

Debating flow regime and measures of restoration. Challenges and limits of stakeholder participation in water management

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Outline

- Research projects
- Current water management problems
- Rhine and Wupper basins
- Participatory process in the Dhünn basin
- Analytical framework
 - Context: limits and challenges
 - Process: limits and challenges
 - Outcome: limits and challenges
- Conclusion

Research projects leading to this presentation

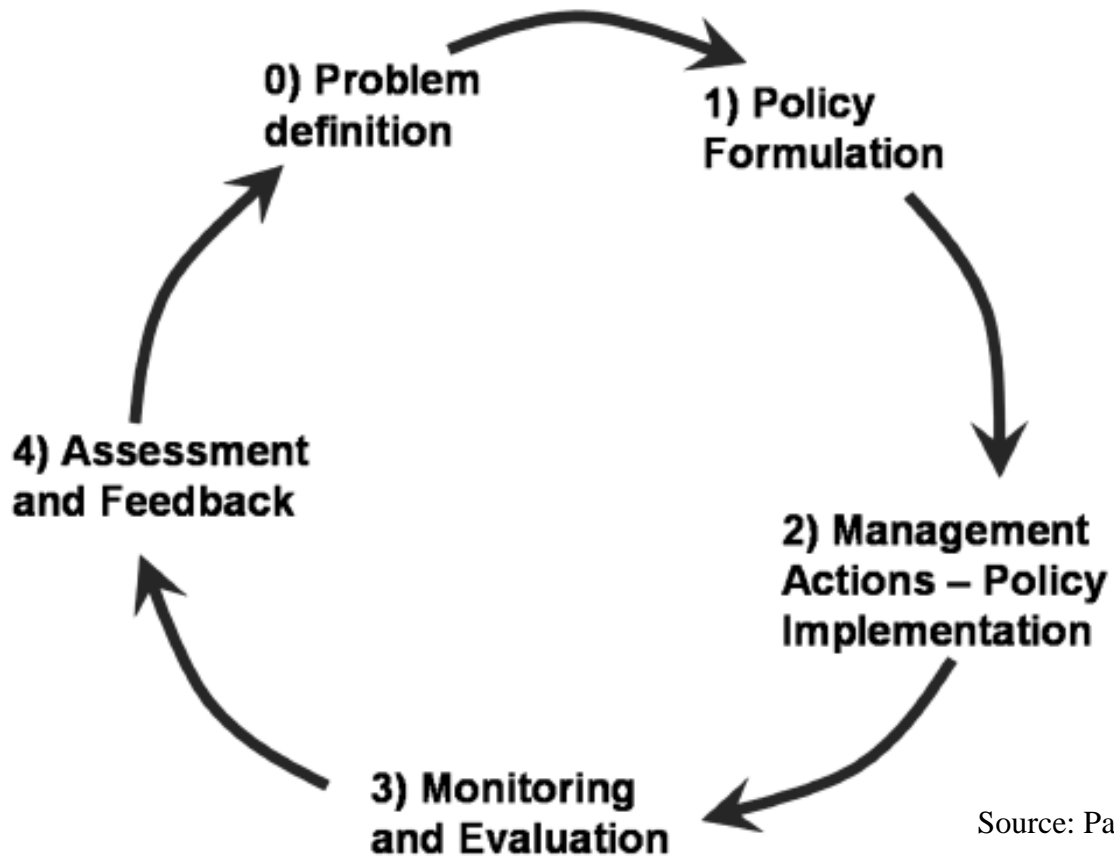
- ***NeWater Project: New Approaches to Adaptive Water Management under Uncertainty***
 - EU FP 6 with 35 project partners
 - 2005-2008
 - Aim: understanding and promoting transitions towards adaptive strategies

- ***ACER Project: Adaptive Capacity to Extreme Events in the Rhine basin***
 - Dutch research project
 - 2005-2009
 - Aim: robust strategies for flood and water management in the Rhine basin under uncertainties

Current water management problems

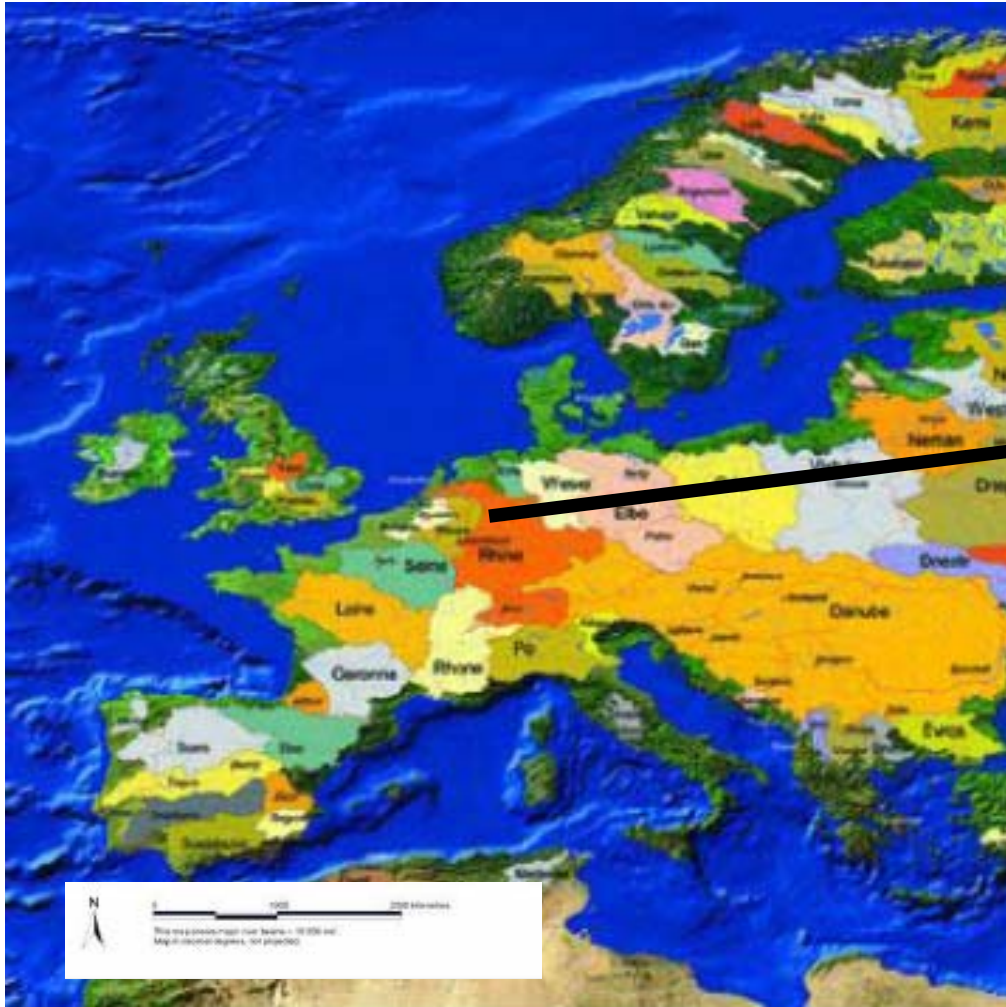
- Complexity (water allocation), changing physical conditions, changing human environments, new legal and managerial requirements (WFD), increasing uncertainties
- Management systems must be able to readjust to changes in the system being managed and thus to adapt (Gunderson, Holling)
- Participatory water management is a prerequisite for adaptive and integrated water resources management
- PP fosters learning processes of groups and organisations which support adaptive management

Iterative cycle of policy development and implementation in adaptive management

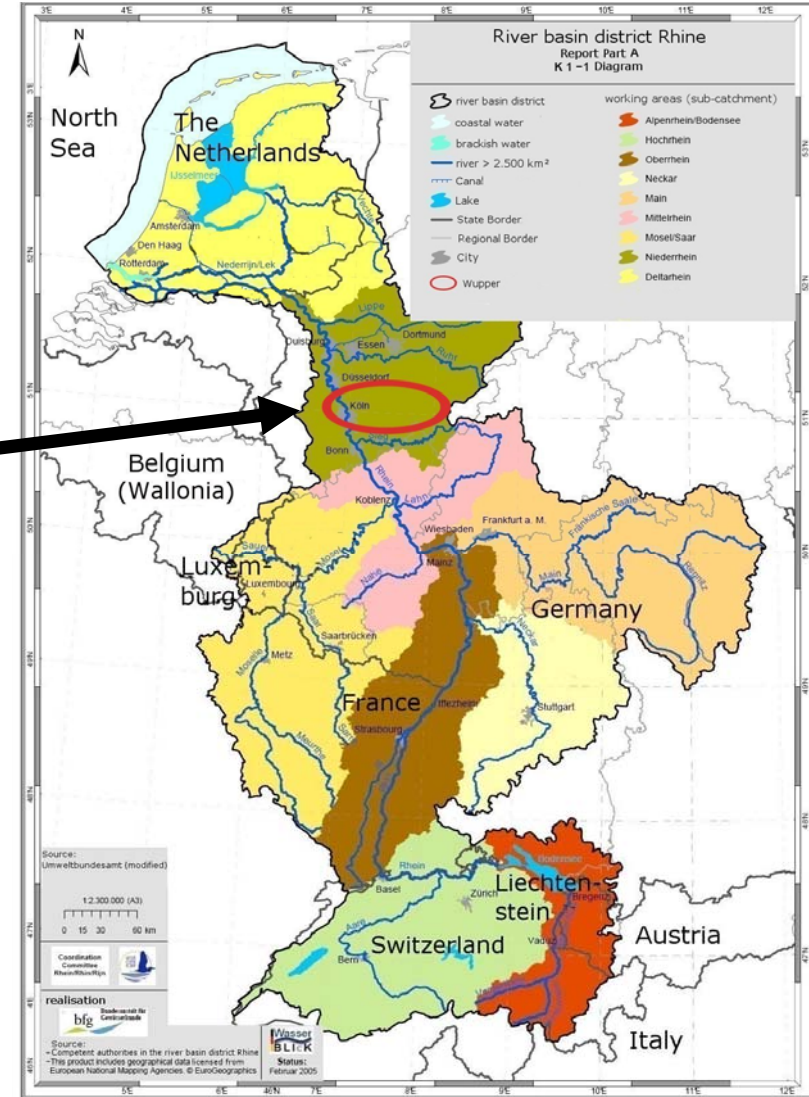


Source: Pahl-Wostl et al. 2007

Rhine basin – Wupper catchment



Source: http://www.rivernet.org/general/divers/europerivermap_x.htm



River Dhünn



Participatory process in the Dhünn sub-basin

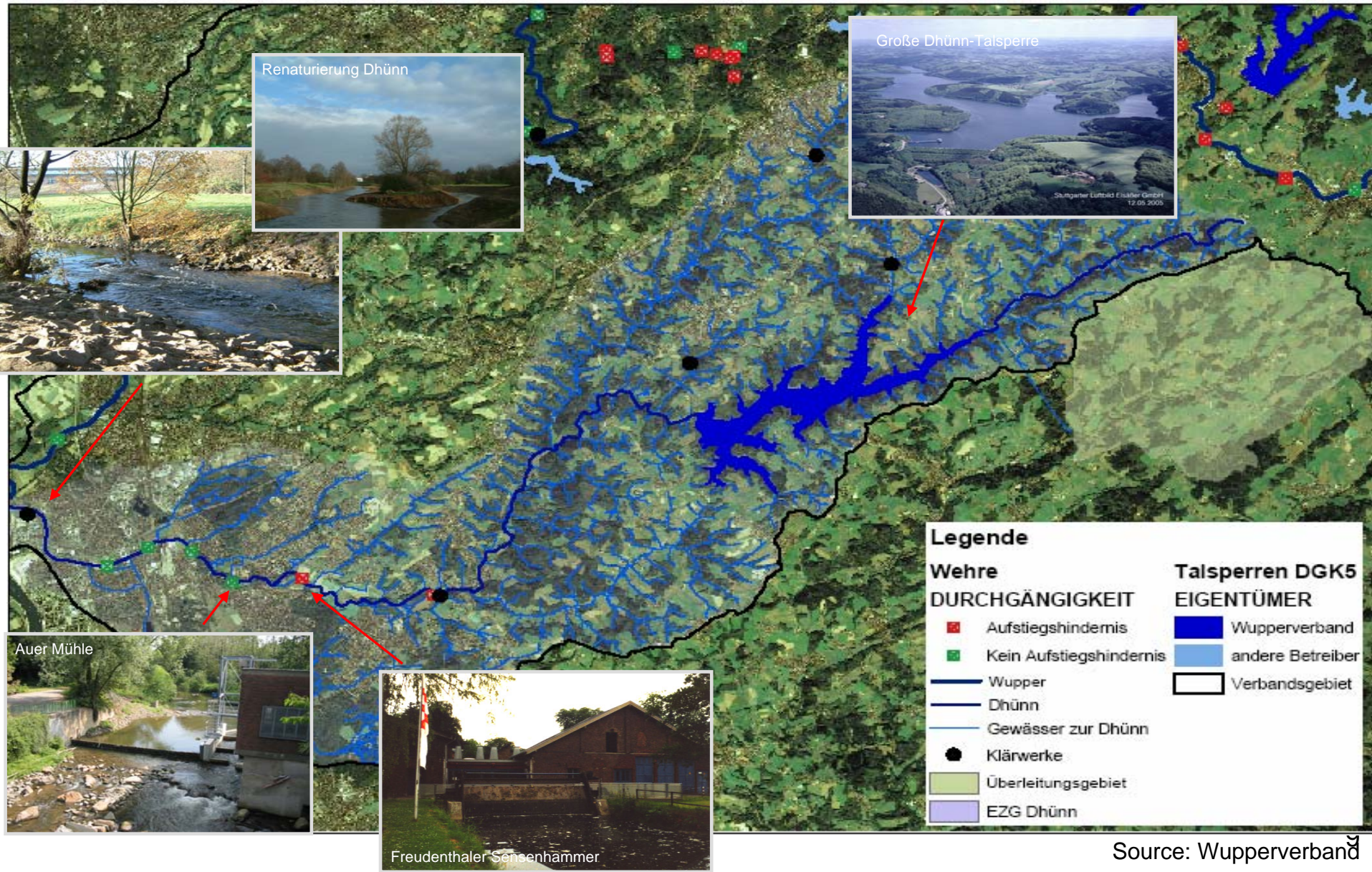
Aim: give multiple stakeholders the opportunity to take part in discussion and development of solutions of management goals and measures in order to improve the ecological status of the river

As a pre-process for WFD implementation and as an example for other sub-basins or water associations

Owner of the process: Wupperverband (regional water management association) and Regionale 2010 (regional planning network) with participation of competent state authority

Researcher / consultant role: planning, consulting and scientific analysis

Dhünn basin: problem situation



Analysis of problems and potential solutions

WFD
Fish

Temperature too low

Lack of ecological continuity

Poor structural quality

Extraction of surface water

Making the Dhünn discharge dynamic

Freudenthaler Sensenhammer Dam Burscheid W Ose

Physical measures in the river bed and banks

Fishstairs or demolition of weirs

Financing Dialogue with owners, Regionale 2010, Natura 2000, FFH

Potentially further loss of bed load, deterioration of structural quality

Uncertainty of effects

Higher requirements for purification of waste water discharge

Claims for high discharge during the whole year

Experiment?

Anglers

LÖBF +WFP (patency)

Recreation

Hydroelectric power station Sensenhammer

Administrational concerns

Dialogue with stakeholders

Compensation payments

Dialogue within WV

Dialogue with responsible authority

Financing

Note: Please read the model top-down, from the core problems identified to their solutions, potential secondary problems arising with these solutions and ways of handling those.

Legend: Orange = Problem, Green = Option for solution

Analytical framework

- Analysis of context, process and outcome

- In view of challenges
 - Difficult, demanding or stimulating tasks resulting from the context, the process design or the aims of the process as well as from their interaction
 - Challenges can be influenced and tackled using the right method

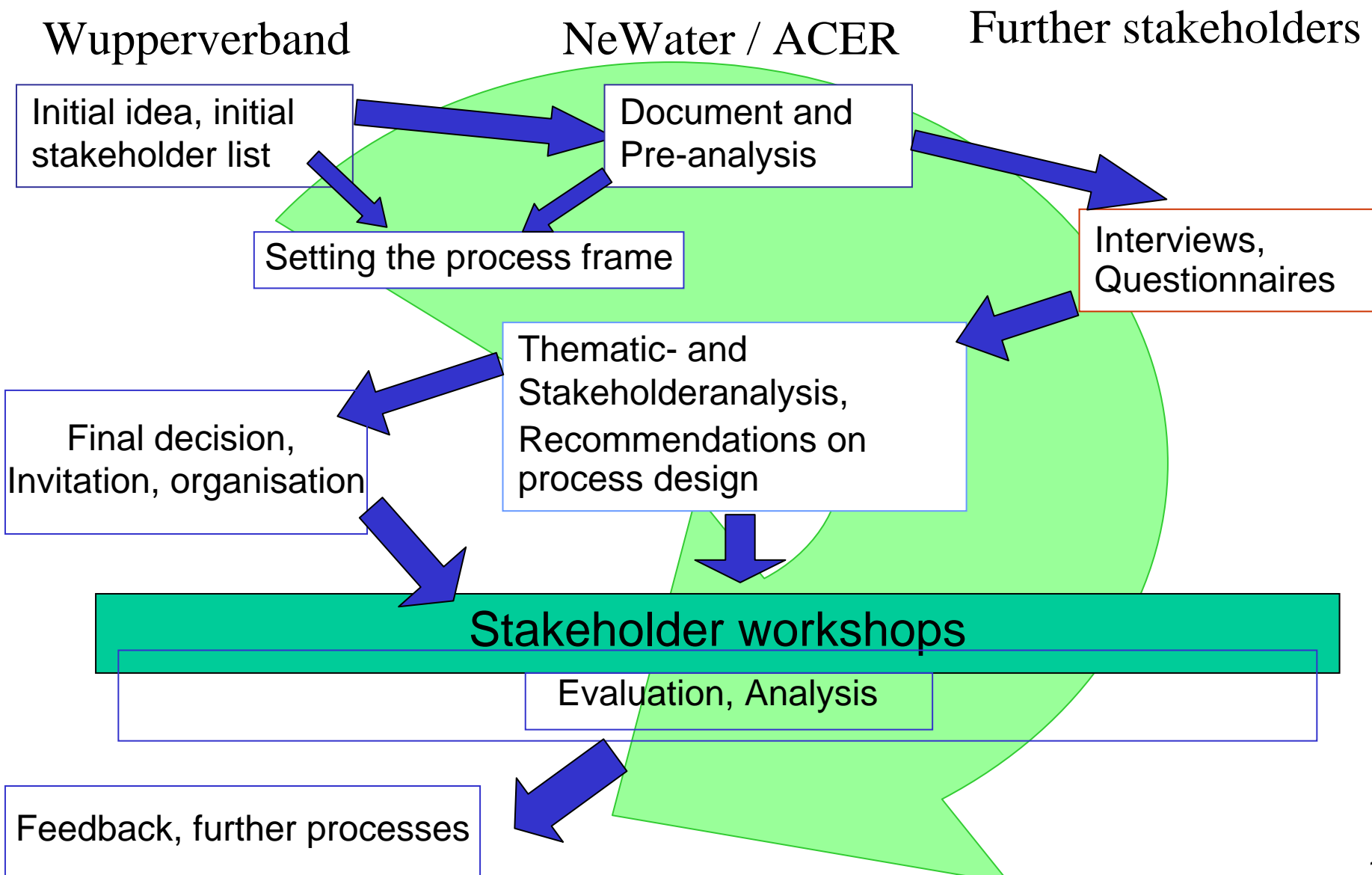
- In view of limits
 - Boundaries which are set by external variables and which generally cannot be changed by the process itself
 - External stimulus that needs to be taken into account

Context: limits and challenges

Category	Description	Challenge/limit
Legislation and admin. structures	Existing obligations for WFD implementation and their transformation into national and regional law	Limit
	Existing administrative structures and legal responsibilities	Limit
Political climate and public debate	Political climate related to participation and the discussed issue	Can be both
	Percieved need for Participation / interest in participation	Can be both

Category	Description	Challenge/ limit
Existing experiences, networks and processes	Pre-existing networks, parallel processes	Can be both
	Prior experiences with participatory processes	limit
Financial and time resources for the process		Can be both
Technical, legal and financial constraints for project implementation		limit

Process interaction



Process: limits and challenges

Category	Description	Challenge/limit
Setting of process boundaries: goals, frames, rules	Define goals	Challenge
	Set boundaries: scale, topic, scope (general public or not)	Challenge
	Define interaction between cooperation partners in research and practice	Challenge
	Assuring relevances for Implementation	Challenge
Selection of relevant stakeholders	Involving all relevant stakeholders, Fairness of selection	Challenge

Category	Description	Challenge/ limit
Selection of relevant stakeholders	Number of stakeholders that can be involved (facilities, methods)	Can be both
Setting up of process design	Methodologies to allow for active involvement	Challenge
	Transparency	Challenge
	Reaching the broad public	Challenge
	Efficiency of the process	Challenge
Feedback and evaluation	Feedback by stakeholders: allow and take into account in future processes	Challenge

Outcome: limits and challenges

Category	Description	Challenge/ limit
Output	Generating a concrete outcome (e.g. list of measures and their assessment)	Challenge
Direct process results	Facilitating planning processes	Challenge
	Dissemination of the results to other practitioners and the public	Challenge
	Long term effects and networks and continuation of the process	Challenge
	Learning effects	Challenge

Conclusion from the ongoing Dhünn process

- Process ownership: limits by law and convention need to be taken into account. Networking with those responsible
- Long term continuation of process to be discussed with all responsible partners, ensure self-interest of responsible authorities
- Selection of stakeholders: often selection from high number of possible stakeholders: by representatives for bigger groups
- European provisions can limit, challenge and stimulate pp.

General conclusions

- Importance to identify the limits and challenges in a process and to differentiate them
- Within the boundary of the limits, a process needs to be designed effectively, using suitable methods
- Limits need to be made transparent to the stakeholders
- Challenges can be influenced and directly tackled by the process owner and designer

Thank you for your attention

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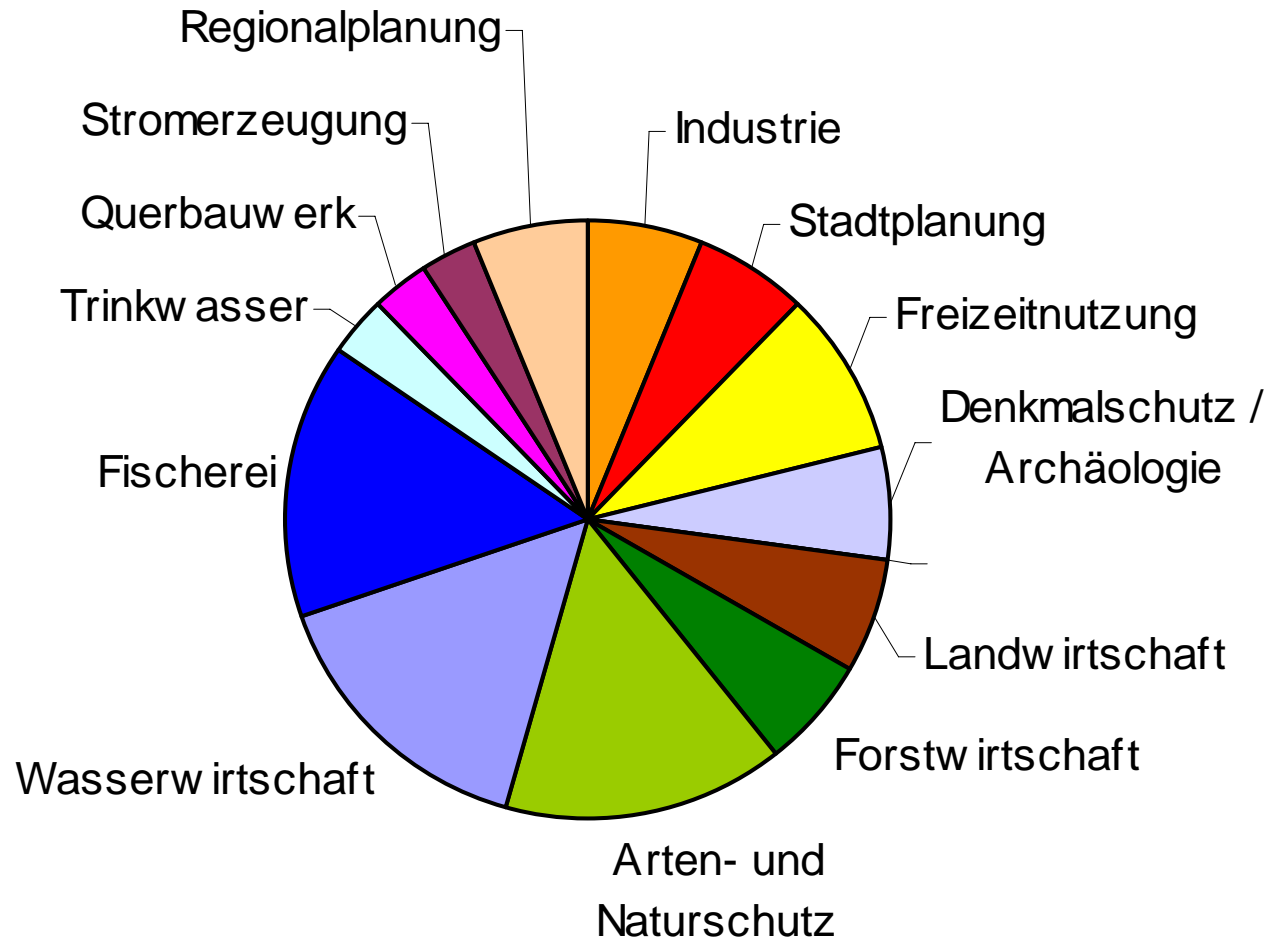
For more information have a look at:

NeWater: www.newater.info

ACER: www.adaptation.nl

Current process development: www.wupperverband.org →
“Flussgebietsmanagement” → “Runder Tisch Untere Dhünn”

Teilnehmerzusammensetzung Runder Tisch



Änderungen möglich