

The logo for the Canadian Columbia River Forum is set against a background image of a river. The text 'Canadian Columbia River Forum' is written in a large, bold, white, sans-serif font. The word 'Canadian' is on the top line, 'Columbia' is on the second line, and 'River Forum' is on the third line. The background image shows a river with a rocky bed and some greenery on the banks.

Canadian Columbia River Forum

Current Surface Water Use on the Columbia and Kootenay Rivers and Tributaries within the Kootenay Region

*Prepared for: The Canadian Columbia
River Forum*

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Water Management Branch*

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This report was prepared for members of the Canadian Columbia River Forum Steering Committee. The views expressed herein are those of the authors and do not necessarily state or reflect the views or positions of the Canadian Columbia River Forum or any of its member agencies.

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The map titled “Current Surface Water Use on the Columbia and Kootenay Rivers and Tributaries within the Kootenay Region” provides a tabular and visual summary of the amount and extent of various surface water uses in the Kootenays. Its focus is on the Columbia and Kootenay Rivers and includes associated major lakes, reservoirs and tributaries.

The map is made up of provincial and federal government data readily available in 2009. The primary criteria for data inclusion was that it depicts current use of surface water in, on or close to the major water bodies, and that it have regional coverage. Ground water use through wells is not included. As the focus is on water quantity rather than quality, the use of water for waste discharge is also not shown. The map should be periodically updated if it continues to be used.

The mapped information is meant to be indicative of use rather than portray actual use. For example, the licensed use information in the boxes (A, B, C, D and E) shows how much water is allocated for use, not how much water is actually used. For example, while the water allocated for power generation in Units C and D primarily accounts for water use at Mica and Revelstoke generating stations, on average those generating stations use only about 30% of the allocated quantities each year. The unit of measure used is “acre feet” - one acre foot of water covers one acre with water one foot deep and equals roughly 270,000 imperial gallons. Similarly, as actual recreation use information is not readily available for the region, the parks and recreation sites are an indicator of the extent of facilitated recreation use on or adjacent to the various waterways.

Overall the map shows water is used in many ways including recreation, household and industrial use, power generation, irrigation and wildlife. The Columbia and Kootenay River waterways are also home to various fish species and are popular for fishing. In 2005, anglers spent approximately 40,000 user days on Kootenay Lake alone.

The Kootenay Region was arbitrarily subdivided into five units using watershed boundaries, primarily for ease of analysis. In each unit the use of water for power generation is dominant. The units, and some initial observations when comparing surface water use among units, are as follows:

A) Kootenay River from its headwaters to Canada/US border.

- contains the most water allocated for agricultural and household use.

B) Kootenay River from Canada/US border to Columbia River confluence

- has the highest amount of water allocated for conservation use.

C) Columbia River from its headwaters to Mica Dam

- has the highest storage use for power and flood control purposes.

D) Columbia River from Mica Dam to Hugh Keenleyside Dam

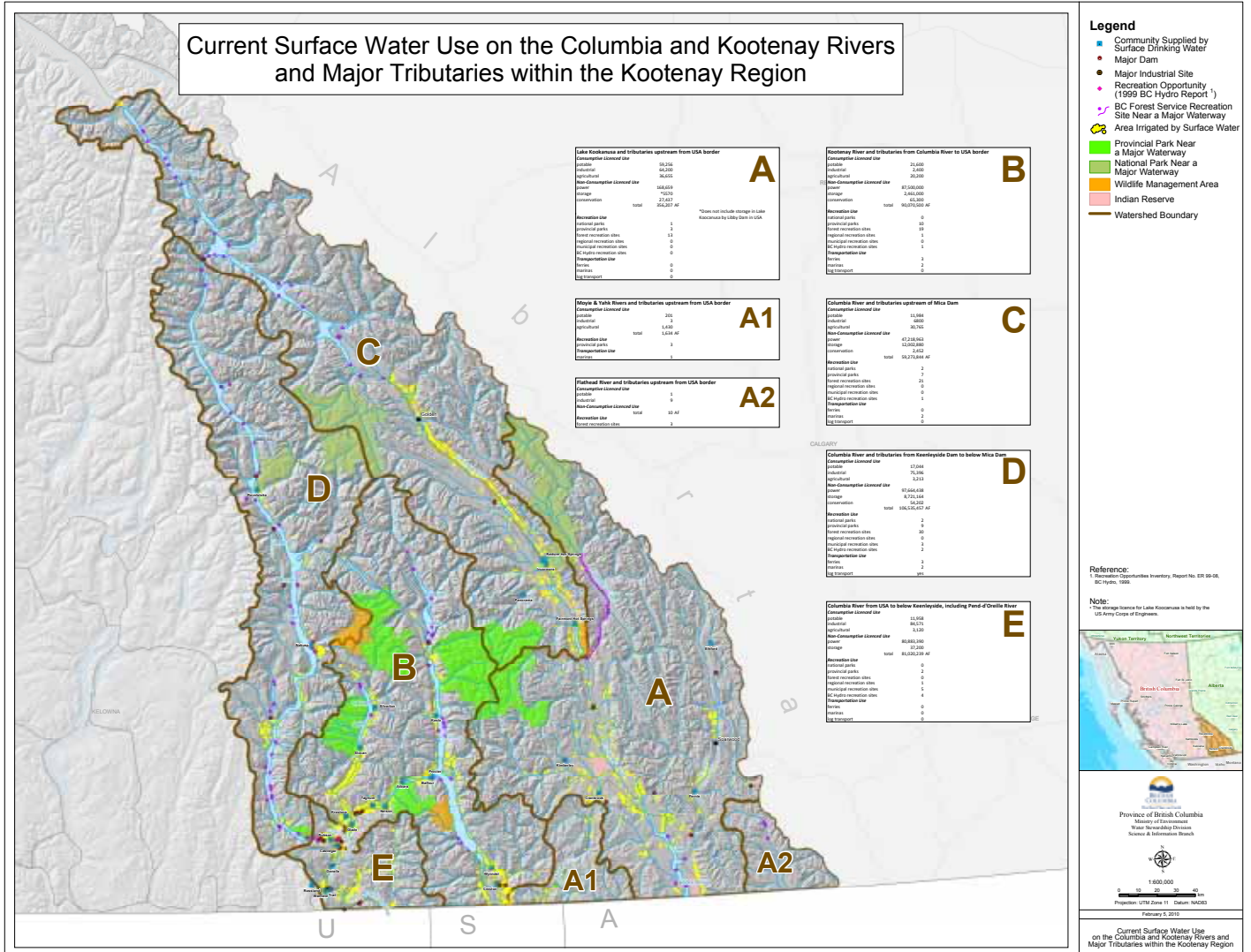
- of all the units this one is highest in water use for power generation, transportation and facilitated recreation use sites.

E) Columbia River from Hugh Keenleyside Dam to Canada/US border












- contains the highest industrial use.

This is a low resolution screen shot of the map. A high resolution format designed to be used with an Adobe zoom tool for more detailed viewing is available at the following link:

[Current Surface Water Use High Resolution Map](#)



Legend

-  Community Supplied by Surface Drinking Water
-  Major Dam
-  Major Industrial Site
-  Recreation Opportunity (1999 BC Hydro Report ¹)
-  BC Forest Service Recreation Site Near a Major Waterway
-  Area Irrigated by Surface Water
-  Provincial Park Near a Major Waterway
-  National Park Near a Major Waterway
-  Wildlife Management Area
-  Indian Reserve
-  Watershed Boundary

Lake Kookanusa & Tribs upstream from USA border

Consumptive Licenced Use

potable	59,256
industrial	64,200
agricultural	36,655

Non-Consumptive Licenced Use

power	168,659
storage	*5570
conservation	27,437
total	356,207 AF

Recreation Use

national parks	1
provincial parks	3
forest recreation sites	13
regional recreation sites	0
municipal recreation sites	0
BC Hydro recreation sites	0

Transportation Use

ferries	0
marinas	0
log transport	0

A

0.1% of total licenced within basin
*Does not include storage in Lake Kookanusa by Libby Dam in USA

Kootenay River & tribs upstream from Columbia River to USA border

B

Consumptive Licenced Use

potable	21,600
industrial	2,400
agricultural	20,200

Non-Consumptive Licenced Use

power	87,500,000
storage	2,461,000
conservation	65,300
total	90,070,500 AF

26.7% of total licenced within basin

Recreation Use

national parks	0
provincial parks	10
forest recreation sites	19
regional recreation sites	1
municipal recreation sites	0
BC Hydro recreation sites	1

Transportation Use

ferries	3
marinas	2
log transport	0

Columbia River & tribs from Mica Dam & upstream

C

Consumptive Licenced Use

potable	11,984
industrial	6800
agricultural	30,765

Non-Consumptive Licenced Use

power	47,218,963
storage	12,002,880
conservation	2,452
total	59,273,844 AF

17.6% of total licenced within basin

Recreation Use

national parks	2
provincial parks	7
forest recreation sites	21
regional recreation sites	0
municipal recreation sites	0
BC Hydro recreation sites	1

Transportation Use

ferries	0
marinas	2
log transport	0

Columbia River & tribs Keenleyside Dam to below Mica Dam

D

Consumptive Licenced Use

potable	17,044
industrial	75,396
agricultural	3,213

Non-Consumptive Licenced Use

power	97,664,438
storage	8,721,164
conservation	54,202

total 106,535,457 AF 31.6% of total licenced within basin

Recreation Use

national parks	2
provincial parks	9
forest recreation sites	30
regional recreation sites	0
municipal recreation sites	3
BC Hydro recreation sites	2

Transportation Use

ferries	3
marinas	2
log transport	yes

Columbia River from USA to below Keenleyside, including Pend O'Reille

E

Consumptive Licenced Use

potable	11,958
industrial	84,571
agricultural	3,120

Non-Consumptive Licenced Use

power	80,883,390
storage	37,200

total 81,020,239 AF 24% of total licenced within basin

Recreation Use

national parks	0
provincial parks	2
forest recreation sites	0
regional recreation sites	1
municipal recreation sites	5
BC Hydro recreation sites	4

Transportation Use

ferries	0
marinas	0
log transport	0