EU H2020 'Green Deal' innovation project MERLIN

Building Blocks for Upscaling Freshwater Nature-Based Solutions in Europe

Sebastian Birk

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www.project-merlin.eu





Super wicked problem (Levin et al. 2012)

- → Urgent time limit
- → Lack of authority
- → Problem-solving paradox
- → Irrational political short-sightedness



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"Societal change"



Super wicked problem (Levin et al. 2012)

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"Societal change"

Practical application of theoretical concept: Nature-Based Solutions (NBS) / Restoration





- Data and indicators
- Certain uncertainties
- Interpretation w/ context
 - **→ Evidence**



SOCIETY

- Values and beliefs
- Perceptions and opinions
- Interests and power-patterns
- "Winners" and "losers"

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→ Actionable and robust knowledge production

Funtowicz & Ravetz (2020)

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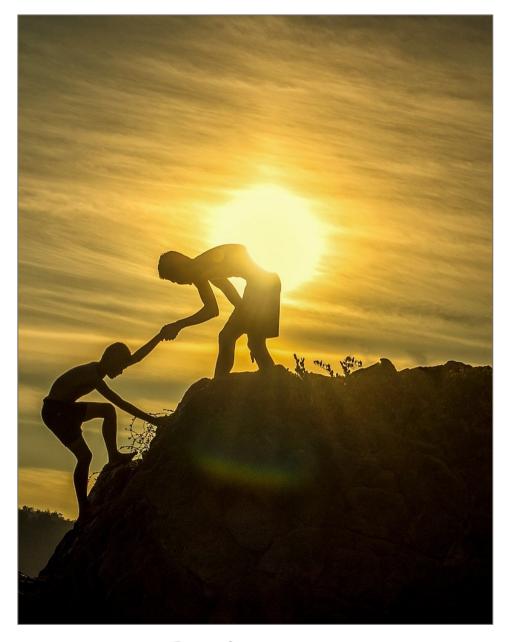




Building Blocks for Upscaling Freshwater NBS/ Restoration in Europe







FULL REVIEW OF STATUS

Complete picture of socio-ecological system

Ideal focus: Common goods and welfare (Whole-of-Society approach)



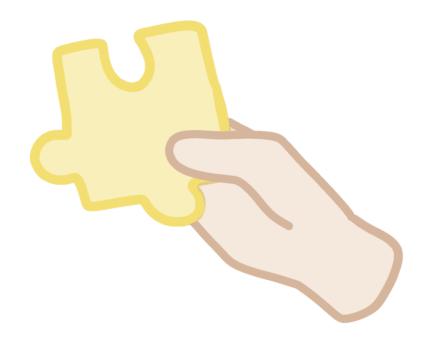


Analysing the interests

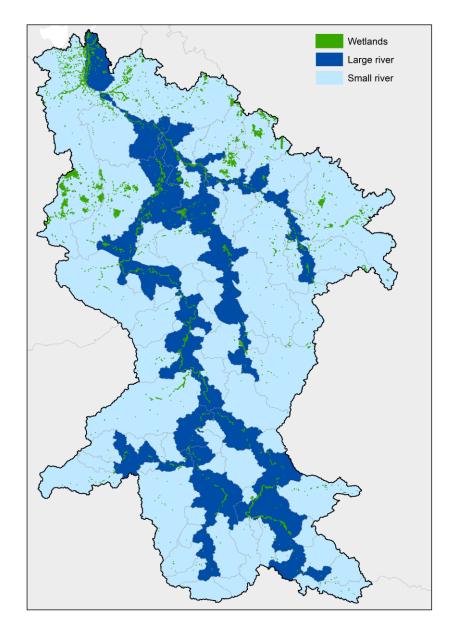
- → Who benefits?
- → Who <u>loses</u>?
- → Who has the <u>power</u>?

FULL REVIEW OF STATUS

Complete picture of socio-ecological system







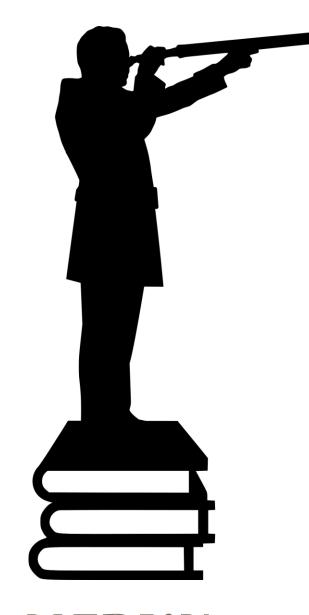
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Landscape-scale perspective







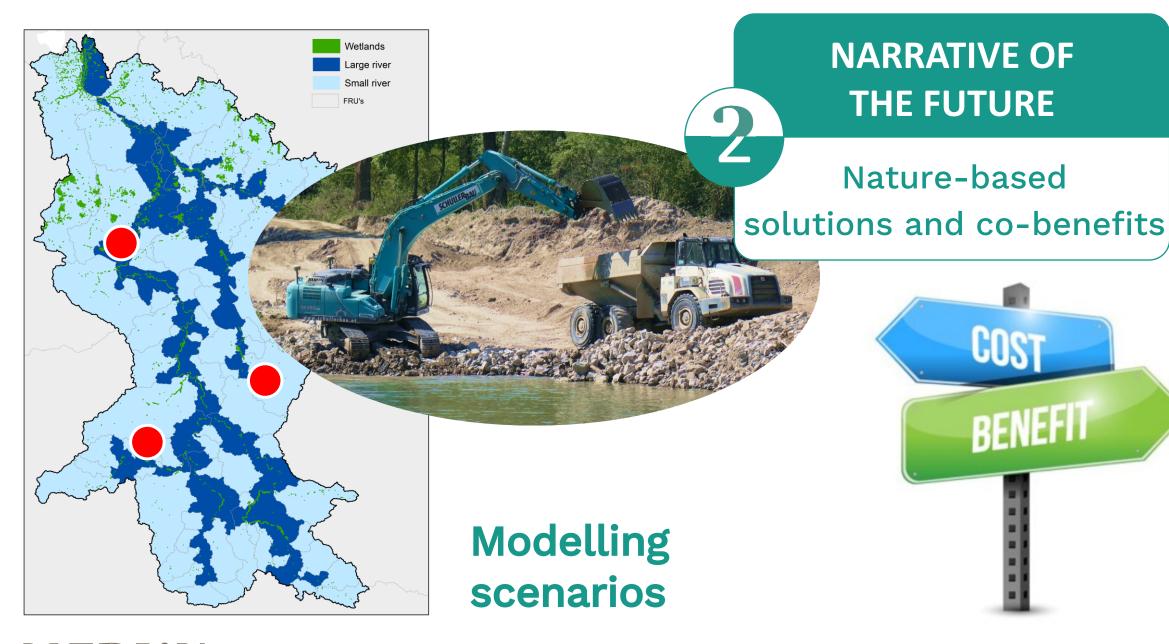
NARRATIVE OF THE FUTURE

Nature-based solutions and co-benefits

How to initialise change?

- → Creating a vision
- → Drafting a plan
- → Winning support











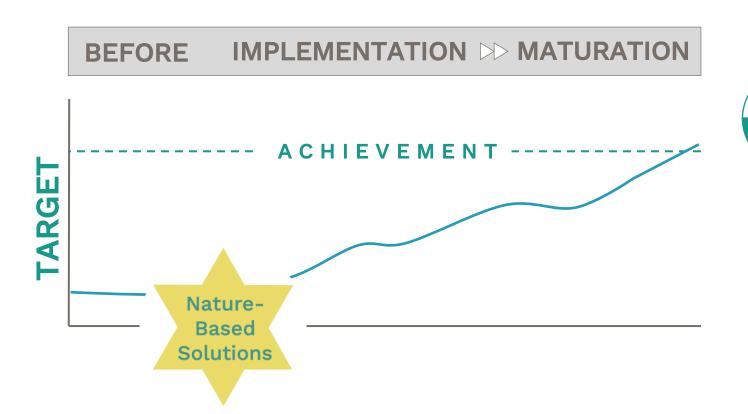
Use of verifiable information and data

Comprehensive monitoring of European Green Deal goals



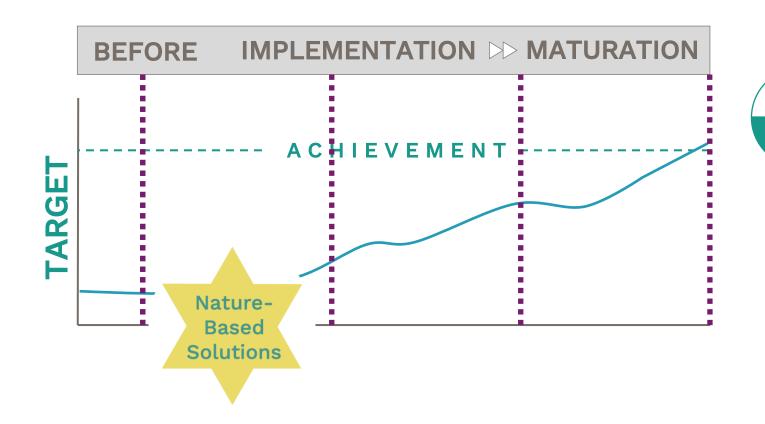
Use of verifiable information and data





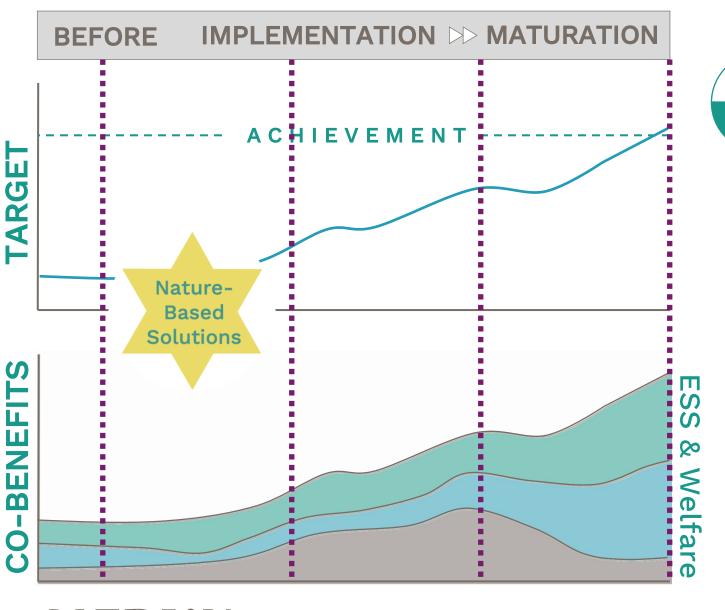
Use of verifiable information and data





Use of verifiable information and data





Use of verifiable information and data





Project funding

COMMERCIAL REVENUES

Public grants
Private donations
Crowdfunding

WITHOUT

REPAYMENT

Marketable products
Payment for
Ecosystem Services

RESOURCES

Funding and other implementation means

Financial planning beyond public grants







PARTICIPATION/INCLUSION

Whole-of-society approach

Participation of relevant interest groups/local communities





PARTICIPATION/INCLUSION

Whole-of-society approach

Cooperation with relevant economic sectors

PRESSING SOCIO-COLOGICAL PROBLEM

TRIGGER



PRESSING SOCIO-ECOLOGICAL PROBLEM

TRIGGER



PRESSING SOCIO-ECOLOGICAL PROBLEM

FULL REVIEW OF STATUS

Complete picture of socio-ecological system

TRIGGER



PRESSING SOCIO-ECOLOGICAL PROBLEM

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NARRATIVE OF THE FUTURE

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PRESSING SOCIO-ECOLOGICAL PROBLEM

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EVIDENCE-BASE

Use of verifiable information and data

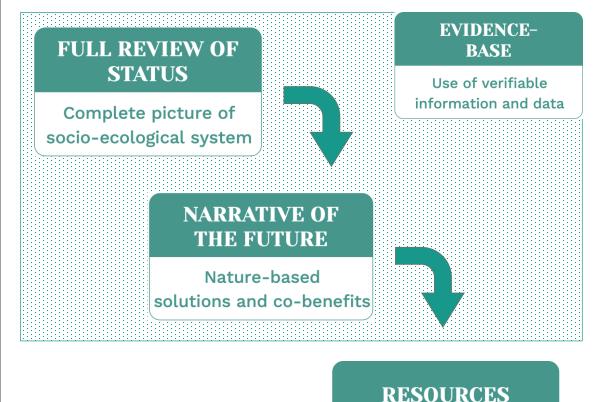
NARRATIVE OF THE FUTURE

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TRIGGER



PROBLEM SOCIO-ECOLOGICAL **PRESSING**

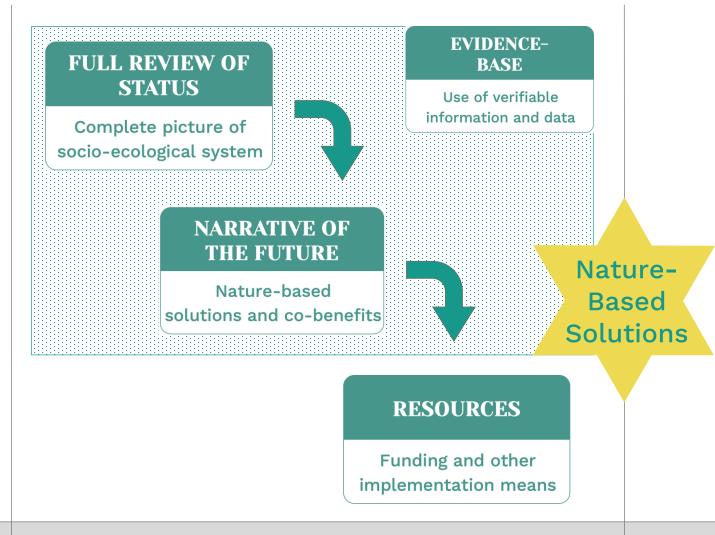


Funding and other implementation means

TRIGGER



PRESSING SOCIO-ECOLOGICAL PROBLEM



TRIGGER

PLANNING

IMPLEMENTATION



PROBLEM

ECOLOGICAL

SOCIO

PRESSING

FULL REVIEW OF STATUS

Complete picture of socio-ecological system

EVIDENCE-BASE

Use of verifiable information and data

NARRATIVE OF THE FUTURE

Nature-based solutions and co-benefits

Nature-Based Solutions

RESOURCES

Funding and other implementation means

EVIDENCE-BASE

Use of verifiable information and data

TRIGGER

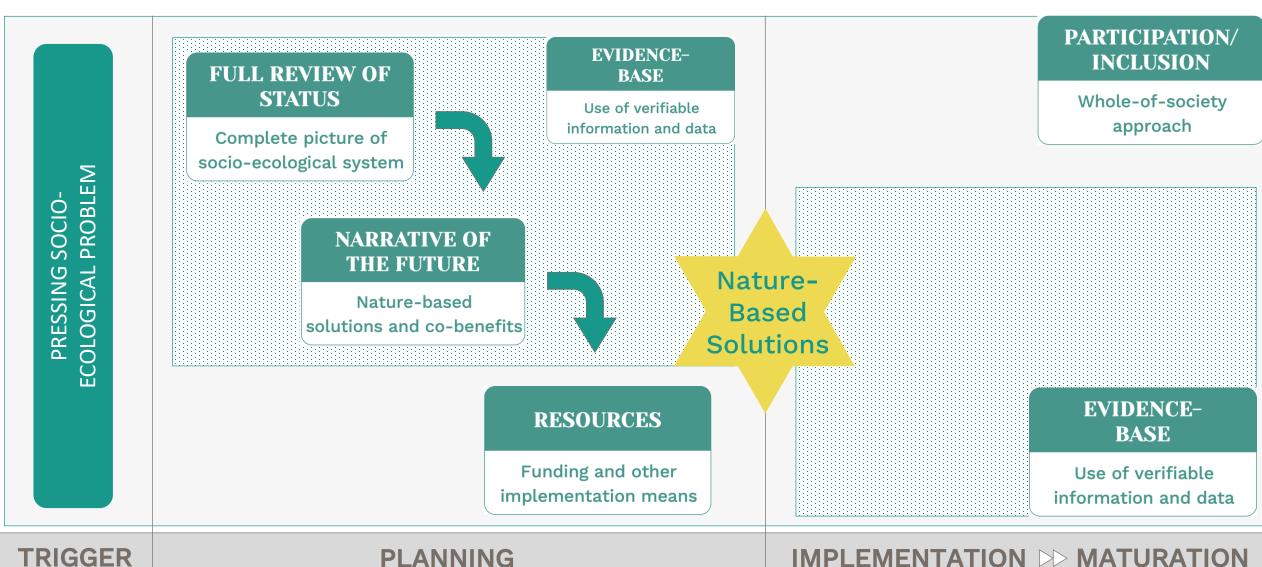
PLANNING

IMPLEMENTATION >> MATURATION

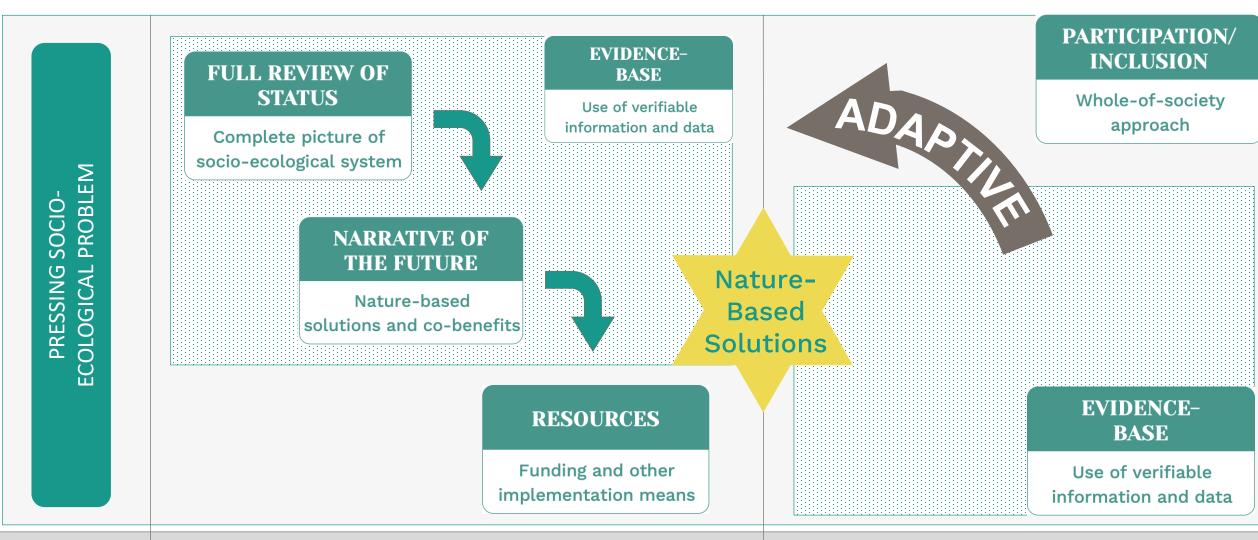












TRIGGER

PLANNING

IMPLEMENTATION >> MATURATION



→ Actionable and robust knowledge production

Funtowicz & Ravetz (2020)

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TRANS-D/SC/E

SOCIETY

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SCIENCE

- Data and indicators
- Certain uncertainties
- Interpretation w/ context
 - \rightarrow Evidence

Ambition: "Societal Change"

→ Actionable and robust knowledge production

Funtowicz & Ravetz (2020)

