



Pacific Salmon
Strategy Initiative

Initiative de la Stratégie
relative au saumon du Pacifique

Pacific Region 2024 Drought Response

SEHAB Meeting
June 7, 2024



Fisheries and Oceans
Canada

Pêches et Océans
Canada

Canada



Overview

- Lessons Learned in 2023
- 2024 Drought Outlook
- DFO Pacific Region Drought Response Plan



ON THE GROUND

Restoring the flow: Tsleil-Waututh's race to save salmon habitat in drought stricken southwest B.C.

When tens of thousands of pink salmon became stranded in the Indian River during September's unrelenting drought, the nation raced into action, continuing their work to rehabilitate culturally significant spawning streams crippled under the twin pressures of climate change and industrial development

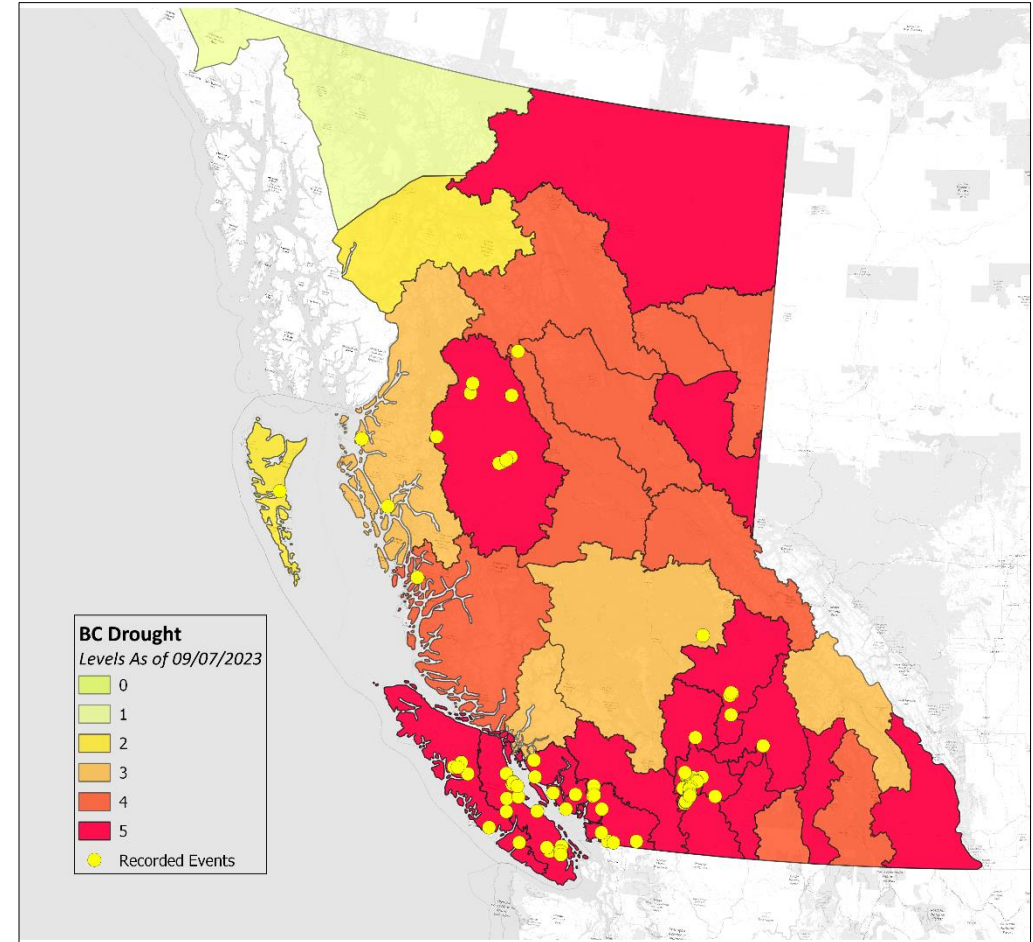
By Ainslie Cruickshank
Photography by Jennifer Gauthier and Jesse Winter

Sept. 21, 2023 12 min. read



Lessons Learned and Successes from 2023

- Need to start drought planning earlier
- Need to support more Indigenous partners on monitoring and minor mitigation work
- Need to clarify roles and responsibilities internally and externally
- Need centralized data tracking
- BCSRIF under PSSI has funded 11 strategic drought mitigation projects totaling \$29.3M
- Salmon Stewardship Directorate provided close to 600K and supported over 40 drought response projects
- Biodiversity cooperated with BC on 4 TPOs that improved conditions for fish in important salmon spawning and rearing rivers
- DFO worked in partnership with 20 First Nations in 2023 to improve conditions for fish during drought

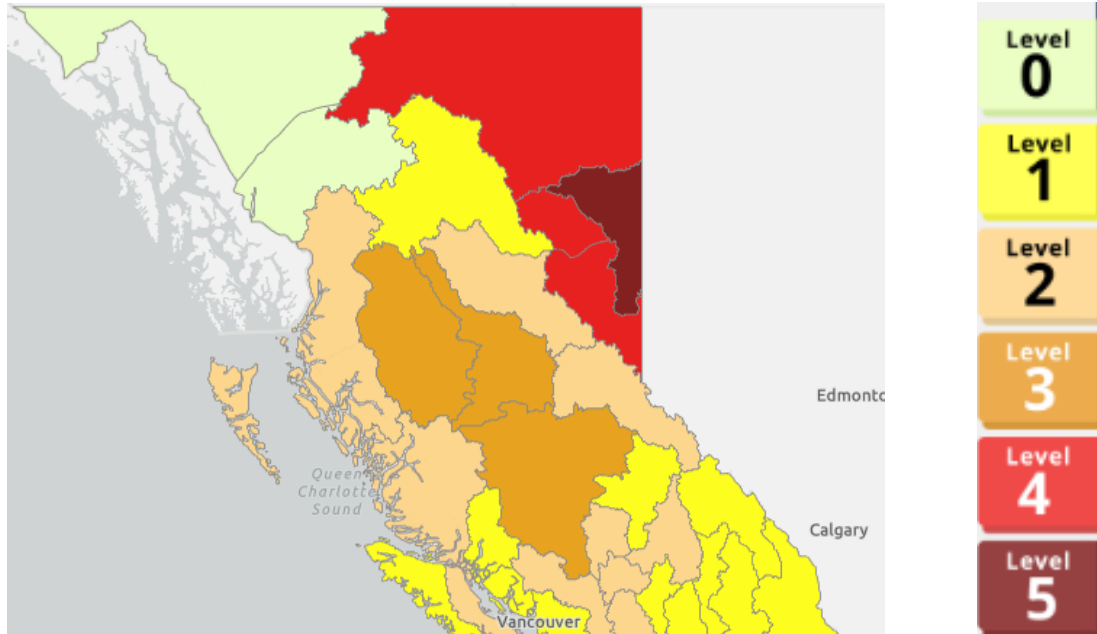


BC's recorded drought incidents in 2023 with the provincial drought levels as of Sept 07, 2023





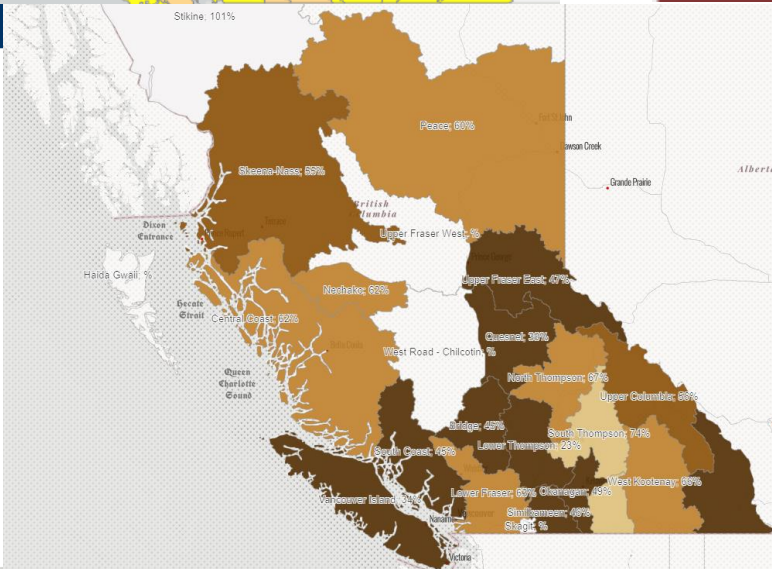
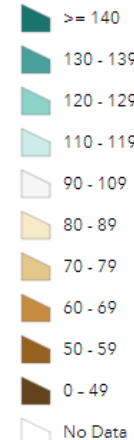
2024 B.C. Drought Outlook



Legend

Snow Basins Indices - View

Snow Basin Index



- Low snowpack, early snowmelt and lingering impacts from on-going drought are creating significantly elevated drought hazards
- Northeast already in drought Level 4/5
- Temporary Protection Orders being considered in more systems this year, including on Vancouver Island, Thompson-Okanagan Region, and Kootenay-Boundary Region
- Drought Conditions are published on BC Drought Information Portal on Thursdays at 9:00 am (for now on a biweekly basis)
- [BC Drought Information Portal - Drought Map](#) | [BC Drought Information Portal \(gov.bc.ca\)](#)



How DFO is Coordinating

- Federally
 - Coordination with other federal government departments, as needed
- Provincially
 - BC/ DFO Drought Tables (operational, technical, and decision-making levels)
 - Provincial Technical Drought Working Group (PTDWG)
- First Nations Organizations and Communities, ENGOs, and local partners
 - The Strategic Area Advisor teams foster partnerships and coordinate activities with partners (ENGOs, Indigenous organizations and First Nations) to support watershed monitoring, identify and correct drought conditions of concerns, purchase necessary equipment, and conduct targeted restoration work
- Multi-Stakeholders
 - Senior Leadership Drought table with BC, FNFC and PSF
 - PSF-BC-FNFC-DFO All Hazards
 - Regional Technical Drought Working Groups (RTDWG) - Technical staff from Canada/BC/First Nations/Municipalities
 - Drought Advisory Tables (DAT) – Senior staff from Canada/BC/Municipalities/First Nations





Who is Leading at DFO

- On the Ground
 - Area teams led by the Area Directors coordinate internally and with partners
- Temporary Protection Orders (supporting Province)
 - Ecosystems Management Branch - Biodiversity
- Partnerships with First Nations and Indigenous Organizations
 - Area based teams coordinated by the Strategic Advisors
- Regional Coordination
 - Salmon Stewardship Directorate





How to report climate conditions impacting salmon to DFO

- Contact the “Observe Record Report” line at DFO.ORR-ONS.MPO@dfo-mpo.gc.ca or 1-800-465-4336.
- When contacting Fisheries and Oceans Canada (DFO) please include as much information as possible, such as:
 - Date and time of sighting
 - Contact Info (First and Last Name, Contact Number and Email of observer and/or Lead)
 - Location (Coordinates, Address, waterbody/watershed name)
 - Observations (i.e. Low water, stranding, dead fish (approx. number))
 - Pictures upstream, downstream and at the site are helpful.
 - Actions completed and/or recommended
- The ORR will share reports with DFO Area Strategic Advisor Teams to action.





DFO Drought Response

• Situational Awareness

- Area Drought Teams are gathering ground observations from Indigenous and BC Partners, DFO sectors and the public.
- ORR and PSF for public Reporting

• Reporting

- All DFO drought response data will be captured by a DFO regional **drought data portal**
- DFO shares weekly Situation Reports with leadership and partners
- Communication strategy for public guidance and awareness

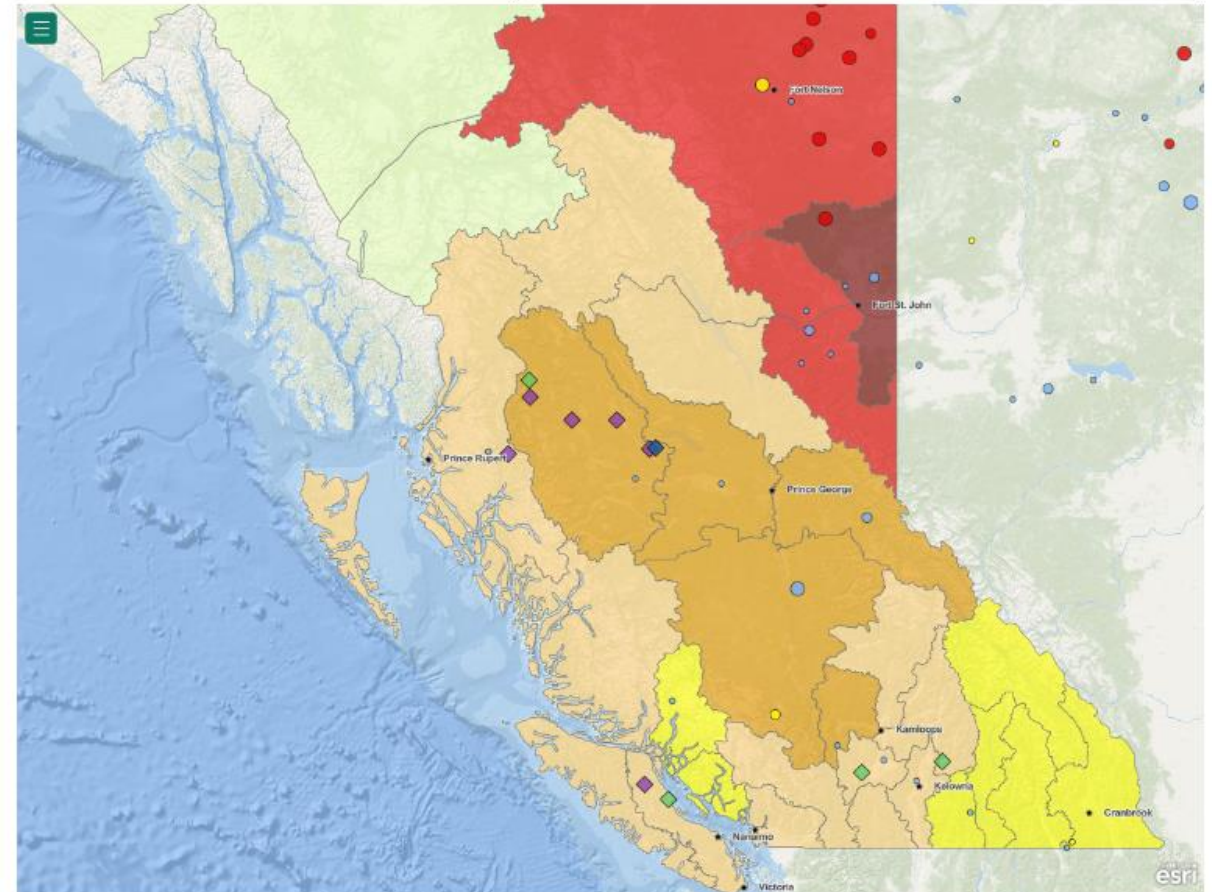
• Actions

- Priority actions for 2024 identified with partners and will adjust in-season based on: Indigenous values, Socio-economic values, population status, Public interest
- DFO, PSF, and FNFC funding is available to action work
- Critical expertise and support for field-based drought response

Drought Incident Map

Pacific Salmon Strategy Initiative

DFO Pacific Regions	Response Status	Date Reported
<input type="checkbox"/> Fraser & Interior Area (FIA)	<input type="checkbox"/> Complete	All
<input type="checkbox"/> North Coast Area (NCA)	<input type="checkbox"/> In Progress	
<input type="checkbox"/> South Coast Area (SCA)	<input type="checkbox"/> Pending	



BC Drought Levels	Fire Size	Fire State of Control	DFO Drought Incidents
Drought Level 0	> 1,000 Ha	Out of Control	Pending
Drought Level 1	101 - 1,000 Ha	Being Held	In Progress
Drought Level 2	0 - 100 Ha	Under Control	Complete
Drought Level 3		Other	Closed
Drought Level 4			
Drought Level 5			





Potential Funding



Pacific Salmon Foundation via The drought response fund

To support in undertaking emergency actions which directly benefit salmon that are threatened by drought conditions



PSSI Grants and Contributions Funds

To enable First Nations and Indigenous organizations to monitor and remediate drought impacts to fish.



Restoration Centre of Expertise

To support monitoring flights and procurement of supplies to assist with drought mitigation activities by DFO and partners.



Witset Canyon on the Bulkley River





Area Drought Response Plan (how we're preparing)

Priority Actions planned in 2024

- Engaging with Indigenous partners, the province of BC and other external partners to coordinate actions, monitoring, etc.
- Developing an area-based response plan that includes a proposed framework for prioritizing response actions
- Integrated teams meeting to establish monitoring priorities
- Developing a surge team approach to ensure adaptive management & timely responses to issues
- Common internal tracking of drought related issues to ensure consistency in DFO response

Three components to the area-based response plan:

1. Data at the ready for those streams where fish are likely to experience adverse impacts as a result of drought (consistent data informing DFO, BC and other partners)
2. Coordinated and opportunistic monitoring (in partnership with Indigenous partners and BC) of same streams
3. Surge team (for response) schedule in collaboration with partners



Questions or comments?

How would you like to collaborate with DFO in Drought Response?





Framework for Prioritizing Area Drought Response

