Ms. Olga Algayerova
Executive Secretary
United Nations Economic Commission
for Europe (UNECE)
Palais des Nations
1211 Geneva 10
Switzerland

Ms. Audrey Azoulay
Director-General
United Nations Educational, Scientific
and Cultural Organization (UNESCO)
7 Place de Fontenoy
75015 Paris
France

Dear Ms. Algayerova and Ms. Azoulay:

RE: Transboundary Water Cooperation Reporting

In response to your letter of February 19, 2020 inviting Canada to submit our second national report on indicator 6.5.2 for Target 6.5 of the Sustainable Development Goals (SDGs), I am pleased to provide you with Canadian data, attached, in order to contribute to your agencies' discussion on progress and gaps in transboundary cooperation at the national and basin levels.

As noted in our national report, Canada shares water with only the United States of America. In 1909, the two countries concluded the *Boundary Waters Treaty*, which established the foundation of a century of cooperative transboundary water management for shared watersheds along the Canada-United States boundary. Over the last 100 years, Canada and the United States have built on this foundation and negotiated a number of other subsidiary treaties, conventions and agreements, including inter alia: the *Columbia River Treaty*, the *Niagara River Diversion Treaty* and the *Great Lakes Water Quality Agreement*.

In order to prevent and resolve potential disputes between Canada and the United States under the Boundary Waters Treaty, both countries created the International Joint Commission (IJC). The IJC acts as an independent and objective adviser to the two governments and fosters cooperation between Canada and the United States on the management of our shared waters. The IJC rules upon applications for approval of projects affecting boundary or transboundary waters and may regulate the operation of these projects; assists the two countries in the protection of the transboundary environment, including the implementation of the Great Lakes Water Quality Agreement; and it alerts the governments to emerging issues along the boundary that may give rise to bilateral disputes.

The submission of our 2nd national report shows that the SDG indicator 6.5.2 is 0.82; or 82% of transboundary basins are covered by an operational agreement for transboundary cooperation. Details for each basin are provided in section II. 91% of surface water basins have operational agreements in place. However, Canada and the U.S. only have operational arrangements in place for four out of a total of ten known transboundary aquifers. As noted in our report, the *Boundary Waters Treaty* does not 7apply to transboundary aquifers.

Part II of Canada's 2nd national report was completed in a separate spreadsheet. As Canada and the United States share a large number of transboundary basins and have a long history of cooperation, part II of the report contains a substantial amount of information. A spreadsheet was used in order to convey this information in an efficient manner.

Should you have any further questions, please note the point of contact in the department is Jean-François Ferry, Director, Americas in the International Affairs Branch (jean-francois.ferry@canada.ca).

I trust that you will find Canada's submission useful to support on-going progress related to Target 6.5 of the Sustainable Development Goals (SDGs).

Sincerely,

Catherine Stewart

Assistant Deputy Minister

International Affairs

Reporting on global SDG indicator 6.5.2

TEMPLATE of the second cycle for reporting

Content of the template

The template is divided into four parts:

- Section I Calculation of SDG indicator 6.5.2
- Section II Information on each transboundary basin or group of basins
- Section III General information on transboundary water management at the national level
- Section IV Final questions

Country name: Canada

I. Calculation of Sustainable Development Goal indicator 6.5.2

Methodology

- 1. Using the information gathered in section II, the information gathered in this section allows for the calculation of Sustainable Development Goal global indicator 6.5.2, which is defined as the proportion of transboundary basin area with an operational arrangement for water cooperation.
- 2. The step-by-step monitoring methodology for indicator 6.5.2, developed by UNECE and UNESCO in the framework of UN-Water, should be referred to for details on the necessary data, the definitions and the calculation.^a
- 3. The value of the indicator at the national level is derived by adding up the surface area in a country of those transboundary basins (river and lake basins and aquifers) that are covered by an operational arrangement and dividing the area obtained by the aggregate total area in a country of all transboundary basins (both river and lake basins, and aquifers).
- 4. Transboundary basins are basins of transboundary waters, that is, of any surface waters (notably rivers, lakes) or groundwaters which mark, cross or are located on boundaries between by two or more States. For the purpose of the calculation of this indicator, for a transboundary river or lake, the basin area is determined by the extent of its catchment. For groundwater, the area to be considered is the extent of the aquifer.
- 5. An "arrangement for water cooperation" is a bilateral or multilateral treaty, convention, agreement or other formal arrangement among riparian countries that provides a framework for cooperation on transboundary water management.
- 6. For an arrangement to be considered "operational" all the following criteria need to be in place in practice:
- (a) There is a joint body, joint mechanism or commission (e.g., a river basin organization) for transboundary cooperation (criterion 1);
- (b) There are regular (at least once per year) formal communications between riparian countries in form of meetings (either at the political or technical level) (criterion 2);
- (c) Joint objectives, a common strategy, a joint or coordinated management plan, or an action plan have been agreed upon by the riparian countries (criterion 3);
- (d) There is a regular (at least once per year) exchange of data and information (criterion 4).

Calculation of indicator 6.5.2

- 7. Please list in the tables below the transboundary basins (rivers and lakes and aquifers) in your country's territory and provide the following information for each of them:
 - (a) The country/ies with which the basin is shared;
- (b) The surface area of the basin (the catchment of rivers or lakes and the aquifer in the case of groundwater) within the territory of your country (in square kilometres (km²));
- (c) Whether a map and/or a geographical information system (GIS) shapefile of the basin has been provided;
 - (d) Whether there is an arrangement in force for the basin;
 - (e) The verification of each of the four criteria to assess operationality;

^a Available from the UN-Water website: https://www.sdg6monitoring.org/indicators/target-65/indicators652/ (updated version "2020").

- (f) The surface area of the basin within the territory of your country which is covered by a cooperation arrangement that is operational according to the above criteria.
- 8. In case an operational arrangement is in place only for a sub-basin or a portion of a basin, please list this sub-basin just after the transboundary basin it is part of. In case there is an operational arrangement for the whole basin, do not list sub-basins in the table below.

CANADA

Canada shares water with only one other country; the United States of America. The two countries have a stable and mature relationship and have successfully cooperated on transboundary water management for more than a century. The foundation of Canada-U.S. transboundary water cooperation is the 1909 Boundary Waters Treaty. The Boundary Waters Treaty provides general principles, rather than detailed prescriptions, for preventing and resolving disputes over waters shared between the two countries and for settling other issues along the length of the Canada-U.S. boundary. The specific application of these principles is decided on a case-by-case basis. Canada and the United States created the International Joint Commission (IJC) as the formal body for cooperation between the two countries, and the IJC is guided by the Boundary Waters Treaty in the performance of its duties to review and approve projects in boundary and transboundary watersheds, undertake studies and make recommendations on matters referred to it by the two governments, and assist the two countries in the implementation of the Great Lakes Water Quality Agreement (GLWQA).

In addition to the *Boundary Waters Treaty*, Canada and the United States have negotiated a number of separate bilateral Agreements subsidiary to the *Boundary Waters Treaty* for the purposes of providing flood control, equally apportioning water, and managing water quality in individual boundary and transboundary watersheds. These subsidiary Agreements, for which copies are available on-line, include (for example):

- The Lake of the Woods Convention and Protocol (1925) http://www.ijc.org/files/dockets/Docket%203/Docket%203%20Convention%20and%20Protocol.pdf
- The Niagara River Diversion Treaty (1950) http://www.internationalwaterlaw.org/documents/regionaldocs/niagra1950.html
- The Columbia River Treaty (1964) https://www.canada.ca/en/environment-climate-change/corporate/international-affairs/partnerships-countries-regions/north-america/canada-united-states-columbia-river.html
- The Great Lakes Water Quality Agreement (1978, 2012) https://www.canada.ca/en/environment-climate-change/corporate/international-affairs/partnerships-countries-regions/north-america/great-lakes-water-quality-agreement.html

Canada and the United States have also used other mechanisms, such as Memorandums of Understanding, and Exchanges of Diplomatic Notes to address certain other minor issues as they have arisen. Copies of many of these documents can be accessed at the following link: https://www.internationalwaterlaw.org/documents/n-america.html.

Since 2005, Canada has participated to international developments in transboundary groundwater issues in cooperation with the United States within the Internationally Shared Aquifer Resources Management Initiative (ISARM) of UNESCO. As a result, ten Transboundary Aquifer Systems (TAS) were identified along the border between Canada and the United States.

The Boundary Waters Treaty does not cover aquifers, and the mandate of the IJC does not explicitly include the prevention or resolution of conflicts over the use or quality of boundary aquifers. It is important to note that currently there are no separate bilateral treaties or agreements between Canada and the U.S. that cover the cooperative management of transboundary aquifers. However, there are science arrangements and overall cooperation established for some of the transboundary aquifers. Some of the Canada/U.S. transboundary aquifers have arrangements for water cooperation designed as bilateral (federal/federal) or multilateral (provincial/state) agreements for scientific cooperation. This cooperation is in the form of data and information exchange on both groundwater quality and quantity. There are no Agreements on transboundary aquifer management.

Canada's approach to determining the value for indicator 6.5.2 changed from its first national report. Canada's second national report more comprehensively and accurately reflects Canada's transboundary water management.

Canada provides this information to UNECE in the spirit of good faith and cooperation. Canada notes that the terminology used by the UNECE differs from language found in international watercourse agreements to which Canada is a Party. As such, Canada's response to the second reporting exercise on Sustainable Development Goal (SDG) indicator 6.5.2 should not be understood as an interpretation of any international watercourse agreements to which Canada is a Party. Canada's answers here are without prejudice to any interpretation Canada may at any time apply to international watercourse agreements to which Canada is a Party.

Table 1
Transboundary river or lake basin (please add rows as needed)

Name of transboundary river or lake basin/sub-basin	It is a basin or a sub- basin? ^b	Countries shared with	Surface area of the basin/ sub-basin (in km²) within the territory of the country	Map and/or GIS shapefile provided (yes/no)	Covered by an arrangement (entirely, partly, no)	Criterion 1 applied (yes/no)	Criterion 2 applied (yes/no)	Criterion 3 applied (yes/no)	Criterion 4 applied (yes/no)	Surface area of the basin/ sub-basin (in km²) covered by an operational arrangement within the territory of the country
Alaska-BC-Yukon Coastal	Basin	U.S.	15551.9057853	Yes	Entirely	Yes	Yes	Yes	Yes	15551.9057853
Alsek	Basin	U.S.	25557.824883	Yes	Entirely	Yes	Yes	Yes	Yes	25557.824883
Androscoggin	Basin	U.S.	1.31743816368	Yes	Entirely	No	No	No	No	0
Columbia	Basin	U.S.	101890.267323	Yes	Entirely	Yes	Yes	Yes	Yes	101890.267323
Connecticut	Basin	U.S.	305.896703342	Yes	Entirely	No	No	No	No	0
Great Lakes	Basin	U.S.	232044.402467	Yes	Entirely	Yes	Yes	Yes	Yes	232044.402467
Kennebec	Basin	U.S.	2.94070456931	Yes	Entirely	No	No	No	No	0
Lake Champlain- Richelieu	Basin	U.S.	3972.90314155	Yes	Entirely	Yes	Yes	Yes	Yes	3972.90314155
Milk	Basin	U.S.	20981.1049536	Yes	Entirely	Yes	Yes	Yes	Yes	20981.1049536
Missouri-Poplar	Basin	U.S.	8116.4589893	Yes	Entirely	Yes	Yes	Yes	Yes	8116.4589893
Peel and Southwestern Beaufort Sea	Basin	U.S.	101242.020638	Yes	No	No	No	No	No	0
Penobscot	Basin	U.S.	1.05109241819	Yes	Entirely	No	No	No	No	0

^b List sub-basins after the basin they belong to.

Name of transboundary river or lake basin/sub-basin	It is a basin or a sub- basin? ^b	Countries shared with	Surface area of the basin/ sub-basin (in km²) within the territory of the country	Map and/or GIS shapefile provided (yes/no)	Covered by an arrangement (entirely, partly, no)	Criterion 1 applied (yes/no)	Criterion 2 applied (yes/no)	Criterion 3 applied (yes/no)	Criterion 4 applied (yes/no)	Surface area of the basin/ sub-basin (in km²) covered by an operational arrangement within the territory of the country
Portland Canal	Basin	U.S.	7171.67345196	Yes	Entirely	Yes	Yes	Yes	Yes	7171.67345196
Puget Sound-Strait of Georgia-Strait of Juan De Fuca	Basin	U.S.	6828.73196343	Yes	Entirely	Yes	Yes	Yes	Yes	6828.73196343
Rainy	Basin	U.S.	37680.6079596	Yes	Entirely	Yes	Yes	Yes	Yes	37680.6079596
Red	Basin	U.S.	25700.5718348	Yes	Entirely	Yes	Yes	Yes	Yes	25700.5718348
Saint John	Basin	U.S.	36985.5820476	Yes	Entirely	Yes	Yes	Yes	Yes	36985.5820476
Souris	Basin	U.S.	38964.0536698	Yes	Entirely	Yes	Yes	Yes	Yes	38964.0536698
St. Croix-Bay of Fundy	Basin	U.S.	5787.42668272	Yes	Entirely	Yes	Yes	Yes	Yes	5787.42668272
St. Lawrence	Basin	U.S.	74427.9902212	Yes	Entirely	Yes	Yes	Yes	Yes	74427.9902212
St. Mary	Basin	U.S.	43912.8409593	Yes	Entirely	Yes	Yes	Yes	Yes	43912.8409593
Stikine	Basin	U.S.	47264.4368244	Yes	Entirely	Yes	Yes	Yes	Yes	47264.4368244
Taku	Basin	U.S.	15943.2121825	Yes	Entirely	Yes	Yes	Yes	Yes	15943.2121825
Yukon	Basin	U.S.	313210.846366	Yes	Entirely	Yes	Yes	Yes	Yes	313210.846366
(A) Total surface area of transboundary basins/sub- basins of rivers and lakes covered by operational arrangements within the territory of the country (in km²) (do not double count sub-basins)										1061992.842

Name of transboundary river or lake basin/sub-basin	It is a basin or a sub- basin? ^b	Countries shared with	· ·	provided	Covered by an arrangement (entirely, partly, no)	 Criterion 2 applied (yes/no)	Criterion 3 applied (yes/no)	Criterion 4 applied (yes/no)	Surface area of the basin/ sub-basin (in km²) covered by an operational arrangement within the territory of the country
(B) Total surface area of transboundary basins of rivers and lakes within the territory of the country (in km²) (do not double count sub-basins)		1163546.068							

^b List sub-basins after the basin they belong to.

Table 2 **Transboundary aquifers (please add rows as needed)**

Name of the transboundary aquifer	Countries shared with	Surface area of the aquifer ^c (in km²) within the territory of the country	and/ or GIS shapefile provided	Covered by an aquifer specific arrangement (entirely, partly, no)	Covered within an arrangement not specific to the aquifer ^d (entirely, partly, no)	Criterion 1 applied (yes/no)	Criterion 2 applied (yes/no)	Criterion 3 applied (yes/no)	Criterion 4 applied (yes/no)	Surface area of the aquifer (in km²) covered by an operational arrangement within the territory of the country
Abbotsford-Sumas	US	100	Yes	Partly	No	Yes	Yes	Yes	Yes	100
Okanagan-Osoyoos	US	25 total; majority in Canada*	Yes	No	-	-	-	-	-	-
Grand Forks	US	34 total; majority in Canada*	Yes	No	-	-	-	-	-	-
Poplar	US	2000 (estimated) of 10,000 total; majority in the U.S.*	Yes	No	-	-	-	-	-	-
Estevan	US	approx. 224	Yes	No	-	-	-	-	-	-
Northern Great Plains	US	approx. 125,000	Yes	No	-	-	-	-	-	-
Chateauguay	US	1,500	Yes	Partly	No	No	No	No	No	1,500

^c For a transboundary aquifer, the extent is derived from the aquifer system delineation which is commonly done relying on information of the subsurface (notably the extent of geological formations). As a general rule, the delineation of aquifer systems is based on the delineation of the extent of the hydraulically connected water-bearing geological formations. Aquifer systems are three-dimensional objects and the aquifer area taken into account is the projection on the land surface of the system. Ideally, when different aquifer systems not hydraulically connected are vertically superposed, the different relevant projected areas are to be considered separately, unless the different aquifer systems are managed conjunctively.

^d In the text of the agreement or arrangement or in the practice.

Name of the transboundary aquifer	Countries shared with	Surface area of the aquifer ^c (in km²) within the territory of the country	Map and/ or GIS shapefile provided (yes/no)	Covered by an aquifer specific arrangement (entirely, partly, no)	Covered within an arrangement not specific to the aquifer ^d (entirely, partly, no)	Criterion 1 applied (yes/no)	Criterion 2 applied (yes/no)	Criterion 3 applied (yes/no)	Criterion 4 applied (yes/no)	Surface area of the aquifer (in km²) covered by an operational arrangement within the territory of the country
Judith River	US	Unknown	Yes	110						
Milk River	US	approx. 22,500	Yes	Partly	No	Yes	No	No	No	11,250
Richelieu- Yamaska/Lake Champlain	US	9,000	Yes	Partly	No	No	No	No	No	9,000
(C) Sub-total: surface area of transboundary aquifers covered by operational arrangements (in km²)										21850
(D) Total surface area of transboundary aquifers (in km²)		160,383 (estimated)								

^{*}More precise data is not available

Indicator value for the country

Surface waters:

Percentage of surface area of transboundary basins of rivers and lakes covered by an operational arrangement:

 $A/B \times 100 = 1061992.842/1163546.068 \times 100 = 91.27$

Aquifers:

Percentage of surface area of transboundary aquifers covered by an operational arrangement:

 $C/D \times 100 = 21850/160383 \times 100 = 13.6236$

Sustainable Development Goal indicator 6.5.2:

Percentage of surface area of transboundary basins covered by an operational arrangement:

 $((A + C)/(B + D)) \times 100 = ((1061992.842 + 21850)/(1163546.068 + 160383)) \times 100 = 81.87$

Spatial information

If a map (or maps) of the transboundary surface water catchments and transboundary aquifers (i.e., "transboundary basins") is available, please consider attaching them. Ideally, shapefiles of the basin and aquifer delineations that can be viewed in GIS should be sent.

The detailed watershed GIS files, hosted by the International Joint Commission, can be found at: http://gis.ijc.org/Strauss/

In addition, following is a link to the IJC.Maps.arcgis.com webpage, specific to transboundary drainage areas:

 $\frac{http://iic.maps.arcgis.com/home/webmap/viewer.html?layers=31dc02d753324bcbbf29ffefc80db50e\&useExisting=1$

GIS shape files of the delineation of the 10 TBAs will be made available online in 2020, and additional information on hydrogeology and aquifers in Canada can be found at:

https://gin.gw-info.net/service/api_ngwds:gin2/en/data/standard.download.html?THEME=1

Does your country have transboundary agreements or arrangements for the protection and/or management of transboundary waters (i.e., rivers, lakes or groundwater), whether bilateral or multilateral?

Yes ⊠/No □

If yes, list the bilateral and multilateral agreements or arrangements (listing for each of the countries concerned):

The Canada-U.S. agreements on transboundary water referenced in Table 1 are listed below. These agreements are detailed in part II of this report.

- Boundary Waters Treaty
- Lake of the Woods Convention and Protocol
- Treaty for the Diversion of the Niagara River
- Columbia River Treaty
- Great Lakes Water Quality Agreement
- Skagit River Treaty
- Rainy Lake Convention
- Canada-U.S. Agreement on the Souris River Basin

The provincial-state agreements referenced in table 1 are listed below. These agreements are not included in Part II as they are not under federal jurisdiction. The provincial agreements were included within the calculation, however, it must be noted these may not meet the definition listed in point 5 as they are sub-national arrangements, and are not agreements between riperion countries.

- Memorandum of Understanding and Cooperation between the State of Alaska and the Province of British Columbia
- Treaty Between the Government of Canada and the Government of the United States of America Concerning Pacific Salmon

II. Questions for each transboundary basin, sub-basin, part of a basin, or group of basins (river, lake or aquifer)

Please complete this second section for each transboundary basin (river or lake basin, or aquifer), sub-basin, part of a basin or a group of basins covered by the same agreement or arrangement where conditions are similar. In some instances, you may provide information on both a basin and one or more of its sub-basins or parts thereof, for example, where you have agreements or arrangements on both the basin and its sub-basin. You may coordinate your responses with other States with which your country shares transboundary waters, or even prepare a joint report. General information on transboundary water management at the national level should be provided in section III and not repeated here.

Please reproduce this whole section with its questions for each transboundary basin, sub-basin, part of a basin or group of basins for which you will provide a reply.

Part II of Canada's report is completed in the attached excel document. Tab 1 of the excel document contains the information on the transboundary basins, and tab 2 contains the information on transboundary aquifers.

¹ In principle, section II should be submitted for every transboundary basin, river, lake or aquifer, in the country, but States may decide to group basins in which their share is small or leave out basins in which their share is very minor, e.g., below 1 per cent.

In section II, "agreement" covers all kinds of treaties, conventions and agreements ensuring cooperation in the field of transboundary waters. Section II can also be completed for other types of arrangements, such as memorandums of understanding.

Only federal agreements are included in Part II of the report. The provincial/state Agreements which were included in the calculations in Part I do not fall under federal jurisdiction. As such, we are unable to provide details on these Agreements and they are excluded from this section.

As noted, there are four aquifers that are covered by Agreements. We are not able to provide more detailed information on these Agreements at this time.

Nan	ne of the transboundary basin,-sub-basin, part of a basin or group	of basins: [fill in]
List	of the riparian States: [fill in]	
	he case of an aquifer, what is the nature of the aquifer and its relative basin:	tion with the river
Unc	onfined aquifer connected to a river or lake	
Unc	onfined aquifer with no or limited relation with surface water	
Con	fined aquifer connected to surface water	
Con	fined aquifer with no or limited relation with surface water	
Othe	er	
Plea	se describe: [fill in]	
Unk	nown]
	centage of your country's territory within the basin, sub-basin, up of basins: [fill in]	part of a basin or
1.	Is there one or more transboundary (bilateral or multilateral arrangement(s) on this basin, sub-basin, part of a basin or group of	
	One or more agreements or arrangements exist and are in force	
	Agreement or arrangement developed but not in force	
	Agreement or arrangement developed, but not in force for all ripar	rians 🗌
	Please insert the name of the agreement(s) or arrangement(s) [fill	in]
	Agreement or arrangement is under development	
	No agreement or arrangement	
	If there is no agreement or arrangement or it is not in force, ple why not and provide information on any plans to address the situa	
tran ques	here is no agreement or arrangement and no joint body or masboundary basin, sub-basin, part of a basin or group of basistion 4; if there is no agreement or arrangement, but a joint both go to question 3.	ins then jump to
arra	estions 2 and 3 to be completed for each bilateral or multilate angement in force in the transboundary basin, sub-basin, part of asins.	_
2.	(a) Does this agreement or arrangement specify the area subjection	et to cooperation?
	Yes /No	
	If yes, does it cover the entire basin or group of basins and all ripa	rian States?

Yes □/No □	
Additional explanations? [fill in]	
Or, if the agreement or arrangement relates to a sub-basin, does it cover th basin?	e entire sub-
Yes /No	
Additional explanations? [fill in]	
Which States (including your own) are bound by the agreement or an (<i>Please list</i>): [fill in]	rangement?
(b) If the agreement or arrangement relates to a river or lake basin or does it also cover aquifers?	r sub-basin
Yes \[\]/No \[\]	
If yes, please list the aquifers covered by the agreement or arrangement:	[fill in]
(c) What is the sectoral scope of the agreement or arrangement?	
All water uses	
A single water use or sector	
Several water uses or sectors	
If one or several water uses or sectors, please list (check as appropriate)	:
Water uses or sectors	
Industry	
Agriculture	
Transport (e.g., navigation)	
Households	
Energy: hydropower and other energy types	
Fisheries	
Tourism	
Nature protection	
Other (please list): [fill in]	
(d) What topics or subjects of cooperation are included in the agarrangement?	greement or
Procedural and institutional issues	
Dispute and conflict prevention and resolution	
Institutional cooperation (joint bodies)	
Consultation on planned measures	
Mutual assistance	
Topics of cooperation	
Joint vision and management objectives	
Joint significant water management issues	

	Navigation	
	Human health	
	Environmental protection (ecosystem)	
	Water quality	
	Water quantity or allocation	
	Cooperation in addressing floods	
	Cooperation in addressing droughts	
	Climate change adaptation	
	Monitoring and exchange	
	Joint assessments	
	Data collection and exchange	
	Joint monitoring	
	Maintenance of joint pollution inventories	
	Elaboration of joint water quality objectives	
	Common early warning and alarm procedures	
	Exchange of experience between riparian States	
	Exchange of information on planned measures	
	Joint planning and management	
	Development of joint regulations on specific topics	
	Development of international or joint river, lake or aquifer basin management or action plans	
	Management of shared infrastructure	
	Development of shared infrastructure	
	Other (please list): [fill in]	
(e) agreer	What are the main difficulties and challenges that your country faces ment or arrangement and its implementation, if any?	with the
	Aligning implementation of agreement or arrangement with national laws, policies and programmes	
	Aligning implementation of agreement or arrangement with regional laws, policies and programmes	
	Lack of financial resources	
	Insufficient human capacity	
	Insufficient technical capacity	
	Tense diplomatic relations	
	Non-participation of certain riparian countries in the agreement	
	No significant difficulties	
	Other (please describe): [fill in]	

	(I) arrang	gement and what were the keys to achieving such success? [fill in]	ment	or
		Please attach a copy of the agreement or arrangement or provide ss of the document (<i>please attach document or insert web adapable</i>): [fill in]		
3.	-	or country a member of any joint body or mechanism for this agreement?	ement	or
Yes []/No [
If no,	why no	t? (please explain): [fill in]		
Wher	e there	e is a joint body or mechanism		
	(a) (pleas	If there is a joint body or mechanism, which kind of joint body or me se tick one)?	chani	sm
		Plenipotentiaries		
		Bilateral commission		
		Basin or similar commission		
		Expert group meeting or meeting of national focal points		
		Other (please describe): [fill in]		
	(b) basin,	Does the joint body or mechanism cover the entire transboundary bapart of a basin or group of basins?	sin, sı	ıb-
Yes []/No [
	(c) mecha	Which States (including your own) are members of the joint anism? (<i>Please list</i>): [fill in]	body	or
	(d) mecha	Are there any riparian States that are not members of the joint anism? (please list): [fill in]	body	or
	(e) the join	If not all riparian States are members of the joint body or mechanism hint body or mechanism cooperate with them?	ow do	oes
		No cooperation		
		They have observer status		
		Other (please describe): [fill in]		
	(f) tick th	Does the joint body or mechanism have any of the following features are ones applicable)?	s (plea	ase
		A secretariat		
		If the secretariat is a permanent one, is it a joint secreta does each country host its own secretariat? (Please describe): [fill in		or
		A subsidiary body or bodies		
		Please list (e.g., working groups on specific topics): [fill in]		
		Other features (<i>please list</i>): [fill in]		

(g)	What are the tasks and activities of this joint body or mechanism? ³	
	Identification of pollution sources	
	Data collection and exchange	
	Joint monitoring	
	Maintenance of joint pollution inventories	
	Setting emission limits	
	Elaboration of joint water quality objectives	
	Management and prevention of flood or drought risks	
	Preparedness for extreme events, e.g., common early warning and alarm procedures	
	Surveillance and early warning of water related disease	
	Water allocation and/or flow regulation	
	Policy development	
	Control of implementation	
	Exchange of experience between riparian States	
	Exchange of information on existing and planned uses of water and related installations	
	Settling of differences and conflicts	
	Consultations on planned measures	
	Exchange of information on best available technology	
	Participation in transboundary EIA	
	Development of river, lake or aquifer basin management or action plans	
	Management of shared infrastructure	
	Addressing hydromorphological alterations	
	Climate change adaptation	
	Joint communication strategy	
	Basin-wide or joint public participation and consultation of, for example, basin management plans	
	Joint resources to support transboundary cooperation	
	Capacity-building	
	Any other tasks (please list): [fill in]	
(h)	What are the main difficulties and challenges that your country face	s with t

he operation of the joint body or mechanism, if any?

This may include tasks according to the agreement or tasks added by the joint body, or its subsidiaries. Both tasks which joint bodies coordinate and tasks which they implement should be included.

		Governance issues	
		Please describe, if any: [fill in]	
		Unexpected planning delays	
		Please describe, if any: [fill in]	
		Lack of resources	
		Please describe, if true: [fill in]	
		Lack of mechanism for implementing measures	
		Please describe, if true: [fill in]	
		Lack of effective measures	
		Please describe, if true: [fill in]	
		Unexpected extreme events	
		Please describe, if any: [fill in]	
		Lack of information and reliable forecasts	
		Please describe, if any: [fill in]	
		Others (please list and describe, as appropriate): [fill in]	
	(i)	Does the joint body or mechanism, or its subsidiary bodies meet regul	arly?
	Yes []/No	
	If yes,	how frequently does it meet?	
		More than once per year	
		Once per year	
		Less than once per year	
	(j) [fill in	What are the main achievements with regards to the joint body or med.	hanism?
	(k) coope	Did the joint body or mechanism ever invite a non-riparian coastal rate?	State to
Yes []/No [
		please give details. If no, why not, e.g. are the relevant coastal Sta an States and therefore already members of the joint body or mechanis	
4.	-	joint objectives, a common strategy, a joint or coordinated management plan been agreed for the basin, sub-basin, part of a basin or group of b	-
Yes []/No[_]	
If yes,	please	provide further details: [fill in]	
5.	protec	is the transboundary basin,-sub-basin, part of a basins or group o ted, including the protection of ecosystems, in the context of sustainal water use?	
		ation of urbanization, deforestation, and sand and extraction.	

	Environseasor	onmental flow norms, including consideration of levels and nality	
		quality protection, e.g. nitrates, pesticides, faecal coliforms, metals	
	Water	-related species and habitats protection	
	Other	measures (please describe): [fill in]	
6.	(a) States	Does your country regularly exchange information and data with other in the basin, sub-basin, part of a basin or group of basins?	riparian
Yes []/No [
	(b)	If yes, how often:	
		More than once per year	
		Once per year	
		Less than once per year	
	(c) meetin	Please describe how information is exchanged (e.g. in connections of joint bodies): [fill in]	on with
	(d)	If yes, on what subjects are information and data exchanged?	
		Environmental conditions	
		Research activities and application of best available techniques	
		Emission monitoring data	
		Planned measures taken to prevent, control or reduce transboundary impacts	
		Point source pollution sources	
		Diffuse pollution sources	
		Existing hydromorphological alterations (dams, etc.)	
		Flows or water levels (including groundwater levels)	
		Water abstractions	
		Climatological information	
		Future planned measures with transboundary impacts, such as infrastructure development	
		Other subjects (please list): [fill in]	
		Other comments, e.g. spatial coverage of data and information exchanin]	ige: [fill
	(e)	Is there a shared database or information platform?	
Yes []/No [
	(f)	Is the database publicly available?	
Yes []/No [
If yes,	please	provide the web address: [fill in]	

What are the main difficulties and challenges to data exchange, if applicable?

(g)

19

Freq	Frequency of exchanges									
Timi	Timing of exchanges Comparability of data and information									
Com	Limited spatial coverage									
Limi	Inadequate resources (technical and/or financial)									
Inade	Inadequate resources (technical and/or financial) Other (please describe): [fill in]									
Othe										
Addi										
` '	basin or group of basins? (please describe): [fill in]									
	Do the riparian States carry out joint monitoring in the transboundary basin, sub-basin, part of a basin or group of basins?									
Yes/No										
(a)	If yes, what does the joint monitoring	ng cover?								
		Hydrological	Ecological	Chemical						
Border surfa	ace waters									
Surface wat	ers in the entire basin									
Surface waters on the main watercourse										
Surface wat	ers in part of the basin									
pleas	se describe [fill in]									
Transbound or unconnect	ary aquifer(s) (connected ted)									
riparian hyd	n the territory of one raulically connected to a rry river or lake									
(b)	If joint monitoring is carried out, ho	ow is this done?								
	National monitoring stations connector common stations	cted through a n	etwork							
	Please describe: [fill in]									
	Joint and agreed methodologies									
	Please describe: [fill in]									
	Joint sampling									
	Please describe: [fill in]									
	Common monitoring network									
	Please describe: [fill in]									
	Common agreed parameters									
	Please describe: [fill in]									

	(c) in]	Please describe the main achievements regarding joint monitoring, if a	any: [fill
	(d)	Please describe any difficulties experienced with joint monitoring: [fil	ll in]
8.		e riparian States carry out joint assessment of the transboundary bas part of a basin or group of basins?	in, sub-
Yes []/No [
	(e.g., s	please provide the date of the last or only assessment, the frequency are surface waters or groundwaters only, pollution sources, etc.) of the assessment methodology applied: [fill in]	-
9.	Have	the riparian States agreed to use joint water quality standards?	
Yes []/No [
	(pleas	what standards have been applied, e.g. international or regional state specify which), or have national standards of the riparian Stated? [fill in]	
10.		are the measures implemented to prevent or limit the transboundary in ental pollution?	npact of
		Notification and communication	
		Coordinated or joint early warning or alarm system for accidental water pollution	
		Other (please list): [fill in]	
		No measures	
		If not, why not? What difficulties does your country face in in place such measures?: [fill in]	putting
11.		are the measures implemented to prevent or limit the transboundary in the weather events and climate change?	npact of
		Notification and communication	
		Coordinated or joint alarm system for floods	
		Coordinated or joint alarm system for droughts	
		Joint climate change adaptation strategy	
		Joint disaster risk reduction strategy	
		Other (please list): [fill in]	
		No measures	
		If not, why not? What difficulties does your country face in in place such measures?: [fill in]	putting
12.	Are pr	rocedures in place for mutual assistance in case of a critical situation?	
Yes []/No [
If yes,	please	provide a brief summary: [fill in]	
13.		te public or relevant stakeholders involved in transboundary water manabasin, sub-basin, part of a basin or group of basins?	agement
Yes []/No [

If yes, how? (please tick all applicable)	
Stakeholders have observer status in a joint body or mechanism	
Stakeholders have an advisory role in the joint body	
Stakeholders have a decision-making role in the joint body	
If yes, please specify the stakeholders for the joint body or mechanism: [fill in]	
Intergovernmental organizations	
Private sectors organizations or associations	
Water user groups or associations	
Academic or research institutions	
Other non-governmental organizations	
General public	
Other (please specify): [fill in]	
Availability of information to the public	
Consultation on planned measures or river basin management plans ⁴	
Public involvement	
Other (please specify): [fill in]	

⁴ Or, where applicable, aquifer management plans.

Please remember to complete section II for each of the transboundary basins, sub-basin, part of a basin or group of basins. Please also remember to attach copies of agreements or arrangements, if any.

III. Water management at the national level

In this section, you are requested to provide general information on water management at the national level as it relates to transboundary waters. Information on specific transboundary basins, sub-basins, part of basins and groups of basins, should be presented in section II and not repeated here.

	s, sub-b peated		ups of basins, should be presented in section	on II and
1.	(a) refer		nal legislation, policies, action plans and s rol and reduce any transboundary impact?	trategies
Yes [✓/No [
		s, please briefly describe th gies [fill in]	e main national laws, policies, action pl	ans and
	(b)	Does your country's legisla	ation provide for the following principles?	
		Precautionary principle	Yes ⊠/No □	
		Polluter pays principle	Yes ⊠/No □	
		Sustainable development	Yes ⊠/No □	
		User pays principle	Yes □/No ⊠	
		If yes, please briefly descriptional level:	ribe how these principles are implemente	d at the
		Protection Act, 1999 (C) prohibition to release dele	uiding principles of the <i>Canadian Enviro</i> EPA) and the Fisheries Act which increased substances into waters frequested through regulations with conditions.	cludes a
			a national licensing or permitting sys point source pollution? (e.g., in industry, nagement or other sectors)?	
Yes []/No [\times		
If yes,	, for wh	nich sectors?		
	Indus	try		
	Minir	ng		
	Energ	gy		
	Muni	cipal		
	Lives	tock raising		
	Aqua	culture		
	Other	(please list): [fill in]		
			sing or permitting system, indicating whe on limits based on best available technolog	
	If yes,	, for which sectors? (please l	(ist):	

If not, please explain why not (giving the most important reasons) or provide information if there are plans to introduce a licensing or permitting system:

Wastewater discharge permits are issued at the provincial level in Canada.

However, Canada has several regulations that set national level effluent quality requirements for certain sectors. Environment and Climate Change Canada administers and enforces the pollution prevention provisions of the *Fisheries Act*, including subsection 36(3), which prohibits the deposit of deleterious substances into waters frequented by fish, unless authorized by regulations under the *Fisheries Act* or other federal legislation. The effluent regulations are:

- Meat and Poultry Products Plant Liquid Effluent Regulations
- Metal and Diamond Mining Effluent Regulations
- Petroleum Refinery Liquid Effluent Regulations
- Potato Processing Plant Lquid Effluent Regulations
- Pulp and Paper Effluent Regulations
- Wastewater Systems Effluent Regulations

ECCC is in the process of developing regulations related to the coal mining and oil sands sectors as well.

Effluent releases from other sources are subject to the subsection 36(3) prohibition of the *Fisheries Act*.

(d)	Are the authorized discharges monitored and controlled?	
Yes 🛭	ŊNo □ N/A	
	If yes, how? (Please tick the ones applicable):	
	Monitoring of discharges	\boxtimes
	Monitoring of physical and chemical impacts on water	\boxtimes
	Monitoring of ecological impacts on water	\boxtimes
	Conditions on permits	\boxtimes
	Inspectorate	\boxtimes
	Other means (please list): [fill in]	
	If your country does not have a discharge monitoring system, please explain or provide information if there are plans to introduce a discharge monitoring [fill in]	
	(e) What are the main measures which your country takes to reduce diffus of water pollution on transboundary waters (e.g., from agriculture, transport or aquaculture)? The measures listed below relate to agriculture, but other set be more significant. Please be sure to include these under "others":	t, forestry
	Legislative measures	
	Norm for uses of fertilizers	
	Norms for uses of manure	
	Permitting system	
	Bans on or norms for use of pesticides	\boxtimes

Others (please list): Pollutant releases from unrelated sectors or activities are subject to the section 36 prohibition of *the Fisheries Act*.

Economic and financial measures	
Monetary incentives	
Environmental taxes (such as fertilizer taxes)	
Others (please list):	
Administrative monetary penalties for violations of the <i>Canadian Environmental Protection Act</i> , 1999	
Agricultural extension services	
Technical measures	
Source control measures	
Crop rotation	
Tillage control	
Winter cover crops	
Others (please list): [fill in]	
Other measures	
Buffer/filter strips	
Wetland reconstruction	
Sedimentation traps	
Chemical measures	
Others (please list): [fill in]	
Other types of measures	
If yes, please list: [fill in]	
(f) What are the main measures which your country takes to enhance resources allocation and use efficiency?	ance water
Please tick as appropriate (not all might be relevant)	
A regulatory system regarding water abstraction	
Monitoring and control of abstractions	
Water rights are defined	
Water allocation priorities are listed	
Water-saving technologies	
Advanced irrigation techniques	
Demand management activities	
Other means (please list)	

In Canada, water resources allocation and use efficiency is the responsibility of the provincial and territorial governments.

(g) Does your country apply the ecosystems approach? Yes ⊠/No □
In 2015, Canada's federal, provincial, and territorial governments released the 202 Biodiversity Goals and Targets for Canada in response to the United Nations Convention of Biological Diversity's Strategic Plan for Biodiversity 2011-2020 and its global Aic Biodiversity Targets. Goal A of the 2020 Biodiversity Goals and Targets is, by 202 Canada's lands and waters are planned and managed using an ecosystem approach to supposition of the conservation outcomes at local, regional and national scales.
If yes, please describe how: [fill in]
(h) Does your country take specific measures to prevent the pollution groundwaters?
Yes ⊠/No □
If yes, please briefly describe the most important measures:
The Geological Survey of Canada through the Groundwater Geosciences Progra assesses Canada's key aquifer systems. The data has been used to improgroundwater management and protection.
2. Do your national laws require transboundary environmental impact assessme (EIA)?
Yes ⊠/No □
If yes, please briefly describe the legislative basis, and any related implementing procedures.
Section 21 of the federal <i>Impact Assessment Act</i> requires the Minister of the Environment to consult and cooperate with relevant jurisdictions, including a government of a foreign state, if that jurisdiction has powers, duties or functions related to the assessment of the environmental effects of a project.
Section 176 of the <i>Canadian Environmental Protection Act</i> , 1999 requires the minister to act to address international water pollution, if the source of the pollution is in Canada.
Canada is party to the UNECE Convention on Environmental Impact Assessment

If not, do other measures provide for transboundary EIA? [fill in]

IV. Final questions

Convention.

1. What are the main challenges your country faces in cooperating on transboundary waters?

a Transboundary Context (Espoo Convention). Canada would use its existing federal imapct assessment processes to implement the requirements of the Espoo Convention if a project had the potential for transboundary impacts for other Parties to the

	Differences between national administrative and legal frameworks	
	Lack of relevant data and information	
	Difficulties in data and information exchange	
	Sectoral fragmentation at the national level	
	Language barrier	
	Resource constraints	
	Environmental pressures, e.g. extreme events	
	Sovereignty concerns	
	Please list other challenges and/or provide further details: [fill in]	
2.	What have been the main achievements in-cooperating on transboundary wa	aters?
	Improved water management	\boxtimes
	Enhanced regional integration, i.e. beyond water	
	Adoption of cooperative arrangements	\boxtimes
	Adoption of joint plans and programmes	\boxtimes
	Long-lasting and sustained cooperation	\boxtimes
	Financial support for joint activities	
	Stronger political will for transboundary water cooperation	
	Better knowledge and understanding	
	Dispute avoidance	
	Stakeholder engagement	
	Please list other achievements, keys to achieving success, and/or provide examples: [fill in]	concrete
3.	Please indicate which institutions were consulted during the completic questionnaire	on of the
	Joint body or mechanism	
	Other riparian or aquifer countries	
	National water management authority	
	Environment agency/ authority	\boxtimes
	Basin authority (national)	
	Local or provincial government	
	Geological survey (national)	
	Non-water specific ministries, e.g. foreign affairs, finance, forestry and energy	\boxtimes
	Civil society organizations	
	Water user associations	
	Private sector	

Other (please list): Department of Natural Resources (Natural Resources Canada)

Please briefly describe the process by which the questionnaire was completed:

This report was compiled by the International Affairs Branch of Environment and Climate Change Canada (ECCC). Section I was completed by the Science and Technology Branch of ECCC, as they will submit this section of the report to the International Hydrological Programme as well. Sections II to IV were completed by the International Affairs Branch. Natural Resources Canada provided all of the information on transboundary aquifers within the report, as they are the government department responsible for aquifers.

- 4. If you have any other comments please add them here (insert comments): [fill in]
- 5. Name and contact details of the person(s) who filled out the questionnaire (*please insert*):

Jean-François Ferry (jean-françois.ferry@canada.ca)

Date: Signature: Ferry, Jean Signature numérique de Ferry, Jean François

François Date: 2020.10.28 09:58:55 -04'00'

Thank you very much for taking the time to complete this report.

Part 2 – Basins

Name of the transboundary basin sub-basin, part of basin or group of basins	ı, a	Great Lakes		Great Lakes Columbia Rainy		Souris	Puget Sound- Strait of Georgia- Strait of Juan De Fuca
List of the riparia	n United States	United States		United States	United States	United States	United States
In the case of a aquifer, what is the nature of the aquifer and its relation with the river or hall basin: If selected "Other please describe: [fin]	ne er h kee ",	N/A 2 3240067%*		N/A	N/A	N/A	N/A
1 Percentage of you country's territor within the basin, sul basin, part of a basin or group of basin [fill in]	ry o- n s:	2.3240067%* *Included in 11.6533252%		1.020467%* *Included in 11.6533252%	0.3773846%* *Included in 11.6533252%	0.3902388%* *Included in 11.6533252%"	0.0683922 %* *Included in 11.653325 2%
transboundary (bilateral multilateral)	rt	One or more agreements or arrangements exist and are in force		One or more agreements or arrangements exist and are in force	One or more agreements or arrangements exist and are in force	One or more agreements or arrangements exist and are in force	One or more agreement s or arrangeme nts exist and are in force
Please insert the nam of the agreement(s) arrangement(s) [fill is		Boundary Waters Treaty (see column D for Q2 &Q3); Great Lakes Water Quality Agreement (GLWQA); Niagara River Water Diversion Treaty		Boundary Waters Treaty (see column D for Q2 &Q3); Columbia River Treaty Skagit River Treaty	Boundary Waters Treaty (see column D for Q2 &Q3); Rainy Lake Convention Lake of the Woods Convention and Protocol	Boundary Waters Treaty (see column D for Q2 &Q3); Canada-U.S. Agreement on the Souris River Basin	Boundary Waters Treaty (see column D for Q2 &Q3); Canada- US treaty for Skagit River, Ross Lake and Seven Mile Reservoir
If there is no agreeme or arrangement or it not in force, plead explain briefly why not and providing formation on an plans to address the situation: [fill in]	is se ot le vy						1.5567.1011
Agreement	Boundary Waters Treaty	GLWQA	Niagara River Water Diversion Treaty	Columbia River Treaty	Rainy Lake Lake of the Convention Woods Convention and Protocol	Canada-U.S. Agreement on the Souris River Basin	Canada- US treaty for Skagit River,

								Ross Lake and Seven Mile Reservoir
2 a Does this agreement or arrangement specify the area subject to cooperation?		Yes	Yes	Yes	Yes	Yes	Yes	Yes
If yes, does it cover the entire basin or group of basins and all riparian States?		Yes	No	No	No	No	Yes	No
Additional explanations? [fill in]	The Boundary Waters Treaty applies to boundary waters shared by Canada and the US	The Great Lakes Water Quality Agreement covers the entire Great Lakes Basin	The treaty covers only the Niagara River and Niagara Falls	The Treaty covers the Columbia River within the Columbia Basin.	The treaty applies to the water level of the Rainy Lake and the level of other boundary waters in the Rainy Lake Watershed	The Treaty cowwoods.	vers the Lake of the	The treaty covers Skagit River, Ross Lake and Seven Mile Reservoir
Or, if the agreement or arrangement relates to a sub-basin, does it cover the entire sub-basin? Additional explanations? [fill in]	,	(yes/no)	(yes/no)	(yes/no)	Yes	Yes	(yes/no)	(yes/no)
Which States (including your own) are bound by the agreement or arrangement? (Please list): [fill in]	Canada; US	Canada; US	Canada; US	Canada; US	Canada; US	Canada; US	Canada; US	Canada; US
b If the agreement or arrangement relates to a river or lake basin or sub-basin, does it also cover aquifers? If yes, please list the aquifers covered by the agreement or arrangement: [fill in]		No	No	No	No	No	No	No
c What is the sectoral scope of the agreement or arrangement? If one or several water uses or sectors, please	All water uses	A single water use or sector	Several water uses or sectors	A single water use or sector	All water uses	Several water uses or sectors	Several water uses or sectors	A single water use or sector
list (check as appropriate):								
Industry						_	•	
Agriculture Transport (e.g.,	п					:		
navigation) Households							•	
Energy: hydropower and other energy types			•	•		•	•	•
Fisheries						•		
Tourism			•					

Nature protection		_						
Nature protection Other (<i>please list</i>): [fill in]		-					-	
d What topics or subjects								
of cooperation are								
included in the								
agreement or								
arrangement? Procedural and								
institutional issues								
Dispute and conflict	•							•
prevention and								
resolution Institutional	_	_	_	_				
cooperation (joint	•	•	•	•				
bodies)								
Consultation on	•							
planned measures								
Topics of cooperation Joint vision and	п							
management objectives		-					•	
Joint significant								
water management								
issues								
Navigation Human health	-	_				•	_	
Environmental		-				:	:	
protection (ecosystem)	-	-			П	-	-	
Water quality								
Water quantity or	•				•			-
allocation								
Cooperation in addressing floods				•	•	•	•	
Cooperation in							•	
addressing droughts					_			
Climate change								
Climate change adaptation Monitoring and								
Climate change adaptation Monitoring and exchange								
Climate change adaptation Monitoring and								
Climate change adaptation Monitoring and exchange Joint assessments Data collection and exchange	□ ■ ■						□ ■	
Climate change adaptation Monitoring and exchange Joint assessments Data collection and exchange Joint monitoring								
Climate change adaptation Monitoring and exchange Joint assessments Data collection and exchange Joint monitoring Maintenance of							□ ■	
Climate change adaptation Monitoring and exchange Joint assessments Data collection and exchange Joint monitoring Maintenance of joint pollution								
Climate change adaptation Monitoring and exchange Joint assessments Data collection and exchange Joint monitoring Maintenance of joint pollution inventories								
Climate change adaptation Monitoring and exchange Joint assessments Data collection and exchange Joint monitoring Maintenance of joint pollution inventories Elaboration of joint water quality								
Climate change adaptation Monitoring and exchange Joint assessments Data collection and exchange Joint monitoring Maintenance of joint pollution inventories Elaboration of joint water quality objectives								
Climate change adaptation Monitoring and exchange Joint assessments Data collection and exchange Joint monitoring Maintenance of joint pollution inventories Elaboration of joint water quality objectives Common early								
Climate change adaptation Monitoring and exchange Joint assessments Data collection and exchange Joint monitoring Maintenance of joint pollution inventories Elaboration of joint water quality objectives Common early warning and alarm								
Climate change adaptation Monitoring and exchange Joint assessments Data collection and exchange Joint monitoring Maintenance of joint pollution inventories Elaboration of joint water quality objectives Common early warning and alarm procedures Exchange of								
Climate change adaptation Monitoring and exchange Joint assessments Data collection and exchange Joint monitoring Maintenance of joint pollution inventories Elaboration of joint water quality objectives Common early warning and alarm procedures Exchange of experience between								
Climate change adaptation Monitoring and exchange Joint assessments Data collection and exchange Joint monitoring Maintenance of joint pollution inventories Elaboration of joint water quality objectives Common early warning and alarm procedures Exchange of experience between riparian States								
Climate change adaptation Monitoring and exchange Joint assessments Data collection and exchange Joint monitoring Maintenance of joint pollution inventories Elaboration of joint water quality objectives Common early warning and alarm procedures Exchange of experience between riparian States Exchange of								
Climate change adaptation Monitoring and exchange Joint assessments Data collection and exchange Joint monitoring Maintenance of joint pollution inventories Elaboration of joint water quality objectives Common early warning and alarm procedures Exchange of experience between riparian States Exchange of information on planned measures								
Climate change adaptation Monitoring and exchange Joint assessments Data collection and exchange Joint monitoring Maintenance of joint pollution inventories Elaboration of joint water quality objectives Common early warning and alarm procedures Exchange of experience between riparian States Exchange of information on planned								

Development of								
joint regulations on								
specific topics Development of								
international or joint					Ц			
river, lake or aquifer								
basin management or								
action plans	_	_	_	_	_	_		_
Management of shared infrastructure	•							
Development of								
shared infrastructure								
Other (please list): [fill				lity and ecosystem health of the Great Lakes of				
in]		Management; Chemicals of Mutual Concer	ii, Nutrients; Discharges from Ves	sels; Aquatic Invasive Species; Habitat and Sp	becies; Grounds	vater, Climate Ci	lange impacts; and So	cience
e What are the main								
difficulties and								
challenges that your								
country faces with the agreement or								
arrangement and its								
implementation, if								
any?								
Aligning								
implementation of								
agreement or arrangement with								
national laws, policies								
and programmes								
Aligning								
implementation of								
agreement or arrangement with								
regional laws, policies								
and programmes								
Lack of financial								
resources Insufficient human	_	_				-		
Insufficient human capacity	"							
Insufficient technical								
capacity								
Tense diplomatic								
relations Non-participation of				П	П	П	П	
certain riparian	Ŭ		ш					
countries in the								
agreement								
No significant		•	•		•	•	•	•
difficulties Other (please				Implementing the Treaty required significar	nt portions of la	nd in Canada to l	ne inundanted which	impacted
describe): [fill in]				areas outside the Treaty terms (communities				publica
f What are the main	The Boundary Waters Treaty was signed	Through the Agreement the	The Treaty established new	The Treaty has provided certainty regarding	g water levels	The Treaty's	The Agreement	The Treaty
	in 1909 to prevent and resolve disputes	Governments of Canada and the United	limitations of water diversion	and has significantly reduced the risk of des		purpose is to	provides	has
_	over the use of waters shared by Canada and the United States and to settled other	States work with Tribes, First Nations,	for power generation. Its	flooding. The Treaty also enabled the constr hydroelectric projects in Canada that provide		regulate water levels	regulates water supply for	successfull y been in
	transboundary issues. The Treaty	Métis, provincial, state and municipal governments, watershed management	purpose is to preserve and enhance the scenic beauty of	approximately half of the potential generation		for the	Canada, and	effect
	established the International Joint	agencies, other local public agencies,	Niagara Falls and the Niagara	Province of British Columbia, as well as pro		benefit of all	flood control for	since
achieving such	Commission to help the two countries	industry and the public to ensure that the	River, while providing	production of significantly more electricity		users of the	the United States,	1984.
success? [fill in]	carry out its provisions. The International	Great Lakes remain an important and	beneficial use of the river	hydropower facilities.		water	and provides for	
				ny dropower raemines.				1
	Joint Commission has since worked to	vibrant natural resource for the benefit	waters for power generation.	ny diopower facilities.		system. It	the administration	
				nydropower raemices.		system. It has been in		

g Please attach a copy of the agreement or arrangement or provide the web address of the document (please attach document or insert web address, if applicable): [fill in]	the Canadian and United States federal governments. https://www.ijc.org/sites/default/files/201 8-07/Boundary%20Water-ENGFR.pdf	and the United States, together with their many Agreement partners, have established a set of nine overarching indicators of ecosystem health supported by 45 science-based sub-indicators. To report on the state of the Great Lakes in 2019, more than 200 government and non-government Great Lakes scientists and other experts analyzed available data and reached consensus on the assessments of each indicator in relation to both current status and trend. https://www.canada.ca/en/environment-climate-change/corporate/international-affairs/partnerships-countries-regions/north-america/great-lakes-water-quality-agreement.html	http://www.internationalwaterlaw.org/documents/regionaldocs/niagra1950.html	https://www.canada.ca/en/environment-climate-change/corporate/international-affairs/partnerships-countries-regions/north-america/canada-united-states-columbia-river.html	https://ijc.or g/sites/defau lt/files/2018- 08/RainyLak eConvention 1938_e.pdf	http://www.ij c.org/files/do ckets/Docket %203/Docke t%203%20C onvention%2 0and%20Prot ocol.pdf	https://www.tr eaty- accord.gc.ca/te xt- texte.aspx?id=1 00475⟪=e ng	https://ww w.treaty- accord.gc. ca/text- texte.aspx? id=100403
Is your country a member of any joint body or mechanism for this agreement or arrangement? If no, why not? (please explain): [fill in]	Yes	Yes	Yes	All commitments and financial returns pertaining to the Treaty were assigned by Canada to British Columbia through the 1963 British Columbia-Canada agreement (and 1964 supplementary agreement). British Columbia has designated BC Hydro as the "Canadian Entity" to deliver on the river management terms of the treaty. As such, there is no federal participation on joint bodies. On the subnational level, there are joint governance mechaisms.	There is no mechanism specific to this agreement however the Rainy Lake Convention empowers the IJC to determine when emergency conditions exist in the Rainy Lake Watershed and to adopt measures of control in the event that such conditions exist. Refer to Question 3 in the IJC Basins sections for information on the IJC.		This Treaty is admistered through a joint agreement between the Province of BC and the City of Seattle.	
If there is a joint body or mechanism, please complete 3. (a)-(k)								
Name of the joint body or mechanism	International Joint Commission	Great Lakes Executive Committee	International Niagara Committee			International Lake of the Woods Control Board under the International Joint Commission	International Souri Board	s River
a If there is a joint body or mechanism, which kind of joint body or mechanism (please tick one)?	Bilateral commission	Expert group meeting or meeting of national focal points	Expert group meeting or meeting of national focal points			Expert group meeting or meeting of national focal points	Expert group meeting or meeting of national focal points	

If selected "Other", please describe [fill in]						
b Does the joint body or mechanism cover the entire transboundary basin, sub-basin, part of a basin or group of basins?	No	Yes	No		Yes	Yes
	The International Joint Commission (IJC) of Columbia, Great Lakes, Lake Champlain-R Rainy, Saint John, Souris, St. Lawrence, St.	ichelieu, Red, Milk, Missouri-Poplar,	The International Niagara Comm Diversion Treaty, which is Niaga	ittee does not cover the entire Great Lakes Bara River and Falls.	asin. It covers the same region a	s the Niagara River Water
c Which States (including your own) are members of the joint body or mechanism? (Please list): [fill in]	Canada; US	Canada; US	Canada; US		Canada; US	Canada; US
d Are there any riparian States that are not members of the joint body or mechanism? (please list): [fill in]	No	No	No		No	No
e If not all riparian States are members of the joint body or mechanism how does the joint body or mechanism cooperate with them? If selected "Other", please describe [fill in] f Does the joint body or mechanism have any of the following features	N/A	N/A	N/A		N/A	N/A
(please tick the ones applicable)? A secretariat A subsidiary body or	<u> </u>	•	■ □			
bodies	-	-				

Other features (please list): [fill in] If the secretariat is a permanent one, is it a joint secretariat or does each country host its own secretariat? (Please describe): [fill in]	n section is located in Ottawa, J.S. section is located in	The Secretariat is composed of one member from Environment and Climate Change Canada and one member from the U.S. Environmental Protection Agency.	The International Niagara Commigointly ascertain and determine the Treaty, and record the amounts of	ittee is composed of one person from each Co e amounts of water available for the purposes f water used for power diversions.	ountry who s of the	The Board, with respresentati ves from both countries, is co-chaired by one representative from Canada and one from the	The Board operates International Joint Commission. It is h and US representati co-chaired a member Canada and a member US.	as Canadian on, and is er from
Control • Internat River Stu • Internat Board • Internat Control • Internat Watershe • Internat	Professionals Advisory Board tional Columbia River Board of tional Kootany Lake Board of tional Lake Champlain-Richelieu ady Board tional Lake of the Woods Control tional Osoyoos Lake Board of tional Rainy-Lake of the Woods	The GLWAQ includes 10 Annexes that focassist in the implementation of the Agreeme		issues. Annex-specific sub-committees to the	Great Lakes Ex	U.S.	tee have been establis	shed to
Board	tional St. Croix River Watershed							
Board • Other st	tional St. Croix River Watershed tudy boards, as required							
Board • Other st g What are the tasks and activities of	tional St. Croix River Watershed tudy boards, as required this joint body or mechanism?							
Board • Other st	tional St. Croix River Watershed tudy boards, as required this joint body or mechanism?							
Board • Other st g What are the tasks and activities of Identification of pollution sources Data collection and ■	tional St. Croix River Watershed tudy boards, as required this joint body or mechanism?							
Board • Other st g What are the tasks and activities of Identification of pollution sources Data collection and exchange	tional St. Croix River Watershed tudy boards, as required this joint body or mechanism?							
Board Other st g What are the tasks and activities of Identification of pollution sources Data collection and exchange Joint monitoring	tional St. Croix River Watershed tudy boards, as required this joint body or mechanism?		•				• •	
Board • Other st g What are the tasks and activities of Identification of pollution sources Data collection and exchange	tional St. Croix River Watershed tudy boards, as required this joint body or mechanism?							
Board Other st g What are the tasks and activities of Identification of pollution sources Data collection and exchange Joint monitoring Maintenance of joint	tional St. Croix River Watershed tudy boards, as required this joint body or mechanism?		•				• •	
Board Other st g What are the tasks and activities of Identification of pollution sources Data collection and exchange Joint monitoring Maintenance of joint pollution inventories Setting emission limits Elaboration of joint	tional St. Croix River Watershed tudy boards, as required this joint body or mechanism?							
Board Other st g What are the tasks and activities of Identification of pollution sources Data collection and exchange Joint monitoring Maintenance of joint pollution inventories Setting emission limits Elaboration of joint water quality	tional St. Croix River Watershed tudy boards, as required this joint body or mechanism?							
Board Other st g What are the tasks and activities of Identification of pollution sources Data collection and exchange Joint monitoring Maintenance of joint pollution inventories Setting emission limits Elaboration of joint water quality objectives	tional St. Croix River Watershed tudy boards, as required this joint body or mechanism?							
Board Other st g What are the tasks and activities of Identification of pollution sources Data collection and exchange Joint monitoring Maintenance of joint pollution inventories Setting emission limits Elaboration of joint water quality objectives Management and	tional St. Croix River Watershed tudy boards, as required this joint body or mechanism?							
Board Other st g What are the tasks and activities of Identification of pollution sources Data collection and exchange Joint monitoring Maintenance of joint pollution inventories Setting emission limits Elaboration of joint water quality objectives Management and prevention of flood or	tional St. Croix River Watershed tudy boards, as required this joint body or mechanism?							
Board Other st g What are the tasks and activities of Identification of pollution sources Data collection and exchange Joint monitoring Maintenance of joint pollution inventories Setting emission limits Elaboration of joint water quality objectives Management and	tional St. Croix River Watershed tudy boards, as required this joint body or mechanism?							
Board Other st g What are the tasks and activities of Identification of pollution sources Data collection and exchange Joint monitoring Maintenance of joint pollution inventories Setting emission limits Elaboration of joint water quality objectives Management and prevention of flood or drought risks Preparedness for extreme events, e.g.,	tional St. Croix River Watershed tudy boards, as required this joint body or mechanism?							
Board Other st g What are the tasks and activities of Identification of pollution sources Data collection and exchange Joint monitoring Maintenance of joint pollution inventories Setting emission limits Elaboration of joint water quality objectives Management and prevention of flood or drought risks Preparedness for extreme events, e.g., common early warning	tional St. Croix River Watershed tudy boards, as required this joint body or mechanism?							
Board Other st g What are the tasks and activities of Identification of pollution sources Data collection and exchange Joint monitoring Maintenance of joint pollution inventories Setting emission limits Elaboration of joint water quality objectives Management and prevention of flood or drought risks Preparedness for extreme events, e.g., common early warning and alarm procedures	tional St. Croix River Watershed tudy boards, as required This joint body or mechanism?							
Board Other st g What are the tasks and activities of Identification of pollution sources Data collection and exchange Joint monitoring Maintenance of joint pollution inventories Setting emission limits Elaboration of joint water quality objectives Management and prevention of flood or drought risks Preparedness for extreme events, e.g., common early warning and alarm procedures Surveillance and early	tional St. Croix River Watershed tudy boards, as required This joint body or mechanism?							
Board Other st g What are the tasks and activities of Identification of pollution sources Data collection and exchange Joint monitoring Maintenance of joint pollution inventories Setting emission limits Elaboration of joint water quality objectives Management and prevention of flood or drought risks Preparedness for extreme events, e.g., common early warning and alarm procedures Surveillance and early warning of water	tional St. Croix River Watershed tudy boards, as required This joint body or mechanism?							
Board Other st g What are the tasks and activities of Identification of pollution sources Data collection and exchange Joint monitoring Maintenance of joint pollution inventories Setting emission limits Elaboration of joint water quality objectives Management and prevention of flood or drought risks Preparedness for extreme events, e.g., common early warning and alarm procedures Surveillance and early	tional St. Croix River Watershed tudy boards, as required this joint body or mechanism?							
Board Other st g What are the tasks and activities of Identification of pollution sources Data collection and exchange Joint monitoring Maintenance of joint pollution inventories Setting emission limits Elaboration of joint water quality objectives Management and prevention of flood or drought risks Preparedness for extreme events, e.g., common early warning and alarm procedures Surveillance and early warning of water related disease	tional St. Croix River Watershed tudy boards, as required this joint body or mechanism?							

Control of							
implementation							
Exchange of							
experience between riparian States							
Exchange of	_	_	_	_			
information on existing		-	-	-	П	-	
and planned uses of							
water and related							
installations							
Settling of differences	•						
and conflicts Consultations on	_	_		П			
planned measures	-	•					
Exchange of							
information on best							
available technology							
Participation in							
transboundary EIA		_	_				
Development of river, lake or aquifer basin		•					
management or action							
plans							
Management of shared	•						
infrastructure							
Addressing							
hydromorphological alterations							
Climate change							
adaptation							
Joint communication	-						
strategy							
Basin-wide or joint	•	•					
public participation and consultation of, for							
example, basin							
management plans							
Joint resources to							
support transboundary							
cooperation							
Any other tasks (<i>please list</i>): [fill in]							
h What are the main							
difficulties and							
challenges that your							
country faces with the							
operation of the joint body or mechanism, if							
any?							
Governance issues							
Unexpected planning							
delays							
Lack of resources							
Lack of mechanism for							
implementing							
measures Lack of effective							
measures							
Unexpected extreme							
events							

Lack of information and reliable forecasts Others (please list and describe, as appropriate)								
i Does the joint body or mechanism, or its subsidiary bodies meet	Yes	Yes	Yes		Yes		Yes	
does it meet?	More than once per year	More than once per year	More than once per year			re than e per year	More than once per year	
achievements with regards to the joint body or mechanism? [fill in]	The IJC has created more than 20 regional to	boards and task forces to meet its responsibili	ities. The IJC has been essential to	preventing and resolving transboundary water	er disputes.			
k Did the joint body or mechanism ever invite a non-riparian coastal State to cooperate? If yes, please give details. If no, why not, e.g. are the relevant coastal States also riparian States and therefore already members of the joint body or mechanism? [fill in]	No	No	No		No		No	No
4 Have joint objectives, a common strategy, a joint or coordinated management plan or action plan been agreed for the basin, subbasin, part of a basin or group of basins?	Yes	Yes		Yes	Yes		Yes	No
If yes, please provide	Canada and the U.S. coordinate the management of the basins covered by the IJC	Canada and the U.S. coordinate the manage through the IJC and its boards; the Great Land the Niagara River Diversion Treaty. The Great Lakes Water Quality Board, the Lawrence River Board, the International Lathe Great Lakes Science Advisory Board at River assist the IJC in the management of to the management of the Great Lakes Basis. The Great Lakes Water Quality Agreement Canada and the U.S. committed to for the physical and biological integrity of the great	International Lake Ontario-St. ake Superior Board of Control, and the Great Lakes-St. Lawrence he Great Lakes Basin contribute in. t outlines the shared objectives protection of the chemical,	Canada and the U.S. coordinate the management of the Columbia Basin through the IJC and its boards: the International Columbia River Board of Control, the International Kootaney Lake Board of Control, and the International Osoyoos Lake Board of Control.	Canada and the U.S coordinate the mana of the Rainy Basin t the Internaitonal Rai of the Woods Water Board and the International Rai Carlo Board	ngement hrough iny-Lake rshed national	Canada and the U.S coordinate the management of the Souris Basin through the International Souris River Board and the International Souris River Study Board	The IJC does not have any Orders or References active in the basin at this time
5 How is the transboundary basin, sub-basin, part of a basins or group of basins protected, including the protection of ecosystems, in the context of sustainable and rational water use?								

	Regulation of						
	urbanization,						
	deforestation, and sand						
	and gravel extraction						
	Environmental flow						
	norms, including						
	consideration of levels						
	and seasonality						
	Water quality						
	protection, e.g. nitrates,						
	pesticides, faecal						
	coliforms, heavy						
	metals						
	Water-related species						
	and habitats protection						
	Other measures (please						
	describe): [fill in]						
6	a Does your country	Yes	Yes	Yes	Yes	Yes	No
	regularly exchange						
	information and data						
	with other riparian						
	States in the basin, sub-						
	basin, part of a basin or						
	group of basins?						
	b If yes, how often:	More than once per year	More than once per year	More than once per year	More than once per year	More than once	
						per year	
		Canada and the U.S. meet in person twice	Information is exchanged through the joint bodies described above,	Information is exchanged on a federal	The Boards exchange		
		per year for meetings on transboundary	including IJC Boards, the Great Lakes Executive Committee, and the	level through the IJC Boards that operate	information regularly.		
		water (bilaterally and with the IJC), and	International Niagara Committee.	in the Columbia Basin. Furthermore,			
		hold regular teleconferences to discuss		federal water level monitoring data is			
	meetings of joint	issues as they arise between in-person		publicly available.			
				publicly available.			
	bodies): [fill in]	meetings. The Canadian federal		publicly available.			
		meetings. The Canadian federal government also meets with the IJC's		publicly available.			
	bodies): [fill in]	meetings. The Canadian federal		publicly available.			
	bodies): [fill in] d If yes, on what subjects	meetings. The Canadian federal government also meets with the IJC's		publicly available.			
	bodies): [fill in] d If yes, on what subjects are information and	meetings. The Canadian federal government also meets with the IJC's		puonery avanaore.			
	d If yes, on what subjects are information and data exchanged?	meetings. The Canadian federal government also meets with the IJC's		publicly available.			
	bodies): [fill in] d If yes, on what subjects are information and data exchanged? Environmental	meetings. The Canadian federal government also meets with the IJC's				•	
	bodies): [fill in] d If yes, on what subjects are information and data exchanged? Environmental conditions	meetings. The Canadian federal government also meets with the IJC's Canadian section frequently.				_	
	bodies): [fill in] d If yes, on what subjects are information and data exchanged? Environmental conditions Research activities and	meetings. The Canadian federal government also meets with the IJC's Canadian section frequently.				•	
	bodies): [fill in] d If yes, on what subjects are information and data exchanged? Environmental conditions Research activities and application of best	meetings. The Canadian federal government also meets with the IJC's Canadian section frequently.				_	
	bodies): [fill in] d If yes, on what subjects are information and data exchanged? Environmental conditions Research activities and application of best available techniques	meetings. The Canadian federal government also meets with the IJC's Canadian section frequently.					
	bodies): [fill in] d If yes, on what subjects are information and data exchanged? Environmental conditions Research activities and application of best available techniques Emission monitoring	meetings. The Canadian federal government also meets with the IJC's Canadian section frequently.				_	
	bodies): [fill in] d If yes, on what subjects are information and data exchanged? Environmental conditions Research activities and application of best available techniques Emission monitoring data	meetings. The Canadian federal government also meets with the IJC's Canadian section frequently.					
	bodies): [fill in] d If yes, on what subjects are information and data exchanged? Environmental conditions Research activities and application of best available techniques Emission monitoring data Planned measures	meetings. The Canadian federal government also meets with the IJC's Canadian section frequently.					
	bodies): [fill in] d If yes, on what subjects are information and data exchanged? Environmental conditions Research activities and application of best available techniques Emission monitoring data Planned measures taken to prevent,	meetings. The Canadian federal government also meets with the IJC's Canadian section frequently.					
	bodies): [fill in] d If yes, on what subjects are information and data exchanged? Environmental conditions Research activities and application of best available techniques Emission monitoring data Planned measures taken to prevent, control or reduce	meetings. The Canadian federal government also meets with the IJC's Canadian section frequently.					
	bodies): [fill in] d If yes, on what subjects are information and data exchanged? Environmental conditions Research activities and application of best available techniques Emission monitoring data Planned measures taken to prevent, control or reduce transboundary impacts	meetings. The Canadian federal government also meets with the IJC's Canadian section frequently.					
	d If yes, on what subjects are information and data exchanged? Environmental conditions Research activities and application of best available techniques Emission monitoring data Planned measures taken to prevent, control or reduce transboundary impacts Point source pollution	meetings. The Canadian federal government also meets with the IJC's Canadian section frequently.					
	d If yes, on what subjects are information and data exchanged? Environmental conditions Research activities and application of best available techniques Emission monitoring data Planned measures taken to prevent, control or reduce transboundary impacts Point source pollution sources	meetings. The Canadian federal government also meets with the IJC's Canadian section frequently.					
	bodies): [fill in] d If yes, on what subjects are information and data exchanged? Environmental conditions Research activities and application of best available techniques Emission monitoring data Planned measures taken to prevent, control or reduce transboundary impacts Point source pollution sources Diffuse pollution	meetings. The Canadian federal government also meets with the IJC's Canadian section frequently.					
	bodies): [fill in] d If yes, on what subjects are information and data exchanged? Environmental conditions Research activities and application of best available techniques Emission monitoring data Planned measures taken to prevent, control or reduce transboundary impacts Point source pollution sources Diffuse pollution sources	meetings. The Canadian federal government also meets with the IJC's Canadian section frequently.					
	bodies): [fill in] d If yes, on what subjects are information and data exchanged? Environmental conditions Research activities and application of best available techniques Emission monitoring data Planned measures taken to prevent, control or reduce transboundary impacts Point source pollution sources Diffuse pollution sources Existing	meetings. The Canadian federal government also meets with the IJC's Canadian section frequently.					
	d If yes, on what subjects are information and data exchanged? Environmental conditions Research activities and application of best available techniques Emission monitoring data Planned measures taken to prevent, control or reduce transboundary impacts Point source pollution sources Diffuse pollution sources Existing hydromorphological	meetings. The Canadian federal government also meets with the IJC's Canadian section frequently.					
	d If yes, on what subjects are information and data exchanged? Environmental conditions Research activities and application of best available techniques Emission monitoring data Planned measures taken to prevent, control or reduce transboundary impacts Point source pollution sources Diffuse pollution sources Existing hydromorphological alterations (dams, etc.)	meetings. The Canadian federal government also meets with the IJC's Canadian section frequently.					
	d If yes, on what subjects are information and data exchanged? Environmental conditions Research activities and application of best available techniques Emission monitoring data Planned measures taken to prevent, control or reduce transboundary impacts Point source pollution sources Diffuse pollution sources Existing hydromorphological alterations (dams, etc.) Flows or water levels	meetings. The Canadian federal government also meets with the IJC's Canadian section frequently.					
	d If yes, on what subjects are information and data exchanged? Environmental conditions Research activities and application of best available techniques Emission monitoring data Planned measures taken to prevent, control or reduce transboundary impacts Point source pollution sources Diffuse pollution sources Existing hydromorphological alterations (dams, etc.) Flows or water levels (including groundwater	meetings. The Canadian federal government also meets with the IJC's Canadian section frequently.					
	d If yes, on what subjects are information and data exchanged? Environmental conditions Research activities and application of best available techniques Emission monitoring data Planned measures taken to prevent, control or reduce transboundary impacts Point source pollution sources Diffuse pollution sources Existing hydromorphological alterations (dams, etc.) Flows or water levels (including groundwater levels)	meetings. The Canadian federal government also meets with the IJC's Canadian section frequently.					
	d If yes, on what subjects are information and data exchanged? Environmental conditions Research activities and application of best available techniques Emission monitoring data Planned measures taken to prevent, control or reduce transboundary impacts Point source pollution sources Diffuse pollution sources Existing hydromorphological alterations (dams, etc.) Flows or water levels (including groundwater levels) Water abstractions	meetings. The Canadian federal government also meets with the IJC's Canadian section frequently.					
	d If yes, on what subjects are information and data exchanged? Environmental conditions Research activities and application of best available techniques Emission monitoring data Planned measures taken to prevent, control or reduce transboundary impacts Point source pollution sources Diffuse pollution sources Existing hydromorphological alterations (dams, etc.) Flows or water levels (including groundwater levels) Water abstractions Climatological	meetings. The Canadian federal government also meets with the IJC's Canadian section frequently.					
	d If yes, on what subjects are information and data exchanged? Environmental conditions Research activities and application of best available techniques Emission monitoring data Planned measures taken to prevent, control or reduce transboundary impacts Point source pollution sources Diffuse pollution sources Existing hydromorphological alterations (dams, etc.) Flows or water levels (including groundwater levels) Water abstractions	meetings. The Canadian federal government also meets with the IJC's Canadian section frequently.					

Future planned measures with transboundary impacts, such as infrastructure development Other subjects (<i>please list</i>): [fill in]						
e Is there a shared database or information platform?		No	No	No	No	
f Is the database publicly available? If yes, please provide the web address: [fill in]		N/A -	N/A	N/A	N/A	
g What are the main difficulties and challenges to data exchange, if applicable?						
Frequency of exchanges Timing of exchanges						
Comparability of data and information						
Limited spatial coverage						
Inadequate resources (technical and/or financial)						
Other (please describe): [fill in]						
describe): [fill in] h What are the main benefits of data exchange on the basin, sub-basin, part of a basin or group of basins? (please	Having access to all the data available in order to make informed decisions regarding the management of the transboundary basins	Having access to all the data available in order to make informed decisions regarding the management of the transboundary basins	Having access to all the data available in order to make informed decisions regarding the management of the transboundary basins	Having access to all the data available in order to make informed decisions regarding the management of the transboundary basins	Having access to al available in order to informed decisions the management of transboundary basi	o make regarding the
describe): [fill in] h What are the main benefits of data exchange on the basin, sub-basin, part of a basin or group of	Having access to all the data available in order to make informed decisions regarding the management of the transboundary basins No		order to make informed decisions regarding the management of the	available in order to make informed decisions regarding the management of the	available in order to informed decisions the management of	o make regarding the
describe): [fill in] h What are the main benefits of data exchange on the basin, sub-basin, part of a basin or group of basins? (please describe): [fill in] 7 Do the riparian States carry out joint monitoring in the transboundary basin, sub-basin, part of a basin or group of basins? a If yes, what does the joint monitoring cover? Hydrological Border surface waters	Having access to all the data available in order to make informed decisions regarding the management of the transboundary basins No	No	order to make informed decisions regarding the management of the transboundary basins No	available in order to make informed decisions regarding the management of the transboundary basins	available in order to informed decisions the management of transboundary basi	o make regarding the ns
describe): [fill in] h What are the main benefits of data exchange on the basin, sub-basin, part of a basin or group of basins? (please describe): [fill in] 7 Do the riparian States carry out joint monitoring in the transboundary basin, sub-basin, part of a basin or group of basins? a If yes, what does the joint monitoring cover? Hydrological Border surface waters Surface waters in the entire basin Surface waters on the	Having access to all the data available in order to make informed decisions regarding the management of the transboundary basins No	No	order to make informed decisions regarding the management of the transboundary basins No	available in order to make informed decisions regarding the management of the transboundary basins No	available in order to informed decisions the management of transboundary basi	o make regarding the ns No
describe): [fill in] h What are the main benefits of data exchange on the basin, sub-basin, part of a basin or group of basins? (please describe): [fill in] 7 Do the riparian States carry out joint monitoring in the transboundary basin, sub-basin, part of a basin or group of basins? a If yes, what does the joint monitoring cover? Hydrological Border surface waters Surface waters in the entire basin	Having access to all the data available in order to make informed decisions regarding the management of the transboundary basins No	No	order to make informed decisions regarding the management of the transboundary basins No	available in order to make informed decisions regarding the management of the transboundary basins No	available in order to informed decisions the management of transboundary basi	o make regarding the ns

Aquifer(s) in the			
territory of one			
riparian hydraulically			
connected to a			
transboundary river or			
lake			
If "Surface waters in			
part of basin", please			
describe [fill in]			
Ecological			
_			
Border surface waters			
Surface waters in the			
entire basin			
Surface waters on the			
main watercourse			
Surface waters in part			
of the basin (describe			
below)			
Transboundary			
aquifer(s) (connected			
or unconnected)			
Aquifer(s) in the			
territory of one			
riparian hydraulically			
connected to a			
transboundary river or			
lake			
If "Surface waters in			
part of basin", please			
describe [fill in]			
Chemical			
Chemical Border surface waters			
Border surface waters			
Border surface waters Surface waters in the			
Border surface waters Surface waters in the entire basin			
Border surface waters Surface waters in the entire basin Surface waters on the			
Border surface waters Surface waters in the entire basin Surface waters on the main watercourse			
Border surface waters Surface waters in the entire basin Surface waters on the main watercourse Surface waters in part			
Border surface waters Surface waters in the entire basin Surface waters on the main watercourse Surface waters in part of the basin (describe			
Border surface waters Surface waters in the entire basin Surface waters on the main watercourse Surface waters in part of the basin (describe below)			
Border surface waters Surface waters in the entire basin Surface waters on the main watercourse Surface waters in part of the basin (describe below) Transboundary			
Border surface waters Surface waters in the entire basin Surface waters on the main watercourse Surface waters in part of the basin (describe below) Transboundary aquifer(s) (connected			
Border surface waters Surface waters in the entire basin Surface waters on the main watercourse Surface waters in part of the basin (describe below) Transboundary aquifer(s) (connected or unconnected)			
Border surface waters Surface waters in the entire basin Surface waters on the main watercourse Surface waters in part of the basin (describe below) Transboundary aquifer(s) (connected or unconnected)			
Border surface waters Surface waters in the entire basin Surface waters on the main watercourse Surface waters in part of the basin (describe below) Transboundary aquifer(s) (connected or unconnected) Aquifer(s) in the			
Border surface waters Surface waters in the entire basin Surface waters on the main watercourse Surface waters in part of the basin (describe below) Transboundary aquifer(s) (connected or unconnected) Aquifer(s) in the territory of one			
Border surface waters Surface waters in the entire basin Surface waters on the main watercourse Surface waters in part of the basin (describe below) Transboundary aquifer(s) (connected or unconnected) Aquifer(s) in the territory of one riparian hydraulically			
Border surface waters Surface waters in the entire basin Surface waters on the main watercourse Surface waters in part of the basin (describe below) Transboundary aquifer(s) (connected or unconnected) Aquifer(s) in the territory of one riparian hydraulically connected to a			
Border surface waters Surface waters in the entire basin Surface waters on the main watercourse Surface waters in part of the basin (describe below) Transboundary aquifer(s) (connected or unconnected) Aquifer(s) in the territory of one riparian hydraulically connected to a transboundary river or			
Border surface waters Surface waters in the entire basin Surface waters on the main watercourse Surface waters in part of the basin (describe below) Transboundary aquifer(s) (connected or unconnected) Aquifer(s) in the territory of one riparian hydraulically connected to a transboundary river or lake			
Border surface waters Surface waters in the entire basin Surface waters on the main watercourse Surface waters in part of the basin (describe below) Transboundary aquifer(s) (connected or unconnected) Aquifer(s) in the territory of one riparian hydraulically connected to a transboundary river or lake If "Surface waters in			
Border surface waters Surface waters in the entire basin Surface waters on the main watercourse Surface waters in part of the basin (describe below) Transboundary aquifer(s) (connected or unconnected) Aquifer(s) in the territory of one riparian hydraulically connected to a transboundary river or lake If "Surface waters in part of basin", please			
Border surface waters Surface waters in the entire basin Surface waters on the main watercourse Surface waters in part of the basin (describe below) Transboundary aquifer(s) (connected or unconnected) Aquifer(s) in the territory of one riparian hydraulically connected to a transboundary river or lake If "Surface waters in part of basin", please describe [fill in]			
Border surface waters Surface waters in the entire basin Surface waters on the main watercourse Surface waters in part of the basin (describe below) Transboundary aquifer(s) (connected or unconnected) Aquifer(s) in the territory of one riparian hydraulically connected to a transboundary river or lake If "Surface waters in part of basin", please describe [fill in] b If joint monitoring is			
Border surface waters Surface waters in the entire basin Surface waters on the main watercourse Surface waters in part of the basin (describe below) Transboundary aquifer(s) (connected or unconnected) Aquifer(s) in the territory of one riparian hydraulically connected to a transboundary river or lake If "Surface waters in part of basin", please describe [fill in] b If joint monitoring is carried out, how is this			
Border surface waters Surface waters in the entire basin Surface waters on the main watercourse Surface waters in part of the basin (describe below) Transboundary aquifer(s) (connected or unconnected) Aquifer(s) in the territory of one riparian hydraulically connected to a transboundary river or lake If "Surface waters in part of basin", please describe [fill in] b If joint monitoring is			
Border surface waters Surface waters in the entire basin Surface waters on the main watercourse Surface waters in part of the basin (describe below) Transboundary aquifer(s) (connected or unconnected) Aquifer(s) in the territory of one riparian hydraulically connected to a transboundary river or lake If "Surface waters in part of basin", please describe [fill in] b If joint monitoring is carried out, how is this done?			
Border surface waters Surface waters in the entire basin Surface waters on the main watercourse Surface waters in part of the basin (describe below) Transboundary aquifer(s) (connected or unconnected) Aquifer(s) in the territory of one riparian hydraulically connected to a transboundary river or lake If "Surface waters in part of basin", please describe [fill in] b If joint monitoring is carried out, how is this done? National monitoring			
Border surface waters Surface waters in the entire basin Surface waters on the main watercourse Surface waters in part of the basin (describe below) Transboundary aquifer(s) (connected or unconnected) Aquifer(s) in the territory of one riparian hydraulically connected to a transboundary river or lake If "Surface waters in part of basin", please describe [fill in] b If joint monitoring is carried out, how is this done? National monitoring stations connected			
Border surface waters Surface waters in the entire basin Surface waters on the main watercourse Surface waters in part of the basin (describe below) Transboundary aquifer(s) (connected or unconnected) Aquifer(s) in the territory of one riparian hydraulically connected to a transboundary river or lake If "Surface waters in part of basin", please describe [fill in] b If joint monitoring is carried out, how is this done? National monitoring stations connected through a network or			
Border surface waters Surface waters in the entire basin Surface waters on the main watercourse Surface waters in part of the basin (describe below) Transboundary aquifer(s) (connected or unconnected) Aquifer(s) in the territory of one riparian hydraulically connected to a transboundary river or lake If "Surface waters in part of basin", please describe [fill in] b If joint monitoring is carried out, how is this done? National monitoring stations connected through a network or common stations			
Border surface waters Surface waters in the entire basin Surface waters on the main watercourse Surface waters in part of the basin (describe below) Transboundary aquifer(s) (connected or unconnected) Aquifer(s) in the territory of one riparian hydraulically connected to a transboundary river or lake If "Surface waters in part of basin", please describe [fill in] b If joint monitoring is carried out, how is this done? National monitoring stations connected through a network or common stations Joint and agreed			
Border surface waters Surface waters in the entire basin Surface waters on the main watercourse Surface waters in part of the basin (describe below) Transboundary aquifer(s) (connected or unconnected) Aquifer(s) in the territory of one riparian hydraulically connected to a transboundary river or lake If "Surface waters in part of basin", please describe [fill in] b If joint monitoring is carried out, how is this done? National monitoring stations connected through a network or common stations Joint and agreed methodologies			
Border surface waters Surface waters in the entire basin Surface waters on the main watercourse Surface waters in part of the basin (describe below) Transboundary aquifer(s) (connected or unconnected) Aquifer(s) in the territory of one riparian hydraulically connected to a transboundary river or lake If "Surface waters in part of basin", please describe [fill in] b If joint monitoring is carried out, how is this done? National monitoring stations connected through a network or common stations Joint and agreed			

	Common monitoring						
	network Common agreed	П					
	parameters						
	For each option selected, please						
	describe [fill in]						
c	Please describe the main achievements						
	main achievements regarding joint						
	monitoring, if any: [fill						
C	in] Please describe any						
	difficulties experienced						
	with joint monitoring: [fill in]						
8	Do the riparian States	Yes	Yes	Yes	Yes	Yes	No
	carry out joint assessment of the						
	transboundary basin,						
	sub-basin, part of a basin or group of						
	basins?						
		On an ad hoc basis, Canada and the US conduct joint studies of issues in	Under the GLWQA, Canada and the US assess water quality conditions of the Great Lakes over time. Through the Great Lakes Adaptive Management	On an ad hoc basis, Canada and the US conduct joint studies of issues in	On an ad hoc basis, Canada and the US conduct joint	On an ad hoc basis the US conduct join	
	only assessment, the	transboundary basins. The frequency and	Committee under the IJC, Canada and the US assess and evaluate water	transboundary basins. The frequency and	studies of issues in	issues in transboun	
	frequency and scope	scope vary.	management mechanisms in the Great Lakes Basin.	scope vary.	transboundary basins. The	The frequency and	scope vary.
	(e.g., surface waters or groundwaters only,				frequency and scope vary.		
	pollution sources, etc.)						
	of the assessment, and assessment						
	methodology applied:						
9	[fill in] Have the riparian	Yes	Yes	No	No	No	No
	States agreed to use						
	joint water quality standards?						
	If yes, what standards	Canada and the US have agreed to use	In 2016, Canada and the U.S. designated eight chemicals as Chemicals of				
		joint water quality standards for some substances in some water bodies, as	Mutual Concern (CMC) under the GLWQA. CMCs are reviewed according to the Binational Screening Criteria for Nominated CMCs, developed by				
	regional standards	required. The IJC facilitates joint	Environment and Climate Change Canada and the U.S. Environmental				
	(please specify which), or have national	regulation of these standards.	Protection Agency.				
	standards of the						
	riparian States been applied? [fill in]						
1		nplemented to prevent or limit the transboun	dary impact of accidental pollution?				
0							
	Notification and	•	•	•			
	communication Coordinated or joint						
	early warning or alarm						
	system for accidental water pollution						
	No measures						
	Other (please list): [fill in]						
	in] If not, why not? What						
	difficulties does your						

							1
	country face in putting						
	in place such measures?: [fill in]						
1	What are the measures						
1	implemented to prevent						
-	or limit the						
	transboundary impact						
	of extreme weather						
	events and climate						
	change?						
	Notification and	•	•	•	•	•	
	communication						
	Coordinated or joint						
	alarm system for floods Coordinated or joint						
	alarm system for						
	droughts						
	Joint climate change						
	adaptation strategy						
	Joint disaster risk	0					
	reduction strategy						
	No measures						
	Other (please list): [fill						
	in]						
	If not, why not? What						
	difficulties does your						
	country face in putting in place such						
	measures?: [fill in]						
1	Are procedures in place	No	No	No	No	No	No
2	for mutual assistance in					1.0	
	case of a critical						
	situation?						
	If yes, please provide a						
	If yes, please provide a brief summary: [fill in]						
1	If yes, please provide a brief summary: [fill in] Are the public or	Yes	Yes	Yes	Yes	Yes	No
1 3	If yes, please provide a brief summary: [fill in] Are the public or relevant stakeholders	Yes	Yes	Yes	Yes	Yes	No
1 3	If yes, please provide a brief summary: [fill in] Are the public or relevant stakeholders involved in	Yes	Yes	Yes	Yes	Yes	No
1 3	If yes, please provide a brief summary: [fill in] Are the public or relevant stakeholders involved in transboundary water	Yes	Yes	Yes	Yes	Yes	No
1 3	If yes, please provide a brief summary: [fill in] Are the public or relevant stakeholders involved in transboundary water management in the	Yes	Yes	Yes	Yes	Yes	No
1 3	If yes, please provide a brief summary: [fill in] Are the public or relevant stakeholders involved in transboundary water management in the basin, sub-basin, part of a basin or group of	Yes	Yes	Yes	Yes	Yes	No
1 3	If yes, please provide a brief summary: [fill in] Are the public or relevant stakeholders involved in transboundary water management in the basin, sub-basin, part of a basin or group of basins?	Yes	Yes	Yes	Yes	Yes	No
1 3	If yes, please provide a brief summary: [fill in] Are the public or relevant stakeholders involved in transboundary water management in the basin, sub-basin, part of a basin or group of basins? If yes, how? (please	Yes	Yes	Yes	Yes	Yes	No
1 3	If yes, please provide a brief summary: [fill in] Are the public or relevant stakeholders involved in transboundary water management in the basin, sub-basin, part of a basin or group of basins? If yes, how? (please tick all applicable)	Yes					
1 3	If yes, please provide a brief summary: [fill in] Are the public or relevant stakeholders involved in transboundary water management in the basin, sub-basin, part of a basin or group of basins? If yes, how? (please tick all applicable) Stakeholders have	Yes	Yes	Yes	Yes		No
1 3	If yes, please provide a brief summary: [fill in] Are the public or relevant stakeholders involved in transboundary water management in the basin, sub-basin, part of a basin or group of basins? If yes, how? (please tick all applicable) Stakeholders have observer status in a	Yes					
1 3	If yes, please provide a brief summary: [fill in] Are the public or relevant stakeholders involved in transboundary water management in the basin, sub-basin, part of a basin or group of basins? If yes, how? (please tick all applicable) Stakeholders have observer status in a joint body or	Yes					
1 3	If yes, please provide a brief summary: [fill in] Are the public or relevant stakeholders involved in transboundary water management in the basin, sub-basin, part of a basin or group of basins? If yes, how? (please tick all applicable) Stakeholders have observer status in a joint body or mechamism	Yes					
1 3	If yes, please provide a brief summary: [fill in] Are the public or relevant stakeholders involved in transboundary water management in the basin, sub-basin, part of a basin or group of basins? If yes, how? (please tick all applicable) Stakeholders have observer status in a joint body or	Yes					
1 3	If yes, please provide a brief summary: [fill in] Are the public or relevant stakeholders involved in transboundary water management in the basin, sub-basin, part of a basin or group of basins? If yes, how? (please tick all applicable) Stakeholders have observer status in a joint body or mechamism Stakeholders have an advisory role in the joint body	Yes					
1 3	If yes, please provide a brief summary: [fill in] Are the public or relevant stakeholders involved in transboundary water management in the basin, sub-basin, part of a basin or group of basins? If yes, how? (please tick all applicable) Stakeholders have observer status in a joint body or mechamism Stakeholders have an advisory role in the joint body Stakeholders have a	Yes					
1 3	If yes, please provide a brief summary: [fill in] Are the public or relevant stakeholders involved in transboundary water management in the basin, sub-basin, part of a basin or group of basins? If yes, how? (please tick all applicable) Stakeholders have observer status in a joint body or mechamism Stakeholders have an advisory role in the joint body Stakeholders have a decision-making role in	Yes					
1 3	If yes, please provide a brief summary: [fill in] Are the public or relevant stakeholders involved in transboundary water management in the basin, sub-basin, part of a basin or group of basins? If yes, how? (please tick all applicable) Stakeholders have observer status in a joint body or mechamism Stakeholders have an advisory role in the joint body Stakeholders have a decision-making role in the joint body (please	Yes					
1 3	If yes, please provide a brief summary: [fill in] Are the public or relevant stakeholders involved in transboundary water management in the basin, sub-basin, part of a basin or group of basins? If yes, how? (please tick all applicable) Stakeholders have observer status in a joint body or mechamism Stakeholders have an advisory role in the joint body Stakeholders have a decision-making role in the joint body (please specify below)	Yes					
1 3	If yes, please provide a brief summary: [fill in] Are the public or relevant stakeholders involved in transboundary water management in the basin, sub-basin, part of a basin or group of basins? If yes, how? (please tick all applicable) Stakeholders have observer status in a joint body or mechamism Stakeholders have an advisory role in the joint body Stakeholders have a decision-making role in the joint body (please specify below) Availability of	Yes					
1 3	If yes, please provide a brief summary: [fill in] Are the public or relevant stakeholders involved in transboundary water management in the basin, sub-basin, part of a basin or group of basins? If yes, how? (please tick all applicable) Stakeholders have observer status in a joint body or mechamism Stakeholders have an advisory role in the joint body Stakeholders have a decision-making role in the joint body (please specify below) Availability of information to the	Yes					
1 3	If yes, please provide a brief summary: [fill in] Are the public or relevant stakeholders involved in transboundary water management in the basin, sub-basin, part of a basin or group of basins? If yes, how? (please tick all applicable) Stakeholders have observer status in a joint body or mechamism Stakeholders have an advisory role in the joint body Stakeholders have a decision-making role in the joint body (please specify below) Availability of information to the public	Yes					
1 3	If yes, please provide a brief summary: [fill in] Are the public or relevant stakeholders involved in transboundary water management in the basin, sub-basin, part of a basin or group of basins? If yes, how? (please tick all applicable) Stakeholders have observer status in a joint body or mechamism Stakeholders have an advisory role in the joint body Stakeholders have a decision-making role in the joint body (please specify below) Availability of information to the	Yes					

river basin management plans Public involvement Other (please specify): [fill in]	The IJC's water management boards seek the advice of stakeholders regarding the mandate and activities of the boards	Stakeholders are consulted on planned measures within the basin. A Public Advisory Group provided input to the Great Lakes Adaptive Management Committee's review of Lake Ontario's Regulation Plan 2014.		Stakeholders provide oversight and advice to the International Rainy-Lake of the Woods Watershed Board on issues related to its mandate through the Community Advisory Group and the Industry Advisory Group	The International S Study Board has cr Public Advisory Grbetter understand the and benefits of varial ternative operation the basin.	reated a froup to the impacts rious
If stakeholders have a						
decision-making role in						
the joint body, please						
specify the						
stakeholders for the joint body or						
joint body or mechanism:						
organizations						
Private sectors						
organizations or						
associations						
Water user groups or						
associations			_	_	_	_
Academic or research institutions						
Other non-	П					
governmental					_	_
organizations						
General public						
Other (please specify): [fill in]						

Part 2 - Aquifers

	Name of the transboundary										
	basin,—sub-basin, part of a										
	List of the ringrical States	Abbotsford-Sumas	Chateauguay	Milk River	•	Okanagan-Osoyoos	Grand Forks	Poplar	Estevan	Northern Great Plains	Judith River
	List of the riparian States	United States	United States	United States	United States	United States	United States	United States	United States	United States	United States
	In the case of an aquifer, what is the nature of the aquifer and its relation with the river or lake basin: If selected "Other", please describe: [fill in]										
1	Percentage of your country's territory within the basin, sub-										
	basin, part of a basin or group of basins: [fill in]	0,001%	0,02%	approx. 0.225%	0,09%	Unknown	Unknown	Unknown	0,002%	1,252%	Unknown
	Is there one or more transboundary (bilateral or multilateral) agreement(s) or arrangement(s) on this basin, sub-basin, part of a basin or group of basins? Please insert the name of the agreement(s) or arrangement(s) [fill in]	agreements or	Agreement or arrangement developed but not in force	Agreement or arrangement developed but not in force	Agreement or arrangement developed but not in force	No agreement or arrangement	No agreement or arrangement	or	No agreement or arrangement	No agreement or arrangement	No agreement or arrangement
	If there is no agreement or arrangement or it is not in force, please explain briefly why not and provide information on any plans to address the situation: [fill in]					This aquifer was partially assessed only by Canada	This aquifer was partially assessed only by Canada	This aquifer was idetified but not assessed.	This aquifer was idetified but not assessed.	This aquifer was identified and partially assessed by the US	This aquifer was identified and partially assessed by the US
	Agreement										
2 a	Does this agreement or arrangement specify the area subject to cooperation? If yes, does it cover the entire basin or group of basins and all riparian States? Additional explanations? [fill in]		Yes This is an aquifer not a	Yes This is an aquifer not a	No						
	Or, if the agreement or arrangement relates to a subbasin, does it cover the entire sub-basin? Additional explanations? [fill in] Which States (including your own) are bound by the agreement or arrangement?		basin	basin	This is an aquifer not a basin						
b	(Please list): [fill in] If the agreement or arrangement relates to a river or lake basin or sub-basin, does it also cover aquifers? If yes, please list the aquifers covered by the agreement or		Canada; US	Canada; US	Canada; US						
С	arrangement: [fill in] What is the sectoral scope of the agreement or arrangement?										

basin,—sub-basin, part of a										
	Abbotsford-Sumas	Chateauguay	Milk River	Richelieu- Yamaska/Lake Champlain	Okanagan-Osoyoos	Grand Forks	Poplar	Estevan	Northern Great Plains	Judith Rive
If one or several water uses or										
sectors, please list (check as										
appropriate):										
_										
Households										
Energy: hydropower and other										
energy types										
Fisheries										
Tourism										
37										
Other (<i>please list</i>): [fill in]					П	Ш		П		П
d What topics or subjects of										
cooperation are included in the										
agreement or arrangement? Procedural and institutional										
issues issues										
Institutional cooperation										
9										
Consultation on planned										
3.6 . 1										
Topics of cooperation										
Joint vision and management										
Joint significant water										
Navigation										
Human health										
Environmental protection										
(ecosystem)										
Water quality										
Cooperation in addressing					П	Ш		П		П
floods										
Cooperation in addressing								ш		ш
C1' 1 1 1 1'										
Monitoring and exchange										
•										
Data collection and exchange										
•										
Maintenance of joint										
Elaboration of joint water										
Common early warning and										
Exchange of experience										
Exchange of information on		=	_		:	_	_	_	_	_

	Name of the transboundary										
	basin,—sub-basin, part of a basin or group of basins	Abbotsford-Sumas	Chateauguay	Milk River	Richelieu- Yamaska/Lake Champlain	Okanagan-Osovoos	Grand Forks	Poplar	Estevan	Northern Great Plains	Judith River
	Joint planning and	11000isjoru-sumus	Charcangany	WHIN TUVE	пененен-Титизки/Бике Спитрішт	Oranagan-Osoyoos	Grana Porks	Торш	Liciun	normern Great I tains	Junin Kiver
	management										
	Development of joint										
	<i>O</i> 1 1										
	Development of international										
	or joint river, lake or aquifer										
	basin management or action plans										
	Management of shared										
	infrastructure	П									
	Development of shared										
	infrastructure										
	Other (please list): [fill in]										
e	What are the main difficulties										
	and challenges that your country										
	faces with the agreement or										
	arrangement and its										
	implementation, if any?										
	Aligning implementation of agreement or arrangement with										
	national laws, policies and										
	programmes										
	Aligning implementation of		-	-			_	_	_		-
	agreement or arrangement with										
	regional laws, policies and										
	programmes										
	Lack of financial resources										
	Insufficient human capacity										
	Insufficient technical capacity										
	Tense diplomatic relations										
	Non-participation of certain										
	riparian countries in the										
	agreement										
	No significant difficulties										
	Other (please describe): [fill in]										
İ	What are the main achievements										
	in implementing the agreement or arrangement and what were										
	the keys to achieving such										
	success? [fill in]										
g	Please attach a copy of the										
	agreement or arrangement or										
	provide the web address of the										
	document (please attach										
	document or insert web address,										
2	if applicable): [fill in]										
3	Is your country a member of any joint body or mechanism for this										
	agreement or arrangement?		No	Yes	No						
	If no, why not? (please explain):		110	1 00	1.0						
	[fill in]										
	If there is a joint body or										
	mechanism, please complete 3.										
	(a)-(k)										
	Name of the joint body or										
	mechanism										

	Name of the transboundary										
	basin,—sub-basin, part of a	411 . 6 . 1.6	Cl	Will Di	D. 1 1. V. 1 /1 1 Cl. 1 .	01 0	C 15 1	D 1	г.	N A C D	I I I D
a	If there is a joint body or mechanism, which kind of joint body or mechanism (please tick one)? If selected "Other", please describe [fill in]	Abbotsford-Sumas	Chateauguay	Milk River	Richelieu- Yamaska/Lake Champlain	Okanagan-Osoyoos	Grand Forks	Poplar	Estevan	Northern Great Plains	Judith River
	Does the joint body or mechanism cover the entire transboundary basin, sub-basin, part of a basin or group of basins? Additional comments										
С	Which States (including your own) are members of the joint body or mechanism? (Please list): [fill in]		Canada; US	Canada; US	Canada; US						
d	Are there any riparian States that are not members of the joint body or mechanism? (please list): [fill in]		No No	No No	No No						
e	If not all riparian States are members of the joint body or mechanism how does the joint body or mechanism cooperate with them? If selected "Other", please describe [fill in]										
f	Does the joint body or mechanism have any of the following features (please tick the ones applicable)? A secretariat										
	A subsidiary body or bodies Other features (<i>please list</i>): [fill in]										
	If the secretariat is a permanent one, is it a joint secretariat or does each country host its own secretariat? (Please describe): [fill in] Please list subsidiary body or bodies (e.g., working groups on specific topics): [fill in]										
g	What are the tasks and activities of this joint body or mechanism? Identification of pollution										
	sources										
	Data collection and exchange										
	Joint monitoring Maintenance of joint pollution inventories										
	Setting emission limits										

basin,—sub-basin, part of a	411 . 6 . 1 6	CI.	1.6:11 D:	De la la Valada de la companya de la	01	0 15 1	D 1	г.	N A C DI	7 1. 1
	Abbotsford-Sumas	Chateauguay	Milk River	Richelieu- Yamaska/Lake Champlain	Okanagan-Osoyoos	Grand Forks	Poplar	Estevan	Northern Great Plains	Judith 1
Elaboration of joint water										
1 2 3										
Management and prevention of										
Preparedness for extreme events,										
e.g., common early warning and										
Surveillance and early warning										
Water allocation and/or flow										
D 11 1 1 1										
*										
Exchange of experience between										
Exchange of information on										
existing and planned uses of										
Settling of differences and										
~··										
Consultations on planned										
•										
Exchange of information on best										-
	П									
Participation in transboundary		П	Ш		П	П	Ш	Ш		Ш
	П									
	Ц									
Development of river, lake or										
aquifer basin management or										
Management of shared										
Addressing hydromorphological										
Climate change adaptation										
+ · ·			П			П	П		П	П
Basin-wide or joint public	_	_	_	_	_	_			_	
participation and consultation of,										
for example, basin management										
P										
Joint resources to support	_	_	_	_	_	_	_	_	_	
J 1										
Any other tasks (please list): [fill										
in]										
What are the main difficulties										
and challenges that your country										
faces with the operation of the										
joint body or mechanism, if any?										
•										
Lack of mechanism for										
T 1 C CC /										
TT 1										
Lack of information and reliable										

	Name of the transboundary basin,—sub-basin, part of a										
	basin or group of basins	Abbotsford-Sumas	Chateauguay	Milk River	Richelieu- Yamaska/Lake Champlain	Okanagan-Osoyoos	Grand Forks	Poplar	Estevan	Northern Great Plains	Judith River
	Others (please list and describe, as appropriate)										
i	Does the joint body or mechanism, or its subsidiary bodies meet regularly? If yes, how frequently does it meet?										
j	What are the main achievements with regards to the joint body or mechanism? [fill in]										
k	Did the joint body or mechanism ever invite a non-riparian coastal State to cooperate? If yes, please give details. If no, why not, e.g. are the relevant coastal States also riparian States and therefore already members of the joint body or mechanism? [fill in]	No	No	No	No						
4	Have joint objectives, a common strategy, a joint or coordinated management plan or action plan been agreed for the basin, sub- basin, part of a basin or group of	Yes The Abbotsford- Sumas Aquifer International Task Force (ASAITF)	. No	No	No						
5	How is the transboundary basin, sub-basin, part of a basins or group of basins protected, including the protection of ecosystems, in the context of sustainable and rational water use?	Tote (ASAIT)									
	Regulation of urbanization, deforestation, and sand and										
	Environmental flow norms, including consideration of levels and seasonality										
	Water quality protection, e.g. nitrates, pesticides, faecal										
	Water-related species and										
	Other measures (please describe): [fill in]										
6 a	Does your country regularly exchange information and data with other riparian States in the basin, sub-basin, part of a basin or group of basins?	Yes	No	Yes	No						
b	or group of basins? If yes, how often:	1 68	INO	168	INU						
	Please describe how information is exchanged (e.g. in connection										

	Name of the transboundary										
	basin,—sub-basin, part of a basin or group of basins	Abbotsford-Sumas	Chateauguay	Milk River	Richelieu- Yamaska/Lake Champlain	Okanagan-Osovoos	Grand Forks	Poplar	Estevan	Northern Great Plains	Judith River
	with meetings of joint bodies): [fill in]		<i></i>			emmegan ezeyeez					
d	If yes, on what subjects are information and data exchanged?										
	Environmental conditions Research activities and application of best available										
	techniques Emission monitoring data										
	Planned measures taken to prevent, control or reduce transboundary impacts										
	Point source pollution sources Diffuse pollution sources										
	Existing hydromorphological alterations (dams, etc.) Flows or water levels (including										
	groundwater levels) Water abstractions										
	Climatological information Future planned measures with transboundary impacts, such as										
	infrastructure development Other subjects (<i>please list</i>): [fill in]										
	Is there a shared database or information platform?										
I	Is the database publicly available? If yes, please provide the web										
g	address: [fill in] What are the main difficulties and challenges to data exchange,										
	if applicable? Frequency of exchanges Timing of exchanges										
	Comparability of data and information Limited spatial coverage										
	Inadequate resources (technical and/or financial)										
h	Other (please describe): [fill in] What are the main benefits of data exchange on the basin, subbasin, part of a basin or group of basins? (please describe): [fill in]										
7	Do the riparian States carry out joint monitoring in the transboundary basin, sub-basin, part of a basin or group of										
a	basins? If yes, what does the joint monitoring cover? Hydrological	Yes				(yes/no)					
							0				

basin,—sub-basin, part of a basin or group of basins	Abbotsford-Sumas	Chateauguay	Milk River	Richelieu- Yamaska/Lake Champlain	Okanagan-Osoyoos	Grand Forks	Poplar	Estevan	Northern Great Plains	Jud
Surface waters in the entire	,			•			,			
basin										
Surface waters on the main										
Surface waters in part of the										
,										
Transboundary aquifer(s) (connected or unconnected)										
Aquifer(s) in the territory of one	•									
riparian hydraulically connected										
to a transboundary river or lake										
If "Surface waters in part of										
basin", please describe [fill in]										
Ecological										
Border surface waters										
Surface waters in the entire										
Surface waters on the main	_	_	_	_	_	_	_	_	_	
watercourse Surface waters in part of the										
•										
Transboundary aquifer(s)					П					
Aquifer(s) in the territory of one										
riparian hydraulically connected										
to a transboundary river or lake										
If "Surface waters in part of										
basin", please describe [fill in] Chemical										
D 1 0										
Surface waters in the entire										
Surface waters on the main					П					
Surface waters in part of the										
basin (describe below)										
Transboundary aquifer(s)										
Aquifer(s) in the territory of one										
riparian hydraulically connected to a transboundary river or lake										
If "Surface waters in part of										
basin", please describe [fill in]										
If joint monitoring is carried out,										
how is this done?										
National monitoring stations										
connected through a network or										
For each option selected, please										
describe [fill in]										

	Name of the transboundary basin,—sub-basin, part of a		ar.								
	basin or group of basins	Abbotsford-Sumas	Chateauguay	Milk River	Richelieu- Yamaska/Lake Champlain	Okanagan-Osoyoos	Grand Forks	Poplar	Estevan	Northern Great Plains	Judith River
d	Please describe any difficulties experienced with joint										
	monitoring: [fill in]										
8	Do the riparian States carry out										
O	joint assessment of the										
	transboundary basin, sub-basin,										
	part of a basin or group of										
	basins?	No	Yes	No	No						
	If yes, please provide the date of										
	the last or only assessment, the frequency and scope (e.g.,										
	surface waters or groundwaters		Only during the								
	only, pollution sources, etc.) of		assessment								
	the assessment, and assessment		phase, not								
	methodology applied: [fill in]		anymore								
9	Have the riparian States agreed										
	to use joint water quality standards?										
	If yes, what standards have been										
	applied, e.g. international or										
	regional standards (please										
	specify which), or have national										
	standards of the riparian States been applied? [fill in]										
10	What are the measures										
10	implemented to prevent or limit										
	the transboundary impact of										
	accidental pollution?										
	Notification and communication										
	Coordinated or joint early										
	warning or alarm system for accidental water pollution										
	No measures										
	Other (<i>please list</i>): [fill in]			ш							
	If not, why not? What difficulties										
	does your country face in putting										
	in place such measures?: [fill in]										
11	What are the measures										
	implemented to prevent or limit the transboundary impact of										
	extreme weather events and										
	climate change?										
	Notification and communication										
	Coordinated or joint alarm										
	system for floods										
	Coordinated or joint alarm system for droughts										
	Joint climate change adaptation		_	u .				u			
	strategy										
	Joint disaster risk reduction										
	strategy No measures										
	No measures Other (<i>please list</i>): [fill in]										
	If not, why not? What difficulties										
	does your country face in putting										
	in place such measures?: [fill in]										
	,										

	Name of the transboundary										
	basin,—sub-basin, part of a basin or group of basins	Abbotsford-Sumas	Chateauguay	Milk River	Richelieu- Yamaska/Lake Champlain	Okanagan Osovoos	Grand Forks	Poplar	Estevan	Northern Great Plains	Indith River
12	Are procedures in place for		Chaleauguay	With River	Richetteu-Tumusku/Luke Champiuth	Okunugun-Osoyoos	Grana Porks	Τοριαι	Estevan	Northern Great I tains	Juann River
12	mutual assistance in case of a										
	critical situation?										
	If yes, please provide a brief										
	summary: [fill in]										
13	Are the public or relevant										
	stakeholders involved in										
	transboundary water										
	management in the basin, sub-										
	basin, part of a basin or group of basins?										
	If yes, how? (please tick all applicable)										
	Stakeholders have observer										
	status in a joint body or										
	mechamism										
	Stakeholders have an advisory										
	role in the joint body										
	Stakeholders have a decision-										
	making role in the joint body										
	(please specify below)										
	Availability of information to										
	the public										
	Consultation on planned measures or river basin										
	management plans					П					
	Public involvement										
	Other (<i>please specify</i>): [fill in]		Ц					Ц			
	Other (prease specify). [IIII III]										
	If stakeholders have a decision-										
	making role in the joint body,										
	please specify the stakeholders										
	for the joint body or mechanism:										
	Intergovernmental organizations										
	Private sectors organizations or										
	associations										
	Water user groups or										
	associations										
	Academic or research										
	institutions Other man accommendate										
	Other non-governmental organizations		П		П		П	П		П	
	General public										
	Other (please specify): [fill in]										
	Other (piease specify): [IIII In]										