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Knowledge sharing on fish-friendly hydropower: the FIThydro wiki

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Hydropower is a key element in the transition to a green energy future. However, this technology also comes with adverse environmental impacts that should be avoided or mitigated. One of the challenges related to hydropower is its impact on fish, and the FIThydro project (2016-2020) has worked on improving the decision support for commissioning and operating hydropower using both existing and innovative technologies. One of the outputs from the project is the FIThydro wiki, which is a collection of mitigation measures, methods, tools and devices for the assessment and measure implementation of fish-friendly hydropower. The mitigation measures are divided into five categories of challenges: environmental flows, habitat, sediment management, upstream fish migration, and downstream fish migration. Each mitigation measure has a description of which methods, tools, and devices to use during the three separate stages of planning, implementation, and operation/monitoring. They also contain a classification table describing different aspects of the solution, such as TRL, suitable locations, which challenges are mitigated, and costs. Similar articles exist for methods, tools, and devices that can be useful in implementing mitigation measures, as well as for test cases in the project. The wiki is closely linked to a Decision Support System (DSS), which helps guide users to the appropriate mitigation measures. The wiki can support decision-making and contribute to a more transparent and simple communication/negotiation of hydropower-related issues through a clarification of terms and technologies.