

Company: Fortum Power and Heat

Project name: Montta fish trap and transfer

Project location: Finland

Please provide a short project description (5 lines) with link to any webpages which provide more detail:

In the 1950s, eight hydropower plants (HPP) were constructed on the main stem of the river Oulujoki. The Montta trap and transfer facility helps collect valuable data about fish migration in constructed rivers and determine the potential of the River Oulujoki in terms of natural migratory fish population and enhancing aquatic biodiversity.

Link: <https://www.fortum.fi/media/2021/08/fish-trap-and-transfer-facility-modification-work-continues-montta-hydropower-plant-finland>

1. What are the technologies involved in this project (hydro, wind, grids, hybrid projects [e.g., agrisolar])? Hydro Power
2. How did you take into account the relevant biodiversity and environmental protection legislation in this project? During which phase of the project were these considerations analysed and integrated into the project? Did you anticipate concerns around biodiversity and environmental protection for this project, and if so, what did that process look like and during which phase of the project did this occur? The project is voluntary and its aim is to improve the reproduction possibilities of salmon and endangered sea trout. The power capacity of the old power plant was not increased.
3. What makes this project innovative? Getting permits for building fish passes to all HPPs in the river would need more than 10 years. With a trap and transfer system the partial reproduction of fish in tributaries can start right away.
4. Did you collaborate with stakeholders outside of your company (authorities, local communities, NGOs, etc.) and if yes, with whom? Can you describe your experiences with these external stakeholders? Were you able to integrate community concerns into this project? The project was planned with both local (municipalities) and regional (regional environmental administration) authorities. A 10-year contract was made with municipalities including financing and maintenance of the system.
5. How did data enable this project and what data did you collect? Of the collected data, what was provided to regulators and authorities as part of the permitting process? Stocked fish in the area are marked with PIT tags so their migration could be monitored. Fish monitoring close to the fish trap provides important data on the effectiveness of the trap and transfer system.
6. Please describe the experiences surrounding the permitting process for this project, including any bottlenecks you faced: Only a transfer permit for sea salmon and trout was needed, the permit is valid for 2020-2024.
7. Please describe any permitting bottlenecks this project faced specific to land use change: none
8. Did you receive public funding for this project? If so, please describe from which funding source (local, national, EU-level, international) and the application process you faced in attempting to secure this funding (including any special requirements conditional to the funding programme): Funds received from regional fish authority via a Government programme for enhancing the reproduction of migratory fish.
9. Please choose at least **one** of the following questions to answer which is relevant to this project:

10. Does this project regenerate previously degraded natural habitats or ecosystems? If so, how was this achieved or how did your company integrate this restoration into the project?

No

11. OR

12. Does this project protect or provide alternative, undisturbed, comparable habitats for protected species? If so, how is this achieved or how did your company integrate this protection into this project?

Trap and transfer and also juvenile releases in the tributaries support partial reproduction of salmon and endangered sea trout.

13. OR

14. If a previous project was found to be environmentally detrimental and your company was able to course correct to not only mitigate, but reverse the negative effects, how was this achieved?

No

15. OR

16. Did this project take into account effects on soil composition or the GHG impacts of land use change? If so, does this project comply with existing regulations around maintaining soil quality or land use, or does this project go beyond what is required? If so, what did you do in excess of the existing regulations?

No

17. Photos (if available): <https://www.fortum.fi/media/2021/08/fish-trap-and-transfer-facility-modification-work-continues-montta-hydropower-plant-finland>