

FNLRT Progress Report 01.2024

Bob Laughton and Elle Adams, 11/03/2023

The following report provides an update on activities from 16th November 2023 11th March 2024. The report is set out in the form of the Fisheries Management Plan 2021-2026.

Table 1: Funders and Grant Summary	Management Plan Target	Description of the bid	Decision/ Timescale	Amount
Scot Gov: Just Transition Fund	1.1 Climate Change 6.1 Education and Awareness	To develop to rejuvenate riparian forest to ameliorate the effects of rising water temperatures plus re-connecting communities with the river Findhorn.	Successful. Funding extension granted to 31/03 2025	£970,000
LNER: Customer and Community Investment Fund	1.1 Climate Change 4.6 to 4.11 Fish and River Data	Gathering ecological baseline data and fostering river stewardship in the Upper Findhorn Watershed	Successful. Completion due 31/03/2024	£75,000
NatureScot: Nature Restoration Fund	1.1 Climate Change 4.6 to 4.11 Fish and River Data	Riparian woodland baseline monitoring scheme and determining the status of Freshwater Pearl Mussels within the Findhorn.	Successful. Completed 2023	£138,114
NatureScot: Nature Restoration Fund	3.3 INNs control	Three-year extension to SISI control project, prepared and submitted by Callum Sinclair (Project Manager)	Successful Operating to 31/03/ 2026.	£2.08M FNLRT £237,494
NatureScot/FME: Working with Rivers graduate placement scheme.	1.1 Climate Control and 3.3 INNs control	One graduate placement post for FNLRT	Successful Completed 30/10/23	£8,645
FMS: Fisheries Management Plan Storybook	All	Development of online version of fisheries management plan	Successful Completion due 31/03/2024	£9,600
Moray Estates	3.3 INNs Control	Continuing control of GH and JK on Moray Estates at Bogside and Darnaway	Successful Completed 30/10/23	£3,450 £800
Crown Estate	3.3 INNs Control	Continuing control of GH and INNs at Wester Manbeen	Successful Completed 30/10/23	£2,760
Moray Council	3.3 INNs Control	Continuing control of INNs across Lossie and Findhorn	Successful Completed 30/10/23	£10,000
Marine Scotland National Electrofishing Programme Scotland (NEPS)	4.6 to 4.11 Fish and River Data	Electrofishing sites across the Findhorn. Nairn and Lossie	Successful Completed 30/10/23	£15,099
Nairn DSFB	4.6 to 4.11 Fish and River Data	To conduct juvenile fish of survey of the river Nairn	Successful Completed 30/10/23	£4,100
Heldon Community Council	6.1 Education and Awareness	Schools go to fish program with Alves, Dallas and Mosstowie Primary Schools	Successful Completion due 30/06/2024	£4,125

1. Climate Change

[Findhorn Watershed Initiative](#)

Nature Recovery

- **Riparian woodland schemes underway:** Fencing for the Glenkyllachy scheme has been installed. Slight amendment of layout due to Estate request means that woodland regeneration area will now be slightly larger. Funds claimed from JTF in our most recent grant claim to be able to pay out to the Estate upon presentation of agreed evidence of completion and Scottish Forestry sign off and contribution.
- **Riparian woodland schemes in co-development:** Continuing with various Estates and encompassing 1000+ha of potential riparian woodland restoration, including; Tomatin, Cawdor, Glenmazeran, Moy, Balnespick, Inverbrough, Lethen, Dunphail
- **Catchment deer management strategy & Deer Forum:** Draft strategy due 8th March and Deer Forum launch for key collaborators planned for May. Collaborative catchment-scale approach to deer (and other herbivore) management in a way which helps to enable natural woodland regeneration is becoming an emerging USP of FWI, and we should celebrate that as it aligns with many policy objectives.
- **Tree Forum idea:** Alongside Deer Forum plans, also exploring the idea for FNLRT to help convene a Tree Forum to support nature-friendly forestry and riparian woodland best practice within the catchment, as well as help access funding for native woodland restoration along our rivers, especially given Scottish Forestry's latest budget cuts
- **Peatland:** A number of conversations have been had with Estate's about our capacity to also support with developing peatland restoration projects. Degraded peatland also has a significant impact on river water temperatures and quality. FWI team planning to explore this further.
- **Temperature monitoring network:** First data set gathered from in-river thermometer network and present a range of very useful insights – Bob to share more detail. Considering adding a continuous monitoring kit to the system which would report river temperature data in real time, for us to add to the FNLRT website.

Nature Connection

- **Pilot Community Engagement programme Oct 2023-March 2024:** Commissions with Wild Things and Findhorn Bay Arts are now wrapping up monitoring and evaluation, ready to complete at the end of March. Has been a learning experience and required more oversight than anticipated, to ensure alignment with our project's objectives at this vital early stage in FWI's development. Will take time to take stock and reflect April/May and consider next steps. Potentially easier to bring in house with a new 'Nature Connection Officer' role going forward.
- **Upper catchment researchers in residence:** Raghnaid Sandilands and Mairi McFadyen's research project culminates with an exciting concert on Saturday 16th March, featuring acclaimed musicians bringing back to life songs discovered during their research about the landscapes of the River Findhorn's headwaters. Residency research materials will shortly be collated into a series of podcasts and an online and printed publication. Nature-related Gaelic names and other cultural heritage data gathered will also be added to our GIS as a dataset to inform future restoration plans.
- **Volunteering & Citizen Science:** Invertebrate monitoring citizen science programme about to begin with support of Buglife and their 'Guardians of Our Rivers' project. Good level of volunteer interest Planning to also work with WildFish's SmartRivers project later in the year for more in-depth invertebrate analysis.

Nature-Positive Economy

- **Training opportunities:** GH coordinating a trial peatland surveying training, based out of Coignafearn with students from University of Exeter. If this is successful it is potentially something we could roll out to catchment land managers and local volunteers.
- **Natural Capital Strategy:** Interests of FWI is developing a natural capital brand are referenced on all agreement paperwork with Estates and has been an interesting area of discussion. General consensus seems to be that if it's possible, collaborating at a landscape-scale to pursue maximum positive impact as well as maximise financial return, is a win-win. This approach would allow for a revenue share to be reinvested into the Trust's ongoing work towards the Findhorn Watershed Initiative. Since deciding not to go down the Zulu Ecosystems route in the Autumn, we are taking some time to reflect on best route forward with the natural capital strategy itself and will pick this up again April/May when there is a bit more bandwidth.
- **Engagement with watershed businesses:** Some positive and supportive recent engagements with Tomatin Distillery and Logie Timber. Plans to pursue more engagements with local businesses and explore opportunities for corporate sponsorship for the project over the coming months.

Programme Management

- **Team:** FWI Communications Officer Helen Nasrat settled in very quickly and has been a great addition to the team.
- **MEL:** Local monitoring and evaluation expert Emily Balls is supporting us with development of a full Monitoring, Evaluation and Learning framework to track our impact, and will be helping us prepare an end of year report
- **PR:** EA and BL were recently featured on BBC Radio Scotland Out of Doors show, and we have LNER making a case study film next week, Chivas Brothers launch on the 22nd, EA and GH are speaking at the FMS conference at the end of March.

Ongoing Funding

- **Just Transition Fund:** Confirmation of 1 year extension to funding received end of January. Huge relief. Will now run until end of March 2025 and we will carry over the underspend from the 23/24 financial year.
- **LNER:** LNER Community and Customer Investment fund has supported temperature, invertebrate, fish, and vegetation monitoring, as well as a range of community engagement opportunities in the upper catchment including schools groups and Ragnaid Sandilands and Mairi McFadyen's research residency and events. This funding completes at the end of the month with the 23/24 financial year.
- **Chivas Brothers:** Agreements signed and partnership launches on World Water Day 22nd March. Expect payment of the first year's £52.5k management fee imminently.
- **Esme Fairburn:** Submitted an EOI and have now been invited to submit a full application for 3 years core funding for FWI staff team. Application to be completed early April.
- **Finderne Development Trust:** Currently offering £5000 towards creation of employment opportunities in Finderne area. Potential contribution to pursue as a towards additional FWI role.

Follow the progress of the Findhorn Watershed Initiative by clicking [here](#).

2. River habitat and Land Use

Clashgour Windfarm: Water, invertebrate and fish monitoring programme developed with the Hutton Institute was approved by developers (EDF). Initial water samples collected by Sean Mclean, Ali Taylor

and Bob with Helen Watson and Dave Riach (HI) on 28th February. Continuous monitoring equipment has arrived and after calibration will be installed in late March.

[Rothes III](#): No further correspondence.

[Carn Duhie Windfarm](#): No further correspondence.

[Lethen Wind Farm](#): Planning permission not granted.

[Tom nan Clach Extension](#): No further correspondence.

[Kellas Wind Farm](#): No further correspondence.

[Ourack Wind Farm](#): No further correspondence.

Flichity Bridge Replacement: Plans for the bridge replacement have been revised and works will be delayed until May/June 2024.

Dallas Sub-station: Re-channelling of the Snaosean Stripe to prevent erosion undermining Dallas Sub-station started in October 2023 and is nearing completion. A fish rescue was completed on the original channel prior to the works in early October by Sarah Hadfield, Alister Taylor and Sean McLean. Site revisited in March, with SSE and Moray Council to discuss and approve a few minor adjustments to the works.

A9 Dual carriageway – Dalmagarry Bridge and Re-alignment: Guy received some plans regarding the proposed bridge and re-alignment of the Dalmagarry burn as part of the A9 dualing. The design is highly engineered, with a considerable section of the burn being replaced by a concrete baffle construction and not in keeping with current bridge guideline. The site is a difficult one but I will be returning comments on the design and seeking an improvement.

3. Biosecurity and INNs

INNS Progress Report: Elise has compiled all the data for 2023 Giant Hogweed and Japanese Hogweed treatment season and planning for 2024. Contracts for spraying contractors, ropework and rafting have been drawn up and issued for tender applications. Meeting with Dalvey Estate was held in March and Elise is developing an approach with the estate for further control. Further discussions with Moray Council on INNs plant control also held.

Two spray training courses for volunteers have been completed. Successful crafting event based around non-native plant control was held in February with Green Hive in Nairn.

Reports on Wester Manbeen and Bogside control in 2023 are near completion and will be submitted shortly with proposals for 2024.

Mink raft and trap network maintained over winter although sightings and mink tracks have been low. No captures to report but several new volunteers have been recruited.

Jane Hamilton continues to promote the project and the latest blog post specifically focus us on using the large pressure tank from Kellas Estate. [Click here](#) to access the blog and here to view the [SISI site](#).

4. Fish and Fisheries

Catches 2024: All staff attended the Forres AA opening ceremony at the Stoney Pool, where Mrs MacLeod opened the season in the traditional way with a large dram of Benromach malt poured into the river. Excellent stovies provided by Billy and Audrey Strathdee were enjoyed by all.

Six spring salmon caught so far on the Findhorn which is encouraging. No reports from the Nairn or the Lossie so far.

Poaching Control: Sean and Ali have commenced regular patrols around the Findhorn.

Findhorn Annual Report: Completed in February and circulated to proprietors, will be posted on the website shortly.

Fish Disease: Peiter van West and his team at Aberdeen University was successful in securing funds for a PHD to study the new variant of Saprolegnia. A student, Vasileios Kyparisis (Billy) has been appointed to undertake the study. Sampling programme has been devised and will include two weekly samples from two locations on the Findhorn from March through to December 2024. The two locations are at Logie Bridge on the mainstem and in the lower Divie. Sean and Ali have been trained in collecting the samples and two sets were collected during March and sent through to Aberdeen Univ. A temperature logger has also been supplied and will be installed near Logie Bridge shortly.

Fisheries Management Scotland Story Map: Considerable amount of effort is required to complete this but this should be compiled by the end of March 2024.

Juvenile Surveys: No NEPs survey proposed for 2024 but likely to be initiated again in 2025. General survey this year will focus on the River Lossie.

River Temperatures: Fifteen temp loggers were installed at various locations in the Upper Findhorn and Dorback and Divie. Twelve of these were successfully retrieved and downloaded by Sean, Ali and Bob during March 2024. The data has yet to be fully reviewed but a few examples are shown below Figures 1 to 3.

Figure 1 indicates that in the Moy Burn and the mainstem at Tomatin where shade from trees or other factors is largely absent that river temperatures are rising into problematic areas for salmon, i.e. above 20°C during June 2023. In contrast the river temperatures in Allt Calder, which has the same aspect but more shading from trees and steeper banks is much cooler with temperatures seldom reaching over 18°C (Figure 2).

Figure 3 is from the Kyllachie in December 2023 and shows several periods where river temperatures were above 5°C and this may affect the development of salmon eggs within the river as well as the growth and activity of juvenile fish. The temperature rise is likely to be caused by mild weather fronts bringing in warmer air temps and possibly warmer rain but clear there are periods throughout the year where above average river temperatures will be affecting salmonid growth and behaviour.

The data requires further analysis but initial impressions clearly support the need to push on with restoring riparian woodland and improving shading where possible. Re-meandering the water course and increasing wetland areas may also be appropriate particularly in parts of the Moy Burn.

The logger from the Elrick in Coignafearn was lost due to the numerous spates recently and we were unable to retrieve two others in the Cro Clach and the Eskin, due to high flows. The remainder were re-installed to collect data through 2024.

Protection of Fish Stocks: Sawbill licence was obtained in October and managed by Sean and Ali. Bird counts completed on 13th December and 21st February.

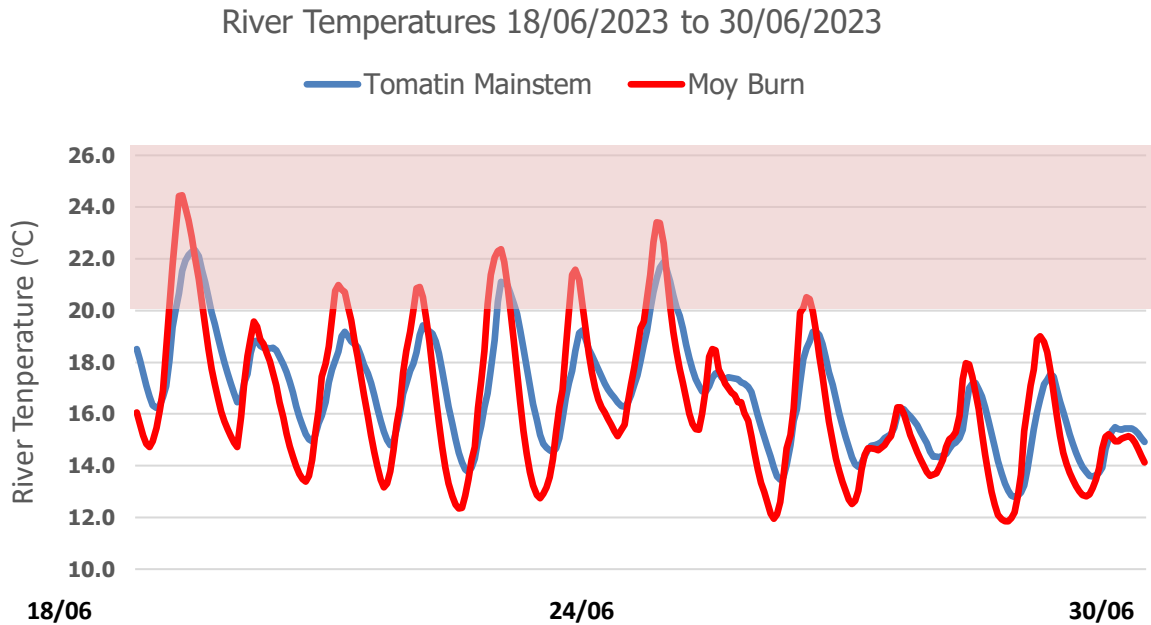


Figure 2: River temperature data from the mainstem at Tomatin and the Moy Burn. Both locations show temperature in June reached levels above 20oC which will lead to difficulties for both juvenile and adult salmon.

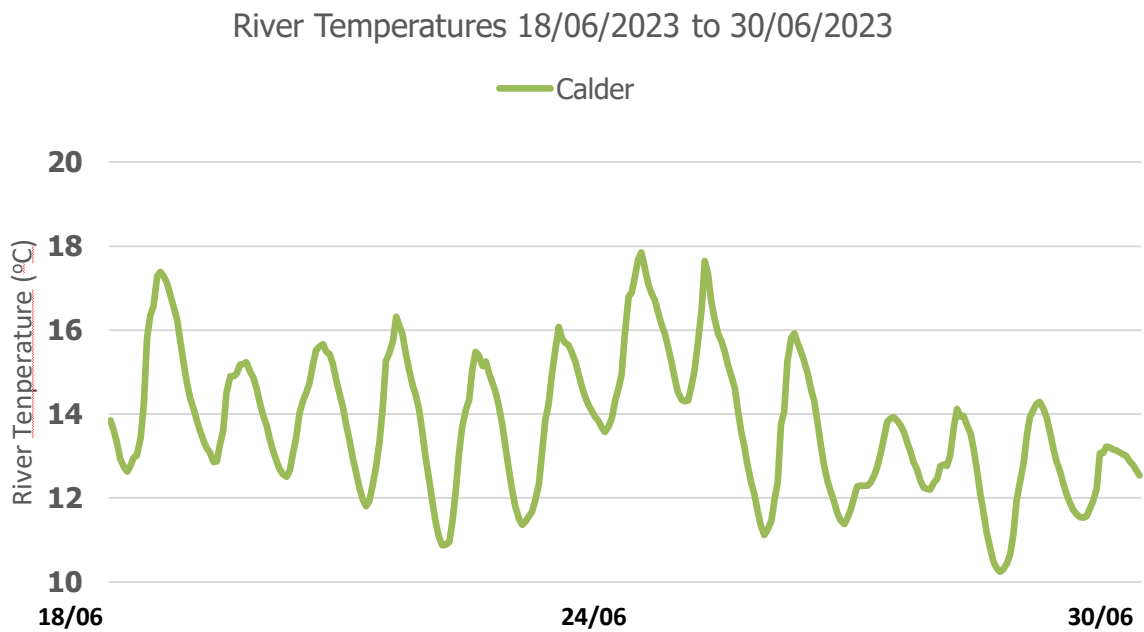


Figure 1: River temperature data from the Allt Calder which is fairly shaded from trees and sleep banks. Showing much lower temperatures in June 2023.

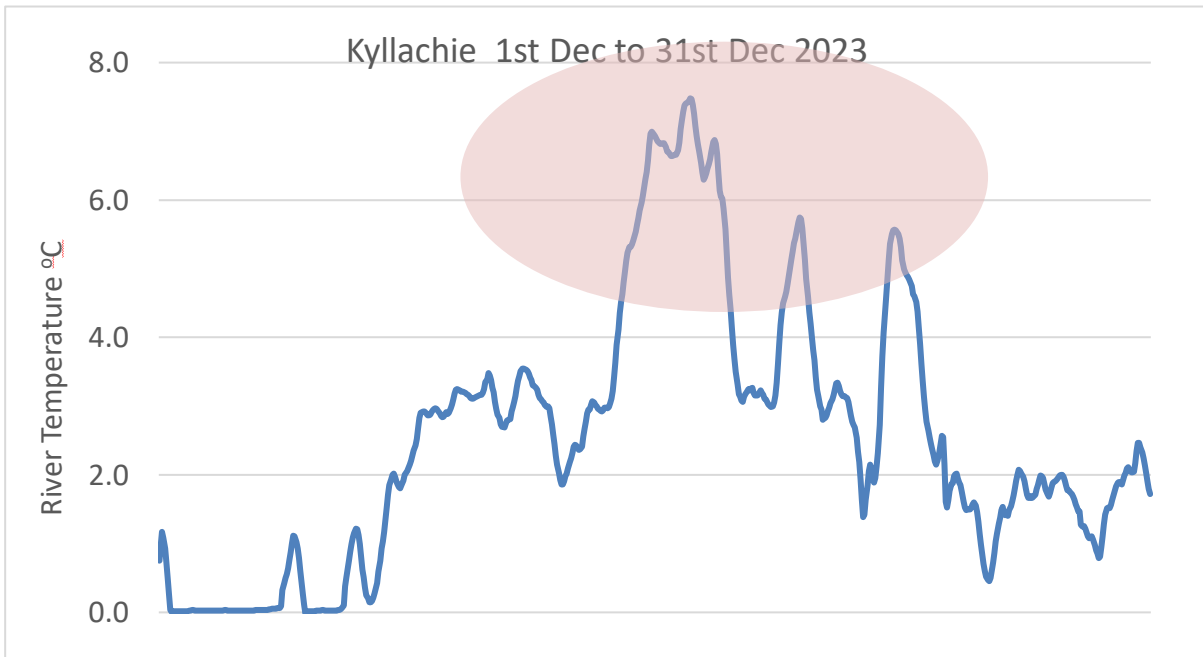


Figure 3: River temperature data from the Kyllachie during December 2023. The data shows high water temperature ($>5^{\circ}\text{C}$) during the month shortly after salmon spawning would have occurred. Would this unusually high temps affect egg development?

5. Marine and Inshore Environment

No further work.

6. Education and Awareness

Schools Go To Fish: I contacted Heldon Community Council to confirm that finding is still available for Alves, Dalles and Mosstowie Primary Schools and the good news is that it is! The three schools have been contacted with two willing to participation so far.

www.fnlrt.org.uk [Facebook](#) www.invasivespecies.scot