

# Frequently Asked Questions About Habitat Offsets



*Anderson Creek Realignment fish habitat offset, located south of the LNG Canada plant site.*

## **What are offsets?**

When certain habitat types are lost due to construction in Canada, those habitats must be compensated for by creating new habitat or by protecting existing habitat.

## **What offsets does LNG Canada manage?**

LNG Canada has multiple offset programs underway, including fish habitat, wetlands, raptor nests, bat boxes and marbled murrelet habitat, which involve constructing or protecting habitat in the Kitimat region both on and off the LNG Canada site. Each offset program has unique requirements, including follow up monitoring. The largest is the fish habitat offset program, which consists of 20 distinct offsets and an extensive 10-year monitoring program.

## **What does fish habitat offset effectiveness monitoring cover?**

Each fish habitat offset is monitored for 10 years after construction in the following categories:

- Physical stability
- Water quality
- Fish utilization (winter presence, and summer relative abundance).
- Riparian vegetation establishment, growth and function
- Comparison to undisturbed sites (control)

## **How does the federal regulator, Fisheries and Oceans Canada, ensure LNG Canada completes and continues to monitor its fish habitat offsets?**

LNG Canada engages with Fisheries and Oceans Canada on a regular basis to provide updates as to how LNG Canada is meeting its commitments. As required under the Fisheries Act, LNG Canada provided financial guarantees to Fisheries and Oceans Canada to ensure funding is available to the regulator, if construction or monitoring commitments are not met.

## **Could climate change affect LNG Canada offsets and their success criteria?**

Offset success is evaluated differently in drought years. LNG Canada is required to demonstrate success over a ten-year effectiveness monitoring period. Relief for drought is only relief for year in which drought occurred.

**What happens if fish habitat offsets are not effective at year 10?**

LNG Canada proactively manages its offsets and will identify any deficiencies prior to the end of effectiveness monitoring period and will make corrections with enough time to monitor and confirm effectiveness. The 10-year effectiveness monitoring period may also be extended to a point at which success can be demonstrated.

**What species of fish are your offsets designed to compensate for?**

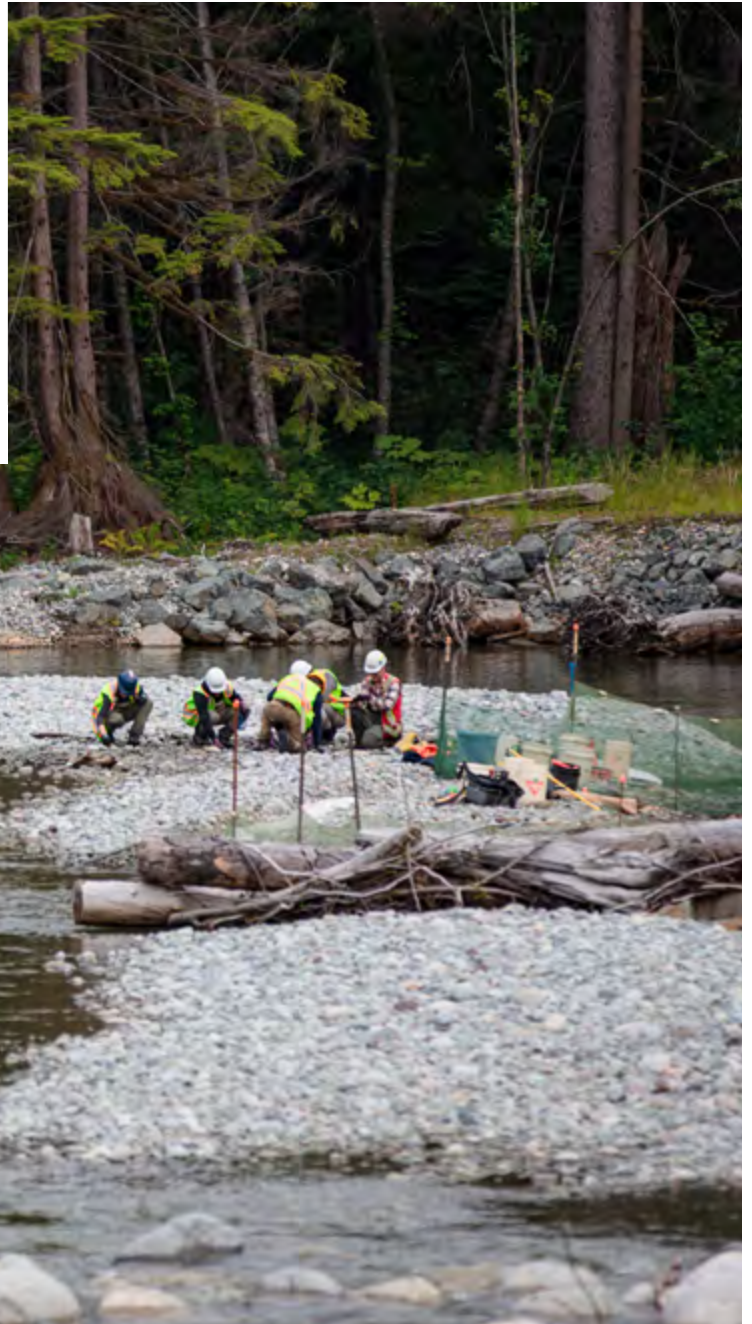
Primarily Pink salmon and Coho salmon, although there is some use by Chum, Sockeye, Chinook, and trout.

**What does offsets maintenance look like?**

Offsets maintenance is intended to be minimal, and for civil infrastructure only (for example, culverts, bridges and fish ladder). "Natural" systems are meant to become self-sufficient fish habitat by the end of 10 years and require no maintenance. Maintenance activities will follow recommendations from the Engineer of Record, and include inspections, debris removal at culverts, and dredging in Anderson Creek.



*Sumgas Creek fish habitat offset, step pools to support upstream movement of fish.*



*Fish crews conducting fish salvage prior to construction activities in the Anderson Creek Realignment fish habitat offset.*