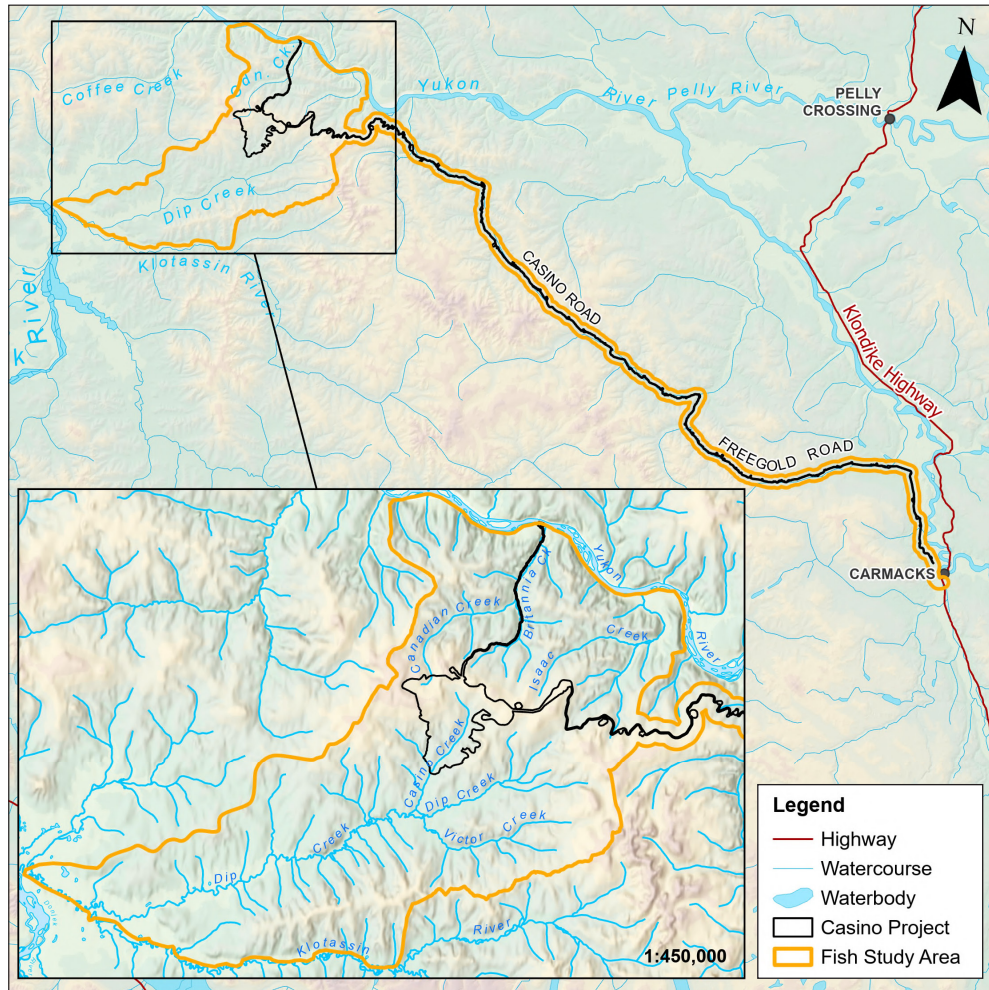


## Fish Baseline Studies

Casino hired Environmental Dynamics Inc. (EDI) to study fish. EDI's work included looking for fish, collecting samples from fish, and confirming which creeks had, or didn't have, fish. The area that EDI studied included 14 creeks/ivers in and around the proposed Casino Project as well as 168 creeks/ivers along Casino Road and Freegold Road. A large amount of information was collected between 2008 and 2024.

## Fish Study Area and the Proposed Casino Project



## Types of Fish in the Project Area

Five types of fish were found in the creeks/ivers near the proposed Casino Project: Chinook salmon; Arctic grayling; round whitefish; burbot; and slimy sculpin. Arctic grayling and slimy sculpin were the most common types of fish seen near the proposed Casino Project. EDI found that higher numbers and variety of fish were seen in Dip Creek and Britannia Creek. EDI also looked at creeks/ivers along the Casino Road and Freegold Road. Their goal was to determine whether or not fish were present in creeks that crossed the proposed access road. Of the potential 168 creek/river crossings, 117 are considered non-fish bearing, 51 are considered fish bearing, and 26 are actually not even considered streams.

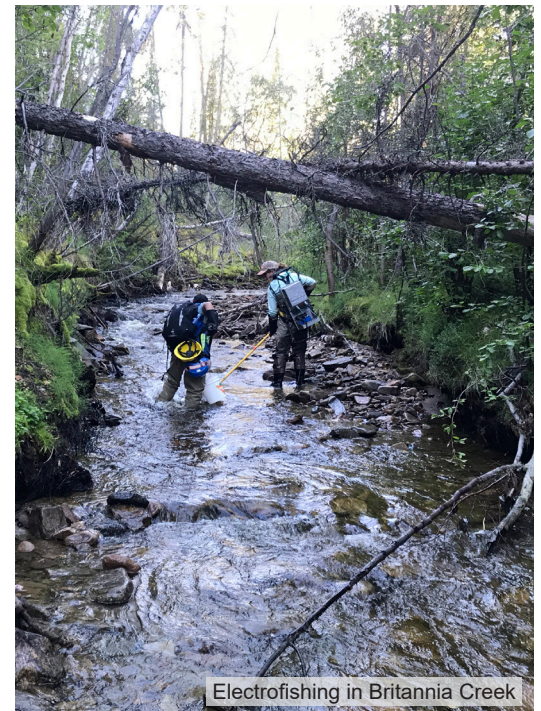
see reverse ▶



Slimy sculpin captured in Casino Creek



Fish equipment on Britannia Creek



Electrofishing in Britannia Creek



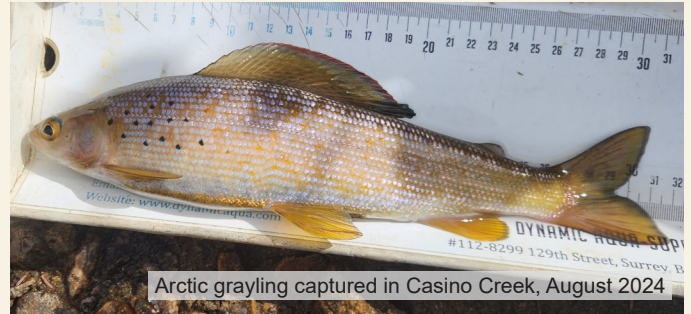


## Chinook Salmon

Chinook salmon are the largest type of salmon in the Yukon. Casino knows that Chinook salmon are an important food source for Yukon First Nations and communities. Baseline studies have not observed any Chinook salmon spawning in the creeks near the mine site. However, juvenile Chinook salmon have been observed in the lower part of Britannia Creek and near the mouth in Canadian Creek. This means that these creeks support the growth and development of juvenile salmon, but are not where they spawn.

## Arctic Grayling

Arctic grayling are a traditional food source for Selkirk First Nation, Tr'ondëk Hwëch'in, and White River First Nation. They are also an important recreational fish in the Yukon. They are present throughout the Yukon. Arctic grayling use different streams at different points of their life cycle. Arctic grayling are widespread near the proposed Casino Project and nearby creeks. They have been observed in Dip Creek, Victor Creek, Casino Creek, Brynolson Creek, Britannia Creek, and Canadian Creek.



## Slimy Sculpin

Slimy sculpin are small fish common throughout creeks and lakes in the Yukon. They have small home ranges because large migrations are not a part of their life cycle. For this reason, when slimy sculpin are present in Yukon waterbodies it usually means that there is good overwintering habitat not just for them, but for other fish too. Slimy sculpin are not valued as a food source, but they are good for studying levels of metals in fish tissue because they do not migrate between creeks, they eat various stream insects, and they are prey of larger fish.

## Fish Tissue and Metal Concentrations

EDI tested for the presence of metals in fish. This helps EDI determine if fish are healthy and if fish are safe to be eaten by people and other predators that eat fish. In 2023 and 2024, Arctic grayling were collected from Casino Creek and Dip Creek. Slimy sculpin were also collected from Britannia Creek in 2024. Some Arctic grayling samples had levels of metals higher than federal guidelines. These levels are occurring in the environment currently, without the Project. This work, and future sampling, will inform future monitoring activities.

## What's Next?

EDI's work is ongoing. Understanding the current conditions and how different species of fish use the creeks/rivers surrounding the proposed Casino Project helps Casino to effectively manage any fish-related risks. Casino is strengthening its understanding of fish in the area by continually adding shared Traditional Knowledge and reviewing the most current literature.

## Scan to View Casino's



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