Holistic approach to managing Mediterranean streams

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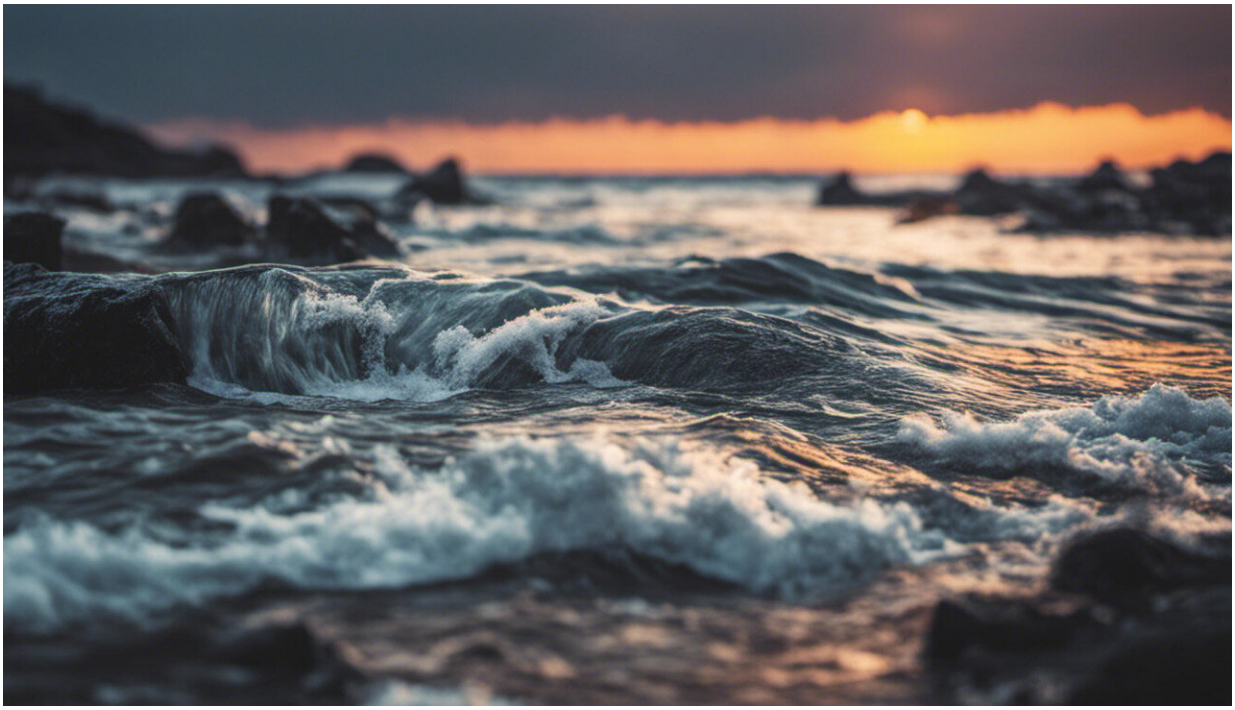

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Lack of accurate information and changing habitats are just two of the challenges facing European researchers in their efforts to improve the environmental management of Mediterranean streams.

The HolRiverMed ('Environmental River Management: An Innovative

Holistic Approach for Mediterranean Streams') project's main focus is on models and methods for sustainable water resource management. The two-year research programme is coordinated by the Polytechnic University of Valencia, in Spain, with EU-funding of EUR 166 565.

The study of the Mediterranean streams is of special interest because of their strong seasonal patterns - low flow in the hot summer period and potential flash floods during autumn and spring storms. This ultimately affects water-related organisms, increases the duration and magnitude of droughts, and impairs the capacity of streams to support the ecosystem.

Part of the study, under the direction of Professor Claudio Comoglio from Politecnico di Torino and Professor Gilberto Forneris from University of Torino, Italy, has been to monitor fish movements and migration using so-called 'pit-tags', radio tracking, and up - and downstream fish capture.

Research has included building a replica fish habitat to study the characteristics of various fish communities and identify their environmental requirements. Using telemetry and holistic monitoring and tracking tools, the researchers have been able to assess the mobility, habitat preferences, growth and mortality of brown trout and marble trout.

By the end of the project this year, the HolRiverMed research team aims to
provide a comprehensive analysis of the various taxonomic and functional groups composing the aquatic ecosystem of Mediterranean streams.

Results from the project will go a long way to filling the gap in information, and fostering long-term activities and knowledge-sharing on this important subject at the European level.

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