

Side event on 'Flood Protection and  
Water Management related issues  
in the Danube Region - EUSDR  
PA4–Towards reaching good status  
of waters in the DRB

in the frame of the  
Hungarian Hydrological Society  
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## FramWat

to strengthen the regional common  
framework for floods, droughts and  
pollution mitigation by increasing the  
buffer capacity of the landscape

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## Parts of the presentation

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- **Introduction of FramWat project**
  - Consortium set-up and main target groups
  - Basic information about the project
  - Main objectives
  - Project structure
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- **Co-operations**
  - Synergies with other INTERREG projects

# Setting the scene

## Introduction of the problem

Too little - drought



The lowest ever water level in the **Vistula at Warsaw** - power restrictions due to plant cooling problems, 09/2015

Too much - flood



The highest ever water level in the **Vistula at Świniary** causing levee breach, 05/2010

Too dirty - pollution



High turbidity in the **Biebrza** after heavy rainfall, 05/2015

After Piniewski 2015

The majority of water management and flood protection measures lack innovation and follow more traditional approaches, including large scale grey infrastructure investment programs or capital projects. They have not been balanced by green infrastructure, which takes into account valuable ecosystem services provided by nature in the landscape settings.

# Setting the scene

## Antecedents

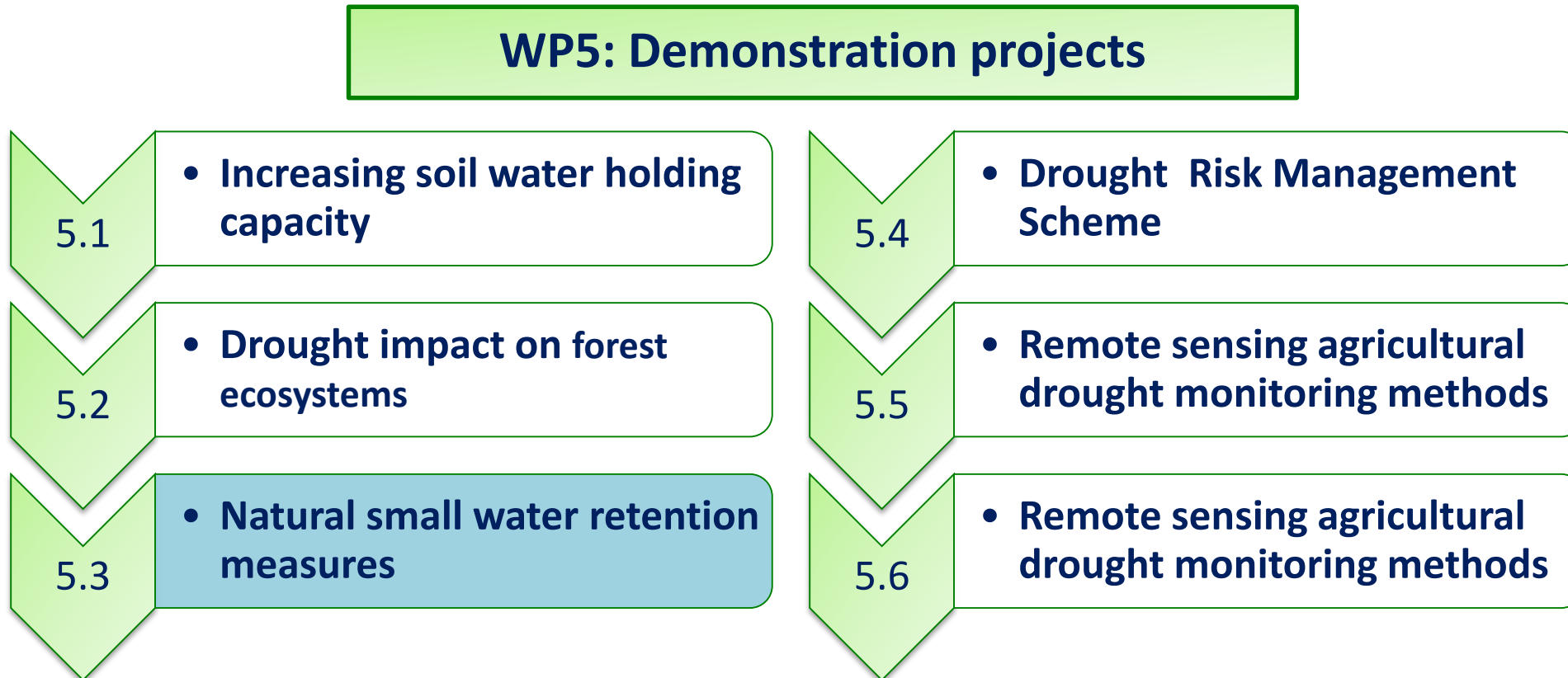
2013 – 2015 WMO – GWP funded Integrated Drought Management Programme - **IDMP**

### Objectives of **IDMP** were

- Develop understanding and knowledge, and promote state-of-the-art technology, through documentation, consultative workshops, dialogues and networking for integrated drought management.
- Map and assess the impact of droughts, promote the adaptation of best practices, incorporate risk mitigation/reduction, and develop drought policies based on scientific knowledge.
- Initiate case studies of pilot basins involving local communities.
- Facilitate the capacity of national governments to incorporate assessments on drought management into their national programs and policies.
- Synthesize country findings and develop regional drought policy, a monitoring framework, and a regional drought management platform.
- Raise awareness about severe drought conditions through efficient dissemination mechanisms, such as a learning platform, training and workshops/seminars.

# Setting the scene

WP5 of **IDMP** dealt with demonstration projects

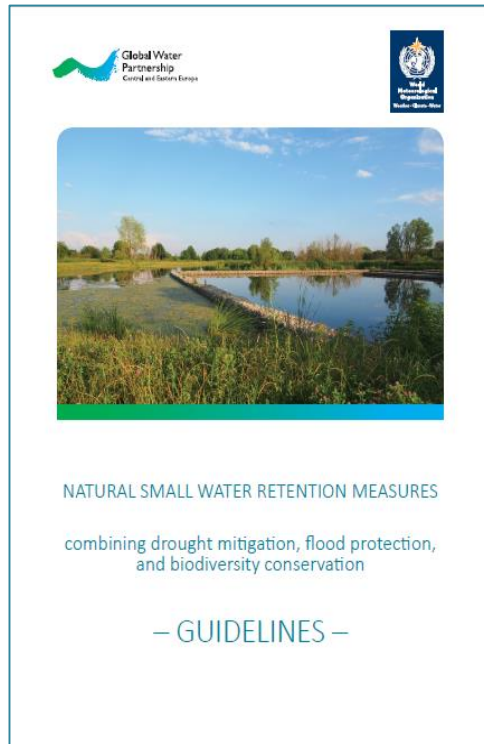


# Setting the scene

**IDMP**



**FramWat**



Project ideas were formulated  
from Dec 2015 till Nov 2016

# Setting the scene

## Ideas of FramWat

- **To support idea for using the landscape features to help solving environmental problems** in water bodies in the sustainable way. The innovative way for doing so is to **develop methods, which translate existing knowledge about N(S)WRM features into river basin management practice.**
- Contribute to **improving water balance, decreasing sediment transport, enhancing nutrients re-circulation.** The measures to be proposed will improve the protection of natural heritage, which is an added value comparing to the traditional approach.
- **Provide decision makers with appropriate tools** to incorporate N(S)WRM into the next cycle of River Basin Management Plans.
- In addition, **FramWat** should **provide guidance and raise awareness** about the importance of horizontal integration of different planning frameworks.

## Consortium set-up

No.	Partner name	Abbreviation	Country
1	Warsaw University of Life Sciences	WULS-SGGW	Poland
2	Global Water Partnership Central and Eastern Europe	GWP CEE	Slovakia
3	Slovak Water Management Enterprise	SWME	Slovakia
4	The Regional Environmental Center for Central and Eastern Europe	REC	Hungary
5	Middle Tisza District Water Directorate	MTDWD	Hungary
6	LIMNOS Ltd.	Limnos	Slovenia
7	Croatian Waters	HV	Croatia
8	University of Ljubljana	UL	Slovenia
9	WasserCluster Lunz – biologische Station GmbH	WCL	Austria
	<b>Associate partners</b>		
10	The International Commission for the Protection of the Danube River	ICPDR	Austria
11	International Sava River Basin Commission	ISRBC	Croatia
12	Ministry of Environment of the Slovak Republic		Slovakia
13	Hungarian Chamber of Agriculture		Hungary
14	Slovenian Water Agency		Slovenia
15	Regional Water Board Warsaw		Poland



## Basic information about FramWat

<b>Number of partners:</b>	9 partners and 6 associate partners
<b>Project Budget:</b>	1 611 621.80 EUR
<b>Project Duration:</b>	36 months (1 July 2017 – 30 June 2020)
<b>Project Lead Partner:</b>	Warsaw University of Life Sciences
<b>Project Manager:</b>	Prof. Dr. Tomasz Okruszko
<b>Contact Details:</b>	<a href="mailto:T.Okruszko@levis.sggw.pl">T.Okruszko@levis.sggw.pl</a> or <a href="mailto:m.jarecka@levis.sggw.pl">m.jarecka@levis.sggw.pl</a>
<b>Funded by:</b>	European Regional Development Fund (85%) and project partners (15%)
<b>Official project website:</b>	<a href="http://www.interreg-central.eu/Content.Node/FramWat.html">http://www.interreg-central.eu/Content.Node/FramWat.html</a>

## Main objectives of FramWat

**The main objective of the project** is to strengthen the regional common framework for floods, droughts and pollution mitigation by increasing the buffer capacity of the landscape using the N(S)WRM approach in a systematic way.

### Project specific objectives:

- Improvement of N(S)WRM planning knowledge on a basis of better identification of needs for N(S)WRMs in the river basins in order to support decision making process
- Increased knowledge and understanding of synergetic cumulative effectiveness of the system of N(S)WRM on the river basin scale for more efficient decision making
- Improved integrated water resource management capacities of public sector for development of the N(S)WRM as part of water management planning process

# Main target groups of FramWat

Target groups	Specification of target groups	Size of the target group (estimated)
<b>Regional public authority</b>	regional water boards; river basins authorities, regional administration	18
<b>National public authority</b>	ministries (in most cases agriculture, environment, natural resources), country water directorate	12
<b>Sectoral agency</b>	forestry agency or state forest authority, agricultural chambers, environmental agencies, water agencies	18
<b>Interest groups including NGOs</b>	environment and water related NGOs (GWP and REC networks, WWF, etc.)	20
<b>Higher education and research</b>	universities, research institutes – in both water and environmental departments/faculties	10
<b>International organisations, EEIG under national law</b>	international river commissions (Helcom, ICPDR, Sava Commission)	3
<b>General public</b>	individuals and entities interested in implementation of natural (small) retention measures in their properties	5 000
<b>Local public authority</b>	Authorities from Kamienna, Middle Tisza, Slana, Aist, Kaminska and Bednja and AP	12

# The structure of FramWat

M – Management WP

C – Communication WP

## T1 – Identification of potential locations of the Natural Small Water Retention Measures

- Act. 1: Developing landscape valorisation method for N(S)WRMs
- Act. 2: Prototype of the GIS tool and training
- Act. 3: Testing the prototype of the GIS tool in the river basins together with stakeholders

## T2 – Effectiveness of the Natural Small Water Measures

- Act. 1: Review of the existing parameters for evaluation of effectiveness of N(S)WRM
- Act. 2: Developing the GIS based method to assess cumulative effect of N(S)WRM at the river basin scale
- Act. 3: Developing the Concept plan for N(S)WRM in river basins
- Act. 4: Application of dynamic water quantity and/or quality models (Pilot Action)
- Act. 5: Integrated approach on cumulative effectiveness assessment

## T3 – Policy integration and economic instruments

- Act. 1: Stakeholder analysis and analysis of the existing policy documents on regional and national level
- Act. 2: National and regional consultations
- Act. 3: Cost analysis
- Act. 4: Development and testing DSS for N(S)WRM planning
- Act. 5: Integrated regional approach to the N(S)WRMs

I - Demo server for N(S)WRM planning tools

## Links with the EU Regional Strategies

**EU Strategy for the Danube Region** - FramWat will contribute to the implementation of River Basin Management Plan (**Pillar B, PA4-Water quality, Action 1. and 5.**) with assessment results of pilot actions and Guidelines on application of complex, multi-scale small water retention measures to protect and/or improve the water quality of surface and subsurface water resources. It would also contribute to the reducing of environmental risks (floods, droughts) with measures to wetland restoration (**PA5- EnvRisks, Action 2 and 7**).

**EU Strategy for the Baltic Sea Region** - FramWat will develop tools for nutrients reduction that is very much in line with the *EUSBSR objective "Save the Sea"*, especially *sub-objective "Clear water in the sea"* – the main goal is to stop eutrophication of the Baltic Sea. FramWat will contribute to other objectives, such as *"Increase Prosperity"* and its sub-objective *"Climate change adaptation, risk prevention and management"*.

**EU Strategy for the Adriatic and Ionian Region** - FramWat will contribute to the sustainability in water management and will support the implementation of nature-based measures (**Pillar 3; Priority 1**). FramWat aims to preserve quality and quantity of water resources (**3rd Objective: Action 6**) taking into account natural heritage (ecosystem resilience) to benefit society (water for life quality) and economy (water availability for growth and agriculture).

**EU Strategy for the Alpine Region** - The Strategy focuses on environmental quality (**Pillar 3**). FramWat tools will improve biodiversity in river basins, prevent degradation of ecosystems and mitigate pollution. The project outputs aim at reducing nutrient flows into the sea, by exploring possible protective measures. Strengthening the policy capacities of all involved stakeholders will support the macro-regional cooperation in the area of environment.

## Expected project results

### FramWat will:

- bring a new approach to the implementation of the N(S)WRM in the RBMPs. Water management and nature protection *often do not cooperate efficiently*, as they work under different departments within national administrations.
- develop new tools to be used by water authorities for:
  - 1) choosing the best location for a set of measures to help achieving the water quantity (mitigation of droughts and floods) and quality (decreasing the N and P loads) goals;
  - (2) assessment of effectiveness of those measures and
  - (3) guidelines for how to apply N(S)WRM in the River Basin Management context.
- aim at changing the attitude in floods, droughts and pollution mitigation by *implementing integrated environmental management in river basin planning process*. In the form of GIS based software, the proposed solutions should help water managers to implement innovative measures apart from “business as usual” approach.
- increase the skills and capacities of water authorities and related stakeholders for sustainable use of landscape, and for better and climate proof water resources management. N(S)WRM will be used in a systematic way addressing the complex challenges in the river basin on the landscape scale.

## Synergies with other INTERREG projects

- The results of the **FramWat** project will contribute to **JOINTisza** project with N(S)WRMs that could be used in river basin management planning.
- Act. 6.4 of **JOINTisza** deals with a Pilot Action on Drought Management - Led by GWP-CEE. The main goal of the pilot is to investigate the climate change induced drought and flood related issues focusing on smaller region within the Tisza River Basin. **FramWat**'s pilot actions could supplement this action.
- Results of **FramWat** could be used in **DriDanube** project, which is focusing on the effects of climate change.
- **FramWat** could utilize some of the results of **CAMARO-D** project on land issues.



**Thank you  
for your attention**