The Fraser River Estuary: A vital salmon nursery under pressure

The mighty Fraser River produces Canada's largest salmon runs. Each fish passes through the estuary at the river's mouth twice in its life. For young salmon, the estuary's marshes, mudflats and eelgrass meadows are a nursery – vital places to feed and grow before heading to sea. Yet 85% of the floodplain that once nurtured juvenile salmon is now lost or cut off, leaving only fragments of this habitat to support salmon in a critical stage of life.[1]

Only 15% **of the Fraser River estuary's former habitat remains accessible to young salmon.[2] More ports and terminals at Roberts Bank will further harm the habitat that remains.[3]**

Why the estuary matters

- Sockeye, coho, pink, chum and Chinook from hundreds of the Fraser River's upstream tributaries all use the estuary.[4,5]
- Salmon rely on the estuary's rich food web to feed and grow for weeks to months.[6]
- The estuary's shallow intertidal waters allow salmon to transition from fresh to saltwater, hide from predators, and feed.

Human impacts on Roberts Bank

- Roberts Bank is one of the most productive areas of the Fraser estuary.[7]
- Port development has already filled, dredged, fragmented and eliminated intertidal and subtidal salmon habitat at Roberts Bank.[8]
- Dikes and jetties have restricted salmon access to important eelgrass meadows.[9]
- A federal review concluded that port expansion (RBT2) would further harm the Fraser River's only remaining abundant Chinook stock - the South Thompson run-, along with Chinook from the Lower Fraser.[10]
- Fish habitat in the estuary is already degraded. Water and sediments contain harmful levels of hydrocarbons, industrial chemicals, and metals.[11]

Another pipeline, another threat

- In addition to port expansion, the newly proposed West Coast Oil Pipeline (WCOP) would further harm Roberts Bank with concrete islands, dredging and loss of intertidal and subtidal habitat.
- An oil spill would be catastrophic to the estuary and the salmon that depend on it.[12]

- Routine vessel emissions to air and discharges to water will deliver a constant stream of harmful hydrocarbons, metals and other pollutants to the estuary.
- A pipeline, an expanded port, and more ships mean more pollution, more lost habitat and more harm to salmon.

Salmon are already under stress

- Many Fraser stocks of Chinook and sockeye salmon are assessed as threatened or endangered by COSEWIC.[13]
- Salmon have lost significant estuary habitat, yet adults or juveniles are present virtually year round.
- Summer temperatures in the Fraser River have shown a warming trend equivalent to about 2.2°C per century.[14] Warmer water increases stress on salmon throughout all life stages.

Fraser River salmon cannot afford to lose any more of the estuary they depend on.

FACT SHEETS AND CITATIONS
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