

# Nature-based Solutions for Water Cycle Management in the Greater Mekong Sub-region countries

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## Issues

- Increased frequency of extreme floods and droughts
- *Disaster risk management and building resilience*
- Connecting gray and green
- *Conservation and expansion of natural ecosystems*
- Coordination and collaboration



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Human infrastructure

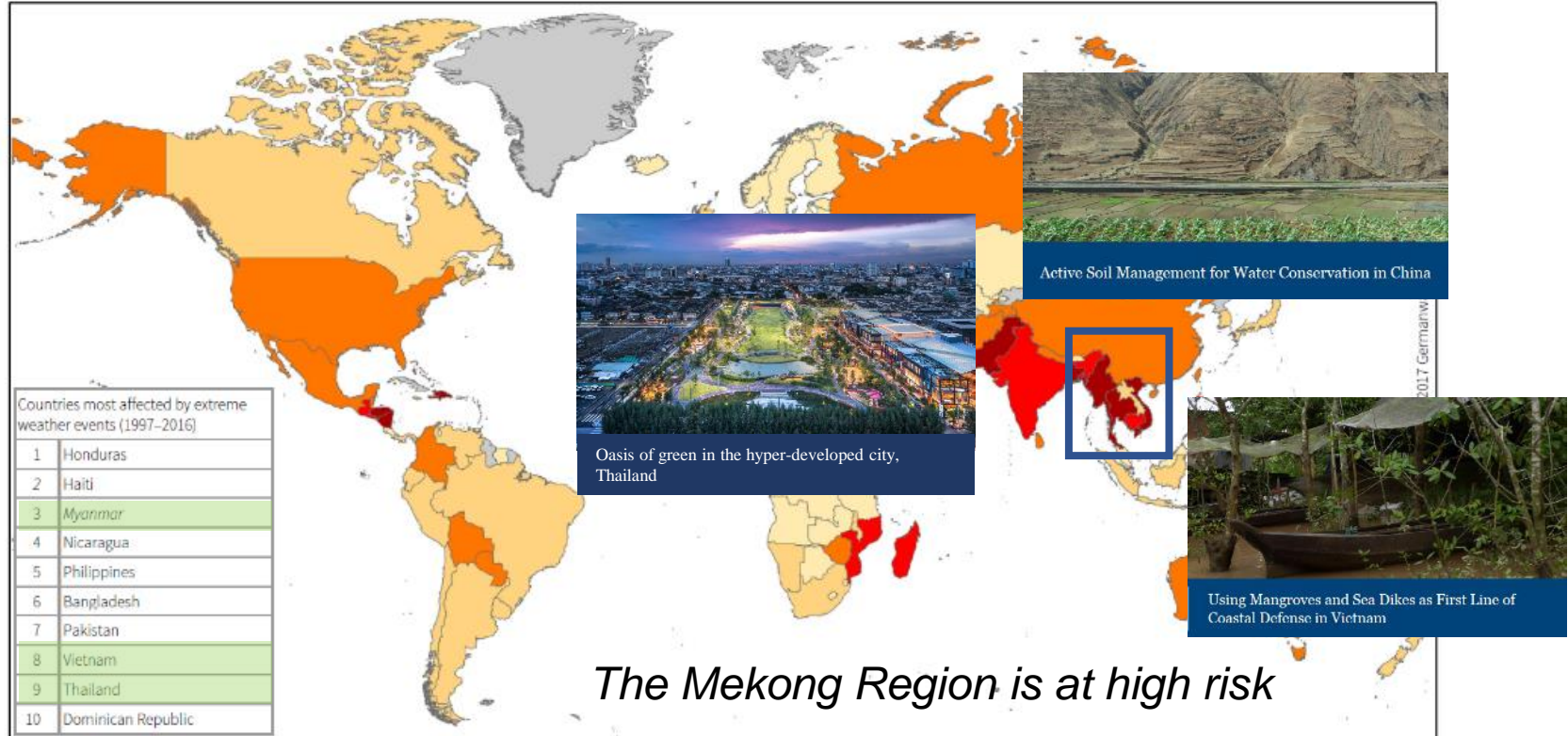


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Natural infrastructure



# Climate risk index by extreme weather events (1997-2016)



# RECONNECT- Regenerating ECOSystems with Nature-based solutions for hydro-meteorological risk rEduCTion



**ADVANCING THE KNOWLEDGE OF NBS** in the context of hydro-meteorological risk reduction focusing on floods, storm surges, landslides and droughts.



**FORMING THE BASIS** for the proof-of-concept regarding large scale NBS demonstrations, by co-creating new cases and connecting to existing cases.



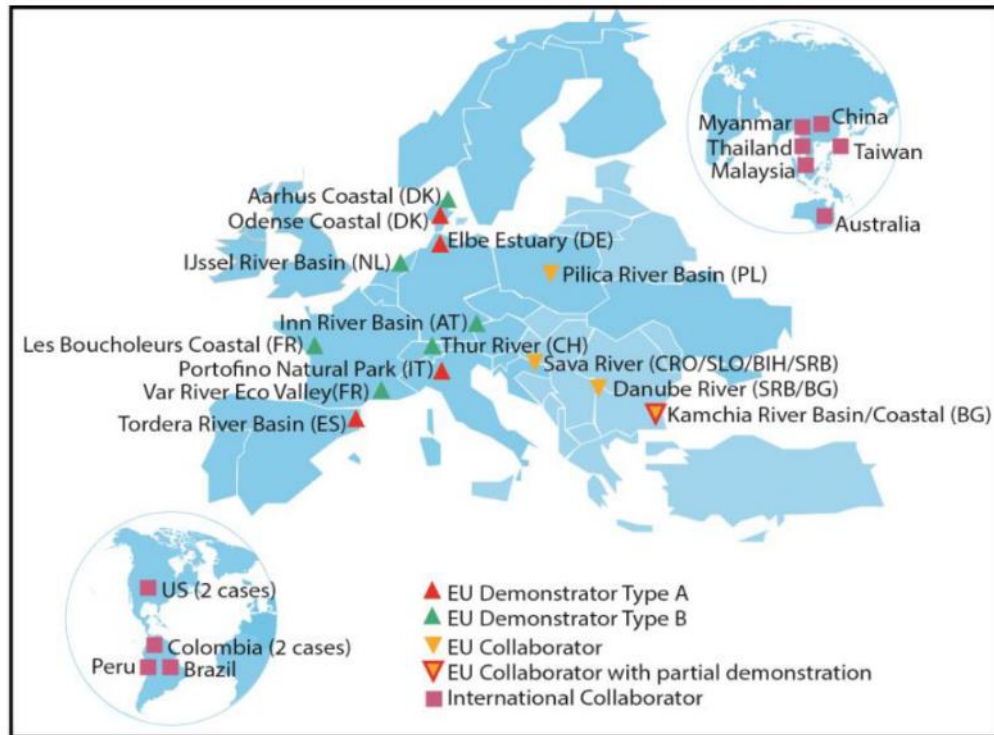
**IDENTIFYING BARRIERS** related to social and cultural acceptance of NBS and policy regulatory frameworks and proposing ways to overcome them.



**PROMOTING INNOVATION** in relation to evaluation, selection, design, operation, maintenance and decommissioning of NBS.



**ENABLING REPLICATION** and upscaling of NBS in different contexts through the RECONNECT Roadmap. In developing the Network of cases, RECONNECT takes into account market dynamics, knowledge creation, institutional entrepreneurship and brokerage.



# RECONNECT



## **HOLISTIC ECOSYSTEM-BASED FRAMEWORK:**

We are creating a framework to support co-creation and collaboration around using NBS effectively for reducing hydro-meteorological risks.



## **NETWORK OF CASES ON NBS APPLICATIONS:**

Our demonstrators and collaborators showcase their 'land use planning' approach linking the reduction of hydro-meteorological risk with local and regional development.



## **RECONNECT SERVICES PLATFORM:**

Our ICT tool provides real-time information about the performance of NBS and the evidence base to facilitate co-creation and to enable replication and upscaling.



## **RECONNECT ROADMAP:**

Lessons learned through RECONNECT are synthesized in a comprehensive report to the EC to be used as a roadmap for NBS in Europe and beyond.

## **Demonstrators Type A: Large scale NBSs to be fully created and validated**



Elbe Estuary, Germany



Seden Strand, Odense, Denmark



Tordera River Basin, Catalonia



Portofino Natural Park, Italy

# Demonstrators – Type B

Existing NBSs to be monitored, evaluated and validated



**IJssel River Basin, The Netherlands**

[More information >](#)



**Inn River Basin, Austria**

[More information >](#)



**Greater Aarhus, Denmark**

[More information >](#)



**Thur River Basin, Switzerland**

[More information >](#)



**Var River Basin, France**

[More information >](#)



**Les Boucholeurs, France**

[More information >](#)



# RECONNECT

**Collaborator cases:** perform prefeasibility studies and knowledge sharing activities with a network of European and international collaborators

Climate-resilience water management at community level Chao Phraya River Basin, Thailand



## Achievements

- *During the Gaemi Typhoon in 2012, this prevented flooding in Bangkok and reserved 17 Million m<sup>3</sup> of water for agriculture*
- *Community's Palm Fund can increase income to THB 656,000/village/year*

Source: HAI, Thailand

# Lessons and challenges for NBSs in the Greater Mekong Sub-region

- Fostering integrated, cross-sectoral and stakeholder led approaches
- Addressing biodiversity and social benefits
- NBS is a relatively 'young' concept in this region, still in the process of being framed into national policies city and land use planning
- Lack of operation clarity, technology and knowledge
- Upscaling the concept



# Thank you

Contact

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