Record Nr. UNINA9910366582203321 Autore Schwevers Ulrich **Titolo** Fish Protection Technologies and Fish Ways for Downstream Migration / / by Ulrich Schwevers, Beate Adam Cham:,: Springer International Publishing:,: Imprint: Springer,, Pubbl/distr/stampa 2020 **ISBN** 3-030-19242-3 Edizione [1st ed. 2020.] 1 online resource (XIV, 279 p. 183 illus., 177 illus. in color.) Descrizione fisica Disciplina 624.15 Soggetti Engineering geology Engineering—Geology **Foundations** Hydraulics Wildlife Fish Marine sciences Freshwater Renewable energy resources Geoengineering, Foundations, Hydraulics Fish & Wildlife Biology & Management Marine & Freshwater Sciences Renewable and Green Energy Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Introduction -- Basic regirements of fish protection and downstream Nota di contenuto passage -- Impact of Downstream passability -- Fish protection facilities -- Fishways for downstream migration -- Fish-friendly turbines -- Fish-friendly operational management -- Species-specific requirements -- Habitat measures -- Open questions and knowledge deficits.

This book offers a comprehensive review of current systems for fish protection and downstream migration. It offers the first systematic description of the currently available technologies for fish protection at

Sommario/riassunto

hydropower intakes, including accurate and timely data collected by the authors and other researchers. It describes how to design and test them in agreement with the guidelines established from the EU Water Framework Directive. The book includes important information about fish biology, with a special focus on swimming and migration mechanisms. It offers a robust bridge between concepts in applied ecology and civil hydraulic engineering, thus providing biologists and hydraulic engineers with an authoritative reference guide to both the theory and practice of fish protection. It is also of interest for planners, public authorities as well as environmental consultants.