



2024 Conference on Nature-based Solutions and Water-related Risks

Insights from the Humanities and Social Sciences

National School for Water and Environmental Engineering of Strasbourg (ENGEES), Strasbourg, France

June 5-7, 2024

Abstract submission deadline: February 15, 2024

The concept of "Nature-based Solutions" (NbS) emerged at the end of the 2000s, in a period characterized by multiple crises, economic, financial, environmental, and climate. This concept was promoted by the International Union for Conservation of Nature (IUCN), which formally defined NbS in 2016 as "actions to protect, sustainably use, manage and restore natural or modified ecosystems, which address societal challenges, effectively and adaptively, providing human well-being and biodiversity benefits". Considered as an "umbrella" concept, NbS encompasses pre-existing concepts such as ecological restoration, ecological engineering, or green infrastructure, as long as they produce beneficial effects for biodiversity and society.

NbS are presented as solutions to two major contemporary public problems: climate change and biodiversity loss. Heatwaves, droughts and floods are now more present in the global media, linked to the increased frequency and intensity of these extreme events. NbS can play a key role in water-related risks, especially flood risk, in the context of climate change by promoting ecosystem preservation and restoration to reduce flood risk.

Widely adopted and disseminated, this concept nevertheless takes on different meanings depending on the actors and institutions that use it. This ambiguity can be productive when it facilitates collective action in situations that accommodate this diversity of meanings. But the definition and implementation of NbS also causes confusion, and sometimes tensions and conflicts locally and internationally. The oil industry and other private actors are also adopting this concept, sometimes diverting it from its initial meaning, for example, to promote fuel as 'carbon neutral' thanks to ecological compensation.

The existing social science literature around NbS aims to facilitate their implementation in various contexts. However, critical literature is still underdeveloped. This conference aims to bring together critical research on the expectations of NbS in the area of water-related risks, such as floods and drought, expanding on the results from the project "Nature-based solutions, from theory to practice: comparing France and the United States" (2021-2024).

Conference themes

The conference will be structured around the following themes:

Theme 1. Governance of NbS: What types of government and governance facilitate the creation of public policies related to NbS and the implementation of NbS projects?

What are the types of public action and the preferred instruments used to create public policies related to NbS and to implement NbS projects (e.g., mandatory policies, funding sources, centralized/decentralized governance structures, etc.)? When creating public policies related to NbS or designing and implementing NbS projects, what are the relationships among governmental agencies and institutions (at federal, state and local levels in the United States or supranational, national, regional and local in Europe), tribal governments, private actors, NGOs, industry and citizens? Is the adoption of the concept of NbS changing these relationships? Is the concept of NbS changing the government and/or governance of "nature", territories or flood risk management? Finally, is the concept of NbS making possible to overcome the sectoral dimension of public action, which can threaten the achievement of the UN Sustainable Development Goals (SDGs)? Or is this concept enabling the mainstreaming of the preservation of biodiversity and nature in other areas of public action such as climate, agriculture and flood risk management?

Theme 2. Conceptualizations of NbS: How different actors conceptualize or perceive the term Nature-based Solutions? What does "nature" mean in the context of NbS?

NbS connect various actors, managers, elected officials, residents, associations, private companies, etc. How are NbS (the concept or the arrangements to which it refers) perceived by the managers and actors those involved in defining and/or implementing NbS projects? Is this concept appropriated, criticized, reinterpreted or transformed by the goals of specific public policies? Do NbS reflect a new conceptualization of "nature", of the place of nature in the city or of human-nature relationships? Does the concept of NbS contribute to the recognition of an entity in non-human beings?

Theme 3. Implementation of NbS: How are NbS being implemented in the territory?

The concept of NbS has been developed in the international arena but is reinterpreted and implemented by territorial actors. Beyond thinking about the study of NbS through the prism of the implementation or diffusion/adoption of an international standard, it is interesting to analyze how territories (or places) modify the concept of NbS. How do territories where NbS are implemented influence the project design and implementation or the concept definition? How do the territorial, political or land ownership dynamics in these territories produce different types of NbS? Behind the generic concept of NbS, how is it translated locally?

Theme 4. Research gaps: What future research is needed to better understand the concept of NbS and its potential?

What future research should be prioritized around NbS in the human and social sciences or according to multi- or interdisciplinary approaches with biophysical sciences? What is the dominant knowledge around NbS? How do different epistemic communities and scientific disciplines address NbS, and potentially reconfigure themselves in the light of this concept? This theme will give special attention to young researchers to present their work currently being developed around NbS.

Abstract submission

We invite academic work in the human and social sciences, as well as interdisciplinary work (including human and social sciences), which aims to shed light on the social, geographical and political dimensions involved in the definition or implementation of this concept in different contexts.

Abstract submissions, empirically anchored and theoretically informed, must include the preferred theme of discussion. One page long, they must include a title, names and affiliations of the authors, a summary (500 words max) presenting the research context, the case study(ies), research questions, methods, and results, as well as three keywords.

Abstracts must be sent in English or French before **February 15, 2024** to the following email address: <u>sfn-2024@engees.unistra.fr</u>

Presentations can be made in French or English. A translation service may be offered if necessary.

Conference information

The conference will take place at ENGEES in Strasbourg - FRANCE (1 cour des cigarières, 67000 Strasbourg, France) from **Wednesday June 5, 2024** (2pm) to **Friday June 7, 2024** (5pm).

Participation in the conference is free, but upon registration and subject to availability. A contribution to meal costs may be requested (€20 per meal). Transport and accommodation costs will be responsibility of the participants.

Scientific committee

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Steering Committee

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Any questions relating to this conference can be addressed to: <u>sfn-2024@engees.unistra.fr</u> ou joana.guerrin@inrae.fr

