

2nd Annual Meeting and the 3rd Screening Workshop at Pilot – Drina River Basin

10 - 12 March 2015

ECRAN 57314

Significant pressures in Drina RB



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Structure of the presentation

- IMPRESS Guidance Document
- Key issues of the Guidance
- Main elements of the analysis
- Use of existing monitoring data
- WFD requirements
- Identification of significant pressures
- Screening approach
- Pressures assessment in Drina JPM



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Basis

IMPRESS Guidance Document

- Develop common understanding of most effective approach to identification of pressures and assessment of potential impact of these pressures
- Identify appropriate tools to assist with this analysis, and where further development is needed
- Develop and disseminate guidance on the above



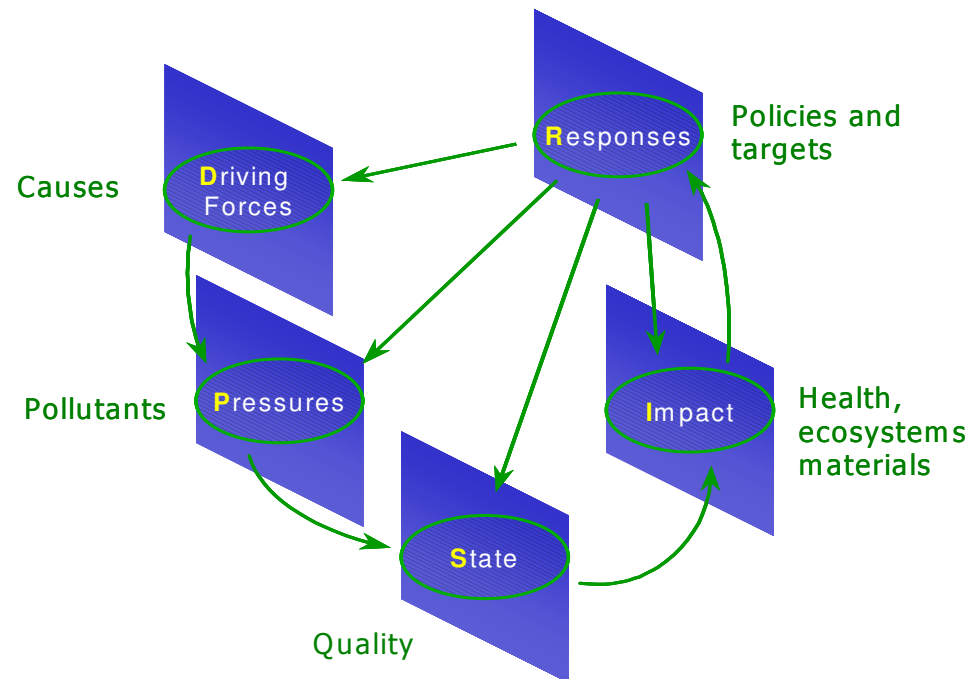
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IMPRESS Guidance Document

DPSIR Assessment framework (Source: EEA)



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Key Issues of the Guidance

- Defining “pressures” and “what is significant”
 - use of thresholds etc.
- Scale of analysis
 - what is a water body?
- Identification of key categories of pressures
- Identification of sources of pressure information
- Linking pressures to impacts
- Assessment of baseline and trends in pressures
- Appropriate tools / models etc.

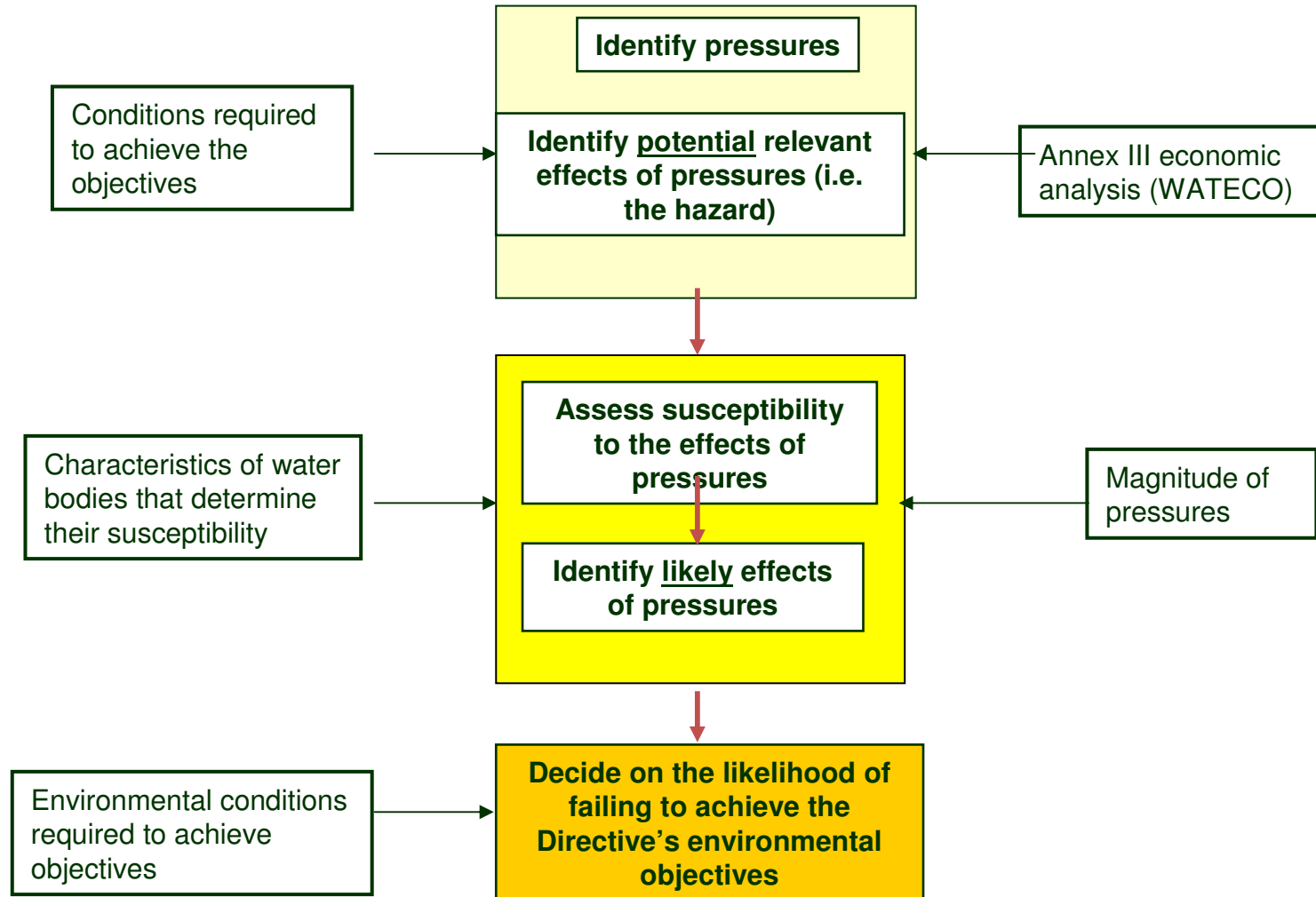


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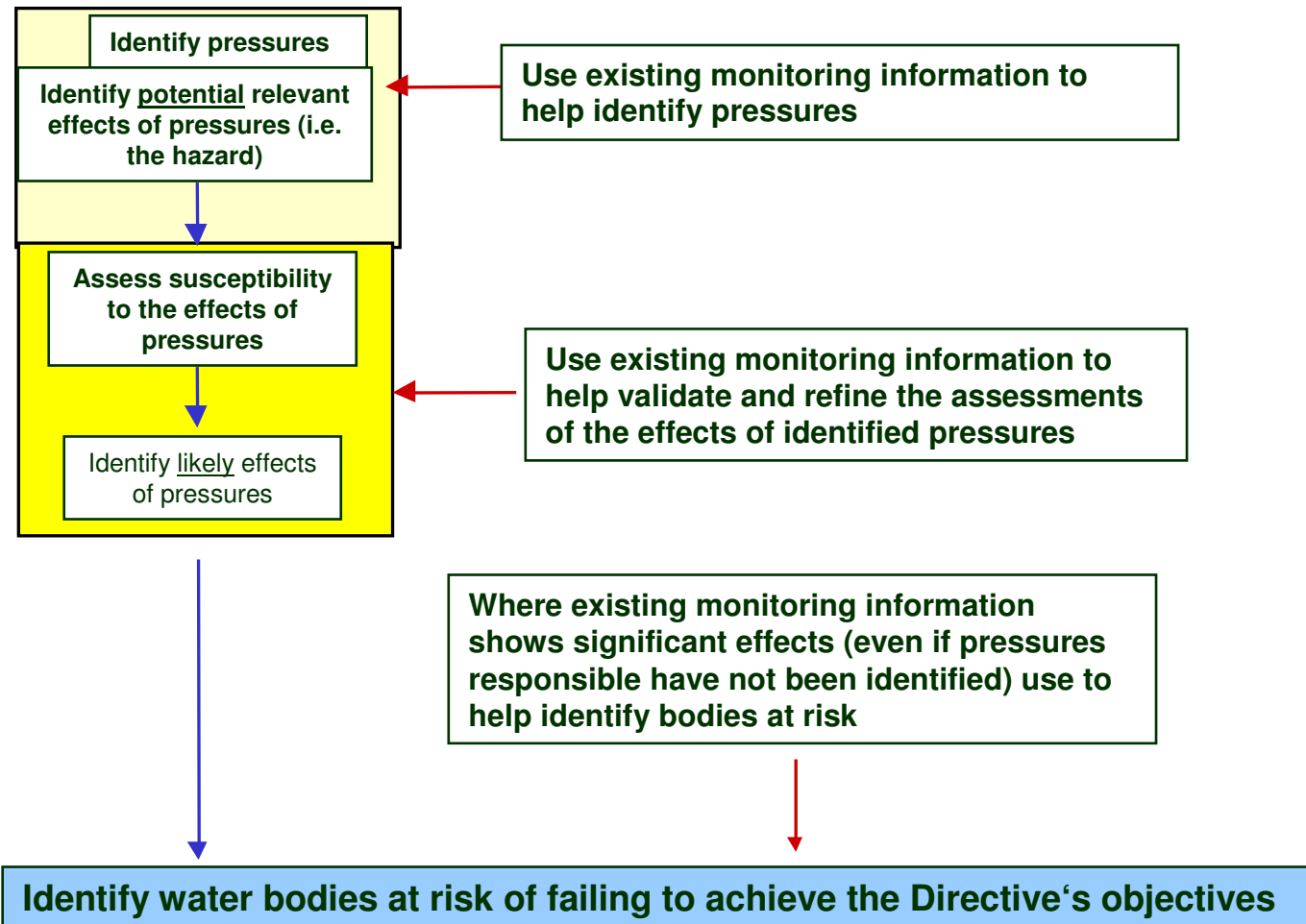


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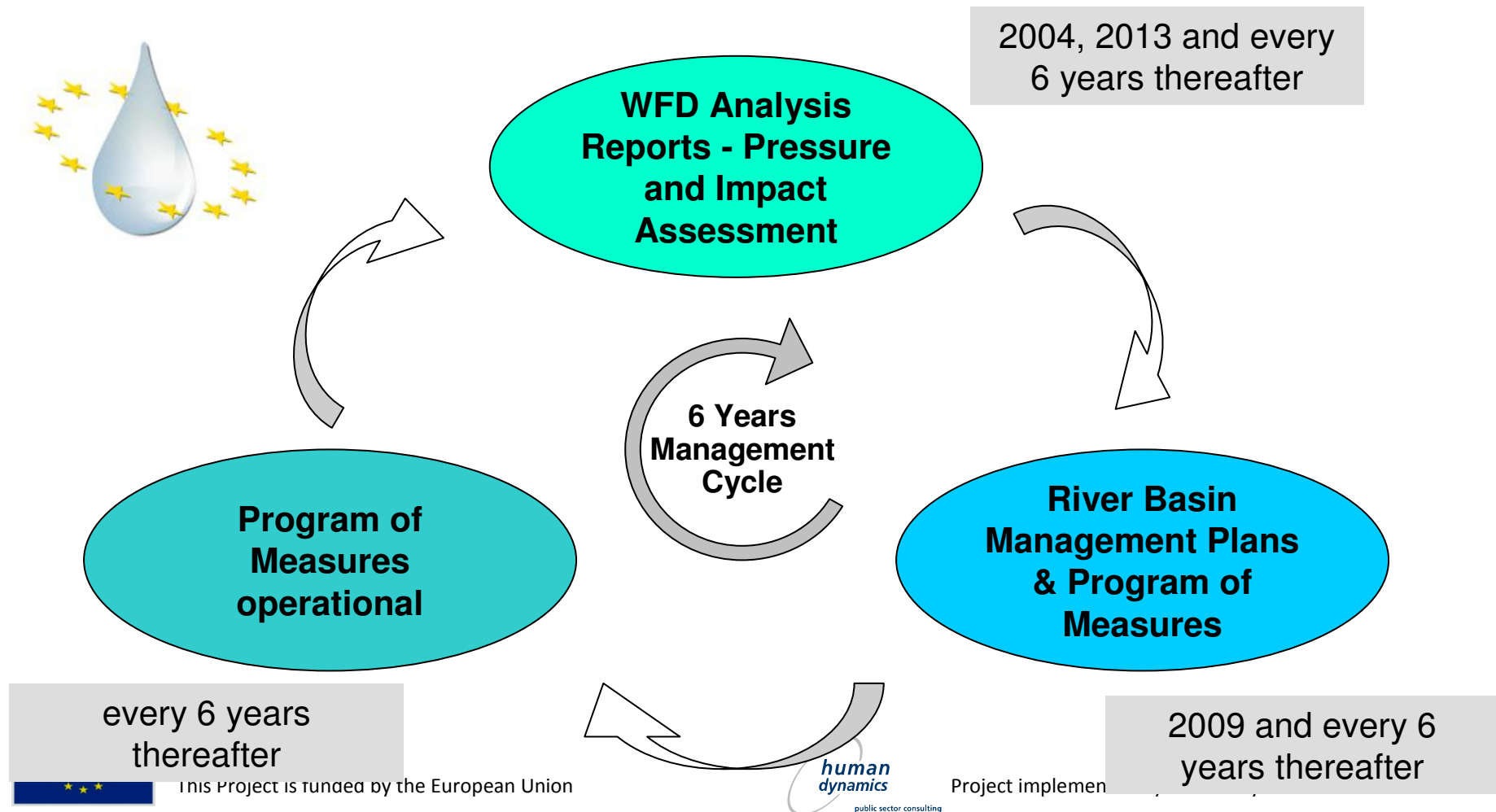
Main elements of the analysis



Use existing monitoring data



WFD Implementation Cycle



WFD Requirements

- Set out in Article 5 and Annex II
 - Identification of significant human pressures on surface and groundwaters
 - Assessment of likely impact on water status
- WFD deadline (December 2004)



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Identification of “Significant” Human Pressures (1)

- The identification of the pressures and the assessment of their impacts on surface water bodies require two steps (WFD Annex II, 1.4 and 1.5):
 - 1st Identification of pressures with possible impacts on the water status: Significant pressures (Annex II, 1.4)
 - 2nd Assessment of these impacts: Risk of failing the environmental quality objectives? (Annex II, 1.5) ⇒ For those water bodies further analysis shall be carried out in order to optimise the design of both the monitoring programmes (Art. 8) and measures (Art. 11).



Identification of “Significant” Human Pressures (2)

- Regarding the **pressures** affecting a water body the WFD forces to include:
 - Pollutions from point and diffuse sources
 - Alterations of the water regime (water abstraction, water flow regulation)
 - Alterations of the morphology of the water bodies
- Impairments of the good status of the water body regarding to the biological, the hydromorphological and the physico-chemical attributes resulting from one or a number of pressures are considered as **impacts**.



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Identification of “Significant” Human Pressures (3)

- Sources of Information
 - Other existing EC legislation, e.g. UWWTD
 - Existing national requirements
 - “State of the Environment” reports
 - National classification schemes
 - Inventories from national legislation
 - Operational information
 - e.g. “pollution incidents”



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Identification of “Significant” Human Pressures (4)

- Determining what is “Significant”
 - “Significant” can be considered in various ways:
 - Broad indices / indicator approach
 - Pressure is subject to specific EC legislation, e.g. GW Directive
 - Significance limits should be chosen so that results provide a practical solution
 - Future trends in pressure should be considered (in broad terms only)



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Identification of “Significant” Human Pressures (5)

– Determining Impact of a Pressure

- Impact of pressure - likely to cause failure of WFD objective
- Impact of pressure - contributes to upward trend
- Impact of pressure - contributes to / causes failure of existing standard (national or EC)
- Should take account of sensitivity of the water body
- Should take account of additive / synergistic effects



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Identification of “Significant” Human Pressures (6)

- Scale issues
- Define spatial scale
- Management unit (observation area): distinct part of the river basin district, which should be viewed during analysis of pressures and impacts
- Size: 500 km² to max. 2500 km²



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Identification of “Significant” Human Pressures (7)

- Availability of appropriate tools
 - Not all tools / techniques needed to identify pressures may currently exist, e.g. for GW
 - Three broad categories currently identified:
 - Monitoring data (environmental/discharge/abstraction)
 - Models, especially linking land use to water status
 - Pollution inventories
 - Also what role for “expert judgement”



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Screening approach to define significant pressures

Task WFD Annex II:

Identify significant anthropogenic pressures on surface and groundwater.
Surface water : rivers, lakes, transitional waters and coastal waters.

List of pressures:

For **surface waters**: point sources pollution (urban, industrial, agricultural), diffuse source pollution, water abstraction, water flow regulations, land use patterns, other morphological impacts and morphological alteration.

For **ground water**: point sources pollution, diffuse source pollution, water abstraction and artificial recharge.

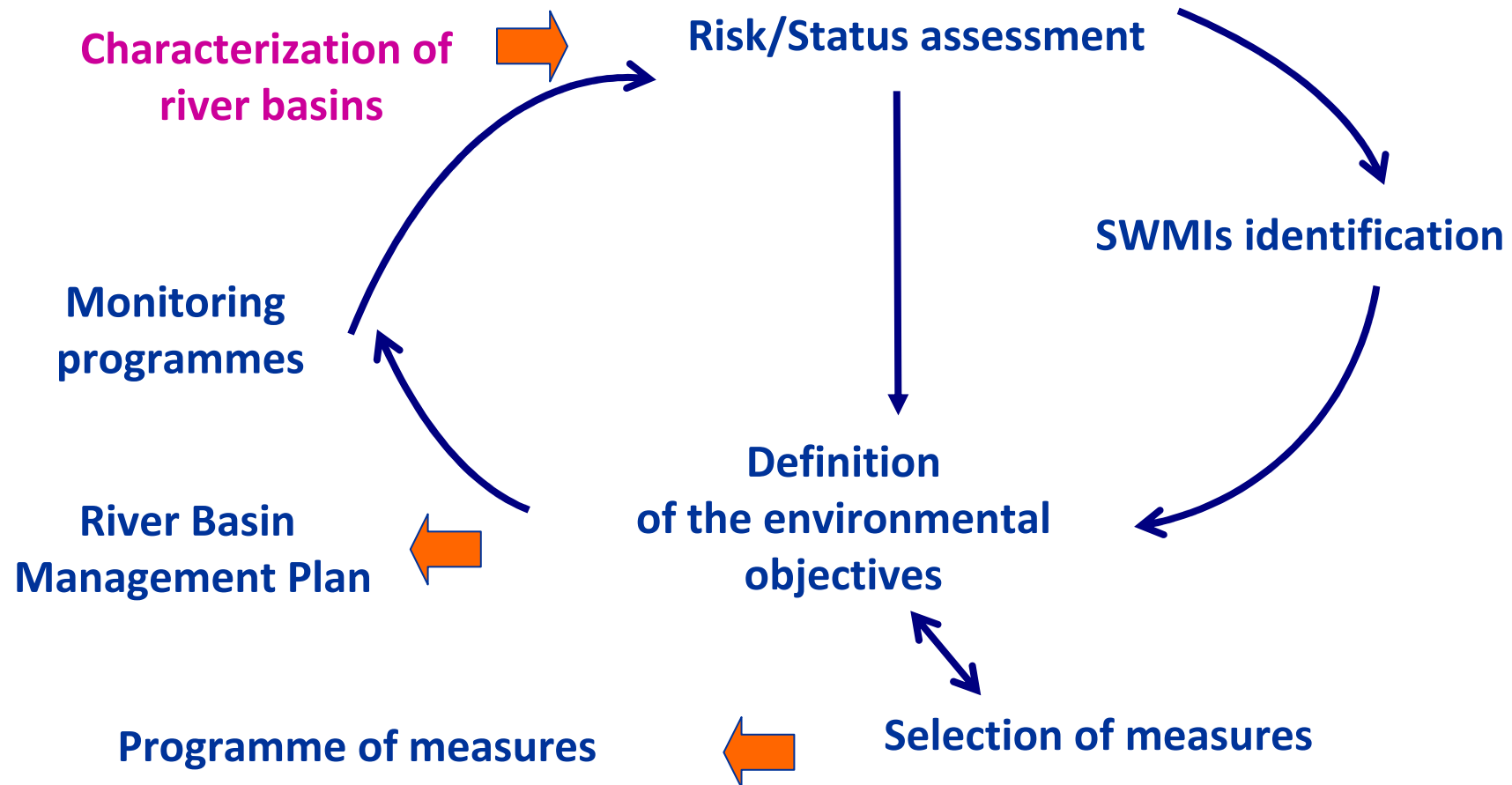


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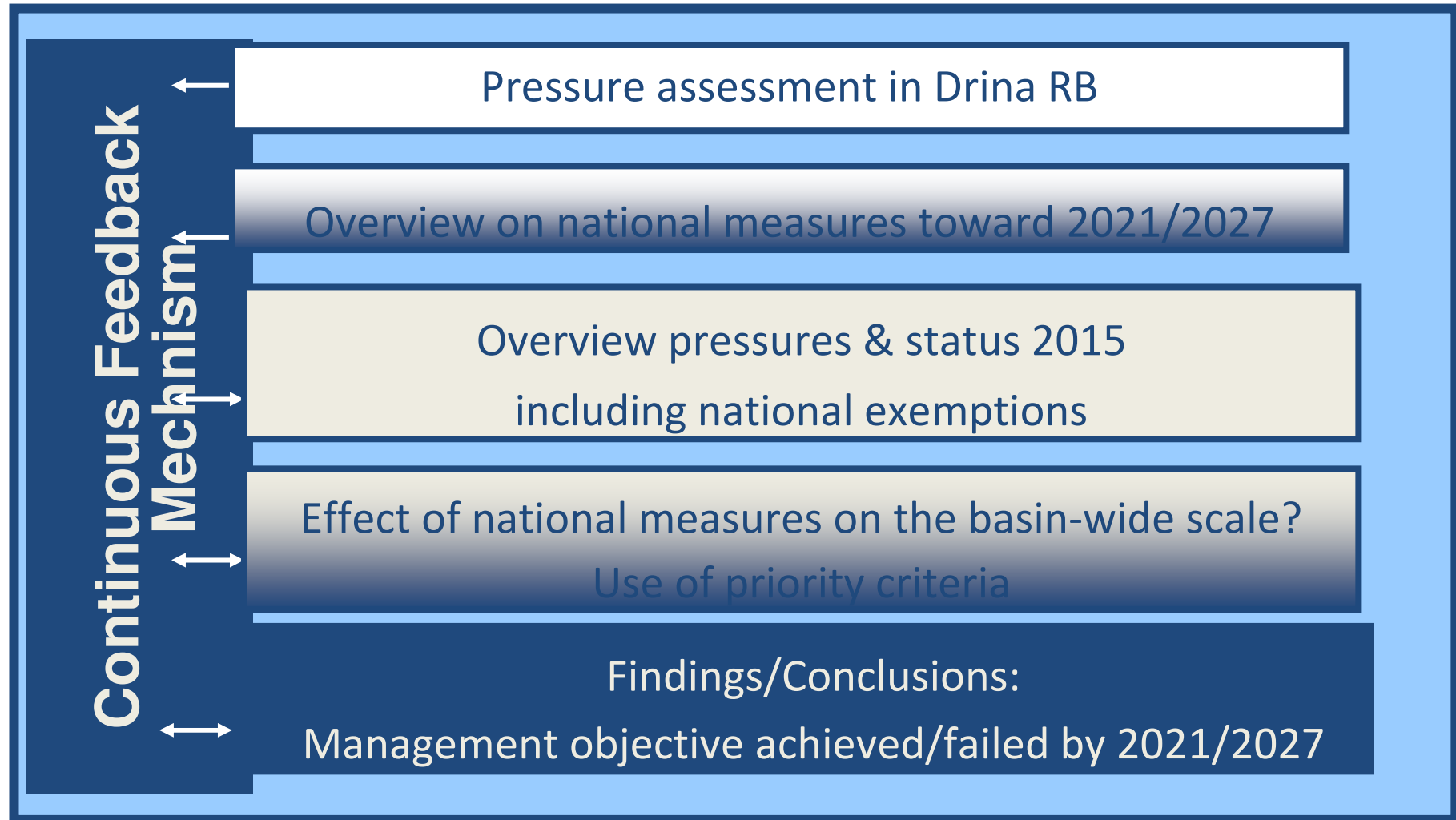
Pressures assessment in the RBMP



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Pressures assessment in Drina JPM



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Thank you!



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