Net Permit Area Monitoring and Control Plan

for Net Permit Areas, as designated under the Net Fishing Byelaw

Supporting Document as part of the Inshore Netting Review

2025 Update

Version dated: 6th February 2025

Document Control

Title	Southern IFCA Net Permit Area Monitoring and Control Plan
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Approver	The Southern Inshore Fisheries Authority
Approval date (draft)	Draft document approved on the 4th of November 2021 at the Meeting of the Technical Advisory Committee
Approval date (final)	9th December 2021 at the Meeting of the Authority.
Owner	Southern IFCA

Annual Revision History

Date	Author	Version	Status	Reason	Approver(s)
January 2025	E Condie	2025 Update	Final	Year 1 review of evidence: • Updated Threshold Trigger Values for Year 2 • Year 1 outputs for Monitoring Components • Addition of current best available evidence to Indicators of salmonid health over time	Technical Advisory Sub-Committee at the meeting on 6th February 2025.

Introduction

This Monitoring and Control Plan ('M&C Plan') has been produced as part of the Southern IFCA Netting Review to accompany the Southern IFCA Net Fishing Byelaw (NFB) and associated Net Fishing Permits.

This M&C Plan considers sites within the Southern IFC District which have been found to have a low functional linkage to a Special Area of Conservation (SAC), where Atlantic salmon are either a primary or qualifying feature of the SAC, or a Site of Special Scientific Interest (SSSI) where Atlantic salmon and/or sea trout are a notified feature or component of the SSSI. These areas will be subject to a permitted ring net fishery or a bottom set net fishery (in specified areas within the Net Permit Area only) under the provisions of the Net Fishing Byelaw.

The annual management of the permitted net fishery will be informed by this M&C Plan, this will ensure that the Authority are using the best available evidence regarding understandings of interactions between net fishing practices and migratory salmonids within the District's harbours and estuaries.

The M&C Plan will be subject to an annual review in line with the Review Procedure detailed in paragraph (36) of the NFB.

1.1 Areas Subject to a Monitoring and Control Plan

The following Net Permit Areas are defined in Schedule 2 of the NFB.

- **Southampton Water Net Permit Area and River Hamble Net Permit Area**

Following completion of a Functionally Linked Area (FLA) Assessment for Southampton Water and the River Hamble and based on the outcomes of the FLA Risk Model, it has been determined that within these areas there is a low functional linkage to the River Itchen SAC, the River Itchen SSSI and the River Test SSSI (Southampton Water). These areas fall outside principal or known migratory routes, refuge areas or pinch points used by salmonids to access the above-named SAC and SSSIs.

- **Christchurch Harbour Net Permit Area**

Following completion of a Functionally Linked Area (FLA) Assessment for Christchurch Harbour and based on the outcomes of the FLA Risk Model, it has been determined that within this area there is a low functional linkage to the River Avon SAC, River Avon System SSSI and Avon Valley SSSI. This area falls outside principal or known migratory routes, refuge areas or pinch points used by salmonids to access the above-named SAC and SSSIs.

1.0 The Monitoring & Control Plan

The M&C Plan considers an On-Site Monitoring Programme which provides triggers for different control measures based upon the type of data collected. The M&C Plan also considers information sources which can be analysed in order to provide up to date information on factors which can be used to suggest the health of salmonid populations over time.

Both the On-Site Monitoring Programme outcomes and the annual analysis of salmonid health overtime which will be to help inform the annual review of Net Permit Conditions, as set out in paragraph (36) of the NFB.

2.1 On-Site Monitoring Programme

2.1.1 Threshold Trigger Levels

Different Threshold Trigger Levels will be set for salmonids which are found (a) **dead in a permitted net type** or (b) **interacting with a permitted net type**. These trigger levels will activate a 'control mechanism'. Further details on control mechanisms can be found in Section 2.1.2.

The Threshold Trigger Levels have been determined using Atlantic salmon 'run data', as this data is available for these species. Comparable data is not currently available for sea trout.

Following a recommendation from the Net Fishing Working Group on the 10th June 2021, at their meeting in August 2021 the Technical Advisory Committee considered and approved the net fishing management intentions for Southampton Water (to include the River Hamble) and Christchurch Harbour, thus agreeing to recommend that the run data used to establish a Threshold Trigger Level should be set at **the value of more than or equal to 1% of the average of the last three year's Atlantic salmon run**.

2.1.2 Year 1 (1st December 2023 to 28th February 2025)

For Southampton Water (including the River Hamble), average run data for the River Itchen and River Test was calculated using the 'Salmon Stock and Fisheries in England and Wales Annual Report 2019' (all rivers) and 'Solent and South Downs Fish Monitoring Report 2020'. **The average 'run data' for years 2018 – 2020 gave a Threshold Trigger Level of 10.**

For Christchurch Harbour, average run data for the River Avon was calculated using the 'Salmon Stock and Fisheries in England and Wales Annual Report 2019' (all rivers) and 'Hampshire Avon Fish Counter at Knapp Mill Report 2020' (River Avon only). **The average 'run data' for years 2018-2020 gave a Threshold Trigger Level of 10.**

2.1.3 Year 2 (1st March 2025 to 31st March 2026)

For Year 2 of the M&C Plan, the run data has been established using data from the most recently available 3 years of data 2021-2023.

For Southampton Water (to include the River Hamble), average run data for the River Itchen and River Test has been calculated using the 'Salmon Stock and Fisheries in England and Wales Annual Report 2023 (all rivers)[1]'. **The average 'run data' for years 2021 - 2023 is 431, the Threshold Trigger Level is therefore 4.**

For Christchurch Harbour, average run data for the River Avon has been calculated using the 'Salmon Stock and Fisheries in England and Wales Annual Report 2023 (all rivers)[2]. **The average 'run data' for years 2021-2023 is 824, the Threshold Trigger Level is therefore 8.**

2.1.4 Control Mechanisms

The following text is intended to supplement the Control Mechanism Flow Diagrams found below (figures 1 and 2) in order to provide further clarity regarding how and when control mechanisms will be activated. This section is also to be read in conjunction with reporting requirements specified in the On-Site Monitoring Programme [Section 2.1.3]

To ensure that the Authority are transparent in making management decisions in line with their duties under the Marine and Coastal Access Act, the Control Mechanisms are subject to two stages of intervention at Authority Level, as has been written into the control process. This process is legally binding under the paragraphs (38) to (39) of the NFB.

Stage 1: Southern IFCA Permit Byelaw Sub-Committee

In the event that a trigger point is reached (for either salmonid death or salmonid interaction), Southern IFCA Officers (IFCOs) will consider the circumstances which may have led to the breach in trigger point. This may include (but not be limited to) consideration of scientific data such as run data, water temperature, tidal flow, seasonality, setting of nets, time of day, assessment of salmonid (where feasible). In addition, IFCOs will consult with the Net Permit Holder as well as partner agencies in order to ascertain a full complement of information to inform the investigation.

A Southern IFCA Permit Byelaw Sub-Committee will then be informed of the outcomes of the investigation by proxy in order to consider actions. Actions will be determined within a two-week period of the investigation beginning. Please refer to Southern IFCA Standing Orders for further details on the remit and scope of the Southern IFCA Permit Byelaw Sub-Committee.

[1] The Solent and South Downs: Fish Monitoring Report 2023 has been reviewed and run data aligns with the validated count and run estimates for salmon in these rivers provided in the Salmon Stocks and Fisheries in England and Wales Annual Report 2023. The difference between less than or equal to 1% of the average of the last three year's run for the River Itchen alone (3) and the average run data across the River Itchen and the River Test (4) can be attributed to statistical noise in the data, therefore it is not expected that using the average run data across both rivers to calculate the trigger value for interactions will result in an increased risk to the population.

[2] The Hampshire Avon Fish Counter at Knapp Mill Report 2022 has been reviewed and run data aligns with the validated count and run estimates for salmon in this river provided in the Salmon Stocks and Fisheries in England and Wales Annual Report 2023. Although the River Stour, which also enters Christchurch Harbour, is also listed as a Principal salmon river, there is no published run data for this river which can assist in defining trigger points. The EA have indicated that the 'run up' the River Avon, when looking at the less than or equal to 1% average over the three-year period this would equate to less than 1 salmon and therefore the addition of estimated run data from the River Stour would not alter the interaction trigger value for Christchurch Harbour.

Stage 2: Technical Advisory Committee

If the Southern IFCA Permit Byelaw Sub-Committee deem the circumstances which lead to a trigger point being reached, warrant the fishery to remain closed, then a full review will be presented to the subsequent timetabled meeting of the TAC. As specified in paragraph (34) of the NFB, the Authority, may, for the purposes of managing a sustainable net fishery, attach to a permit, remove from a permit, or vary one or more flexible permit conditions in line with the provisions set out in the NFB.

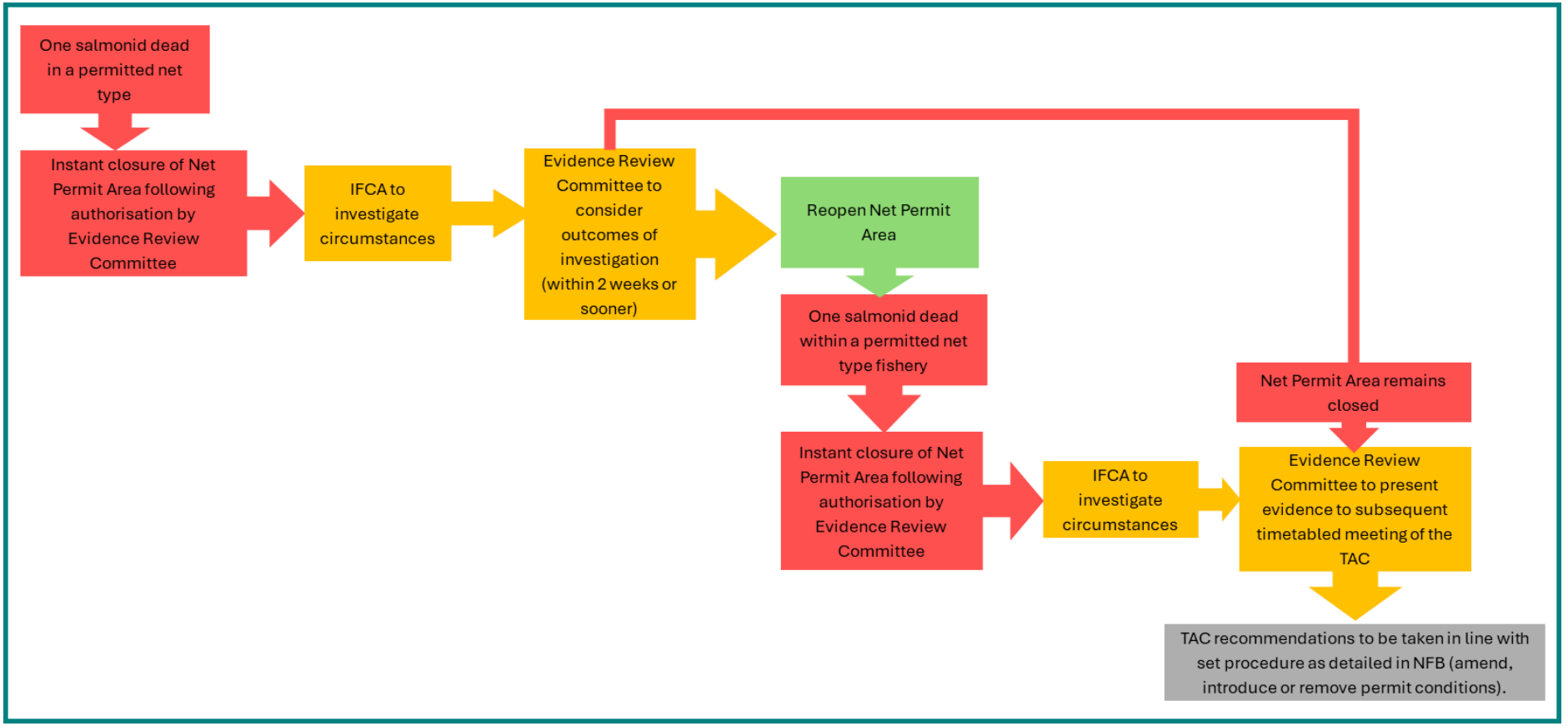

Figure 1: Salmonid mortality control mechanism flow diagram.

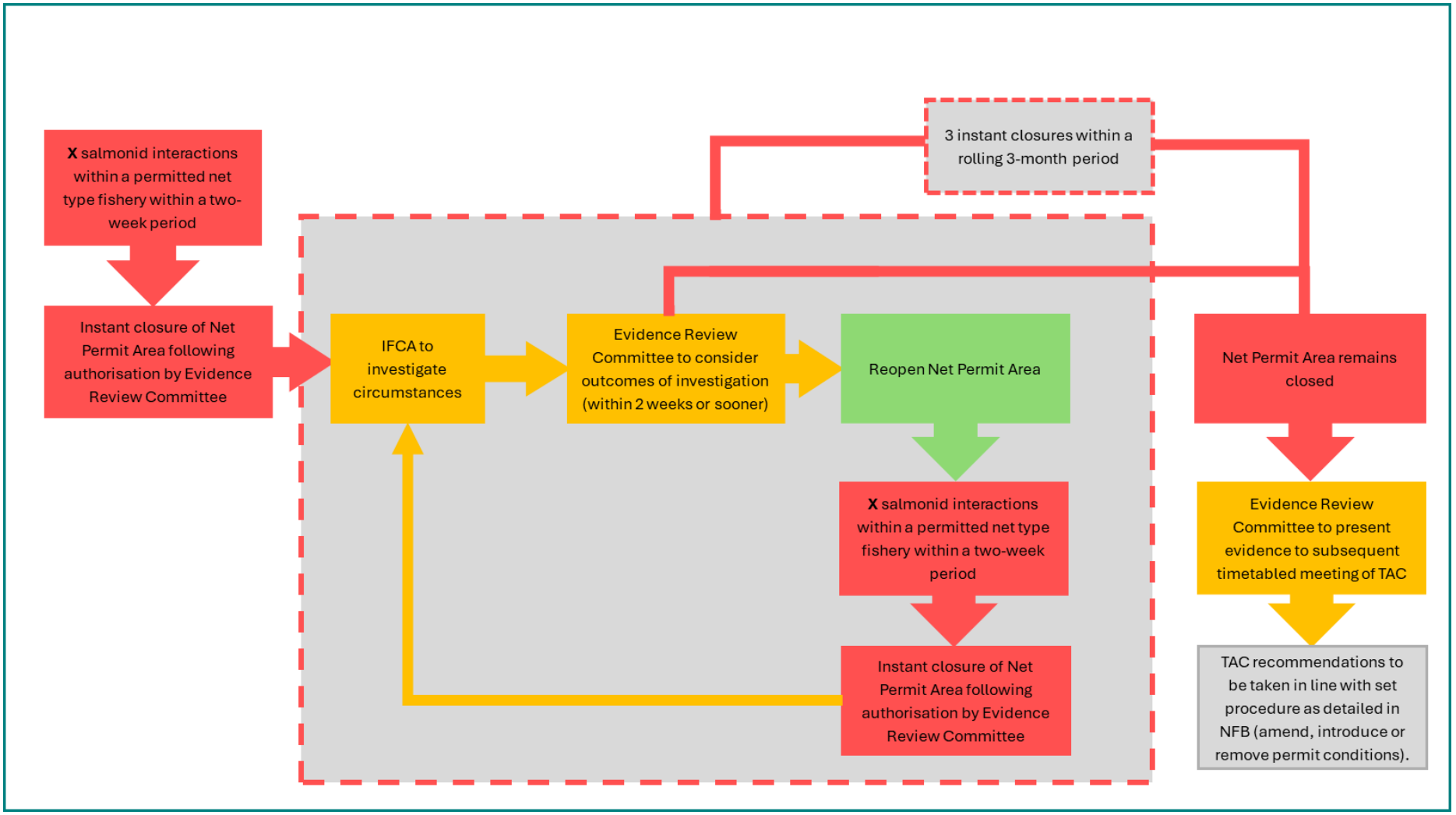

Figure 2: Salmonid interaction control mechanism flow diagram at point of implementation. ***For Year 2, X = 4 for Southampton Water and River Hamble Permit Areas. X = 8 for Christchurch Harbour Permit Areas.***

2.1.5 On-Site Monitoring Programme

The On-Site Monitoring Programme captures five components of monitoring which will be conducted in each Net Permit Area. Each of the components will work in parallel, for example, any salmonid interaction will be counted in accumulation across all components. Further details of each Monitoring Component can be found in Annex 1.

MONITORING					CONTROL	YEAR 1 OUTPUTS
Component	**Net Permit Area**	**Data Requirement**	**Responsibility**	**Analysis**		
A: Salmonid Reporting	All Net Permit Areas	**Salmonid mortality**: Permit holders to report instantly upon haul (where safe to do so) by text or phone if any dead or mortality wounded salmonids are detected.	Permit holder, as a requirement of the Net Permit Conditions	Instant action upon receipt of information	See Figure 1	No reported salmonid mortality in the Year 1 permit period
		Salmonid interaction Permit holders to report to the Authority on the day of interaction of any salmonids/net interactions (which do not result in mortality)		Reporting forms collated & analysed within 5 working days by IFCA	See Figure 2	Two reported salmonid interactions in 2024, sea trout, Christchurch Harbour. Both instances fish were in good condition and returned. Interactions did not reach the level of 10 within a 2-week period.
B: Targeted Compliance	**Southampton Water**:4 patrols across two areas **Christchurch Harbour**: 3 patrols	• Patrols for 5% of total estimated net fishing trips during June to September (NB: period of peak migration as directed by best available evidence). • Patrols will aim to provide data during different tidal states, times of day (night/day) and cover different spatial areas.	Southern IFCA to be tasked under TCG process	Instant action upon receipt of information	Mortality: see Figure 1	Ability to undertake targeted patrols and observer trips were based on fishing activity levels within Permit Areas. Throughout Year 1 activity in Permit Areas was very low, engagement with fishers throughout the year confirmed continued low level of activity resulting in limited opportunities for targeted patrols and no opportunities for observer trips. No mortality or interactions were detected through either Monitoring Component.
				Patrol Reports to be analysed within 5 working days.	Interaction trigger reached: see Figure 2	
C: Joint Agency Net Fishing Observer Trips	**Southampton Water:** 3 ring net trips/2 bottom set net trips across two areas **Christchurch Harbour**: 3 trips	• Observer Trips for 5% of total estimated net fishing trips during June to September. • Southern IFCA can commit to achieving 50% of annual target across all Net Permit Areas (4 observer patrols). Assistance from the Environment Agency will help to achieve 100% of the target.	IFCA and the EA (Observer Requirement Condition of NFB)	Instant action upon receipt of information	Mortality: see Figure 1	
				IFCA Patrol Reports to be analysed within 5 working day/EA Patrol IR reports to be shared with IFCA and analysed upon receipt	Interaction trigger reached: see Figure 2	

D: Non-targeted Compliance Patrols	All Net Permit Areas	Partner organisations to monitor compliance as tasked under the Southern IFCA TCG	Southern IFCA at TCG (via IR)	Instant action upon receipt of information	Mortality: see Figure 2	No intelligence has been received relevant to net fishing in permit areas. No non-targeted compliance patrols have identified any issues relating to non-compliance with net fishing in permit areas.
				Southern IFCA Patrol Reports to be analysed within 5 working day/EA Patrol IR reports to be shared with IFCA and analysed upon receipt	Interaction trigger reached: see Figure 2	
E: MMO Catch Recording App	*All Net Permit Areas*	*Monitoring tool still in infancy at time of writing. It is hoped that in the future this tool can be used to complement the M&C Plan*	*Pending*	*Pending*	*Pending*	The MMO catch app has not yet reached a development stage where it can be integrated into the monitoring of the net permit fishery.

2.1.6 Indicators of Salmonid Health over time

These following data sources are to be used to support understandings of salmonid health overtime. The data sources selected are specific to Southampton Water and Christchurch Harbour to provide an indication of salmonid health based on the best available data from partner organisations. This information will be reviewed alongside data from the On-Site Monitoring Programme and collectively inform the Annual Review of the Net Permit Conditions. An explanation of the different data sources and how the data is calculated is provided in Annex 2.

MONITOR			CONTROL	Most Recent Report[3,4]
Relevance to Net Permit Area	**Area**	**Data Source**	**Baseline Data**	
Southampton Water	**River Itchen**	• Salmon Stock and Fisheries in England and Wales (Annual report by EA, Cefas and Natural Resources Wales) **Baseline data: 2019** **Most recent data: 2023**	**Principal Salmon River: Atlantic salmon population status** • **2019:** Compliance Level: 'At risk' • **2024:** Compliance Level predication: 'Probably at risk'	• **2023:** Compliance Level: 'At risk' • **2028:** Compliance Level predication: 'At risk'

[3] https://assets.publishing.service.gov.uk/media/66f6ad7ea31f45a9c765ede8/SalmonReport-2023-summary.pdf
[4] 2020 England Sea Trout Fishery Performance Results -FINAL Version

		• Salmon Stock and Fisheries in England and Wales (Annual Report EA, Cefas and Natural Resources Wales) • SSD Annual Fish Monitoring Report (Annual report by EA) **Baseline data: 2015-2019** **Most recent data: 2019-23**	**Returning stock estimate (Atlantic salmon)**	
			• **2020:** 719 (130% of five-year average) (Attainment of: Conservation Limit <100% and Management Target <100%) • **2019:** 475 **5-year average (2015-2019):** 547	• **2021:** 318 (Attainment of: 44% of Conservation Limit, 80% of 5-year rolling average) • **2022:** 133 (Attainment of: 22% of Conservation Limit, 33% of 5-year rolling average) • **2023:** 287 (Attainment of: 42% of Conservation Limit, 33% of Management Target, 72% of 5-year rolling average) **5-year (2019-23) rolling average:** 386
		• England sea trout fishery performance results (Annual report by EA) **Baseline data: 2020** **Most recent data: as per baseline**	**Principal Sea Trout River: Sea trout population status**	
			• **2020:** Compliance Level: 'Probably at risk'	No updated report since 2020 which remains the best available evidence. • **2020:** Compliance Level: 'Probably at risk'
		• Salmon Counter Update, Test & Itchen, October 2024 **New report for 2024**	• An additional evidence source has been identified for 2024 – "Salmon Counter Update, Test & Itchen, October 2024". This report provides October 2024 count data for 'trout' against an average count for 2015-2023. As no count data is provided for sea trout from other reports this is the current best available evidence.	• River Itchen ○ **Oct 24** = 938 count (241% of 2015-23 average of 389) *(*) Provisional monthly counts may be adjusted on basis of further review, count includes stocked trout where these can't be identified and removed from the data.*
		• Natural England Designated Sites (View webpage-periodic) **Baseline data: 2015** **Most recent data: as per baseline**	**SSSI Condition Assessment for units which reference Atlantic salmon under the 'Rivers and Streams' reportable feature (NB relates to habitat rather than population status)**	
			• **2015:** 'unfavourable – no change'	• **2015:** 'unfavourable – no change'
	River Test	• Salmon Stock and Fisheries in England and Wales (Annual report by EA, Cefas and Natural Resources Wales) **Baseline data: 2019** **Most recent data: 2023**	**Principal Salmon River: Atlantic salmon population status**	
			• **2019:** Compliance Level: 'Probably at risk' • **2024:** Compliance Level Predication: 'Probably at risk'	• **2023:** Compliance Level: 'At risk' • **2028:** Compliance Level predication: 'At risk'
			Returning stock estimate (Atlantic salmon)	

		• Salmon Stock and Fisheries in England and Wales (Annual Report EA, Cefas and Natural Resources Wales) • SSD Annual Fish Monitoring Report (Annual report by EA) **Baseline data: 2015-2019** **Most recent data: 2019-23**	• **2020:** 2947 (211% of five-year average) (Attainment of: Conservation Limit >100% and Management Target >100%) • **2019:** 984 **5-year average (2015-2019):** 1,396	• **2021:** 704 (Attainment of: 60% of Conservation Limit, 60% of 5-year rolling average) • **2022:** 506 (Attainment of: 49% of Conservation Limit, 43% of 5-year rolling average) • **2023:** 635 (Attainment of: 43% of Conservation Limit, 30% of Management Target, 55% % of 5-year rolling average) **5-year (2019-23) rolling average:** 1,155
		• England sea trout fishery performance results (Annual report by EA) **Baseline data: 2020** **Most recent data: as per baseline** • Salmon Counter Update, Test & Itchen, October 2024 **New report for 2024**	**Principal Sea Trout River**	
			• Sea trout population status **2020:** Compliance Level: 'Probably at risk'	No updated report since 2020 which remains the best available evidence. • **2020:** Compliance Level: 'Probably at risk'

			• An additional evidence source has been identified for 2024 – "Salmon Counter Update, Test & Itchen, October 2024". This report provides October 2024 count data for 'trout' against an average count for 2015-2023. As no count data is provided for sea trout from other reports this is the current best available evidence.	• Data is split into 'Great Test' and 'Little River Test'
				  ○ Great Test
				  ▪ **Oct 24** = 871 count (185% of 2015-23 average of 470)
				  ○ Little River Test
				  ▪ **Oct 24** = 659 count (104% of 2015-23 average of 632)
				(*) Provisional monthly counts may be adjusted on basis of further review, count includes stocked trout where these can't be identified and removed from the data.

		• Natural England Designated Sites (View webpage – periodic) **Baseline data: 2013** **Most recent data: as per baseline**	**SSSI Condition Assessment for units which reference Atlantic salmon under the 'Rivers and Streams' reportable feature (NB relates to habitat rather than population status)**	
			• **2013:** 'unfavourable – no change'	• **2013:** 'unfavourable – no change'
			Principal Salmon River: Atlantic salmon population status	

Christchurch Harbour: **Eastern harbour, excluding Main Channel and River Mude entrance**	**River Avon**	• Salmon Stock and Fisheries in England and Wales (Annual report by EA, Cefas and Natural Resources Wales) **Baseline data: 2019** **Most recent data: 2023**	• **2019:** Compliance Level: 'Probably at risk' • **2024:** Compliance Level Predication: 'Probably at risk'	• **2023:** Compliance Level: 'At risk' • **2028:** Compliance Level predication: 'At risk'
		• Salmon Stock and Fisheries in England and Wales (Annual report by EA, Cefas and Natural Resources Wales) • SSD Annual Fish Monitoring Report (Annual report by EA) **Baseline data: 2015-2019** **Most recent data: 2019-23** • Hampshire Avon Fish Counter at Knapp Mill Report (Environment Agency Report) **Baseline data: 2020** **Most recent data: 2022**	**Returning stock estimate (Atlantic salmon)** • **2020:** 1495 • **2019:** 704 **5-year average (2015-2019):** 998	• **2021:** 1,057 (Attainment of: 88% of Conservation Limit, 109% of 5-year rolling average) • **2022:** 837 (Attainment of: 57% of Conservation Limit, 87% of 5-year rolling average) • **2023:** 578 (Attainment of: 31% of Conservation Limit, 27% of Management Target and 3% of 5-year rolling average) **5-year (2018-22) rolling average:** 934
		• England sea trout fishery performance results (Annual report by EA) **Baseline data: 2020** **Most recent data: as per baseline**	**Principal Sea Trout River: Sea trout population status** • **2020:** Compliance Level: 'Probably at risk'	No updated report since 2020 which remains the best available evidence. • **2020:** Compliance Level: 'Probably at risk'
		• Natural England Designated Sites (View webpage – periodic) **Baseline data: 2010** **Most recent data: for one SSSI, 2021, other SSSI as per baseline**	**SSSI Condition Assessment for units which reference Atlantic salmon under the 'Rivers and Streams' reportable feature (NB relates to habitat rather than population status)** • Avon Valley (Bickton to Christchurch) (1 unit) **2010:** 'unfavourable – recovering' • River Avon System (3 units) **2010:** 'unfavourable – recovering'	SSSI assessments have been updated for 1 site. The units mentioned below refer to Atlantic Salmon in relation to Freshwater Levels. • River Avon System (9 units) **2021:** 'unfavourable – No Changes'[5]

[5] Natural England – Designated Site Feature Conditions – River Avon SSSI

Annex 1: Components of On-Site Monitoring Programme

A: Salmonid Interaction Reporting

The requirements for reporting salmonid death and salmonid interactions will be set under the Net Permit Conditions.

B: Targeted Compliance Patrols

The number of each type of net fishing trip per year within each fishery area has been estimated based on expert opinion, fisher communications and MMO fishing data (table A1). This data has been used to inform the number of trips for both the Targeted Compliance Patrols and the Joint Agency Observer Trips (see section C), where 5% of estimated trips has been used in the first instance to set a target for both monitoring components. Although fishing activity has remained lower than expected in year 1, the proposed patrol numbers will remain for year 2.

Fishery Area	Estimated number of net fishing trips in Year 1		
	Ring Net	Bottom Set Net	Combined Net Trips
Southampton Water	60	20	80
Christchurch Harbour	60	n/a	60

Table A1: Estimated number of net fishing trips on which Monitoring Targets for year one will be based. Estimates are derived from expert opinion, fisher communications and MMO fishing data.

C: Joint Agency Observer Trips

Observer Trips will involve the deployment of a Southern IFCA Officer, or a person delegated by the Southern IFCA to conduct this function (this may include but is not limited to a person from another competent authority such as The Environment Agency) for the duration of a net fishing trip. Observer trips will be targeted towards peak salmonid migration conditions and fishers will be informed that they will be required to carry an observer on their next trip.

During the net fishing trip, the observer will record information related to:

- The type of fishing gear being used.
- The number of net hauls completed.
- Details (species and size) of all catch, both retained and discarded; and
- Details of any interaction with a salmonid.

The observer will be provided with a standardised record sheet which will detail the information required and will ensure that the data from the observer program is consistent, and any analysis of the data can be robust and quantifiable. Prior to the commencement of the observer program, participants will be required to demonstrate that they are competent in the identification of salmonids and other relevant species.

At a meeting of the Byelaw Working Group on 17th December 2020, Members agreed that observer trips should be 5% of total estimated net fishing trips for a particular gear type or a minimum of two trips whichever was higher. For demersal sole nets in Southampton Water, 5% of the total estimated net fishing trips is 1 trip therefore a minimum of two trips is applied here

D: Non targeted Compliance Patrols

Non-targeted Compliance Patrols refer to Compliance Patrols conducted by Southern IFCA and partner agencies in the normal delivery of their duties as opposed to patrols conducted for the purpose of observing net fishing activity. During these patrols Officers will be aware of the need to collect data on net fishing activity and any potential interactions with salmonids. Any intelligence relating to net fishing activity and/or interactions with salmonids will be submitted and analysed through the intelligence reporting system of a particular agency with intelligence reports marked for dissemination to other relevant authorities.

E: MMO Catch Recording

The newly implemented method of catch recording by the MMO for under 10 metre flag vessels fishing in UK waters is designed to provide an accurate picture of what is being taken out of the sea to be able to manage fish stocks and fishing opportunities for the future. Catch recording is a licence requirement which applies to the owners or operators of any licenced fishing vessel under 10m (non-sector only). Catch records can be submitted via the web, the specifically designed app, or the digital assist helpline. Fishers must submit catch records for quota species after landing but before the fish is moved from its place of landing. For non-quota species, fishers have 24 hours to submit the catch record. The catch record includes the date, port of landing, fish species, catch weight, the gear used and the sea area (defined as ICES statistical rectangle and sub-rectangle). For example, Christchurch Harbour is within sub-rectangle 30E82, Southampton Water falls within three sub-rectangles, 30E84 (from Fawley area north), 30E87 (entrance to River Hamble, River Hamble) and 30E88 (south of Fawley).

Annex 2: Components of Indicators of salmonid health over time

A: Principal Salmon River Status to include Population Status for Atlantic salmon

There are 49 rivers in England and 31 rivers in Wales which regularly support Atlantic salmon. Of these, 64 rivers are designated as 'principal salmon rivers' in the 'Salmon Stocks and Fisheries in England and Wales' annual report issued jointly by the Environment Agency, Cefas and Natural Resources Wales. The report used for the baseline data is for 2019. There are 42 principal salmon rivers in England and 22 in Wales, each of which has a Conservation Limit (CL) and a Management Target (MT). The CL and MT are used to give annual advice on stock status and to assess the need for management and conservation measures. The report used for the year 1 review is for 2023.

The CL and MT are based on the number of eggs deposited and annual compliance with the CL is assessed using egg deposition estimates. These estimates are derived from returning stock estimates where this data is available or, for rivers without traps or counters, the estimate is derived from the run size based on rod catch data using estimates of exploitation and an appropriate adjustment for under-reporting[6]. The Management Objective for a principal salmon river is that the river should meet the CL is at least four years out of five (at least 80% of the time). Compliance with this objective, I.e., the probability of a river meeting the Management Objective, classifies a river as 'At risk' (<5% probability), 'Probably at risk' (5-50% probability), 'Probably not at risk' (50-95% probability) and 'Not at risk' (>95% probability).

B: Returning stock estimate (Atlantic salmon)

The Environment Agency monitors stocks and fishery performance in most principal salmon rivers using fish counters, surveys of juvenile fish and collecting fisheries statistics. Based on this data collection, validated count data and a run estimate for salmon smolts and adults is provided for principal salmon rivers. The 'Salmon Stocks and Fisheries in England and Wales' annual report provides this verified data for all principal salmon rivers. The Environment Agency also produces a 'Solent and South Downs Annual Fish Monitoring Report' which provides details and results from all EA fish monitoring conducted in the Solent and South Downs area. This provides results from a variety of surveys including count data from fish counters on rivers in this area. This report has provided the baseline count data for 2020 for the Rivers Test and Itchen, the most recent reports informing the year 1 review is for 2023[6,7].

For 2020 data for the River Avon, the Environment Agency have produced a report on data from the fish counter at Knapp Mill. Part of this report provides a yearly summary of data from the fish counter which gives a combined upstream count of both salmon and sea trout. This figure is then apportioned between salmon and sea trout to give a total count for each. The separation between the two species is done based on images which are collected by

[6] Environment Agency, Cefas and Natural Resources Wales. 2023. 'Salmon Stocks and Fisheries in England and Wales in 2023', (https://assets.publishing.service.gov.uk/media/66f6ad7ea31f45a9c765ede8/SalmonReport-2023-summary.pdf)

[7] Environment Agency, Solent and South Downs Annual Fish Monitoring Report, https://www.solentforum.org/publications/Environment%20Agency%20SSD%20Fish%20Monitoring%20Report%202023.pdf

the cameras in the counters. The proportion of each species from these images is used to calculate the split between salmon and sea trout for 'unknown' fish I.e., where ID is not possible. This information is then used to provide a final count for each species. The most recent report is for 2022[8].

C: Principal Sea trout River Status to include fishery performance for sea trout

A report is produced on the England sea trout fishery performance results by the England & Wales Sea Trout & Salmon Technical Working Group. This report details the status of England's sea trout stocks based on declared rod catches with the aim of informing management actions to protect and enhance sea trout populations. The current report is for 2020 and was used to calculate the baseline. There are 44 rivers designated as 'principal sea trout rivers' in England, designated based on the rod catch being >50 fish. There has been no updated report since 2020 in which to compare the status of principal sea trout river status.

The assessment of the principal sea trout rivers uses two criteria: trend in CPUE in the last 10 years and current CPUE relative to the last 10 years. Based on this assessment the river is categorised into one of four categories: 'At risk', 'Probably at risk', 'Probably not at risk' and 'Not at risk'. There is no forward prediction for sea trout status as there is with salmon. The assessment reflects rod performance and therefore is not always an indication of overall stock performance, the assessment is intended to give early warning about potential problems. For a full picture of the stock, the assessment should be considered alongside Water Framework Directive Assessments for juvenile trout for the consistent water bodies in the catchment of a particular river (where such assessments exist).

An additional evidence source has been identified for Southampton Water for 2024 – "Salmon Counter Update, Test & Itchen, October 2024". This report provides October 2024 count data for 'trout' against an average count for 2015-2023. Data in the reported is caveated with the fact that provisional monthly counts may be adjusted on basis of further review and the count includes stocked trout where these can't be identified and removed from the data.

D: SSSI Condition Assessment for 'Rivers and Streams'

Each SSSI has a number of units associated with it which cover a certain geographic area. For a SSSI Condition Assessment, the condition of 'reportable features' are assessed periodically within the geographical area of a particular site unit. As such, individual condition assessments are not undertaken specifically for Atlantic salmon or sea trout, but rather for the 'Rivers and Streams' reportable feature, of which salmon and sea trout are a faunal component (which species are included in dependent on the site designation). The assessment of the 'Rivers and Streams' feature considers both the condition of supporting habitat for salmonids and their populations status within the site. Therefore, the condition which is assigned to a particular unit relates to the 'Rivers and Streams' feature as a whole, rather than just the condition of the salmonid population in that area. Condition assessments for SSSIs are updated periodically based on a rolling program.

[8] Environment Agency, Hampshire Avon Fish Counter at Knapp Mill 2022 Q4 report, http://avondiary.net/news/2022q4.pdf