NATURE THRIVES

NATURE-based urban water Transitions for Healthy, Resilient, InclusiVE regional Scapes

Programm / Ausschreibung	KLWPT 24/26, Internationale FTI-Initiativen, Driving Urban Transitions (DUT) Ausschreibung 2024 (KLWPT)	**Status**	laufend
Projektstart	01.01.2026	**Projektende**	31.12.2028
Zeitraum	2026 - 2028	**Projektlaufzeit**	36 Monate
Barwert der Projektförderung	€ 399.347		
Keywords	water resources management; policy development; capacity building; circular economy; blue-green infrastructure		

Projektbeschreibung

Die städtische Wasserinfrastruktur steht vor Herausforderungen durch Klimawandel, Urbanisierung und alternde Systeme. Um eine nachhaltige Wasserversorgung zu sichern, ist ein Paradigmenwechsel zu Kreislaufwirtschaft und Resilienz notwendig. Hier setzt NATURE THRIVES an, indem es auf naturbasierte Lösungen (Nature-Based Solutions, NBS) setzt, um städtisches Wassermanagement widerstandsfähig und zukunftssicher zu gestalten.

Das Projekt adressiert bestehende Hindernisse wie fehlende Standardisierung und unzureichende Kommunikation über erfolgreiche Implementierungen von NBS. Mit qualitativen und quantitativen Methoden untersucht NATURE THRIVES aktuelle NBS-Ansätze und entwickelt gemeinsam mit Stakeholdern „Was-wäre-wenn“-Szenarien. Mittels Modellierungen, Experimenten und Co-Creation erprobt das Projekt multifunktionale NBS, die sowohl technisch als auch gesellschaftlich akzeptiert und begeisternd sind.

Zu den Hauptzielen gehören:
- Co-Design und Erprobung neuer multifunktionaler NBS-Konzepte, die städtische Anforderungen und zukünftige Herausforderungen berücksichtigen.
- Erweiterung des Managements urbaner Wasserressourcen für hybride, blau-grün-graue Lösungen.
- Co-Entwicklung von Strategien zur Mainstreaming und Skalierung erfolgreicher NBS und ökosystembasierter Ansätze.

Mit sieben Projekt- und drei Kooperationspartnern, die umfangreiche Expertise in urbanem Wassermanagement und Governance besitzen, setzt NATURE THRIVES auf bidirektionalen Wissenstransfer und Zusammenarbeit. Ziel ist es, durch Co-Design und Co-Creation die Akzeptanz und Umsetzbarkeit von NBS zu stärken und deren Integration in die städtische Wasserinfrastruktur zu fördern.

Abstract

Urban environments and water infrastructure are influenced by future uncertainties like climate change, urbanization and aging infrastructure. The paradigm shift towards sustainability and circularity is needed to maintain the high quality of urban water services supported by the innovation in technological, social, governmental and communication sphere.
Implementation of Nature-Based Solutions for urban water management has been proposed as a cure-for-all no-regret alternative to solely pipe-based urban infrastructure. The transformation and integration of these solutions has been hindered by the lack of standardization, well tested and monitored solutions and positive communication of the successful transitions.
NATURE THRIVES has set its activities around four simple questions to support the transition towards the sustainable and efficient water management that is robust enough to encounter the future uncertainties. We will use qualitative and quantitative research methods to define the state of the art in NBS planning, design and integrated management to propose what if narratives that will be explored with the stakeholders in co-design and co-creation events. Modelling, experimentation and co-creation will be used to define what works and what wows considering both technical and social aspects in the pathways. This means novel technical solutions for multipurpose NBS and integrated asset management approaches for ensuring the cascading positive effect of the blue-green-grey interaction. The feedforward and feedback loops will be used throughout the project to ensure the bidirectional science to stakeholder transfer. The pathways for NBS mainstreaming and upscaling (what is) will be co-created with the stakeholders to support the sustainability in urban water transitions. Active participation in DUT Knowledge HUB and communication and dissemination actions will support the further uptake (how to) of the NATURE THRIVES solutions and concepts.
The project has set three objectives:
- Co-design and test new multifunctional and desirable NBS concepts considering the lessons learnt from already existing solutions, uncertainties and constraints of urban context.
- Expand the existing UWS control and (asset) management concepts for integrated grey and blue-green hybrid solutions
- Co-create strategic advice and build capacity for mainstreaming and upscaling successful and innovative NBSs and ecosystem-based approaches in urban water planning and management.
NATURE THRIVES includes 7 co-applicants and 3 cooperation partners with a solid track record in urban water management, technical innovation and implementation with interdisciplinary expertise in governance, planning, management and policy studies as well as in regional design and sustainability transitions. Long-term experience in co-design and co-creation will be exploited to reach the target groups and to ensure the uptake and upscaling of the developed solutions and approaches.

Projektkoordinator

- Universität Innsbruck Institut für Infrastruktur

Projektpartner

- alpS GmbH