



S A B I C A S

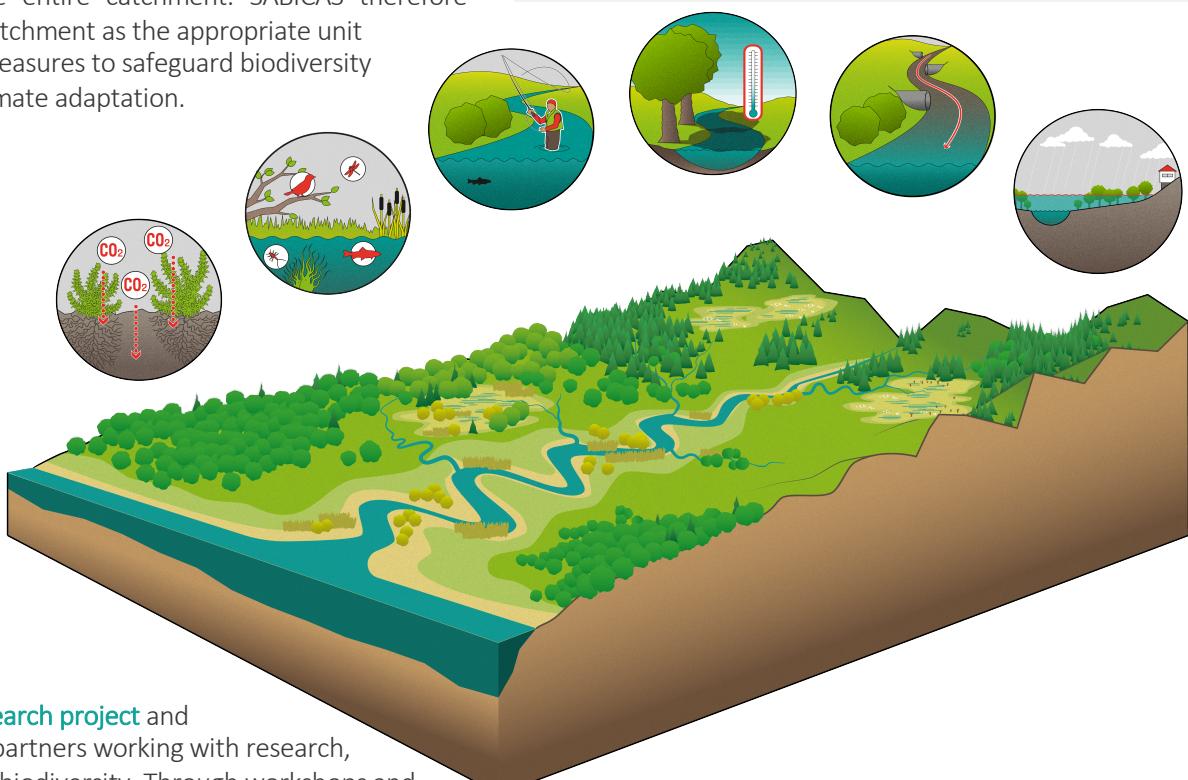
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# SABICAS: Safeguard Biodiversity and improve Climate Adaptation in catchment areas under pressure: tools and Solutions

**Rivers and their surroundings** harbor a high number of species and contribute substantially to biodiversity. But pollution, land-use, climate change and physical changes such as dams, have impacted rivers heavily. Increased flooding also poses an increased risk for human safety and infrastructure in floodplains.

To counteract these negative trends, we need to take measures that consider the bigger picture. Rivers receive water from the entire catchment. SABICAS therefore considers the catchment as the appropriate unit to implement measures to safeguard biodiversity and improve climate adaptation.

**Nature-based solutions (NbS)** are solutions to societal and environmental challenges that are inspired by or supported by nature. Examples are riparian buffers, floodplains and connected wetlands, that can prevent floods, erosion and landslides. Using these ecosystem features actively as NbS will have multiple benefits for climate change adaptation, biodiversity, water quality and human activities in the rivers and their surroundings.



**SABICAS is a research project** and involves eleven partners working with research, governance and biodiversity. Through workshops and living labs we will engage with a broad range of stakeholders. The close dialogue will influence how we investigate effects of NbS and how to prioritize the different solutions at appropriate scales.

**The two case study catchments** Halden River (Haldenvassdraget) in South-East Norway and Gausa in South-Central Norway are impacted differently by human activities. We will study how small parts of land area can be transformed into NbS without major economic losses. The overall aim is to develop a user-friendly toolbox to optimize the use of NbS at the catchment scale.

## What will SABICAS contribute?

- Balancing societal land use needs with the need to protect biodiversity and adapt to climate change
- Filling key knowledge gaps
- Propose innovative solutions to implement NbS in Norwegian river management
- Accelerate multi-functional, multi-beneficial, cross-sectoral and interdisciplinary future use of NbS
- Improve sustainable use and management of land