

## Spotlight on salmon stock assessment

Fisheries and Oceans Canada (DFO) staff, often in collaboration with partners, deliver three types of monitoring programs to support area-based salmon stock assessment. The information generated by these programs is compiled annually to provide advice on the management of salmon populations.



Credit: Northwest Marine Technology, Inc.

**POPULATION MONITORING** programs estimate the abundance of salmon and their condition. Methods used range from basic visual surveys to application intensive mark-recapture or passage enumeration, and associated biological sampling.



Credit: Ian Bergsma

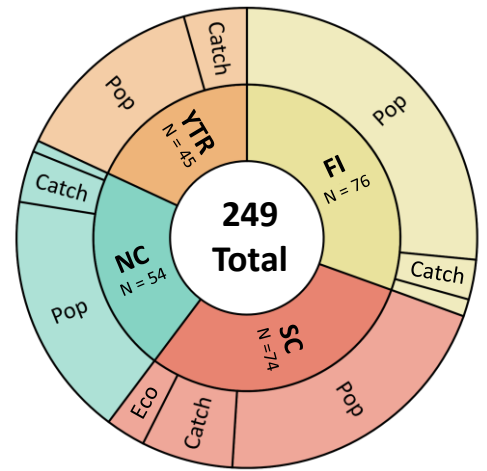
**CATCH MONITORING** programs estimate catch, releases, fishing effort, and the stock and age composition of catch, to evaluate harvest impacts. These are estimated

through harvester reporting and survey methods. Age and stock composition is estimated by sampling DNA, scales, coded wire tags, and other stock identifiers.

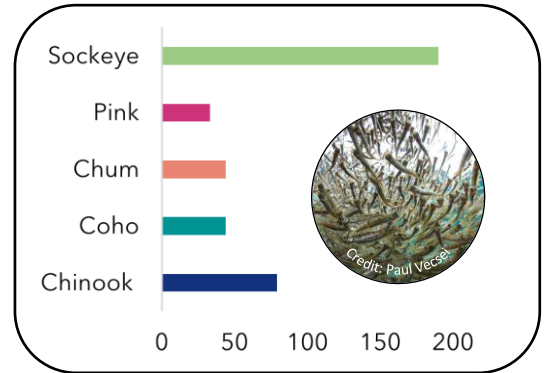


Credit: Ian Bergsma

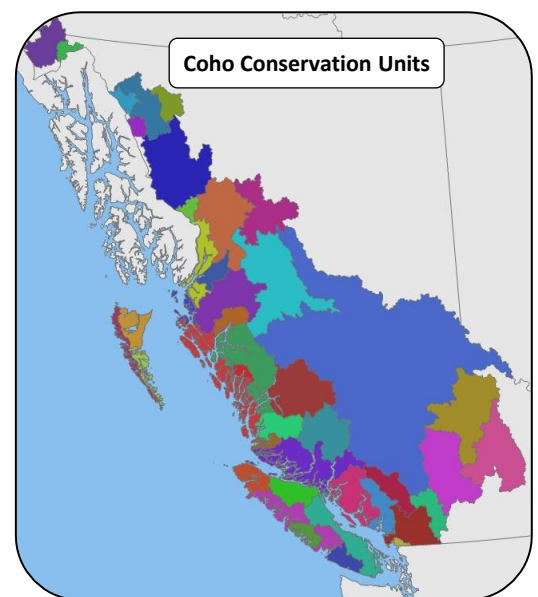
**ECOSYSTEM MONITORING** programs monitor habitat changes and their impact on salmon. This may include methods such as basic water quality monitoring to more comprehensive hydrology or food-web studies.



**Figure 1.** Pacific salmon stock assessment monitoring projects by area: YTR (Yukon and Transboundary Rivers), NC (North Coast), SC (South Coast), and FI (Fraser River and Interior). Area-based monitoring is further subdivided by proportion of monitoring types: Eco (Ecosystem), Catch, or Pop (Population).\*



**Figure 2.** Pacific salmon Conservation Units (CUs) by species. [Learn more...](#)



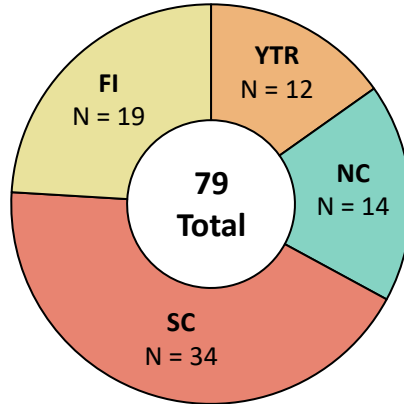
**Map 1.** Coho salmon CU boundaries in British Columbia.

# Working together for salmon

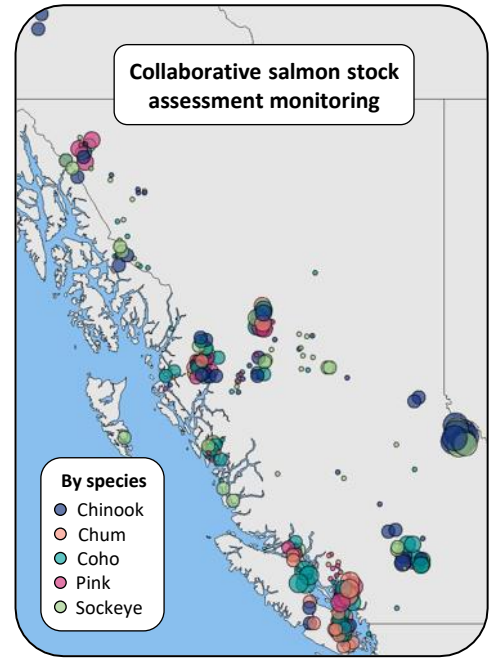
DFO, First Nations, and Indigenous organizations are committed to working together and weaving science and Indigenous Knowledge to understand the many challenges facing Pacific salmon populations and inform better decision-making.



**Figure 3.** Unique Indigenous collaborators in 2023 and 2024.

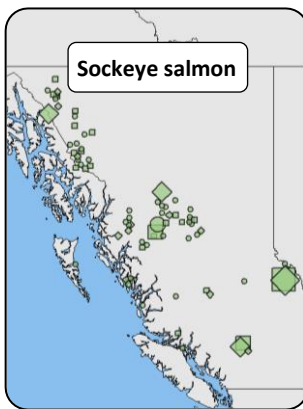
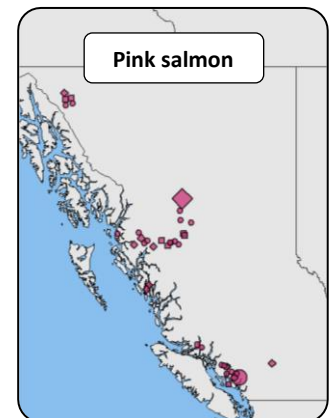
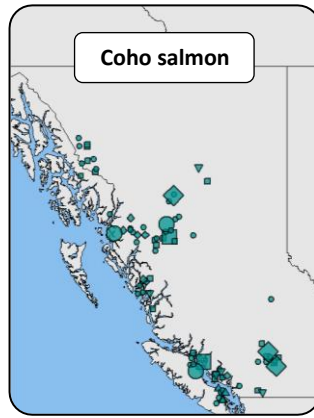
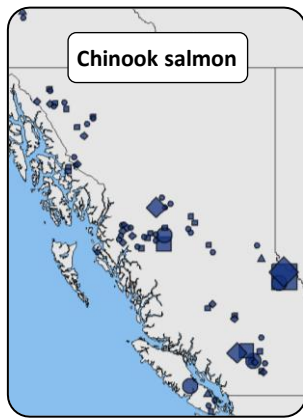


**Figure 4.** DFO-Indigenous monitoring projects by area.\*



**Map 2.** DFO-Indigenous monitoring projects by species.\*

## Salmon stock assessment activities



**Map 3.** DFO-Indigenous salmon stock assessment monitoring programs by activity and species.\*

### Population Monitoring

○ Enumeration (escapement) → **169**

◇ Biological sampling → **86**

### Catch Monitoring

○ Enumeration (catch) → **72**

◇ Biological sampling → **12**

### Ecosystems Monitoring

□ Stream assessment → **11**

△ Lake assessment → **5**



# Salmon outlook summary

YUKON / TRANSBOUNDARY RIVERS	
<b>Chinook</b>	
Alsek	3
Porcupine	1
Stikine	1
Taku	2
Yukon	1
<b>Chum</b>	
Porcupine	1 to 2
Transboundary	Data Deficient
Yukon	1 to 2
<b>Coho</b>	
Alsek	2
Stikine	Data Deficient
Taku	3
Yukon	Data Deficient
<b>Sockeye</b>	
Alsek	3
Stikine	2 to 3
Taku	3

NORTH AND CENTRAL COAST	
<b>Chinook</b>	
Central Coast	2
Haida Gwaii	Data Deficient
Nass	2
Skeena	2
<b>Chum</b>	
Central Coast	2 DD
Haida Gwaii	1
Skeena/Nass	1 2 3
<b>Coho</b>	
Central Coast	Data Deficient
Haida Gwaii	Data Deficient
Nass	3
Skeena	3 DD
<b>Pink</b>	
Central Coast	2 to 3
Haida Gwaii	2 to 3
Nass	3 to 4
Skeena	3 to 4
<b>Sockeye</b>	
Central Coast	2
Haida Gwaii	2
Nass	3
Rivers/Smith	1
Skeena	2

SOUTH COAST	
<b>Chinook</b>	
Lower Strait of Georgia	4
Mainland Inlet	Data Deficient
Middle Strait of Georgia	1/2 4
Upper Strait of Georgia	3 to 4
West Coast Vancouver Island	1 4
<b>Chum</b>	
Inner South Coast	1 to 2
West Coast Vancouver Island	2
<b>Coho</b>	
Johnstone Strait/Mainland Inlet	3
Strait of Georgia	3
West Coast Vancouver Island	3
<b>Pink</b>	
East Coast Vancouver Island/Mainland - Even	2 to 3
East Coast Vancouver Island/Mainland - Odd	N/A
West Coast Vancouver Island	Data Deficient
<b>Sockeye</b>	
East Coast Vancouver Island/Mainland	2
West Coast Vancouver Island - Barkley	2 3
West Coast Vancouver Island - Other	Data Deficient

FRASER RIVER AND INTERIOR	
<b>Chinook</b>	
Fraser Fall Run 4 <sub>1</sub>	2 4
Fraser Spring Run 4 <sub>2</sub>	2
Fraser Spring Run 5 <sub>2</sub>	2
Fraser Summer Run 4 <sub>1</sub>	1 4
Fraser Summer Run 5 <sub>2</sub>	2
Okanagan	1
<b>Chum</b>	
Fraser	2
<b>Coho</b>	
Interior Fraser	2
Lower Fraser	Data Deficient
<b>Pink</b>	
Fraser - Odd	N/A
<b>Sockeye</b>	
Fraser - Early Stuart	1
Fraser - Early Summer	1 2 4
Fraser - Late	1
Fraser - Summer	1 2 3
Okanagan	3

OUTLOOK CATEGORY			
1 - Well below average	2 - Below average	3 - Near average	4 - Abundant
Between 1 and 2	Between 2 and 3	Between 3 and 4	Data Deficient (DD)

**Figure 5.** The Outlook provides an annual estimate of expected abundance by Stock Management Units and is used in fishery planning and reporting. For more information, consult the salmon [Integrated Fisheries Management Plans](#).

## Accessible and transparent salmon data

The Pacific Salmon Data Portal will contain data visualization tools, built-in analysis tools such as charts, maps, and graphs providing insights about Pacific salmon, and the ability to export or connect to the underlying salmon datasets.

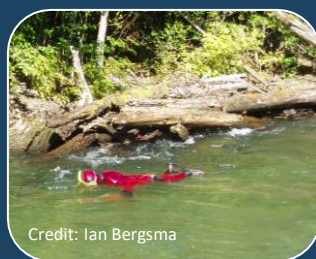
These dashboards will improve data accessibility and enable conservation and restoration work.



## Salmon stock assessment contacts



Credit: Ian Bergsma



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