Northeast Drought Update

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Agenda

What is Drought?

History of NE Drought

Current Drought Levels

2023 Provincial Drought Actions

Next Steps





"Drought is a recurrent feature of climate involving a deficiency of precipitation over an extended period, resulting in a water shortage for activities, communities or aquatic ecosystems."



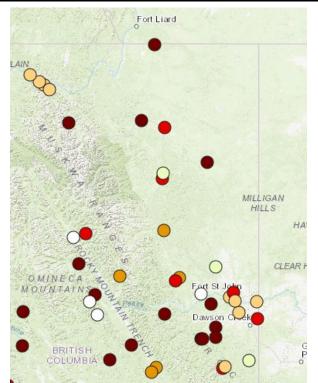
-BC Drought and Water Scarcity Response Plan (2023)

Drought Response Levels

Level	Impacts	General Response Measures
0	There is sufficient water to meet socio- economic and ecosystem needs	Preparedness
1	Adverse impacts to socio-economic or ecosystem values are rare	Conservation
2	Adverse impacts to socio-economic or ecosystem values are unlikely	Conservation Local water restrictions where appropriate
3	Adverse impacts to socio-economic or ecosystem values are possible	Conservation Local water restrictions likely
4	Adverse impacts to socio-economic or ecosystem values are likely	Conservation and local water restrictions Regulatory action possible
5	Adverse impacts to socio-economic or ecosystem values are almost certain	Conservation and local water restrictions Regulatory action likely Possible emergency response

Streamflow Indicators

Indicator	Level 0	Level 1	Level 2	Level 3	Level 4	Level 5
30 Day* Precipitation (Percentiles)	>30 th	21 st - 30 th	11 th - 20 th	6 th – 10 th	2 nd – 5 th	< 2 nd
7-Day Average Streamflow (Percentiles)	>30 th	21 st - 30 th	11 th - 20 th	6 th – 10 th	2 nd – 5 th	< 2 nd



History of Drought

BASINS	30-Jun	14-Jul	21-Jul	28-Jul	04-Aug	11-Aug	25-Aug	01-Sep	08-Sep	15-Sep	22-Sep	06-0ct	13-0ct	20-0ct	27-0ct	03-Nov	10-Nov	24-Nov	01-Dec
Fort Nelson	0	0	0	0	0	0	1	2	3	3	4	4	5	5	5	5	5	5	4
East Peace	0	0	0	1	1	1	1	2	3	3	3	4	5	5	5	5	5	5	5
North Peace	0	0	0	0	0	0	1	1	2	2	3	4	5	5	5	5	5	5	5
South Peace	0	0	0	0	0	0	1	2	3	3	3	4	5	5	5	5	5	5	5

BASINS	26-May	09-Jun	23-Jun	07-Jul	14-Jul	21-Jul	28-Jul	04-Aug	11-Aug	18-Aug	20-Aug	25-Aug	01-Sep	08-Sep	15-Sep	17-Sep	22-Sep	29-Sep	06-Oct	20-Oct	28-Oct	01-Nov
Fort Nelson	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
East Peace	0	0	1	1	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
North Peace	0	0	0	0	2	2	2	2	2	2	2	0	0	0	0	0	1	1	0	0	0	0
South Peace	0	0	1	2	2	2	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0

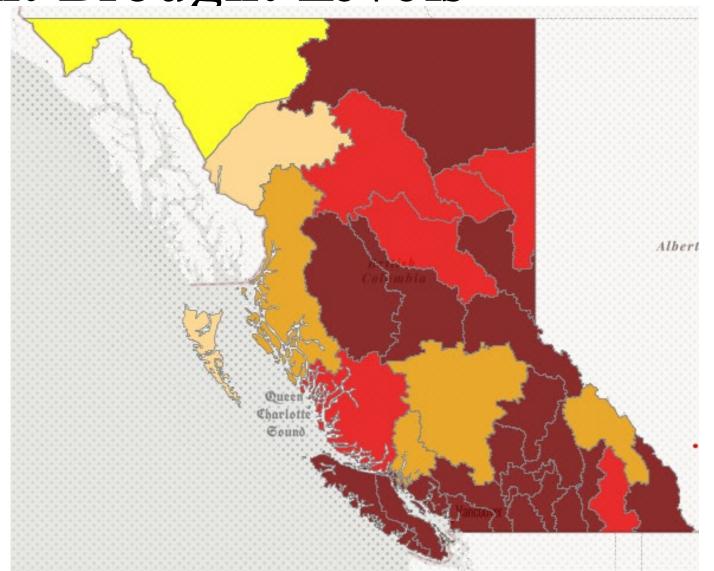
BASINS	24-Jun	13-Jul	22-Jul	05-Aug	19-Aug	02-Sep	10-Sep	16-Sep	23-Sep	28-Sep	30-Sep	14-Oct
Fort Nelson	1	1	1	1	1	1	1	1	1	1	1	1
East Peace	1	1	1	1	1	1	1	1	1	1	1	1
North Peace	1	1	1	1	1	1	1	1	1	1	1	1
South Peace	1	1	1	1	1	1	1	1	1	1	1	1

BASINS	30-May	13-Jun	27-Jun	04-Jul	11-Jul	17-Jul	25-Jul	01-Aug	08-Aug	15-Aug	22-Aug	06-Sep	19-Sep	03-Oct	28-Oct
Fort Nelson	3	4	3	3	2	1	1	1	1	1	1	1	1	1	1
East Peace	2	2	2	2	2	1	1	1	1	1	1	1	1	1	1
North Peace	2	2	2	2	2	1	1	1	1	1	1	1	1	1	1
South Peace	2	2	3	3	2	1	1	1	1	1	1	1	1	1	1

BASINS	14-Jun	28-Jun	12-Jul	26-Jul	09-Aug	14-Aug	17-Aug	21-Aug	23-Aug	06-Sep	20-Sep	04-Oct	18-Oct	01-Nov	08-Nov
Northeast	2	1	1	2	3	3	3	3	4	3	2	2	2	1	1
East Peace	2	1	1	1	1	1	1	1	2	2	1	1	1	1	1
Peace	2	1	2	2	2	2	3	3	3	3	2	3	3	3	3

В	BASINS	31-May	01-Jun	22-Jun	06-Jul	20-Jul	03-Aug	10-Aug	14-Aug	17-Aug	23-Aug	28-Aug	31-Aug	08-Sep	14-Sep	28-Sep	12-Oct	18-Oct	26-Oct
	Northeast	1	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2
	East Peace	1	1	1	1	2	2	2	2	2	2	2	2	2	3	3	3	3	2
	Peace	1	1	1	2	1	2	2	2	2	2	2	2	2	2	2	2	2	2

Current Drought Levels



2023 Drought Levels

								2023	DRO	JGHT	LEVELS	S AT A	GLAN	ICE									
Drought Levels:	0		1		2		3		4		5												
BASINS	01-Jun	08-Jun	15-Jun	22-Jun	29-Jun	06-Jul	13-Jul	20-Jul	27-Jul	03-Aug	10-Aug	17-Aug	24-Aug	31-Aug	07-Sep	14-Sep	21-Sep	28-Sep	05-Oct	12-Oct	19-Oct	26-Oct	02-Nov
Fort Nelson	2	3	4	4	4	4	5	5	5	5	5	5	5	5	5	5	5						
East Peace	3	3	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4						
North Peace	1	2	3	3	4	4	4	4	4	4	4	4	4	4	4	4	4						
South Peace	1	2	2	2	3	4	4	5	5	5	5	5	5	5	5	5	5						
Northwest	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1						
Stikine	0	0	0	0	1	2	2	2	2	2	2	2	2	2	2	2	2						
Skeena-Nass	0	1	1	2	3	3	3	3	3	3	3	3	3	3	3	4	3						
Bulkley-Lakes	1	2	3	3	4	4	5	5	5	5	5	5	5	5	5	5	5						
Finlay	1	2	2	4	4	4	4	5	5	5	5	5	5	4	4	4	4						
Parsnip	1	2	2	3	4	4	4	5	5	5	5	5	5	4	4	4	4						
Upper Fraser West	1	2	2	3	4	4	4	5	5	5	5	5	5	4	4	5	5						
Upper Fraser East	1	2	2	2	4	4	4	4	4	4	4	4	4	4	4	5	5						
Upper Columbia	2	2	3	3	3	3	3	3	4	4	4	4	4	3	3	3	3						
Lower Columbia	1	2	3	3	3	3	4	4	4	4	4	4	5	5	5	5	5						
West Kootenay	1	2	3	3	3	3	4	4	4	4	4	4	4	4	4	4	4						
East Kootenay	2	2	3	3	3	3	4	4	4	4	4	4	5	5	5	5	5						
Kettle	0	2	3	3	3	3	3	3	3	4	4	4	5	5	4	4	5						
Middle Fraser	1	2	2	2	3	3	4	3	3	3	3	3	3	3	3	3	3						
Lower Thompson	0	2	2	2	2	3	3	3	3	4	4	5	5	5	5	5	5						
North Thompson	0	2	2	2	3	4	4	4	4	5	5	5	5	5	5	5	5						
South Thompson	0	2	2	2	3	4	4	4	4	5	5	5	5	5	5	5	5						
-Salmon River	0	3	3	3	3	4	4	4	5	5	5	5	5	5	5	5	5						
Nicola	1	2	2	2	2	3	3	3	3	4	4	5	5	5	5	5	5						
-Coldwater River	2	3	3	3	3	4	4	4	4	4	4	5	5	5	5	5	5						
Okanagan	0	2	2	2	2	3	3	3	3	4	4	5	5	5	5	5	5						
Similkameen	2	3	3	3	3	3	3	3	4	4	4	5	5	5	5	5	5						
Central Pacific Range	1	2	2	2	3	3	3	3	3	3	3	3	4	3	3	3	3						
Eastern Pacific Range	2	3	3	3	3	3	3	3	3	4	4	5	5	5	5	5	5						
Sunshine Coast	2	3	3	3	4	4	4	4	4	4	4	5	5	5	5	5	5						
Lower Mainland	2	3	3	3	4	4	4	4	4	4	4	5	5	5	5	5	5						
Central Coast	1	2	2	2	2	2	3	3	3	4	4	4	4	4	4	4	4						\vdash
West Vancouver Island	2	3	3	3	4	4	5	5	5	5	5	5	5	5	5	5	5						
East Vancouver Island	2	3	3	3	4	4	5	5	5	5	5	5	5	5	5	5	5						
Haida Gwaii	0	1	2	3	3	3	4	4	4	3	3	2	2	2	2	3	2						\vdash
0		_	_					Dress		ater Manag	omont D	ob Miri-	nu of Eo		_		_						

2023 Drought Actions

Outreach

- Municipalities and First Nations
- Sent voluntary restrict letters to all licensees
- Provincial media request
- Weekly meeting with fish biologists, range, agriculture, BCER, executive, RFC

Compliance

- Identify watersheds of high concern
- Targeted inspections of licensees
- Targeted inspections at easy access points

Temporary Protection Orders

Precedence of Rights

Declaration of Water Shortage

CEF Protection

Trigger: A licensee with senior rights is not able to exercise their rights due to decreased water availability

•Order junior rights holder to cease diverting water, beginning with those with the most junior rights

•Trigger: Used when one or more streams in an area have fallen or are at risk of falling below their Critical Environmental Flow Threshold

- •Trigger: Used immediately following Declaration of Significant Water Shortage
- •Regionally significant aquatic ecosystem
- •Enforcing the CEFT will help prevent significant or irreversible harm to the aquatic ecosystem of the stream
- •CEFT takes precedence over all water use, and FITFIR can be enforced



Next Steps

Agricultural Outreach

Fisheries

Non-Licensed Users

- Consider water storage
- Funding opportunities
- Climate Preparedness

- Identify sensitive species and streams
- Temperature monitoring

- Education and outreach
- Bring into compliance



Thank you

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