Growing concern and motivation

How to **ensure sustainable water protection** and non-deterioration of Danube Basin water bodies & Natura2000 if major infrastructure projects will be built?

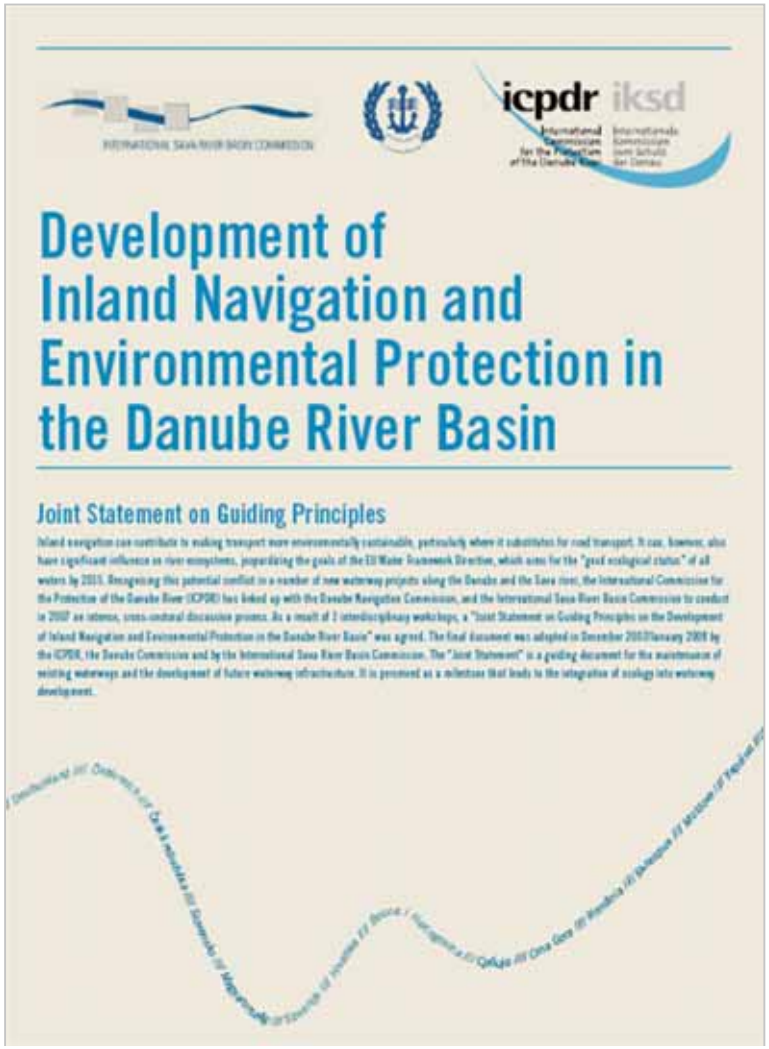
How to **make a step** from confrontation and ignorance to reconciliation, cooperation or even win-win results?

Can we **guide** infrastructure development that it won't conflict with river protection but support it?

First response: Cross-sector dialogue 2007

Stakeholder process (12 basin governments and 22 industry and environmental interest groups) during 3 workshops.

Result: **New commitment** by *ICPDR, Danube Commission and Sava Commission* (2007)



Key Principles of the Joint Statement

- **Integrated planning process from the beginning** (environment, water management and transport; via interdiscipl. teams -> *joint planning objectives*)
- **Minimize the impacts** of engineering interventions, use non-structural measures
- Apply **EIAs** with public input
- Respect the WFD's **river basin management plans** 2009 (protect / restore ecology and reduce negative impacts)
- Define **goals** for IWT **and** the river/floodplain ecological integrity
- Use **best practise** to achieve the required objective.

JS
Criteria for river engineering

The designers of technical measures should apply:

- **Case-by-case** approach
- **Working with nature**
- **Integrated design** (hydraulics, morphology and ecology)
- **Adaptive form of measures**
- Use of **restoration potential**
- Ensure no worsening of **flood** water levels

JS – Annex 2: Examples of possible measures

The new PIANC position (2008): ‘Working with Nature’

The *World Association for Waterborne Transport Infrastructure*, i.e. the global competence network of governmental and private experts for waterways, states:

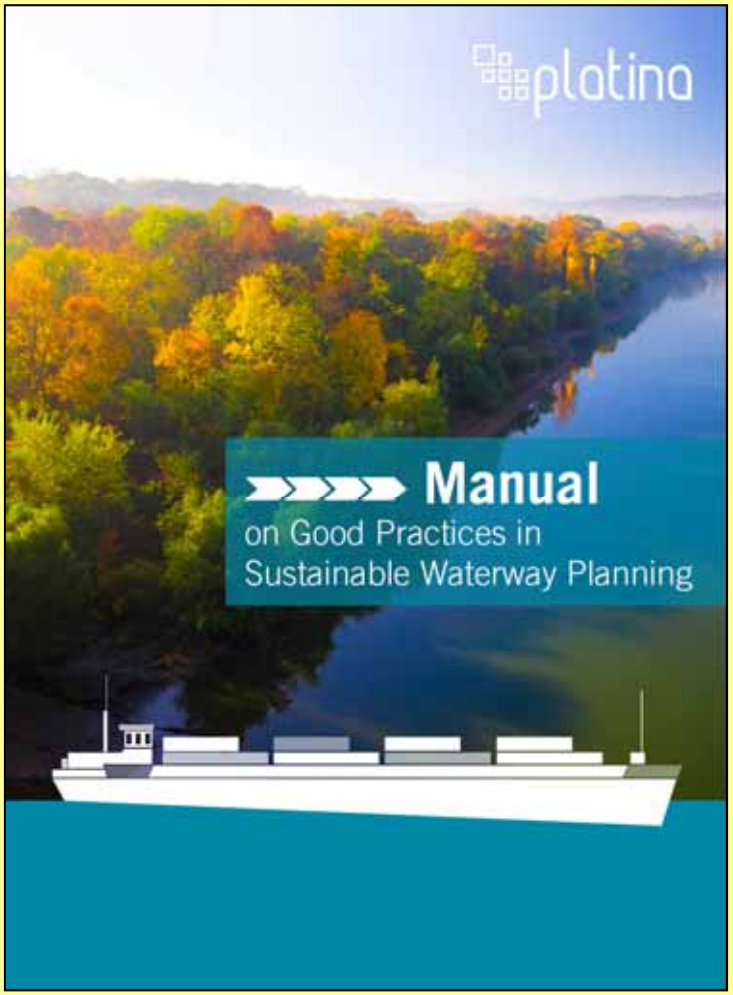
Fundamentally, *Working with Nature* means reversing the order:

1. establish project need and objectives
2. understand the environment
3. make meaningful use of stakeholder engagement to identify possible win-win opportunities
4. prepare initial project proposals/design to benefit navigation and nature.

New approach:

- Achieve the project objectives in an ecosystem context rather than assess the consequences of a pre-defined project design;
- Identify mutually beneficial solutions rather than simply minimise ecological harm.

Main guidance
(based on various experiences)

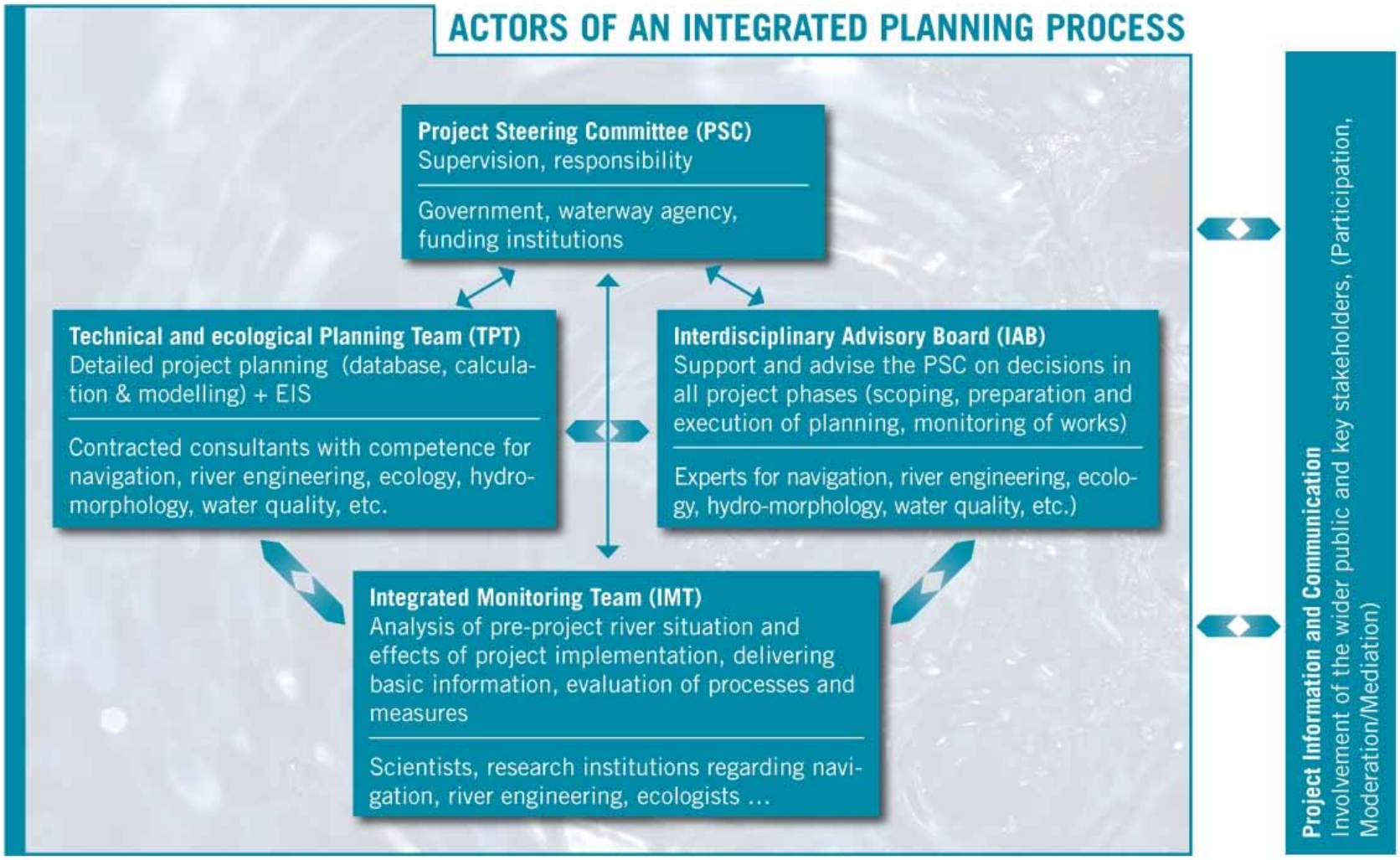


The essential features for integrated planning are:

- Identify **integrated project objectives** incorporating IWT aims, environmental needs and the objectives of other uses of the river reach such as nature protection, flood management and fisheries;
- **Integrate relevant stakeholders** from the initial scoping phase of a project;
- Carry out an **integrated planning process** to translate the IWT and environment objectives into concrete project measures securing win-win results;
- **Conduct comprehensive environmental monitoring** prior, during and after the project works, enabling an adaptive implementation approach if necessary.

1. Prepare the planning

Recommended planning bodies



3. Do integrated planning

Step 1

Define joint Planning Objectives and Principles

Step 2

Carry out the detailed planning of measures

- technical and ecological options
- plan alternatives
- variants of chosen alternatives
- local examination and/or testing
- priority ranking

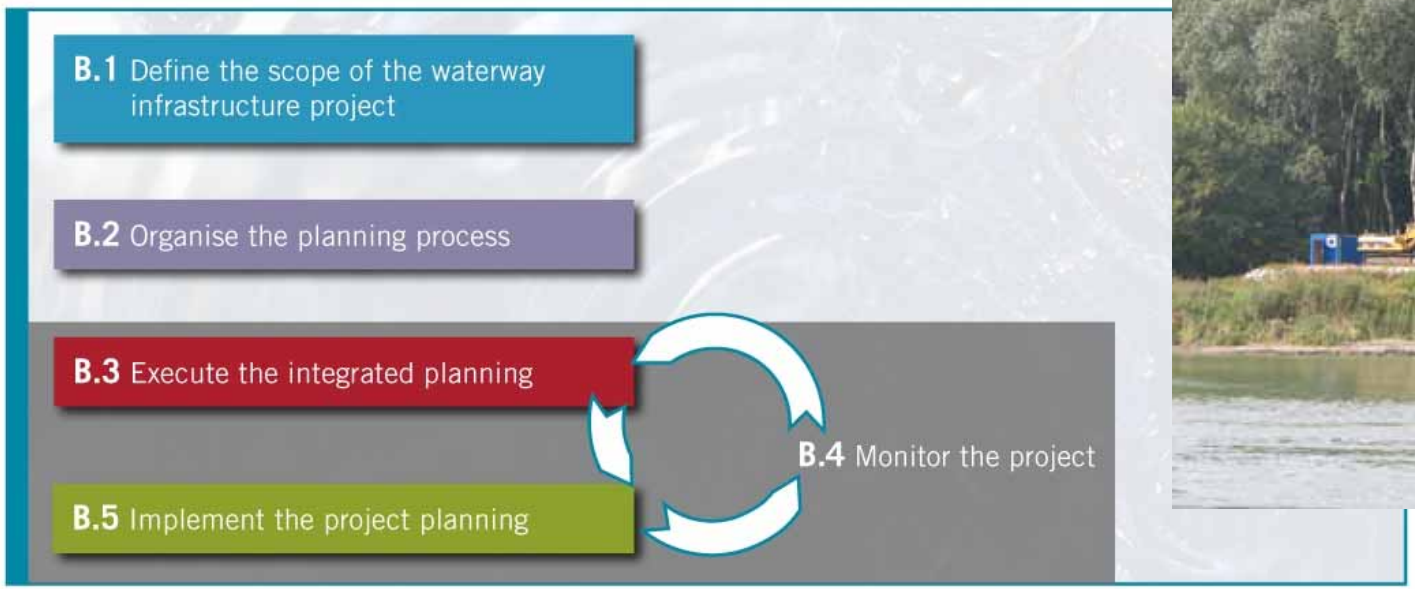
Step 3

Conclude the integrated planning process (communicate and adopt results)

Step 4

Execute the EIA process and apply for environmental permits

Project developers should use these steps to create a dedicated **Road Map** for the planning process of their IWT project.



Photos: ICPDR

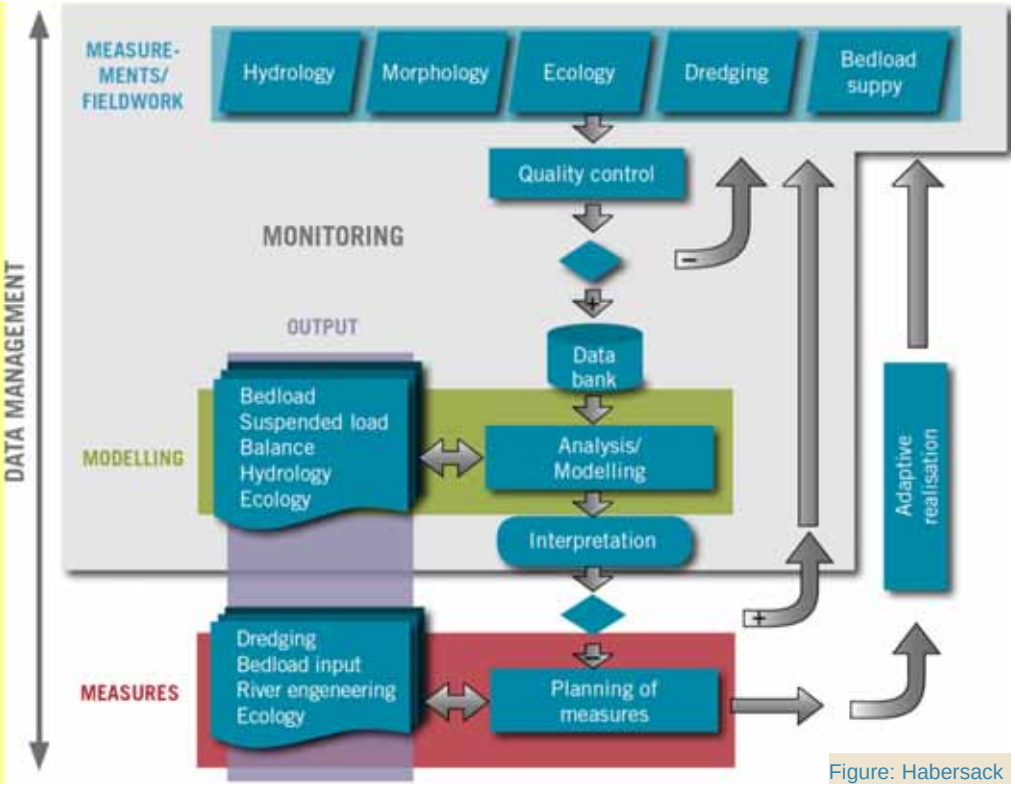
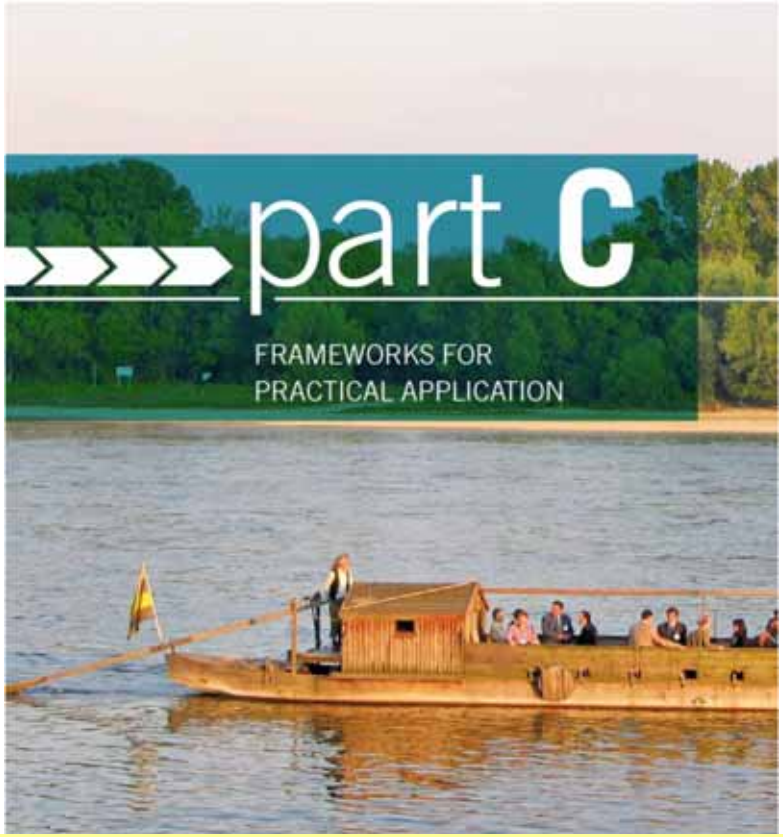
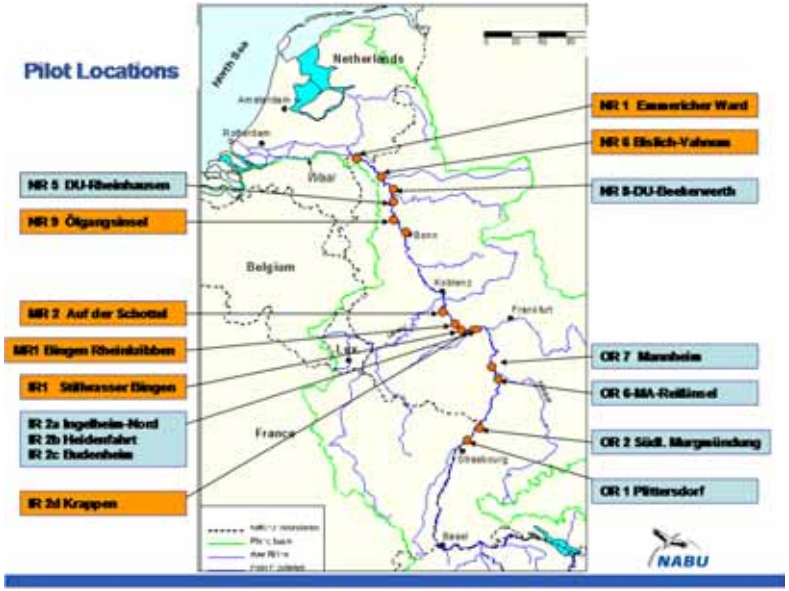


Figure: Habersack

Take important aspects into account



Combining Environm. Impact Assessment (SEA/EIA-D), Nature Impact Assessmt. (BH-D) WFD assessment - Art. 4 (7)



Make use of available knowledge & practical experiences

Photo: Zinke

Restored river banks

Photo: B. Boekhoven, RWS-NL

Improving riverine ecology while maintaining or improving navigability

Photos: via donau

Reconnected side-arms

Down-sized groynes


2006
SCHULLER BAU

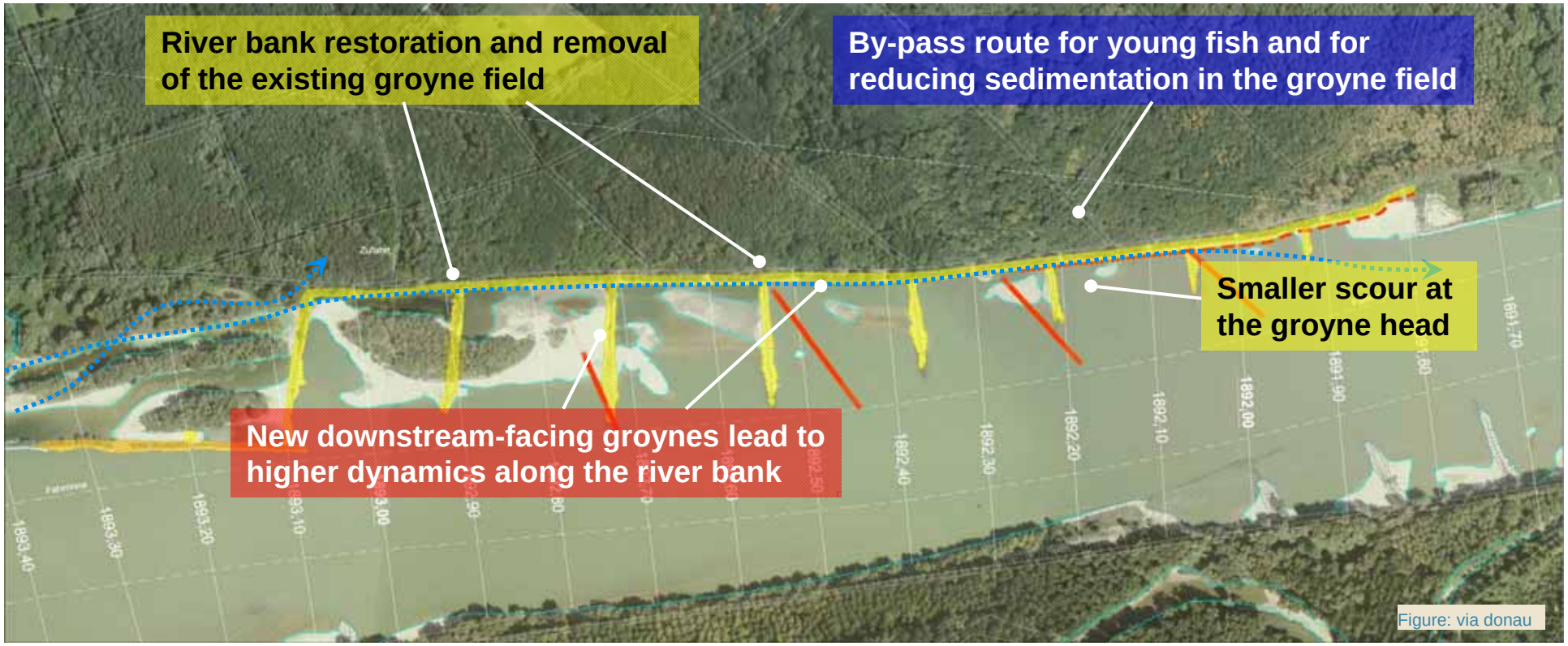
1941

1997

2004

Example: Reconstruction of groynes

Austrian Danube - Pilot Project Witzelsdorf



Removal of old groynes and river bank restoration

Construction of new groynes