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

File reference: BAFU-061.2-03-09.4-01-757
Business case:
Your reference:
Berne, 30 June 2020

Switzerland : Reporting under the Water Convention and the indicator 6.5.2 of the SDG 6

Dear Executive Secretary,

On behalf of the Federal Councillor, Mrs S. Sommaruga, I thank you for your letter of 18 February 2020, inviting Switzerland to take part into second reporting exercise under the Convention on the Protection and Use of Transboundary Watercourses and International Lakes (Water Convention) and in the monitoring of the indicator 6.5.2 under the SDG 6.

I have the pleasure to send you the report of Switzerland to the Water Convention and the SDG 6. Switzerland, as a member of the Bureau, is looking forward to examining the results of this important exercise. We are fully committed to the implementation of the Water convention and are convinced that the broader data basis is also contributing to the successful implementation of SDG 6.

Sincerely Yours

Federal Office for the Environment
The Head of the International Affairs Division

Franz Xaver Perrez
Ambassador

Enclosure(s): Report of Switzerland to the Water Convention and the SDG 6/indicator 6.5.2
Copy to:
- Permanent Mission of Switzerland to WTO and EFTA, Ambassador Didier Chambovey
- OFEV: PFR, SIK, SCF, MUS, US, SZZ, Michael Sinreich, Petra Schmocker-Fakel
Madam,

I have the pleasure to send you the completed report of Switzerland for the Water Convention and the indicator 6.5.2, following the questions of your mail of 8 December 2020.

I would like to thank you for the excellent work of the Convention and I look forward towards the analysis of this important venture.

Sincerely Yours
Franz Perrez

Franz Xaver Perrez
Ambassador

Head of International Affairs Division
Federal Office for the Environment FOEN
3003 Berne, Switzerland
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mail to: franz.perrez@bafu.admin.ch
Reporting on global SDG indicator 6.5.2

TEMPLATE of the second cycle for reporting

Content of the template

The template is divided into four parts:

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

Country name: [fill in] Switzerland
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.¹

3. The value of the indicator at the national level is derived by adding up the surface area in a country of those transboundary basins (river and lake basins and aquifers) that are covered by an operational arrangement and dividing the area obtained by the aggregate total area in a country of all transboundary basins (both river and lake basins, and aquifers).

4. Transboundary basins are basins of transboundary waters, that is, of any surface waters (notably rivers, lakes) or groundwaters which mark, cross or are located on boundaries between by two or more States. For the purpose of the calculation of this indicator, for a transboundary river or lake, the basin area is determined by the extent of its catchment. For groundwater, the area to be considered is the extent of the aquifer.

5. An “arrangement for water cooperation” is a bilateral or multilateral treaty, convention, agreement or other formal arrangement among riparian countries that provides a framework for cooperation on transboundary water management.

6. For an arrangement to be considered “operational” all the following criteria need to be in place in practice:
   
   (a) There is a joint body, joint mechanism or commission (e.g., a river basin organization) for transboundary cooperation (criterion 1);
   
   (b) There are regular (at least once per year) formal communications between riparian countries in form of meetings (either at the political or technical level) (criterion 2);
   
   (c) Joint objectives, a common strategy, a joint or coordinated management plan, or an action plan have been agreed upon by the riparian countries (criterion 3);
   
   (d) There is a regular (at least once per year) exchange of data and information (criterion 4).

Calculation of indicator 6.5.2

7. Please list in the tables below the transboundary basins (rivers and lakes and aquifers) in your country’s territory and provide the following information for each of them:

   (a) The country/ies with which the basin is shared;
   
   (b) The surface area of the basin (the catchment of rivers or lakes and the aquifer in the case of groundwater) within the territory of your country (in square kilometres (km²));
   
   (c) Whether a map and/or a geographical information system (GIS) shapefile of the basin has been provided;
   
   (d) Whether there is an arrangement in force for the basin;
   
   (e) The verification of each of the four criteria to assess operationality;

(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>
<thead>
<tr>
<th>Name of transboundary river or lake basin/sub-basin</th>
<th>It is a basin or a sub-basin? b</th>
<th>Countries shared with</th>
<th>Surface area of the basin/sub-basin (in km²) within the territory of the country</th>
<th>Map and/or GIS shapefile provided (yes/no)</th>
<th>Covered by an arrangement (entirely, partly, no) (Ref. to questions in sect. II)</th>
<th>Criterion 1 applied (yes/no) (Ref. to questions in sect. II)</th>
<th>Criterion 2 applied (yes/no) (Ref. to questions in sect. II)</th>
<th>Criterion 3 applied (yes/no) (Ref. to questions in sect. II)</th>
<th>Criterion 4 applied (yes/no) (Ref. to questions in sect. II)</th>
<th>Surface area of the basin/sub-basin (in km²) covered by an operational arrangement within the territory of the country</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rhône (-sub basinLake of Geneva) (-sub basin -Doubs)</td>
<td>Basin</td>
<td>F</td>
<td>7'739.1 km²</td>
<td><a href="https://www.eea.europa.eu/data-and-maps/data/wise-large-rivers-and-large-lakes">https://www.eea.europa.eu/data-and-maps/data/wise-large-rivers-and-large-lakes</a></td>
<td>entirely</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td>7'739.1 km²</td>
</tr>
<tr>
<td>Ticino (-Lake Maggiore and Lake Lugano)</td>
<td>Sub-Basin Po</td>
<td>I</td>
<td>3603.80 km²</td>
<td>yes, see link at page 8</td>
<td>entirely</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td>3603.80 km²</td>
</tr>
<tr>
<td>Adige</td>
<td>Basin</td>
<td>I</td>
<td>130.1 km²</td>
<td>yes, see link at page 8</td>
<td>no</td>
<td>no</td>
<td>no</td>
<td>no</td>
<td>no</td>
<td>0</td>
</tr>
<tr>
<td>Inn</td>
<td>Sub-basin Danube</td>
<td>I</td>
<td>2093.7 km²</td>
<td><a href="https://www.eea.europa.eu/data-and-maps/data/wise-large-rivers-and-large-lakes">https://www.eea.europa.eu/data-and-maps/data/wise-large-rivers-and-large-lakes</a></td>
<td>no</td>
<td>no</td>
<td>no</td>
<td>no</td>
<td>no</td>
<td>0</td>
</tr>
</tbody>
</table>

b List sub-basins after the basin they belong to.
<table>
<thead>
<tr>
<th>Name of transboundary river or lake basin/sub-basin</th>
<th>It is a basin or a sub-basin? b</th>
<th>Countries shared with</th>
<th>Surface area of the basin/sub-basin (in km²) within the territory of the country</th>
<th>Map and/or GIS shapefile provided (yes/no)</th>
<th>Covered by an arrangement (entirely, partly, no) (Ref. to questions in sect. II)</th>
<th>Criterion 1 applied (yes/no) (Ref. to questions in sect. II)</th>
<th>Criterion 2 applied (yes/no) (Ref. to questions in sect. II)</th>
<th>Criterion 3 applied (yes/no) (Ref. to questions in sect. II)</th>
<th>Criterion 4 applied (yes/no) (Ref. to questions in sect. II)</th>
<th>Surface area of the basin/sub-basin (in km²) covered by an operational arrangement within the territory of the country</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adda Sub basin Po I</td>
<td></td>
<td></td>
<td>512.7 km²</td>
<td>yes, see link at page 8</td>
<td>no</td>
<td>no</td>
<td>no</td>
<td>no</td>
<td>no</td>
<td>0</td>
</tr>
<tr>
<td>(A) Total surface area of transboundary basins/sub-basins of rivers and lakes covered by operational arrangements within the territory of the country (in km²) (do not double count sub-basins)</td>
<td>39’382.10 km²</td>
<td></td>
<td>(B) Total surface area of transboundary basins of rivers and lakes within the territory of the country (in km²) (do not double count sub-basins)</td>
<td>42’118.60 km²</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Name of the transboundary aquifer</td>
<td>Countries shared with</td>
<td>Surface area of the aquifer(^a) (in km(^2)) within the territory of the country</td>
<td>Map and/ or GIS shapefile provided (yes/no)</td>
<td>Covered by an aquifer specific arrangement (entirely, partly, no) (Ref. to questions in sect. II)</td>
<td>Covered within an arrangement not specific to the aquifer(^d) (entirely, partly, no) (Ref. to questions in sect. II)</td>
<td>Criterion 1 applied (yes/no) (Ref. to questions in sect. II)</td>
<td>Criterion 2 applied (yes/no) (Ref. to questions in sect. II)</td>
<td>Criterion 3 applied (yes/no) (Ref. to questions in sect. II)</td>
<td>Criterion 4 applied (yes/no) (Ref. to questions in sect. II)</td>
<td>Surface area of the aquifer (in km(^2)) covered by an operational arrangement within the territory of the country</td>
</tr>
<tr>
<td>----------------------------------</td>
<td>-----------------------</td>
<td>----------------------------------------------------------------------------------</td>
<td>------------------------------------------</td>
<td>---------------------------------------------------------------------------------</td>
<td>-------------------------------------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Groundwater bodies:</td>
<td></td>
<td></td>
<td><a href="https://map.geo.admin.ch/?lang=en&amp;topic=bafu&amp;bgLayer=ch.swisstopo.pixelkarte-grau&amp;layers_opacity=0.75&amp;E=2641964.22&amp;N=1193775.83&amp;zoom=2&amp;layers=ch.bafu.grundwassertorgeper">https://map.geo.admin.ch/?lang=en&amp;topic=bafu&amp;bgLayer=ch.swisstopo.pixelkarte-grau&amp;layers_opacity=0.75&amp;E=2641964.22&amp;N=1193775.83&amp;zoom=2&amp;layers=ch.bafu.grundwassertorgeper</a></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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

\(d\) In the text of the agreement or arrangement or in the practice.
<table>
<thead>
<tr>
<th>Name of the transboundary aquifer</th>
<th>Countries shared with</th>
<th>Surface area of the aquifer(^2) (in (\text{km}^2)) within the territory of the country</th>
<th>Map and/or GIS shapefile provided (yes/no)</th>
<th>Covered by an aquifer specific arrangement not specific to the aquifer(^d) (entirely, partly, no) (Ref. to questions in sect. II)</th>
<th>Covered within an arrangement not specific to the aquifer(^c) (entirely, partly, no) (Ref. to questions in sect. II)</th>
<th>Criterion 1 applied (yes/no) (Ref. to questions in sect. II)</th>
<th>Criterion 2 applied (yes/no) (Ref. to questions in sect. II)</th>
<th>Criterion 3 applied (yes/no) (Ref. to questions in sect. II)</th>
<th>Criterion 4 applied (yes/no) (Ref. to questions in sect. II)</th>
<th>Surface area of the aquifer (in (\text{km}^2)) covered by an operational arrangement within the territory of the country</th>
</tr>
</thead>
<tbody>
<tr>
<td>La Nappe du Genevois</td>
<td>France</td>
<td>45</td>
<td>Yes (see section II)</td>
<td>Fully</td>
<td>no</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td>6'343 km(^2)</td>
</tr>
<tr>
<td><strong>See EXCEL table for the totality of transboundary groundwater bodies and their link to water agreements</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(C) Sub-total: surface area of transboundary aquifers covered by operational arrangements (in km\(^2\))

(D) Total surface area of transboundary aquifers (in km\(^2\)) 8'559 km\(^2\)
Indicator value for the country

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

\[
\frac{A}{B} \times 100 = \frac{39'382.10 \text{ km}^2}{42'118.60 \text{ km}^2} = 93.5\% 
\]

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

\[
\frac{C}{D} \times 100 = \frac{6343 \text{ km}^2}{8559 \text{ km}^2} = 74.1\% 
\]

**Sustainable Development Goal indicator 6.5.2:**
Percentage of surface area of transboundary basins covered by an operational arrangement:

\[
\left(\frac{A + C}{B + D}\right) \times 100 = 90.2\% 
\]

**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.

**For surface water**
https://map.geo.admin.ch/?X=192282.54&Y=662295.71&zoom=1&topic=gewiss&bgLayer=ch.swisstopo.pixelkarte-grau&layers=ch.bafu.hydroweb-messstationen_temperatur,ch.bafu.hydrologischer-atlas_flussgebiete&lang=de&layers_visibility=false,true&catalogNodes=2694,2714&layers_opacity=1,0.75

**For groundwater bodies:**
https://map.geo.admin.ch/?topic=ech&lang=fr&bgLayer=ch.swisstopo.pixelkarte-farbe&layers=ch.swisstopo.zeitreihen, ch.bfs.gebaeude_wohnungs_register, ch.bav.haltestellen-en-oev, ch.swisstopo.swisstlm3d-wanderwege, ch.bafu.grundwasserkoerper&layers_opacity=1,1,1,0.8,0.75&layers_visibility=false,false,false,true&layers_timestamp=18641231,,,,,E=2733203.33&N=1276103.82&zoom=0

Please note that Switzerland does not use individual aquifers but is using the groundwater bodies as reporting units.

Apart from the “Nappe du Genevois” covered by a transboundary groundwater agreement, Switzerland has a certain number of transboundary groundwater bodies that are covered by water agreements (i.e. on the Rhine, Constance Lake, Rhône/Lake of Geneva and on Italian-Swiss waters.). Therefore, the EXCEL sheet in the annex details which groundwater bodies are under the agreements presented in the questionnaire under major water agreements.

**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): [fill in]

**Rhine and Lake of Constance:**

The International Intergovernmental Commission of the Alpine Rhine ("Internationale Regierungskommission Alpenrhein-IRKA") is a common platform of four governments: Switzerland (Confederation and the Cantons Graubünden and St Gallen), Liechtenstein and Austria (Vorarlberg). It provides transboundary information exchange, discussion, decision-making and planning for the management of water measures in the Alpine Rhine. There is no State agreement.

Agreement between Switzerland and Austria on the regulation of the Rhine from the mouth of the river Ill to Lake Constance between Switzerland and Austria ((1954). This agreement is the continuation of the agreements from 1892 and 1924.

Agreement on the Protection of the Lake Constance against Pollution (1960): Switzerland (Confederation, Cantons Graubünden, Thurgau and St Gallen), Vorarlberg (Austria), Bayern (Germany), Baden-Württemberg (Germany), Liechtenstein. Implemented through the International Commission for the Protection of the Lake Constance


Coordinating Committee Rhine (CC Rhine) for the coordination required within the implementation of the Water Framework Directive (Directive 2000/60/EC) and the Floods Directive (Directive 2007/60/EC) in the international Rhine river basin: Austria, Germany, France, Liechtenstein, Luxembourg, Netherlands, Wallonia (Belgium), Switzerland (observer)


International Commission for the Hydrology of the Rhine Basin (CHR) (1970): Switzerland, Austria, Germany, France, Luxembourg, Netherlands
Danube

International Association for Danube Research (IAD) (1956): Germany, Switzerland, Austria, Czech Republic, Slovakia, Hungary, Croatia, Serbia, Romania, Bulgaria, Moldova, Ukraine

Swiss – Italian transboundary waters (including Lago Maggiore and Lago di Lugano)

Convention between Switzerland and Italy on the Protection of the Italian-Swiss waters against pollution (“Convenzione tra la Svizzera e l’Italia concernente la protezione delle acque italo-svizzere dall’inquinamento”) (1972): Switzerland (Confederation and the Canton Ticino) and Italy (including the regions of Piemonte and Lombardia).

It is implemented through the International Commission on the Protection of the Italian-Swiss Waters (“Commissione Internazionale per la Protezione delle Acque Italo-Svizzere -CIPAIS”).

Italian Swiss Commission for the regulation of the Lago Maggiore (“Commissione italo-svizzera per la regolazione del Lago Maggiore”):

There is no agreement between Switzerland and Italy for the regulation of the Lago Maggiore. The only binding document is “Minutes of the Conference of the technical Swiss and Italian delegates for the examination of the project of regulation of the Lago Maggiore of 24 October 1938”, a document signed by both delegations. (“Verbale della Conferenza dei Delegati tecnici svizzeri ed italiani per l’esame del progetto di sistemazione del Lago Maggiore”).

Convention between Switzerland and Italy on the regulation of the Lake of Lugano (1955)(“Convenzione tra la Svizzera e l’Italia relativa alla regolazione del lago di Lugano”). It is implemented through the Commission for the surveillance of the regulation of the Lake of Lugano (“Commissione italo-svizzera di sorveglianza per la regolazione del Lago di Lugano”).

Lake Geneva - Rhône


The convention is implemented through the International Commission for the Protection of the Waters of the Lake of Geneva (“ Commission internationale pour la protection des eaux du Léman-CIPEL ”). The Parties are Switzerland (Confederation, the Cantons of Valais, Vaud and Geneva) and France.

French-Swiss Agreement on the intervention of bodies responsible for combating accidental water pollution by hydrocarbons or other substances liable to alter the waters, and recognized as such within the framework of Convention between the Swiss Federal Council and the Government of the French Republic on the protection of water

Convention between the Confederation and the French Republic on the hydroelectric development of Emosson (1963) (“ Convention entre la Confédération suisse et la République française au sujet de l’aménagement hydroélectrique d’Emosson ”): Switzerland, France

**Doubs (tributary of Saône which is a tributary of Rhône)**


For operational purposes : Binational Working Group on the improvement of water and aquatic ecosystems of the French-Swiss Doubs (2011) with Switzerland (Confederation, the Cantons of Bern, Neuchâtel and Jura) and France) (“ Groupe de travail binational pour l’amélioration de la qualité des eaux et des milieux aquatiques du Doubs franco-suisse ”)

The Binational Group on the management of river flow (2011) (“Groupe de travail binational sur la gestion des débits”) with Switzerland (Confederation, the Cantons Neuchâtel and Jura), France.

**French-Swiss Genevese aquifer**

2007 Convention on the protection, use, recharge and monitoring of the French-Swiss Genevese aquifer (“La Nappe du Genevois”): Canton of Geneva (Switzerland) and the « Préfecture de Haute Savoie » (France) (through the « Communauté d'agglomération » of the Annemasse region, the « Communauté de communes du Genevois »)

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

| RHINE |

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

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

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

- **Convention on the Protection of the Rhine (1999):** Switzerland, Germany, France, Luxembourg, Netherlands, European Community. Implemented through the International Commission for the Protection of the Rhine River (ICPR)

- **Coordinating Committee Rhine (CC Rhine) for the coordination required within the implementation of the Water Framework Directive (Directive 2000/60/EC) and the Floods Directive (Directive 2007/60/EC) in the international Rhine river basin: Austria, Germany, France, Liechtenstein, Luxembourg, Netherlands, Wallonia (Belgium), Switzerland (observer)**

List of the riparian States: [fill in] see above

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: [14.2%]

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

---

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

2. 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.
Agreement or arrangement developed, but not in force for all riparians  

Please insert the name of the agreement(s) or arrangement(s) [fill in]

**Convention on the Protection of the Rhine (1999)**

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.

**Convention on the Protection of the Rhine (1999):** Germany, France, Luxembourg, the Netherlands, Switzerland, and the European Community. Implemented through the International Commission for the Protection of the Rhine River (ICPR):

**Coordinating Committee Rhine (CC Rhine) for the coordination required within the implementation of the Water Framework Directive (Directive 2000/60/EC) and the Floods Directive (Directive 2007/60/EC) in the international Rhine river basin district: Germany, France, Luxembourg, the Netherlands, Switzerland, and the European Community, Austria, Liechtenstein, Wallonia (Belgium) and Italy**

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? [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): [fill in]

**ICPR:** Germany, France, Luxembourg, the Netherlands, Switzerland, and the European Community

**Coordinating Committee (CC):** Germany, France, Luxembourg, the Netherlands, Switzerland, and the European Community, Austria, Liechtenstein, Wallonia (Belgium) and Italy

(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] See the EXCELL table in Annex:

CH3101
CH3106
CH3107
CH3110
CH3111
CH3112
CH3203
CH3303

(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) ☑
- 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?

*In general, challenges relate to aligning ICPR plans and activities with changing national policies and programmes.*

- 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]

The main concrete achievement of ICPR has been a tremendous improvement in the ecological and chemical quality of the water of the Rhine. This was achieved through both measures to reduce pollution and river restoration measures among other through improving the ecological connectivity and spawning grounds. The flood management has also substantially improved. Next to this, improvements include the exchange of data and information between the parties, including a warning and alarm system, and a certain level of alignment of measures and plans in the riparian countries. Key to this success has been close cooperation at technical level and the subsequent building of trust between the parties.

In addition, a common monitoring on water quality and biology was built up to control the results of the measures taken by riparian states.

(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]


International Commission for the Protection of the Rhine

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): [fill in]

*Germany, France, Luxembourg, the Netherlands, Switzerland, and the European Community*

(d) Are there any riparian States that are not members of the joint body or mechanism? (please list): [fill in] *Liechtenstein, Belgium and Austria*

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

These three states have an observer status to the ICPR and enjoy the same rights in the Rhine Coordination Committee as the parties to the ICPR convention:

- 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 ☑

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

- Joint ☑

- A subsidiary body or bodies ☑

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

---

Other features (please list): [fill in]
(g) What are the tasks and activities of this joint body or mechanism?

- Identification of pollution sources
- Data collection and exchange
- Joint monitoring
- Maintenance of joint pollution inventories
- Setting emission limits
- 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?

---

3 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]

In general, challenges relate to aligning ICPR plans and activities with changing national policies and programmes, and coming to agreement on newly emerging issues and setting the agenda.

Unexpected planning delays

Please describe, if any: [fill in]

Lack of resources

Please describe, if true: [fill in]

Lack of mechanism for implementing measures

Please describe, if true: [fill in]

Lack of effective measures

Please describe, if true: [fill in]

Unexpected extreme events

Please describe, if any: [fill in]

Lack of information and reliable forecasts

Please describe, if any: [fill in]

Others (please list and describe, as appropriate): [fill in]

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

Yes ☑/No ☐

If yes, how frequently does it meet?

More than once per year: subsidiary bodies ☑

Once per year: plenary assembly ☑

Less than once per year ☐

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

see above

(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]

Some of the relevant coastal states are party to the joint body (France, Belgium, Netherlands, Germany). Contacts exist with the Convention on the Marine Protection of the North-East Atlantic (OSPAR) Convention and the Convention on the Protection of the Marine Environment of the Baltic Sea Area.
International Commission for the Hydrology of the Rhine Basin (CHR)

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, subbasin, 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): [fill in] Switzerland, Austria, Germany, France, Luxembourg, Netherlands

(d) Are there any riparian States that are not members of the joint body or mechanism? (please list): [fill in]

(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 ☑
  
  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): [fill in]

(g) What are the tasks and activities of this joint body or mechanism?

---

4 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.
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]

Unexpected planning delays

Please describe, if any: [fill in]
Lack of resources

Please describe, if true: [fill in]

Lack of mechanism for implementing measures

Please describe, if true: [fill in]

Lack of effective measures

Please describe, if true: [fill in]

Unexpected extreme events

Please describe, if any: [fill in]

Lack of information and reliable forecasts

Please describe, if any: [fill in]

Others (please list and describe, as appropriate): [fill in]

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

Yes ☒/No ☐

If yes, how frequently does it meet?

More than once per year 2x /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]


3) Rhine 2040 – The Rhine and its Catchment: Sustainably Managed and Climate-resilient

5. How is the transboundary basin, sub-basin, part of a basin 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]
- Preserve freely flowing river sections
- Restore river dynamics
- Allow a more varied design of the structure of river banks and bottom
- Open old alluvial areas to the river
- Change to more extensive agriculture in the floodplain
- Remove obstacles to the migration of the river fauna
- Reconnect old river branches and torrents

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): [fill in]

(d) If yes, on what subjects are information and data exchanged?
- Environmental conditions ☒
- Research activities and application of best available techniques ☒
- Emission monitoring data ☒
- Planned measures taken to prevent, control or reduce transboundary impacts ☒
- Point source pollution sources ☒
- Diffuse pollution sources ☒
- Existing hydromorphological alterations (dams, etc.) ☒
- Flows or water levels (including groundwater levels)/discharge (other questions) ☒
- 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: [fill in] http://iksr.bafg.de/iksr/
(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]
Mostly technicalities like frequency, comparability, metadata, number format, etc.

(h) What are the main benefits of data exchange on the basin, sub-basin, part of a basin or group of basins? (please describe): [fill in]
Improved possibilities for early warning and alarm system, improved understanding of other countries’ challenges.

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?

<table>
<thead>
<tr>
<th>Hydrological</th>
<th>Ecological</th>
<th>Chemical</th>
</tr>
</thead>
<tbody>
<tr>
<td>Border surface waters</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Surface waters in the entire basin</td>
<td>☒</td>
<td>☒</td>
</tr>
<tr>
<td>Surface waters on the main watercourse</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Surface waters in part of the basin</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>
(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]  
*The long-term cooperation yields long time series of hydrological, chemical and biological parameters that enable joint trend analyses and joint conclusions on the trends.*

(d) Please describe any difficulties experienced with joint monitoring: [fill in]  
*Deciding upon parameters and methodologies, and ensuring comparability of data.*

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 groundwater only, pollution sources, etc.) of the assessment, and assessment methodology applied: [fill in]


*Snow and glacier hydrology in 2015 (product of the Rhine International Commission for the Hydrology of the Rhine Basin (CHR).*

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?
It is based on quality objectives that the EU Water Framework Directive sets for priority substances and priority hazardous substances, and Rhine river specific pollutants through the Objectives for water quality of the ICPR.

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] The procedures are discussed within the framework of the EU Floods Directive

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)
     - AK Wasser im BBU (www.akwasser.de)
     - Alsace Nature (www.alsacenature.org)
     - Arbeitsgemeinschaft Revitalisierung Alpenrhein/Bodensee (www.lebendigerrhein.org)
     - Arbeitsgemeinschaft der Internationalen Wasserwerke im Rheineinzugsgebiet (www.iawr.org)
     - Arbeitsgemeinschaft Renaturierung des Hochrheins (www.arge-hochrhein.ch)
     - Bund für Umwelt und Naturschutz Deutschland (www.bund-rlp.de)
Conseil Européen de l'Industrie Chimique (CEFIC) (www.cefic.be)
DWA Deutsche Vereinigung für Wasserwirtschaft, Abwasser und Abfall e.V. (www.dwa.de)
EBU – UENF (www.ebu-uenf.org)
EurAqua Network (www.euraqua.org)
European Union of National Associations of Water Suppliers and Waste Water Services (www.eureau.org)
Greenpeace International (www.greenpeace.org/international)
Hochwassernotgemeinschaft Rhein Gemeinde- und Städtebund (hochwassernotgemeinschaft-rhein.de)
NABU-Naturschutzstation NABU-Koordinationsstelle Rhein (www.nabu.de und www.nabu-naturschutzstation.de/v1)
Rheinkolleg (www.rheinkolleg.de)
Verband Deutscher Sportfischer e.V. (www.vdsf.de)
VGB Power Tech e.V. (www.vgb.org)
Wereld Natuur Fonds (www.wnf.nl)
WWF Schweiz (www.wwf.ch)

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 plans5 ☒
Public involvement ☒
Other (please specify): [fill in] ☒

5 Or, where applicable, aquifer management plans.
II. Questions for each transboundary basin, sub-basin, part of a basin, or group of basins (river, lake or aquifer)

LAKE CONSTANCE

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

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

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

LAKE CONSTANCE

List of the riparian States: [fill in] Switzerland (Confederation, the Cantons Graubünden, Thurgau and St Gallen, Vorarlberg (Austria), Bayern and Baden-Württemberg (Germany), Liechtenstein

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: 49% (Switzerland and Liechtenstein)

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 [X]
   - Agreement or arrangement developed but not in force

---

6 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.

7 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.
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 on the Protection of the Lake Constance against Pollution (1960): Switzerland (Confederation, the Cantons Graubünden, Thurgau and St Gallen, Vorarlberg (Austria), Bayern and Baden-Württemberg (Germany), Liechtenstein

It is implemented through the International Commission for the Protection of the Lake Constance (“Internationale Gewässerschutzkommission für den Bodensee IGKB”)

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.

Agreement on the Protection of the Lake Constance against Pollution (1960): Switzerland (Confederation, the Cantons Graubünden, Thurgau and St Gallen, Vorarlberg (Austria), Bayern and Baden-Württemberg (Germany), Liechtenstein

It is implemented through the International Commission for the Protection of the Lake Constance (“Internationale Gewässerschutzkommission für den Bodensee IGKB”)

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? [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): [fill in] Switzerland (Confederation, the Cantons Graubünden, Thurgau and St Gallen), Vorarlberg (Austria), Bayern and Baden-Württemberg (Germany), Liechtenstein
(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]

See the EXCELL table in Annex: CH 3016 and CH 3303

(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) ☒
   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?

*In general, challenges relate to aligning IGKB plans and activities with changing national policies and programmes.*

- 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]

*The main concrete achievement of IGKB has been the improvement in the ecological and chemical quality of the water of the Lake Constance. This was achieved through measures to reduce the input of nutrients (mainly*
phosphorus) and other pollutants by building sewers and sewage treatment plants in the entire basin. Eutrophication does not occur today in Lake Constance and water quality is very good. Lake Constance is an important resource for drinking water.

There is a program for the restoration of the lakeshore.

Next to this, improvements include the exchange of data and information between the parties, including a system for damage prevention and damage control, and a certain level of alignment of measures and plans in the riparian countries. Key to this success has been close cooperation at technical level and the subsequent building of trust between the parties.

In addition, a common monitoring on water quality and biology was build up to control the results of the measures taken by riparian states.

At present, the Contracting Parties of the IGKB together with different research institutes around the lake are doing a research project on the resilience capacity of the ecosystem of Lake Constance.

(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]

http://www.igkb.org/start/


https://www.admin.ch/opc/fr/classified-compilation/19600181/index.html

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 [ ]
   Basin or similar commission [x]
   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? (Please list): [fill in]
Switzerland (Confederation, Cantons Graubünden, Thurgau and St Gallen), Vorarlberg (Austria), Bayern and Baden-Württemberg (Germany), Liechtenstein (as observer)

(d) Are there any riparian States that are not members of the joint body or mechanism? (please list): [fill in]

(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
- A subsidiary body or bodies
- The secretariat’s tasks and responsibilities are fulfilled by the Member States by rotation

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

(g) What are the tasks and activities of this joint body or mechanism?8

- 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

---

8 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.
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] In general, challenges relate to aligning IGKB plans and activities with changing national policies and programmes, and coming to agreement on newly emerging issues and setting the agenda.

Unexpected planning delays

Please describe, if any: [fill in]

Lack of resources

Please describe, if true: [fill in]

Lack of mechanism for implementing measures

Please describe, if true: [fill in]

Lack of effective measures

Please describe, if true: [fill in]

Unexpected extreme events

Please describe, if any: [fill in]

Lack of information and reliable forecasts

Please describe, if any: [fill in]
Others (please list and describe, as appropriate): [fill in]

(i) Does the joint body or mechanism, or its subsidiary bodies meet regularly?
Yes ☒/No ☐

If yes, how frequently does it meet?

More than once per year subsidiary bodies ☒
Once per year plenary assembly ☐
Less than once per year ☐

(j) What are the main achievements with regards to the joint body or mechanism?
[fill in] see above

(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]

Some of the relevant coastal states are involved in the work of the International Commission for the Protection of the Rhine River

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]

Report on the result of the constituent meeting of the international water protection commission for Lake Constance of 5 and 6 November 1959 in St Gallen.

("N i e d e r s c h r i f t über das Ergebnis der konstituierenden Sitzung der inter—nationalen G-ewässerschutzkommission für")

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]

- Restore lakeshores
- Remove obstacles to the migration of the Lake Constance Trout
- Measures to reduce the input of micropollutants from point and diffuse sources

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): [fill in]

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

- Environmental conditions ☒
- Research activities and application of best available techniques ☒
- Emission monitoring data ☒
- Planned measures taken to prevent, control or reduce transboundary impacts ☒
- Point source pollution sources ☒
- Diffuse pollution sources ☒
- Existing 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: [fill in]*

http://www.igkb.org/der-bodensee/seedaten/
(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): [fill in]

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

Yes ☒ / No ☐

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

<table>
<thead>
<tr>
<th></th>
<th>Hydrological</th>
<th>Ecological</th>
<th>Chemical</th>
</tr>
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<tr>
<td>Transboundary aquifer(s) (connected or unconnected)</td>
<td>☒</td>
<td>☐</td>
<td>☒</td>
</tr>
<tr>
<td>Aquifer(s) in the territory of one riparian hydraulically connected to a transboundary river or lake</td>
<td>☒</td>
<td>☐</td>
<td>☒</td>
</tr>
</tbody>
</table>

(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]
The long-term cooperation yields long time series of chemical and biological parameters that enable joint trend analyses and joint conclusions on the trends.

(d) Please describe any difficulties experienced with joint monitoring: [fill in]

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: [fill in]

http://www.igkb.org/publikationen/limnologischer-zustand-des-sees-grueneberichte/


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 ☐
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 ☐

Stakeholders have observer status in the open part of the plenary session:

- Pro Natura St Gallen
- WWF Switzerland
- Arbeitsgemeinschaft Wasserwerke Bodensee-Rhein
- IWGN Internationale Wassersportgemeinschaft Bodensee
- Schweizer Berufsfscherverband
- Bodensee Schiffsbetriebe GmbH
- Schweizer Bodensee Schifffahrtsgesellschaft AG

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 plans⁹ ☑

Public involvement ☑

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⁹ Or, where applicable, aquifer management plans.
Other (*please specify*): [fill in]
II. Questions for each transboundary basin, sub-basin, part of a basin, or group of basins (river, lake or aquifer)

LAKE OF GENEVA AND DOUBS SUB BASIN

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

Please reproduce this whole section with its questions for each transboundary basin, sub-basin, part of a basin or a 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]

Lake of Geneva

List of the riparian States: [fill in]

Switzerland (Confederation, Cantons Valais, Vaud and Genève), France

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: [60%]

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 ☐

---

10 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.

11 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.
Agreement or arrangement developed, but not in force for all riparians
Please insert the name of the agreement(s) or arrangement(s) [fill in]

Convention between the Swiss Federal Council and the Government of the French Republic on the protection of water of the Lake of Geneva against pollution (1962) (“Convention entre le Conseil fédéral suisse et le Gouvernement de la République française concernant la protection des eaux du lac Léman contre la pollution ”): Switzerland (Confederation., Cantons Valais, Vaud and Genève), France

French-Swiss Agreement on the intervention of bodies responsible for combating accidental water pollution by hydrocarbons or other substances liable to alter the waters, and recognized as such within the framework of Convention between the Swiss Federal Council and the Government of the French Republic on the protection of water of the Lake of Geneva against pollution (“Accord franco—suisse sur l’intervention des organes chargés de la lutte contre la pollution accidentelle des eaux par les hydrocarbures ou autres substances pouvant altérer les eaux, et reconnus comme tels dans le cadre de la Convention franco—suisse du 16 novembre 1962 concernant la protection des eaux du lac Léman contre la pollution”)


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? [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): [fill in]

Switzerland (Confederation, Cantons Valais, Vaud and Genève), France

(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]

CH1104
CH1105
CH1106
CH1201
CH1202
CH1203
CH 1304

(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)
- 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]

The main concrete achievement of CIPEL has been a tremendous improvement in the chemical quality of the water of the Lake Geneva. This was achieved through measures to reduce the input of nutrients (mainly phosphorus) and other pollutants by building sewers and sewage treatment plants in the entire basin. The water quality is very high today. This is very important because Lake Geneva is an important resource for drinking water.

Next to this, improvements include the exchange of data and information between the parties, including a system for damage prevention and damage control, and a certain level of alignment of measures and plans in the riparian countries. Key to this success has been close cooperation at technical level and the subsequent building of trust between the parties.

In addition a common monitoring on water quality and biology was build up to control the results of the measures taken by riparian states.

(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): [fill in] Switzerland (Confederation, Cantons Valais, Vaud and Genève), France

(d) Are there any riparian States that are not members of the joint body or mechanism? (please list): [fill in]

(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

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

Lake Geneva: Joint Secretariat

Doubs: Binational working groups

☐ A subsidiary body or bodies

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

To simplify, we can distinguish three tiers: The first tier consists of roughly equal numbers of Swiss and French elected politicians and senior civil servants. These members act as an Administrative Board, which meets once a year in plenary session. A Technical Sub-commission constitutes the second tier: this comprises scientists and experts, and consists of an Operational Committee and a Scientific Committee. The former supervises the proper implementation of the action plans, and the latter coordinates studies and research programmes concerning the water of the Lake Geneva catchment area and monitors the scientific aspects. The Technical sub-commission calls on specific working groups to study the various different aspects of water protection. The Operating Committee, the Scientific Committee and the working groups include a total of about de 140 people, most of who are drawn from Swiss and French state bodies. Finally, a permanent secretariat based in Changins near Nyon, forms the third tier. This secretariat is responsible for coordinating the studies and carrying out the administrative, financial, technical and scientific administration. Since 1971, the monitoring of the aquatic environment, the research and other investigations undertaken by CIPEL, and its running costs have been organised into five-year programmes, 75% of the funding for which comes from Switzerland and 25% from France.

For operational purposes:

**Binational Working Group on the improvement of water and aquatic ecosystems of the French-Swiss Doubs (2011) with Switzerland (Confederation, the Cantons of Bern, Neuchâtel and Jura) and France ("Groupe de travail binational pour l’amélioration de la qualité des eaux et des milieux aquatiques du Doubs franco-suisse")**

**The Binational Group on the management of river flow (2011) ("Groupe de travail binational sur la gestion des débits") with Switzerland (Confederation, the Cantons Neuchâtel and Jura), France.**

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

(g) What are the tasks and activities of this joint body or mechanism?¹²

- 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

¹² 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.
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] In general, challenges relate to aligning CIPEL plans and activities with changing national policies and programmes, and to agreeing on newly arising issues and setting the agenda.

Unexpected planning delays
Please describe, if any: [fill in]

Lack of resources
Please describe, if true: [fill in]

Lack of mechanism for implementing measures
Please describe, if true: [fill in]

Lack of effective measures
Please describe, if true: [fill in]

Unexpected extreme events
Please describe, if any: [fill in]

Lack of information and reliable forecasts
Please describe, if any: [fill in]

Others (please list and describe, as appropriate): [fill in]

(i) Does the joint body or mechanism, or its subsidiary bodies meet 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] see above

(k) Did the joint body or mechanism ever invite a non-riparian coastal State to cooperate? not applicable

Yes No not applicable

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]


Action Plan on the Doubs

5. How is the transboundary basin, sub-basin, part of a basin 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]

See Action Plan for 2011 – 2020

http://www.cipel.org/en/action/action-plans/

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): [fill in]

(d) If yes, on what subjects are information and data exchanged?  
- Environmental conditions ☒
- Research activities and application of best available techniques ☒
- Emission monitoring data ☒
- Planned measures taken to prevent, control or reduce transboundary impacts ☒
- Point source pollution sources ☒
- Diffuse pollution sources ☒
- Existing 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: [fill in]  
http://www.cipel.org/en/documentation_en/scientific-reports/

(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)*: [fill in] *Improved possibilities for early warning, improved understanding of other countries challenges.*

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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<tr>
<td>Transboundary aquifer(s) (connected or unconnected)</td>
<td>☑</td>
<td>☐</td>
</tr>
<tr>
<td>Aquifer(s) in the territory of one riparian hydraulically connected to a transboundary river or lake</td>
<td>☑</td>
<td>☐</td>
</tr>
</tbody>
</table>

(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] *The long-term cooperation yields long time series of chemical and*
biological parameters that enable joint trend analyses and joint conclusions on the trends.

(d) Please describe any difficulties experienced with joint monitoring: [fill in]

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: [fill in]

http://www.cipel.org/en/documentation_en/scientific-reports/

See the “Tableau de Bord”:

https://www.cipel.org/publications/tableau-de-bord/

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]

See goals within the “Tableau de bord”:

https://www.cipel.org/publications/tableau-de-bord/

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)

CIPEL offers special meetings for stakeholders to inform on the Action Programmes and the results of the assessments.

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 plans13 ☒

Public involvement ☒

Other (please specify): [fill in]
II. Questions for each transboundary basin, sub-basin, part of a basin, or group of basins (river, lake or aquifer)

**Swiss – Italian Transboundary Waters**

*(including Lago Maggiore and Lago di Lugano)*

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.\(^{14}\) 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\(^ {15}\) 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]

*Swiss – Italian Transboundary Waters including the Lago Maggiore and Lago di Lugano*

List of the riparian States: [fill in] *Switzerland (Confederation, Canton Ticino) Italy (including regions of Piemonte and Lombardia).*

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

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\(^{14}\) 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.

\(^{15}\) 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.
Percentage of your country’s territory within the basin, sub-basin, part of a basin or group of basins: [fill in] Lago Maggiore: 50% and Lago di Lugano: 60%

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]

   Convention between Switzerland and Italy on the Protection of the Italian-Swiss waters against pollution (1972) (“Convenzione tra la Svizzera e l'Italia concernente la protezione delle acque italo-svizzere dall'inquinamento”): Switzerland (Confederation, Canton Ticino) Italy (including regions of Piemonte and Lombardia).

   It is implemented through the International Commission on the Protection of the Italian-Swiss Waters (“Commissione Internazionale per la Protezione delle Acque Italo-Svizzere –CIPAIS”)

   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? [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): [fill in] Switzerland (Confederation, Canton Ticino) Italy (including regions of Piemonte and Lombardia).
(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] See the EXCELL table in Annex: CH6102, CH6202

(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) ☒

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?

*In general, challenges relate to aligning CIPAIS plans and activities with changing national policies and programmes*:

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]

*The main concrete achievement of CIPAIS has been a tremendous improvement in the chemical quality of the water of the Lago Maggiore and the Lago di Lugano. This has been achieved through measures to reduce the input of nutrients (mainly phosphorus) and other pollutants by building sewers and sewage treatment plants in the entire basin.*
Next to this, improvements include the exchange of data and information between the parties, including a system for damage prevention and damage control, and a certain level of alignment of measures and plans in the riparian countries. Key to this success has been close cooperation at technical level and the subsequent building of trust between the parties.

In addition a common monitoring on water quality and biology was build up to control the results of the measures taken by riparian states.

(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] http://www.cipais.org/

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): [fill in]

Switzerland (Confederation, Canton Ticino), Italy (including regions of Piemonte and Lombardia).

(d) Are there any riparian States that are not members of the joint body or mechanism? (please list): [fill in]

(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 ☒

If the secretariat is a permanent one, is it a joint secretariat or does each country host its own secretariat? (Please describe): [fill in]
Regione Piemonte for administration and for scientific purposes in Regione Lombardia

A subsidiary body or bodies

Please list (e.g., working groups on specific topics): [fill in] Organigram at: http://www.cipais.org/modules.php?name=cipais&pagina=commissione

Other features (please list): [fill in]

(g) What are the tasks and activities of this joint body or mechanism?16

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

16 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.
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] In general, challenges relate to aligning CIPAIS plans and activities with changing national policies and programmes, and agreeing on newly arising issues and setting the agenda.

Unexpected planning delays   ☐

Please describe, if any: [fill in]

Lack of resources   ☐

Please describe, if true: [fill in]

Lack of mechanism for implementing measures   ☐

Please describe, if true: [fill in]

Lack of effective measures   ☐

Please describe, if true: [fill in]

Unexpected extreme events   ☐

Please describe, if any: [fill in]

Lack of information and reliable forecasts   ☐

Please describe, if any: [fill in]

Others (please list and describe, as appropriate): [fill in]

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

Yes ☒/No ☐

If yes, how frequently does it meet?

More than once per year subsidiary bodies   ☒

Once per year plenary assembly   ☒

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 ☒ not applicable
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 basin 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]

restoration of shores

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): [fill in]

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

Environmental conditions ☒

Research activities and application of best available techniques ☒

Emission monitoring data ☒

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

Point source pollution sources ☒
Diffuse pollution sources ☒
Existing 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: [fill in]

(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): [fill in]

7. Do the riparian States carry out joint monitoring in the transboundary basin, sub-basin, part of a basin or group of basins?
Yes ☒/No ☐

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

<table>
<thead>
<tr>
<th></th>
<th>Hydrological</th>
<th>Ecological</th>
<th>Chemical</th>
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<tbody>
<tr>
<td>Border surface waters</td>
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<tr>
<td>Surface waters in the entire basin</td>
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<tr>
<td>Surface waters on the main watercourse <strong>Lake</strong></td>
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<tr>
<td>Surface waters in part of the basin</td>
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</tr>
<tr>
<td>Please describe [fill in]</td>
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</tr>
</tbody>
</table>
(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]

The long-term cooperation yields long time series of hydrological, chemical and biological parameters that enable joint trend analyses and joint conclusions on the trends

(d) Please describe any difficulties experienced with joint monitoring: [fill in]

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 groundwater only, pollution sources, etc.) of the assessment, and assessment methodology applied: [fill in]

Panel of control (“Panello di controllo”)


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 ☑  No Stakeholder Participation in CIPAIS

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\textsuperscript{17}

Public involvement

Other (please specify): [fill in]

\textsuperscript{17} Or, where applicable, aquifer management plans.
Please remember to complete section II for each of the transboundary basins, sub-basin, part of a basin or group of basins. Please also remember to attach copies of agreements or arrangements, if any.

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

**Nappe du Genevois – the Genevese aquifer**

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

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

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

**Nappe du Genevois – the Genevese aquifer**

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18 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.

19 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.
List of the riparian States: [fill in]: Canton of Geneva (Switzerland) and the «Préfecture de Haute Savoie» (France) (through the «Communauté d'agglomération» of the Annemasse region, the «Communauté de communes du Genevois»).

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] The main natural recharge of the aquifer comes from the Arve river (7.5 Mm³/year)

Unknown
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 [X]
   - 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]

2007 Convention on the protection, use, recharge and monitoring of the French-Swiss Genevese aquifer ("La Nappe du Genevois"): Canton of Geneva (Switzerland) and the « Préfecture de Haute Savoie » (France) (through the « Communauté d'agglomération » of the Annemasse region, the « Communauté de communes du Genevois »)

   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): Canton of Geneva (Switzerland) and the « Préfecture de Haute Savoie » (France) (through the « Communauté d'agglomération » of the Annemasse region, the « Communauté de communes du Genevois »)

   (b) If the agreement or arrangement relates to a river or lake basin or sub-basin, does it also cover aquifers?
Yes □/No □ not applicable

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) ☒
- 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]

To adopt a strategy for common use of the transboundary resource
To tackle a problem relating to international water resources at local level, rather than at the level of sovereign states through the Canton of Geneva and the Department of Haute-Savoie...
The technical aspects (hydrogeological studies, management of pumping stations, local hydraulic assessments) are well known and dealt with by local actors who would then relay the information to decision-makers at the local level.
As the main stakeholder, being at the center of all discussions and meetings, this commission has been crucial to this success.
(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]  https://www.ge.ch/legislation/accords/doc/3038.pdf

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): [fill in] Canton of Geneva (Switzerland) and the « Préfecture de Haute Savoie » (France) (through the « Communauté d'agglomération » of the Annemasse region and the « Communauté de communes du Genevois »)

(d) Are there any riparian States that are not members of the joint body or mechanism? (please list): [fill in]

(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 ☐

   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): [fill in]
(g) What are the tasks and activities of this joint body or mechanism?20

- 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?

---

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

Please describe, if any: [fill in]

Unexpected planning delays

Please describe, if any: [fill in]

Lack of resources

Please describe, if true: [fill in]

Lack of mechanism for implementing measures

Please describe, if true: [fill in]

Lack of effective measures

Please describe, if true: [fill in]

Unexpected extreme events

Please describe, if any: [fill in]

Lack of information and reliable forecasts

Please describe, if any: [fill in]

Others (please list and describe, as appropriate): [fill in]

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

Yes ☒/No ☐

If yes, how frequently does it meet?

More than once per year ☐

Once per year at least ☒

Less than once per year ☐

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

[fill in]

The agreement signed between Geneva and French communities is a rare example of a transboundary agreement of an aquifer management between a Swiss canton and communities belonging to a country of the European Union. It is providing the Geneva area with an optimal and safe drinking water supply thanks to the diversification and qualitative and quantitative potentialities of water resources.

(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] The agreement contains all the agreed cooperation details, regulating the technical and financial aspects. Other documents on cooperation are the yearly reports of the meetings of the Commission.

5. How is the transboundary basin, sub-basin, part of a basin 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): [fill in]

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

- Environmental conditions ☐
- Research activities and application of best available techniques ☐
- Emission monitoring data ☐
- Planned measures taken to prevent, control or reduce transboundary impacts ☐
- Point source pollution sources ☐
- Diffuse pollution sources ☒
- Existing 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: [fill in]*

(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*): [fill in]

7. Do the riparian States carry out joint monitoring in the transboundary basin, sub-basin, part of a basin or group of basins?
Yes ☒ No ☐

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

<table>
<thead>
<tr>
<th>Hydrological</th>
<th>Ecological</th>
<th>Chemical</th>
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<tr>
<td>Border surface waters</td>
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<td>Surface waters in the entire basin</td>
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<td>Surface waters on the main watercourse</td>
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<tr>
<td>Surface waters in part of the basin please describe [fill in]</td>
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<tr>
<td>Transboundary aquifer(s) (connected or unconnected)</td>
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<tr>
<td>Aquifer(s) in the territory of one riparian hydraulically connected to a transboundary river or lake</td>
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</tbody>
</table>

(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 [fill in]

Common monitoring network [fill in]

Common agreed parameters [fill in]

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

(d) Please describe any difficulties experienced with joint monitoring: [fill in]

- Technical standards differences between Switzerland and France (sanitary, chemical).
- Administrative management differences between Switzerland and France
- Differences in the capacity among technical staff in managing water protection between Switzerland and France
- Lack of the regional geological and hydrogeological knowledge between Geneva and French communities (south rim of the Geneva aquifer still not well known)

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: [fill in]

Technical meeting on pollution issues in May 2020 and next in September

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]

Joint assessment of the basin but application of national standards which may be different depending on the products found (for example pesticides) between Swiss and French standards

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 ☐

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: [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\(^{21}\)
Public involvement
Other \textit{(please specify)}: [fill in]

\(^{21}\) Or, where applicable, aquifer management plans.
Questions for each transboundary basin, sub-basin, part of a basin, or group of basins (river, lake)

III. Water management at the national level

In this section, you are requested to provide general information on water management at the
tional 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 ☒ No ☐

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

*Federal Act on the Protection of the Environment: Article 39 (Implementing
provisions and international law agreements) Paragraph 2: The Federal Council may conclude international agreements on technical
regulations, environmentally hazardous substances (Art. 26-29), waste avoidance
and disposal, cooperation in frontier zones by the establishment of international
commissions with advisory status, data collections and surveys, research and
training.*

*Waters Protection Ordinance: Article 51 (International decisions,
recommendations and commissions): The Federal Department of Environment,
Transport, Energy and Communication is authorised to approve decisions and
recommendations that are based on the following international agreements, with the
agreement of the Federal Department of Economic Affairs, Education and Research:
- Convention for the Marine Protection of the Environment of the North-East
Atlantic (OSPAR)
- Convention for the Protection of the Rhine River (ICPR).*

*Waters Protection Ordinance: Article 17 (Reporting on exceptional events),
paragraph 3: The authorities shall ensure that the communities and individuals
affected by an exceptional event are informed about possible harmful effects on
waters in due time. If substantial effects may be expected beyond cantonal or
national boundaries, they shall also ensure that the federal alarm centre, as well as
the neighbouring cantons and states are notified.*

The water protection programs take into account the responsibility of Switzerland
as an upstream country. Water pollution control does not only include requirements
on water quality standards for surface and groundwater but also requirements to
reduce or minimize total loads of hazardous substances into waters.
E.g. Measures to remove micropollutants in large public sewage treatment plants or
the definition of Best Available Technology for specific substances from certain
industrial sectors.

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

Precautionary principle Yes ☒ No ☐
According to Article 6 of the Federal Act on the Protection of Waters (Principle), it is prohibited to introduce into a body of water, either directly or indirectly any substances which may pollute it; the infiltration of such substances is also prohibited. It is also forbidden to store or spread such substances outside a body of water if there is a genuine risk of water pollution.

In Article 7 (Disposal of waste water), polluted waste water must be treated. It may only be discharged or infiltrated into a body of water with the authorisation of the cantonal authority.

The authorities authorise the discharge of polluted waste water into surface waters, drainage areas, underground rivers and streams if the requirements in discharge into waters according to Annex 3 of the Waters Protection Ordinance are complied with.

Requirements for the discharge of polluted waste water include:
- discharge of communal waste water into waters
- discharge of industrial waste water into waters or public sewer systems
- discharge of other polluted waste water into waters or into public sewers
  (general requirements and special requirements e.g. on continuous cooling installations, closed-circuit cooling installations, gravel conditioning, fish farms, etc.)

Non-polluted waste water must be discharged by infiltration according to the instructions of the cantonal authority. If local conditions do not permit this, such non-polluted water may be discharged into surface waters.

The cantons shall draw communal and, if required, regional drainage plans. The discharge of water that is not shown on a communal drainage plan approved by the canton requires the consent of the cantonal authority.

Switzerland plans to manage the risks associated with micro-pollutants in urban sewage (by 2040) and pesticide use in agriculture (within ten years of the adoption of an action plan). To these ends, it is upgrading the 120 largest plants, accounting for 50% of treated sewage, to add a fourth treatment stage removing micro-pollutants.

Example water user principle (source: OECD 2017 report)

Switzerland has long propounded a clear set of water charging principles:
- Water should be metered.
- Water prices should cover all costs
- Tariffs should comprise a basic fee and a volumetric price, ideally reflecting both the fixed and variable costs of the utility.
- Enough revenue should be earned to maintain the system’s assets.

As regards the financing of urban water infrastructure, the cantons are required by law to ensure that capital expenditure and the costs of operating and maintaining sewage collection and treatment facilities are charged to users. In practice, user charges cover the full costs of operating and maintaining facilities for both sanitation and water supply. User charges also cover all longterm capital expenditure (including
renewal) for water supply. The water bill covers the full costs of operation and maintenance and 78% of long-term capital expenditure (including renewal) of sanitation infrastructure.

(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 ☒ No ☐

If yes, for which sectors?

Industry ☒
Mining ☒
Energy ☒
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?

The permits are given for building and operating. Existing legislation on the registration, evaluation, authorisation and restriction of chemicals makes it possible to deal with the most problematic micro-pollutants at source by not placing them on the market.

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 ☒ No ☐

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

Monitoring of discharges ☒
Monitoring of physical and chemical impacts on water ☒
Monitoring of ecological impacts on water ☒
Conditions on permits ☒
Inspectorate ☒

Other means (please list): [fill in]

Persons responsible for enterprises that discharge industrial waste water into public sewers and persons responsible for waste water treatment plants who discharge waste water into public sewers or into a body of water must report to and as instructed by the authorities the amount of waste water discharged the amounts and concentrations of substances discharged which they must determine according to the prescriptions of the authorities.

Authorities are obliged to supervise periodically the compliance with the requirements set out in the authorisations.
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
- Others (please list): [fill in]

**Requirements for Discharge of Other Polluted Waste Water into waters not from point sources**

**Economic and financial measures**

- Monetary incentives
- Environmental taxes (such as fertilizer taxes)
- Others (please list): [fill in]

**Federal Act on Protection of Waters Article 62a, 77a**

- Compensatory payments to cantons for construction of waste disposal installations (article 62a);
- Improvement of manure storage facilities (article 77)

**Agricultural extension services**

- [ ]

**Technical measures**

**Source control measures**

- Crop rotation
- Tillage control
- Winter cover crops
- Others (please list): [fill in]

**Other measures**

- Buffer/filter strips
- Wetland reconstruction
- Sedimentation traps
- Chemical measures
- Others (please list): [fill in]

**Other types of measures**
Switzerland adopted in 2017 an action plan on the risk reduction of phytosanitary products as well on their sustainable use. A pesticide licensing programme is in place to ensure that toxicity does not exceed certain risk thresholds.

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
- Monitoring and control of abstractions
- Water rights are defined
- Water allocation priorities are listed
- Water-saving technologies
- Advanced irrigation techniques
- Demand management activities
- Other means (please list)

(g) Does your country apply the ecosystems approach?

Yes ☒ No ☐

If yes, please describe how: [fill in] OECD 2017

Cantonal surface water rehabilitation plans were finalised in 2014. They aim to designate stretches of river and lakeshore where the benefits to nature and landscape are greatest in relation to rehabilitation costs. The cost-benefit analysis is based on a stretch’s ecomorphological status, its natural state and existing installations, such as buildings and roads, on riparian zones.

Several legal provisions allow for payments to landowners for the multiple ecosystem services of surface water rehabilitation in terms of hydrology, flood protection, protection of nature and landscape, and land improvement. For example, there may be payments for i) rehabilitation within the meaning of the WPA, ii) flood protection under the Watercourse Management Act, iii) alluvial biotope restoration under the Act on the Protection of Nature and Cultural Heritage and (iv) extensive farming and land improvement under the Agriculture Act.

Farmers providing space for waters are granted direct (compensatory) payments for preserving biodiversity on their lands under agricultural policy and pursuant to the Water Protection Act, Article 62b. This is justified insofar as farmers are getting paid for going beyond what cross-compliance requires them to do anyway (setting aside at least 7% of the farm for biodiversity promotion). The proceeds of a tax on electricity bills support the legally required upgrading of hydropower plants to reduce their negative impact on watercourses.

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

Yes ☒ No ☐

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

Groundwater protection areas are implemented (see art. 211 of the ordinance on water protection)
2. Do your national laws require transboundary environmental impact assessment (EIA)?

Yes ☑/No ☐

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

Ordinance on environmental impact assessment

Switzerland is a Party of the Convention on Environmental Impact Assessment in a Transboundary Context (Espoo Convention).

The legal basis for transboundary environmental impact assessment is under Article 6a of the Ordinance on Environmental Impact Assessment.

*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 ☑
    Lack of relevant data and information ☑
    Difficulties in data and information exchange ☐
    Sectoral fragmentation at the national level ☐
    Language barrier ☐
    Resource constraints ☐
    Environmental pressures, e.g. extreme events ☑
    Sovereignty concerns ☐

    Please list other challenges and/or provide further details: [fill in]

2. What have been the main achievements in cooperating on transboundary waters?

    Improved water management ☑
    Enhanced regional integration, i.e. beyond water ☐
    Adoption of cooperative arrangements ☑
    Adoption of joint plans and programmes ☑
    Long-lasting and sustained cooperation ☑
    Financial support for joint activities ☑
    Stronger political will for transboundary water cooperation ☑
    Better knowledge and understanding ☑
    Dispute avoidance ☑
    Stakeholder engagement ☑

    Please list other achievements, keys to achieving success, and/or provide concrete examples: [fill in]
A better coordination within the country between different ministries or cantonal entities. A better understanding of water management at basin level and a more prospective action towards mitigation and adaption to climate change.

3. Please indicate which institutions were consulted during the completion of the questionnaire

   Joint body or mechanism
   Other riparian or aquifer countries
   National water management authority
   Environment agency/authority
   Basin authority (national)
   Local or provincial government
   Geological survey (national)
   Non-water specific ministries, e.g. foreign affairs, finance, forestry and energy
   Civil society organizations
   Water user associations
   Private sector
   Other (please list): [fill in]

   Please briefly describe the process by which the questionnaire was completed: [fill in]

   Data was already available from last reporting. Some new items were added.

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): [fill in]

   Date: 30 juin 2020   Signature: [fill in]

   30 juin 2020: Sibylle Vermont
   30 juin 2020: Michael Sinreich
   30 juin 2020: Petra Schmocker-Fackel
   30 juin 2020: Ueli Sieber

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

________________________
<table>
<thead>
<tr>
<th>River basin</th>
<th>Groundwater body (GWB) ID</th>
<th>Border GWB (geographically)</th>
<th>Transboundary GWB (hydrogeologically)</th>
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6343  Surface area of transboundary GWB with arrangement
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<th>Surface area of transboundary GWB without arrangement</th>
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<td>Percentage of surface area of transboundary GWB covered by an open system</td>
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