	<p>Council</p> <p><i>Annual Progress Report on Actions taken under the Implementation Plan for the Calendar Year 2023 UK – England and Wales</i></p>	<p>CNL(24)26</p>
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Annual Progress Report on Actions taken under the Implementation Plan for the Calendar Year 2023

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, CNL(18)49.***

These reports will be reviewed by the Council. Please complete this form and return it to the Secretariat **no later than 1 April 2024.**

Party:	United Kingdom
Jurisdiction / Region:	England and Wales

1: Changes to the Implementation Plan
1.1 Describe any proposed revisions to the Implementation Plan (<i>Where changes are proposed, the revised Implementation Plans should be submitted to the Secretariat by 1 November.</i>)
None.
1.2 Describe any major new initiatives or achievements for salmon conservation and management that you wish to highlight.
<p>In the latest species reassessment by the IUCN Red List of Threatened Species, facilitated by WildFish and Natural England, Atlantic salmon have been reclassified from ‘Least Concern’ to ‘Endangered’ in Great Britain (as a result of a 30-50% decline in British populations since 2006 and 50-80% projected between 2010-2025), and from ‘Least Concern’ to ‘Near Threatened’ in terms of global populations as a result of global populations declines of 23% since 2006.</p> <p>Following the publication of, <i>The identification and characterisation of small salmon populations to support their conservation and management</i>, report in March 2023, Natural Resources Wales (NRW) has sought to raise the profile of salmon stocks and gain support for further stock recovery measures.</p> <ul style="list-style-type: none"> • NRW hosted a salmon summit with the Institute of Fisheries Management and Afonydd Cymru at the Welsh Senedd, with the support of the Senedd species champion Huw Irranca-Davies MS.

- The NRW Board considered the state of salmon stocks and made recommendations for a revitalised plan of action, including an endorsement to consider radical landscape scale initiatives. To progress this, NRW are applying the Norwegian pressure matrix model to better prioritise measures at a local, national and international scale.

For England, the Environment Agency has been working with external interests to develop a new salmon and sea trout implementation plan for England that will follow on from the Salmon 5-point Approach developed in November 2015. This builds on the experience gained from the Salmon 5-point Approach and importantly takes account of climate change impacts upon salmon. An important new component of the new approach will be to develop an external governance group with an independent chairperson. We are currently seeking feedback from key stakeholders and NGOs to determine their likely contribution to any future plan reflecting the need to combine efforts through collaborative working.

The EU funded SALmonid MAnagement Round the CHannel (SAMARCH) project involving a range of EU and English partner organisations concluded after 5 years. Whilst mostly focused on sea trout ecology within the transitional and the marine environment, the project has also furthered our knowledge of salmon smolt migration behaviour in two estuaries that has led to revised advice in relation to planning developments. A further key finding has been the potential scale of coastal inshore bycatch arising from the use of fixed inshore nets. This has highlighted the need to further investigate the impact and influence of inshore coastal nets set to capture sea fish on migratory fish. This is particularly relevant in the context of climate change and reduced river flows that may result in salmon taking longer to enter river catchments and therefore face an increasing risk of being intercepted in fixed gill nets.

In England, we are developing a river temperature monitoring network to better inform environmental and fisheries management. The intention will be to use real-time data to inform the need for management intervention to protect salmon and other migratory fish species. Furthermore, the data collected through the network can also be used to inform research into the impacts of climate change on salmon stocks in England.

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.

In 2023, the provisional declared salmon rod catch in England and Wales (E&W) of 4,911 was the lowest on record (2022 final declared rod catch 6,387). Salmon stocks are in an increasingly critical state when assessed against Conservation Limits (CLs) (see Action F1) with 94% of principal salmon rivers in E&W projected to be assessed as At Risk or Probably At Risk in 2028 if recent trends continue. The state of E&W salmon populations reflects the increasingly stressful environmental conditions in fresh, transitional and marine waters impacting on salmon most notably from climate change, diffuse and point-source pollution, habitat quality and barriers to migration.

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’).

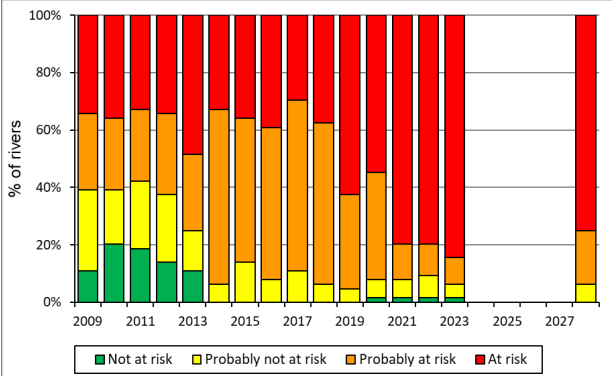
	In-river	Estuarine	Coastal	Total
(a) provisional nominal catch (which may be subject to revision) for 2023 (tonnes)	1.0	0	0	1.0
(b) confirmed nominal catch of salmon for 2022 (tonnes)	1.1	0	0	1.1

(c) estimated unreported catch for 2023 (tonnes)	0.1	0	0	0.1
(d) number and percentage of salmon caught and released in recreational fisheries in 2023	In E&W, 4,644 salmon were declared as released from the total declared catch of 4,911 salmon. This equates to 95% overall Catch-and-Release (C&R) (based on provisional 2023 rod catch data). This reflects a combination of voluntary and mandatory C&R requirements.			

3: Implementation Plan Actions.

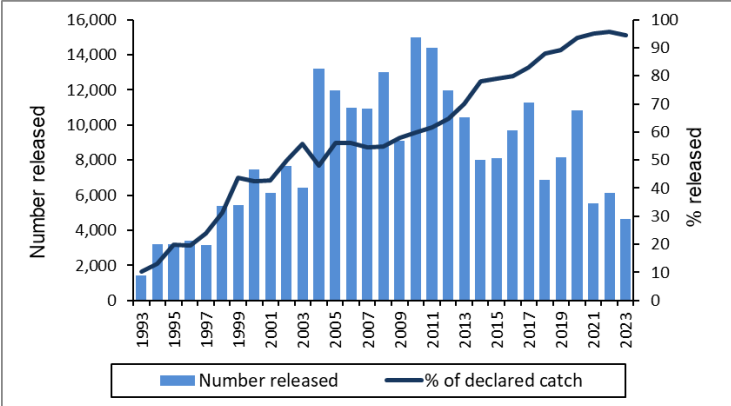
3.1 Provide an update on progress on actions relating to the Management of Salmon Fisheries (section 2.9 of the Implementation Plan).
*Note: the reports under 'Progress on action to date' should provide a **brief overview** of each action. For all actions, provide **clear and concise** quantitative information 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 F1:	Description of action (as submitted in the IP):	In order to ensure that management decisions are based on up-to-date assessments of stock status and composition (F1), in E&W we will (i) undertake annual assessments of the status of salmon stocks in line with the NASCO Fishery Management Guidance (paragraph 2.5), and (ii) annually review management measures and any need for changes / possible new measures (including voluntary and emergency regulatory controls) in salmon fishing. These actions will also ensure that regulated fishing in estuary and river fisheries does not exceed levels that are sustainable and threaten conservation of stocks (F3), and that mixed stock fisheries do not pose unacceptable risks to stocks (F4).
	Expected outcome (as submitted in the IP):	An annual update on stock status for all principal salmon rivers, meeting annual reporting requirements for ICES and NASCO, and, where the annual review of management measures indicates the need for change, these changes will be implemented.
	Progress on action to date (Provide a brief overview with a quantitative measure, or other justified evaluation, of progress. Other material (e.g. website links) will not be evaluated):	(i) In 2023, the status of salmon stocks was assessed for all 64 of E&W's principal salmon rivers to meet annual reporting requirements for ICES and NASCO. These will be published in the report: <i>Salmon Stocks and Fisheries in England and Wales 2023</i> . The assessment places each rivers' salmon stock into one of four categories with the strongest classed as 'Not at Risk' and the weakest as 'At Risk', see Figure 1. below. In 2023, 93% of principal salmon rivers in E&W were At Risk or Probably At Risk, which is a significant concern. (ii) Details of revised management measures are described in F3 and F4.

		 <p data-bbox="678 582 1476 705"><i>Figure 1. Percentage of principal salmon rivers in England and Wales in each risk category, assessed against their management objective, for 2009-2023 and as projected for 2028, if recent trends continue.</i></p>
	Current status of action:	Ongoing
	If 'Completed', has the action achieved its objective?	
Action F2:	Description of action (as submitted in the IP):	<p>In order to ensure that assessments of stock status, compliance procedures and associated Decision Structure make best use of available data and remain fit for purpose (F2), E&W will continue to assess ways in which assessment procedures and the related Decision Structure can be improved and changes implemented. These developments will be subject to discussion and review with stakeholders through the England Fisheries Group (EFG) and Welsh Fisheries Forum (WFF).</p>
	Expected outcome (as submitted in the IP):	Introduction of a more robust stock assessment methodology with clearer and more timely links to management decision-making and regulatory responses.
	Progress on action to date (Provide a brief overview with a quantitative measure, or other justified evaluation, of progress. Other material (e.g. website links) will not be evaluated):	<p>In 2023, the national salmon stock assessment review group met regularly and progressed work in a number of areas, including: publishing the following academic papers:</p> <ol style="list-style-type: none"> 1. <i>Estimation of returning Atlantic salmon stock from rod exploitation rate for principal salmon rivers in England & Wales</i>, published in the ICES Journal of Marine Science. 2. <i>Exploring the importance of accurate sex ratios on egg deposition targets and conservation limit compliance for Atlantic salmon (Salmo salar L.) in the River Tamar, southwest England</i>, published in the journal Fisheries Management and Ecology. <p>The results of the research and development presented within these papers will be integrated into the new stock assessment process.</p> <p>In addition to exploitation rates and the updating of biological parameters, the national salmon stock assessment review group has also been focusing on updating the national salmon conservation limit statistical compliance methodology and the salmon fishery decision management making processes. In progressing this, the group has considered the stock assessment processes applied within other jurisdictions and NASCO's salmon management principles.</p>

		<p>This is to ensure that we are following a best practice approach to salmon fishery management within England and Wales. Taking account of the serious declines observed in salmon stocks within the last 10 years, the overriding management objective is to ensure that salmon Conservation Limits and the upper stock reference points are achieved in order to seek to maximise salmon smolt output from principal salmon river catchments. We believe that this is a fundamental management principle when marine survival is at such a low level.</p> <p>To keep stakeholders informed of progress with the salmon stock assessment review, the England Fisheries Group, Angling Trust Salmon and Sea Trout Advisory Group and the Wales Fisheries Forum have been regularly briefed and updated on this work throughout 2023.</p> <p>The aim is to finalise the national salmon stock assessment review process in 2024 and this will be facilitated through an informal external consultation that will be undertaken in 2024 with a view to full implementation of the national salmon stock assessment process in 2025. The consultation will be undertaken in both England and Wales reflecting a joint desire to continue to align our salmon stock assessment process given the shared management responsibility for cross-border river catchments.</p>
	Current status of action:	Ongoing
	If 'Completed', has the action achieved its objective?	
Action F3:	Description of action <i>(as submitted in the IP):</i>	<p>In order to ensure that regulated fishing by estuary and river fisheries does not exceed levels that are sustainable and threaten conservation of stocks (F3) (in line with the NASCO Fishery Management Guidance - paragraph 2.7), E&W will introduce new restrictions on net and rod fisheries in England from the 2019 season, and in Wales from 2020. The measures are based on the projected status of stocks for 2022, as assessed in 2017, and will be in place for 10 years. In England there will be a review of rod and line C&R in 2020. Stock status will continue to be assessed annually.</p> <p>These actions will also ensure that mixed stock fisheries do not pose unacceptable risks to stocks (F4).</p> <p>For England (measures implemented from 2019):</p> <ul style="list-style-type: none"> • Closure of all net fisheries for 'at risk' and 'probably at risk' rivers in 2019, based on the projected status of stocks for 2022, as assessed in 2017; this includes all remaining drift net fisheries. • Mandatory C&R by anglers on the rivers that are classed as 'at risk', based on the projected status of stocks for 2022, as assessed in 2017, and on rivers that are listed as 'recovering rivers' (Annex 2). • Voluntary C&R targets in excess of 90% on rivers classed as 'probably at risk'. Compliance with the C&R target will be reviewed in 2020 with a view to either continuing the voluntary measures or implementing mandatory C&R byelaws if stocks

		<p>cannot be adequately protected by voluntary means.</p> <ul style="list-style-type: none"> • Renewal of the 1998 Spring Salmon Byelaws. These protect the larger, early running salmon, and do not introduce any new restrictions. <p>N.B. River Severn emergency byelaws were introduced in 2019 requiring compulsory C&R.</p> <p>N.B. A package of rod fishing byelaws will also be developed for the cross-border rivers Wye and Dee (“Border Rivers (England) byelaws”) to complement measures in Wales.</p> <p>For Wales (measures implemented from 2020):</p> <ul style="list-style-type: none"> • Mandatory C&R fishing of all salmon at all times for rod fisheries in all rivers in Wales. • Introduce method prohibitions on bait (worm, prawn and shrimp), use of treble hooks and use of barbed hooks. • Introduce mandatory C&R fishing and method controls on 2 of the 3 cross-border rivers – Dee and Wye in Wales. (N.B. River Severn emergency byelaws requiring mandatory C&R of salmon were introduced in 2019 in England and 2021 in Wales). • Introduce mandatory C&R at all times in all net fisheries. • Introduce revised start and finish dates for net fishing seasons with compulsory C&R. (Introduced 2019).
	<p>Expected outcome <i>(as submitted in the IP):</i></p>	<p>Reduction in the exploitation of stocks to facilitate conservation of wild salmon stocks and to aid stock recovery.</p>
	<p>Progress on action to date <i>(Provide a brief overview with a quantitative measure, or other justified evaluation, of progress. Other material (e.g. website links) will not be evaluated):</i></p>	<p>As a consequence of the implementation of the national salmon and sea trout byelaws in England in 2019, 6 of the 15 net fisheries covered by Net Limitation Order (NLOs) were subsequently fully prohibited on the basis that they predominantly exploited salmon. This included the salmon net fisheries on the Taw and Torridge (joint), Tamar, Tavy and Lynher, Camel and Exe. The NLOs on these catchments have therefore been allowed to expire as there is no opportunity to fish for migratory salmonids.</p> <p>The Severn Estuary NLO was not covered by the national salmon and sea trout byelaws and this has subsequently been managed separately owing to the complexities of this fishery. The net fisheries in the Severn predominantly exploit salmon only. A subsequent byelaw has closed the putcher rank and draft net salmon fisheries. The low risk handheld lave net fishery has been allowed to remain and fish for salmon on a catch-and-release basis. The agreement to retain the Severn lave net fishery reflects its accepted low risk and adoption of additional measures to improve salmon survival post catch-and-release. There is also a recognition of the important historic cultural and heritage value associated with lave net fishing in the Severn Estuary.</p> <p>8 of the 15 remaining NLOs covering sea trout net fisheries have been allowed to remain and consequently have been subject to additional seasonal restrictions to avoid salmon bycatch. 5 of the 8 net limitation orders covering sea trout (Lune, Teign, Fowey, Christchurch Harbour and the Yorkshire and North East coast) have</p>

		<p>been reviewed to date and this has included an assessment of their potential to capture salmon. Of these, Christchurch Harbour NLO has now been removed and replaced with a closure byelaw reflecting the need to protect sea trout stocks.</p> <p>In 2023, the North East coast NLO was approved by the Fisheries Minister. In accordance with the direction set out in 2012, the 2023 NLO will continue to implement a reducing NLO to zero nets with existing licences being extinguished as netsmen retire from the fishery. This will operate for a further 10-year period.</p> <p>3 of the 8 remaining sea trout net fishery NLOs are to be completed in 2024 (Anglian coastal, Kent and Leven).</p> <p>Anglian NLO: This NLO is currently being prepared for public consultation with a recommendation to retain the existing reducing NLO for a further 10 years.</p> <p>River Kent and Leven NLOs: are being prepared for public consultation. This includes a byelaw proposal for rod fishery method restrictions and compulsory C&R.</p> <p>In 2023, in England, new salmon protection byelaws were implemented on the River Derwent and the tidal reaches of the Yorkshire Esk. The River Derwent is a designated Special Area of Conservation for Atlantic salmon.</p> <p>For E&W in 2023, based on the provisional rod catch data, the overall C&R rate (mandatory and voluntary) was 95%.</p>  <p><i>Figure 2. The number and percentage of the declared salmon catch released by rod and line anglers, 1993-2023.</i></p>
	<p>Current status of action:</p> <p>If 'Completed', has the action achieved its objective?</p>	<p>Ongoing</p>
<p>Action F4:</p>	<p>Description of action (as submitted in the IP):</p>	<p>In order to ensure that mixed stock fisheries do not pose unacceptable risks to stocks (F4), E&W will introduce measures to phase out / regulate any remaining MSFs to reduce fishing mortality to sustainable levels in order to conserve stocks (in line with the NASCO Fishery Management Guidance - paragraph 2.7).</p> <p>Any estuarine MSFs will continue to be managed in order to safeguard the weakest contributing stock. Measures include:</p> <ol style="list-style-type: none"> The drift net fishery on the NE coast will close in 2019 and

		<p>mandatory C&R of salmon will be required in the NE T&J (beach) net and Anglian coastal fisheries.</p> <p>b. The 5-year review of the NLO for net fisheries in the Severn Estuary and the regulatory measures for fixed engines will be conducted and amended as appropriate.</p> <p>c. The 7-year review of the NLO for the remaining nets in the Anglian Coastal Fishery will be conducted and the NLO (licence numbers) and Byelaws (fishing periods and gear) amended as appropriate.</p> <p>d. The 10-year review of the NLO for the remaining T&J (beach) nets in the NE coast fishery will be conducted and the NLO (licence numbers) and Byelaws (fishing periods and gear) amended as appropriate.</p>
	Expected outcome (as submitted in the IP):	<p>Cessation of netting or introduction of mandatory C&R provisions for salmon in all coastal mixed stock fisheries from 2019.</p> <p>Implementation of regulations to ensure estuarine mixed stock fisheries (N.B. River Severn only, all other estuary fisheries will be closed or subject to mandatory C&R) continue to be managed in line with national policy and international guidance and to ensure that all contributing stocks achieve their management objectives.</p>
	Progress on action to date (Provide a brief overview with a quantitative measure, or other justified evaluation, of progress. Other material (e.g. website links) will not be evaluated):	<p>a. Completed.</p> <p>b. Completed.</p> <p>c. The Anglian NLO is currently being reviewed. This is predominantly a sea trout fishery with a low risk to salmon. The intention is to retain the reducing NLO to zero nets.</p> <p>d. The North East coast NLO was approved in 2023 (Sea trout fishery only). This has continued to apply a reducing NLO to zero nets. The NLO will be reviewed again in 10 years.</p>
	Current status of action:	Ongoing
	If 'Completed', has the action achieved its objective?	
Action F5:	Description of action (as submitted in the IP):	<p>In order to ensure that conservation of salmon stocks and fishing mortality at sustainable levels is not threatened by lack of support from stakeholders in voluntary conservation measure (F5), E&W will work with stakeholder organisations to promote C&R in rod fisheries through enhanced guidance and communications to increase acceptance of C&R among those anglers currently reluctant to adopt this practice and to achieve required C&R targets.</p> <p>In Wales this is mandatory C&R in all rivers from 2020; and in England from the 2019 season - mandatory C&R in all rivers classed as 'at risk', with voluntary high C&R rates (>90%) in all stocks classed as 'probably at risk' (based on the projected status of stocks for 2022, as assessed in 2017).</p>
	Expected outcome (as submitted in the IP):	Higher uptake of C&R in rod fisheries resulting in increased numbers of salmon surviving to spawn to facilitate stock recovery.
	Progress on action to date	In 2023, based on provisional declared rod catch data, the overall C&R rate across E&W was 95% (2022 96%), with England C&R being 94% (2022 95%) and Wales 97% (2022 100%). C&R is

(Provide a brief overview with a quantitative measure, or other justified evaluation, of progress. Other material (e.g. website links) will not be evaluated):

compulsory in Wales and currently implemented in England through a combination of mandatory and voluntary measures.

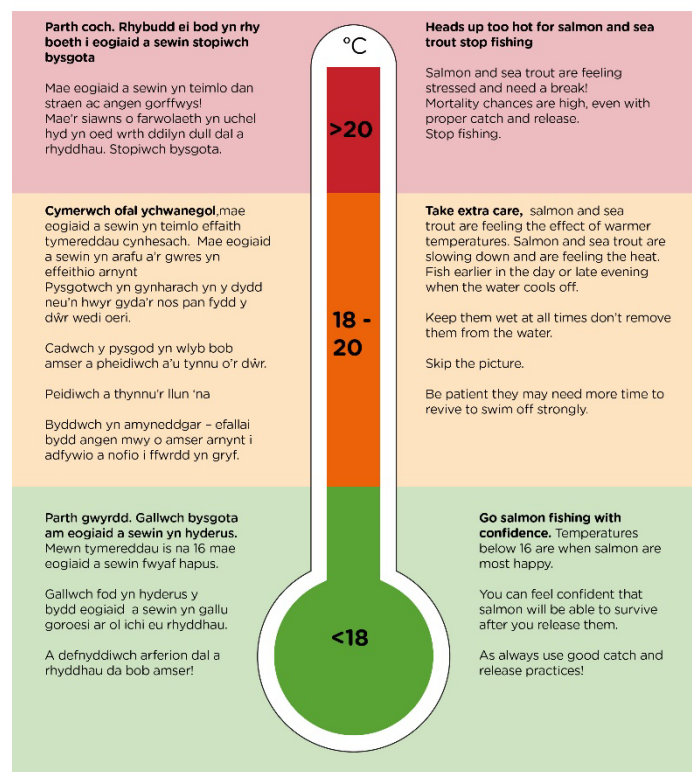
For rod and line anglers, a web-based guide: *Look after your salmon - an angler's guide to catch and release*, has been developed in partnership with the Wye and Usk Foundation, Angling Trust and Environment Agency. In Wales, guidance has been issued to all netmen on C&R with measures implemented in England to reduce the level of salmon bycatch as far as reasonably possible.

NRW released a new voluntary warm weather rod and line angling protocol in June 2023, *Water Thermometer - To fish or not to fish for salmon and sea trout*, advising anglers to cease fishing when river temperatures reach 20°C, and to take extra care at water temperatures above 18°C. This guidance has also been shared across England, with angling associations being encouraged to voluntarily implement angling restrictions during periods of warm weather to avoid impacting salmon.

**Thermomedr Dŵr
Pysgota neu beidio â physgota
am eogiaid a sewin**



**Water Thermometer
To fish or not fish for salmon
and sea trout**



Increased frequency and duration of water temperatures above 20°C has been evident in recent summers. Water temperatures on the rivers Wye and Usk exceeded the threshold in June/July (2 weeks) and again in early September (1 week) during 2023 leading to the suspension of angling by fishery owners. Angling resumed once water temperatures reduced.

Current status of action:

Ongoing

	If 'Completed', has the action achieved its objective?	
Action F6:	Description of action <i>(as submitted in the IP):</i>	In order to ensure that unregulated (illegal) fishing and by-catch in other fisheries do not threaten conservation of stocks (F6), E&W will ensure the effective enforcement of fishery regulations (in line with the NASCO Fishery Management Guidance - paragraph 2.3), and specifically will: <ul style="list-style-type: none"> a) Continue with prevention, disruption and intervention of illegal fishing, including intelligence-led enforcement and ongoing implementation of a ban on the sale of rod-caught fish and a carcass tagging scheme for net-caught fish. b) Undertake a review of fishery enforcement priorities in England and Wales. c) Work with England's ten Inshore Fisheries and Conservation Authorities (IFCAs) and Welsh Government to secure better protection for migratory salmonids from netting activities
	Expected outcome <i>(as submitted in the IP):</i>	Reduced illegal fishing and by-catch of migratory salmonids in estuaries and nearshore areas, helping to ensure that as many returning salmon as possible survive to contribute to spawning, particularly for stocks in vulnerable rivers.
	Progress on action to date <i>(Provide a brief overview with a quantitative measure, or other justified evaluation, of progress. Other material (e.g. website links) will not be evaluated):</i>	(a) In 2023 (April to December), the Environment Agency undertook across England: 111 migratory salmonid net fishery patrols; 355 migratory salmonid intelligence-led patrols in freshwater including during the close season; and 64 migratory salmonid dealer inspections. These are new enforcement metrics following the Enforcement Review (F6 b). In 2023, in NE England, prosecutions included a case of fishing illegally with a gill net with the offender being ordered to pay £421; and a prosecution for using prohibited instruments with the offender being sentenced to a 12-month conditional discharge and fines totalling £626.

NE England salmonid fisheries enforcement	2021	2022	2023
Section 1 & 2 offences (Gaff/Snatch/stripping eggs)	1	1	1
Section 27 unlicensed net offences		1	0
Illegal nets seized - salmon	5	3	3
Obstructions to migrating fish (Section 12 offences)	2	5	6
Section 2 (gravel removal/disturbing spawn of fish)	1	0	2
Local Enforcement Positions (LEPS)	1	1	0
Estuary and coastal boat patrols (8 commercial T netmen checked and several other fishing boats checked)	14	14	10
Dealer inspections	15	16	12
Joint Boat patrols (IFCAs)	3	3	8
Joint Operations (Police/ external agencies)	4	6	6
Joint Operations (Yorkshire Area)	2	4	3

In Wales, the most up-to-date figures are for 2022, which were published in 2023 in NRW's Annual Regulation Report. In 2022, 267 Fisheries incidents were reported to NRW in Wales, made up of 197 incidents of illegal fishing and 70 incidents of fish kills. These amounted to 4% of total incidents reported in Wales.

NRW prosecuted 93 illegal fishing and 26 rod and line offences. Two cases were prosecuted under the Theft Act 1968 for rod and line offences and four further Theft Act cases are still in progress. In addition, Advice and Guidance was issued for 14 cases, 14 warning letters were issued and 16 enforcement cases are in progress.

The Single Justice Procedure was used for several fisheries' enforcement cases. Single Justice Procedures apply to cases involving adults charged with summary-only non-imprisonable offences. It is part of the Government's strategy to transform summary justice to make it simpler, faster, and more proportionate; and ensure that the best use of magistrates' court time is made so that they can focus on cases which have the biggest impact on their communities. It enables cases to be dealt with by a single magistrate without the attendance of either prosecutor or defendant outside of the traditional courtroom setting, potentially allowing prosecutor resource to be diverted to other work and releasing court capacity.

In 2022, there were 24 Single Justice Procedure cases for fisheries rod and line offences.

The ringleader of prolific Teifi poaching gang had £18,524.25 confiscated as part of a £61,791.50 criminal gains penalty that he was ordered to pay. This is the first time that the Proceeds of Crime Act had been successfully used in an illegal fishing case in England and Wales.



b) In 2023, in England, under the Enforcement Review, new contracts for enforcement officers are being phased in.

c) In 2023, the Environment Agency undertook 176 compliance and enforcement patrols with enforcement partners including Inshore Fisheries Conservation Authorities (IFCAs) between April and December. This is a new enforcement metric following the Enforcement Review (F6 b). Environment Agency officers attended the National Inshore Marine Enforcement Group (NIMEG) with IFCAs and Marine Management Organisation (MMO) officers and in some districts, officers operate with cross-warrants.

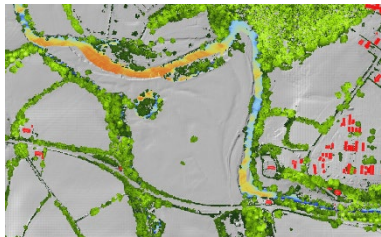
In Wales, Natural Resources Wales continue to seek ways of working with Welsh Government marine fisheries to better protect salmon in inshore waters. For example, the Welsh Dee Estuary Salmon and Sea Bass Initiative, is a multi-agency project to promote collaborative working and intelligence sharing. The partners include, Welsh Government Marine and Fisheries, North West Inshore Fisheries and Conservation Authority (NWIFCA), Environment Agency England, and Natural Resources Wales working together to carry out shore and estuary boat patrols of vessels operating within inshore waters.

Current status of action:	Ongoing
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.*

<p>Action H1:</p>	<p>Description of action (as submitted in the IP):</p>	<p>To increase salmon’s climate change resilience (H1) we will:</p> <p>a) seek to safeguard and create thermal refugia through tree planting/fencing to increase riparian shade in England and Wales (target 50,000 trees and 50km fencing in England by 2024);</p> <p>b) work with anglers to minimise the risk to salmon when temperatures are high through supporting voluntary cessation of fishing (e.g. on all principal salmon rivers where water temperatures reach 19°C at 09:00);</p> <p>c) ensure that salmonid thermal standards are applied and adhered to through regulation on all principal salmon rivers;</p> <p>d) aim to establish temperature monitoring networks on principal salmon rivers, representative of regions (target 5 rivers in England by 2024) to research and support management initiatives; and</p> <p>e) investigate potential impacts of future climate change scenarios on salmon and explore and seek to implement possible mitigating measures.</p>
	<p>Expected outcome (as submitted in the IP):</p>	<p>Improved salmon survival as a result of actions to moderate the impact of climate change.</p>
	<p>Progress on action to date (Provide a brief overview with a quantitative measure, or other justified evaluation, of progress. Other material (e.g. website links) will not be evaluated):</p>	<p>a) The Environment Agency has created updated Keeping Rivers Cool maps from the latest available Lidar data. These maps help to identify where riparian tree planting should be targeted to help reduce river temperatures for salmonids and other aquatic species. The maps have been used to target additional contributions under the England Woodland Creation Offer (EWCO). To date (June 2021 to December 2023), the Forestry Commission has funded £341,040 of additional contributions for riparian tree planting through the EWCO. This equates to 213ha of riparian tree planting targeted at cooling rivers for the benefit of salmonids and other species.</p> <p>The Woodland for Water project, led by the Rivers Trust also aims to increase riparian and catchment tree planting. To date they have planted 18.73ha of woodland, and have submitted a further 472.16ha of woodland creation applications.</p> <div data-bbox="625 1451 927 1874"> </div>

		<p>NRW is working with WG woodland creation team to identify and address barriers to uptake and to provide spatial data to inform riparian tree planting to benefit salmon.</p>  <p>Tree-planting to create climate resilient river corridors continues to be a priority for the LIFEDeeRiver and 4RiversForLIFE projects. Between them they have planted over 18,000 trees within fenced areas of riverbank.</p> <p>b) In 2023, the voluntary schemes to cease fishing when temperatures exceed 19°C on the rivers Test, Itchen and Hampshire Avon continued. In 2023, on the Hampshire Avon, fishing was stopped for 16 days (45 days in 2022). The number of days that temperature exceeded 19°C in 2023 on the Test was 22 (52 in 2022) and the Itchen 6 (28 in 2022). The number of days fishing was stopped on the Test and Itchen isn't available.</p> <p>c) Temperature standards have been integrated into river basin planning.</p> <p>d) During 2023, temperature monitoring was undertaken on the rivers Tamar, Tyne, Wye, Usk, Tywi, Conwy, Clwyd and Dee (the latter via Natural Resources Wales and partner organisations including Welsh Water, Afonydd Cymru and Wye Salmon Association). In 2023, the Environment Agency began a trial with a telemetered continuous river temperature monitoring network. The roll out of an England wide network is planned to be delivered from 2025.</p> <p>e) In 2023, the Environment Agency has been working with the Woodlands for Water Project to investigate real-time temperature changes due to riparian tree planting to add to the weight of evidence and better understand temperature dynamics within river systems. This will help with understanding fine-scale temperature changes in river systems.</p>
	Current status of action:	Ongoing
	If 'Completed', has the action achieved its objective?	
Action H2:	Description of action (as submitted in the IP):	<p>To improve the survival of salmon in estuaries and inshore waters (H2), we will:</p> <p>a) review and report on the factors affecting salmon at sea and the associated evaluation and prioritisation of potential stressors acting in estuaries and inshore waters;</p> <p>b) raise the profile of salmon by supporting the International Year of the Salmon (IYS) throughout 2019 (and possibly beyond);</p> <p>c) support research initiatives aimed at improving understanding of salmon survival at sea (including: SAMARCH (SAlmonid MAnagement Round the CHannel) 2017-2022 and the Likely</p>

		<p>Suspects initiative) and use recommendations to realise better protection for salmon in estuaries and at sea;</p> <p>d) work with England’s ten Inshore Fisheries and Conservation Authorities (IFCAs) and Welsh Government to secure better protection for migratory salmonids from netting activities;</p> <p>e) secure improvements in water quality through the delivery of the Water Company National Environment Programmes PR14 (2015-2020) & PR19 (2020-2025) and River Basin Management Plans (2015-2021) & (2021-2027); and</p> <p>f) seek to ensure tidal-lagoons and power stations do not adversely impact on salmon populations.</p>
	<p>Expected outcome (as submitted in the IP):</p>	<p>Improved understanding of the fate of salmon in estuaries and marine waters to inform policy and strengthen management practice in these areas.</p> <p>Tangible measures implemented to protect salmon in the marine environment, e.g. byelaws introduced to protect salmon from inshore netting activities.</p>
	<p>Progress on action to date (Provide a brief overview with a quantitative measure, or other justified evaluation, of progress. Other material (e.g. website links) will not be evaluated):</p>	<p>a) Completed. The paper: <i>A review of marine stressors impacting Atlantic salmon Salmo salar, with an assessment of major threats to English stocks</i>, Gilson et al. (2021), has been published.</p> <p>b) Completed. In October 2022, the concluding IYS symposium for Atlantic and Pacific salmon took place in Vancouver, Canada.</p> <p>c) Completed: The SALmonid MANAGEMENT Round the CHannel project (SAMARCH) 2017 – 2023 ended in June 2023, following a closing conference in Southampton, England. The project has tracked 900 salmon and sea trout smolts through the lower river and estuary of four rivers in the south of England and northern France; tagged 314 adult sea trout in three rivers and collected data from 84 of them on their marine movements, swimming depths, survival and reasons for mortality at sea; tagged nearly 100,000 juvenile salmon and trout on two rivers to assess marine survival rates; used molecular genetics to sex 9,500 juvenile salmon and trout; read 10,000 sets of salmon scales for changes in the ages and growth of fish at sea since 1971; developed a genetic database for salmon and trout from all rivers flowing into the Channel and assigned sea trout caught at sea back to their rivers of origin. 18 scientific papers have been published so far and the project has supported two PhD projects and 12 MSc projects. To strengthen the protection of salmon and sea trout at sea, a series of GIS layers have been produced summarising the project’s findings, and marine policy recommendations include restricting/conditioning activities such as dredging to avoid key migration periods (e.g. smolt run), strengthening measures to reduce the risk of by-catch and securing enhanced recognition for salmon and sea trout within marine protection areas and marine spatial planning. Information on the project outputs are available on the project web site www.samarch.org.</p> <p>d) The Cornwall IFCA migratory salmonid netting byelaw that was intended to strengthen the existing protection afforded to</p>

		<p>migratory salmonids in inshore coastal waters was suddenly withdrawn by the Cornwall IFCA Chief Officer at the final stage of completion and submission to the MMO and fisheries Minister. This was despite the byelaw undergoing full consultation and being approved by the IFCA committee on a number of occasions in the 5 years that it took to reach that position. The decision was extremely disappointing and failed to take account of the clear evidence presented that justified the need for the additional measures. Cornwall IFCA have agreed to continue to implement the existing migratory salmonid measures that implements net headline restrictions in 9 coastal bays and headlands around the coast of Cornwall where salmon and sea trout were known to be present.</p> <p>The netting prohibition in all of the key migratory salmonid estuaries in Devon and Severn IFCA and Cornwall IFCA districts since 2017 have been maintained.</p> <p>In 2023, in England, the Southern Inshore Fisheries Conservation Authority (IFCA) introduced a Net Fishing Byelaw to help protect migratory fish species.</p> <p>e) In 2023, in England and Wales, the most up to date WFD ecological classification for transitional and coastal (TraC) waters was:</p> <table border="1" data-bbox="603 1014 1423 1122"> <thead> <tr> <th></th> <th>High</th> <th>Good</th> <th>Moderate</th> <th>Poor</th> <th>Bad</th> </tr> </thead> <tbody> <tr> <td>England Transitional & Coastal</td> <td>0%</td> <td>17.8%</td> <td>76.3%</td> <td>2.2%</td> <td>3.7%</td> </tr> <tr> <td>Wales Transitional</td> <td>0%</td> <td>12.5%</td> <td>84.4%</td> <td>3.1%</td> <td>0%</td> </tr> <tr> <td>Wales Coastal</td> <td>4.3%</td> <td>30.4%</td> <td>61%</td> <td>4.3%</td> <td>0%</td> </tr> </tbody> </table> <p>f) In 2023, concerning Hinkley Point C, EDF Energy proposed to apply for a Development Consent Order material change to remove the requirement for Acoustic Fish Deterrents despite a Planning Inquiry highlighting the need to implement this measure to protect fish species. The potential impact of the significant estuarine abstraction will require compensation under the Habitats Regulations and this is actively being discussed at the present time.</p> <p>In 2023, Natural Resources Wales continued discussions with Welsh Government on how to address the evidence gaps for diadromous migration and behaviour in coastal waters which presents consenting risks to tidal range marine energy projects in Wales.</p>		High	Good	Moderate	Poor	Bad	England Transitional & Coastal	0%	17.8%	76.3%	2.2%	3.7%	Wales Transitional	0%	12.5%	84.4%	3.1%	0%	Wales Coastal	4.3%	30.4%	61%	4.3%	0%
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Action H3:	Description of action (as submitted in the IP):	<p>To improve fish passage and salmon habitat (H3) through implementing River Basin Management Plans, working with key partner organisations such as the Rivers Trust across England and Wales, we will aim to:</p> <p>a) identify and prioritise barriers to migration and implement measures to improve fish passage (e.g. passage schemes completed on at least 25 sites in England by 2024 and 35 in Wales in 2020/21);</p>																								

		<p>b) identify and restore degraded salmon habitat (e.g. minimum 50 kilometres in England and a target of 100 kilometres in Wales by 2024);</p> <p>c) seek to ensure in-river hydropower and tidal power schemes meet defined standards and do not cause deterioration in salmon populations.</p>																																																																																																																									
	<p>Expected outcome (as submitted in the IP):</p>	<p>Improved fish passage allowing greater access to spawning areas and improved smolt survival combined with enhanced habitat improving spawning success and juvenile survival.</p>																																																																																																																									
	<p>Progress on action to date (Provide a brief overview with a quantitative measure, or other justified evaluation, of progress. Other material (e.g. website links) will not be evaluated):</p>	<p>a) In 2023, fish passage was improved on 5 weirs/barriers across England’s principal salmon rivers, improving access on the Ribble, Irt, Eden and Border Esk. (data from the Environment Agency’s fish passage panel and ‘kilometres of river enhanced’ database). Between 2019 to 2023 fish passage has been improved at 58 barriers on England’s salmon rivers surpassing the target of 25.</p> <div data-bbox="603 741 1417 1267" data-label="Figure"> <table border="1"> <caption>Approximate data from Figure 4: Removing or easing barriers on England's salmon rivers 2014-2023</caption> <thead> <tr> <th>Year</th> <th>Other</th> <th>Prebarrage</th> <th>Weir removal</th> <th>Bypass/natural channel</th> <th>Rock ramp</th> <th>Larinier super active baffle</th> <th>Pool type</th> <th>Baulk</th> <th>LCB</th> <th>Alaskan A/Denil</th> </tr> </thead> <tbody> <tr><td>2014</td><td>2</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td></tr> <tr><td>2015</td><td>2</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td></tr> <tr><td>2016</td><td>2</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td></tr> <tr><td>2017</td><td>2</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td></tr> <tr><td>2018</td><td>2</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td></tr> <tr><td>2019</td><td>2</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td></tr> <tr><td>2020</td><td>2</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td></tr> <tr><td>2021</td><td>2</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td></tr> <tr><td>2022</td><td>2</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td></tr> <tr><td>2023</td><td>2</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td></tr> </tbody> </table> </div> <p><i>Figure 4. Removing or easing barriers on England's salmon rivers 2014-2023 (Data source: EA National Fish Pass Panel and Kms River Enhanced database).</i></p> <p>In Wales, fish passage projects are largely delivered by NRW, Afonydd Cymru and the 6 Welsh rivers Trusts.</p> <p>Since 2020 NRW has provided approximately £4 million to the rivers trusts of Wales from the Welsh Government’s Nature and Climate Emergency (NACE) fund. As well securing habitat improvement the trusts have completed 82 fish passage improvement schemes with an aggregate 502 km of river access gained.</p> <p>At the same time, NRW has focussed on tackling larger and “riskier” barriers, through the internally delivered Salmon4Tomorrow Programme, again as part of the NACE programme. Four Schemes delivered in 2023 opened up 60km of river.</p> <div data-bbox="608 1798 1027 2024" data-label="Image"> </div> <p><i>Fig weir removal on the Afon Clywedog, a tributary of the River Severn in mid Wales. Part of the Salmon4Tomorrow project</i></p>	Year	Other	Prebarrage	Weir removal	Bypass/natural channel	Rock ramp	Larinier super active baffle	Pool type	Baulk	LCB	Alaskan A/Denil	2014	2	1	1	1	1	1	1	1	1	1	2015	2	1	1	1	1	1	1	1	1	1	2016	2	1	1	1	1	1	1	1	1	1	2017	2	1	1	1	1	1	1	1	1	1	2018	2	1	1	1	1	1	1	1	1	1	2019	2	1	1	1	1	1	1	1	1	1	2020	2	1	1	1	1	1	1	1	1	1	2021	2	1	1	1	1	1	1	1	1	1	2022	2	1	1	1	1	1	1	1	1	1	2023	2	1	1	1	1	1	1	1	1	1
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		<p>NRW through the multi-year LIFEDeeRiver (~£6.8m) and Four Rivers for LIFE projects (~£9.0m), has improved fish passage over 3 structures on the River Dee (Chester weir, Alwen culvert and Weir Z in Bala).</p> <p>b) In 2023, an estimated 41km (2022 76km) of habitat was enhanced across England’s 42 principal salmon rivers, including on the Test, Hampshire Avon, Wylye, Nadder, Ribble, Irt, Eden, Kent and Teign (data from the Environment Agency’s ‘kilometres of river enhanced’ database).</p> <p>Afonydd Cymru and the 6 Welsh rivers Trusts continue to deliver habitat restoration and river habitat works across Wales – funded through the Inland Fisheries Habitat Restoration and Alternative Mitigation grants. In total, they have delivered more than 140km of river improvements since 2020, 45km of which has been in 2023.</p> <p>Similar works are being carried out as part of two LIFE projects in Wales. As well as planting trees they have augmented gravels and fenced off 55km of riverbank to exclude livestock and restore bankside vegetation.</p> <p>In 2023, the LIFEDeeRiver project continued to carry out fencing work having completed over 40km of fencing across the catchment, and introduced 800 tonnes of boulders.</p> <p>c) In 2023, no new hydropower schemes were licenced on England’s principal salmon rivers. There was one recorded non-compliant hydropower licence in 2023, which breached their licence by failing to provide a prescribed flow across the associated weir and fish pass. It was classified as a 3 (minor impact on human health, quality of life or the environment). In 2022, there were seven breaches. In Wales, NRW has issued licences for eight new hydropower schemes between 2019-2023 and 15 existing hydropower schemes have applied for licence renewal since 2019.</p>
	Current status of action:	Ongoing
	If ‘Completed’, has the action achieved its objective?	
Action H4:	Description of action (as submitted in the IP):	<p>To ensure sufficient flow for salmon through delivering measures to realise sustainable abstraction (H4), we will:</p> <p>a) continue the Restoring Sustainable Abstraction (RSA) Programme; to vary abstraction licences to meet requirements of environmental legislation (e.g. (WFD & HD), which includes 13 licences on salmon rivers in England investigated by March 2020);</p> <p>b) review time-limited licences due for renewal on salmon rivers, adjusting them as necessary to make sure they do not allow environmental damage now or in the future;</p> <p>c) ensure all permanent abstraction licences shown to be seriously damaging to salmon are reduced and meet environmental standards;</p>

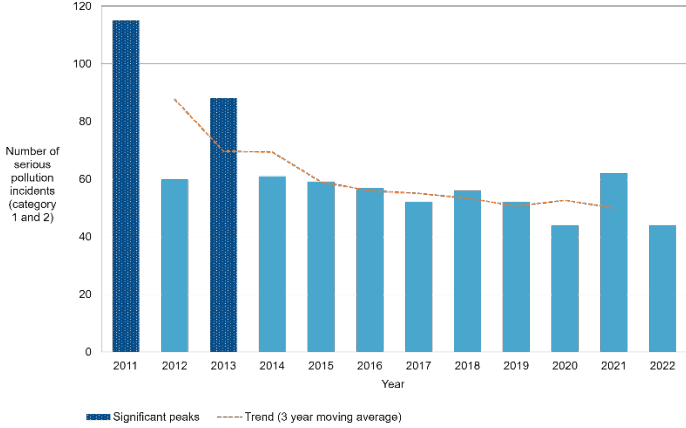
		<p>d) revoke 116 unused licences that are no longer needed, and work with abstractors to reduce 12 under-used licences on salmon rivers in England by 2019. This will prevent increased abstraction from these licences creating new environmental pressures;</p> <p>e) regulate all significant abstractions that have been exempt historically to protect the water environment;</p> <p>f) secure sufficient flows for salmon through delivering >100 Water Industry National Environmental Programme water resource investigations during PR14 & PR19;</p> <p>g) work with abstractors and catchment groups to develop local solutions to existing abstraction problems, as set out in the Water Abstraction Plan 2017 (England). To support this, we will also work with stakeholders to improve available tools through the Future Local Management of Flows initiative 2019-2024; and</p> <p>h) ensure hydro and tidal power schemes do not cause deterioration in flows or an increase in migration barriers to the detriment of salmon populations. Where possible ensure flows and artificial spates controlled from impounding reservoirs are managed to optimise salmon production/migration.</p>
	<p>Expected outcome (as submitted in the IP):</p>	<p>Improved flows to sustain the various life stages of salmon in freshwater (and the wider ecology of rivers) resulting in improved survival of salmon.</p> <p>More sustainable abstraction with more water bodies meeting environmental objectives.</p> <p>Under Defra's 25-year Environment Plan and set out in the Water Abstraction Plan (https://www.gov.uk/government/publications/water-abstraction-plan-2017/water-abstraction-plan), it is proposed to reduce the damaging abstraction of water from rivers and groundwater, ensuring that by 2021 the proportion of water bodies with enough water to support environmental standards increases from 82% to 90% for surface water bodies and from 72% to 77% for groundwater bodies. In order to meet these goals, the Environment Agency will implement the actions described above.</p>
	<p>Progress on action to date (Provide a brief overview with a quantitative measure, or other justified evaluation, of progress. Other material (e.g. website links) will not be evaluated):</p>	<p>a) In 2023, in England, no abstraction licences on principal salmon rivers were reviewed under the Restoring Sustainable Abstraction (RSA) programme. In Wales, NRW are progressing discussions with holders of abstraction and impoundment licences within the RSA programme. For example, the Afan Water Management Group continues to review site operation at Greenpark Weir on a bi-monthly basis to ensure that a series of abstraction licence conditions, water level, residual flows and screening arrangements, facilitate fish passage at all times.</p> <p>b) In 2023, 6 time-limited licences on England's principal salmon rivers were reviewed. None of these were varied to reduce abstraction. In Wales, NRW continues to review all time-limited licences in accordance with the review schedule.</p> <p>c) In 2023, in England, no licences, that has been shown to be seriously damaging to salmon were modified. There are no licences in this category in Wales.</p>

		<p>d) In 2023, in England, one unused licence was revoked, and one underused licence was reduced on England’s principal salmon rivers under phase four of this programme. This action is not applicable to Wales.</p> <p>e) Completed in England.</p> <p>In Wales, all 117 applications were determined by the 31st December 2022. There are 7 outstanding appeal decisions on licences that were restricted during the New Authorisations process that brought the abstractions into regulation.</p> <p>f) Under the Water Industry National Environmental Programme (WINEP) two improvement actions have been complete in 2023, these will reduce abstraction impacts on the River Ehen in Cumbria. In 2024, there are 278 schemes programmed for delivery on Principal Salmon Rivers (110) and recovering salmon rivers (168), covering water quality, water quantity and physical modification improvements.</p> <p>In Wales, NRW is progressing discussions with water companies on water resources schemes within the AMP7 (2020-2025) National Environment Programme due to be completed by March 2025. Nine sites have been identified for either improvement to flow or sediment management (e.g. sediment management in the Taff Fechan and Taff Fawr) to meet Water Framework Directive requirements for Heavily Modified Water Bodies by 2025.</p> <p>g) In 2023, in England, the Environment Agency released its Hydro-ecology Toolkit to enable stakeholders within the water resource industry to use modelling techniques to assess hydro-ecology impacts from its activities. The toolkit is focussed on macro-invertebrates though its underlying approach can equally be applied to fish. Workshops were delivered to the water industry in 2023 to familiarise them with the approach and to use the toolkit in future water resource planning. This action is not applicable to Wales.</p> <p>h) In 2023, in England, reservoir releases were not necessary due to a much wetter year.</p> <p>In Wales, Natural Resources Wales applies its hydropower guidance when licensing HEP schemes (see H3 d). Work to improve understanding of the effects of reservoir operation and flow regulation on salmon migration in the rivers Dee, Wye, Usk and Severn is ongoing. For example, on the Dee, following smolt tagging in 2023, a report will be published outlining issues and options to optimise flow regimes to support the population of salmon in the upper Dee. This may include changes to operations or physical modifications.</p> <p>In 2023, as a consequence of drought conditions, a drought permit was developed for the River Lyd in the southwest of England, which highlights the impact of climate change and the fragility of water availability and water demand. In addition, over the last year there have been discussions regarding the implementation of an additional pumped storage scheme on the River Lyd being promoted by South West Water to provide additional resilience to the Roadford strategic supply zone. The Environment Agency has been instrumental in</p>
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		ensuring the continued protection of adult migration and juvenile salmon rearing and spawning habitats.																	
	Current status of action:	Ongoing																	
	If 'Completed', has the action achieved its objective?																		
Action H5:	Description of action <i>(as submitted in the IP):</i>	<p>To maximise the production of healthy smolts by improving water quality (H5), we will:</p> <ul style="list-style-type: none"> a) influence River Basin Management Plans to deliver the necessary water quality improvements to protect and enhance salmon populations (England baseline principal salmon water body status (2016): 25% Good/High, 54% Moderate, 19% Poor, 2% Bad; Wales overall minimum target 42% water bodies Good or better status by 2021); b) deliver >100 Water Industry National Environment Programme water quality investigations on salmon rivers during PR14 (2015-2020) and PR19 (2020-2025); c) improve conditions for salmon through targeted agri-environment schemes e.g. Catchment Sensitive Farming, Environmental Stewardship, Countryside Stewardship and regulatory approaches such as Farming Rules for Water (or the equivalent initiatives in Wales e.g. Glastir schemes, Farm Business and Sustainable Production grants and New Water regulations ~2020); and d) seek to reduce 'serious environmental incidents' (e.g. from 419 in 2017 in (England). Includes delivery through Wales Land Management Forum sub-group on agricultural pollution and provision of advice by Farming Connect Agricultural Pollution Prevention Campaign). 																	
	Expected outcome <i>(as submitted in the IP):</i>	Improved water quality to sustain the various life stages of salmon in freshwater (and the wider ecology of rivers) resulting in improved survival of salmon.																	
	Progress on action to date <i>(Provide a brief overview with a quantitative measure, or other justified evaluation, of progress. Other material (e.g. website links) will not be evaluated):</i>	<p>a) In 2023, in England and Wales, the most up to date WFD ecological classification for principal salmon river water bodies was:</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th></th> <th>High</th> <th>Good</th> <th>Moderate</th> <th>Poor</th> <th>Bad</th> </tr> </thead> <tbody> <tr> <td>England Principal Salmon Rivers</td> <td>0.3%</td> <td>24.5%</td> <td>55.1%</td> <td>17.3%</td> <td>2.9%</td> </tr> <tr> <td>Wales Principal Salmon Rivers</td> <td>0%</td> <td>12.5%</td> <td>84.4%</td> <td>3.1%</td> <td>0%</td> </tr> </tbody> </table> <p>In Wales, the latest WFD (cycle 3) classifications were undertaken in 2021. In total, 933 surface and ground waterbodies were classified to set the baseline for cycle 3. Across all these waterbodies, 40% were classified as having Good or better overall status in 2021 (i.e. combining ecological and chemical metrics). This represented a 3% improvement from that reported in 2015 at the start of the second cycle and an 8% improvement since 2009. These assessments will be used to help deliver environmental improvements through the River Basin Management Planning cycle. Cycle 3 River Basin</p>		High	Good	Moderate	Poor	Bad	England Principal Salmon Rivers	0.3%	24.5%	55.1%	17.3%	2.9%	Wales Principal Salmon Rivers	0%	12.5%	84.4%	3.1%
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England Principal Salmon Rivers	0.3%	24.5%	55.1%	17.3%	2.9%														
Wales Principal Salmon Rivers	0%	12.5%	84.4%	3.1%	0%														

		<p>Management Plans (2021-2027) were published by Natural Resources Wales for the Western Wales and Dee River Basins in 2022.</p> <p>NRW are working with the Wales Water Management Forum (WWMF) and the Better Water Quality Taskforce to ensure 4th cycle River Basin Management Plans fully engage with external interests.</p> <p>The Combined Storm Overflows (CSO) Roadmap, and Special Areas of Conservation (SAC) Rivers Action Plan are being used to ensure that actions identified in catchment plans to protect and improve WQ are effectively tracked, monitored and delivered. Work has recently begun on the River Teifi as an ‘Exemplar Demonstration Catchment’ and is expected to serve as a blueprint for catchment planning elsewhere in Wales.</p> <p>b) In 2023, Water Companies, as part of the Water Industry National Environment Programme (WINEP), completed 23 schemes that will bring benefits to salmon. 20 of these were on our Principal Salmon Rivers and 3 on our recovering salmon rivers. The schemes were predominantly to investigate the impact of water quality, flow and physical modification pressures. We are on track to achieve our target regarding the planned investigations by 2025. Investigations that determine that there is an impact to address will result in improvement actions in future WINEPs, the next of which starts in 2025.</p> <p>The National Environment Programme (NEP) PR19 for Wales identifies a number of actions by the lead water company – Dŵr Cymru/Welsh Water (DCWW) – to improve environmental quality over the lifetime of the plan (2020-2025). This includes targeting improvements to 418km of rivers over the course of the AMP7 period (to 2025) and a further 128km during AMP8 – to 2030. These figures have been agreed with NRW and the Environment Agency as part of the NEP process, and as such have the status of formal legal obligations.</p> <p>NRW's latest annual performance report for DCWW in 2022 (published in 2023) awarded a '2 star' rating overall – down from a ‘3 star’ rating in 2021 and a ‘4 star’ (highest possible) rating achieved for the first time in 2020. The ratings in most categories remained the same as in 2021 – including a ‘green’ rating for delivery of the Asset Management Programme (AMP) (score 100%). However, ratings referring to pollution incidents scored less well than in 2021 – including a ‘red’ rating in the category ‘serious pollution incidents (sewerage and water supply assets)’.</p> <p>Water Companies submitted their Price Review 2024 (PR24) business plans to Ofwat in October 2023. Ofwat is now reviewing these and will issue draft determinations in May 2024 before final determination in December 2024. The agreed business plan and associated funding will then be delivered from 1st April 2025 to 31st March 2030 during Asset Management Programme period 8 (AMP8). The Investment Water Companies make through Ofwat’s Price review (alongside action by others) will be critical to addressing the Nature Emergency.</p>
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		<p>c) To the end of 2023, to improve conditions for salmon through targeted agri-environment schemes, uptake by farms within England’s 42 principal salmon catchments, Catchment Sensitive Farming encompassed 10,794 (up from 9,681 in 2022) farms covering 1,765,428 hectares (up from 1,604,733 hectares in 2022). In 2023, under Round 2 of funding for Landscape Recovery (LR) projects, which are large-scale long-term projects, 17 projects (up from 9 LR projects in 2022) align with principal salmon catchments, totalling ~57,000 hectares (up from 19,682 hectares in 2022), and 10 (up from 5 in 2022) of these projects mention targeting salmon as part of their project proposal. Included are the rivers: Eden, Kent, Walkham, Allen, Yeo, Glenderamackin, Wylfe, Brock, Calder, Ure, Dart, Tavy, Taw, Teign, Plym and Brit.</p> <p>The Wales, Land Management Forum (WLMF) and a sub-group on agricultural pollution met regularly during 2023 with the broad aims of developing mutual understanding of the root causes of pollution and identifying a range of approaches for driving improvements. Their focus is on slurry and nutrient management alongside water quality issues relating to soil runoff and use of agri-chemicals. A River Pollution Summit was convened by Welsh Government (WG) in 2022 – in particular to address concerns around phosphate pollution in SAC rivers and potential remedial measures. To this end, eight areas of intervention were identified and new funding provided by WG (£415K in 2022-2023) to support the work of Nutrient Management Boards. This is in addition to existing WG funding over the next 3 years e.g. £40m to address water quality problems across Wales and £337m to farmers, foresters and associated businesses to foster resilience in the rural economy, including supporting actions to tackle agricultural pollution.</p> <p>Developments in failing SAC river catchments may require nutrient neutrality re. phosphorus inputs. To support decision making, NRW have published nutrient neutrality principles and WG have engaged consultants to develop an all-Wales nutrient calculator.</p> <p>Final non-technical reports have been published by DCWW in respect of nutrient Source Apportionment modelling for all SAC rivers. Quality assurance by NRW has concluded these models are fit-for-purpose for informing wastewater planning decisions. Uncertainties remain in apportioning exact figures to diffuse nutrient inputs from agriculture and other land use due to the nature of the pollution. However, modelling demonstrates that farmers as well as water companies will need to play an important part in reducing phosphorus losses to SAC rivers.</p> <p>For permitting, NRW have applied a precautionary interim position which does not allow any additional phosphorus into failing SACs. New screening criteria are being developed. The Review of Permits for those in scope (volumes of 20m³ per day or more) is underway and is to be completed by July 2024 (17 revised permits have been issued to date).</p> <p>Other initiatives to tackle concerns around environmental quality continue. These include work on ten Opportunity Catchments by Natural Resources Wales where there is enhanced focus on addressing objectives relating to Water Framework Directive (WFD)</p>
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		<p>Regulations and wider outcomes linked to Sustainable Management of Natural Resources and well-being. These Opportunity Catchments include parts of the Dee, Usk, Wye, Teifi and Cleddau SAC rivers.</p> <p>Nature And Climate Emergency (NACE) funded, as well as supporting fisheries habitat and passage improvement (see above), the Welsh Government NACE programme is also supporting a suite of projects to address water quality issues across Wales.</p> <p>d) In 2022, which is the most recent year for which information is available, in England, water and sewerage companies caused 44 serious pollution incidents (category 1 & 2), which though a reduction on 2021 (62), remains unacceptably high. Anglian (11) and Thames (17) were the worst performers.</p> <p><i>Figure 5 Serious pollution incidents (category 1 & 2) caused by water and sewerage companies 2011 to 2022 (Water and sewerage companies in England: environmental performance report 2022)</i></p>  <table border="1" data-bbox="603 884 1292 1310"> <caption>Data for Figure 5: Serious pollution incidents (category 1 & 2) 2011-2022</caption> <thead> <tr> <th>Year</th> <th>Number of incidents</th> </tr> </thead> <tbody> <tr><td>2011</td><td>115</td></tr> <tr><td>2012</td><td>60</td></tr> <tr><td>2013</td><td>88</td></tr> <tr><td>2014</td><td>60</td></tr> <tr><td>2015</td><td>58</td></tr> <tr><td>2016</td><td>55</td></tr> <tr><td>2017</td><td>52</td></tr> <tr><td>2018</td><td>55</td></tr> <tr><td>2019</td><td>52</td></tr> <tr><td>2020</td><td>45</td></tr> <tr><td>2021</td><td>62</td></tr> <tr><td>2022</td><td>44</td></tr> </tbody> </table> <p>In Wales, the frequency of agricultural pollution incidents is a source of concern. In 2022, there were 225 agriculture incidents reported to NRW. Of these, 69% involved water pollution and 12% involved soil contamination. On 1 April 2021, new regulations for agricultural pollution came into force. These address areas such as when to spread fertiliser and make or store silage. The new regulations are being introduced over 3 years, providing time for farmers to plan for any changes. NRW has established a new inspection team to assess compliance with the Welsh Government Control of Agricultural Pollution Regulations (CoAPR), which aims to inspect over 800 farms in 2024.</p>	Year	Number of incidents	2011	115	2012	60	2013	88	2014	60	2015	58	2016	55	2017	52	2018	55	2019	52	2020	45	2021	62	2022	44
Year	Number of incidents																											
2011	115																											
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2021	62																											
2022	44																											
	Current status of action:	Ongoing																										
	If 'Completed', has the action achieved its objective?																											
Action H6:	Description of action	<p>To reduce the risk of salmon stock depletion as a result of predation (H6), we will:</p> <p>a) support the continued issue of licences to control cormorants and</p>																										

	<i>(as submitted in the IP):</i>	<p>goosanders, including the use of area-based licences and the coordination of management actions;</p> <p>b) complete a preliminary review of the current management of fish-eating birds in Wales and undertake a subsequent full evidence-based review of policy if a decision is made to undertake this;</p> <p>c) explore options for better protecting salmon at sensitive life stages and potential predation ‘pinch points’ (e.g. around barriers to smolt migration) and introduce new measures where appropriate; and</p> <p>d) review changes in the abundance and distribution of potential predator species to facilitate management decisions (e.g. seals and fish-eating birds).</p>
	Expected outcome <i>(as submitted in the IP):</i>	<p>Ensuring that licensing policy for the control of fish-eating birds remains fit for purpose and strikes an appropriate balance between safeguarding fish stocks and the conservation status of the birds.</p> <p>Better protection of salmon during sensitive life stages through co-ordinated activities at potential ‘pinch points’.</p>
	Progress on action to date <i>(Provide a brief overview with a quantitative measure, or other justified evaluation, of progress. Other material (e.g. website links) will not be evaluated):</i>	<p>a) In 2023, across England, there were 476 licences granted to control piscivorous birds for the 2023/2024 season. This comprised 394 cormorant-only individual licences and 23 cormorant-only Area licences; 5 cormorant and goosander Area licences; 27 goosander-only licences (there were no goosander-only Area licences); and 27 grey heron licences (there were no Area grey heron licences).</p> <p>In 2023, in Wales, there were 12 licences granted to control piscivorous birds for 2023/24. This comprised of 6 stillwater based licences and 6 riverine based licences with an overall total of 34 cormorants and 51 goosanders licensed for lethal control as an aid to scaring. NRW also carried out its first Fish-Eating Birds (FEB) catchment-based pilot project on the Usk to consider the practicalities of the approach and to test recommendations received from the FEB advisory group.</p> <p>b) A ‘Fish-Eating Birds external Advisory Group’ was commissioned by Natural Resources Wales in 2020 to examine the extent to which fish-eating birds were implicated in (i) the decline or the suppressed recovery of wild fish populations and (ii) damage to still water fisheries. Depending on the findings of the above (iii) options would be explored to manage the impact of predation by fish-eating birds.</p> <p>The key outputs of the Advisory Group were ten evidence reports that informed the development of a Final Report and a set of recommendations, submitted to NRW (May 2022).</p> <p>Based on the recommendations from the Advisory Group, NRW proposed a set of 39 actions. This framework was approved by NRW Board (July 2022).</p> <p>In June 2023 NRW appointed a Freshwater Fish Lead Specialist to progress the FEB framework. NRW have initiated a formal project to implement the actions, with the initial focus on a catchment-based pilot on the river Usk, that aims to apply and test the advisory group recommendations on a local scale. The first phase of the pilot will run in early spring of 2024 and findings from the overall pilot will be</p>

		<p>captured in an evidence report that will inform NRW’s future approach to the licencing of Fish-Eating Bird’s in Wales.</p> <p>c) Natural Resources Wales and partners on the River Usk, continued a 3-year salmon smolt tracking (2020-23) study that aims to examine losses during in-river migration – including the effects of barriers to migration (and their alleviation) on predation losses. Prolonged dry weather and low flows throughout the migration period in 2022 resulted in just 24% of the 100 tagged smolts passing the final receiver array with the last fish leaving the river on the 17th June.</p> <p>In 2023, trapping took place from 17th March to 17th May with 21 nights fished for a total catch of just 20 smolts.</p> <p>This compares with previous years:</p> <ul style="list-style-type: none"> • 2021 – 15 nights for 88 smolts • 2022 – 10 nights for 159 smolts • 2023 – 21 nights for 20 smolts <p>The data from 2023 is currently being processed.</p> <p>Work is underway to extend the project to 2024 and 2025 with new software and techniques being trialled to investigate fine scale fish movement. This will allow us to monitor how and if smolts are using the existing passes on Brecon Weir and provide a baseline for comparison post the easement work planned for later in 2024 under the Four Rivers for LIFE project.</p> <p>Ultimately, the information and data we gather will inform our collaborative work in the area of salmon conservation, which will prove invaluable in our efforts to tackle the cause of the population declines in the long term. The Fish-Eating Bird framework project is also working with NRW area staff and partners to identify likely smolt migration pinch points on 10 rivers.</p> <p>d) The most recent abundance estimates of grey and harbour seals are for 2022 (NERC, 2022), <i>Scientific Advice on Matters Related to the Management of Seal Populations: 2022 (st-andrews.ac.uk)</i>. Grey seal populations at the start of the breeding season were estimated as 27,000 (2019 28,400) in England and 5,400 (2019 5,000) in Wales. Grey seal pup production in 2019 (the latest year for which data are available) was estimated at 11,300 in England and 2,250 in Wales, with an increasing trend from 2016 to 2019 in England (+9.7 % per annum) but no trend reported for Wales due to a lack of data. Population estimates for harbour seals were 5,100 in England and <15 in Wales, with 2020-2021 surveys showing a population decline in England (2019-2021 counts in Southeast England were 38% lower than in 2014-2018). Numbers are too low in Wales to report a trend.</p> <p>For otters, the most up to date information is for 2018. Across Britain otter numbers were estimated at 11,000, which is a 49% increase since the previous estimate in 1995 (Mathews et al., 2018: MAMMALS-Technical-Summary-FINALNE-Verision-FM2.pdf). In Wales, the sixth national otter survey reported a 22% decline in number of sites with otter signs in 2015-2018 compared with the previous survey in 2009-2010, the first time that a decline has been</p>
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		<p>observed since these surveys began in 1977 (Kean & Chadwick, 2021). Results are not yet available from the sixth national otter survey in England (2022/2023).</p> <p>For fish-eating birds, the British Trust for Ornithology’s 2022 Breeding Bird Survey (Heywood et al., 2023) bbs_report_2022_v1.1.pdf (bto.org) reported recent increases in the breeding population of cormorants in England (8% increase from 2021 to 2022, and a longer-term increase of 23% from 1995 to 2021). These trends are not reported for Wales due to the smaller sample size. Trends in the English wintering population of cormorants have been summarised by the Joint Nature Conservation Committee Cormorant indices JNCC - Adviser to Government on Nature Conservation, based on data collected by the BTO’s Wetland Bird Survey, and show a 10-year trend (2011-2022) of 33% increase. The corresponding trends for Wales, reported in the BTO’s Wetland Bird Survey report (Austin et al., 2023) wituk2122forweb.pdf (bto.org), show a 10-year trend of 22% increase. Natural Resources Wales reported estimated wintering populations of 2,894 cormorants and 1460 goosanders within the catchments of the ten principal Welsh salmonid rivers surveyed in winter 2020-2021 (Taylor et al., 2022). Wintering goosander populations have shown a 10-year decrease of 19% in England, but a 10-year increase of 32% in Wales (Graham et al., 2023).</p> <p>In Wales for fish eating birds, using the most up-to-date information, the British Trust for Ornithology’s 2021 Breeding Bird Survey report did not indicate any significant trends in the distribution of cormorants in England (Harris et al., 2022). Natural Resources Wales reported estimated wintering populations of 2,894 cormorants and 1460 goosanders within the catchments of the ten principal Welsh salmonid rivers surveyed in winter 2020-2021 (Taylor et al., 2022). The NRW FEB project will be considering the need for future river bird census surveys.</p>
	Current status of action:	Ongoing
	If ‘Completed’, has the action achieved its objective?	

<p>3.3 Provide an update on progress on actions relating to Aquaculture, Introductions and Transfers and Transgenics (section 4.11 of the Implementation Plan).</p> <p><i>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.</i></p>		
Action A1:	Description of action (as submitted in the IP):	<p>In response to pressure to increase salmon stocking as a means to support fisheries and/or stocks (A1), we will:</p> <p>a) regulate salmon stocking in English rivers by implementing the Environment Agency’s stocking policy, which requires</p>

		<p>the production of a stocking plan;</p> <p>b) continue to highlight the evidence about the impacts of salmon stocking; and</p> <p>c) not allow salmon stocking in Wales.</p> <p>These actions will also contribute to avoiding the threat from the introduction and spread of non-native fish, invertebrate species, parasites and diseases, excluding <i>G. salaris</i>.</p>
	Expected outcome (as submitted in the IP):	All authorised stocking operations ensure the protection of genetic integrity and fitness of wild salmon populations.
	Progress on action to date (Provide a brief overview with a quantitative measure, or other justified evaluation, of progress. Other material (e.g. website links) will not be evaluated):	<p>a) Five salmon hatcheries operate across England for mitigation and restoration purposes and they are all required to adhere to the Environment Agency's stocking policy. In 2023, 244,576 0+ fry were stocked to the North Tyne in mitigation for the impact of Kielder Reservoir (18,463 0+ fry in 2022). The increase in stocking numbers in 2023 was to offset the extremely low numbers stocked in 2022.</p> <p>b) In 2023, the Environment Agency continued to highlight the impacts of salmon stocking although there is a recognition that salmon stocking may have a part to play in recovering salmon stocks where they are at severe risk of them being extirpated.</p> <p>c) In line with the 2014 NRW policy on stocking, no enhancement or restoration salmon stocking was undertaken in Wales in 2023.</p>
	Current status of action:	Ongoing
	If 'Completed', has the action achieved its objective?	
Action A2:	Description of action (as submitted in the IP):	<p>To prevent the introduction and spread of non-native fish, invertebrate species, parasites and diseases, excluding <i>G. salaris</i> (A2), we will:</p> <p>a) implement and enforce Keeping and Introduction of Fish Regulations (in 2015, the Environment Agency issued 5,207);</p> <p>b) implement European Council Regulation No. 708/2007 concerning the Use of Alien and Locally Absent Species in Aquaculture and the Alien and Locally Absent Species in Aquaculture (England and Wales) Regulations 2011;</p> <p>c) monitor disease threats (e.g., <i>Saprolegnia</i> and red vent syndrome) and the occurrence of non-native species (e.g. pink salmon) together with providing timely management advice;</p> <p>d) implement biosecurity protocols including the 'Check, Clean, Dry' campaign: and</p> <p>e) remove non-native fish at high-risk sites and/or applying Import of Live Fish Act (IFLA) or fish movement regulations to take appropriate enforcement action where site owners are not compliant.</p>

	Expected outcome (as submitted in the IP):	Containment and/or eradication of undesirable non-native fish species and prevention of <i>G. salaris</i> and other parasites and diseases occurring in England and Wales.
	Progress on action to date (Provide a brief overview with a quantitative measure, or other justified evaluation, of progress. Other material (e.g. website links) will not be evaluated):	<p>a) Since the implementation of the Keeping and Introduction of Fish Regulations in 2015, the total number of live/active permits issued by the Environment Agency is 6,746 (up 258 from 2022) Live Fish Movements Site Permits and 450 (up 19 on 2022) Live Fish Supplier Permits February 2024.</p> <p>b) In 2023, there have been no applications to culture non-native or locally absent fish species in natural waters in E&W. Defra’s policy remains to prohibit the culture of any non-native species in sites connected to natural waters.</p> <p>c) In 2023, in England, the FHI had 11 incidents logged following submission of intelligence for the sale and keeping of live non-native species under the Import of Live Fish Act (ILFA). All premises were visited, species removed where found and sources investigated with official warnings issued. For premises where no species were found a statutory advisory was issued to the operator to ensure they understand the requirements under ILFA. In 2023, there were 2 confirmed reports of pink salmon in England.</p> <p>d) In 2023, the FHI carried out 74 investigations relating to suspicions of notifiable disease, the majority in fishery waters, 1 investigation of wild crayfish, 1 investigation of farmed trout, 3 investigations at ornamental retailers and 7 on shellfish sites. In addition, 30 fish samples were screened for notifiable diseases on imports.</p> <p>In 2023, the listed diseases detected was Koi Herpesvirus Disease (KHV) with 24 (19 in 2022) fishery sites and Oyster herpesvirus detected at 1 shellfish farm that are now subject to formal controls for this disease by the FHI.</p> <p>e) In 2023, one site in England was treated to eradicate topmouth gudgeon (TMG) in East Midlands. There are currently 6 known populations of TMG in England. Prussian carp remain an increasing concern.</p> <p>In Wales, 5 sites have been identified with active populations of TMG. It is intended that these sites will be further assessed and targeted for future eradication efforts and/or biocontrol methods (dependent upon funding/budgetary approval). Eradication operations at one site in January 2023 was halted due to technical issues and the risk of rotenone being released into nearby watercourses. Subsequently, NRW has suspended all chemical-based TMG eradications and is exploring alternative control methods.</p>
	Current status of action:	Ongoing
	If ‘Completed’, has the action achieved its objective?	
Action A3:	Description of action (as submitted in the IP):	To prevent the introduction and spread of the non-native

		<p>parasite <i>G. salaris</i> (A3), we will:</p> <ul style="list-style-type: none"> a) deliver the <i>G. salaris</i> surveillance programme, contingency planning and scenario testing/exercises; and b) implement biosecurity protocols, including ensuring in-river operations comply with best practice and encouraging anglers and other water users to remain vigilant to the risk of non-native species and pathogens, to report sightings and to take biosecurity measures (the 'Check, Clean, Dry' campaign)
	Expected outcome (as submitted in the IP):	Protection of salmon from impact of <i>G. salaris</i> .
	Progress on action to date (Provide a brief overview with a quantitative measure, or other justified evaluation, of progress. Other material (e.g. website links) will not be evaluated):	<ul style="list-style-type: none"> a) In 2023, outcomes from Operation Electra continued to improve our operational preparedness and emergency response. This included further testing of communications between Cefas, Defra, the Environment Agency, Natural Resources Wales and Welsh Government in the event of an outbreak. <i>G. salaris</i> contingency plans have been finalised and published on the Defra government website. b) In 2023, 7 wild salmonid samples were taken from 7 river catchments and all were negative for the presence of <i>G. salaris</i>. All sampling was done using non-lethal sampling methods. There was no suspicion of the presence of the parasite during routine inspections of salmonid farms, and no reports of unusually low levels of natural salmon parr populations that would have triggered a specific investigation.
	Current status of action:	Ongoing
	If 'Completed', has the action achieved its objective?	
Action A4:	Description of action (as submitted in the IP):	To prevent an adverse impact of aquaculture on water quality (A4), fish farm discharge controls and restrictions on prohibited substances will be applied and any breaches in consents reported.
	Expected outcome (as submitted in the IP):	Avoidance of deleterious impacts on water quality to ensure waters achieve compliance with WFD GES/GEP status and requirements of protected sites.
	Progress on action to date (Provide a brief overview with a quantitative measure, or other justified evaluation, of progress. Other material (e.g. website links) will not be evaluated):	In 2023, there was a 123 condition breaches recorded following 92 assessments (CCS-NCAD Report). Breaches included: % dissolved oxygen, suspended solids, Biological Oxygen Demand (BOD), pH and chlorine.
	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.