



Creating a Network of Knowledge
for biodiversity and ecosystem services
to support decision making

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Demonstration Case Conservation

Green infrastructure issues

Stefan Schindler, Michaela Kropik, Thomas Wrba
(University of Vienna)



The KNEU Coordination Action is supported by the
European Commission under the 7th Framework
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Current planning status

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Involve requesters in question setting

1.) Two science-policy conferences

- June 2011: Meeting of the European Nature Directors in Hungary, Balatonfüred
- November 2011: „Planning for biodiversity“ Conference of the Polish Presidency, Warsaw

2.) Contact with potential requesters

- **Marco Fritz (DG ENV, B2 – Biodiversity)**
- François Wakenhut (DG ENV, head of B2 – Biodiversity)
- Szylvia Bősze (DG ENV, B2 – Biodiversity)
- Stefan Leiner DID (DG ENV, head of B3 – Nature)
- Gabriele Obermayr (BMLFUW, Federal Ministry Austria)
- Chris Walzer (FIWI, scientist, coordinator project ECONNET)

Conservation case: **GREEN INFRASTRUCTURE**



→ Topic “**Green Infrastructure**”: because most suitable for the “conservation case” of the six targets of the EU BD Strategy 2020

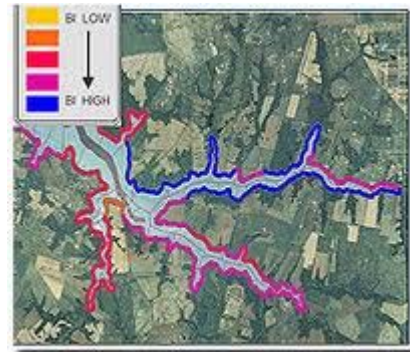
EU Biodiversity Strategy 2020:

*“By 2020, ecosystems and their services are maintained and enhanced by establishing **Green Infrastructure** and restoring at least 15% of degraded ecosystems”*

Conservation case: GREEN INFRASTRUCTURE ***resulting subtopics***

1) Existing networks of protected sites and to what extent they can be seen/used as Green Infrastructure?

- prioritization of restoration efforts
- improvement of functional flyways
- improvement of the coherence of N2K



Conservation case: GREEN INFRASTRUCTURE resulting subtopics

2) To which respect does technical infrastructure meet the requirements of nature conservation?

- approaches of greening “grey” infrastructure
- which measures of greening specifically combat fragmentation?



Conservation case: GREEN INFRASTRUCTURE resulting subtopics

3) How does Green Infrastructure contribute to multifunctional land-use and well balanced delivery of ecosystem services?

- adaptation to climate change & improvement of ecosystem resilience
- biodiversity benefits of multi-functional floodplain management



Conservation case: GREEN INFRASTRUCTURE



Research question

“Impact on biodiversity of multi-functional floodplain management compared to conventional flood control measures?”

policy context

- **DG Environment / Marco Fritz** involved in the decision on the topic
- **EU Biodiversity Strategy 2020**
- **Habitats Directive, Water Framework Directive, Nitrogen Directive, Directive on the assessment and management of flood risks, Ramsar Convention**

Conservation case: GREEN INFRASTRUCTURE
Systematic Review

PICO-Structure of proposed question

- Population (statistical): floodplains
- Intervention/Exposure – multi-functional floodplain management
- Comparator – Conventional flood control measures
- Outcome – Indicators of change in levels of biodiversity

Conservation case: GREEN INFRASTRUCTURE

Systematic Review

Input from subject experts is needed regarding the following:

- 1) Definition of the intervention and the comparator.
- 2) Focus on a specific aspect of biodiversity (genetic, species, ecosystem)?
Which indicators of biodiversity to consider?
Both positive and negative impacts on biodiversity should be considered.
- 3) Is there sufficient literature to make the review viable and informative? There seems to be a high proportion of grey literature related to this topic!
How can we use the NoK to efficiently obtain this grey literature?!

Conservation case: GREEN INFRASTRUCTURE

Scope science and potential methods: “grey literature” & projects

- **“River Restoration in Europe. Practical Approaches”**
(Proceedings to the conference on river restoration)
- **Labe-Elbe:** Adaptation to flood risk in the Elbe river basin
- **LIFE Project Drava River Basin:** Benefits for nature conservation and water management
- **Virginia:** using a GI approach to conserving and managing Natural areas, working Landscapes, open space, and other critical resources (Benedict, Allen, McMahon)
- **Boston:** Emerald Necklace provides flood mitigation (Fabos, 2004)

Conservation Case: Implementation of the NoK prototype – first results



Call for nomination of experts on the case study topic

- broad call, asking about 80 selected knowledge-hubs
- only 6 replies

Second call (reminder) + call to additional experts from the Rubicode project

- contacted about 50 more specific experts
- invited them or asked for further contacts
- got about 30 replies

Invited about 50 experts to join our workshop

- 14 confirmed

Goals for the Workshop on the 23rd/24th of May 2012

- final adjustment of the question
- hints for further experts/hubs, grey literature & key papers
- discussion of the draft protocol and search strategy



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Thank you for your attention!

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