



European Union Water Initiative Plus for the Eastern Partnership  
(EUWI+ 4 EaP)

# HOW TO ACHIEVE GOOD ENVIRONMENTAL STATUS OF WATER BODIES

## SELECTING THE MOST INDICATIVE QUALITY ELEMENTS FOR ANTHROPOGENIC PRESSURES ON WATER BODIES – EXPERIENCES FROM THE EUWI+ PROJECT

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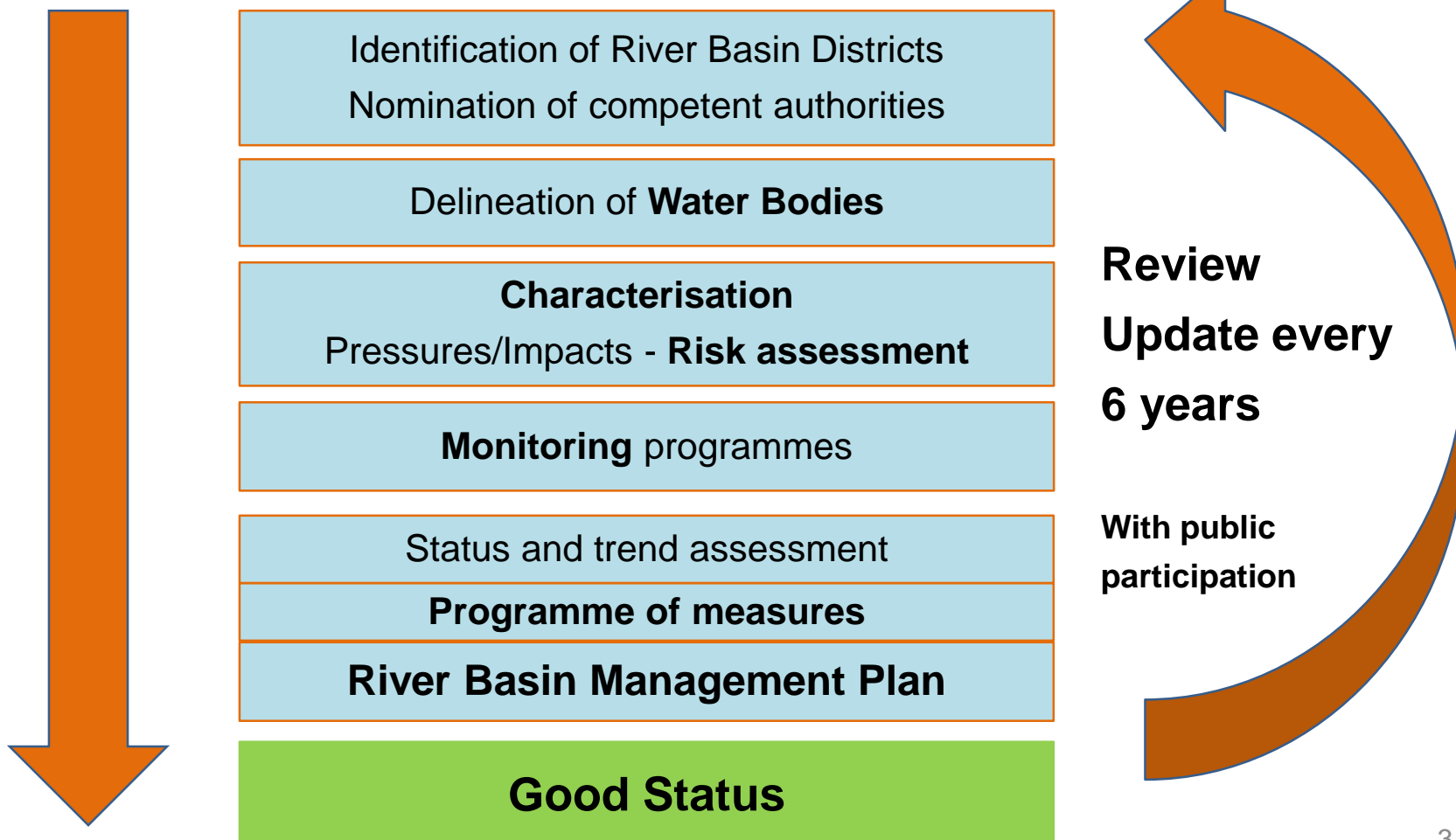
## EUROPEAN UNION WATER INITIATIVE PLUS FOR THE EASTERN PARTNERSHIP (EUWI+ 4 EaP)

- EU-funded action: contribution of 23.5 million EUR - The biggest commitment of the EU to the Water Sector in Eastern Partnership Countries



- Objectives:
  - To improve the management of water resources,
  - To bring national policies in line with the EU Water Framework Directive and other multilateral environmental agreements.
  - To prepare River Basin Management Plans (RBMPs) and enhance monitoring capacities (staff, equipment and infrastructure)
- 4-year implementation: 2016-2020
- Implemented by: UNECE / OECD / EU MS Consortium (AT, FR)

# EU WATER FRAMEWORK DIRECTIVE - WFD IMPLEMENTATION STEPS



# PRESSURE/IMPACT ANALYSIS - RISK ASSESSMENT

**Characterisation, Pressures, Impacts** = key element under the WFD:

- How do the water resources function (conceptual understanding).
- How are they impacted by pressures from human activities.

**Risk assessment** (= pressure/impact assessment):

- Which water bodies need utmost attention  
(**at risk** of not meeting good status objectives)

It is the basis for **focused (risk-based)** and **prioritized action**:

- Designing target-oriented and cost-effective **Monitoring Programs**
- Identification of most effective quality parameters/indicators
- Establishing **Groundwater quality standards** (considering natural background)
- Developing effective and cost efficient **Programs of Measures**

# SELECT THE RIGHT QUALITY ELEMENTS

Example Austria: Most indicative for anthropogenic pressures

Quality elements: Anthropogenic Pressures:	Fundamental Physical and chemical Parameters	Pollutants	Phytobenthos	Macrophytes	MZB	Fish
<b>Chemical pressures</b>						
nutrients	X		X	(X)	(X)	
oxygen conditions	X				X	(X)
temperature	X				(X)	X
salinisation	X		(X)		(X)	X
acidification	X			(X)	X	(X)
pollutants	X	relevant pollutant				
<b>Hydromorphological pressures:</b>						
Morphological modifications:					(X)	X
<i>only modification of stream bed</i>					X	(X)
residual flow				(X)	(X)	X
hydro peaking				(X)	(X)	X
impoundment				(X)	X	(X)
interruption of continuum					(X)	X

# PURPOSE OF WATER BODY MONITORING

## **Characterisation**

- Verify the conceptual understanding of the system.

## **Risk assessment – Risk of failure**

- Identify local or regional problems.
- Identify and verify the risk of failing compliance in future (outlook).

## **Status and trends**

- Enable status classification.
- Identify trends including long-term changes (natural, anthropogenic).

## **Measures**

- Place the right and most (cost) efficient measures at the right place.
- Verify effects of measures – track progress.
- Demonstrate compliance with legal provisions.
- Amend permits and authorisations for water users.

## **Reporting**

- Provide information for decision makers and the general public.
- Report to other administrations or international obligations.

## QUALITY OF MONITORING MATTERS

Good water governance and water management need **timely, targeted, relevant, sufficient and reliable data!**

The weakest monitoring element is decisive

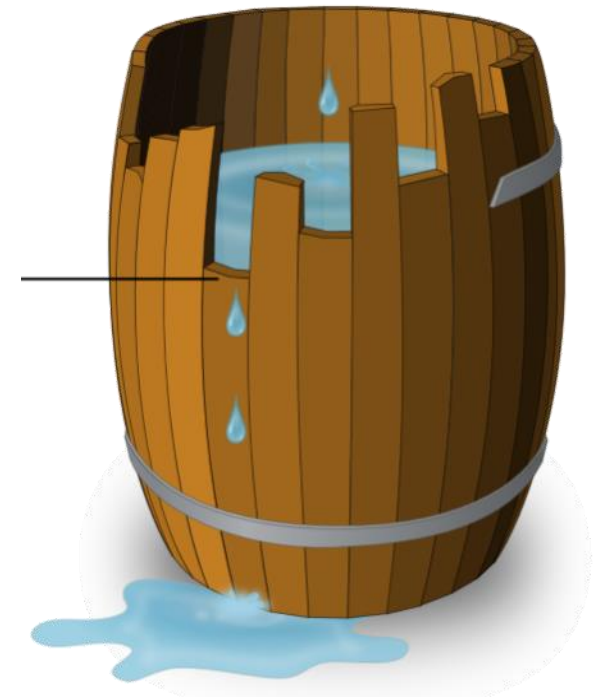
- Monitoring design
- Sampling procedure
- Equipment - sampling and laboratory
- Trained staff
- Relevant indicators
- Availability of data
- Accessibility of data
- ....



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Source: Wikipedia. Liebig's Law of the Minimum

## OVERALL BENEFITS OF THE EUWI+ APPROACH

- Parallel implementation in 6 countries - harmonised approach and support by same international institution/expert.
- National experts are implementing (learning by doing) – international experts are instructing and supervising.
- Purchasing of equivalent equipment for laboratory and sampling
- Provision / elaboration of ± unified trainings / guidelines / manuals in each country (but considering national situation)
- „Competition“ between neighbouring EaP countries.



## TRANSBOUNDARY BENEFITS OF EUWI+ APPROACH

- Coordination of transboundary water bodies and characterisation.
- Regional hands-on activities → unified approaches, linking of national experts, exchange of experience / challenges.
- Transboundary knowledge transfer towards e.g. intercalibration.
  - Create common conceptual understanding.
  - Exchange of information on pressures and impacts.
  - **Identify most indicative indicators (quality elements) of common concern.**
  - Agree on monitoring sites for bilateral data exchange.
  - Establish common templates / rules for data exchange.

## LESSONS LEARNED FROM EUWI+ IMPLEMENTATION

- Avoid „quick and dirty“ approaches ( = waste of time and resources).
- Reiterate importance of monitoring!  
Monitoring needs attention, continuity and QA (sites, equipment, motivated (well-paid) staff, training, secured budgets).
- Consider „adsorption capabilities“ of beneficiaries (administrative procedures, available staff capacities and budget). Speed kills.
- All WFD steps are important, none can be skipped. + Cyclic process.
- 1st RBMPlan: EU Member States: 9 years, EaP countries: 3 years.  
Be pragmatic and focused. Start with most important aspects/indicators → gain routine → extend scope (depending on staff and budget capacities).
- Sustainability depends on guaranteed long-term budgets.



## CONTACT

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