# Proposed new net fishing controls to protect salmon and sea trout stocks on the River Dee (Wales)

### **Executive summary**

This technical document sets out the case for the renewal and introduction of fishing controls, to protect stocks of salmon and sea trout in the River Dee. Setting out proposals for new byelaws to regulate the net fisheries in the Dee Estuary. This follows a review of the evidence of stock status and the continued concerns over the status of juvenile fish populations.

Natural Resources Wales (NRW) has a duty to regulate public migratory salmonid fisheries using Net Limitation Orders (NLOs) and byelaws. NLOs are defined under the Salmon and Freshwater Fisheries Act 1975 - Section 26, they control the number of licences issued on net fisheries for salmon and sea trout. NLOs must be renewed within 10 years and failure to do so, could result in an unrestricted fishery *i.e.* there would be no limit on the number of net licences.

The Dee fishery comprises draft (seine) and trammel nets and has primarily targeted salmon with only a small catch of sea trout.

The Dee salmon stock was failing its Conservation Limit in most years, in the early 2000s, and following the review in 2005 of the Dee NLO, a Reducing Order of Zero was introduced on conservation grounds.

In the first season of the 2005 Order, 13 draft and 4 trammel net licences were issued. Dee angling interests funded a full buy-out of the net fishery; accelerating the decline in netting activity. The trammel and draft net fisheries licences were zero by 2008 and 2009, respectively. The current Zero NLO was advertised and implemented in 2015; maintaining no licences, reflecting the need to conserve salmon and sea trout. It expires in June 2025.

The cross-border nature of the Dee necessitates that NRW works with the Environment Agency (EA) and, through them the Department for Environment, Food and Rural Affairs (Defra) and Natural England (NE), when reviewing and advertising the Dee NLO.

In recent decades the status of most of our stocks of migratory salmonids in Wales have declined and the River Dee is no exception. There are a complex range of factors that have contributed to this, including reduced survival of fish at sea, pressures on freshwater habitats (including water quality and habitat degradation), past unsustainable fishing effort in high seas and other interceptory fisheries including some fisheries in home waters. Some of these pressures have been addressed or removed, including introduction of mandatory catch and release of all salmon in Wales. Stocks, however, have not returned to levels of historical abundance, or even to a position of sustainability, where exploitation and harvest can be allowed. The effects of climate change are thought to be a major contributory

factor in the ongoing decline of both salmon and sea trout stocks in both freshwater and marine ecosystems.

Our overall objective for salmon and sea trout is:-

"To protect, through the application of best-practice science and management, the sustainability of our natural resource of wild salmon and sea trout stocks in Wales."

Our position, directed by our statutory duties and international obligations, is that stocks should only be exploited when they are at sustainable levels. Until stocks exceed a safe conservation limit, there is no scope for an exploitable harvest.

The River Dee is designated as a Special Area of Conservation (SAC) under the Habitats Directive, with salmon as one of the designating features.

New restrictions (NLO or Byelaws) are required by June 2025 to protect vulnerable salmon and sea trout stocks in the River Dee. In evaluating management options, the long-term conservation and sustainability of the salmon and sea trout resources take precedence over socio-economic considerations for the benefit of future generations.

The proposals will, when confirmed and implemented, see byelaws introduced to close the draft and trammel net fisheries in the Dee Estuary.

Natural Resources Wales is now seeking views on these proposals.

#### **Evidence**

We have considered three principal sources of evidence in determining our preferred option for management change: -

- The status of adult stocks of salmon and sea trout
- The status of salmon as a designated feature of the Dee SAC
- The status of juvenile salmon and trout stocks

For both species, the adult assessment, is the primary means of evaluating stock status and informing the management response via the Decision Structure (DS).

#### Salmon

The most recent assessment of our salmon stocks indicates that the Dee is currently 'At Risk' of failing to achieve their Management Objectives (in 2023) and is projected to be 'At Risk' in 5 years' time (in 2028). Based on average egg deposition levels over the last 5-years (2019-2023), the Dee stock has recorded deficits against its indicative Management Target of -9.35million eggs (-53%). These deficits approximate to -3,117 adults (8lb fish equivalents).

The status of salmon as a designated feature of Dee SACs was 'Unfavourable' in the most recently published round of Condition Assessments (Milner *et al.*, 2013), driven largely by poor adult runs.

#### Sea trout

The most recent assessment of our sea trout stocks indicates that the Dee stock is currently 'At Risk' of failing to meet its conservation limits and is projected to remain 'At Risk' in 2028. Based on average egg deposition levels over the last 5-years (2019-2023), the Dee stock has recorded a deficit of -2.68 million eggs (-26%) calculated, against an indicative Management Target of ~10.19 million eggs. This deficit approximates to 1,339 spawners (as 3lb fish equivalents).

#### **Juvenile Salmonids**

Examination of juvenile electrofishing survey data for the Dee indicates below expected levels of salmon fry production in last 10 years but generally good numbers of trout fry. The former observation is in-line with the failing status of salmon spawners, but the latter suggests healthier stock levels than indicated from returns of adult sea trout. Juvenile trout stocks will also include those fish that remain in the river as resident brown trout.

## Options for the management of the Dee net fishery to sustain and restore stocks

We have considered the following principal options: -

#### Option 1 – Do Nothing (allow NLO to lapse)

With this option, the fishery on the Dee would be re-opened with potentially an unlimited number of licences available.

The evidence is clear for the current and projected status of salmon and sea trout stocks. They are 'At Risk'. Although, current byelaws protect salmon from being taken, an open net fishery would reduce protection of both salmon and sea trout stocks, increasing the risk to their populations.

An open fishery does not comply with our national and international duties, our organisational guidance, approach and Decision Structure.

This is not a viable option.

#### Option 2 – Renew Zero NLO for 10 years.

This option maintains the current approach, keeping current restrictions in place with no harvest from 2025 until 2035.

It does align with NRW corporate wellbeing objectives that 'Nature is Recovering' and does comply with our national and international duties.

Renewal of a zero NLO does not address the long-term uncertainties faced by salmon and sea trout populations, that are declining.

It does leave the option to review and potentially re-open the fishery in 10 years' time, however, with the increase in pressures on salmon stocks, we are unlikely to see harvestable levels return in our lifetime.

This is a viable option but provides minimal protection in the face of long-term uncertainties and pressures on already vulnerable salmon and sea trout stocks.

#### Option 3 – Close fishery (Byelaws)

This option provides similar protection to salmon and sea trout stocks as option 2, over the next 10 years. However, it removes the requirement for future NLO reviews and future administration and compliance of the NLO.

It aligns with the NRW corporate plan wellbeing objective 'Nature is Recovering' and supports our guidance, national and international duties.

With the current and projected status of 'At Risk' for our salmon and sea trout stocks on the Dee, the closure of the fishery provides greater protection for the future uncertainties of climate change and increased pressures on their populations.

This option aligns with the intent of the 2009 buy-out to cease commercial exploitation. The recovery of the stocks to harvestable surplus levels, seems extremely unlikely in the foreseeable future, however, there would still be an option to reopen the fishery if this ever occurs.

This option is viable and provides greater security and longer-term protection to the stocks of salmon and sea trout on the Dee.

**Socio-economic impacts:** With no net fishery in existence for the last 15 years, there has been no socio-economic benefit to the local communities from this activity and the closure of the fishery will not change this. The benefits of the proposed measures will contribute to the preservation of Welsh Dee salmon and sea trout stocks and their future resilience.

Non statutory consultation engagement and liaison with stakeholders: NRW has discussed the proposals with our local fisheries stakeholders. At the North Wales Local Fisheries Advisory Group (LFAG) and Wales Fisheries Forum (WFF), we sought views and advice on the management of the net fisheries on the Dee, considering the status of the supporting stocks.

There was widespread support from both groups to close the net fishery through byelaws. There was no support to Renew the Zero NLO or let the existing NLO lapse, without measures in place, to ensure no further exploitation of the Dee salmon and sea trout stocks.

#### We conclude that:

Option 3 is the preferred option, to close the fishery by Byelaws. It provides the greatest protection from the future uncertainties faced by salmon and sea trout stocks in the Dee and aligns with our overall objective to "to protect, through the application of best-practice science and management, the sustainability of our natural resource of wild salmon and sea trout stocks in Wales".

#### **Our proposals**

We are proposing to seek confirmation of new byelaws for net fishing in the River Dee and Dee Estuary, effectively closing the existing fishery.

#### **River Dee**

The Salmon and Sea Trout (Prohibitions of Net Fishing) (River Dee) (Wales) Byelaws (2025)

Byelaw 4 – Prohibition of Net Fishing for Salmon or Sea Trout on the River Dee.

Note: NRW is working with the Environment Agency on the technical case and net fishing byelaws for the Dee and is seeking to ensure commensurate byelaws for the Dee in England, thereby ensuring a consistent catchment approach for the cross-border river.

#### Your response

We would like your views on our proposals and invite you to submit these using the form designed for the purpose which is available via our consultation hub.

#### Respond to the consultation

Hard copies of the documents can be requested by emailing <a href="fisheries.wales@naturalresourceswales.gov.uk">fisheries.wales@naturalresourceswales.gov.uk</a>: Or by writing to:-

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Respondents should note carefully that representations to this consultation for arrangements in Wales will be received by Natural Resources Wales. The consultation for the River Dee in England will be a different consultation and representations to that will be received by either the Environment Agency or by Defra.