#### Council



Annual Progress Report on Actions taken under the Implementation Plan for the Calendar Year 2020 - EU - France

### Annual Progress Report on Actions taken under the Implementation Plan for the Calendar Year 2020

The Annual Progress Reports allow NASCO to evaluate progress on actions taken by Parties / jurisdictions to implement its internationally agreed Resolutions, Agreements and Guidelines and, consequently, the achievement of their objectives and actions taken in accordance with the Convention. The following information should be provided through the Annual Progress Reports:

- any changes to the management regime for salmon and consequent changes to the Implementation Plan;
- actions that have been taken under the Implementation Plan in the previous year;
- significant changes to the status of stocks, and a report on catches; and
- actions taken in accordance with the provisions of the Convention.

In completing this Annual Progress Report please refer to the **Guidelines for the Preparation** and Evaluation of NASCO Implementation Plans and for Reporting on Progress, <u>CNL(18)49</u>.

These reports will be reviewed by the Council. Please complete this form and return it to the Secretariat **no later than 1 April 2021**.

| Party:                 | European Union |
|------------------------|----------------|
| Jurisdiction / Region: | France         |

#### **1:** Changes to the Implementation Plan

**1.1 Describe any proposed revisions to the Implementation Plan** (*Where changes are proposed, the revised Implementation Plans should be submitted to the Secretariat by 1 November*).

The plan was submitted in November 2021. No revisions have therefore been made since.

**1.2** Describe any major new initiatives or achievements for salmon conservation and management that you wish to highlight.

As part of the IYS, several films have been shot in France. The aim is to promote the actions of the OFB for the protection of salmo salar. These films will be translated into English very soon, before the annual NASCO meeting.

https://ofb.gouv.fr/actualites/des-especes-preserver-qui-reviennent.

Other actions have been implemented regionally by the French "great migratory associations". The links to their websites are on the attached map.



The year 2021 will be devoted to writing new plagepoins for most of the basins river. All of them will take into account the actions identified in the IP.

#### 2: Stock status and catches.

- 2.1 Provide a description of any new factors that may affect the abundance of salmon stocks significantly and, if there has been any significant change in stock status since the development of the Implementation Plan, provide a brief (200 word max) summary of these changes.
- 2.2 Provide the following information on catches: (nominal catch equals reported quantity of salmon caught and retained in tonnes 'round fresh weight' (i.e. weight of whole, ungutted, unfrozen fish) or 'round fresh weight equivalent').

| (a) provisional nominal   | In-river   | Estuarine | Coastal | Total  |
|---------------------------|--|-----------|---------|--------|
| catch (which may be       | 3,8 T  | 4,09 T    | 0,07 T  | 7,99 T |
| subject to revision) for  |  |           |         |        |
| 2020 (tonnes)             |  |           |         |        |
| (b) confirmed nominal     | 6,5 T  | 7,85 T    | 0,25 T  | 14,6 T |
| catch of salmon for       |  |           |         |        |
| 2019 (tonnes)             |  |           |         |        |
| (c) estimated             | 0,01 T   |           |         | 0,01 T |
| unreported catch for      |  |           |         |        |
| 2020 (tonnes)             |  |           |         |        |
| (d) number and            | 936 salmon caught, 68 released which is 6.7% of the fish caught in |           |         |        |
| percentage of salmon      | recreational fisheries in 2020 (CNCIS)                             |           |         |        |
| caught and released in    |  |           |         |        |
| recreational fisheries in |  |           |         |        |
| 2020                      |  |           |         |        |

### **3:** Implementation Plan Actions.

## **3.1** Provide an update on progress on actions relating to the Management of Salmon Fisheries (section 2.9 of the Implementation Plan).

**Note:** the reports under 'Progress on action to date' should provide a **brief overview** of each action. For all actions, provide **clear and concise** quantitative information to demonstrate progress. In circumstances where quantitative information cannot be provided for a particular action because of its nature, a clear rationale must be given for not providing quantitative information and other information should be provided to enable progress with that action to be evaluated. While referring to additional material (e.g. via links to websites) may assist those seeking more detailed information, this will not be evaluated by the Review Group.

| Action | Description of   | Under the Marine Strategy Framework Directive (MSFD)  |
|--------|--|---|
| F1:    | action<br>( <i>as submitted in the</i><br><i>IP</i> ):   | 2008/56/EC dated 17 June 2008 each Member State should develop<br>a strategy to achieve or maintain Good Environmental Status (GES)<br>in the marine environment. The first cycle covered the period $2012 - 2018$ and the second cycle ( $2019 - 2025$ ) is now in progress. Relevant<br>objectives and indicators are set for each cycle and these are revised<br>every 6 years. Reaching these objectives and indicators is achieved<br>through monitoring programmes and a suite of measures set out in<br>the strategy papers for maritime zones. One of the environmental<br>objective indicators in the second cycle relates to marine catches of<br>diadromous species, including salmon, and is given below. |
|        |  | Implementation of the indicators for the second cycle of the MSFD $(2019 - 2025)$ will enable:  |
|        |  | a) an assessment to be carried out on reaching the indicators in the first cycle;   |
|        |  | b) new monitoring measures and actions to be established for the second cycle.  |
|        | Expected outcome ( <i>as submitted in the IP</i> ):  | Management of the resource will be adapted and the MSFD objectives will be achieved.  |
|        | Progress on action to<br>date<br>(Provide a brief  | The strategic documents for French facades were officially<br>adopted in October 2019. The environmental objectives also.   |
|        | overview with a<br>quantitative measure,<br>or other justified<br>evaluation, of<br>progress. Other<br>material (e.g. website<br>links) will not be<br>evaluated): | The proposed measure presented in this action will be subject<br>to public inquiry (for adoption in mid 2021).<br>However, it has changed noticeably in its title:<br>o D01-PC-OE3-AN2 : Avoid or reduce the risk of damage to<br>the population dynamics of diadromous species. This must<br>be linked to catches in major sectors for diadromous species in<br>addition to existing management plans.<br>Technical work has been launched to define the methodology<br>for analyzing the risk of capture by fishing activities (DEB /<br>DPMA management, OFB technical coordination). The<br>methodology should be available at the end of 2021.   |
|        | Current status of  | Ongoing   |
|        | action:  |   |

|        | If 'Completed', has    |  |
|--------|------------------------|--|
|        | the action achieved    |  |
|        | its objective?         |  |
| Action | Description of         | Establish conservation limits for French rivers on which fishing         |
| F2.    | action                 | occurs / Create management objectives and assessment tools.              |
| 1 4.   | (as submitted in the   |  |
|        | (us submitted in the   |  |
|        | II J.                  | Concervation limits or management targets will be established            |
|        | Expected outcome       | Conservation minits of management targets will be established.           |
|        | (as submitted in the   |  |
|        | IF).                   | Concerning must also and the most of used which must be in               |
|        | Progress on action to  | Cogeponnis must choose the method used, which must be in                 |
|        |                        | line with the recommendations of the NASCO.                              |
|        | (Provide a brief       |  |
|        | overview with a        | The Brittany cogepomi has already chosen to follow the                   |
|        | or other justified     | method proposed by the renosaum project, which is lead by                |
|        | evaluation of          | Prévost et al. (Management of Diadromous Fish in their                   |
|        | nrogress Other         | Environment, OFB, INRAE, Institut Agro – AGROCAMPUS                      |
|        | material (e.g. website | OUEST, UNIV PAU & PAYS ADOUR/E2S UPPA). It aims                          |
|        | links) will not be     | at revisiting the definition of conservation limits in Brittany as       |
|        | evaluated):            | well as explored new management framework for salmon                     |
|        |                        | fisheries.   |
|        |                        | This project has been presented during 2019 NASCO                        |
|        |                        | conference (https://hal.archives-  |
|        |                        | ouvertes.fr/POLE_MIGRATEURS_AMPHIHALINS/hal-                             |
|        |                        | 02289543v1) and the PhD defense of Clément Lebot has                     |
|        |                        | sucessfully been done in January 2021.                                   |
|        |                        | The Brittany COGEPOMI decided to adopt new conservation                  |
|        |                        | limit in June 2019 (http://www.bretagne.developpement-                   |
|        |                        | durable.gouv.fr/IMG/pdf/pm 190614 releve decisions 2.pdf)                |
|        |                        | which has being defined by the number of eggs for which the              |
|        |                        | population has less than a given risk to be lower than the               |
|        |                        | carrying capacity For the Léguer and Elorn watersheds the                |
|        |                        | risk is 40% for 75% of carrying capacity. For the rest of                |
|        |                        | Brittany the risk is 25% for 50% of carrying capacity                    |
|        |                        | Diffunity, the fisk is 2570 for 5070 of earlying capacity.               |
|        |                        | Seine-Normandy and Artois-Picardie's cogenomi have                       |
|        |                        | initiated an approach at the end of 2020 to assess the data              |
|        |                        | concerning the populations and their habitats in their basin             |
|        |                        | river in order to reflect on a new system for calculating                |
|        |                        | conservation limits  |
|        |                        | In 2010, the Adour's approximitiated the construction of a               |
|        |                        | in 2017, the Adout's cogepoint initiated the construction of a           |
|        |                        | tool to help salmon management including the estimation of a             |
|        |                        | conservation limit. I ne first conservation limit value was              |
|        |                        | presented to the committee in $2020$ . It is established on the          |
|        |                        | value of 500 eggs per 100m <sup>2</sup> . This value was adopted and was |
|        |                        | tirst applied on March 3, 2021. Considering that the Oloron-             |
|        |                        | Saison stock is above the conservation limit, the management             |

| Action<br>F4· | Current status of<br>action:<br>If 'Completed', has<br>the action achieved<br>its objective?<br>Description of<br>action   | methods have been maintained for the 2021 season such as<br>defined in the 2015-2021 management plan.<br>The salmon stocks in the Garonne and Dordogne, Loire and<br>Rhin-Meuse waterbasins are not subject to fishing activity and<br>are not concerned by this action.<br>Ongoing<br>Determine the origin of salmon caught in estuaries and rivers<br>through scientific studies.   |
|---------------|--|---|
|               | (as submitted in the<br>IP):<br>Expected outcome<br>(as submitted in the<br>IP):<br>Progress on action to  | Improved knowledge of stock exploitation<br>During the year 2020 investigations to identify the origin of   |
|               | rogress on action to<br>date<br>(Provide a brief<br>overview with a<br>quantitative measure,<br>or other justified<br>evaluation, of<br>progress. Other<br>material (e.g. website<br>links) will not be<br>evaluated): | burning the year 2020, investigations to identify the origin of<br>the salmon returning to New Aquitaine focused on three axes<br>using otolith microchemistry and/or otolith shape.<br>First, the development of a model for assigning the native<br>origin on a regional scale (watersheds or group of rivers at<br>regional level) was made based on otolith microchemistry and<br>nine origins along the Gulf of Biscay (Adour, Nivelle,<br>Bidasoa, Garonne, Dordogne, Allier, South Brittany, Asturias,<br>Galicia). Using Discriminant Analysis with Random Forest,<br>preliminary results suggested that six regrouping (Adour-<br>Asturias; Brittany-Galicia, Bidasoa-Dordogne, Garonne,<br>Allier, Nivelle) must be done to confidently assign adult with<br>a good posterior probability. Clearly, regrouping are<br>consistent with similar watershed geology. The use of otolith<br>shape is now in progress on the individuals previously<br>analyzed by otolith microchemistry to assess whether this tool<br>makes it possible to discriminate between pools that are<br>grouped together. At the same time, more than a thousand of<br>otoliths newly collected from several basins (Adour, Garonne-<br>Dordogne, Allier, Bidassoa, Rhin, Normandie) have been<br>photographed and are being analyzed for their shape. We will<br>test on this large bank of otoliths (old and newly collect<br>otoliths), the use of shape alone to distinguish the regional<br>origin of salmon and then we will analyze the otolith<br>microchemistry on a subset of samples to control their origin.<br>Second, the development (Garonne-Dordogne) or<br>improvement (Adour) of assignment models to determine the<br>origin of returning adults were made at a scale of sub-basin as<br>well as its main tributaries. Discriminant Analysis with<br>Random Forest was newly developed in the Adour, while a |

|                     | clustering approach based on the combination of water            |
|---------------------|--|
|                     | chemistry and adult salmon otolith chemistry was promoted in     |
|                     | the Gironde because a juvenile database was not available in     |
|                     | this later basin. In both case, good differentiation was         |
|                     | observed at the sub-basin scale, but also at a fine scale        |
|                     | (specific rivers or groups of rivers). We will next test whether |
|                     | otolith shape can also distinguish the origin of salmon within a |
|                     | specific watershed at fine scale.                                |
|                     | Third, we determined the specific chemical signatures            |
|                     | recorded in otoliths at the level of the main salmon farms used  |
|                     | in France (Adour, Garonne, Dordogne, Allier) and in the          |
|                     | Bidasoa. Preliminary results suggests that the different fish    |
|                     | farms are relatively well distinguished from each other, but     |
|                     | some can be confounded with some river signatures. Otolith       |
|                     | shape will soon be examined to assess its potential to           |
|                     | discriminate between different fish farms.                       |
| Current status of   | Ongoing  |
| action:             |  |
| If 'Completed', has |  |
| the action achieved |  |
| its objective?      |  |

# **3.2 Provide an update on progress on actions relating to Habitat Protection and Restoration** *(section 3.5 of the Implementation Plan).*

**Note:** the reports under 'Progress on action to date' should provide a **brief overview** of each action. For all actions, provide **clear and concise** quantitative information to demonstrate progress. In circumstances where quantitative information cannot be provided for a particular action because of its nature, a clear rationale must be given for not providing quantitative information and other information should be provided to enable progress with that action to be evaluated. While referring to additional material (e.g. via links to websites) may assist those seeking more detailed information, this will not be evaluated by the Review Group.

|               | 2   |  |
|---------------|---|--|
| Action<br>H1: | Description of action (as submitted in the IP):   | Improve upstream and downstream movement by reducing the<br>impacts of obstacles on the main watercourses populated by<br>salmon (removing, levelling or modifying obstacles).   |
|               | Expected outcome ( <i>as submitted in the IP</i> ):   | Assessment of the improvements made to upstream and downstream movement of salmon in the main watercourses.  |
|               | Progress on action to<br>date<br>(Provide a brief overview<br>with a quantitative<br>measure, or other justified<br>evaluation, of progress.<br>Other material (e.g.<br>website links) will not be<br>evaluated): | 2020 made it possible to compile a balance sheet for the<br>current situation in France thanks to a tool called ROE<br>(stream's obstacles repository) and to the list of salmon<br>rivers established beforehand.<br>At this stage, there is no information yet for Dordogne and<br>Garonne.<br>This method being perfectible, we will not fail to<br>announce any improvement in future APR<br>See attached excel file called H1_SAT |
|               | Current status of action:   | Ongoing  |

|               | If 'Completed', has the action achieved its objective?  |   |
|---------------|---|---|
| Action<br>H2: | Description of action ( <i>as submitted in the IP</i> ):  | Identify strategic salmon spawning and nursery habitats and<br>match these with appropriate regulatory instruments for their<br>protection.   |
|               | Expected outcome (as submitted in the IP):  | Creation of a map of regulatory protection instruments; if<br>possible this will be superimposed on a map of strategic<br>habitats for salmon.  |
|               | Progress on action to<br>date<br>(Provide a brief overview<br>with a quantitative<br>measure, or other justified<br>evaluation, of progress.<br>Other material (e.g.<br>website links) will not be<br>evaluated): | During this IP's first year, we worked on the articulation<br>between salmon rivers and one of the regulatory<br>instruments: the biotope protection decree. A biotope<br>protection decree applies to the protection of<br>environments little exploited by humans and sheltering<br>protected wild animal and / or plant species. It allows the<br>prefect to set the measures to promote by decree, the<br>conservation of biotopes necessary for the food,<br>reproduction, rest or survival of protected species, on<br>appropriate territory. |
|               |   | This map represents the biotope decrees mentioning salmon<br>Equivalent work will be initiated in the coming years, with other tools promoting the protection of salmon:<br>"spawning grounds" regulatory decrees, Natura 2000 network, nature reserves, etc.   |

|               |   | <b>F</b>  |
|---------------|---|---|
|               |   | To date, the Meuse basin has mapped the spawning,<br>growth and resting areas. The Loire, Adour and GDCSL<br>basins have mapped their spawning grounds.<br>This works will be concatenated at the national level in<br>the next reports.  |
|               | Current status of action:   | Ongoing   |
|               | If 'Completed', has the action achieved its objective?  |   |
| Action        | Description of action   | Improving the function of 'weakened' habitats:  |
| Н3:           | (as submitted in the IP):   | a) Improve sedimentary conditions in some strategic areas for salmon, especially below some large dams  |
|               |   | b) Improve flow management below some large dams for the various stages of the salmon's life cycle (e.g. migration, spawning, growth)   |
|               |   | c) ensure appropriate flow levels on certain routes, or strategic stretches, for salmon (particularly on side channels).  |
|               | Expected outcome (as submitted in the IP):  | a) identification of the relevant areas in France and<br>implementation of actions (dam management, mechanical<br>sedimentary transport) which will improve the survival rates of<br>eggs and juveniles   |
|               |   | b) identification of the relevant areas across France, definition<br>and implementation of adapted management methods (minimum<br>and maximum flow levels, water level variation gradients etc.)  |
|               |   | c) identification of the relevant routes or stretches (side<br>channels) across France, definition and implementation of<br>appropriate flow levels for salmon to live, spawn and move<br>around the river  |
|               | Progress on action to<br>date<br>(Provide a brief overview<br>with a quantitative<br>measure, or other justified<br>evaluation, of progress.<br>Other material (e.g.<br>website links) will not be<br>evaluated): | Although initiated in a few COGEPOMIs, the actions<br>identified in the IP will be taken into account in future<br>plagepomis and these actions can really begin in 2022 in<br>order to have a strong identification territories with<br>salmon related issues for the end of the plan. |
|               | Current status of action:   | Not started   |
|               | If 'Completed', has the action achieved its objective?  |   |
| Action<br>H4: | Description of action (as submitted in the IP):   | Co-ordinate planning tools, linking actions related to salmon to<br>the various existing planning and management documents.   |
|               | Expected outcome (as submitted in the IP):  | Salmon issues should be taken into account in developing these documents.   |
|               | Progress on action to date  | The national plan for diadromous fishes (PNMA) is under development with the establishment of a steering  |

| (Provide a brief overview<br>with a quantitative<br>measure, or other justified<br>evaluation, of progress.<br>Other material (e.g.<br>website links) will not be<br>evaluated): | <ul> <li>committee under the joint authority of the ministries of fisheries and ecology.</li> <li>Numerous consultations have taken place, via symposiums or bilateral meetings in mainland France and overseas (with stakeholders, recreational fishermen, professional freshwater fishermen, professional sea fishing, fish farming, hydroelectricity, agriculture, etc.).</li> <li>Chapter 1 of this plan is currently being written and should present a global vision of the state and management practices of all these species. It will present all the existing systems (SDAGE, FSD, Plagepomi, Nasco IP, etc.) in order to promote their synergy, by activating the biodiversity-freshwater-sea link.</li> <li>The other chapters should present the smart goals decided collectively</li> <li>Like the measure proposed in action F1 within the framework of the MSFD, another measure relating to this plan will be the subject of a public inquiry (for adoption in mid 2021) :</li> <li>D01-PC-OE3-AN1 Develop and implement a national plan for diadromous fishes for optimized management of diadromous fish across the entire Land-Sea continuum. Actions took a little delay due to the health crisis</li> </ul> |
|--|---|
| Current status of action:<br>If 'Completed', has the   | Ongoing   |
| action achieved its<br>objective?  |   |

# **3.3 Provide an update on progress on actions relating to Aquaculture, Introductions and Transfers and Transgenics** (section 4.11 of the Implementation Plan).

**Note**: the reports under 'Progress on action to date' should provide a **brief overview** of each action. For all actions, provide **clear and concise** quantitative information to demonstrate progress. In circumstances where quantitative information cannot be provided for a particular action because of its nature, a clear rationale must be given for not providing quantitative information and other information should be provided to enable progress with that action to be evaluated. While referring to additional material (e.g. via links to websites) may assist those seeking more detailed information, this will not be evaluated by the Review Group.

| Action | Description of action                   | Assessment of stocking practices (genetic, the impact of the   |
|--------|---|--|
| A1:    | (as submitted in the IP):               | life stage at which stocking occurs etc.) in the various river |
|        | ``````````````````````````````````````` | basins in France.  |
|        | Expected outcome                        | Compilation of a national overview, with proposed              |
|        | (as submitted in the IP):               | management measures.   |
|        | Progress on action to                   | This action will start in 2022, with a specific recruitment.   |
|        | date                                    |  |
|        | (Provide a brief overview               |  |
|        | with a quantitative                     |  |
|        | measure, or other justified             |  |

|        | evaluation, of progress.<br>Other material (e.g.   |  |
|--------|--|--|
|        | website links) will not be evaluated):             |  |
|        | Current status of action:                          | Not started  |
|        | If 'Completed', has the                            |  |
|        | action achieved its                                |  |
|        | objective?   |  |
| Action | Description of action                              | Implementing reporting specifically on sea lice.   |
| A2:    | (as submitted in the IP):                          |  |
|        | Expected outcome                                   | Close monitoring for the presence / absence of sea lice in commercial salmon farms in France |
|        | Progress on action to                              | No infestation of scalice has been reported to the local                                     |
|        | date   | and national states services in the commercial salmon  |
|        | (Provide a brief overview                          | farms during 2020  |
|        | with a quantitative                                |  |
|        | measure, or other justified                        |  |
|        | evaluation, of progress.                           |  |
|        | Other material (e.g.<br>website links) will not be |  |
|        | evaluated):  |  |
|        | Current status of action:                          | Ongoing  |
|        | If 'Completed', has the                            |  |
|        | action achieved its                                |  |
|        | objective?   |  |
| Action | Description of action                              | Monitoring escapes from commercial marine salmon farms.                                      |
| A3:    | (as submitted in the IP):                          | Maritaria di mandara faranza di mari   |
|        | Expected outcome                                   | Monitoring the number of escapes each year.  |
|        | Progress on action to                              | No escapes in the commercial salmon farms had been   |
|        | date   | reported to the local and national services in 2020  |
|        | (Provide a brief overview                          |  |
|        | with a quantitative                                |  |
|        | measure, or other justified                        |  |
|        | evaluation, of progress.                           |  |
|        | website links) will not be                         |  |
|        | evaluated):  |  |
|        | Current status of action:                          | Ongoing  |
|        | If 'Completed', has the                            |  |
|        | action achieved its                                |  |
|        | objective?   |  |

### 4: Additional information required under the Convention

- 4.1 Details of any laws, regulations and programmes that have been adopted or repealed since the last notification.
- 4.2 Details of any new commitments concerning the adoption or maintenance in force for specified periods of time of conservation, restoration, and other management measures.
- 4.3 Details of any new actions to prohibit fishing for salmon beyond 12 nautical miles.
- 4.4 Details of any new actions to invite the attention of States not party to the Convention to matters relating to the activities of its vessels which could adversely affect salmon stocks subject to the Convention.
- 4.5 Details of any actions taken to implement regulatory measures under Article 13 of the Convention including imposition of adequate penalties for violations.

North American Commission Members only:

4.6 Details of any new measures to minimise bycatches of salmon originating in the rivers of the other member.

4.7 Details of any alteration to fishing patterns that result in the initiation of fishing or increase in catches of salmon originating in the rivers of another Party except with the consent of the latter.

|                          | Obstacles on watercourses populated by salm                                      |   |   |  |             | Main use of the obstacle                        |                          |                                |          |                             |  |                            |   |                                    |          |      |                |                  |  |
|--------------------------|--|---|---|--|-------------|---|--------------------------|--------------------------------|----------|-----------------------------|--|----------------------------|---|------------------------------------|----------|------|----------------|------------------|--|
| River Name               | number of<br>obstacles which<br>are on<br>watercourses<br>populated by<br>salmon | Number of<br>obstacles<br>removed from<br>salmon rivers | Number of<br>modified<br>obstacles on<br>salmon rivers for<br>upstream<br>migration | Number of<br>modified<br>obstacles on<br>salmon rivers<br>from downstream<br>migration | Aquaculture | Agriculture<br>(irrigation, animal<br>drinking) | Drinking water<br>supply | Energy and<br>hydroelectricity | Industry | Leisure and<br>water sports | Stabilization of the<br>riverbed, erosion<br>control | Safety of goods and people | Technical and scientific<br>monitoring (flow,<br>temperature) | Shipping and<br>navigation support | Obsolete | None | Unknown<br>use | not<br>available |  |
|                          |  |   |   |  |             |   |                          |                                |          |                             |  |                            |   |                                    |          |      |                | L                |  |
| Aa                       | 85   | 1   | 1   | 1  |             | 2   |                          | 1                              | 3        | 1                           |  | 2                          |   | 2                                  | 8        | 46   |                | 14               |  |
| Aber Benoit              | 13   | 0   | 0   | 0  | 1           |   | 1                        | 3                              |          | 2                           |  |                            | 1   |                                    |          | 4    | 1              | 4                |  |
| Aber Vrac'h              | 13   | 0   | 4   | 0  |             |   | 3                        | 1                              |          |                             | 1  |                            | 1   |                                    |          | 4    | 1              | 4                |  |
| Adour/Gave d'Olo         | 221  | 11  | 60  | 92   | 0           | 13  | 1                        | 72                             | 2        | 5                           | 49   | 1                          | 1   | 0                                  | 8        | 8    | 11             | 21               |  |
| Allier                   | 55   | 3   | 13  | 5  | 1           | 9   | 3                        | 4                              | 1        | -                           | 2  |                            | -   | 1                                  | 3        | 7    |                | 7                |  |
| Arques                   | 26   | 9   | 2   | 0  |             |   |                          | 1                              |          |                             |  |                            |   |                                    |          | 14   |                | 3                |  |
| Aulne                    | 40   | 0   | 28  | 0  | 1           |   | 2                        |                                |          | 1                           |  |                            | 2   | 23                                 |          | 2    |                | 5                |  |
| Authie                   | 35   | 4   | 5   | 1  | 2           |   |                          | 3                              |          | 1                           |  |                            |   |                                    |          | 23   |                |                  |  |
| Aven                     | 25   | 0   | 6   | 0  |             |   | 1                        |                                |          | 6                           |  |                            | 1   | 1                                  |          | 6    |                | 2                |  |
| Bélon                    | 12   | 0   | 2   | 0  |             |   |                          | 2                              |          |                             |  |                            |   |                                    |          | 3    |                | 3                |  |
| Blavet                   | 76   | 0   | 12  | 0  | 1           | 1   | 3                        | 8                              |          | 13                          |  |                            | 3   | 11                                 | 1        | 14   |                | 13               |  |
| Bresle                   | 125  | g   | 11  | 0  | 2           |   |                          | 6                              |          |                             |  |                            | 6   | 1                                  |          | 94   |                | 15               |  |
| Canche                   | 10   | 2   | 3   | 0  | 3           |   |                          | 3                              |          | 1                           | 1  | 1                          |   |                                    |          | 30   |                | 15               |  |
| Couesnon                 | 39   | 9   | 7   | 0  | 2           |   | 2                        | 1                              |          | 5                           | ±  | 1                          | 1   |                                    |          | 10   |                | 7                |  |
| Dordogne                 | 29   | 0   | ,<br>0  | 0  | -           |   | 2                        | 12                             |          | 3                           | 1  |                            | 1   | 2                                  | 1        | 10   |                | 9                |  |
| Douron                   | 30   | 0   | 3   | 2  | 2           |   |                          | 2                              |          | 2                           | 1  |                            |   | -                                  |          | 5    |                |                  |  |
| Douve                    | 11   | 0   | 0   | 0  | 1           |   |                          |                                |          |                             |  |                            |   |                                    |          |      |                | 8                |  |
| Durdent                  | 61   | 1   | 2   | 0  | 1           |   |                          | 8                              |          |                             |  |                            | 1   | 1                                  |          | 48   |                |                  |  |
| Ellé                     | 31   | 0   | 9   | 0  |             |   | 1                        |                                |          |                             |  | 2                          |   |                                    |          | 18   |                | 4                |  |
| Elorn                    | 30   | 0   | 7   | 1  | 1           |   | 2                        |                                |          |                             |  |                            | 2   |                                    |          | 3    | 5              | 14               |  |
| Faou                     | 1  | 0   | 0   | 0  |             |   |                          |                                |          |                             |  |                            |   |                                    |          |      |                | 1                |  |
| Flèche                   | 12   | 0   | 2   | 0  | 1           | 2   | 4                        | 1                              | 2        | 2                           | <i>c</i>   | 1                          |   | 1                                  |          | 2    | 2              | 1                |  |
| Garonne<br>Gaeb Guillerm | 33   | 0   | 0   | 0  |             | 2   | 1                        | 16                             |          | 2                           | 6  |                            |   |                                    |          | 2    |                | 2                |  |
| Gouët                    | 47   | 1   | 14  | 0  | 1           |   | 1                        | 3                              |          |                             |  | 1                          | 2   | 1                                  |          | 26   |                | 2                |  |
| Goven                    | 22   | 0   | 2   | 0  | 1           | 1   | 1                        | 5                              |          | 8                           |  | 1                          | 2   | -                                  |          | 3    |                | 3                |  |
| Jaudy                    | 33   | 1   | 8   | 0  | 1           | -   | 1                        |                                |          | -                           |  |                            | 1   |                                    |          | 15   |                | 9                |  |
| Léguer                   | 51   | 2   | 9   | 0  | 2           |   | 3                        | 3                              |          | 13                          | 1  |                            |   |                                    |          | 15   |                | 7                |  |
| Liane                    | 23   | 5   | 2   | 0  |             | 1   | 1                        |                                |          | 1                           |  |                            |   |                                    | 1        | 5    | 1              | 4                |  |
| Loire                    | 69   | 5   | 6   | 1  |             |   |                          | 22                             | 3        | 3                           | 7  | 1                          | 2   | 5                                  | 1        | 12   | 1              | 6                |  |
| Maye                     | 8  | 4   | 0   | 0  |             |   |                          |                                |          |                             |  | 1                          |   |                                    |          | 2    | 1              | L                |  |
| Mignonne                 | 12   | 0   | 1   | 0  |             |   |                          |                                |          |                             |  |                            | 1   |                                    |          | 1    | 3              | 4                |  |
| Nivelle                  | 8  | 0   | 1   | 5  | 1           |   | 1                        | 2                              | 1        | 1                           | 1  |                            | 1   | 1                                  |          |      |                | 2                |  |
| Orea                     | 23   | 12  | 0<br>8  | 1  | 1           |   |                          | 6                              | 1        | 1                           |  |                            |   | 1                                  |          | 11   |                | 0                |  |
| Penzé                    | 21   | 13  | 8   | 1  | 2           |   | 1                        | 1                              |          | 4                           |  |                            | 1   | 1                                  |          | 10   |                | 44               |  |
| Queffleuth               | 34   | 1   | 3   | 1  | 3           |   | -                        | 1                              |          | 4                           | 3  |                            | 1   |                                    |          | 5    |                | 2                |  |
| Rhine                    | 26   | 0   | 13  | 1  |             |   | ĺ                        | 2                              |          | İ                           |  | l                          |   |                                    | 1        | -    |                | 10               |  |
| Saire                    | 35   | 0   | 1   | 0  | 2           | 1   |                          | 1                              | 1        |                             |  | 1                          |   |                                    |          | 25   |                | 2                |  |
| Scorff                   | 32   | 0   | 9   | 0  |             |   | 1                        | 3                              |          | 1                           | 1  |                            | 2   |                                    |          | 14   |                | 3                |  |
| Sée                      | 29   | 0   | 9   | 0  |             |   |                          | 3                              |          |                             |  |                            |   |                                    |          | 20   | 2              | 4                |  |
| Seine                    | 132  | 16  | 14  | 1  |             | 1   |                          | 17                             | 2        | 3                           | 2  | 3                          |   | 25                                 |          | 22   | 8              | 47               |  |
| Sélune                   | 12   | 1   | 1   | 0  |             |   | 1                        | 1                              | L        | ~                           |  |                            | 1   |                                    | l        | 6    |                | 1                |  |
| Sionno                   | 68   | 2   | /   | U  | 1           | 1   | 1                        | 4                              |          | 2                           |  | 4                          |   |                                    |          | 28   |                | 10               |  |
| Sinone                   | 0/   | 9   | 11  | 0  | 1           | 1   | 1                        | /                              |          |                             |  | ł                          |   | -                                  | t        | 30   |                | 15               |  |
| Slack                    | 17   | 2   | 0   | 0  | 1           | 1   |                          |                                |          |                             |  | 1                          |   |                                    |          | 3    |                | 11               |  |
| Somme                    | 75   | ō   | 5   | ŏ  | 2           | 1 -   | 1                        | 1                              |          | 2                           | 1  | 13                         | -   | 27                                 | 1        | 11   | 8              | 9                |  |
| Thar                     | 3  | 0   | 0   | 0  | <u> </u>    |   |                          | -                              |          | -                           | -  |                            |   |                                    |          | 1    | -              | 2                |  |
| Touques                  | 50   | 5   | 12  | 0  | 3           |   |                          | 3                              | 1        | 1                           |  |                            |   |                                    |          | 28   |                | 6                |  |
| Trieux                   | 57   | 0   | 13  | 0  | 2           |   | 2                        | 3                              |          | 1                           |  |                            | 2   | 1                                  |          | 21   |                | 10               |  |
| Valmont                  | 33   | 3   | 7   | 0  | 1           |   |                          |                                |          |                             |  |                            |   |                                    |          | 23   | 1              | 4                |  |
| Vienne                   | 149  | 2   | 4   | 1  |             | 2   |                          | 39                             |          | 1                           | 1  |                            |   | 7                                  | 19       | 57   | 2              | 4                |  |
| Vilaine                  | 55   | 0   | 14  | 0  |             |   | 1                        |                                | 2        | 5                           |  | 1                          | 6   | 16                                 |          | 1    | 5              | 9                |  |
| Vire                     | 80   | 9   | 16  | 0  | 1           | 2   | 1                        | 4                              | 2        | 1                           |  |                            |   |                                    | 6        | 18   | 1              | 23               |  |
| Voimereux                | 14   | 1   | 2   | 0  |             |   | 1                        |                                |          | 2                           | 3  |                            | 1   |                                    | 5        | 2    | 1              | 2                |  |
| TOTAL                    | 2489   | 137   | 373   | 114  | 43          | 37  | 36                       | 272                            | 20       | 95                          | 81   | 33                         | 41  | 127                                | 50       | 780  | 54             | 415              |  |