance the loss of habitat