

Recommendations for long term research in support




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Recommendations for
long
term research in support
of IWPRM



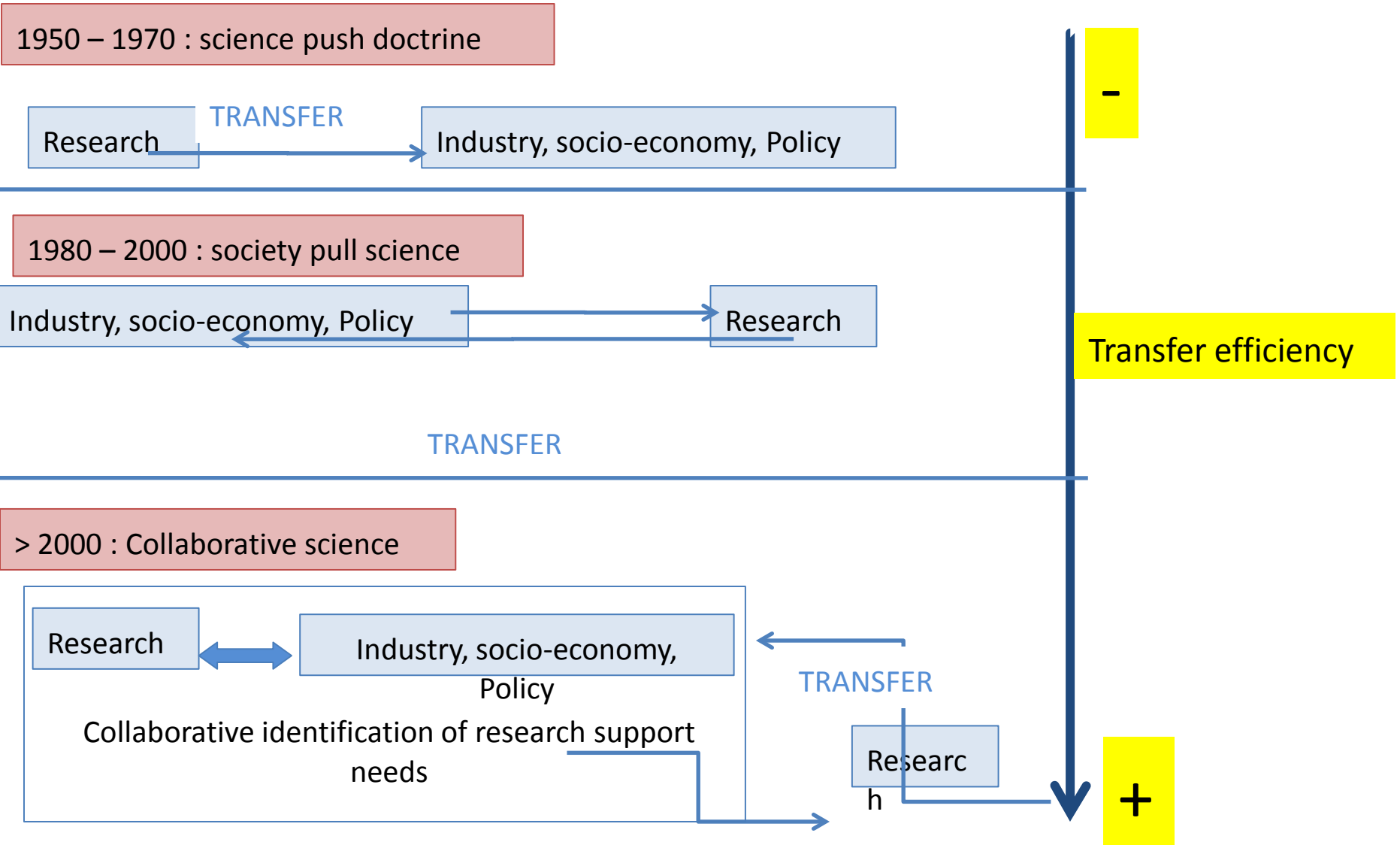
1 – Method of WP3

2 – Methodological Recommendations

3 – Propositions of long term research
needs



WP3 METHOD





WP3 METHOD

WP3 has tested a 3 steps method for the collaborative identification of research support needs for IWRM

- **First step** : identification of the major issues for the WFD
- **Second step** : for these issues, collective identification of the questions linked to the WFD implementation process
- **Third step** : proposition of research needs



WP3 METHOD

- **First step** : identification of the major issues for the WFD

PURPOSE : to consider the long term process of implementation (2015, 2021 and 2027) and difficulties faced in implementing water policies.

METHOD :

- a questionnaire to European water managers to ask them about their difficulties during the elaboration of the 2015 scenarios for the WFD (deliverable 3.2) ;
- a workshop with water managers, water scientists and foresight experts to discuss and prioritize outputs of this questionnaire (WORKSHOP LIEGE 2007) ;
- analysis of the workshop results by an experts group.



WP3

METHOD

- **First step** : identification of the major issues for the **PARTICIPANTS (invitations within the IWRM-Net ; a few responses)**

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Peter Allen-William	Environment Agency (UK)
Ilona Bärlund	Kassel University (G)
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Sébastien Treyer	ENGREF (FR)
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Bernard Barraqué	Ecole Nationale des Ponts et Chaussées
Sarah Gillet	WWF France, Fresh Water Centre



WP3 METHOD

- **First step** : identification of the major issues for the

WATER

RESULTS : Two major issues for a collective identification of research needs (The second Step)

How to value aquatic systems taking into account socio-economic aspects?

(How to assess the efficiency of the first programme of measures in order to build up the further ones?)

What new concepts and tools for a real Integrated Catchment Management?

(What tools or methods to be able to deal with unknown emerging issues?)



WP3 METHOD

- **Second step** : Collaborative identification of the questions linked to the WFD implementation process (PARIS Workshop, 10 and 11th April 2008)

PURPOSE : Collective identification of scientific support needs for reviewing and updating future management plans of the WFD

METHOD :

- a workshop with water managers, water scientists, foresight experts and stake-holders
- 42 participants (UK, France, NL, Spain, Italy, Germany, Austria, Belgium) ;
100 persons invited trough the IWRM-net.





WP3 METHOD

- **Third step** : Proposition of research needs

PURPOSE : from the results of STEPS 1 &2 Collective : proposition of research needs.

METHOD :

- Rewording of the results of STEP 1 & 2 into question of research
- Proposition of these research needs to IWRM-Net members and to participants of STEPS 1 & 2, for choice and implementation in research activities.

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Recommendations from the WP3 method

Collaborative process of identification of scientific issues by involving from the start decisions makers, water managers, stakeholders (water users, enterprises of water, innovative enterprises, technological platforms), and researchers from all the disciplines.

- **Advantage 1** - the decrease of the misunderstanding between what the water managers and decisions makers are expecting from research, and what the research is supposed to deliver.
- **Advantage 2** – the organisation of the continuity from the academic research to the development of tools and methods usable by water managers and decision makers
- **Advantage 3** – the facilitation of multidisciplinary, interdisciplinary and transdisciplinary approaches

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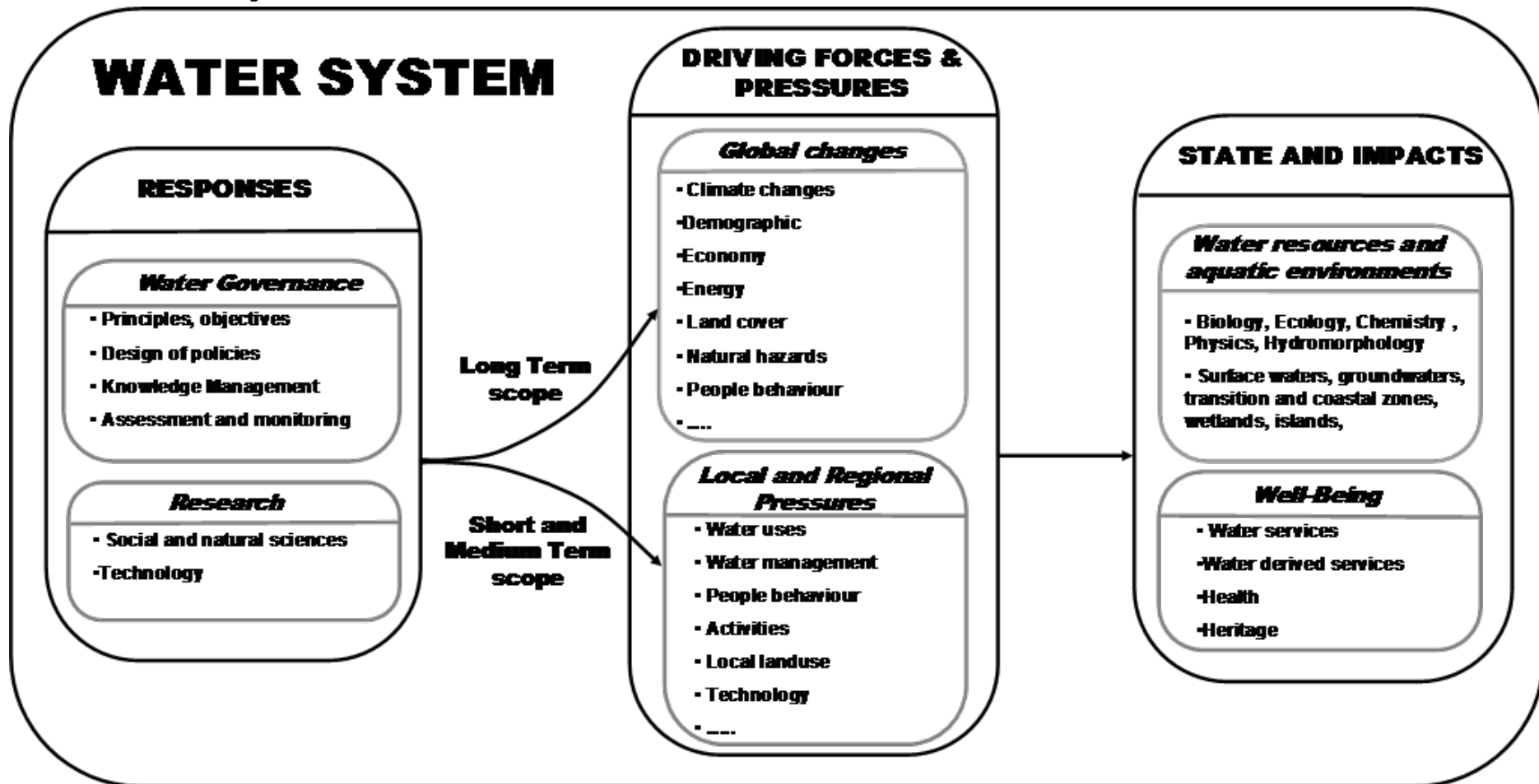
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Propositions of Long term Research needs

- A Framework of references : the water system





Proposition of Long term Research needs

1- Which governance framework and tools for the Water System management?

2- How to manage the pressures and their related impacts : Prevention, Mitigation, Adaptation and Crisis management?

3 - What are the current and the future pressures and related impacts on the water system?

(to prepare the future River Basin Management Plans - WFD implementation)



Proposition of Long term Research needs

1- Which governance framework and tools for the Water System management?

How to improve the decision making process in water management?

What are the governance related tools and methods for implementing IWRM?

How to develop a framework for policies assessment?



Proposition of Long term Research needs

2- How to manage the pressures and their related impacts : Prevention, Mitigation, Adaptation and Crisis management?

- Develop Indicators for trends, thresholds; early warning systems
- Scenarios and models to anticipate efficiency of measures (in time and space)
- Mitigation and adaptation strategies
- Economic and social assessment for management measures, for impacts
- To assess efficiency of the measures
- Social acceptance of conservation and restoration measures
- Scientific knowledge of each components of the water system, of relations between activities and pollution
- Technological solutions to manage impacts (to maintain water quality, quantity, ecological flows...) or to reduce pressures (activities, settlements, transportation...)



Proposition of Long term Research needs

3 - What are the current and the future pressures and related impacts on the water system?

(to prepare the future River Basin Management Plans - WFD implementation)

Which relationships between water quality and quantity and society well-being (health, economical and social aspects...)?

How to identify and to assess the potential impacts of pressures on the water bodies ?

How to consider cumulative impacts, inertias phenomena and resilience of water bodies and ecosystems in dynamic context ?

How to develop models (for Pressures-Impacts-State and Processes relations) and scenario-builders enabling foresights and comparisons between different management options ?

How to build an integrative vision of water management ?

How to reduce uncertainties ?