

Board Paper

9 July 2015

Paper Title	Management Options to Address the Decline in Stocks of Salmon and Some Sea Trout in Wales
Paper Reference:	NRW B B 40.15
Paper sponsored by:	Ceri Davies
Paper Prepared By:	Peter Gough
Purpose of Paper:	To provide information for a discussion on salmon and sea trout stock management in Wales. To agree the way forward.
Recommendations:	The Board is requested to: 1. Consider the information provided on the status of stocks of salmon and sea trout 2. Provide advice on the proposed way forward and engagement with stakeholders on the options for future salmon and sea trout management. 3. Agree that the environment and knowledge board sub groups assist in developing the next steps.
Decision Required:	• To endorse the need to protect more salmon and sea trout in order to increase the number that survive to spawn. • To endorse the proposed approach to implement new byelaws and net limitation orders following a consultation on the management options available. • To endorse the need for ongoing investment in river habitat restoration.
Impact: To note – all headings might not be applicable to the topic	Impact on the Environment: Fish require good water quality and availability and access to habitat. They are a key indicator of ecological performance and environmental quality. Impact on the Economy: Wales' fisheries have an important role in providing jobs and income

	in commercial and recreational fishing, fisheries management and tourism. Impact on Community: Fish can play an important role in engaging people in their environment and providing opportunities for education recreation and associated health benefits. Impact on Knowledge: We need a strong evidence base to inform our advice to Welsh Government on fisheries policy, to inform Natural Resources Wales' decision making on fisheries management and to inform discussions with partners and co-deliverers.
--	--

Issue

1. We need to manage our natural resources in a way that provides multiple benefits for people and nature now and in the future. As part of that we need to ensure that fish stocks are managed sustainably to provide maximum socio-economic benefits. We propose to consider the socio-economic benefit of sustainable rod and net fisheries in Wales.
2. Each year NRW assesses the status of salmon and sea trout stocks in all of Wales' main rivers. The most recent assessments, which were presented to the Board in May 2015, indicate for:

Salmon All of our 23 principal salmon rivers are either 'At Risk' (AR) or 'Probably at Risk' (PAR) of failing to achieve their conservation limits.

All but one are forecast to remain in this condition until at least 2019 and will therefore fail to achieve management targets.

These results also contribute to assessment of six Natura 2000 rivers in Wales where salmon are a qualifying feature.

Sea Trout 40% of our sea trout stocks are also either 'AR' or 'PAR' of failure. This assessment is less robust than that for salmon as we have no corresponding biologically-based assessment process. This assessment is therefore based on long-term trends in catch per unit effort.

3. More detail is contained in Annex 2 (technical report: Management options to address the decline in salmon and some sea trout stocks in Wales).
4. We must respond to these assessments by considering what action is now required to restore these important stocks of fish.
5. We have a range of roles and duties for fisheries that are relevant to our management of salmon and sea trout stocks, noting that policy responsibility for Welsh fisheries is devolved to WG.
 - statutory objectives set out in the Environment Act 1995
 - guidance to ensure the conservation and maintenance of the diversity of freshwater fish, salmon, sea trout and eel and to conserve the aquatic environment
 - to enhance the contribution that fish make to the economy, particularly in rural areas
 - to enhance the social value of fishing as a healthy form of recreation
 - national and international obligations for salmon stock management though Ministerial Direction and our national commitment to implement NASCO (North Atlantic Salmon Conservation Organisation) resolutions guidelines and agreements.

Background

Status of stocks

6. Salmon stocks are considered to be at an all-time low across the North Atlantic (NASCO). The generic reason for this is the historically low level of survival of salmon at sea, which is considered to be due to changing environmental conditions in the North Atlantic due to climate change. This is changing available habitat and presumably prey availability, and consequently is adversely influencing the survival of salmon.
7. Sea trout stock performance is more variable, but some rivers in SW Wales are giving real cause for concern. Sea trout do not occupy the same marine habitats as salmon, and generally appear to remain within the confines of the Irish Sea. Here they are less exposed to deteriorating marine habitat quality.
8. We also measure the performance of our salmon and trout stocks through our assessments carried out under the Water Framework Directive (WFD) and our routine freshwater juvenile fish monitoring programmes. Our current assessment is that about 60% of river water bodies in Wales fail to achieve Good Ecological Status, and of these about 35% of the failures are due to fish.

Exploitation by rods and nets

9. Salmon and sea trout are caught by anglers in most Welsh rivers, and also in 12 net fisheries operating around Wales. It is a statutory requirement for anglers and netsmen to submit catch returns, and the rod catch data is used to assess the status of stocks of both species.
10. There are some existing statutory requirements for catch-and-release (C&R) fishing for salmon. All salmon caught anywhere in Wales prior to the 1st of June and the 16th of June by netsmen and anglers respectively must be returned alive to the water. Full C&R fishing byelaws are in place on the rivers Wye and Taff/Ely and require all salmon and sea trout to be returned.
11. There have been great advances in the uptake of voluntary catch-and-release (C&R) fishing by anglers across Wales, moving from close to zero two decades ago to a declared Welsh national average in 2014 of about 78% for salmon and sea trout.
12. Some net fishing, notably that using coracles, is recognised by many as providing heritage value. Further restrictions of activity could threaten the viability of some activities.

13. Although we do not believe fishing (by rods and nets) is the cause of stock decline, it is clear that the immediate requirement to increase the numbers of fish surviving to spawn can only be achieved if rod and net fishermen stop killing fish. This would give an immediate boost to the numbers of spawning fish and mark progress towards a key objective to optimise the numbers of smolts leaving our rivers in future. This would have greatest effect if methods to restore catchments continue.

Tools available to protect and restore stocks

14. The main tools for protection and restoration of salmon and sea trout stocks are:

- a) Restoring freshwater habitats, e.g. by improving migratory connectivity, implementing measures to ensure appropriate water quantity and quality conditions are in place, and returning habitats to good condition.

These are requirements under the WFD and, once delivered, will contribute to the optimisation of smolt output from rivers.

NRW and partners, notably the rivers trusts, have delivered much work in this area in the past, and there remains scope to do much more.

- b) Encouraging further voluntary uptake of C&R fishing to increase the survival of fish to spawn.
- c) Regulating the capture and kill of fish by rods and nets through the implementation of byelaws and Net Limitation Orders (NLOs):
- I. Byelaws allow us to control fishing effort through the setting of season and method controls, potentially including a statutory requirement for C&R fishing.
 - II. NLOs are the statutory tool used to regulate net fishing effort by setting a limit on the number of licences that can be issued in the defined public net fisheries around Wales. These have a typical duration of 10 years and, if they lapse, this would end such control and open fisheries to all.

15. We can specify the time period for any option where mandatory measures are introduced for salmon or sea trout. This is generally for a 10 year period, often with a mid-term review, and this covers at least 2 full generations of fish during which the measures should have full effect.

Options for Fishing Controls

16. The most recent stock assessments illustrate the pattern of decline in salmon stocks and the Decision Structure (DS) clearly requires us to develop controls

to protect stocks. Although we don't have a DS for sea trout we propose to apply the same principle.

17. Our proposals are a response to the poor assessments for salmon throughout Wales and to the poor status of sea trout in defined areas.
18. We propose to implement new byelaws to reduce the numbers of fish killed, and associated control of fishing methods to maximise C&R survival. This will maximise spawning escapement. We also propose to develop new NLOs to control fishing effort in the estuary fisheries.
19. The C&R options for salmon and sea trout are set out in annex 1.

Rod fishing method controls

20. Each C&R option would need to include new controls on fishing methods and equipment so that the probability of fish survival is maximised and the objectives of the measures are achieved. This would be likely to include controls on hooks, hook sizes, barbless hooks and fishing methods and baits.
21. We need best practice approaches to fishing to be adopted in association with any C&R fishing, whether voluntary or when required by byelaw. We will consult with anglers on the required methods.

Net Limitation Orders

22. We must also take action to renew the NLOs for the public coastal and estuary fisheries. Although this will take more time, it is unlikely to deliver the substantial early stock savings that are needed. However it makes good sense to tackle this at the same time.
23. The 9 individual net fisheries are currently aggregated into a single NLO, but we will explore the possible future dis-aggregation of these to achieve a more flexible approach to future regulation. This would potentially create a lot of work, and we will therefore explore alternatives such as a single core technical case supporting individual NLOs.
24. Associated to possible future changes to net regulation is a potential option for catch control based on net licence 'buy-back' which would necessarily be based on third-party negotiations with netsmen.

Review of old inappropriate byelaws

25. We also propose to review some other relevant byelaws that we believe are no longer relevant or appropriate, notably:
- a) The bag limit byelaw in west Wales, setting maximum permissible daily catch of salmon and sea trout that is clearly now inappropriate. We will consult on possible repeal of this.
 - b) The existing Wye and Taff/Ely C&R byelaws for possible addition of fishing method controls such as single-hook lures. We will consult on issues around adding these method controls as part of an overall consultation.
 - c) An old byelaw that requires coarse fishermen on the Wye to apply for a dispensation allowing them to use maggot as bait. We believe this is no longer relevant and we will consult on possible repeal of this.

Next Steps

26. Although some of the actions required are driven by requirements of salmon stock management, e.g. C&R for failing stocks, there are many other areas where we wish to seek views from stakeholders. These include:

Rod fishing method controls for successful C&R fishing
Where sea trout are the target – seasonal controls on C&R
Possible repeal of old byelaws

Net fishing feasibility and methods for successful C&R fishing
Season start times
Establishing consistency in seasons

27. We need to debate the issues arising from the stock assessments and the options to address these. We plan to talk to as many stakeholders as we can prior to completing a formal consultation later in the year. In this way we hope to explain the need for action, and gather the views and evidence from anglers, netsmen, partners and all stakeholders. We will then use these responses to identify the options we will pursue.

28. This is a difficult issue because of the radical nature of the measures proposed, and it will be unpopular with some. However it should be noted that other jurisdictions, including Ireland, Scotland and Canada are dealing with this matter in a similar way, and England is urgently considering its options.

29. Following identification of the preferred option we will need to initiate the process to develop and introduce new fishing byelaws and NLOs in the set of rivers covered by each option. This includes:

- Construction of a technical case to support the options for action
- Informal consultation with all relevant stakeholders

- Formal consultation with all interested stakeholders, including anglers, netsmen and WG.
 - A report on the case and the consultation together with a recommendation to the Minister
 - Statutory advertising of the proposals
 - A final report to the Minister seeking approval
 - Implementation and future regulation.
30. Depending upon the resources available the earliest the new measures could be in place is for the 2016 fishing season. But the timing will be considered as part of the consultation with stakeholders.

Risks

Legal

31. Availability of legal staff resources.
32. Legal challenge of the options identified and pursued.

Management

33. We need to review and confirm the *vires* for each option.

External Communications and stakeholder engagement

Risks

34. Criticism of the approach to the consultation.
35. Concerns about the impact of the decision on angling in Wales.

Management

36. The decisions we need to take now are difficult and quite radical, but match those being taken by other jurisdictions. They are driven by the poor and declining state of our salmon stocks and some sea trout stocks. We will engage with other jurisdictions to share experience and management approach. Develop a communication plan to explain what we are doing and why and to seek sign-up from influential fisheries groups.

Resources

Risks

37. Potential need to increase fisheries technical resources to manage the process.

38. Potential need to re-direct or increase fisheries enforcement resources to enforce any new regulation.

Management

39. We will consider the relative priority attached to this work.

Financial Implications

40. The way in which we seek to implement responses to our stock assessment process currently demands significant staff resource. We propose to consult with other jurisdictions in a review of procedures that are effective, understood and accountable. We aim to streamline the process to reduce the resources needed to undertake this work.

Communication

41. There has been some dis-content following the consultation and implementation of actions following the review of hatcheries and stocking in Wales. This is because of a perception of pre-determination.
42. There is also significant concern amongst some stakeholders about our commitment to fisheries management and enforcement, as indicated by submissions to the WG scrutiny process.
43. We will prepare a fisheries communications plan to seek to engage stakeholders in deciding the management options necessary to address the decline in stocks of salmon and some sea trout at the same time seeking to address wider fisheries concerns.

Annexes

Annex 1 - Catch-and-release options for salmon and sea trout

Annex 2 - Technical Report: Management options to address the decline in stocks of salmon and some sea trout in Wales