

**Citizen Participation and Public Petitions Committee**  
**Wednesday 11 February 2026**  
**4th Meeting, 2026 (Session 6)**

## **PE2109: Halt any further pump storage hydro schemes on Scottish lochs holding wild Atlantic salmon**

### **Introduction**

**Petitioner** Brian Shaw on behalf of the Ness District Salmon Fishery Board

**Petition summary** Calling on the Scottish Parliament to urge the Scottish Government to create a moratorium on any further development of pump storage hydro operations on Scottish lochs holding wild Atlantic salmon until the impact of such developments on wild Atlantic salmon migrations is understood.

**Webpage** <https://petitions.parliament.scot/petitions/PE2109>

1. [The Committee last considered this petition at its meeting on 10 September 2025.](#) At that meeting, the Committee agreed to write to the Scottish Environment Protection Agency, NatureScot and the Cabinet Secretary for Climate Action and Energy.
2. [On 14 January 2026](#), the Committee took evidence on thematic energy issues raised across a number of petitions, including this petition.
3. The petition summary is included in **Annexe A** and the Official Report of the Committee's last consideration of this petition is at **Annexe B**.
4. The Committee has received new written submissions from the Cabinet Secretary for Climate Action and Energy, NatureScot, the Scottish Environment Protection Agency, and the Petitioner, which are set out in **Annexe C**.
5. Amendments relevant to the petition, which related more broadly to the impact of energy projects on biodiversity, the environment and communities, were debated and defeated during Stage 3 Consideration of the Natural Environment (Scotland) Bill, [on 28 January 2026](#). The Parliament passed the Bill on 29 January 2026.
6. [Written submissions received prior to the Committee's last consideration can be found on the petition's webpage.](#)
7. [Further background information about this petition can be found in the SPICe briefing](#) for this petition.
8. [The Scottish Government gave its initial response to the petition on 27 September 2024.](#)

9. Every petition collects signatures while it remains under consideration. At the time of writing, 536 signatures have been received on this petition.

## **Action**

10. The Committee is invited to consider what action it wishes to take.

**Clerks to the Committee**  
**February 2026**

## Annexe A: Summary of petition

### PE2109: Halt any further pump storage hydro schemes on Scottish lochs holding wild Atlantic salmon

#### Petitioner

Brian Shaw on behalf of the Ness District Salmon Fishery Board

#### Date Lodged

19 June 2024

#### Petition summary

Calling on the Scottish Parliament to urge the Scottish Government to create a moratorium on any further development of pump storage hydro operations on Scottish lochs holding wild Atlantic salmon until the impact of such developments on wild Atlantic salmon migrations is understood.

#### Previous action

Responded to earlier pump storage hydro (PSH) applications on Loch Ness, staged public meetings and lobbied politicians to raise our concerns about the environmental impact of PSH. We commissioned the highly respected Norwegian Institute for Nature Research (NINA) to produce a report <https://brage.nina.no/nina-xmlui/handle/11250/3085192>

We have been in correspondence with Kate Forbes MSP, Fergus Ewing MSP and Edward Mountain MSP on this matter. The latter's office facilitated a site meeting to Foyers pump storage hydro scheme in November 2023. Despite all our efforts more PSH schemes are being floated.

#### Background information

There has been a recent tsunami of interest in pump storage hydro (PSH) in Scotland. The economic case for PSH has been made by the sector but the environmental impacts have been glossed over, denied or ignored.

PSH operations move huge volumes of water and create large variations in loch levels sterilising shoreline ecology. In the case of Loch Ness, if all existing, consented or proposed PSH schemes were approved, the level of Loch Ness will vary by up to 1m daily. Loch Ness would effectively become an inland tidal loch, which would have serious ecological impacts including on the River Ness.

The impact of PSH on salmon smolt migration is not understood but is acknowledged by PSH developers as harmful. Wild salmon in Loch Ness sustain an ecosystem including the famous dolphins at Chanonry Point.

Please note that we are not against PSH per se, but schemes need to be located in the least environmentally damaging locations.

## Annexe B: Extract from Official Report of last consideration of PE2109 on 10 September 2025

**The Convener:** We will now revert to the original order. PE2109, which has been lodged by Brian Shaw on behalf of the Ness District Salmon Fishery Board, calls on the Scottish Parliament to urge the Scottish Government to impose a moratorium on any further development of pumped storage hydro operations on Scottish lochs that hold wild Atlantic salmon until the impact of such developments on wild Atlantic salmon migrations is understood.

I apologise for the rather long introductory note that I must read out.

We last considered the petition on 27 November 2024, when we agreed to write to the Scottish Government, major developers of pumped storage schemes, including Scottish and Southern Electricity Networks, and the United Nations Educational, Scientific and Cultural Organization centre for water law, policy and science.

In its response, the Scottish Government states that the environmental impact assessment regulations envisage that, for large infrastructure projects, significant environmental effects are more likely to occur, but that the regulations require that ministers must determine the application in the knowledge of what significant effects are likely to occur, taking into consideration any mitigation measures that might form part of the development or be secured by the conditions of any consent. At the conclusion of the EIA process, consideration of any likely significant effects forms part of the planning balance.

In its response, the UNESCO centre for water law, policy and science states:

“While there are some very good reasons to support”

pumped storage hydro,

“there are also grounds to pause and consider alternatives.”

It describes the benefits of PSH, which include grid balancing, reducing the need for carbon emissions, energy security and job creation, but states that

“the proposals … represent huge interventions in our landscapes and”

rivers, and it considers that

“If any or all of these threaten the dwindling populations of … Atlantic salmon, the impacts will be cumulative year by year, and could ultimately lead to species losses.”

The centre also states:

“Protected species and habitats will inevitably be adversely impacted by the various PSH proposals under consideration.”

The submission from SSE Renewables provides information about its experience with pumped storage hydro technology through the Foyers power station at Loch

Ness. It also highlights research and monitoring that found “no observed impact” on the flow of smolts at Foyers.

In its response, Glen Earrach Energy—I am getting an admonishing look from Mr Ewing in relation to my pronunciation of “Earrach”—shares that it is undertaking relevant work with the petitioners group, the Ness District Salmon Fishery Board; NatureScot; the Scottish Environment Protection Agency; and the Highland Council. That work has included a smolt tracking study to understand smolt behaviour in Loch Ness.

Similarly, in its response, Statkraft highlights work that it is undertaking with the Ness District Salmon Fishery Board on smolt tracking.

I do apologise—this is quite a long introduction. The petitioner has provided a written submission that highlights the findings of the computational fluid dynamics study on Loch Ness, which was set up to examine the cumulative impact of pumped storage on the hydrology and temperature regime. The submission states:

“The effect on Loch Ness is profound with cold water currents crossing the loch, changes to the temperature profile, including at depth, and the formation of a vortex in Dores Bay.”

Edward Mountain MSP has provided a written submission noting his entry in the register of members’ interests, which shows that he owns part of a wild salmon fishery. Well, I have to say that we have never seen the benefit of that here. [Laughter.] I shall have to pursue that separately. He also wishes to put on record the fact that he managed fisheries on the Ness and Loch Ness until 2006.

In his submission, Mr Mountain states that

“Wild Atlantic salmon in Scotland are in serious decline”,

and he believes that

“pump storage at Loch Ness has proven that there are real threats to the environment that have not yet been fully evaluated.”

He suggests that,

“as a precaution”

pumped storage hydro schemes

“should not be allowed unless it can be proved that the overall temperature of the loch and indeed the surface temperature does not increase, or affect migratory fish.”

With apologies for that very long preamble, I wonder whether colleagues have any comments or suggestions as to what we do next.

**David Torrance:** In the light of the evidence, I wonder whether the committee would consider writing to SEPA and NatureScot to ask what information they hold on the impact of pumped storage hydro on wild Atlantic salmon and how that is considered

when they provide comment on planning applications in their role as statutory consultees.

I also wonder whether the committee would consider writing to the Cabinet Secretary for Climate Action and Energy to note the committee's disappointment with the Scottish Government's recent response, as it fails to address the committee's concerns about how the cumulative impact of pumped storage hydro is monitored and assessed, and to ask for further information on that point.

**The Convener:** Thank you, Mr Torrance. That was very helpful. Do members have any other comments?

**Davy Russell:** This is not new. Pumped storage schemes have been going for 70 years now, especially in the Highlands, Norway and other such countries, so there must be enough data to show whether they are having a damaging impact on the environment and the affected species. As it is not a new issue, there must be enough information there. I am at odds as to why there does not seem to be, given that, as I said, hydro schemes have been around for 70 years, in various shapes and forms.

**Fergus Ewing:** Mr Russell makes a fair point—these things are certainly not new. What is perhaps a bit different about the situation facing those with an interest in Loch Ness is the cumulative impact of several proposals. If we were talking about just one or two, that would be one thing, but there are several. The companies that have replied have defended their own proposals, but that is not really what the main concern is—it is the cumulative impact of numerous proposals.

I support Mr Torrance's recommendation, but I make the additional request that, as well as the impact on wild salmon, the minister also considers the other potential impacts, including on water levels and on users of the loch and the Caledonian canal.

At the weekend, I heard concerns in the constituency that I represent that water levels could be seriously depleted during certain periods of the operation of the intended pumped storage scheme. I do not know whether that is the case, but if that happens, an awful lot of the existing businesses that survive by providing boat trips in Loch Ness, or fishing and leisure craft, will be affected, as will those who use the Caledonian canal. They were there first, so they are entitled to have their interests considered.

I added that because the petitioners have raised a particular concern, but there are other issues, too. I should declare that I know Mr Shaw. I have engaged with him, and I know that he adopts a very forensic approach.

**The Convener:** How would we accommodate that along with Mr Torrance's recommendation?

**Fergus Ewing:** We could perhaps just add it to the letter to the minister.

**The Convener:** Are members content with that?

**Members indicated agreement.**

## Annexe C: Written submissions

### Cabinet Secretary for Climate Action and Energy written submission, 7 October 2025

#### PE2109/I: Halt any further pump storage hydro schemes on Scottish lochs holding wild Atlantic salmon

Thank you for your letter of 15 September 2025 in connection to the above petition. I understand the Citizen Participation and Public Petitions Committee considered this topic at its meeting on 10 September 2025.

The Committee have requested more information on how the cumulative impact of pumped storage hydro is monitored and assessed, and what consideration has been given to the potential impact of low water levels, caused by PSH usage, on local businesses, including concerns of the impact on business local to Loch Ness and the Caledonian Canal.

#### Cumulative Impact and Electricity Act consents

All pumped storage hydro (PSH) applications submitted to the Scottish Government under section 36 of the Electricity Act 1989 (“the Act”) are assessed in accordance with the Act and other legislative requirements, including the Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017 (“the EIA Regulations”). As established through these frameworks, each application is assessed on its own merits and the environmental impact assessment for each proposal considers the cumulative impacts which would occur. In exercising their statutory functions under the Act, Scottish Ministers are required to avoid, as far as is possible, causing injury to fisheries or to the stock of fish in any waters.

The environmental effects of the proposed developments on the water levels in Loch Ness are covered by EIA Reports for the respective applications for consent under the Act and are a matter to be considered by Scottish Ministers through the environmental impact assessment process for the live applications. Furthermore, consideration will be given, when determining applications for consent, to the net economic impact of each proposed PSH development when considering to what extent that development is supported by NPF4.

In accordance with section 36 (5A) of the Act, before granting section 36 consent for a generating station in respect of which a controlled activity, within the meaning of the Water Environment (Controlled Activities) (Scotland) Regulations 2011 (known as a CAR licence), will be carried on, Scottish Ministers are required to:

- obtain advice from the Scottish Environment Protection Agency (“SEPA”) on matters relating to the protection of the water environment; and
- have regard to the purposes of Part 1 of the Water Environment and Water Services (Scotland) Act 2003.

Scottish Ministers consider SEPA's advice in respect of the cumulative impacts through the environmental impact process and they also review SEPA's advice on whether a CAR license is likely to be capable of being granted.

Scottish Ministers are not the sole authority on whether a PSH station can operate and transfer water between the proposed upper and lower reservoirs. Separately, pumped storage developers must apply to SEPA for a license under the Water Environment (Controlled Activities) (Scotland) Regulations 2011 and SEPA considers whether the impacts on the water environment are acceptable and whether a CAR license should be granted or refused.

Monitoring, mitigation and control measures may be included in the conditions attached to the granting of consent to an application if Scottish Ministers consider they are required – for example, when an EIA report has assessed the cumulative effects of PSH developments on fish populations and other uses of the water environment. Ultimately if a CAR licence sets different conditions relating to the protection of the water environment than those imposed on any section 36 consent or deemed planning permission, the conditions relating to protection of the water environment in the CAR licence granted by SEPA take precedence.

### Water Permitting

As indicated above, all PSH schemes require to be authorised by SEPA under the Water Environment (Controlled Activities) (Scotland) Regulations which will become the Environmental Authorisations Scotland Regulations in November 2025 (all current applications will be determined under CAR). SEPA is required to assess the impact of these schemes on the water environment to ensure the impact is acceptable. It should be noted that this process is independent from the Electricity Act 1989.

The assessment of PSH is undertaken in the same manner as all applications using SEPA's expert knowledge, published regulatory methods and guidance. These take account of all aspects of the water environment and use standardised assessments to establish the impact a project will have on the water environment. Before granting an authorisation, SEPA take account of a scheme's likely adverse impacts on the water environment, including wild fish stocks, by assessing it against environmental standards to ensure the impact on the environment is acceptable, and any appropriate mitigation is put in place. This will include consideration of any other licenced activities. These standards are derived from the best available scientific data and are reviewed and updated, as necessary.

Large projects, such as PSH, will often have the potential to have a significant adverse impact on the water environment and in such cases SEPA is required to make a derogation assessment. This stage of the determination process is to establish if a project is of overall benefit to sustainable development by assessing the social, economic and environmental impacts, both positive and negative, to determine if there is net gain or impact. To issue a licence, SEPA will include appropriate mitigation based on a precautionary approach to ensure impacts on the environment, including Atlantic salmon, are minimised. Monitoring may also be required to assess the ongoing impacts.

SEPA expect developers to provide sufficient information on the environmental impact that their development may cause and, if not provided, they will either refuse the application for a CAR licence or pause determination until this detailed information is provided. SEPA will then consider this information using the best available scientific advice to inform their determination. Where appropriate SEPA will consult externally with the public and other relevant stakeholders e.g. District Salmon Fishery Boards (DSFB's), NatureScot. Relevant, in scope, representations made during this process will also be considered to ensure they have taken all the available information into account.

Live Electricity Act applications

The matters the committee raises are linked to current live applications to the Scottish Government which fall within my ministerial portfolio for determination. One of these applications is at the stage where arrangements for a public inquiry are being made. It would not be appropriate for me to comment further on the assessment of cumulative impact or water levels for these specific applications other than to reassure the committee that the requirements of all regulations relevant to the applications placed on Scottish Ministers, including in relation to fisheries, cumulative impacts and the water environment, will be followed.

I hope this information has been helpful in addressing the Committee's concerns.

**GILLIAN MARTIN**

**NatureScot written submission, 13 October 2025**

**PE2109/J: Halt any further pump storage hydro schemes on Scottish lochs holding wild Atlantic salmon**

The Committee asks two questions:

- 1) what information is held by NatureScot on the impact of pumped storage hydro on wild Atlantic salmon and how this is considered when providing comment on planning applications in its role as a statutory consultee; and
- 2) what are NatureScot's considerations of the cumulative impact of numerous proposals for pumped storage hydro schemes.

NatureScot recognises that Atlantic salmon are ecologically, culturally and economically important and, within the UK, Scotland is a stronghold for this species. Catch data, which has been collected by the Marine Directorate since 1952, reflects an overall decline in the numbers of fish returning to Scottish rivers. This decline has led to the IUCN declaring that Atlantic salmon populations within Great Britain are 'Endangered'. Atlantic salmon are listed in Annex II of the EU Habitats Directive and are a protected feature in a total of 17 Special Areas of Conservation (SAC). Atlantic salmon ascend Scottish rivers in every month of the year and several of those rivers, and others which are not SACs, also contain on-line loch systems through which, at least some of, these fish must negotiate as they make their way to natal spawning locations. It is important to ensure that these fish are allowed to do so, in a way that avoids unnecessary mortality or delay. As with all abstractions and releases of water

it is important to design schemes in such a way that they do not attract or impinge downstream migrating Atlantic salmon smolts or create in-loch conditions which cause confusion or disorientation. For adults (both upstream migrants and downstream migrating kelts), whilst impingement is perhaps less likely, it is also important to consider whether changes in the uptake and discharge of water will affect their ability to reach spawning areas. It is also vital to ensure that Atlantic salmon of all life-history stages (particularly smolts and kelts) can successfully exit affected lochs, and that flows from affected lochs to outflowing rivers are sufficient to ensure the upstream migration of adult fish.

**1).** NatureScot's role in relation to pump storage hydro schemes (PSHS) is to advise on the implications of proposals for protected areas. There are currently a range of pump storage hydro schemes at various stages of development in Scotland. In providing advice, specialist NatureScot staff utilise a range of information sources from within the published scientific literature, other studies, developer reports and their own scientific experience to inform our response to any proposal.

Under the Habitats Regulations, all competent authorities must consider whether any plan of project could affect a European site and if so, they must carry out a Habitats Regulation Appraisal (HRA). NatureScot provides guidance to Competent Authorities, on the scope and content of any HRA. For any notified interest, such as Atlantic salmon, this advice is strongly linked to the Conservation Objectives for that feature, and within that site. The Scottish Environment Protection Agency (SEPA) must also authorise and regulate activities associated with PSHS through the Controlled Activities Regulations. These include activities which may impact freshwater fish and their supporting habitats. In line with [our guidance for consulting authorities](#) it is not our role to advise on potential effects on Atlantic salmon that are not connected to protected areas.

**2).** In relation to cumulative effects, before a competent authority can consent or authorise a plan or project that could potentially impact the qualifying interests of a European site, it must first consider whether the proposal is likely to have a significant effect on the qualifying interests of the site, either alone or in combination with other plans or projects (Regulation 48 of the Conservation (Natural Habitats, &c.) Regulations 1994 as amended/ Regulation 63 of The Conservation of Habitats and Species Regulations 2017). If so, an appropriate assessment must be carried out in view of the site's conservation objectives. This assessment should consider the impacts of the proposal on the conservation objectives of the site, and this might also include cumulative effects from other plans and projects. Cumulative effects could include impacts from similar types of proposals, different types of plans or projects, or different elements of the same project. As part of our role described above, we provide advice the Competent Authority on these potential cumulative impacts.

As a statutory consultee in individual Planning and Electricity Act cases we assess each application against its merits according to the nature affected and the relevant policy frameworks. One such policy consideration is National Planning Framework 4 (NPF4) which sets out Scottish Government's national spatial policy: spatial principles, regional priorities, national developments and national planning policy. Within NPF4, Pumped Hydro Storage is the 2<sup>nd</sup> national development listed and is considered accordingly in the planning balance.

Individual case officers consider cases in the context of the following two pieces of internal guidance, to ensure we operate in a consistent and reasonable way:

- [Identifying Natural Heritage Issues of National Interest in Development Proposals](#)
- [Guidance - Development Management and the Natural Heritage](#).

## **Scottish Environment Protection Agency written submission, 14 October 2025**

### **PE2109/K: Halt any further pump storage hydro schemes on Scottish lochs holding wild Atlantic salmon**

SEPA has provided below information on the planning and water permitting contexts of Pumped Storage Hydro.

#### **Planning**

Under National Planning Framework 4 (NPF4), Pumped Storage Hydro (PSH) is explicitly recognised and supported as a national development within the planning system. This designation helps streamline planning processes by giving such projects presumption in favour of development.

NPF4 is designed to align with Scotland's 2045 net-zero target. It aims to support the expansion of renewable, low-carbon, and zero-emissions technologies, and pumped storage hydro is considered a key part of this infrastructure national development. While supportive, NPF4 also acknowledges impacts are expected with large-scale infrastructure like PSH schemes. These impacts are considered acceptable if appropriately mitigated as per NPF4 policy.

Land use planning must consider the potential environmental impacts of proposed developments. When a planning application involves activities regulated by us, we will advise if the proposal is potentially capable of gaining consent. This ensures that environmental protection is integrated into the planning decision-making process. As the consenting authority for <sup>1</sup>Water Environment (Controlled Activities) (Scotland) Regulations, (CAR), SEPA decide whether the activity itself can go ahead based on potential impacts on the water environment. Whilst we give this advice at the planning stage, we do not grant planning permission. This is done by the planning authority or, in the case of PSH, the Energy Consents Unit (ECU). The ECU is unlikely to consent a project if we have not advised that the proposal is potentially capable of gaining consent

The Electricity Act and the planning system are closely linked through the consenting process for electricity infrastructure, particularly for large-scale projects. Under the Electricity Act, we must be consulted on applications for PSH schemes. We give advice to the consenting authority during the planning process, focusing on environmental impacts related to land use. Developers are responsible for assessing the environmental impact of their projects, including how their scheme might add to

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<sup>1</sup> <https://www.sepa.org.uk/regulations/water/>

the effects of other similar projects (i.e. cumulative impact), both existing and planned. We review this information and, where impacts relate to the water environment, we will provide relevant advice to help mitigate those impacts.

It is important to note that planning and water permitting are separate but interlinked consenting regimes. PSH schemes must obtain both planning permission and CAR consent; neither process overrides the other.

## Water Permitting

All abstractions and impounding works, including for PSH developments, require an authorisation from SEPA under CAR. From November, CAR will be replaced by the Environmental Authorisations (Scotland) Regulations<sup>2</sup>. All current applications will be determined under CAR. However, the same considerations will continue to apply when determining applications under the Environmental Authorisations (Scotland) Regulations.

In determining an application for authorisation under CAR, SEPA must assess the risk to posed to the water environment by the proposed development, including cumulative effects with other activities.

If SEPA considers that the proposed development will be likely to have a significant adverse impact on the status of the water environment, SEPA may not grant authorisation unless it is satisfied that:

- the benefits of the proposed regulated activities to sustainable development will outweigh the benefits from protecting the status of the water environment;
- all practicable steps will be taken to mitigate the adverse impacts of the proposed regulated activities on the status of the water environment; and
- the benefits expected from the regulated activities cannot for reasons of technical feasibility or disproportionate cost be achieved by other means that are a significantly better option.

Details of how SEPA undertakes such assessment is described in its published regulatory methods<sup>3</sup>.

If the proposed development is likely to have a significant adverse impact on a Special Area of Conservation (SAC), SEPA must also carry out the necessary appropriate assessment under the regulation 48 of the Conservation (Natural Habitats, &c.) Regulations, including consulting with NatureScot. SEPA will normally only grant authorisation if it has ascertained that the proposal will not adversely affect the integrity of the SAC.

Large PSH developments will in many cases have a significant adverse impact on the status of the water environment. Their potential to adversely impact Atlantic salmon will depend on the specifics of each development, including its location.

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<sup>2</sup> <https://beta.sepa.scot/regulation/authorisations-and-compliance/easr-authorisations/>

<sup>3</sup> [https://www.sepa.org.uk/media/149762/wat\\_rm\\_34.pdf](https://www.sepa.org.uk/media/149762/wat_rm_34.pdf)

The current scientific evidence regarding some potential adverse impacts of large or cumulative PSH developments in a river catchment on Atlantic salmon, such as the potential effects on migratory behaviour from changes in water levels and water temperatures, is currently relatively sparse. SEPA will:

- continue to review the latest research and evidence as it becomes available to ensure its assessments are based on the best available scientific understanding;
- engage with developers and other interested parties to identify ways in which potential adverse impacts on migratory behaviour can be minimised through the design and operation of proposed schemes. This may include the use of mitigation to regulate the timing of the operation of the scheme; and

in coming to decisions on an application, consider any remaining uncertainties about potentially significant impacts on migratory behaviours, including from the cumulative effects of PSH developments in the river catchment.

### **Petitioner written submission, 28 January 2026**

#### **PE2109/L: Halt any further pump storage hydro schemes on Scottish lochs holding wild Atlantic salmon**

Dear Citizens Participation and Public Petitions Committee,

Ness District Salmon Fishery Board (Ness DSFB) wishes to submit the following as a further contribution to our Petition – PE2109.

Ness DSFB note that, at the Committee meeting on 10 September 2025, Davy Russell MSP queried why further work was required to understand the impact of a long established technology such as pump storage hydro (PSH). Our petition is prompted by the fact that the impacts of PSH on wild Atlantic salmon are not understood. PSH may be a mature technology but the virtual absence of new developments in recent decades means that relevant research into their impacts has not occurred in the UK, nor elsewhere as far as we can ascertain. We note that, in countries such as USA and Canada, new PSH schemes are only permitted on “closed-loop” sites, where water is pumped between man-made, upper and lower reservoirs. This is because of the environmental impact on migratory fish and other concerns in open-loop, natural systems. The existing Welsh PSH schemes are closed-loop, both utilising old slate mines, as is the proposed Glenmuckloch PSH scheme in Dumfries and Galloway.

SSE, in their written submission to the Committee, acknowledged that they have not commissioned any new research into the impact of pumped storage hydro operations on wild Atlantic salmon. The only evidence they cited was that salmon smolts were not impinged on the smolt intake screens at the Foyers PSH. Conventional hydro has had a significantly detrimental impact on Scotland’s wild salmon populations. Indeed, SSE refer to the extensive monitoring, mitigation and restoration work they are currently involved in delivering to address issues, both legacy and operational, associated with impacts of conventional hydro. Many of

these issues were not considered, nor understood, at the time of construction in the 1950s and 1960s.

The developers of the proposed Glen Earrach PSH on Loch Ness did commission a salmon smolt tracking study in 2025, involving 200 tagged wild Ness smolts. That study was completed and Glen Earrach Energy have stated that they do not intend to report on the study *“ahead of the commencement of construction, post determination. These data will be used to inform specific mitigation and operation measures that would feed into a fish management strategy that would form a planning condition”*. Ness DSFB do not consider it acceptable that the findings of this study will not be made available to help ascertain the impact of this, or indeed other, PSH schemes on Ness salmon smolts, pre-determination. We regard the impact on salmon smolt migration as potentially one of the most significant impacts of PSH and consider that studies such as this should have been undertaken as part of the EIA and submitted with the planning application to facilitate an informed decision.

Gillian Martin MSP, Cabinet Secretary for Climate Action and Energy, in her appearance at the January 2026 Committee meeting, referred to a SEPA PSH Working Group, and its work. Ness DSFB is pleased to hear that SEPA have established this group, but there has been no communication, nor any insight into the SEPA guidance referred to. Considering the number of live PSH planning applications and the impending Loch Kemp PSH Public Local Inquiry (scheduled for mid-April, 2026) we consider it imperative that SEPA’s position regarding PSH is consulted on in advance. Ness DSFB ask that the SEPA working group consider whether the existing template for licencing such developments (Controlled Activities Regulations (CAR) licence) is adequate and appropriate, for the complex interactions of PSH with the water environment, and particularly the cumulative impact. CAR licences for conventional hydro schemes are basic, the key criteria regulated being water abstraction and return points as well as volumes. In comparison to conventional hydro, the impacts of PSH are profound with alterations to the natural hydrology and temperature regime of lower headponds possible.

Given its biodiversity and economic, social, and cultural significance, Loch Ness is one of the most sensitive locations possible. Scotland needs to be sure that the impacts of PSH in such a significant location are understood. NPF4 requires that these large schemes not only protect biodiversity but enhance it. Protection of existing biodiversity should be the priority rather than subsequent mitigation in an attempt to deal with lost biodiversity.