

**Reporting on global SDG indicator 6.5.2**  
**TEMPLATE of the second cycle for reporting**

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**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: United States

## 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.<sup>a</sup>
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 (km<sup>2</sup>));
  - (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 operability;

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<sup>a</sup> 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.

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

<i>Name of transboundary river or lake basin/sub-basin</i>	<i>It is a basin or a sub-basin? <sup>b</sup></i>	<i>Countries shared with</i>	<i>Surface area of the basin/ sub-basin (in km<sup>2</sup>) within the territory of the country</i>	<i>Map and/or GIS shapefile provided (yes/no)</i>	<i>Covered by an arrangement (entirely, partly, no) (Ref. to questions in sect. II)</i>	<i>Criterion 1 applied (yes/no) (Ref. to questions in sect. II)</i>	<i>Criterion 2 applied (yes/no) (Ref. to questions in sect. II)</i>	<i>Criterion 3 applied (yes/no) (Ref. to questions in sect. II)</i>	<i>Criterion 4 applied (yes/no) (Ref. to questions in sect. II)</i>	<i>Surface area of the basin/ sub-basin (in km<sup>2</sup>) covered by an operational arrangement within the territory of the country</i>
Yukon River	Basin	Canada	~580000 km <sup>2</sup>		Yes	Yes	Yes	Yes	Yes	~580000 km <sup>2</sup>
Skagit River	Basin	Canada	~5730 km <sup>2</sup>		Yes	Yes	Yes	Yes	Yes	~5730 km <sup>2</sup>
Columbia River	Basin	Canada	~244000 km <sup>2</sup>		Yes	Yes	Yes	Yes	Yes	~244000 km <sup>2</sup>
St. Mary & Milk Rivers	Basin	Canada	~36000 km <sup>2</sup>		Yes	Yes	Yes	Yes	Yes	~36000 km <sup>2</sup>
Poplar River	Basin	Canada	~26000 km <sup>2</sup>		Partly	Yes	Yes	Yes	Yes	~26000 km <sup>2</sup>
Souris River	Basin	Canada	~21000 km <sup>2</sup>		Yes	Yes	Yes	Yes	Yes	~21000 km <sup>2</sup>
Red River	Basin	Canada	~90000 km <sup>2</sup>		Yes	Yes	Yes	Yes	Yes	~90000 km <sup>2</sup>
Lake of the Woods & Rainy River	Basin	Canada	~22000 km <sup>2</sup>		Yes	Yes	Yes	Yes	Yes	~22000 km <sup>2</sup>
Great Lakes – St. Lawrence River	Basin	Canada	~454000 km <sup>2</sup>		Yes	Yes	Yes	Yes	Yes	~454000 km <sup>2</sup>
Lake Superior	Sub-basin	Canada	~84000 km <sup>2</sup>		Yes	Yes	Yes	Yes	Yes	~84000 km <sup>2</sup>
Lake Michigan	Sub-basin	Canada	~147000 km <sup>2</sup>		Partly	Yes	Yes	Yes	Yes	~147000 km <sup>2</sup>
Lake Huron	Sub-basin	Canada	~57000 km <sup>2</sup>		Partly	Yes	Yes	Yes	Yes	~57000 km <sup>2</sup>
Lake Erie	Sub-basin	Canada	~57000 km <sup>2</sup>		Partly	Yes	Yes	Yes	Yes	~57000 km <sup>2</sup>
Lake Ontario-St. Lawrence River	Sub-basin	Canada	~109000 km <sup>2</sup>		Yes	Yes	Yes	Yes	Yes	~109000 km <sup>2</sup>
Lake Champlain	Basin	Canada	~18100 km <sup>2</sup>		Partly	Yes	Yes	Yes	Yes	~18100 km <sup>2</sup>

<sup>b</sup> List sub-basins after the basin they belong to.

<i>Name of transboundary river or lake basin/sub-basin</i>	<i>It is a basin or a sub-basin? <sup>b</sup></i>	<i>Countries shared with</i>	<i>Surface area of the basin/ sub-basin (in km<sup>2</sup>) within the territory of the country</i>	<i>Map and/or GIS shapefile provided (yes/no)</i>	<i>Covered by an arrangement (entirely, partly, no) (Ref. to questions in sect. II)</i>	<i>Criterion 1 applied (yes/no) (Ref. to questions in sect. II)</i>	<i>Criterion 2 applied (yes/no) (Ref. to questions in sect. II)</i>	<i>Criterion 3 applied (yes/no) (Ref. to questions in sect. II)</i>	<i>Criterion 4 applied (yes/no) (Ref. to questions in sect. II)</i>	<i>Surface area of the basin/ sub-basin (in km<sup>2</sup>) covered by an operational arrangement within the territory of the country</i>
Lake Memphremagog	Basin	Canada	~1400 km <sup>2</sup>		Partly	Yes	Yes	Yes	Yes	~1400 km <sup>2</sup>
Saint John River	Basin	Canada	~40000 km <sup>2</sup>		Partly	Yes	Yes	Yes	Yes	~40000 km <sup>2</sup>
St. Croix River	Basin	Canada	~2240 km <sup>2</sup>		Yes	Yes	Yes	Yes	Yes	~2240 km <sup>2</sup>
<b>(A)</b> <b>Total surface area of transboundary basins/sub-basins of rivers and lakes covered by operational arrangements within the territory of the country (in km<sup>2</sup>)</b> <b>(do not double count sub-basins)</b>										
<b>(B)</b> <b>Total surface area of transboundary basins of rivers and lakes within the territory of the country (in km<sup>2</sup>)</b> <b>(do not double count sub-basins)</b>										

Table 2

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

<i>Name of the transboundary aquifer</i>	<i>Countries shared with</i>	<i>Surface area of the aquifer<sup>c</sup> (in km<sup>2</sup>) within the territory of the country</i>	<i>Map and/or GIS shapefile provided (yes/no)</i>	<i>Covered by an aquifer specific arrangement (entirely, partly, no) (Ref. to questions in sect. II)</i>	<i>Covered within an arrangement not specific to the aquifer<sup>d</sup> (entirely, partly, no) (Ref. to questions in sect. II)</i>	<i>Criterion 1 applied (yes/no) (Ref. to questions in sect. II)</i>	<i>Criterion 2 applied (yes/no) (Ref. to questions in sect. II)</i>	<i>Criterion 3 applied (yes/no) (Ref. to questions in sect. II)</i>	<i>Criterion 4 applied (yes/no) (Ref. to questions in sect. II)</i>	<i>Surface area of the aquifer (in km<sup>2</sup>) covered by an operational arrangement within the territory of the country</i>
Abbotsford-Sumas	Canada	160 km <sup>2</sup>	No	No	No					
Okanagan-Osoyoos	Canada	~2 km <sup>2</sup>	No	No	No					
Grand Forks	Canada	~3 km <sup>2</sup>	No	No	No					
Poplar	Canada	~8000 km <sup>2</sup>	No	No	No					
Estevan	Canada	~56 km <sup>2</sup>	No	No	No					
Northern Great Plains	Canada	375000 km <sup>2</sup>	No	No	No					
Chateauguay	Canada	1000 km <sup>2</sup>	No	No	No					
Judith River	Canada	N/A	No	No	No					
Milk River	Canada	~25000 km <sup>2</sup>	No	No	No					
Richelieu-Yamaska/Lake Champlain	Canada	7500 km <sup>2</sup>	No	No	No					
<b>(C)</b> <b>Sub-total: surface area of transboundary</b>										

<sup>c</sup> 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.

<sup>d</sup> 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 <sup>c</sup> (in km <sup>2</sup> ) within the territory of the country	Map and/or GIS shapefile provided (yes/no)	Covered by an aquifer specific arrangement (entirely, partly, no) (Ref. to questions in sect. II)	Covered within an arrangement not specific to the aquifer <sup>d</sup> (entirely, partly, no) (Ref. to questions in sect. II)	Criterion 1 applied (yes/no) (Ref. to questions in sect. II)	Criterion 2 applied (yes/no) (Ref. to questions in sect. II)	Criterion 3 applied (yes/no) (Ref. to questions in sect. II)	Criterion 4 applied (yes/no) (Ref. to questions in sect. II)	Surface area of the aquifer (in km <sup>2</sup> ) covered by an operational arrangement within the territory of the country
<b>aquifers covered by operational arrangements (in km<sup>2</sup>)</b>										
<b>(D) Total surface area of transboundary aquifers (in km<sup>2</sup>)</b>										

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? <sup>e</sup>	Countries shared with	Surface area of the basin/sub-basin (in km <sup>2</sup> ) within the territory of the country	Map and/or GIS shapefile provided (yes/no)	Covered by an arrangement (entirely, partly, no) (Ref. to questions in sect. II)	Criterion 1 applied (yes/no) (Ref. to questions in sect. II)	Criterion 2 applied (yes/no) (Ref. to questions in sect. II)	Criterion 3 applied (yes/no) (Ref. to questions in sect. II)	Criterion 4 applied (yes/no) (Ref. to questions in sect. II)	Surface area of the basin/sub-basin (in km <sup>2</sup> ) covered by an operational arrangement within the territory of the country
Colorado River	Basin	Mexico	644600	Available	Entirely	Yes	Yes	Yes	Yes	644600
Rio Grande/Rio Bravo	Basin	Mexico	341800	Available	Entirely	Yes	Yes	Yes	Yes	341800
Tijuana	Basin	Mexico	1300	Available	Entirely	Yes	Yes	Yes	Yes	1300

<sup>e</sup> List sub-basins after the basin they belong to.

<i>Name of transboundary river or lake basin/sub-basin</i>	<i>It is a basin or a sub-basin? <sup>e</sup></i>	<i>Countries shared with</i>	<i>Surface area of the basin/sub-basin (in km<sup>2</sup>) within the territory of the country</i>	<i>Map and/or GIS shapefile provided (yes/no)</i>	<i>Covered by an arrangement (entirely, partly, no) (Ref. to questions in sect. II)</i>	<i>Criterion 1 applied (yes/no) (Ref. to questions in sect. II)</i>	<i>Criterion 2 applied (yes/no) (Ref. to questions in sect. II)</i>	<i>Criterion 3 applied (yes/no) (Ref. to questions in sect. II)</i>	<i>Criterion 4 applied (yes/no) (Ref. to questions in sect. II)</i>	<i>Surface area of the basin/sub-basin (in km<sup>2</sup>) covered by an operational arrangement within the territory of the country</i>
Yaqui	Basin	Mexico	4600							
<b>(A)</b> <b>Total surface area of transboundary basins/sub-basins of rivers and lakes covered by operational arrangements within the territory of the country (in km<sup>2</sup>)</b> <b>(do not double count sub-basins)</b>										987700
<b>(B)</b> <b>Total surface area of transboundary basins of rivers and lakes within the territory of the country (in km<sup>2</sup>)</b> <b>(do not double count sub-basins)</b>			992300							



Table 2

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

<i>Name of the transboundary aquifer</i>	<i>Countries shared with</i>	<i>Surface area of the aquifer<sup>f</sup> (in km<sup>2</sup>) within the territory of the country</i>	<i>Map and/ or GIS shapefile provided (yes/no)</i>	<i>Covered by an aquifer specific arrangement (entirely, partly, no) (Ref. to questions in sect. II)</i>	<i>Covered within an arrangement not specific to the aquifer<sup>g</sup> (entirely, partly, no) (Ref. to questions in sect. II)</i>	<i>Criterion 1 applied (yes/no) (Ref. to questions in sect. II)</i>	<i>Criterion 2 applied (yes/no) (Ref. to questions in sect. II)</i>	<i>Criterion 3 applied (yes/no) (Ref. to questions in sect. II)</i>	<i>Criterion 4 applied (yes/no) (Ref. to questions in sect. II)</i>	<i>Surface area of the aquifer (in km<sup>2</sup>) covered by an operational arrangement within the territory of the country</i>
Yuma	Mexico	1748								
Sonoyta-Papagos	Mexico									
Santa Cruz	Mexico	8789								
San Pedro	Mexico	2460								
Conejos Medanos-Mesilla	Mexico	6500								
Sonora San Bernadino	Mexico	1090								
Huecos Bolson-Valle de Juarez	Mexico	9612								
Edwards Trinity-El Burro	Mexico	9324								
Baja del Rio Bravo-Grande	Mexico	14200								

<sup>f</sup> 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.

<sup>g</sup> In the text of the agreement or arrangement or in the practice.



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**Indicator value for the country (includes US-Canada and US- Mexico)**

**Surface waters:**

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

$$A/B \times 100 = 2528170 / 2528170 \times 100 = 99.8\%$$

**Aquifers:**

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

$$C/D \times 100 = 0 / 505115 \times 100 = 0$$

**Sustainable Development Goal indicator 6.5.2:**

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

$$((A + C)/(B + D)) \times 100 = (2528170 + 0) / (2528170 + 505115) \times 100 = 83.2\%$$

**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.

**Additional information**

If the respondent has comments that clarify assumptions or interpretations made for the calculation, or the level of certainty of the spatial information, please write them here:

**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):*

Canada: The International Joint Commission (surface water)

Mexico: The International Boundary Waters Commission (surface water)

Write-up for all US-Canada surface waters under the International Boundary Waters Treaty of 1809:

The Boundary Waters Treaty is written as such that it covers any and all surface waters between the U.S. and Canada, such that “all navigable boundary waters shall forever continue free and open for the purposes of commerce to the inhabitants and to the ships, vessels, and boats of both countries equally”. This means that even if a particular basin, such as a smaller basin like The Polar River Basin, does not have an associated Order and/or Board, the river is still understood to be covered under the Boundary Waters Treaty. Larger basins like The Colorado River and the St. Lawrence River have specific agreements due to their size and variability. A basin may not be specifically covered for a variety of reasons. For example, if a river is largely non-navigable, it would not be covered. Alternately, it may not be historically subject to floods or droughts. The previously referenced Poplar River Basin does not currently have any orders or references active under the Boundary Waters Treaty, though it has in the past, as there was to be a power plant installed along the river, and water quality came into question.

Mexico:

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Treaty Between the United States of America and Mexico Respecting Utilization of Waters of the Colorado and Tijuana Rivers and of the Rio Grande, U.S.-Mex., Feb. 3, 1944, 59 Stat. 1219. Minute 319 Water Conservation and Environmental Protection (2012-2017).

Convention of May 21, 1906, on the Equitable Distribution of the Waters of the Rio Grande, at <http://www.ibwc.gov/Files/1906Conv.pdf>

Minute 320 General Framework for Binational Cooperation on Transboundary Issues in Tijuana River

## 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.<sup>1</sup> 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<sup>2</sup> 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.

**Name of the transboundary basin,-sub-basin, part of a basin or group of basins:** Small river basins between the US and Canada (the Yukon River, Skagit River, St. Mary & Milk Rivers, Poplar River, Souris River, Lake of the Woods & Rainy River, Lake Champlain, Lake Memphremagog, Saint John River, St. Croix River)

List of the riparian States: U.S., Canada

**In the case of an aquifer, what is the nature of the aquifer and its relation with the river or lake basin:**

- Unconfined aquifer connected to a river or lake
- Unconfined aquifer with no or limited relation with surface water
- Confined aquifer connected to surface water
- Confined aquifer with no or limited relation with surface water
- Other
- Please describe: [fill in]
- Unknown

**Percentage of your country's territory within the basin, sub-basin, part of a basin or group of basins:**

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<sup>1</sup> 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.

<sup>2</sup> 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.

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Approximately 70% of the total surface area the river drainage areas lie within US territory.

1. 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?

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 riparians

*Please insert the name of the agreement(s) or arrangement(s):* Boundary Waters Treaty of 1909

Agreement or arrangement is under development

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]

**If there is no agreement or arrangement and no joint body or mechanism for the transboundary basin, sub-basin, part of a basin or group of basins then jump to question 4; if there is no agreement or arrangement, but a joint body or mechanism then go to question 3.**

**Questions 2 and 3 to be completed for each bilateral or multilateral agreement or arrangement in force in the transboundary basin, sub-basin, part of a basin or group of basins.**

2. (a) Does this agreement or arrangement specify the area subject to cooperation?

Yes /No

If yes, does it cover the entire basin or group of basins and all riparian States?

Yes /No

Additional explanations? Any surface waters shared between the United States and Canada are subject to the BWT, even if the IJC has no current orders on the body.

Or, if the agreement or arrangement relates to a sub-basin, does it cover the entire sub-basin?

Yes /No

Additional explanations? N/A

Which States (including your own) are bound by the agreement or arrangement?  
*(Please list):* U.S., Canada

- (b) If the agreement or arrangement relates to a river or lake basin or sub-basin, does it also cover aquifers?

Yes /No

If yes, please list the aquifers covered by the agreement or arrangement: N/A

- (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):*

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**Water uses or sectors**

- |   |                                     |
|---|-------------------------------------|
| Industry                                  | <input checked="" type="checkbox"/> |
| Agriculture                               | <input checked="" type="checkbox"/> |
| Transport (e.g., navigation)              | <input checked="" type="checkbox"/> |
| Households                                | <input type="checkbox"/>            |
| Energy: hydropower and other energy types | <input checked="" type="checkbox"/> |
| Fisheries                                 | <input type="checkbox"/>            |
| Tourism                                   | <input type="checkbox"/>            |
| Nature protection                         | <input type="checkbox"/>            |
| Other ( <i>please list</i> ):             |                                     |

(d) What topics or subjects of cooperation are included in the agreement or arrangement?

**Procedural and institutional issues**

- |  |                                     |
|--|-------------------------------------|
| Dispute and conflict prevention and resolution | <input checked="" type="checkbox"/> |
| Institutional cooperation (joint bodies)       | <input checked="" type="checkbox"/> |
| Consultation on planned measures               | <input checked="" type="checkbox"/> |
| Mutual assistance                              | <input type="checkbox"/>            |

**Topics of cooperation**

- |   |                                     |
|---|-------------------------------------|
| Joint vision and management objectives    | <input checked="" type="checkbox"/> |
| Joint significant water management issues | <input type="checkbox"/>            |
| Navigation                                | <input checked="" type="checkbox"/> |
| Human health                              | <input type="checkbox"/>            |
| Environmental protection (ecosystem)      | <input type="checkbox"/>            |
| Water quality                             | <input checked="" type="checkbox"/> |
| Water quantity or allocation              | <input type="checkbox"/>            |
| Cooperation in addressing floods          | <input checked="" type="checkbox"/> |
| Cooperation in addressing droughts        | <input checked="" type="checkbox"/> |
| Climate change adaptation                 | <input type="checkbox"/>            |

**Monitoring and exchange**

- |  |                                     |
|--|-------------------------------------|
| Joint assessments                              | <input checked="" type="checkbox"/> |
| Data collection and exchange                   | <input checked="" type="checkbox"/> |
| Joint monitoring                               | <input checked="" type="checkbox"/> |
| Maintenance of joint pollution inventories     | <input type="checkbox"/>            |
| Elaboration of joint water quality objectives  | <input type="checkbox"/>            |
| Common early warning and alarm procedures      | <input type="checkbox"/>            |
| Exchange of experience between riparian States | <input type="checkbox"/>            |

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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) 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]

(f) 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, if applicable*): <https://www.ijc.org/en/who/mission/bwt>

3. Is your country a member of any joint body or mechanism for this agreement or arrangement?

Yes /No

*If no, why not? (please explain):* [fill in]

**Where there is a joint body or mechanism**

(a) If there is a joint body or mechanism, which kind of joint body or mechanism (*please tick one*)?

Plenipotentiaries

Bilateral commission

Basin or similar commission

Expert group meeting or meeting of national focal points

Other (*please describe*): [fill in]

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(b) Does the joint body or mechanism cover the entire transboundary basin, sub-basin, part of a basin or group of basins?

Yes /No

(c) Which States (including your own) are members of the joint body or mechanism? *(Please list)*: U.S., Canada

(d) Are there any riparian States that are not members of the joint body or mechanism? *(please list)*: N/A

(e) If not all riparian States are members of the joint body or mechanism how does the joint body or mechanism cooperate with them?

No cooperation

They have observer status

Other *(please describe)*: N/A

(f) Does the joint body or mechanism have any of the following features *(please tick the ones applicable)*?

A secretariat

*If the secretariat is a permanent one, is it a joint secretariat or does each country host its own secretariat? (Please describe):* [fill in]

A subsidiary body or bodies

*Please list (e.g., working groups on specific topics):* [fill in]

Other features *(please list)*: International Board, co-chaired by a representative from each country.

(g) What are the tasks and activities of this joint body or mechanism?<sup>3</sup>

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

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<sup>3</sup> 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.



- 
- 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 faces with the operation of the joint body or mechanism, if any?

- 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*): N/A

(i) Does the joint body or mechanism, or its subsidiary bodies meet regularly?

Yes /No

---

If yes, how frequently does it meet?

- More than once per year
- Once per year
- Less than once per year

(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?

Yes /No

*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]

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 basins?

Yes /No

*If yes, please provide further details:*

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 regularly exchange information and data with other riparian States in the basin, sub-basin, part of a basin or group of basins?

Yes /No

(b) If yes, how often:

- More than once per year
- Once per year
- Less than once per year

(c) Please describe how information is exchanged (e.g. in connection with meetings of joint bodies): Data is jointly monitored throughout the year, and the data is available to both countries.

(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 exchange: [fill in]

(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:* Canadian gauges:

[https://wateroffice.ec.gc.ca/google\\_map/google\\_map\\_e.html?map\\_type=real\\_time&search\\_type=province&province=all](https://wateroffice.ec.gc.ca/google_map/google_map_e.html?map_type=real_time&search_type=province&province=all)

US gauges: <https://dashboard.waterdata.usgs.gov/app/nwd/?region=lower48>

(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*): N/A

Additional comments: None

(h) What are the main benefits of data exchange on the basin, sub-basin, part of a basin or group of basins? (*please describe*): Useful feedback to IJC.

7. 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 cover?

	<i>Hydrological</i>	<i>Ecological</i>	<i>Chemical</i>
Border surface waters	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Surface waters in the entire basin	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Surface waters on the main watercourse	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Surface waters in part of the basin please describe: Only red river and tributaries	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Transboundary aquifer(s) (connected or unconnected)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Aquifer(s) in the territory of one riparian hydraulically connected to a transboundary river or lake	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

(b) If joint monitoring is carried out, how is this done?

National monitoring stations connected through a network or common stations

*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) Please describe the main achievements regarding joint monitoring, if any: [fill in]

(d) Please describe any difficulties experienced with joint monitoring: N/A

8. Do the riparian States carry out joint assessment of the transboundary basin, sub-basin, part of a basin or group of basins?

Yes /No

*If yes, please provide the date of the last or only assessment, the frequency and scope (e.g., surface waters or groundwaters only, pollution sources, etc.) of the assessment, and assessment methodology applied:* Continuous monitoring of

9. Have the riparian States agreed to use joint water quality standards?

Yes /No

---

*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 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

Other (*please list*): [fill in]

No measures

*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 strategy

Joint disaster risk reduction strategy

Other (*please list*): [fill in]

No measures

*If not, why not? What difficulties does your country face in putting in place such measures?: [fill in]*

12. Are procedures in place for mutual assistance in case of a critical situation?

Yes /No

*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?

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:*

Intergovernmental organizations

Private sectors organizations or associations

Water user groups or associations

Academic or research institutions

Other non-governmental organizations

---

General public	<input checked="" type="checkbox"/>
Other (please specify): [fill in]	
Availability of information to the public	<input checked="" type="checkbox"/>
Consultation on planned measures or river basin management plans <sup>4</sup>	<input type="checkbox"/>
Public involvement	<input checked="" type="checkbox"/>
Other ( <i>please specify</i> ): [fill in]	

---

<sup>4</sup> Or, where applicable, aquifer management plans.

---

**Name of the transboundary basin,-sub-basin, part of a basin or group of basins: Red River**

List of the riparian States: U.S., Canada

**In the case of an aquifer, what is the nature of the aquifer and its relation with the river or lake basin:**

- Unconfined aquifer connected to a river or lake
- Unconfined aquifer with no or limited relation with surface water
- Confined aquifer connected to surface water
- Confined aquifer with no or limited relation with surface water
- Other
- Please describe: [fill in]
- Unknown

**Percentage of your country's territory within the basin, sub-basin, part of a basin or group of basins:**

~90,000 square kilometres, or approximately 86% of a total surface area of 104,117 square kilometers

1. 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?

- 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 riparians

*Please insert the name of the agreement(s) or arrangement(s):* Boundary Waters Treaty of 1909

- Agreement or arrangement is under development
- 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]

**If there is no agreement or arrangement and no joint body or mechanism for the transboundary basin, sub-basin, part of a basin or group of basins then jump to question 4; if there is no agreement or arrangement, but a joint body or mechanism then go to question 3.**

**Questions 2 and 3 to be completed for each bilateral or multilateral agreement or arrangement in force in the transboundary basin, sub-basin, part of a basin or group of basins.**

2. (a) Does this agreement or arrangement specify the area subject to cooperation?

Yes /No

If yes, does it cover the entire basin or group of basins and all riparian States?

Yes /No

Additional explanations?

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Or, if the agreement or arrangement relates to a sub-basin, does it cover the entire sub-basin?

Yes /No

Additional explanations? N/A

Which States (including your own) are bound by the agreement or arrangement?  
(Please list): U.S., Canada

(b) If the agreement or arrangement relates to a river or lake basin or sub-basin, does it also cover aquifers?

Yes /No

If yes, please list the aquifers covered by the agreement or arrangement: N/A

(c) What is the sectoral scope of the agreement or arrangement?

- |                               |                                     |
|-------------------------------|-------------------------------------|
| All water uses                | <input checked="" type="checkbox"/> |
| A single water use or sector  | <input type="checkbox"/>            |
| Several water uses or sectors | <input type="checkbox"/>            |

*If one or several water uses or sectors, please list (check as appropriate):*

**Water uses or sectors**

- |   |                          |
|---|--------------------------|
| Industry                                  | <input type="checkbox"/> |
| Agriculture                               | <input type="checkbox"/> |
| Transport (e.g., navigation)              | <input type="checkbox"/> |
| Households                                | <input type="checkbox"/> |
| Energy: hydropower and other energy types | <input type="checkbox"/> |
| Fisheries                                 | <input type="checkbox"/> |
| Tourism                                   | <input type="checkbox"/> |
| Nature protection                         | <input type="checkbox"/> |
| Other (please list):                      |                          |

(d) What topics or subjects of cooperation are included in the agreement or arrangement?

**Procedural and institutional issues**

- |  |                                     |
|--|-------------------------------------|
| Dispute and conflict prevention and resolution | <input checked="" type="checkbox"/> |
| Institutional cooperation (joint bodies)       | <input checked="" type="checkbox"/> |
| Consultation on planned measures               | <input checked="" type="checkbox"/> |
| Mutual assistance                              | <input type="checkbox"/>            |

**Topics of cooperation**

- |   |                                     |
|---|-------------------------------------|
| Joint vision and management objectives    | <input checked="" type="checkbox"/> |
| Joint significant water management issues | <input type="checkbox"/>            |
| Navigation                                | <input checked="" type="checkbox"/> |
| Human health                              | <input type="checkbox"/>            |



- 
- 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) 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]

(f) What are the main achievements in implementing the agreement or arrangement and what were the keys to achieving such success? [fill in]

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(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*): <https://www.ijc.org/en/who/mission/bwt>

3. Is your country a member of any joint body or mechanism for this agreement or arrangement?

Yes /No

*If no, why not? (please explain):* [fill in]

**Where there is a joint body or mechanism**

(a) If there is a joint body or mechanism, which kind of joint body or mechanism (*please tick one*)?

Plenipotentiaries

Bilateral commission

Basin or similar commission

Expert group meeting or meeting of national focal points

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?

Yes /No

(c) Which States (including your own) are members of the joint body or mechanism? (*Please list*): U.S., Canada

(d) Are there any riparian States that are not members of the joint body or mechanism? (*please list*): N/A

(e) If not all riparian States are members of the joint body or mechanism how does the joint body or mechanism cooperate with them?

No cooperation

They have observer status

Other (*please describe*): N/A

(f) Does the joint body or mechanism have any of the following features (*please tick the ones applicable*)?

A secretariat

*If the secretariat is a permanent one, is it a joint secretariat or does each country host its own secretariat? (Please describe):* [fill in]

A subsidiary body or bodies

*Please list (e.g., working groups on specific topics):* [fill in]

Other features (*please list*): International Board, co-chaired by a representative from each country.

(g) What are the tasks and activities of this joint body or mechanism?<sup>5</sup>

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<sup>5</sup> This may include tasks according to the agreement or tasks added by the joint body, or its

- 
- 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 faces with the operation of the joint body or mechanism, if any?

Governance issues

*Please describe, if any:* [fill in]

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subsidiaries. Both tasks which joint bodies coordinate and tasks which they implement should be included.

---

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*): N/A

(i) Does the joint body or mechanism, or its subsidiary bodies meet regularly?

Yes /No

If yes, how frequently does it meet?

More than once per year

Once per year

Less than once per year

(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?

Yes /No

*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]

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 basins?

Yes /No

*If yes, please provide further details:*

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 regularly exchange information and data with other riparian States in the basin, sub-basin, part of a basin or group of basins?

Yes /No

(b) If yes, how often:

More than once per year

Once per year

Less than once per year

(c) Please describe how information is exchanged (e.g. in connection with meetings of joint bodies): Data is jointly monitored throughout the year, and the data is available to both countries.

(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 exchange: [fill in]

(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:* Canadian gauges:

[https://wateroffice.ec.gc.ca/google\\_map/google\\_map\\_e.html?map\\_type=real\\_time&search\\_type=province&province=all](https://wateroffice.ec.gc.ca/google_map/google_map_e.html?map_type=real_time&search_type=province&province=all)

US gauges: <https://dashboard.waterdata.usgs.gov/app/nwd/?region=lower48>

(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*): N/A

Additional comments: None

(h) What are the main benefits of data exchange on the basin, sub-basin, part of a basin or group of basins? (*please describe*): Useful feedback to IJC.

7. 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 cover?

	<i>Hydrological</i>	<i>Ecological</i>	<i>Chemical</i>
Border surface waters	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Surface waters in the entire basin	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Surface waters on the main watercourse	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Surface waters in part of the basin please describe: Only red river and tributaries	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Transboundary aquifer(s) (connected or unconnected)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Aquifer(s) in the territory of one riparian hydraulically connected to a transboundary river or lake	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

(b) If joint monitoring is carried out, how is this done?

National monitoring stations connected through a network or common stations

*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) Please describe the main achievements regarding joint monitoring, if any: [fill in]
- (d) Please describe any difficulties experienced with joint monitoring: N/A
8. Do the riparian States carry out joint assessment of the transboundary basin, sub-basin, part of a basin or group of basins?
- Yes /No
- If yes, please provide the date of the last or only assessment, the frequency and scope (e.g., surface waters or groundwaters only, pollution sources, etc.) of the assessment, and assessment methodology applied:* Continuous monitoring of
9. Have the riparian States agreed to use joint water quality standards?
- Yes /No
- 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 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
- Other (*please list*): [fill in]
- No measures
- 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 strategy
- Joint disaster risk reduction strategy
- Other (*please list*): [fill in]
- No measures
- If not, why not? What difficulties does your country face in putting in place such measures?:* [fill in]
12. Are procedures in place for mutual assistance in case of a critical situation?
- Yes /No
- If yes, please provide a brief summary:* [fill in]

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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?

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:*

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<sup>6</sup>

Public involvement

Other (please specify): [fill in]

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<sup>6</sup> Or, where applicable, aquifer management plans.



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**Name of the transboundary basin, sub-basin, part of a basin or group of basins:**  
**Columbia River**

List of the riparian States: U.S., Canada

**In the case of an aquifer, what is the nature of the aquifer and its relation with the river or lake basin:**

- Unconfined aquifer connected to a river or lake
- Unconfined aquifer with no or limited relation with surface water
- Confined aquifer connected to surface water
- Confined aquifer with no or limited relation with surface water
- Other
- Please describe: N/A
- Unknown

**Percentage of your country's territory within the basin, sub-basin, part of a basin or group of basins:** N/A

~244,000 square kilometres, or approximately 36% of a total surface area of 668,000 square kilometres, total.

1. 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?

- 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 riparians
- 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, please explain briefly why not and provide information on any plans to address the situation: [fill in]*

**If there is no agreement or arrangement and no joint body or mechanism for the transboundary basin, sub-basin, part of a basin or group of basins then jump to question 4; if there is no agreement or arrangement, but a joint body or mechanism then go to question 3.**

**Questions 2 and 3 to be completed for each bilateral or multilateral agreement or arrangement in force in the transboundary basin, sub-basin, part of a basin or group of basins.**

2. (a) Does this agreement or arrangement specify the area subject to cooperation?

Yes /No

If yes, does it cover the entire basin or group of basins and all riparian States?

Yes /No

Additional explanations?

Or, if the agreement or arrangement relates to a sub-basin, does it cover the entire sub-basin?

---

Yes /No

Additional explanations? N/A

Which States (including your own) are bound by the agreement or arrangement?  
(Please list): U.S., Canada

(b) If the agreement or arrangement relates to a river or lake basin or sub-basin, does it also cover aquifers?

Yes /No

If yes, please list the aquifers covered by the agreement or arrangement: N/A

(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):

(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
- 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) 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]

(f) 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, if applicable*): <https://ijc.org/en/crbc>; <https://ijc.org/en/klbc>; <https://ijc.org/en/olbc>

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3. Is your country a member of any joint body or mechanism for this agreement or arrangement?

Yes /No

*If no, why not? (please explain):* [fill in]

**Where there is a joint body or mechanism**

(a) If there is a joint body or mechanism, which kind of joint body or mechanism (*please tick one*)?

Plenipotentiaries

Bilateral commission

Basin or similar commission

Expert group meeting or meeting of national focal points

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?

Yes /No

(c) Which States (including your own) are members of the joint body or mechanism? (*Please list*): U.S., Canada

(d) Are there any riparian States that are not members of the joint body or mechanism? (*please list*): N/A

(e) If not all riparian States are members of the joint body or mechanism how does the joint body or mechanism cooperate with them?

No cooperation

They have observer status

Other (*please describe*): N/A

(f) Does the joint body or mechanism have any of the following features (*please tick the ones applicable*)?

A secretariat

*If the secretariat is a permanent one, is it a joint secretariat or does each country host its own secretariat? (Please describe):* [fill in]

A subsidiary body or bodies

*Please list (e.g., working groups on specific topics):* A board oversees activities/conditions in the basin, then make recommendations back to the IJC/USG.

Other features (*please list*): International Board, co-chaired by a representative from each country.

(g) What are the tasks and activities of this joint body or mechanism?<sup>7</sup>

Identification of pollution sources

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<sup>7</sup> 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.

- 
- 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 faces with the operation of the joint body or mechanism, if any?
    - 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*): N/A

(i) Does the joint body or mechanism, or its subsidiary bodies meet regularly?

Yes /No

If yes, how frequently does it meet?

More than once per year

Once per year

Less than once per year

(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?

Yes /No

*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]

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 basins?

Yes /No

*If yes, please provide further details:* [fill in]

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 regularly exchange information and data with other riparian States in the basin, sub-basin, part of a basin or group of basins?

Yes /No

- (b) If yes, how often:

More than once per year

Once per year

Less than once per year

- (c) Please describe how information is exchanged (e.g. in connection with meetings of joint bodies): Data is jointly monitored throughout the year, and the data is available to both countries.

- (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 exchange: [fill in]

- (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:* Canadian gauges:

[https://wateroffice.ec.gc.ca/google\\_map/google\\_map\\_e.html?map\\_type=real\\_time&search\\_type=province&province=all](https://wateroffice.ec.gc.ca/google_map/google_map_e.html?map_type=real_time&search_type=province&province=all)

US gauges: <https://dashboard.waterdata.usgs.gov/app/nwd/?region=lower48>

- (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*): N/A

Additional comments: None

(h) What are the main benefits of data exchange on the basin, sub-basin, part of a basin or group of basins? (*please describe*): Useful feedback to IJC.

7. 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 cover?

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	<i>Hydrological</i>	<i>Ecological</i>	<i>Chemical</i>
Border surface waters	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Surface waters in the entire basin	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Surface waters on the main watercourse	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Surface waters in part of the basin please describe: Only red river and tributaries	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Transboundary aquifer(s) (connected or unconnected)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Aquifer(s) in the territory of one riparian hydraulically connected to a transboundary river or lake	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

---

(b) If joint monitoring is carried out, how is this done?

National monitoring stations connected through a network or common stations

*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) Please describe the main achievements regarding joint monitoring, if any: [fill in]
- (d) Please describe any difficulties experienced with joint monitoring: N/A
8. Do the riparian States carry out joint assessment of the transboundary basin, sub-basin, part of a basin or group of basins?

Yes /No

*If yes, please provide the date of the last or only assessment, the frequency and scope (e.g., surface waters or groundwaters only, pollution sources, etc.) of the assessment, and assessment methodology applied: ICRBC 2018 Report to the International Joint Commission, April 2019.*

9. Have the riparian States agreed to use joint water quality standards?

Yes /No

*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? The International Columbia River Board of Control only reports hydrologic conditions to the IJC.*

10. What are the measures 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

Other (please list): [fill in]

No measures

*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 strategy

Joint disaster risk reduction strategy

Other (please list): N/A

No measures

*If not, why not? What difficulties does your country face in putting in place such measures?:*

12. Are procedures in place for mutual assistance in case of a critical situation?

Yes /No

*If yes, please provide a brief summary:*

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?

---

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:*

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<sup>8</sup>

Public involvement

Other (please specify):

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<sup>8</sup> Or, where applicable, aquifer management plans.

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**Name of the transboundary basin,-sub-basin, part of a basin or group of basins: The Great Lakes Basin-St. Lawrence Basin**

List of the riparian States: U.S., Canada

**In the case of an aquifer, what is the nature of the aquifer and its relation with the river or lake basin:**

- Unconfined aquifer connected to a river or lake
- Unconfined aquifer with no or limited relation with surface water
- Confined aquifer connected to surface water
- Confined aquifer with no or limited relation with surface water
- Other
- Please describe: [fill in]
- Unknown

**Percentage of your country's territory within the basin, sub-basin, part of a basin or group of basins:**

~90,000 square kilometres, or approximately 86% of a total surface area of 104,117 square kilometers

1. 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?

- 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 riparians

*Please insert the name of the agreement(s) or arrangement(s)* The International Boundary Waters Treaty

- Agreement or arrangement is under development
- 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]*

**If there is no agreement or arrangement and no joint body or mechanism for the transboundary basin, sub-basin, part of a basin or group of basins then jump to question 4; if there is no agreement or arrangement, but a joint body or mechanism then go to question 3.**

**Questions 2 and 3 to be completed for each bilateral or multilateral agreement or arrangement in force in the transboundary basin, sub-basin, part of a basin or group of basins.**

2. (a) Does this agreement or arrangement specify the area subject to cooperation?

Yes /No

If yes, does it cover the entire basin or group of basins and all riparian States?

Yes /No

Additional explanations?

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Or, if the agreement or arrangement relates to a sub-basin, does it cover the entire sub-basin?

Yes /No

Additional explanations? N/A

Which States (including your own) are bound by the agreement or arrangement?  
(Please list): U.S., Canada

(b) If the agreement or arrangement relates to a river or lake basin or sub-basin, does it also cover aquifers?

Yes /No

If yes, please list the aquifers covered by the agreement or arrangement: N/A

(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):

(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
- 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*): Though the Control Boards can make recommendations for regulations, they cannot themselves create enforceable regulations, per

(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]

(f) What are the main achievements in implementing the agreement or arrangement and what were the keys to achieving such success? [fill in]

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(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]

3. Is your country a member of any joint body or mechanism for this agreement or arrangement?

Yes /No

*If no, why not? (please explain):* [fill in]

**Where there is a joint body or mechanism**

(a) If there is a joint body or mechanism, which kind of joint body or mechanism (*please tick one*)?

Plenipotentiaries

Bilateral commission

Basin or similar commission

Expert group meeting or meeting of national focal points

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?

Yes /No

(c) Which States (including your own) are members of the joint body or mechanism? (*Please list*): U.S., Canada

(d) Are there any riparian States that are not members of the joint body or mechanism? (*please list*): N/A

(e) If not all riparian States are members of the joint body or mechanism how does the joint body or mechanism cooperate with them?

No cooperation

They have observer status

Other (*please describe*): N/A

(f) Does the joint body or mechanism have any of the following features (*please tick the ones applicable*)?

A secretariat

*If the secretariat is a permanent one, is it a joint secretariat or does each country host its own secretariat? (Please describe):* [fill in]

A subsidiary body or bodies

*Please list (e.g., working groups on specific topics):* [fill in]

Other features (*please list*): International Board, co-chaired by a representative from each country.

(g) What are the tasks and activities of this joint body or mechanism?<sup>9</sup>

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<sup>9</sup> This may include tasks according to the agreement or tasks added by the joint body, or its

- 
- 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 faces with the operation of the joint body or mechanism, if any?

Governance issues

*Please describe, if any:* [fill in]

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subsidiaries. Both tasks which joint bodies coordinate and tasks which they implement should be included.

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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*): N/A

(i) Does the joint body or mechanism, or its subsidiary bodies meet regularly?

Yes /No

If yes, how frequently does it meet?

More than once per year

Once per year

Less than once per year

(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?

Yes /No

*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]

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 basins?

Yes X/No

*If yes, please provide further details:* [fill in]

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,



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heavy metals

Water-related species and habitats protection

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

(b) If yes, how often:

More than once per year

Once per year

Less than once per year

(c) Please describe how information is exchanged (e.g. in connection with meetings of joint bodies): Data is jointly monitored throughout the year, and the data is available to both countries.

(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 exchange: [fill in]

(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:* Canadian gauges:

[https://wateroffice.ec.gc.ca/google\\_map/google\\_map\\_e.html?map\\_type=real\\_time&search\\_type=province&province=all](https://wateroffice.ec.gc.ca/google_map/google_map_e.html?map_type=real_time&search_type=province&province=all)

US gauges: <https://dashboard.waterdata.usgs.gov/app/nwd/?region=lower48>

(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*): N/A

Additional comments: None

(h) What are the main benefits of data exchange on the basin, sub-basin, part of a basin or group of basins? (*please describe*): Useful feedback to IJC.

7. 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 cover?

	<i>Hydrological</i>	<i>Ecological</i>	<i>Chemical</i>
Border surface waters	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Surface waters in the entire basin	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Surface waters on the main watercourse	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Surface waters in part of the basin please describe: Only red river and tributaries	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Transboundary aquifer(s) (connected or unconnected)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Aquifer(s) in the territory of one riparian hydraulically connected to a transboundary river or lake	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

(b) If joint monitoring is carried out, how is this done?

National monitoring stations connected through a network or common stations

*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) Please describe the main achievements regarding joint monitoring, if any: [fill in]
- (d) Please describe any difficulties experienced with joint monitoring: N/A
8. Do the riparian States carry out joint assessment of the transboundary basin, sub-basin, part of a basin or group of basins?
- Yes /No
- If yes, please provide the date of the last or only assessment, the frequency and scope (e.g., surface waters or groundwaters only, pollution sources, etc.) of the assessment, and assessment methodology applied:* Continuous monitoring of
9. Have the riparian States agreed to use joint water quality standards?
- Yes /No
- 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 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
- Other (*please list*): [fill in]
- No measures
- 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 strategy
- Joint disaster risk reduction strategy
- Other (*please list*): [fill in]
- No measures
- If not, why not? What difficulties does your country face in putting in place such measures?:* [fill in]
12. Are procedures in place for mutual assistance in case of a critical situation?
- Yes /No
- 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?

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:*

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<sup>10</sup>

Public involvement

Other (please specify): [fill in]

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<sup>10</sup> Or, where applicable, aquifer management plans.

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**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.<sup>11</sup> 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<sup>12</sup> 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.

**Name of the transboundary basin, sub-basin, part of a basin or group of basins: [fill in]**

List of the riparian States: Colorado River

**In the case of an aquifer, what is the nature of the aquifer and its relation with the river or lake basin:**

- Unconfined aquifer connected to a river or lake
- Unconfined aquifer with no or limited relation with surface water
- Confined aquifer connected to surface water
- Confined aquifer with no or limited relation with surface water
- Other
- Please describe: [fill in]
- Unknown

**Percentage of your country's territory within the basin, sub-basin, part of a basin or group of basins: 97%**

1. 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?
- 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 riparians
- Please insert the name of the agreement(s) or arrangement(s) [Treaty Between the United States of America and Mexico Respecting Utilization of Waters of the Colorado and Tijuana Rivers and of the Rio Grande, U.S.-Mex., Feb. 3, 1944, 59 Stat. 1219. Minute 319 Water Conservation and Environmental Protection (2012-2017)]*
- Agreement or arrangement is under development
- No agreement or arrangement

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<sup>11</sup> 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.

<sup>12</sup> 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.

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*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]*

**If there is no agreement or arrangement and no joint body or mechanism for the transboundary basin, sub-basin, part of a basin or group of basins then jump to question 4; if there is no agreement or arrangement, but a joint body or mechanism then go to question 3.**

**Questions 2 and 3 to be completed for each bilateral or multilateral agreement or arrangement in force in the transboundary basin, sub-basin, part of a basin or group of basins.**

2. (a) Does this agreement or arrangement specify the area subject to cooperation?

Yes X /No

If yes, does it cover the entire basin or group of basins and all riparian States?

Yes X/No

Additional explanations? [fill in]

Or, if the agreement or arrangement relates to a sub-basin, does it cover the entire sub-basin?

Yes /No

Additional explanations? [fill in]

Which States (including your own) are bound by the agreement or arrangement?  
(Please list): United States, Mexico

(b) If the agreement or arrangement relates to a river or lake basin or sub-basin, does it also cover aquifers?

Yes /No X

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 X

Agriculture X

Transport (e.g., navigation)

Households X

Energy: hydropower and other energy types

Fisheries

Tourism X

Nature protection X

Other (please list): [fill in]

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(d) What topics or subjects of cooperation are included in the agreement or arrangement?

**Procedural and institutional issues**

Dispute and conflict prevention and resolution	X
Institutional cooperation (joint bodies)	X
Consultation on planned measures	X
Mutual assistance	X

**Topics of cooperation**

Joint vision and management objectives	X
Joint significant water management issues	X
Navigation	<input type="checkbox"/>
Human health	<input type="checkbox"/>
Environmental protection (ecosystem)	X
Water quality	X
Water quantity or allocation	X
Cooperation in addressing floods	X
Cooperation in addressing droughts	X
Climate change adaptation	<input type="checkbox"/>

**Monitoring and exchange**

Joint assessments	X
Data collection and exchange	X
Joint monitoring	X
Maintenance of joint pollution inventories	<input type="checkbox"/>
Elaboration of joint water quality objectives	X
Common early warning and alarm procedures	X
Exchange of experience between riparian States	X
Exchange of information on planned measures	X

**Joint planning and management**

Development of joint regulations on specific topics	X
Development of international or joint river, lake or aquifer basin management or action plans	X
Management of shared infrastructure	X
Development of shared infrastructure	<input type="checkbox"/>
Other ( <i>please list</i> ): [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  | X                        |
| Aligning implementation of agreement or arrangement with regional laws, policies and programmes | X                        |
| Lack of financial resources   | X                        |
| Insufficient human capacity   | X                        |
| Insufficient technical capacity   | <input type="checkbox"/> |
| Tense diplomatic relations  | <input type="checkbox"/> |
| Non-participation of certain riparian countries in the agreement                                | <input type="checkbox"/> |
| No significant difficulties   | <input type="checkbox"/> |
| Other ( <i>please describe</i> ): [fill in]   |                          |

(f) What are the main achievements in implementing the agreement or arrangement and what were the keys to achieving such success? Drought risk management, Salinity and water quality arrangements, Ecological flows.

(g) Please attach a copy of the agreement or arrangement or provide the web address of the document <https://www.usbr.gov/lc/region/pao/pdffiles/mextrety.pdf>, [https://ibwc.gov/Files/Minutes/Minute\\_319.pdf](https://ibwc.gov/Files/Minutes/Minute_319.pdf); <https://ibwc.gov/Files/Minutes/Min323.pdf>

3. Is your country a member of any joint body or mechanism for this agreement or arrangement?

Yes X/No

*If no, why not? (please explain):* [fill in]

**Where there is a joint body or mechanism**

(a) If there is a joint body or mechanism, which kind of joint body or mechanism (*please tick one*)?

- |  |                          |
|--|--------------------------|
| Plenipotentiaries  | <input type="checkbox"/> |
| Bilateral commission                                     | X                        |
| Basin or similar commission                              | <input type="checkbox"/> |
| Expert group meeting or meeting of national focal points | <input type="checkbox"/> |

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?

Yes X/No

(c) Which States (including your own) are members of the joint body or mechanism? : United States. and Mexico

(d) Are there any riparian States that are not members of the joint body or mechanism?: 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?

- |                |                          |
|----------------|--------------------------|
| No cooperation | <input type="checkbox"/> |
|----------------|--------------------------|



- 
- They have observer status
- 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
- If the secretariat is a permanent one, is it a joint secretariat or does each country host its own secretariat? (Please describe):* [fill in]
- A subsidiary body or bodies
- Please list (e.g., working groups on specific topics):*
- Working Groups: Salinity and water quality,  
[https://www.ibwc.gov/EMD/reports\\_studies.html](https://www.ibwc.gov/EMD/reports_studies.html)
- Other features (*please list*): [fill in]
- (g) What are the tasks and activities of this joint body or mechanism?<sup>13</sup>
- 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

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<sup>13</sup> 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.

- 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*):

(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

*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:* Assess and characterizing Extraordinary

Drought

Lack of effective measures

*Please describe, if true:* [fill in]

Unexpected extreme events

*Please describe, if any:* Extraordinary drought

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 regularly?

Yes X/No

If yes, how frequently does it meet?

More than once per year

Once per year

Less than once per year

(j) What are the main achievements with regards to the joint body or mechanism?

In 1889, the United States and Mexico signed the convention that established the International Boundary Commission (IBC) to apply border agreements. The 1944 Water Treaty reconfigured the IBC and expanded its role, creating the

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International Boundary and Water Commission (IBWC). The IBWC is charged with addressing issues that arise during application of the boundary and water treaties. The 1944 Water Treaty established other requirements beyond water distribution obligations. Among other things, the Treaty (1) provided for the construction of certain dams and channels along the rivers; (2) required the IBWC to establish studies and prepare plans for flood control; (3) provided that the IBWC should study and plan for the generation of hydroelectric energy along the rivers; and (4) required the IBWC to establish regulations for the maintenance and operation of reservoirs. Discussion of these treaty requirements is beyond the scope of this report.

The Treaty authorizes the IBWC to develop rules and to issue proposed decisions, called minutes, regarding matters related to the Treaty's execution and interpretation. Once issued, a proposed minute is forwarded within three days to the government of each country for approval. If neither country announces its disapproval within 30 days, the minute is considered adopted. In 1970, the United States and Mexico concluded a treaty (1970 Boundary Treaty) to resolve "all pending boundary differences between the two countries." Under this treaty, portions of the Rio Grande and the Colorado River remain international boundaries between the United States and Mexico. Minutes (e.g. 319, 323 above) to the 1944 Treaty are negotiated through the IBWC.

Minute 242 (Permanent and Definitive Solution to the International Problem of the Salinity of the Colorado River), was signed in 1973. Per Minute 242, the United States agreed to construct additional channels to control salinity, fund cleanup of the Mexicali Valley lands damaged by the accumulation of salts, and keep salinity levels of delivered water below a certain level. Minute 242 remains in force

Minute 309, Volumes of Water Saved with the Modernization and Improved Technology Projects for the Irrigation Districts in the Rio Conchos Basin and Measures for Their Conveyance to the Rio Grande, July 3, 2003, available at <http://www.ibwc.gov/Files/Minutes/Min309.pdf>

Minute 319 was signed on November 20, 2012, and is to be enforced for five years. It allows for temporary adjustments to water deliveries to Mexico based on drought or surplus water conditions, joint investments to create greater environmental protection, measures to incentivize water conservation, and greater water storage for Mexico in upstream reservoirs in the United States. Minute 319 was the result of negotiations between both governments, with input from affected state officials and nongovernmental groups from both countries. Minute 319, when taken together with two prior and related minutes, has been viewed as recognizing environmental uses as a beneficial use for the basin's treaty waters

Key elements of the agreement include:

- extending provisions of Minute 318 (Cooperative Measures to Address the Continued Effects of the April 2010 Earthquake in the Mexicali Valley, Baja, California), to allow Mexico to defer delivery of its Colorado River water allocation while Mexico repairs earthquake-damaged infrastructure;
- delivering additional water (i.e., above the 1.5 million AF annual delivery required by the Treaty) to Mexico when water levels are high in Lake Mead; reducing deliveries to Mexico during water shortage conditions in the Colorado River basin (i.e., Mexico's annual water deliveries would be reduced if Lake Mead elevations indicate shortage conditions, similar to reduction by the U.S. lower basin states);<sup>73</sup>
- creating a mechanism by which U.S. water deliveries to Mexico can be held in United States reservoirs for subsequent delivery;
- continuing to address salinity concerns per Minute 242; and
- implementing a pilot program of jointly funded water efficiency and conservation projects in Mexico to free up water for Colorado River delta pulse flows as well as base flows.

Under the Minute 319 pilot program, stored water was used for a pulse flow from March 23, 2014, to May 18, 2014. The water releases were intended to simulate a spring flood. The high releases meant that, after multiple years of the river not reaching its estuary, the instream flows were sufficient for the river to reconnect with its estuary. The releases and the impacts on instream flow, stream topography, salinity, groundwater, vegetation, birds, and aquatic species were monitored by a binational team of experts

Minute 323 resulted from more than two years of negotiations among federal and state authorities from both governments, with binational input from water users, scientists, academics, and nongovernmental organizations. Minute 323 was signed on September 21, 2017, and it is to be enforced through December 31, 2026. Although Minute 323 is based in part on provisions from Minute 319, Minute 323 also contains additional sections on variability of flows arriving in Mexico and initiates a Binational Water Scarcity Contingency Plan. Minute 323 aims to provide water supply certainty and adequate planning opportunities and is expected to benefit both sides of the border, according to the IBWC. Another major goal of Minute 323 is to establish cooperative efforts to avoid severe water shortages (i.e., amounts *in addition* to the commitments under Minute 319 that were extended in Minute 323). This aim is seen in the Binational Water Scarcity Contingency Plan, under which each country has committed to save specified volumes of water at certain low reservoir conditions.

Minute 323 designates a “Mexican Water Reserve” through which Mexico can delay its water deliveries from the United States and store its delayed deliveries upstream at Lake Mead, thereby increasing the lake’s elevation. Lake Mead elevation is the baseline used for determining shortage conditions and associated water delivery cutbacks for the lower Colorado River basin states of Arizona, California, and Nevada

(k) Did the joint body or mechanism ever invite a non-riparian coastal State to cooperate?

Yes /No

*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?*

Not Applicable/No other riparian states

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 basins?

Yes / No

*If yes, please provide further details: [fill in]*

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 regularly exchange information and data with other riparian States in the basin, sub-basin, part of a basin or group of basins?

Yes /No

(b) If yes, how often:

More than once per year

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Once per year

Less than once per year

(c) Please describe how information is exchanged (e.g. in connection with meetings of joint bodies): Through Waokring Grups and quarterly meetings of the IBWC

(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*):

Other comments, e.g. spatial coverage of data and information exchange: Spatial coverage from Lake Mead tin the US hrough to the Sea of Cortez in Mexico

(e) Is there a shared database or information platform?

Yes X/No

(f) Is the database publicly available?

Yes X/No

*If yes, please provide the web address: [ibwc.org](http://ibwc.org)*

(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]

Additional comments: [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*): Coordinated management and execution of Minute agreements

7. Do the riparian States carry out joint monitoring in the transboundary basin, sub-basin, part of a basin or group of basins?

Yes X/No

(a) If yes, what does the joint monitoring cover?

	<i>Hydrological</i>	<i>Ecological</i>	<i>Chemical</i>
Border surface waters	X	X	X
Surface waters in the entire basin	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Surface waters on the main watercourse	X	X	X
Surface waters in part of the basin please describe From Lake Mead to the Sea of Cortez	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Transboundary aquifer(s) (connected or unconnected)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Aquifer(s) in the territory of one riparian hydraulically connected to a transboundary river or lake	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

(b) If joint monitoring is carried out, how is this done?

National monitoring stations connected through a network or common stations

*Please describe:*

Joint and agreed methodologies

*Please describe: Through Hydrology and Water Quality Working Groups*

Joint sampling

*Please describe:*

Common monitoring network

*Please describe: [fill in]*

Common agreed parameters

*Please describe: [fill in]*

(c) Please describe the main achievements regarding joint monitoring, if any: [fill in]

(d) Please describe any difficulties experienced with joint monitoring: Mainatining climate, streamflow, and weather monitoring stations

8. Do the riparian States carry out joint assessment of the transboundary basin, sub-basin, part of a basin or group of basins?

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Yes X/No

*If yes, please provide the date of the last or only assessment, the frequency and scope (e.g., surface waters or groundwaters only, pollution sources, etc.) of the assessment, and assessment methodology applied: [fill in]*

9. Have the riparian States agreed to use joint water quality standards?

Yes X/No

*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?*

10. What are the measures 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

Other (please list): [fill in]

No measures

*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 strategy

Joint disaster risk reduction strategy

Other (please list): [fill in]

No measures

*If not, why not? What difficulties does your country face in putting in place such measures?: [fill in]*

12. Are procedures in place for mutual assistance in case of a critical situation?

Yes X/No

*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?

Yes X/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  | <input type="checkbox"/>            |
| Private sectors organizations or associations                                  | <input checked="" type="checkbox"/> |
| Water user groups or associations  | <input checked="" type="checkbox"/> |
| Academic or research institutions  | <input type="checkbox"/>            |
| Other non-governmental organizations   | <input type="checkbox"/>            |
| General public   | <input type="checkbox"/>            |
| Other (please specify): [fill in]  |                                     |
| Availability of information to the public                                      | <input checked="" type="checkbox"/> |
| Consultation on planned measures or river basin management plans <sup>14</sup> | <input checked="" type="checkbox"/> |
| Public involvement   | <input checked="" type="checkbox"/> |
| Other ( <i>please specify</i> ): [fill in]                                     |                                     |

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<sup>14</sup> Or, where applicable, aquifer management plans.



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**Name of the transboundary basin,-sub-basin, part of a basin or group of basins: [fill in]**

List of the riparian States: Rio Grande /Rio Bravo

**In the case of an aquifer, what is the nature of the aquifer and its relation with the river or lake basin:**

- Unconfined aquifer connected to a river or lake
- Unconfined aquifer with no or limited relation with surface water
- Confined aquifer connected to surface water
- Confined aquifer with no or limited relation with surface water
- Other
- Please describe: [fill in]
- Unknown

**Percentage of your country's territory within the basin, sub-basin, part of a basin or group of basins: 50%**

1. 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?

- 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 riparians

*Please insert the name of the agreement(s) or arrangement(s) [*

Convention of May 21, 1906, on the Equitable Distribution of the Waters of the Rio Grande, at <http://www.ibwc.gov/Files/1906Conv.pdf>

Treaty Between the United States of America and Mexico Respecting Utilization of Waters of the Colorado and Tijuana Rivers and of the Rio Grande, U.S.-Mex., Feb. 3, 1944, 59 Stat. 1219]

- Agreement or arrangement is under development
- 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]*

**If there is no agreement or arrangement and no joint body or mechanism for the transboundary basin, sub-basin, part of a basin or group of basins then jump to question 4; if there is no agreement or arrangement, but a joint body or mechanism then go to question 3.**

**Questions 2 and 3 to be completed for each bilateral or multilateral agreement or arrangement in force in the transboundary basin, sub-basin, part of a basin or group of basins.**

2. (a) Does this agreement or arrangement specify the area subject to cooperation?

Yes X /No

If yes, does it cover the entire basin or group of basins and all riparian States?

Yes X/No

Additional explanations? [fill in]

---

Or, if the agreement or arrangement relates to a sub-basin, does it cover the entire sub-basin?

Yes /No

Additional explanations? [fill in]

Which States (including your own) are bound by the agreement or arrangement?  
(Please list): United States, Mexico

(b) If the agreement or arrangement relates to a river or lake basin or sub-basin, does it also cover aquifers?

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 agreement or arrangement?

**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)	X
Water quality	X
Water quantity or allocation	X
Cooperation in addressing floods	X
Cooperation in addressing droughts	X
Climate change adaptation	<input type="checkbox"/>

**Monitoring and exchange**

Joint assessments	X
Data collection and exchange	X
Joint monitoring	X
Maintenance of joint pollution inventories	<input type="checkbox"/>
Elaboration of joint water quality objectives	X
Common early warning and alarm procedures	X
Exchange of experience between riparian States	X
Exchange of information on planned measures	X

**Joint planning and management**

Development of joint regulations on specific topics	X
Development of international or joint river, lake or aquifer basin management or action plans	X
Management of shared infrastructure	X
Development of shared infrastructure	<input type="checkbox"/>
Other ( <i>please list</i> ): [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	X
Aligning implementation of agreement or arrangement with regional laws, policies and programmes	X
Lack of financial resources	X
Insufficient human capacity	X
Insufficient technical capacity	<input type="checkbox"/>
Tense diplomatic relations	<input type="checkbox"/>
Non-participation of certain riparian countries in the agreement	<input type="checkbox"/>
No significant difficulties	<input type="checkbox"/>
Other ( <i>please describe</i> ): [fill in]	

(f) What are the main achievements in implementing the agreement or arrangement and what were the keys to achieving such success? Drought risk management, Salinity and water quality arrangements, Ecological flows.

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(g) Please attach a copy of the agreement or arrangement or provide the web address of the document <https://www.usbr.gov/lc/region/pao/pdfiles/mextrety.pdf>, [https://ibwc.gov/Files/Minutes/Minute\\_319.pdf](https://ibwc.gov/Files/Minutes/Minute_319.pdf); <https://ibwc.gov/Files/Minutes/Min323.pdf>

3. Is your country a member of any joint body or mechanism for this agreement or arrangement?

Yes X/No

*If no, why not? (please explain):* [fill in]

**Where there is a joint body or mechanism**

(a) If there is a joint body or mechanism, which kind of joint body or mechanism (*please tick one*)?

Plenipotentiaries

Bilateral commission X

Basin or similar commission

Expert group meeting or meeting of national focal points

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?

Yes X/No

(c) Which States (including your own) are members of the joint body or mechanism? : United States. and Mexico

(d) Are there any riparian States that are not members of the joint body or mechanism?: 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?

No cooperation

They have observer status

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 X

*If the secretariat is a permanent one, is it a joint secretariat or does each country host its own secretariat? (Please describe):* [fill in]

A subsidiary body or bodies

*Please list (e.g., working groups on specific topics):*

Working Groups: Salinity and water quality,

[https://www.ibwc.gov/EMD/reports\\_studies.html](https://www.ibwc.gov/EMD/reports_studies.html)

Other features (*please list*): [fill in]

- 
- (g) What are the tasks and activities of this joint body or mechanism?<sup>15</sup>
- |   |                               |
|---|-------------------------------|
| Identification of pollution sources   | X                             |
| Data collection and exchange  | X                             |
| Joint monitoring  | X                             |
| Maintenance of joint pollution inventories  | <input type="checkbox"/>      |
| Setting emission limits   | <input type="checkbox"/>      |
| Elaboration of joint water quality objectives   | X                             |
| Management and prevention of flood or drought risks   | X                             |
| Preparedness for extreme events, e.g., common early warning and alarm procedures                  | <input type="checkbox"/>      |
| Surveillance and early warning of water related disease   | <input type="checkbox"/>      |
| Water allocation and/or flow regulation   | X                             |
| Policy development  | X                             |
| Control of implementation   | <input type="checkbox"/>      |
| Exchange of experience between riparian States  | X                             |
| Exchange of information on existing and planned uses of water and related installations           | X<br><input type="checkbox"/> |
| Settling of differences and conflicts   | X                             |
| Consultations on planned measures   | <input type="checkbox"/>      |
| Exchange of information on best available technology  | <input type="checkbox"/>      |
| Participation in transboundary EIA  | X                             |
| Development of river, lake or aquifer basin management or action plans                            | <input type="checkbox"/>      |
| Management of shared infrastructure   | X                             |
| Addressing hydromorphological alterations   | <input type="checkbox"/>      |
| Climate change adaptation   | <input type="checkbox"/>      |
| Joint communication strategy  | <input type="checkbox"/>      |
| Basin-wide or joint public participation and consultation of, for example, basin management plans | X                             |
| Joint resources to support transboundary cooperation  | X                             |
| Capacity-building   | <input type="checkbox"/>      |
- Any other tasks (*please list*):

- (h) What are the main difficulties and challenges that your country faces with the operation of the joint body or mechanism, if any?

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<sup>15</sup> 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 X
  - Please describe, if true:* [fill in]
  - Lack of mechanism for implementing measures
  - Please describe, if true:* Assess and characterizeng Extraordinary
  - Drought
  - Lack of effective measures X
  - Please describe, if true:* [fill in]
  - Unexpected extreme events X
  - Please describe, if any:* Extraordinary drought
  - 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 regularly?

Yes X/No

If yes, how frequently does it meet?

- More than once per year X
- Once per year
- Less than once per year

(j) What are the main achievements with regards to the joint body or mechanism?

In 1889, the United States and Mexico signed the convention that established the International Boundary Commission (IBC) to apply border agreements. The 1944 Water Treaty reconfigured the IBC and expanded its role, creating the International Boundary and Water Commission (IBWC). The IBWC is charged with addressing issues that arise during application of the boundary and water treaties. The 1944 Water Treaty established other requirements beyond water distribution obligations. Among other things, the Treaty (1) provided for the construction of certain dams and channels along the rivers; (2) required the IBWC to establish studies and prepare plans for flood control (3) provided that the IBWC should study and plan for the generation of hydroelectric energy along the rivers; and (4) required the IBWC to establish regulations for the maintenance and operation of reservoirs. Discussion of these treaty requirements is beyond the scope of this report.

The Treaty authorizes the IBWC to develop rules and to issue proposed decisions, called minutes, regarding matters related to the Treaty's execution and interpretation. Once issued, a proposed minute is forwarded within three days to the government of each country for approval. If neither country announces its disapproval within 30 days, the minute is considered adopted. In 1970, the United States and Mexico concluded a treaty (1970 Boundary Treaty) to resolve "all pending boundary differences between the two countries." Under this treaty, portions of the Rio Grande and the Colorado River remain international boundaries between the United States and Mexico. Minutes (e.g. 319, 323 above) to the 1944 Treaty are negotiated through the IBWC

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(k) Did the joint body or mechanism ever invite a non-riparian coastal State to cooperate?

Yes /No X

*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?*

Not Applicable/No other riparian states

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 basins?

Yes /No

*If yes, please provide further details: [fill in]*

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 regularly exchange information and data with other riparian States in the basin, sub-basin, part of a basin or group of basins?

Yes X/No

(b) If yes, how often:

More than once per year X

Once per year

Less than once per year

(c) Please describe how information is exchanged (e.g. in connection with meetings of joint bodies): Through Waokring Grups and quarterly meetings of the IBWC

(d) If yes, on what subjects are information and data exchanged?

Environmental conditions X

Research activities and application of best available techniques X

Emission monitoring data

Planned measures taken to prevent, control or reduce transboundary impacts X

Point source pollution sources X

Diffuse pollution sources X

Existing hydromorphological alterations (dams, etc.) X

- 
- Flows or water levels (including groundwater levels) X
  - Water abstractions X
  - Climatological information X
  - Future planned measures with transboundary impacts, such as infrastructure development X

Other subjects (*please list*):

Other comments, e.g. spatial coverage of data and information exchange:  
 Spatial coverage from Lake Mead in the US through to the Sea of Cortez in Mexico

(e) Is there a shared database or information platform?

Yes X/No

(f) Is the database publicly available?

Yes X/No

*If yes, please provide the web address: [ibwc.org](http://ibwc.org)*

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

Frequency of exchanges

Timing of exchanges

Comparability of data and information X

Limited spatial coverage X

Inadequate resources (technical and/or financial)

Other (*please describe*): [fill in]

Additional comments: [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*): Coordinated management and execution of Minute agreements

7. Do the riparian States carry out joint monitoring in the transboundary basin, sub-basin, part of a basin or group of basins?

Yes X/No

(a) If yes, what does the joint monitoring cover?

	<i>Hydrological</i>	<i>Ecological</i>	<i>Chemical</i>
Border surface waters	X	X	X
Surface waters in the entire basin	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Surface waters on the main watercourse	X	X	X
Surface waters in part of the basin please describe From Lake Mead to the Sea of Cortez	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



	<i>Hydrological</i>	<i>Ecological</i>	<i>Chemical</i>
Transboundary aquifer(s) (connected or unconnected)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Aquifer(s) in the territory of one riparian hydraulically connected to a transboundary river or lake	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

(b) If joint monitoring is carried out, how is this done?

National monitoring stations connected through a network or common stations

*Please describe:*

Joint and agreed methodologies

*Please describe: Through Hydrology and Water Quality Working Groups*

Joint sampling

*Please describe:*

Common monitoring network

*Please describe:* [fill in]

Common agreed parameters

*Please describe:* [fill in]

(c) Please describe the main achievements regarding joint monitoring, if any: [fill in]

(d) Please describe any difficulties experienced with joint monitoring: Maintaining climate, streamflow, and weather monitoring stations

8. Do the riparian States carry out joint assessment of the transboundary basin, sub-basin, part of a basin or group of basins?

Yes X/No

*If yes, please provide the date of the last or only assessment, the frequency and scope (e.g., surface waters or groundwaters only, pollution sources, etc.) of the assessment, and assessment methodology applied: [fill in]*

9. Have the riparian States agreed to use joint water quality standards?

Yes X/No

*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?*

10. What are the measures implemented to prevent or limit the transboundary impact of accidental pollution?

Notification and communication X

Coordinated or joint early warning or alarm system for accidental water pollution X

Other (*please list*): [fill in]

- 
- No measures
- 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 strategy
- Joint disaster risk reduction strategy
- Other (*please list*): [fill in]
- No measures
- If not, why not? What difficulties does your country face in putting in place such measures?:* [fill in]
12. Are procedures in place for mutual assistance in case of a critical situation?
- Yes X/No
- 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?
- Yes X/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<sup>16</sup>

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<sup>16</sup> Or, where applicable, aquifer management plans.

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Public involvement

X

Other (*please specify*): [fill in]

---

**Name of the transboundary basin,-sub-basin, part of a basin or group of basins: [fill in]**

List of the riparian States: Tijuana

**In the case of an aquifer, what is the nature of the aquifer and its relation with the river or lake basin:**

- Unconfined aquifer connected to a river or lake
- Unconfined aquifer with no or limited relation with surface water
- Confined aquifer connected to surface water
- Confined aquifer with no or limited relation with surface water
- Other
- Please describe: [fill in]
- Unknown

**Percentage of your country's territory within the basin, sub-basin, part of a basin or group of basins: 25%**

1. 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?

- 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 riparians

*Please insert the name of the agreement(s) or arrangement(s) [*

Treaty Between the United States of America and Mexico Respecting Utilization of Waters of the Colorado and Tijuana Rivers and of the Rio Grande, U.S.-Mex., Feb. 3, 1944, 59 Stat. 1219.

Minute 320 General Framework for Binational Cooperation on Transboundary Issues in Tijuana River Basin]

- Agreement or arrangement is under development
- 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]*

**If there is no agreement or arrangement and no joint body or mechanism for the transboundary basin, sub-basin, part of a basin or group of basins then jump to question 4; if there is no agreement or arrangement, but a joint body or mechanism then go to question 3.**

**Questions 2 and 3 to be completed for each bilateral or multilateral agreement or arrangement in force in the transboundary basin, sub-basin, part of a basin or group of basins.**

2. (a) Does this agreement or arrangement specify the area subject to cooperation?

Yes X /No

If yes, does it cover the entire basin or group of basins and all riparian States?

Yes X/No

Additional explanations? [fill in]

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Or, if the agreement or arrangement relates to a sub-basin, does it cover the entire sub-basin?

Yes /No

Additional explanations? [fill in]

Which States (including your own) are bound by the agreement or arrangement?  
(Please list): United States, Mexico

(b) If the agreement or arrangement relates to a river or lake basin or sub-basin, does it also cover aquifers?

Yes /No X

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 X
- Agriculture X
- Transport (e.g., navigation)
- Households X
- Energy: hydropower and other energy types
- Fisheries
- Tourism X
- Nature protection X
- Other (please list): [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 X
- Institutional cooperation (joint bodies) X
- Consultation on planned measures X
- Mutual assistance X

**Topics of cooperation**

- Joint vision and management objectives X
- Joint significant water management issues X
- Navigation
- Human health

---

Environmental protection (ecosystem)	X
Water quality	X
Water quantity or allocation	X
Cooperation in addressing floods	X
Cooperation in addressing droughts	X
Climate change adaptation	<input type="checkbox"/>

**Monitoring and exchange**

Joint assessments	X
Data collection and exchange	X
Joint monitoring	X
Maintenance of joint pollution inventories	<input type="checkbox"/>
Elaboration of joint water quality objectives	X
Common early warning and alarm procedures	X
Exchange of experience between riparian States	X
Exchange of information on planned measures	X

**Joint planning and management**

Development of joint regulations on specific topics	X
Development of international or joint river, lake or aquifer basin management or action plans	X
Management of shared infrastructure	X
Development of shared infrastructure	<input type="checkbox"/>
Other ( <i>please list</i> ): [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	X
Aligning implementation of agreement or arrangement with regional laws, policies and programmes	X
Lack of financial resources	X
Insufficient human capacity	X
Insufficient technical capacity	<input type="checkbox"/>
Tense diplomatic relations	<input type="checkbox"/>
Non-participation of certain riparian countries in the agreement	<input type="checkbox"/>
No significant difficulties	<input type="checkbox"/>
Other ( <i>please describe</i> ): [fill in]	

(f) What are the main achievements in implementing the agreement or arrangement and what were the keys to achieving such success? Drought risk management, Salinity and water quality arrangements, Ecological flows.

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(g) Please attach a copy of the agreement or arrangement or provide the web address of the document <https://www.usbr.gov/lc/region/pao/pdfiles/mextrety.pdf>, [https://ibwc.gov/Files/Minutes/Minute\\_319.pdf](https://ibwc.gov/Files/Minutes/Minute_319.pdf); <https://ibwc.gov/Files/Minutes/Min323.pdf>

3. Is your country a member of any joint body or mechanism for this agreement or arrangement?

Yes X/No

*If no, why not? (please explain):* [fill in]

**Where there is a joint body or mechanism**

(a) If there is a joint body or mechanism, which kind of joint body or mechanism (*please tick one*)?

Plenipotentiaries

Bilateral commission X

Basin or similar commission

Expert group meeting or meeting of national focal points

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?

Yes X/No

(c) Which States (including your own) are members of the joint body or mechanism? : United States. and Mexico

(d) Are there any riparian States that are not members of the joint body or mechanism?: 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?

No cooperation

They have observer status

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 X

*If the secretariat is a permanent one, is it a joint secretariat or does each country host its own secretariat? (Please describe):* [fill in]

A subsidiary body or bodies

*Please list (e.g., working groups on specific topics):*

Working Groups: Salinity and water quality,

[https://www.ibwc.gov/EMD/reports\\_studies.html](https://www.ibwc.gov/EMD/reports_studies.html)

Other features (*please list*): [fill in]

- 
- (g) What are the tasks and activities of this joint body or mechanism?<sup>17</sup>
- |   |                               |
|---|-------------------------------|
| Identification of pollution sources   | X                             |
| Data collection and exchange  | X                             |
| Joint monitoring  | X                             |
| Maintenance of joint pollution inventories  | <input type="checkbox"/>      |
| Setting emission limits   | <input type="checkbox"/>      |
| Elaboration of joint water quality objectives   | X                             |
| Management and prevention of flood or drought risks   | X                             |
| Preparedness for extreme events, e.g., common early warning and alarm procedures                  | <input type="checkbox"/>      |
| Surveillance and early warning of water related disease   | <input type="checkbox"/>      |
| Water allocation and/or flow regulation   | X                             |
| Policy development  | X                             |
| Control of implementation   | <input type="checkbox"/>      |
| Exchange of experience between riparian States  | X                             |
| Exchange of information on existing and planned uses of water and related installations           | X<br><input type="checkbox"/> |
| Settling of differences and conflicts   | X                             |
| Consultations on planned measures   | <input type="checkbox"/>      |
| Exchange of information on best available technology  | <input type="checkbox"/>      |
| Participation in transboundary EIA  | X                             |
| Development of river, lake or aquifer basin management or action plans                            | <input type="checkbox"/>      |
| Management of shared infrastructure   | X                             |
| Addressing hydromorphological alterations   | <input type="checkbox"/>      |
| Climate change adaptation   | <input type="checkbox"/>      |
| Joint communication strategy  | <input type="checkbox"/>      |
| Basin-wide or joint public participation and consultation of, for example, basin management plans | X                             |
| Joint resources to support transboundary cooperation  | X                             |
| Capacity-building   | <input type="checkbox"/>      |
- Any other tasks (*please list*):

- (h) What are the main difficulties and challenges that your country faces with the operation of the joint body or mechanism, if any?

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<sup>17</sup> 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 X  
*Please describe, if true:* [fill in]
  - Lack of mechanism for implementing measures   
*Please describe, if true:* Assess and characterizing Extraordinary
  - Drought
  - Lack of effective measures X  
*Please describe, if true:* [fill in]
  - Unexpected extreme events X  
*Please describe, if any:* Extraordinary drought
  - 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 regularly?

Yes X/No

If yes, how frequently does it meet?

- More than once per year X
- Once per year
- Less than once per year

(j) What are the main achievements with regards to the joint body or mechanism?

In 1889, the United States and Mexico signed the convention that established the International Boundary Commission (IBC) to apply border agreements. The 1944 Water Treaty reconfigured the IBC and expanded its role, creating the International Boundary and Water Commission (IBWC). The IBWC is charged with addressing issues that arise during application of the boundary and water treaties. The 1944 Water Treaty established other requirements beyond water distribution obligations. Among other things, the Treaty (1) provided for the construction of certain dams and channels along the rivers; (2) required the IBWC to establish studies and prepare plans for flood control; (3) provided that the IBWC should study and plan for the generation of hydroelectric energy along the rivers; and (4) required the IBWC to establish regulations for the maintenance and operation of reservoirs. Discussion of these treaty requirements is beyond the scope of this report.

The Treaty authorizes the IBWC to develop rules and to issue proposed decisions, called minutes, regarding matters related to the Treaty's execution and interpretation. Once issued, a proposed minute is forwarded within three days to the government of each country for approval. If neither country announces its disapproval within 30 days, the minute is considered adopted. Minute 320 established an inclusive process under the framework of the International Boundary and Water Commission, United States and Mexico (IBWC) to obtain advice and recommendations from stakeholder groups on transboundary issues in the Tijuana River Basin and to coordinate the identification and implementation of cooperative measures that are jointly determined to be of common interest and benefit to residents on both sides of the border. The Minute established a Binational Core Group (BCG) that serves as a clearinghouse for the consideration and recommendation of cooperative measures in the Tijuana River basin on Water quality, sediment and solid waste

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(k) Did the joint body or mechanism ever invite a non-riparian coastal State to cooperate?

Yes /No X

*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?*

Not Applicable/No other riparian states

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 basins?

Yes /No

*If yes, please provide further details: [fill in]*

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 regularly exchange information and data with other riparian States in the basin, sub-basin, part of a basin or group of basins?

Yes X/No

(b) If yes, how often:

More than once per year X

Once per year

Less than once per year

(c) Please describe how information is exchanged (e.g. in connection with meetings of joint bodies): Through Waokring Grups and quarterly meetings of the IBWC

(d) If yes, on what subjects are information and data exchanged?

Environmental conditions X

Research activities and application of best available techniques X

Emission monitoring data

Planned measures taken to prevent, control or reduce transboundary impacts X

Point source pollution sources X

Diffuse pollution sources X

Existing hydromorphological alterations (dams, etc.) X

- 
- Flows or water levels (including groundwater levels) X
  - Water abstractions X
  - Climatological information X
  - Future planned measures with transboundary impacts, such as infrastructure development X

Other subjects (*please list*):

Other comments, e.g. spatial coverage of data and information exchange:  
 Spatial coverage from Lake Mead tin the US hrough to the Sea of Cortez in Mexico

(e) Is there a shared database or information platform?

Yes X/No

(f) Is the database publicly available?

Yes X/No

*If yes, please provide the web address: [ibwc.org](http://ibwc.org)*

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

Frequency of exchanges

Timing of exchanges

Comparability of data and information X

Limited spatial coverage

Inadequate resources (technical and/or financial)

Other (*please describe*): [fill in]

Additional comments: [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*): Coordinated management and execution of Minute agreements

7. Do the riparian States carry out joint monitoring in the transboundary basin, sub-basin, part of a basin or group of basins?

Yes X/No

(a) If yes, what does the joint monitoring cover?

	<i>Hydrological</i>	<i>Ecological</i>	<i>Chemical</i>
Border surface waters	X	X	X
Surface waters in the entire basin	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Surface waters on the main watercourse	X	X	X
Surface waters in part of the basin please describe From Lake Mead to the Sea of Cortez	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	<i>Hydrological</i>	<i>Ecological</i>	<i>Chemical</i>
Transboundary aquifer(s) (connected or unconnected)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Aquifer(s) in the territory of one riparian hydraulically connected to a transboundary river or lake	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

(b) If joint monitoring is carried out, how is this done?

National monitoring stations connected through a network or common stations

*Please describe:*

Joint and agreed methodologies

*Please describe: Through Hydrology and Water Quality Working Groups*

Joint sampling

*Please describe:*

Common monitoring network

*Please describe:* [fill in]

Common agreed parameters

*Please describe:* [fill in]

(c) Please describe the main achievements regarding joint monitoring, if any: [fill in]

(d) Please describe any difficulties experienced with joint monitoring: Maintaining climate, streamflow, and weather monitoring stations

8. Do the riparian States carry out joint assessment of the transboundary basin, sub-basin, part of a basin or group of basins?

Yes X/No

*If yes, please provide the date of the last or only assessment, the frequency and scope (e.g., surface waters or groundwaters only, pollution sources, etc.) of the assessment, and assessment methodology applied:* [fill in]

9. Have the riparian States agreed to use joint water quality standards?

Yes X/No

*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?*

10. What are the measures implemented to prevent or limit the transboundary impact of accidental pollution?

Notification and communication X

Coordinated or joint early warning or alarm system for accidental water pollution X

Other (*please list*): [fill in]

- 
- No measures
- 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 X
- Coordinated or joint alarm system for floods X
- Coordinated or joint alarm system for droughts X
- 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 putting in place such measures?:* [fill in]
12. Are procedures in place for mutual assistance in case of a critical situation?
- Yes X/No
- 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?
- Yes X/No
- If yes, how? (please tick all applicable)*
- Stakeholders have observer status in a joint body or mechanism X
- Stakeholders have an advisory role in the joint body X
- 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 X
- Water user groups or associations X
- Academic or research institutions
- Other non-governmental organizations
- General public
- Other (*please specify*): [fill in]
- Availability of information to the public X
- Consultation on planned measures or river basin management plans<sup>18</sup> X

---

<sup>18</sup> Or, where applicable, aquifer management plans.

Public involvement

X

Other (*please specify*): [fill in]

**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.

1. (a) Does your country's national legislation, policies, action plans and strategies refer to measures to prevent, control and reduce any transboundary impact?

Yes X/No

*If yes, please briefly describe the main national laws, policies, action plans and strategies [fill in]*

- (b) Does your country's legislation provide for the following principles?

Precautionary principle Yes /No X

Polluter pays principle Yes /No X

Sustainable development Yes X/No

User pays principle Yes /No X

*If yes, please briefly describe how these principles are implemented at the national level: Environmental water rights under the US-Mexico Water Treaty*

- (c) Does your country have a national licensing or permitting system for wastewater discharges and other point source pollution? (e.g., in industry, mining, energy, municipal, wastewater management or other sectors)?

Yes X/No

*If yes, for which sectors?*

Industry X

Mining X

Energy X

Municipal

Livestock raising

Aquaculture

Other (please list): [fill in]

*Please briefly describe the licensing or permitting system, indicating whether the system provides for setting emission limits based on best available technology?*

*If yes, for which sectors? (please list): [fill in]*

*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: [fill in]*

---

(d) Are the authorized discharges monitored and controlled?

Yes X/No

*If yes, how? (Please tick the ones applicable):*

Monitoring of discharges X

Monitoring of physical and chemical impacts on water X

Monitoring of ecological impacts on water X

Conditions on permits

Inspectorate

Other means (*please list*): [fill in]

*If your country does not have a discharge monitoring system, please explain why not or provide information if there are plans to introduce a discharge monitoring system:*  
[fill in]

(e) What are the main measures which your country takes to reduce diffuse sources of water pollution on transboundary waters (e.g., from agriculture, transport, forestry or aquaculture)? The measures listed below relate to agriculture, but other sectors may be more significant. Please be sure to include these under "others":

**Legislative measures**

Norm for uses of fertilizers

Norms for uses of manure

Permitting system

Bans on or norms for use of pesticides X

Others (*please list*): Salinity

**Economic and financial measures**

Monetary incentives X

Environmental taxes (such as fertilizer taxes)

Others (*please list*): [fill in]

**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

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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 water resources allocation and use efficiency?

*Please tick as appropriate (not all might be relevant)*

A regulatory system regarding water abstraction	X
Monitoring and control of abstractions	X
Water rights are defined	X
Water allocation priorities are listed	X
Water-saving technologies	<input type="checkbox"/>
Advanced irrigation techniques	<input type="checkbox"/>
Demand management activities	X
Other means ( <i>please list</i> )	<input type="checkbox"/>

(g) Does your country apply the ecosystems approach?

Yes /No X

*If yes, please describe how:* [fill in]

(h) Does your country take specific measures to prevent the pollution of groundwaters?

Yes /No X

*If yes, please briefly describe the most important measures:* [fill in]

2. Do your national laws require transboundary environmental impact assessment (EIA)?

Yes X/No

*If yes, please briefly describe the legislative basis, and any related implementing procedures.* [fill in]

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

#### IV. Final questions

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

Differences between national administrative and legal frameworks	X
Lack of relevant data and information	X
Difficulties in data and information exchange	X
Sectoral fragmentation at the national level	X
Language barrier	<input type="checkbox"/>
Resource constraints	X
Environmental pressures, e.g. extreme events	X



- 
- Sovereignty concerns X
- Please list other challenges and/or provide further details: [fill in]
2. What have been the main achievements in-cooperating on transboundary waters?
- Improved water management X
- Enhanced regional integration, i.e. beyond water X
- Adoption of cooperative arrangements X
- Adoption of joint plans and programmes X
- Long-lasting and sustained cooperation X
- Financial support for joint activities X
- Stronger political will for transboundary water cooperation X
- Better knowledge and understanding X
- Dispute avoidance X
- Stakeholder engagement X
- Please list other achievements, keys to achieving success, and/or provide concrete examples: [fill in]
3. Please indicate which institutions were consulted during the completion of the questionnaire
- Joint body or mechanism X
- Other riparian or aquifer countries X
- National water management authority X
- Environment agency/ authority X
- Basin authority (national) X
- Local or provincial government
- Geological survey (national) X
- Non-water specific ministries, e.g. foreign affairs, finance, forestry and energy
- Civil society organizations X
- Water user associations X
- Private sector
- Other (please list): [fill in]
- Please briefly describe the process by which the questionnaire was completed: [fill in]
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*): Roger S. Pulwarty and Elizabeth Ericson
- Date: 10 Feb 2021 Signature: [fill in]

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