

The Power of Policy: Creating the conditions to scale nature-based solutions for water security

1 OCTOBER 2025



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INTRODUCTION

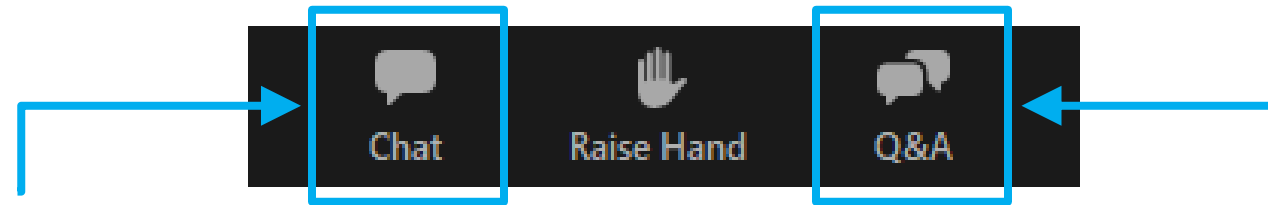


- The webinar is organised by The Nature Conservancy (TNC) in collaboration with the International Water Association (IWA) and partners for the launch of TNC's latest report: *'The Power of Policy: Creating the conditions to scale nature-based solutions for water security'*.
- This report gathers data from example case studies in 17 countries around the globe, examining collaborative lessons and including a tool for projects to examine their own enabling conditions.

WEBINAR INFORMATION

- This webinar will be **recorded and made available “on-demand”** on the [IWA Connect Plus](#) platform and IWA Network website, with relevant information.
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- The opinions, hypothesis, conclusions or recommendations contained in the presentations and other materials are the **sole responsibility of the speaker(s)** and do not necessarily reflect IWA opinion.

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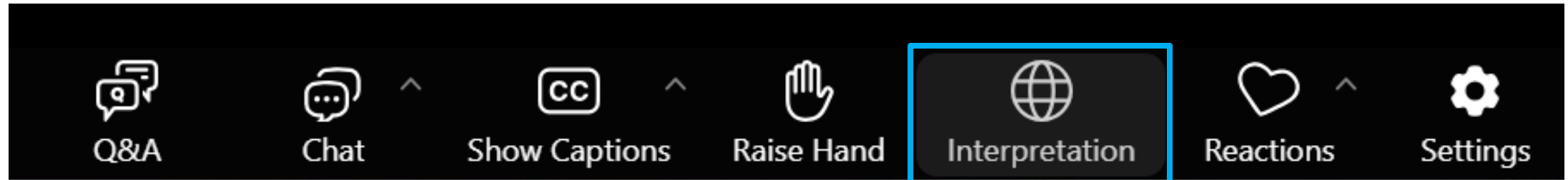


- **‘Chat’ box:** please use this for general requests and for interactive activities.
- **‘Q&A’ box:** please use this to send questions to the panelists. (We will answer these during the discussions)

***Please Note:** Attendees’ microphones are muted. We cannot respond to ‘Raise Hand’.*

WEBINAR INFORMATION

- This webinar is also available in two languages : **Spanish and Portuguese**. Please see the instructions below:



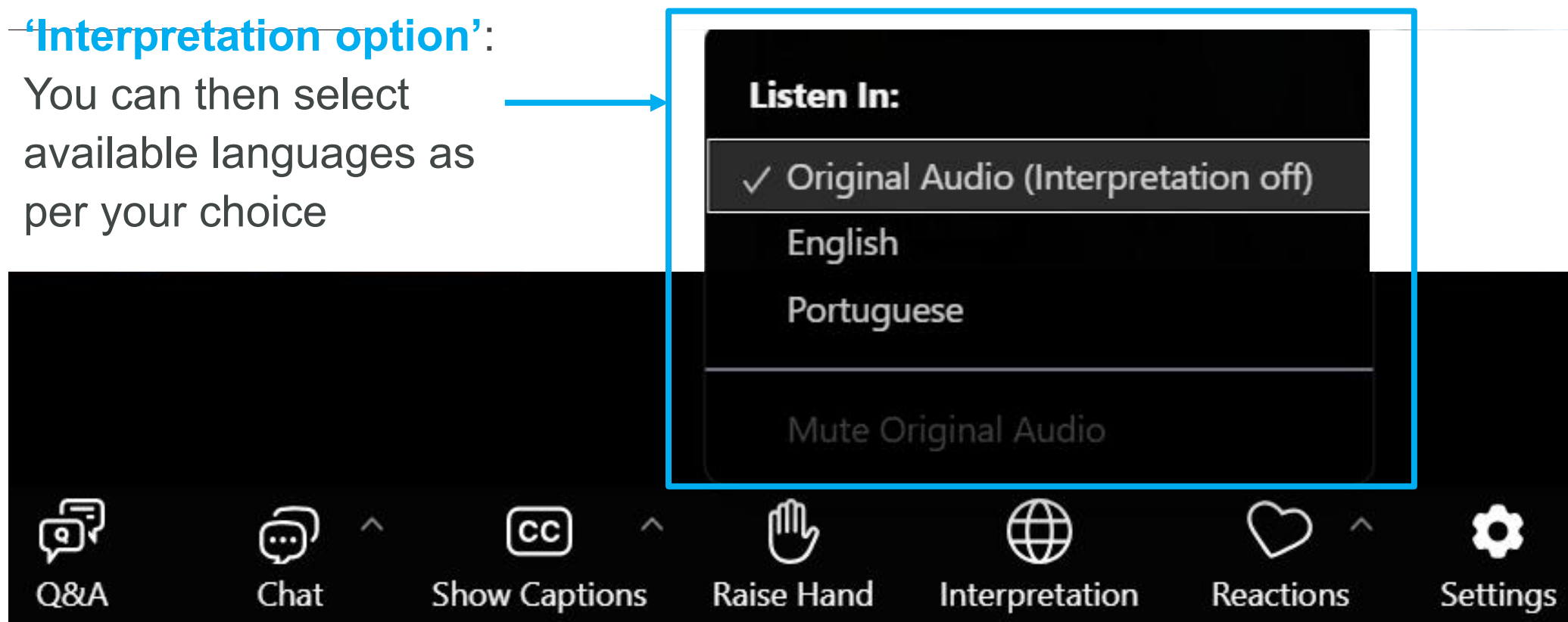
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The Power of Policy:

Creating the conditions to scale nature-based solutions for water security



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Program

- 1 Welcome
- 2 Opening remarks
- 3 The Power of Policy:
Why, How and What?
- 4 Case Studies
- 5 Questions & Answers
- 6 Panel
- 7 Closing remarks

Welcome

Moderator



Alejandro Jimenez

Head of WASH Governance
Group

**IVL - Swedish Environmental
Institute**

Opening Remarks



Daniela Bemfica

Strategic Programmes &
Engagement Director

International Water Association



Frank Rijsberman

Head of Policy and Public
Funding

The Nature Conservancy

The Power of Policy: *Why, How and What?*

ROB CUNNINGHAM, THE NATURE CONSERVANCY



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Why is policy important?



Full Report:
The Power of Policy

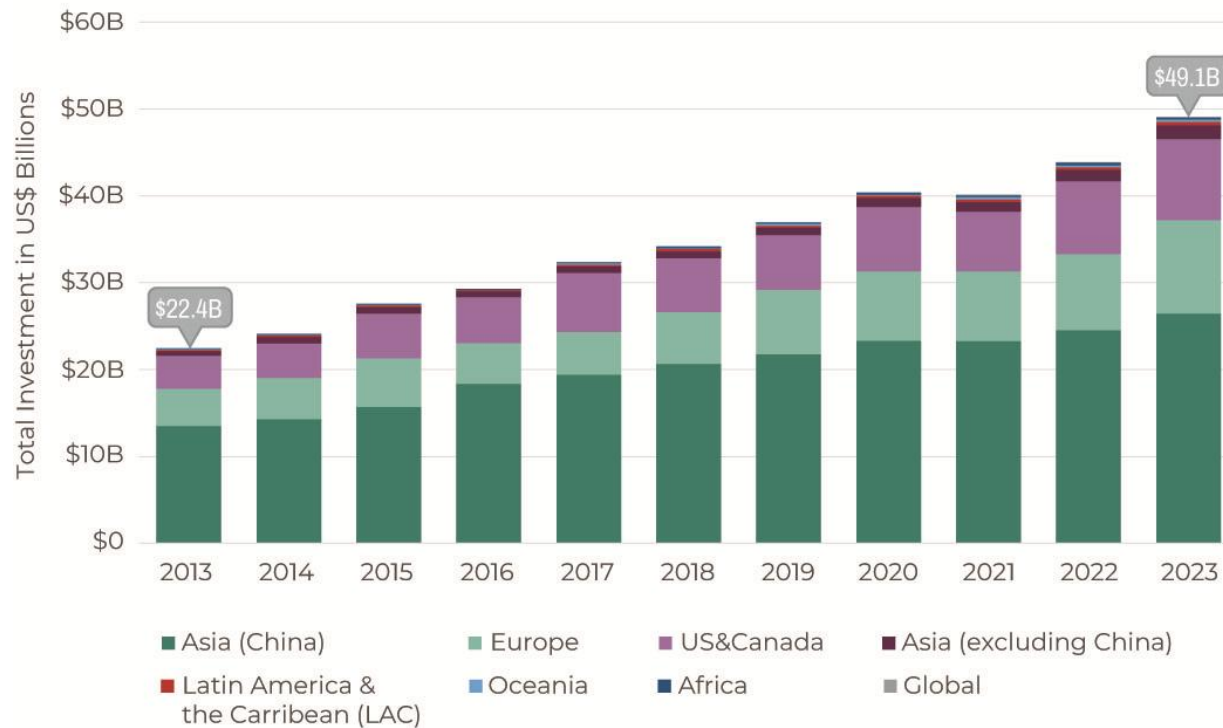


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Doubling Down on Nature

Growth in Investment in NbS for Water Security by Geography, 2013-2023



Smith et al. 2025. *Doubling Down on Nature: State of Investment in Nature-based Solutions for Water Security*, 2025.
Forest Trends and The Nature Conservancy

**Global
investments in
NbS for water
security doubled
over the past
decade, reaching
USD 49 billion (B)
in 2023.**

NbS for water are no longer fringe – but they do still face key challenges

NbS are not integrated into grey infrastructure planning

Long-term OPEX funding remains a major gap

Capacity to implement lags demand

Public funding dominates, but is vulnerable

Private investment constrained

Project preparation & transaction costs difficult to fund

Indigenous and local community leadership lacking

Data gaps hinder uptake

NbS for water are no longer fringe – but they do still face key challenges

NbS are not integrated into grey infrastructure planning

Long-term OPEX funding remains a major gap

Capacity to implement lags demand

Public funding dominates, but is vulnerable

What role does policy have to play in addressing these challenges?

Private investment constrained

Project preparation & transaction costs difficult to fund

Indigenous and local community leadership lacking

Data gaps hinder uptake

How

did we approach this study?



Full Report:
The Power of Policy



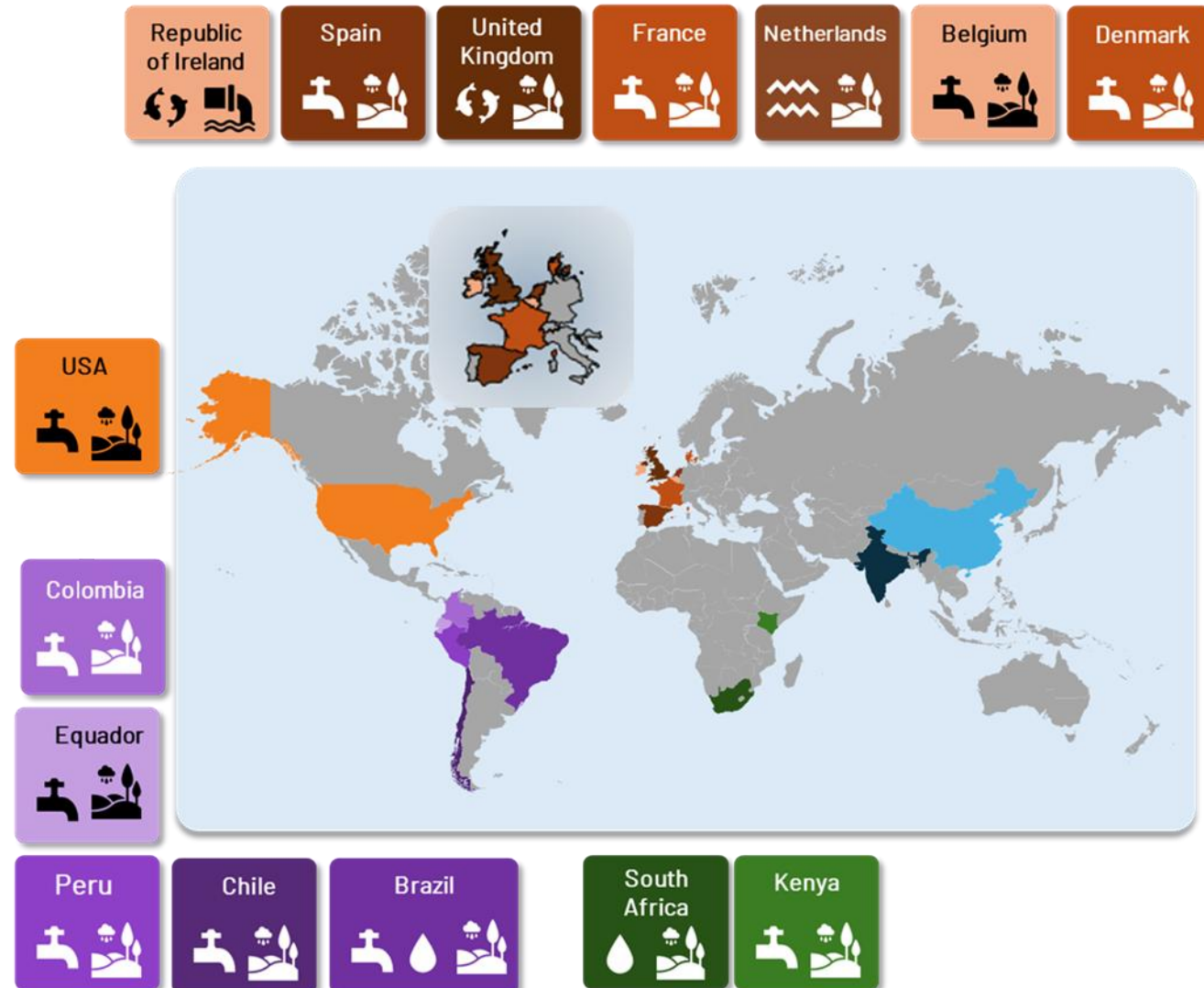
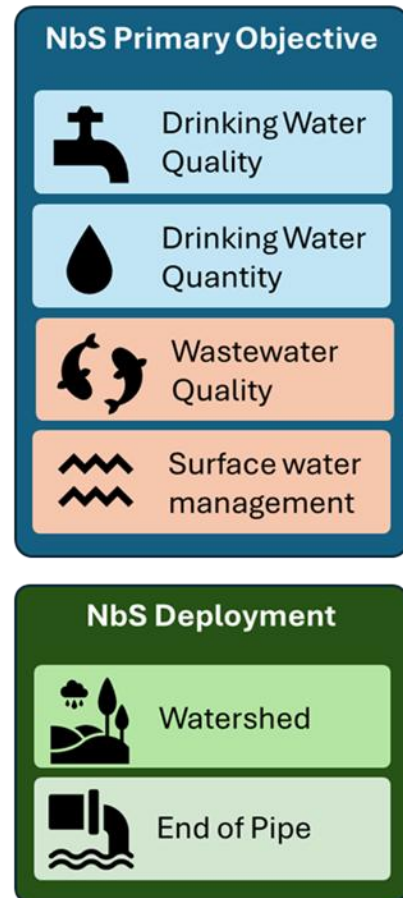
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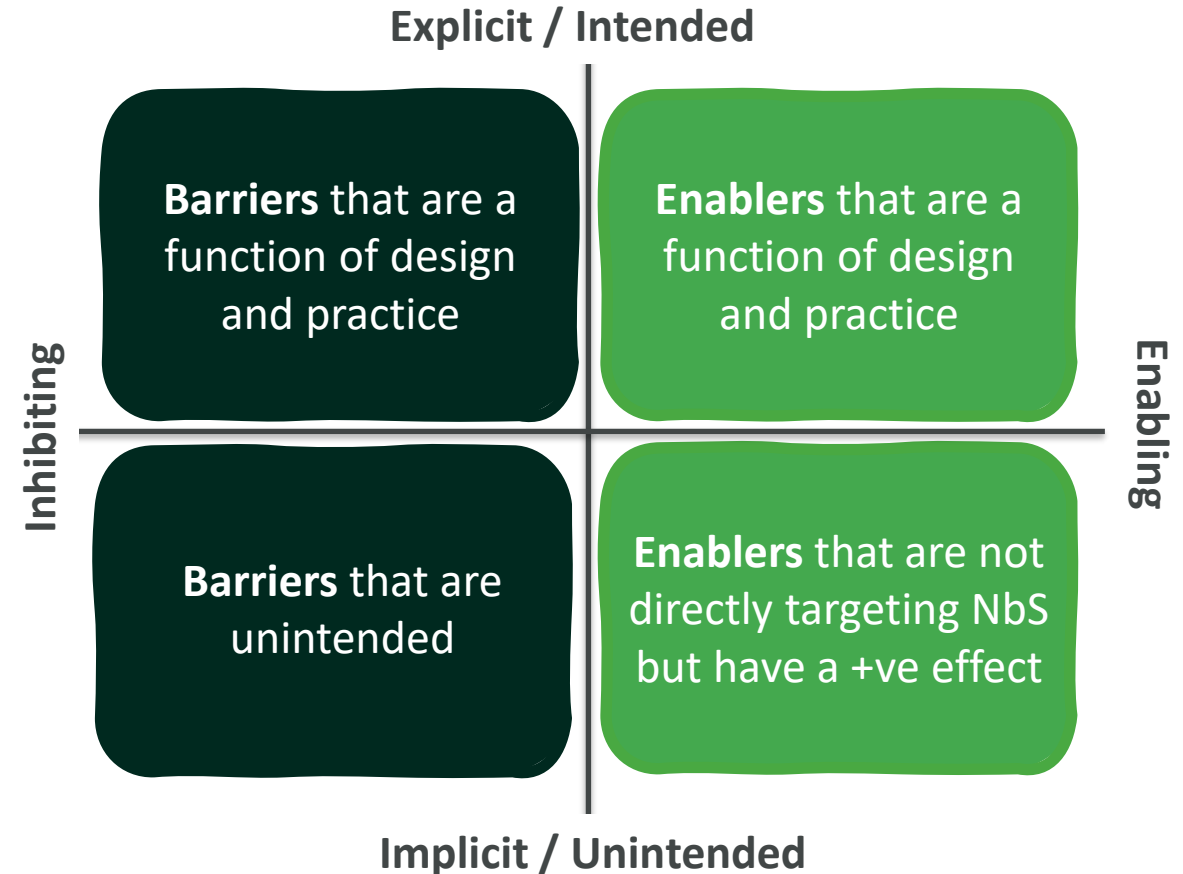
Case studies



Extracting common lessons

The project team:

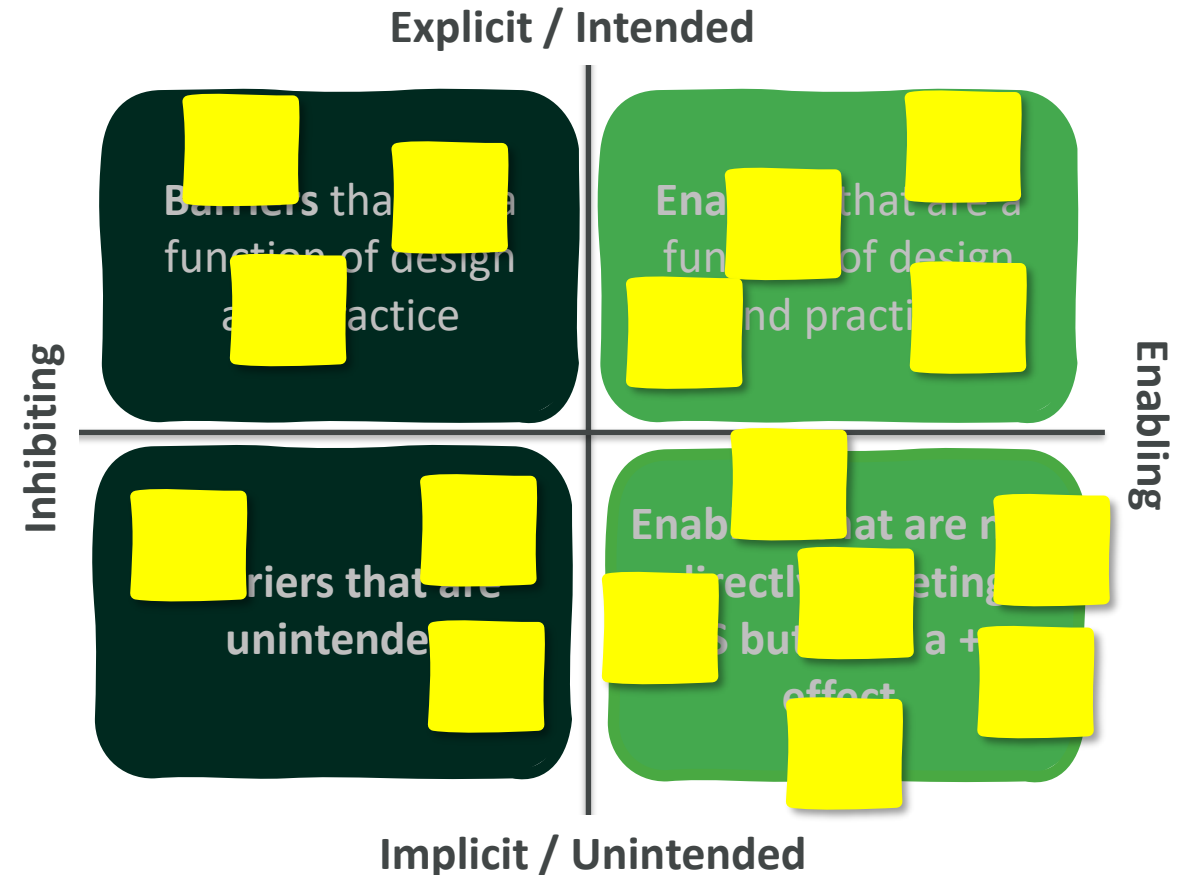
1: Developed a matrix that allowed us to categorize case study learnings as enabling/inhibiting.



Extracting common lessons

The project team:

- 1: Developed a matrix that allowed us to categorize case study learnings as enabling/inhibiting.
- 2: Mapped case study findings on the matrix to reflect how enabling/inhibiting they are.



Extracting common lessons

The project team:

- 1: Developed a matrix that allowed us to categorize case study learnings as enabling/inhibiting.
- 2: Mapped case study findings on the matrix to reflect how enabling/inhibiting they are.
- 3: Grouped findings around common categories as a starting point for structuring the *analytical framework*

Policy Design Conditions

In the control of legislators & institutions

Laws

Policy & Regulation

Finance and funding

Institutional set-up

Common Execution Conditions

outside direct control of policy makers

Technical Capacity

Social Capital

What

did we find?



Full Report:
The Power of Policy



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Policy Design Conditions

Laws 

Laws are overarching and set the rules for everything else.

Water Laws that enable NbS have provisions that,

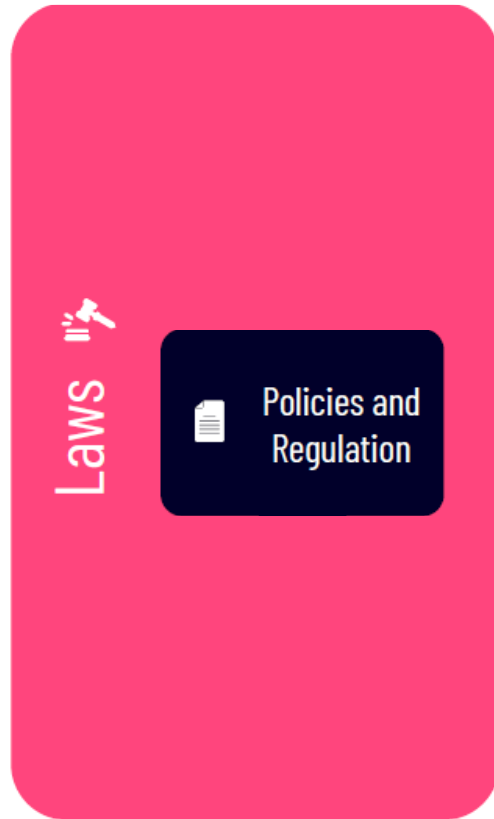
- Provide a structured approach to sustainable water management
- Facilitate resource allocation to ecosystems
- Clearly define roles & responsibilities across governance levels
- Mandate (not just permit) water and sanitation service providers protect water resources at the source

Land Laws that enabling NbS have provisions that,

- Incorporate nature conservation goals which promote NbS
- Adopt principles of integrated catchment management

Hardest to change.

Policy Design Conditions

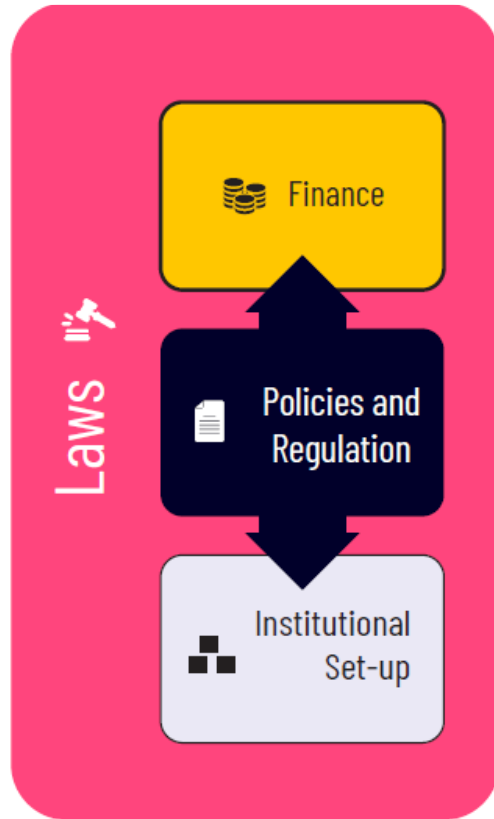


Policy and regulation profoundly impact how service providers operate.

Enabling policies and regulations for NbS at a national scale,

- Focus on long-term performance goals that account for variability in ecosystems
- Are outcome-based regulations that emphasize objectives rather than specify specific technologies
- Apply CBA to capture wide benefits of NbS when making investment decisions
- Enable cross-sector collaboration
- Avoid CAPEX bias,
- Design flexible permitting and compliance regimes that allow for variability in NbS performance

Policy Design Conditions



Adequate, predictable funding across government functions

- Funding for all stages of NbS program development
- Dedicated funding for CAPEX and OPEX
- Economic incentives to encourage NbS deployment
- Simple application processes
- Risk mitigation strategies like insurance that align to NbS characteristics.

Institutional arrangements for NbS drive adaptive planning & mgmt.

- Horizontal coordination across ministries & sectors
- Vertical coordination between national & local governments
- Transboundary cooperation
- Participatory mechanisms for local communities
- Engagement w/ non-governmental stakeholders

Technical capabilities a critical barrier across all phases of project development.

Maintaining institutional memory ensures lessons learned and collaborations are retained when staff move on

Interdisciplinary research and partnerships even when policy conditions are not favorable.

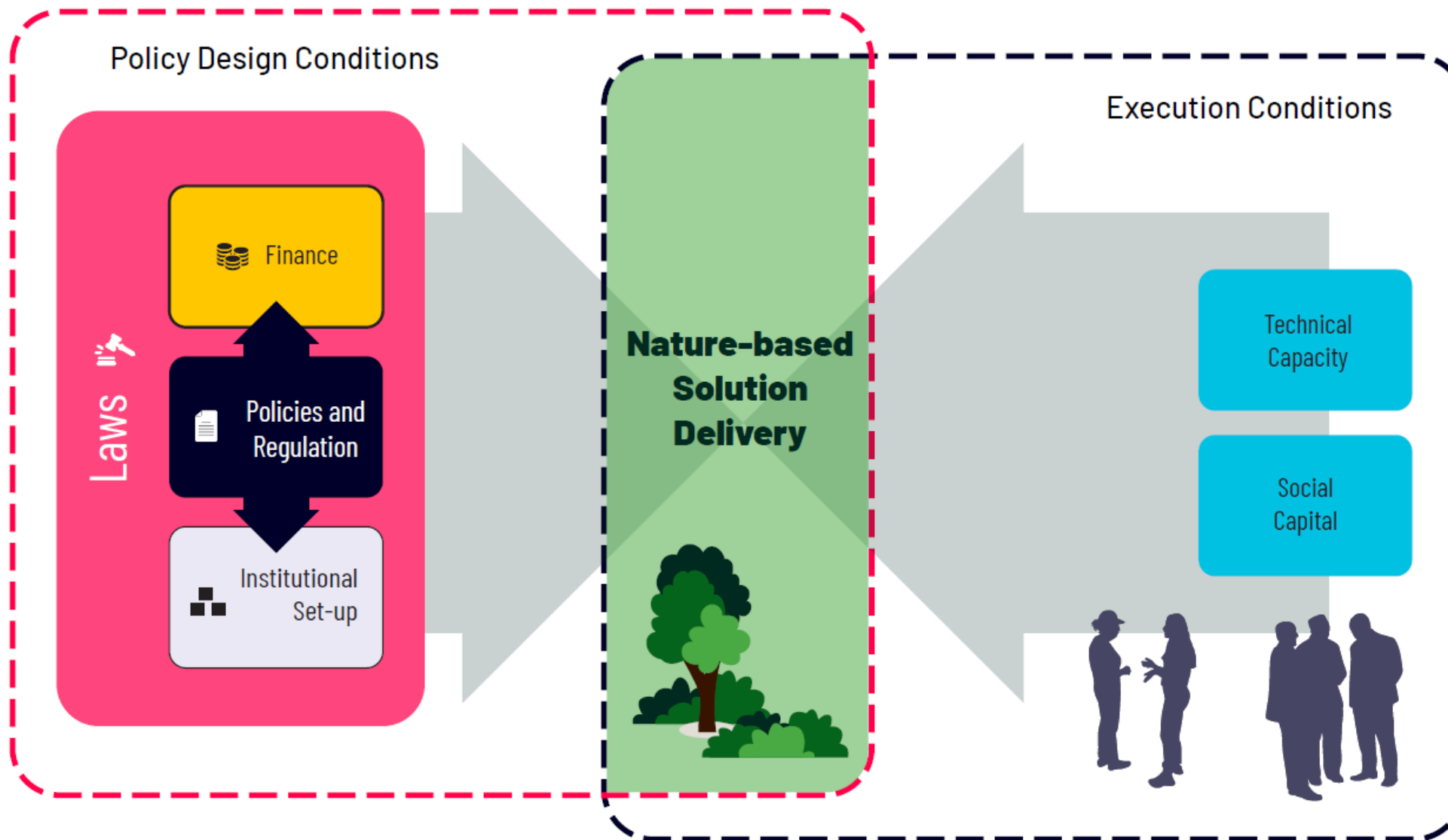
Cultural, historical, and economic experience shape openness to NbS

- Nature holds cultural or spiritual significance
- Social benefits enhance popularity
- Community-based organizations and cooperatives increase acceptance
- Champions play a key role in advocating for NbS
- Transparency and inclusivity build trust

Execution Conditions

Technical
Capacity

Social
Capital

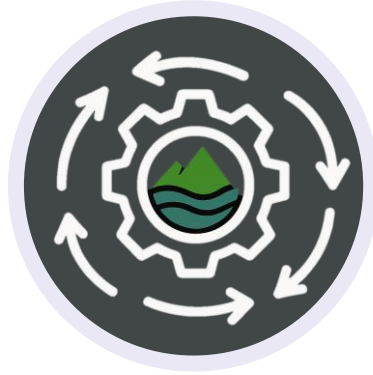


In summary: the four C's



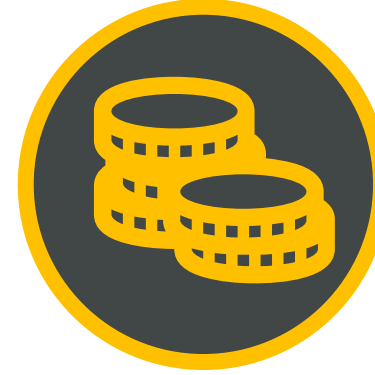
Coherence

Policies, laws, and regulations must share common goals and not contradict each other



Coordination

NbS cut across political and regulatory jurisdictions so coordination is key.



Cash

Policy cannot be implemented without finance, revenue and impartial procurement



Community

NbS cannot be delivered without support, leadership and capacity in communities.

the 5th C:

CRISIS!

Crises can offer a window of opportunity for reform.

But a rapid response is needed to capitalize

You can't legislate for a crisis
BUT you can prepare

Cape Town's largest reservoir, Theewaterskloof, March 2018

By Zaian - Own work, CC BY-SA 4.0,

<https://commons.wikimedia.org/w/index.php?curid=67250848>



Thanks for listening

Please download the report



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Case Studies



**Jorge Enrique Cardoso
Rodriguez**

Commissioned Expert
Potable Water and Basic Sanitation
Regulation Commission – CRA

Colombia



Lore Geeraert

Ecohydrologist
De Watergroep

Belgium



Claudio Klemz

Water Policy Specialist
The Nature Conservancy

Brazil

El papel de los mecanismos de regulación en la conservación de las cuencas hidrográficas *Colombia*

JORGE ENRIQUE CARDOSO RODRIGUEZ, COMISIONADO EXPERTO
COMISIÓN DE REGULACIÓN DE AGUA POTABLE Y SANEAMIENTO BÁSICO (CRA)

Evolución de las señales regulatorias en Colombia con enfoque de sostenibilidad



Innovación
tecnológica



Economía circular



Derecho humano
al agua y
saneamiento



Sostenibilidad en
la prestación



Gestión integral del
agua



Compromisos
con el ODS 6



- Consolidación alianzas estratégicas como **TNC-CRA** para el **impulso de las Inversiones Ambientales Inteligentes** en la Prestación del servicio de acueducto.



- Se establece con mayor claridad y facilidad los **costos ambientales** en la metodología y en la tarifa del servicio público de acueducto y alcantarillado.



- Se desarrollan criterios enfocados a la articulación con actores de la **cuenca (entes territoriales, entre prestadores, gestores comunitarios, etc.)**. Priorización de **áreas de conservación y la planificación ambiental territorial**.
- Nuevos planes e incentivos regulatorios asociado a **SbN, gestión social, gestión del riesgo y la gestión ambiental**.

Explícito/intencionado

En proceso nuevas orientaciones regulatorias sobre metodologías y evaluación de impactos tarifarios.

Conocimiento limitado de los prestadores y los usuarios de los beneficios a largo plazo de SbN.

Marcos AAA vigencia a 5 años (Art 126 Ley 142 de 1994).

Se permite recuperación de los costos de inversión de las SbN.

La CRA esta integrada por las entidades públicas del sector de agua potable necesarios para la toma de decisiones del país.

Las Políticas publicas y los actos administrativos del país están orientados a la conservación de la naturaleza y la gestión de conflictos socioambientales

La Ley 142/94 sobre servicios públicos exige la inclusión de protección de cuencas hidrográficas (Art 164).

El Decreto 2811/74 define el agua como un bien público y establece principios de conservación. Ley 99 de 1993- Ley Sector Ambiental.

inhibir

Algunas empresas de servicios públicos aún dependen de financiación a corto plazo o basada en proyectos.

Superposiciones en las inversiones entre actores estratégicos afecta desarrollo de proyectos debido a la falta de mecanismos de coordinación.

Baja capacidad económica de las poblaciones para promover un aumento en tarifas.

Habilitando

Sistema de gobernanza multinivel.

Los fondos nacionales e internacionales facilitan coordinación y cofinanciación entre actores Públicos y privados.

Colaboración y consolidación de proyectos entre los actores estratégicos del territorio fortalece su implementación.

La claridad regulatoria sobre qué inversiones pueden incluirse en las tarifas promueve su adopción.

Hay actores estratégicos que mejoran el intercambio de conocimientos técnicos y el desarrollo de capacidades.

Implicito/no intencionado

COLOR KEY

Arreglos institucionales

Condiciones comunes de ejecución

Finanzas

Legislación

Política y regulación

Innovaciones regulatorias

Modificaciones Regulatorias en los NMT

Integrando medidas de conservación, gestión de cuencas, incentivos, buenas practicas y gestión del riesgo.

Análisis Ambiental

Incorporación de análisis desde el componente ambiental en estudios de pequeños prestadores y gestores comunitarios.

Actualización de la Caja de Herramientas
Actualización **caja de herramientas de Inversiones Ambientales Inteligentes** (año 2025)



Resolución CRA 907 de 2019

Permite la incorporación de Inversiones Ambientales Adicionales en la tarifa del servicio público de acueducto.

Resolución CRA 1005 de 2024

Implementa medidas relativas al uso racional y eficiente del agua en condiciones de variabilidad climática.

Integración del componente ambiental en los nuevos estudios

Fomenta la sostenibilidad bajo el enfoque de adaptación y mitigación al cambio climático y Agua como bien común

La Regulación y la gestión ambiental en Colombia

Reconocimiento del Contexto

Considerar los contextos geográficos, ecosistémicos, sociales y económicos.

Mecanismos de Financiación

Incentivar la financiación conjunta para la adaptación y mitigación al cambio climático.

Articulación Interinstitucional, intersectorial y comunitaria

Promover la colaboración con instituciones, empresas prestadoras, gestores comunitarios del agua y demás usuarios del agua en la cuenca compartida.

Inversiones Ambientales Adicionales

Implementar y promover Inversiones Ambientales Adicionales como PSA, restauración ecológica, monitoreo hídrico, entre otros.

Consolidación de Inversiones

Integrar inversiones ambientales y de gestión del riesgo, buenas practicas e incentivos.

Armonización y ordenamiento territorial

Alinear las estrategias ambientales con los instrumentos de planificación territorial.





Adaptación y mitigación al Cambio Climático

Incorporación de estrategias para abordar los impactos del cambio climático en los recursos hídricos desde El NMTAA de grandes y pequeños prestadores



Planificación de la Demanda de Agua y conservación de la oferta

Desarrollo de estrategias para gestionar y prever la demanda de agua para asegurar un suministro adecuado



Fortalecimiento de la Regulación hacia la sostenibilidad hídrica

La CRA impulsa **nuevos marcos tarifarios** asociados al reconocimiento de la gestión integral del agua, economía circular y gestión social.



Economía Circular del Agua

Implementación de prácticas para reutilizar, control pérdidas y reciclar el agua para reducir el desperdicio



Gestión de Costos Ambientales y de Riesgo

Establecimiento de criterios claros para los costos asociados con inversiones ambientales y de gestión del riesgo



Tackling pollution threats through NbS

Belgium, Flanders

LORE GEERAERT, DE WATERGROEP

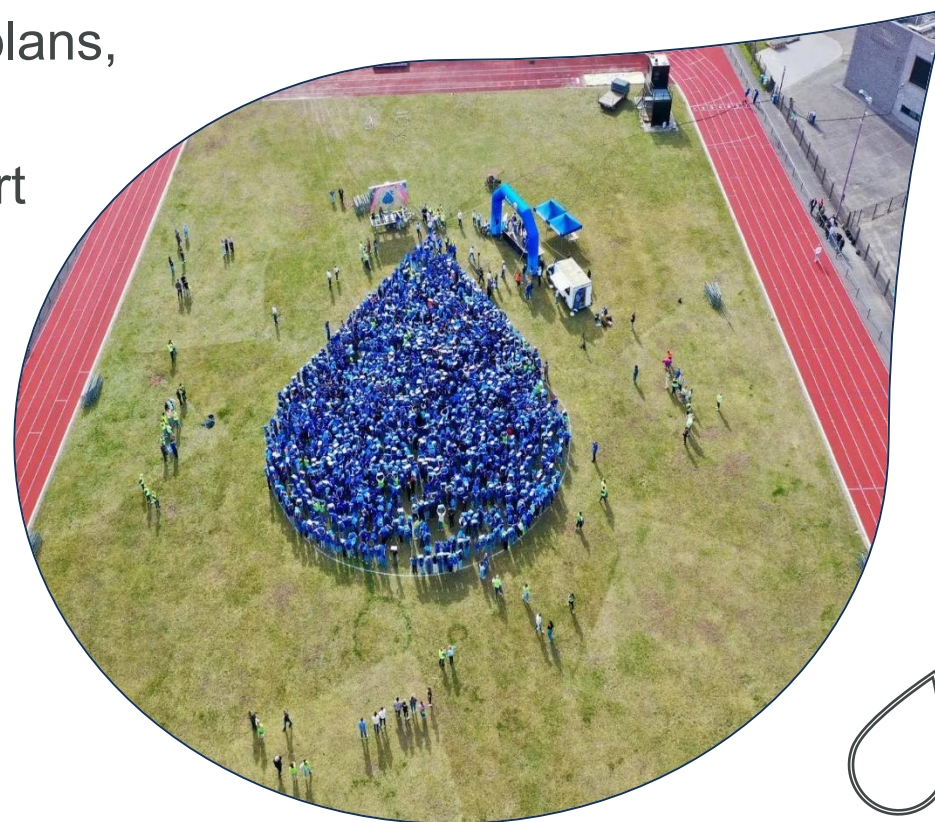
CONTEXT IN FLANDERS (BELGIUM)

- Water security
 - Water availability: low
 - Additional stressors: urbanization, agriculture, industry, climate change
- Water resources management
 - Flemish government
 - Local authorities
 - Water utilities



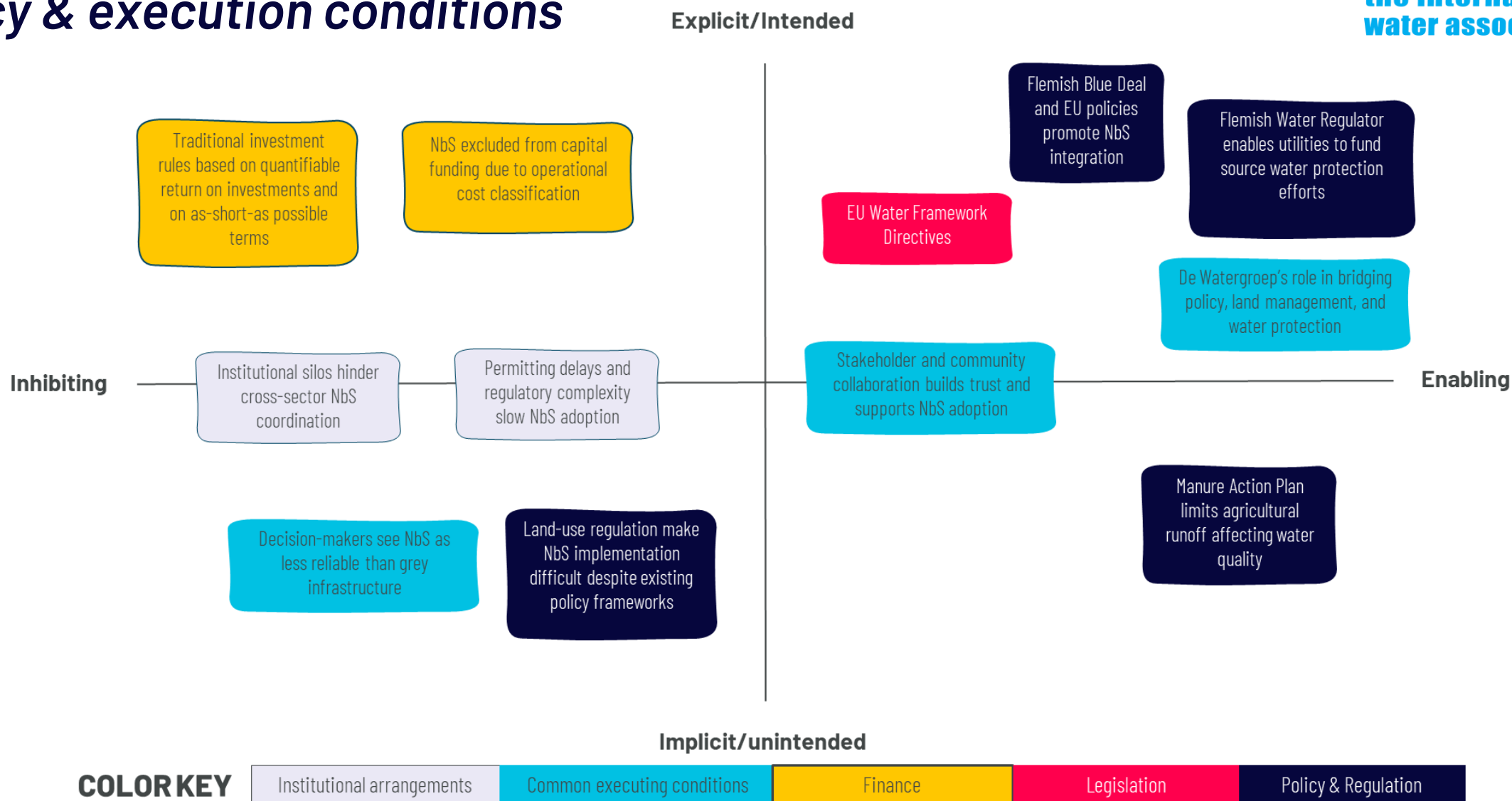
NATURE BASED SOLUTIONS

- Stakeholder collaboration
 - **Government agencies:** implementation of regulations / development of policy frameworks
 - **Nature conservancy groups:** nature management plans, monitoring
 - **Fellow utilities:** knowledge exchange, overall support
 - **Research institutions:** studies, outreach network
 - **Local authorities:** implementation of NbS
 - **Farmers:** land use practices (NbS)



Belgium, Flanders:

Policy & execution conditions



TAKEAWAYS



- Communication
- Collaboration
- Continuation
- Bridging sectoral silos



Institutional Arrangements and Implementation Strategies for NbS *Brazil*

CLAUDIO KLEMZ, THE NATURE CONSERVANCY

Background

Context

- Comprehensive legal framework in place (environment, water and sanitation, PES)
- High diversity
 - Scale
 - Socioeconomic
 - Institutional
- Water governance and community participation

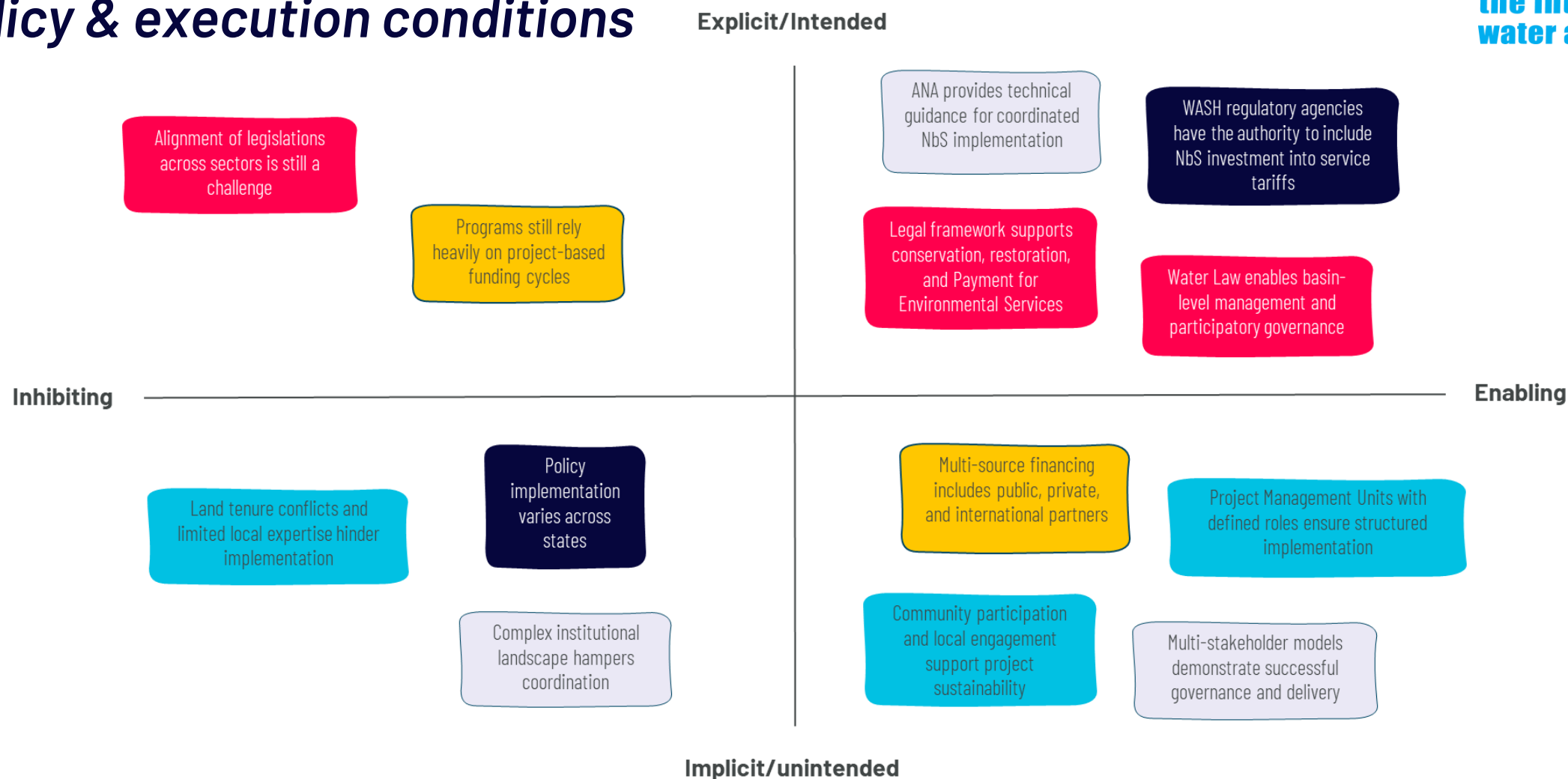
NbS programme

- Water Producer Program
- State and local PES programs
- Watershed Committees
- Local implementation



Brazil:

Policy & execution conditions



COLOR KEY

Institutional arrangements

Common executing conditions

Finance

Legislation

Policy & Regulation

Takeaways

Enabling Conditions

- Brazil's Water Law (Law 9.433/1997) enables watershed-level management and participatory decision-making.
- National and state policies allow integration of NbS costs into water tariffs; while blended public, private, and international funds mobilised for NbS;
- River basin committees facilitate localised decision-making.

Inhibiting Conditions

- Institutional complexity and inconsistent enforcement of regulations hinder scaling.
- Technical capacity varies across regions; local expertise and monitoring systems often insufficient.
- Long-term financial sustainability is a challenge, with many programmes reliant on project-based funding cycles.



Questions and Answers

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Louise Lodenkemper
Arup
Moderator

Panel



Alejandro Jimenez
IVL

Moderator



Sophie Trémolet
OECD



Grégoire Decamps
Veolia



Klaas de Groot
World Bank



Madeleine Portmann
AFD



**Raphael Castanheira
Brandão**
ARSAE-MG Brazil

Closing Remarks



Daniel Shemie
Global Director,
Resilient Freshwater

The Nature Conservancy



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90+ Global Utilities recognised in the past 3 years for their breakthrough actions on adaptation, mitigation and leadership.

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