# Quarterly Oil and Gas Water Management Summary

Jul-Sept (Q3) 2022

BC Oil & Gas COMMISSION



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### Vision, Mission and Values



### Mission

We regulate the life cycle of energy resource activities in B.C., from site planning to restoration, ensuring activities are undertaken in a manner that:



Protects public safety



Safeguards the environment



Supports meaningful reconciliation



Advances the public interest and contributes to B.C.'s economy

Transparency is our commitment to be open and provide clear information on decisions, operations and actions.

Innovation is our commitment to learn, adapt, act and grow.

Integrity is our commitment to the principles of fairness, trust and accountability.

**Values** 

Respect is our commitment to listen, accept and value diverse perspectives.

Responsiveness is our commitment to listening and timely and meaningful action.

# Role of the BC Oil and Gas Commission

As a provincial Crown agency, we protect public safety and safeguard the environment through the sound regulation of oil, gas and aspects of geothermal activities in B.C. while balancing a broad range of environmental, economic and social considerations

We regulate resource activity through the Oil and Gas Activities Act (OGAA), the Petroleum and Natural Gas (PNG) Act, and other associated laws related to heritage conservation, roads, land and water use, forestry, and other natural resources.

Through combined authority and working with partner agencies, we regulate activities on Crown land, private land, and the Agricultural Land Reserve. When oil, gas, or geothermal permits are granted, we are responsible for ensuring industry compliance with provincial legislation from initial exploration to final reclamation.

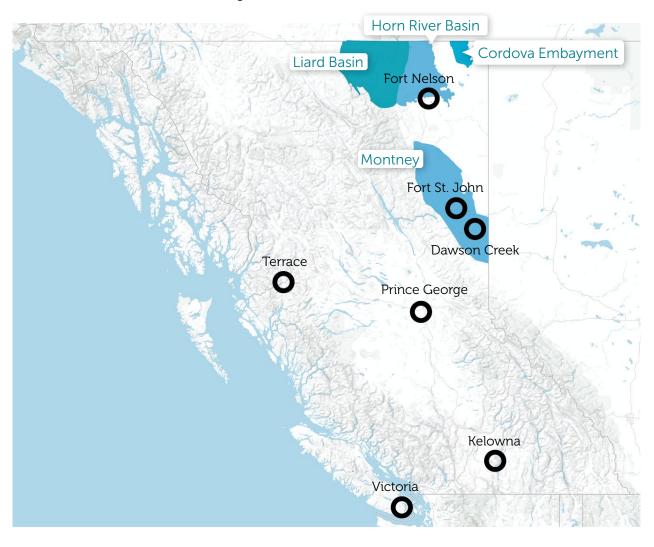
As more resources have been discovered, techniques for accessing them have advanced, environmental awareness has increased, and stakeholders have let us know they are interested in providing more input.

During our review and decision-making processes, we work closely with <u>land</u> <u>owners</u>, <u>rights holders</u>, and <u>Indigenous</u> <u>communities</u>.

The Commission currently has over 280 employees operating out of seven locations: Fort Nelson, Fort St. John, Dawson Creek, Terrace, Prince George, Kelowna and Victoria. The largest number of employees are in the Fort St. John office.



### Commission Office Locations Throughout B.C.



### Territorial Acknowledgement

We acknowledge and respect the many Indigenous Territories and Treaty areas, each with unique cultures, languages, legal traditions and relationships to the land and water, which the BC Oil and Gas Commission's work spans. We also respectfully acknowledge the Métis and Inuit people living across B.C.

# How Water is Used and Accessed

### Water Use

Water is used for various purposes in the oil and gas industry. The largest use of water is for hydraulic fracturing, however, water is used for other purposes, such as:



Seismic or geophysical exploration



Drilling



Machine washing



Dust control



Water floods (enhances oil recovery)



Ice road freezing



Hydrostatic testing of pipelines

### **Water Access**

There are different ways the oil and gas industry may access water in British Columbia. Some methods are managed through provincial legislation, including:

- Water licences issued under section 9 of the Water Sustainability Act (WSA) for surface and groundwater. Commission staff designated as Regional Water Managers have the authority to issue and administer long-term water licences.
- Short-term surface water use or diversion approvals issued under section 10 of the WSA. Short-term water use is administered by the Commission.
- Water source wells authorized by the Commission under OGAA are wells where water is withdrawn for injection into underground formations to enhance oil or natural gas recovery.
- Flowback water that returns to the surface after being injected for hydraulic fracturing.
- Produced water that flows to the surface as a by-product of oil and gas production.

### Industry may access water by means outside of regulatory oversight:

Private agreements can be made with land owners who have a source of surface water supply such as a dugout or groundwater well. In some cases, private agreements may require a Waterworks water licence under the WSA.

# Oil and Gas Activity Water Use: Short-term Approvals & Long-Term Licences

Active Approvals

### **Short-Term Water Use**

During July to September there were 293 water use approvals in place, representing 705 withdrawal locations, held by 30 companies (Table 1).

The total water volume available for use by short-term approvals active on the last day of September was 16,768,485 m<sup>3</sup>.

A total of 1,050,375 m³ was reported as withdrawn in the first three quarters of 2022.

AND USE IN 2022	End of Q1	End of Q2
Companies with Active Approvals	36	33

 Volume Available for Use (m³)
 18,300,693
 17,378,385
 16,768,485

 Cumulative Volume Reported Withdrawn (m³)
 292,693
 486,966
 1,050,375

248

714

End of Q3

276

732

30

293

705

### Long-Term Water Use

During July to September, there were 107 active oil and gas related water licences, representing 111 withdrawal locations, held by 31 companies (Table 2).

The total annual volume available for use for water licences was 32,720,740 m<sup>3</sup>.

A total of 2,887,377 m<sup>3</sup> was reported as withdrawn in the first three quarters of 2022.

### TABLE 2 - LONG-TERM WATER LICENCES AND LISE IN 2022

TABLE 1 - SHORT-TERM APPROVALS

Approved Withdrawal Locations

AND USE IN 2022	End of Q1	End of Q2	End of Q3
Companies with Active Water Licences	30	31	31
Active Water Licences	106	107	107
Licenced Withdrawal Locations	110	111	111
Annual Volume Available for Use (m³)	32,163,740	32,720,740	32,720,740
Cumulative Volume Reported Withdrawn (m³)	684,428	2,028,017	2,877,377

A break down of short-term approvals and water licence use by OGC Water Management Basin is listed in Table 4 on page 10.

# Oil and Gas Related Water Licences

Table 3: Licences that Withdrew Water from July to September 2022

			OGC WATER	ANNUAL	WATER
LICENCE #	LICENCEE	SOURCE	MGMT BASIN	APPROVAL (m³/YR)	USE (m³)
C112155	Whitecap Resources Inc.	Peace River	Lower Peace River	1,825,000	126,611
C133805	Peace View Hutterian Brethren Church	Dawson Creek Aquifer	Lower Peace River	250,000	860
C133847	Petronas Energy Canada	Spring & Unnamed Stream	Cameron River	7,374	1,594
C133853	Petronas Energy Canada	Barker Creek Tributary	Middle Sikanni Chief River	7,264	152
C133934	Petronas Energy Canada	Caribou Creek	Upper Beatton River	15,076	381
C134092	Petronas Energy Canada	Unnamed Spring	Lower Halfway River	65,971	230
C134093	Petronas Energy Canada	Grewatsch Creek Tributary	Upper Beatton River	54,368	80
C134104	Petronas Energy Canada	Unnamed Stream	Lower Halfway River	50,235	1,110
C134107	Petronas Energy Canada	Unnamed Stream	Cameron River	57,582	2,266
C134110	Petronas Energy Canada	Unnamed Stream	Cameron River	79,045	700
C134111	Petronas Energy Canada	Unnamed Stream	Upper Beatton River	49,588	60
C134112	Canadian Natural Resources	Pine River	Lower Pine River	650,000	400
C134168	Petronas Energy Canada	Unnamed Creek	Middle Sikanni Chief River	8,199	7
C134369	Tourmaline Oil Corp.	Beatton River	Upper Beatton River	750,000	175,460
C134471	Petronas Energy Canada	Sikanni Chief River	Upper Sikanni Chief	2,993,000	170,343
C500172	Secure Energy Services	Aquifer 634	Lower Peace River	36,500	2,703
C500226	Veresen Energy Pipeline Inc.	Aquifer 621	Smoky River	5,500	959
C500334	Petronas Energy Canada	FSJ Aquifer	Upper Beatton River	29,161	2,144
C500335	Petronas Energy Canada	FSJ Aquifer	Upper Beatton River	13,670	13,670
C500349	Petronas Energy Canada	FSJ Aquifer	Lower Halfway River	10,463	1,602
C500530	Petronas Energy Canada	FSJ Aquifer	Upper Beatton River	83,950	827
C500794	Petronas Energy Canada Ltd.	FSJ Aquifer	Upper Beatton River	6,924	1,171
C501029	Ovintiv Canada ULC	Dawson Creek Aquifer	Lower Kiskatinaw River	16,000	375
C501076	Ovintiv Canada ULC	Bissette Ck, Dawson Ck	Pouce Coupe River	482,000	162
C501120	Canlin Energy Corp.	FSJ Aquifer	Upper Beatton River	1,825	72
C501507	Ovintiv Canada ULC	Aquifer 622	Pouce Coupe River	200,000	420
C501578	Ovintiv Canada ULC	Aquifer 593	Lower Kiskatinaw River	120,000	110
C501672	ConocoPhillips Canada	Aquifer 451	Cache Creek	49,750	2,683

				At the end of Septemb industry by way of licer of a per cent (0.002) of the replenished annually	nce was a fraction he average runoff
			OGC WATER	ANNUAL	WATER
LICENCE #	LICENCEE	SOURCE	MGMT BASIN	APPROVAL (m³/YR)	USE (m³)
C501685 C501773 C501793 C501797 C501804 C501865 C502134 C502277 C502448 C502452 C502455 C502467 C502467 C502795 C502900	ConocoPhillips Canada Tourmaline Oil Corp. Canadian Natural Resources Canadian Natural Resources T. Hartnell Enterprises Ltd. Boundry Lake Sand & Gravel Petronas Energy Canada Peaceland Farm Ltd. Canadian Natural Resources Pineview Trucking &	Aquifer 451 FSJ Aquifer Aquifer 931 Aquifer 633 FSJ Aquifer FSJ Aquifer Aquifer 908 Dawson Creek Bedrock FSJ Aquifer Dawson Creek Aquifer FSJ Aquifer FSJ Aquifer FSJ Aquifer FSJ Aquifer Aquifer 451 Unconsolidated Aquifer	Cache Creek Upper Beatton River Milligan Creek Milligan Creek Lower Kiskatinaw River Lower Peace River Cameron River Lower Halfway River Murray River Kahntah River Smoky River Kahntah River Upper Beatton River Blueberry River Outside of NEBC	160,235 19,710 36,500 23,725 250,000 10,950 4,015 360,000 5,475 3,650 1,095 7,300 3,650 3,650 98,550	36,805 620 3,312 2,854 238,127 492 455 3,416 389 51 185 742 40 357 12,341
C502957 C503048 C503155 C503376 C500346 C500355	Excavating Ltd. Time Travel Services Ltd. Albright Flush Systems Inga Water Source Ltd. Nil-Ray Farms Petronas Energy Canada Ovintiv Canada	Aquifer 928 Aquifer 451 Aquifer 451 Unnamed Creek FSJ Aquifer Dugout nr Eight Mile Creek	Upper Peace River Cache Creek Cache Creek Lower Kiskatinaw River Upper Prophet River Lower Peace River	10,000 2,920 76,285 110,217 36,593 90,000 Jul - Sept (Q3) To	4,942 686 162 32,050 81 1,907

# TABLE 4 - SUMMARY OF WATER ALLOCATION AND USE FOR OIL AND GAS ACTIVITIES IN 2022,

### OIL AND GAS RELATED SHORT-TERM WATER USE APPROVALS - SECTION 10

### **OIL AND GAS RELATED WATER LICENCES - SECTION 9**

ORGANIZED BY OGC WATER MANAGEMENT BASIN (Page 1 of 4)	NUMBER OF APPROVED		TOTAL VOLUME APPROVED AS %	TOTAL VOLUME	TOTAL VOLUME WITHDRAWN AS % OF MEAN	NUMBER O LICENCED	VOLUME	TOTAL VOLUME LICENCED AS % OF MEAN	TOTAL VOLUME	TOTAL VOLUME WITHDRAWN AS % OF MEAN	MEAN ANNUAL
MAJOR and Sub-Basin Name	WITHDRAWAL LOCATIONS	TOTAL VOLUME APPROVED (m³)	OF MEAN ANNUAL RUNOFF	WITHDRAWN IN 2022 (m³)	ANNUAL RUNOFF	WITHDRAW/ LOCATIONS		ANNUAL RUNOFF	WITHDRAWN IN 2022 (m³)	ANNUAL RUNOFF	RUNOFF (m³)
BEATTON RIVER (sub-basin of Peace River)											
Upper Beatton River	14	765,600	0.153%	12,135	0.002%	17	1,575,519	0.315%	508,727	0.102%	499,408,440
Middle Beatton River	26	282,896	0.114%	3,004	0.001%	1	1,095	0.000%	0	0.000%	249,152,995
Middle Beatton Total (incl. Upper Beatton)	40	1,048,496	0.140%	15,139	0.002%	18	1,576,614	0.211%	508,727	0.068%	748,561,435
Milligan Creek	11	29,100	0.015%	0	0.000%	6	235,425	0.123%	15,730	0.008%	191,536,686
Blueberry River	15	266,000	0.091%	32,399	0.011%	4	198,925	0.068%	24,805	0.008%	293,278,540
Doig River	1	5,000	0.002%	2,740	0.001%	1	51,100	0.016%	0	0.000%	323,069,523
Lower Beatton River	2	519,600	0.376%	2,282	0.002%	1	20,730	0.015%	0	0.000%	138,262,629
BEATTON TOTAL	69	1,868,196	0.110%	52,560	0.003%	30	2,082,794	0.123%	549,262	0.032%	1,694,708,813
HALFWAY RIVER (sub-basin of Peace River)											
Chowade River	0					0					327,027,527
Upper Halfway River	1	500,000	0.063%	0	0.000%	1	72,000	0.009%	0	0.000%	795,962,409
Upper Halfway Total (includes Chowade)	1	500,000	0.045%	0	0.000%	1	72,000	0.006%	0	0.000%	1,122,989,936
Graham River	0	0	0.000%	0	0.000%	0					860,627,172
Cameron River	24	957,124	0.428%	54,006	0.024%	19	1,111,919	0.497%	33,378	0.015%	223,679,567
Lower Halfway River	0	0	0.000%	0	0.000%	9	5,448,688	3.596%	379,764	0.251%	151,526,991
HALFWAY TOTAL	25	1,457,124	0.062%	54,006	0.002%	29	6,632,607	0.281%	413,052	0.018%	2,358,823,666
MOBERLY RIVER (sub-basin of Peace River)											
Moberly River	0					0					391,714,995
MOBERLY TOTAL	0	0	0.000%	0	0.000%	0	0	0.000%	0	0.000%	391,714,995
PINE RIVER (sub-basin of Peace River)											
Burnt River	3	94,002	0.013%	3	0.000%	0					737,930,022
Sukunka River	4	140,000	0.013%	62,748	0.006%	0					1,047,282,572
Sukunka River Total (includes Burnt)	7	232,002	0.013%	62,751	0.004%	0	0	0.000%	0	0.000%	1,785,212,594
Upper Pine River	1	18,000	0.001%	1,977	0.000%	0					1,466,884,035
Murray River	4	87,352	0.003%	760	0.000%	1	5,475	0.000%	728	0.000%	2,698,285,017
Lower Pine River	2	1,580,500	1.148%	242,433	0.176%	1	650,000	0.472%	400	0.000%	137,619,889
PINE TOTAL	14	1,919,354	0.032%	307,921	0.005%	2	655,475	0.011%	1,128	0.000%	6,088,001,535

GAS ACTIVITIES IN 2022, ORGANIZED BY OGC WATER MANAGEMENT BASIN (Page 2 of 4)	NUMBER OF APPROVED		TOTAL VOLUME	TOTAL	TOTAL VOLUME WITHDRAWN AS % OF MEAN	NUMBER LICENCE		TOTAL VOLUME LICENCED AS % OF MEAN	TOTAL	TOTAL VOLUM WITHDRAWN AS % of MEA	MEAN
MAJOR and Sub-Basin Name	WITHDRAWAL LOCATIONS	TOTAL VOLUME APPROVED (m³)	APPROVED AS % OF MEAN ANNUAL RUNOFF	VOLUME WITHDRAWN IN 2022 (m³)	ANNUAL RUNOFF	WITHDRAY LOCATIO	WAL LICENCED	ANNUAL RUNOFF	VOLUME WITHDRAWN IN 2022 (m³)	ANNUAL RUNOFF	RUNOFF (m³)
KISKATINAW RIVER (sub-basin of Peace River)											
West Kiskatinaw River	0					0					117,515,115
East Kiskatinaw River	0					0					105,452,962
Middle Kiskatinaw River	3	27,200	0.048%	750	0.001%	1	600,000	1.065%	167,102	0.297%	56,347,972
Middle Kiskatinaw Total (incl. West & East)	3	27,200	0.010%	750	0.000%	1	600,000	0.215%	167,102	0.060%	279,316,049
Lower Kiskatinaw River	13	329,382	0.367%	6,705	0.007%	10	3,198,317	3.567%	567,595	0.633%	89,659,847
KISKATINAW TOTAL	16	356,582	0.097%	7,455	0.002%	11	3,798,317	1.029%	734,697	0.199%	368,975,896
PEACE RIVER											
Peace Arm	0					3	9,125,000	N/A	41,356	N/A	N/A
Upper Peace River	1	510,000	0.001%	0	0.000%	1	10,000		8,808		36,423,413,429
Lynx Creek	0					0					30,436,635
Farrell Creek	0	0	0.000%	0	0.000%	0					91,018,843
Cache Creek	0	0	0.000%	0	0.000%	8	677,605	0.908%	85,193	0.114%	74,603,546
Pouce Coupe River	5	142,800	0.056%	0	0.000%	4	1,650,200	0.645%	110,843	0.043%	255,686,202
Lower Peace River	5	355,000	0.310%	114,644	0.100%	8	4,204,919	3.673%	430,764	0.376%	114,470,012
<b>PEACE TOTAL</b> (incl. Kisk/Pine/Moberly/Half/Beatton)	135	6,609,056	0.014%	536,586	0.001%	96	28,836,917	0.060%	2,375,103	0.005%	47,891,853,572
SMOKY RIVER											
Smoky River	3	27,000	0.001%	0	0.000%	2	6,595	0.000%	2,563	0.000%	2,669,506,123
SMOKY TOTAL	3	27,000	0.001%	0	0.000%	2	6,595	0.000%	2,563	0.000%	2,669,506,123
MUSKWA RIVER (sub-basin of Fort Nelson River)											
Upper Muskwa River	0					0					1,725,201,511
Middle Muskwa River	0					0					1,973,711,816
Middle Muskwa Total (incl. Upper Muskwa)	0	0	0.000%	0	0.000%	0	0	0.000%	0	0.000%	3,698,913,327
Lower Muskwa River	1	22,000	0.003%	0	0.000%	0					646,841,560
MUSKWA TOTAL	1	22,000	0.001%	0	0.000%	0	0	0.000%	0	0.000%	4,345,754,887
PROPHET RIVER (sub-basin of Fort Nelson River)											
Upper Prophet River	0					1	36,593	0.002%	81	0.000%	1,470,271,289
Middle Prophet River	7	63,000	0.010%	0	0.000%	0					621,428,680
Middle Prophet Total (incl. Upper Prophet)	7	63,000	0.003%	0	0.000%	1	36,593	0.002%	81	0.000%	2,091,699,969
Lower Prophet River	2	8,200	0.003%	0	0.000%	0					272,262,427
PROPHET TOTAL	9	71,200	0.003%	0	0.000%	1	36,593	0.002%	81	0.000%	2,363,962,396

Table: pg 2 of 4

SUMMARY OF WATER ALLOCATION AND USE FOR OIL AND	OIL AND GAS RELATED SHORT-TERM WATER USE APPROVALS - SECTION 10					OIL AND GAS RELATED WATER LICENCES - SECTION 9						
GAS ACTIVITIES IN 2022, ORGANIZED BY OGC WATER MANAGEMENT BASIN (Page 3 of 4)  MAJOR and Sub-Basin Name	NUMBER OF APPROVED WITHDRAWAL LOCATIONS	TOTAL VOLUME APPROVED (m³)	TOTAL VOLUME APPROVED AS % OF MEAN ANNUAL RUNOFF	TOTAL VOLUME WITHDRAWN IN 2022 (m³)	TOTAL VOLUME WITHDRAWN AS % OF MEAN ANNUAL RUNOFF	NUMBER OI LICENCED WITHDRAW/ LOCATIONS	VOLUME AL LICENCED	TOTAL VOLUME LICENCED AS % OF MEAN ANNUAL RUNOFF	TOTAL VOLUME WITHDRAWN IN 2022 (m³)	TOTAL VOLUME WITHDRAWN AS % OF MEAN ANNUAL RUNOFF	MEAN	
SIKANNI CHIEF RIVER (sub-basin of Fort Nelson River)												
Upper Sikanni Chief River	0	0	0.000%	0	0.000%	3	3,117,689	0.386%	469,050	0.058%	807,771,692	
Middle Sikanni Chief River	24	324,443	0.034%	211	0.000%	4	29,203	0.003%	159	0.000%	949,755,794	
Middle Sikanni Chief Total (incl. Upper Sikanni)	24	324,443	0.018%	211	0.000%	7	3,146,892	0.179%	469,209	0.027%	1,757,527,486	
Lower Sikanni Chief	16	96,224	0.011%	952	0.000%	0					875,678,142	
SIKANNI CHIEF TOTAL	40	420,667	0.016%	1,163	0.000%	7	3,146,892	0.120%	469,209	0.018%	2,633,205,628	
FORT NELSON RIVER												
Kahntah River	33	168,648	0.042%	0	0.000%	2	10,950	0.003%	2,693	0.001%	400,582,903	
Fontas River	3	17,200	0.003%	0	0.000%	0					591,531,903	
Fontas Total (includes Kahntah)	36	185,848	0.019%	0	0.000%	2	10,950	0.001%	2,693	0.000%	992,114,806	
Klua Creek	0					0					402,135,448	
Upper Fort Nelson River	0					0					276,181,026	
Upper Fort Nelson Total (incl. Sikanni Chief Tota	l, 76	606,615	0.014%	1,163	0.000%	9	3,157,842	0.073%	471,902	0.011%	4,303,636,908	
Kahntah, Fontas, Klua)												
Snake River	0					0					310,763,522	
Sahtaneh River	9	30,500	0.006%	0	0.000%	0					474,904,729	
Middle Fort Nelson River	5	74,000	0.014%	1,421	0.000%	0					515,348,901	
Middle Ft Nelson Total (incl. Upper Ft. Nelson total,	100	804,215	0.007%	2,584	0.000%	10	3,194,435	0.026%	471,983	0.004%	12,314,371,343	
Muskwa Total, Prophet Total, Snake, Sahtaneh)												
Kiwigana River	7	71,500	0.016%	2,579	0.001%	0					441,657,543	
Lower Fort Nelson River	0					0					312,768,938	
FORT NELSON TOTAL	107	875,715	0.007%	5,163	0.000%	10	3,194,435	0.024%	471,983	0.004%	13,068,797,824	
LIARD RIVER												
Muncho River	0					0					551,551,360	
Upper Liard River	0					0					33,125,817,465	
Upper Liard Total (incl. Muncho)	0	0	0.000%	0	0.000%	0	0	0.000%	0	0.000%	33,677,368,825	
Grayling River	0					0					630,833,914	
Upper Toad River	0					0					1,521,055,576	
Racing River	0					0					1,488,336,681	
Lower Toad River	0					0					419,472,722	
Beaver River	0					0					10,862,659,426	
Middle Liard River	0					0					463,652,312	

SUMMARY OF WATER ALLOCATION AND USE FOR OIL AND GAS ACTIVITIES IN 2022, ORGANIZED BY OGC WATER

### OIL AND GAS RELATED SHORT-TERM WATER USE APPROVALS - SECTION 10

OIL AND GAS RELATED WATER LICENCES - SECTION 9

GAS ACTIVITIES IN 2022, ORGANIZED BY OGC WATER MANAGEMENT BASIN (Page 4 of 4)  MAJOR and Sub-Basin Name	NUMBER OF APPROVED WITHDRAWAL LOCATIONS	TOTAL VOLUME APPROVED (m³)	TOTAL VOLUME APPROVED AS % OF MEAN ANNUAL RUNOFF	TOTAL VOLUME WITHDRAWN IN 2022 (m³)	TOTAL VOLUME WITHDRAWN AS % OF MEAN ANNUAL RUNOFF	NUMBER O LICENCED WITHDRAW, LOCATION:	VOLUME AL LICENCED	TOTAL VOLUME LICENCED AS % OF MEAN ANNUAL RUNOFF	TOTAL VOLUME WITHDRAWN IN 2022 (m³)	TOTAL VOLUME WITHDRAWN AS % OF MEAN ANNUAL RUNOFF	MEAN
LIARD RIVER con't	LUCATIONS	AFFROVED (III )	ANNUAL NUNUFF	IN 2022 (III')	KUNUTI	LUCATION	(111 )	RONOTT	IN 2022 (III-)	NONOTI	(111 )
Middle Liard Total (incl. Upper Liard Total, Grayling,	0	0	0.000%	0	0.000%	0	0	0.000%	0	0.000%	49,063,379,456
Upper Toad, Racing, Lower Toad, Beaver)		v	0.000/0	v	0.00070		•	0.00070	•	0.00070	17/003/377/130
Capot-Blanc Creek	0					0					183,879,851
Dunedin River	0					0					820,464,167
Lower Liard River	1	20,000	0.002%	0	0.000%	0					1,236,634,664
LIARD TOTAL (incl. Fort Nelson)	108	895,715	0.001%	5,163	0.000%	10	3,194,435	0.005%	471,983	0.001%	64,373,155,962
PETITOT RIVER		•					· ·		•		
Sahdoanah River	22	55,000	0.022%	3,696	0.001%	0					252,625,362
Upper Petitot River	47	165,400	0.011%	0	0.000%	0					1,476,579,488
Tsea River	36	169,810	0.039%	2,484	0.001%	0					434,062,484
Middle Petitot River	24	108,300	0.016%	0	0.000%	0					698,562,753
Middle Petitot Total (incl. Sahdoanah,	129	498,510	0.017%	6,180	0.000%	0	0	0.000%	0	0.000%	2,861,830,087
Upper Petitot, Tsea)											
Lower Petitot River	23	276,000	0.031%	1,462	0.000%	0					904,314,069
PETITOT TOTAL	152	774,510	0.021%	7,642	0.000%	0	0	0.000%	0	0.000%	3,766,144,156
HAY RIVER											
Upper Kotcho River	0					0					311,519,217
Kyklo River	0	0	0.000%	468	0.000%	0					145,897,691
Shekilie River	28	330,599	0.073%	1,656	0.000%	0					450,747,494
Lower Kotcho River	0	0	0.000%	2,208	0.001%	0					311,519,217
Lower Kotcho Total (includes Upper Kotcho,	28	330,599	0.027%	4,332	0.000%	0	0	0.000%	0	0.000%	1,219,683,619
Kyklo, Shekilie)											
Hay River	25	175,300	0.033%	144	0.000%	0					538,672,352
HAY TOTAL	53	505,899	0.029%	4,476	0.000%	0	0	0.000%	0	0.000%	1,758,355,971
CHINCHAGA RIVER											
Chinchaga River	0	0	0.000%	0	0.000%	0					109,492,680
CHINCHAGA TOTAL	0	0	0.000%	0	0.000%	0	0	0.000%	0	0.000%	109,492,680
OTHER (outside Northeast B.C.)	254	7,956,305	N/A	496,508	N/A	3	682,793	N/A	27,728	N/A	N/A
GRAND TOTAL	705	16,768,485	0.014%	1,050,375	0.001%	111	32,720,740	0.027%	2,877,377	0.002%	120,568,508,464



# PREVIOUS REPORTS

Annual water reports and quarterly updates are available on the Commission's website at https://www.bcogc.ca/data-reports.

For questions regarding this report, please contact OGC.Communications@bcoqc.ca













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