



### 1. Line of research

Modelling, management, and remediation of stormwater runoff in peri-urban and rural ecosystems.

### 2. ERC descriptor

PE10\_17: Hydrology, hydrogeology, engineering and environmental geology, water and soil pollution

### 3. Job description

We invite post-doc students to develop a research project which aims to evaluate potential alternatives for managing and reclaiming stormwater runoff in urban, peri-urban and rural ecosystems through the combination of nature-based approaches and on the interactions

between soil-vegetation and atmosphere, taking into account socio-economic impacts, effects of climate change and near-future health challenges.

#### 4. We offer

- ✓ The winner which will choose this line of research will work in the research group of Agricultural Hydraulic and Watershed Restoration
- ✓ Hydraulic and hydrological modeling activities, field and laboratory experiments;
- ✓ Monitoring activities with flow meters, instruments for detecting soil hydrological proprieties and parameters, agro-meteorological stations and remote sensing devices;
- ✓ Avant-grade knowledges in (i) hydrological processes in soil-vegetation-atmosphere systems, (ii) soil hydrology dynamics, (iii) modeling of agro-hydrological processes at different spatial scales

#### 5. Desired skills

Applicants must have specialization in program languages (e.g. Matlab), Gis instruments (e.g. QGis), hydrology, hydraulic, soil science or related fields. Preference will be given to candidates with demonstrated skills and experience in experimental work and numerical mathematical modeling in environmental, water and water-quality processes, or related fields. Deep knowledge of the English language is required.

#### 6. Contacts

Additional information on this line of research please takes contact with [daniele.masseroni@unimi.it](mailto:daniele.masseroni@unimi.it) (ORCID link: <http://orcid.org/0000-0001-8597-9067>; La Statale @work: <https://expertise.unimi.it/get/person/daniele-masseroni>).