

UP IRSTEA - RiverLy

SUPERVISORY BODIES



RiverLy is a multidisciplinary unit whose objective is to understand the functioning of watercourses.

At the international level, our research aims to :

- assess and predict the impacts of human activities and climate change on hydrosystems;
- prioritize actions to be undertaken to restore and conserve our aquatic environment, anticipate accentuated or emerging risks for the coming decades.

4 research axes

UNIT MANAGER

Gilles PINAY

LOCATION

Region : Auvergne-Rhône-Alpes (Lyon)

University site : Université de Lyon

Address :

5 rue de la Doua - CS 20244 -
69625 VILLEURBANNE CEDEX

• Flows and transfer mechanisms

Understand and model flows and transfer mechanisms to and within watercourses (water, sediment and contaminant flows, speciation and degradation mechanisms, biological dispersion mechanisms).

• Exposure, stress and biological effects

Describe biological responses to environmental stresses and contaminants to predict ecotoxic hazard in aquatic environments and the combined effects of physical and chemical environmental changes on community dynamics.

• Pressure-impacts: multiple scales and stresses

Understand and integrate ecological responses (biological and hydro-morphological) to multiple stresses with cumulative impacts at different spatial and temporal scales, from the slope to river systems.

• Spatialization of flows and integrated watershed management

Understand and model the components of the water cycle and their interactions with human actions at different spatial scales (from the plot to the hydrographic network) and temporal scales (from sudden events (floods) to multi-centennial variations), in order to understand hydrometeorological risks, the effects of global change and propose management measures.

Unit website : <http://www.irstea.fr/la-recherche/unites-de-recherche/hydrosystemes>

DOCTORAL SCHOOL(S)

E2M2

DS 341 - Evolution, Ecosystems, Microbiology, Modelling

Website : <http://e2m2.universite-lyon.fr>

Co-accredited institutions : Université Claude Bernard Lyon 1

Head : Fabrice CORDEY

