

# European Strategy for the Danube Region

## Priority area 4

To restore and maintain the  
quality of waters

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PAC 4 assistant

# European Strategy for the Danube Region (EUSDR)

- EUSDR is a macro-regional strategy adopted by the European Commission in 2010 and endorsed by the European Council in 2011.
- *The Strategy is not about funding, it is about closer cooperation!*
- One strategy – 11 priorities

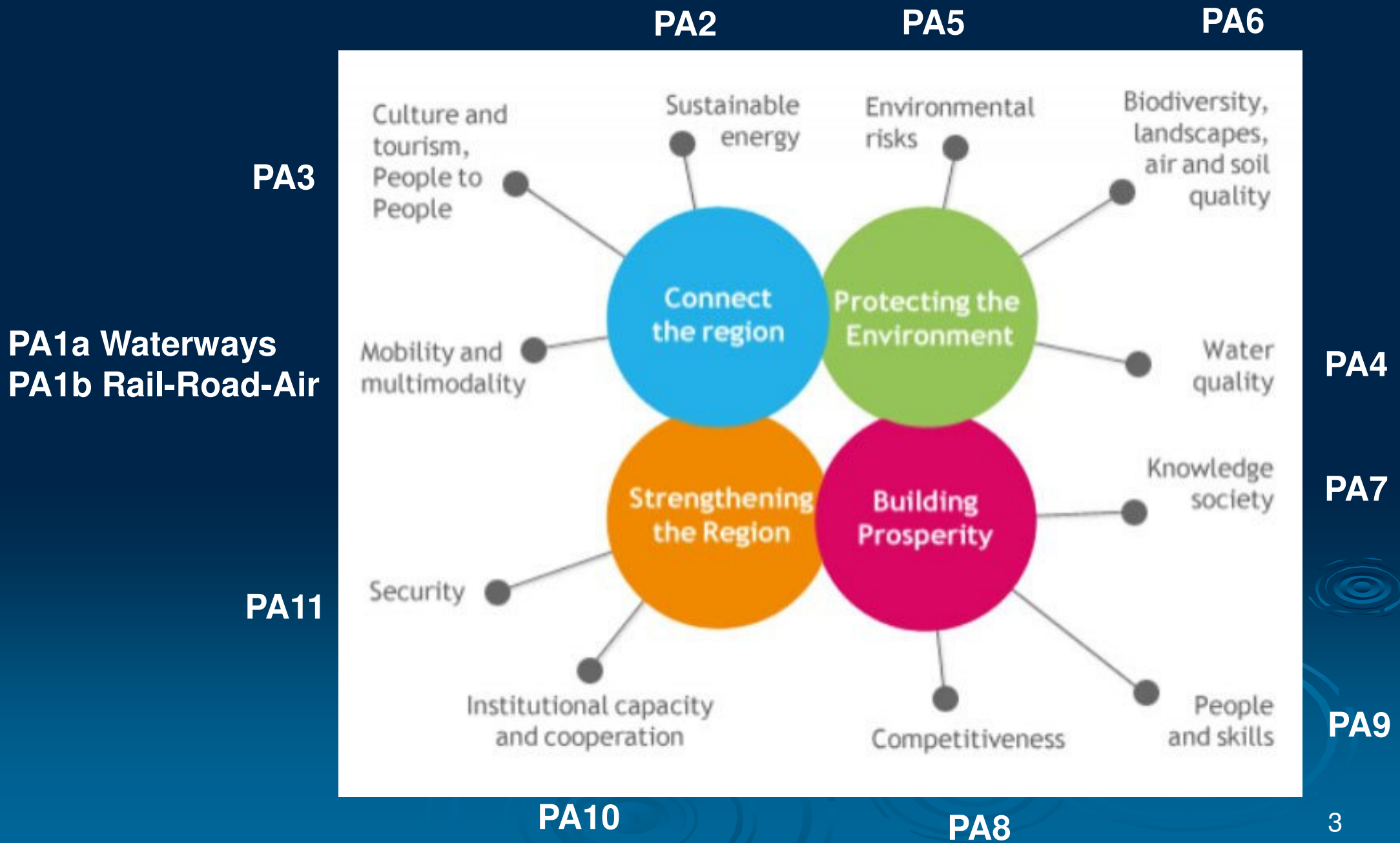
- **Governance:**

European Commission (EC) → High Level Group (HLG) → National Coordinators (NCs) → Priority Coordinators (PACs - each priority area is managed by 2 Priority Area Coordinators) → Steering Group

Danube Strategy Point

Interact

# Pillars and Priority Areas



# Priority Area 4 „To restore and maintain the quality of waters“

- Coordinated by Hungary and Slovakia
- Comprises 14 activities:
  1. implementation of the Danube River Basin Management Plan
  2. strengthening the cooperation at sub-basin level
  3. supporting the information collection systems already developed by ICPDR
  4. boosting major investments in building and upgrading urban wastewater treatment facilities
  5. establishing the buffer strips along the rivers and promotion of alternative collection and treatment of waste waters in small rural settlements
  6. improvement of the dialogue and cooperation between agriculture and environment sectors aimed at reduction of agricultural pollution
  7. legislating the limit of phosphates in detergents

- 8. treating the hazardous substances and contaminated sludge with the best available technology and developing the remediation measures**
- 9. assuring the proper control and progressive substitution of problematic substances for Danube Region**
- 10. reducing water continuity interruption for fish migration in the Danube River Basin**
- 11. promoting the measures to limit water abstraction**
- 12. strengthening awareness and facilitating exchange of good practice in integrated water management issues**
- 13. promoting measures aimed at knowledge deficit reduction, developing and transferring tools, methods and guidelines concerning the safeguarding of drinking water supply**
- 14. strengthening the Integrated Coastal Zone Management and Maritime Spatial Planning practices on the Western shores of the Black Sea.**

# NEWS

➤ **Danube Transnational Programme – OPEN CALL**

**4 priority axes, water related – Priority Axis 2**

**Deadline for project submission - 3 November 2015**

**<http://www.interreg-danube.eu/calls/calls-for-proposals/first-call>**

➤ **4th Annual Forum – 28-29 October 2015, Ulm, Germany**

**<http://www.danube-forum-ulm.eu/danube-forum-ulm>**

**PA4 events – workshop:**

- **Co-operation possibilities with Non-EU countries in the water sector**
- **Protecting the environment in the Danube Region: Integrated horizontal cooperation (Synergies EUSDR Pillar B )**
- **Setting water management priorities until 2021 – The Danube River Basin Management Plan 2015**

➤ **EUSDR Slovak Presidency in 2016**

**Thank you for your attention**

# WATER RESEARCH INSTITUTE




**Alena Kurecová**  
**PAC 4 assistant**



# Short history of WRI:

- **established in 1951**
- **a government-subsidized organization managed by the Ministry of Environment of the Slovak Republic.**
- **a leading scientific-research institute with national scope conducting comprehensive water management research and other activities resulting from the needs of water management sector in Slovakia.**
- **its core activities include scientific research and development programmes as well as professional consulting and advisory services in the field of water management and water-ecology.**

# WRI departments

- Department of Water Management Concepts, Programmes and Planning
  - Department of Hydrology and Hydraulics
  - Department of Water Quality
  - National Water Reference Laboratory
  - Department of Economy and Technical Accounting
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# Main activities:

- Water analyses
- Flood protection programmes and measures
- Hydraulics, hydrology and river morphology
- Preparation of water management legislation
- Research on drinking water supply
- Research on wastewater treatment and collection
- Cooperation on trans-boundary rivers
- Expertise and consulting services
- Drafting fundamental national conceptual documents in the field of water management
- Activities related to the Water Framework Directive

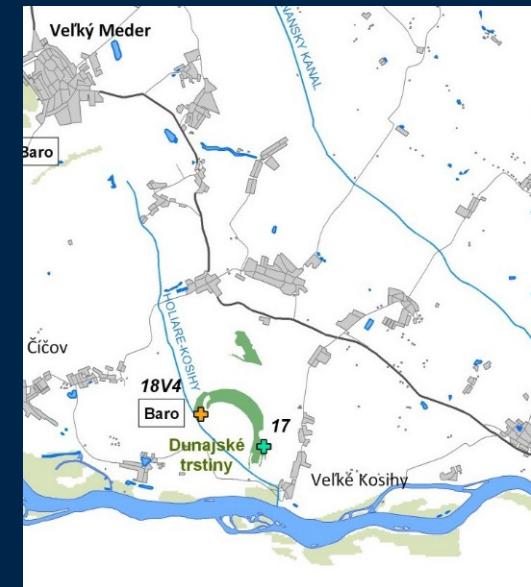
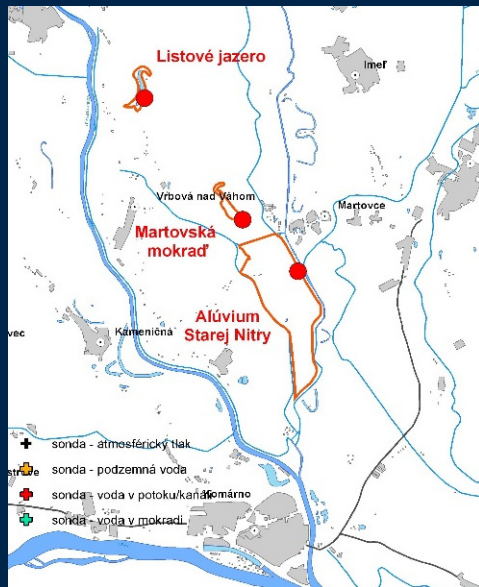
# Water Planning and Development

- Water quality and protection
- Development plans of drinking water supply and sewerage systems
- Quantitative water management balance, runoff regulation
- Economy and legislation in water management
- Development of methodologies and conceptual documents General Plan of Water Protection and Water Use
- Water Framework Directive implementation
- River basin management plans
- Preparation of water management maps, GIS mapping
- Information databases in water management
- Publications

# Hydrology and Hydraulics

- Flood protection measures, flood risk assessment
- Research and simulation of rainfall – runoff processes
- Research and simulation of flow and water level regimes in streams and reservoirs
- Research of groundwater regime in interaction with other elements of hydrosphere
- Discharge and water level measurements
- Hydraulic research of dams and reservoirs
- River training and restoration, wetland restoration
- Study of navigation conditions
- Study of ice and temperature regimes of streams and dam reservoirs
- Study of flow processes and their effects on hydraulic structures
- Assessment of anthropogenic impacts on water regime
- Calibration of current meters, water meters and flow meters

# Restoration of streams, wetlands and habitats of protected fauna and flora



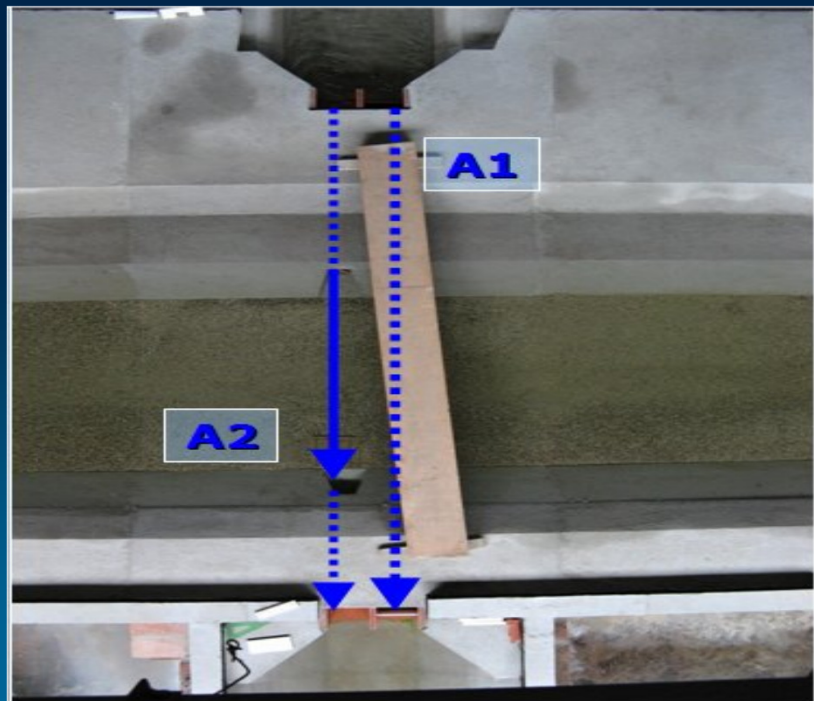
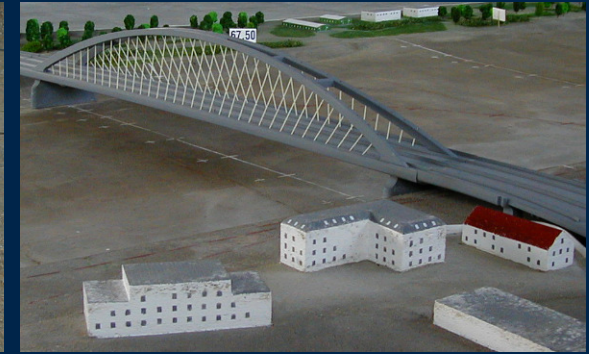
# Assessment of flood protection measures







# Activities of WRI Hydraulic Laboratories



# Geodetic, hydrological a hydro-morphological field measurements



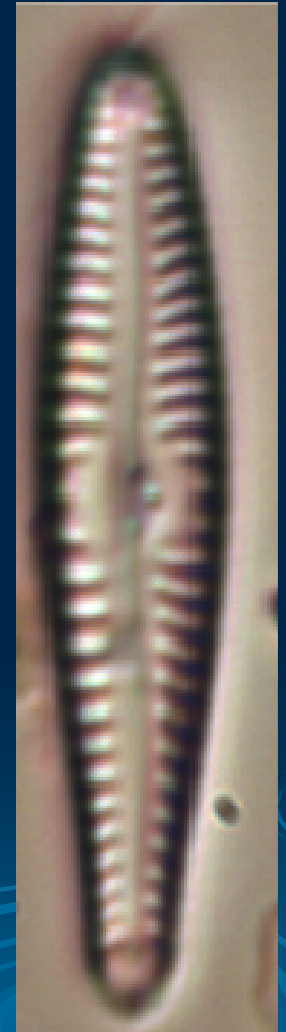
# Water Quality and Water Treatment Technology

- Forecasting and improvement of water quality in surface streams and reservoirs
- Study of the impact of pollution factors (point and diffuse sources of pollution) on water quality in reservoirs and surface streams
- Surface water quality protection, contamination risk assessment
- Analysis of groundwater contamination processes, quality assessment and evaluation
- Impact of natural and anthropogenic factors on the groundwater quality
- Development of new technologies aimed at reduction of anthropogenic pollution
- Design and development of drinking water treatment technologies
- Assessment of drinking water quality, water safety, water disinfection
- Research of progressive technological methods for wastewater treatment
- Assessment of sewerage systems, sludge disposal, waste disposal

# National Water Reference Laboratory

- Development, verification and implementation of analytical methods
- Physical-chemical analyses
- Hydrobiological, microbiological and ecotoxicological analyses
- Organic and inorganic trace compounds
- Radiochemical isotopes
- Water quality monitoring and assessment
- Training programmes
- Proficiency Testing Schemes
- Water analyses and water sampling







**Thank you for your attention**

