From field data to predictive models for diadromous fish management

DiadSea

COLLECTING AND INTEGRATING FIELD DATA
Sampling and data collection

Species presence and abundance

Tagging and telemetry data (movement)

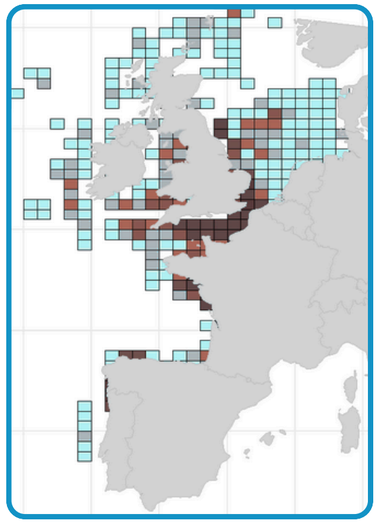
Morphological, physiological, genetic data

Environmental parameters (temperature, salinity, flow, oxygen, etc.)

Habitat descriptors and connectivity indicators

Detailed biological, ecological, and environmental data are collected across estuaries and coastal areas, providing the empirical foundation for understanding diadromous fish populations

TRANSFORMING DATA INTO KNOWLEDGE
Modelling and analysis



Species distribution models: predict current and future habitat suitability under different climate scenarios

Biological and environmental data are integrated into predictive models that reveal how diadromous fish respond to environmental change and inform management actions

FROM MODELS TO MANAGEMENT TOOLS
Outputs and applications

Identify critical habitats and migration corridors

Forecast climate change impacts on species distribution

Inform transnational conservation policies and fisheries management

Model results guide decision-makers by identifying priorities for conservation, improving river-sea connectivity, and predicting future population trends under climate change

Funded by Interreg Atlantic Area
Co-funded by the European Union
Endorsed by 2021 2030 United Nations Decade of Ocean Science for Sustainable Development