

Lessons learned in integrating hydromorphological trajectories for water resources management in alpine rivers

13.06.2025 - Belluno, Bianchi Room, Viale Fantuzzi

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Alpine rivers are crucial ecosystems, providing water resources, hydropower, biodiversity habitats, and flood mitigation. However, human activities and climate change have altered their bio-hydromorphological functioning, impacting water flow, sediment transport, vegetation, and river morphology, reducing ecosystem services. To address these challenges, studies and rehabilitation projects in France and Italy focus on river hydromorphological processes trajectories to support sustainable management, an approach particularly relevant in the Alpine region, highly sensitive to the hydrological cycle.

This one-day workshop aims at gathering researchers, practitioners and students to share knowledges of alpine river ecosystem functioning and to pinpoint any limitations in both theoretical understanding and practical application, essential for enhancing the success of river rehabilitation projects.

Morning: Seminars

9:00 : Introduction

9:15 : Rivers facing change in Alpine and Mediterranean climate: anthropogenic pressures vs extreme events vs climate change, a geomorphic point of view through quantification of hydro-sedimentary fluxes by **Margot Chapuis**, Lecturer at the University of Azur Coast, France.

9:45 : Alpine riverscape trajectories from global to habitat scale: which implications for their management? by **Barbara Belletti**, Professor at the University of Lyon, France.

10:15 – 10:45 : Coffee Break

10:45 : Bringing hydromorphology into policy and practice by **Martina Bussetti**, Research Manager - Head of the Hydrology, Hydrodynamics and Hydro-morphology Area, status and evolutionary dynamics of surface water ecosystems at ISPRA, Roma, Italia.

11:15 : Multi-decadal anthropogenic management affected sediment fluxes and morphological dynamics of Alpine rivers: lessons learned from South Tyrol (Eastern Italian Alps) by **Vittoria Scorpio**, Associate Professor at the University of Modena, Italia.

11:45 : Restoring alpine rivers: examples and lessons learned from the French Alps by **Benoit Terrier**. Project leader at the Mediterranean and Corsica water agency, France.

12:15 – 14:00 : Lunch break

14:00 – 16:00 : Afternoon: Discussions and debates on the integration of hydromorphology in Alpine river management.

The workshop will be in english. Contact: thomas.bernard@unitn.it