



## Strengthening climate resilience measures for protection and revitalization of ecosystem in the Spačva-Bosut Basin - RETFOR

### Novi Sad, 07.05.2024.











Centar kompetencija d.o.o. za istraživanje i razvoj



### **Spačva-Bosut basin-general information**

One of the largest coherent complexes of lowland pedunculate oak forests in Europe that connects the Republic of Croatia and Serbia– cca 50.000 ha

- > Wet ecosystem
- > An oasis of biodiversity
- Under the influence of climate change
- In the summer of 2023 extreme weather event occurred
- Continuous problem insufficient amounts of water (drought)





Spačva-Bosut basin



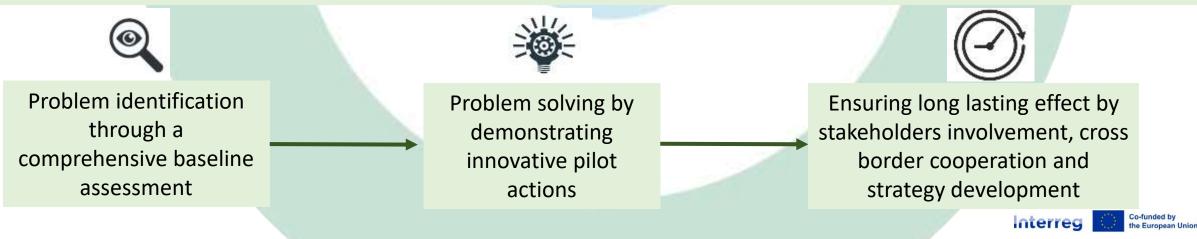
## Main needs and challenges related to the Spačva-Bosut basin







## What is **REFTOR's contribution?**



Croatia - Serbia

## Strategic Project - Interreg IPA Cross-border Cooperation Programme Croatia-Serbia 2021-2027

- Priority Axis 2: Cooperating for greener and climate change resilient programme area
- Specific objective: RSO2.4. Promoting climate change adaptation and disaster risk prevention, resilience, taking into account ecosystem-based approaches



Aftermaths of extreme weather events



## Project overall objective: To increase climate change resilience of the Spačva-Bosut Basin

**Specific objective 1**: Creating preconditions for climate resilience strengthening in the Spačva-Bosut Basin

**Specific objective 2**: Improving climate resilience measures for protection and revitalization of the Spačva-Bosut Basin through jointly implemented pilot actions

**Specific objective 3**: Strengthening potentials for solution uptake for future climate resilience action



## **Main project activities**



Root system of fallen tree

## Activity 1

- 1.1. Baseline assessment analyses of existing data, Studies and EU projects with similar topics
- 1.2. Identification and preparations of pilot locations: initial field observations and Analyis of forests biodiversity
- 1.3. Communication activities: development of Communication plan and identification of potential stakeholders



# Activity 2

2.1 Establishment of joint cross-border groundwater monitoring system to foster climate change resilience and adaptation

- > 2.2 Software for dynamic modelling of underground waters + weather stations
- 2.3 Joint action on drought mitigation in Spačva Basin Upgrading of the Lipovac barrier's crown on the river Bosut (HR) for forest ecosystem sustainability and revitalization (emphasizing droughts issue)
- 2.4 Restoration of Radosava pond (SRB)
- > 2.5 Reconstruction of the sluice on the river Bosut (SRB)
- 2.6 Communication activities/Public events: organization of two events about project progress and innovation actions with the participation of external experts and organization.





Effect of extreme weather event on forest

## **Activity 3**

3.1 Validating and consolidating of results on demonstrated and tested solutions

3.2 Development of the Strategy for solution uptake by organizations

2.3 Communication and dissemination activities: final conference and technical meetings with stakeholders regarding results dissemination and increasing potential for the solution uptake



## **Project outputs**

- 1.1 Jointly developed action plan for implementation activities towards climate resilience in the Spačva-Bosut Basin
- 2.1 5 pilot actions jointly developed and implemented (underground monitoring system, software for dynamic modelling of underground waters and weather stations, upgrading of the Lipovac barrier's crown on the river Bosut, restoration of Radosava pond, reconstruction of the sluice on the river Bosut)

#### > 2.2. 2 jointly developed solution

- Sestablished Centre for climate change monitoring
- jointly developed and demonstrated solution (NbS) for drought extremes mitigation based on existing infrastructure

3.1 - Developed Strategy for the solution uptake by organizations (Plan of the solution presentation, and results dissemination to local public authorities, managing organization in charge of forestry and water management. The plan will contain basic data on solutions, possible applications, and replications reflecting multi-sectoral and transnational approach, data collection and exchange between organizations).

# Contribution of the project to programme output indicators (RCO) and programme result indicators (RCR

Output label	Title of the output	Target value	Result label	Connection to the results	Target value
RCO 83	Jointly developed action plan for implementation activities towards climate resilience in the Spačva-Bosut Basin	1	RCR 79	Jointly developed Action plan taken up by organisations	1
	Developed Strategy for the solution 1 uptake by organisations		Jointly developed Strategy taken up by organisations	1	
RCO 116	Jointly developed solution taken up by organisations (Centre for climate change monitoring will be presented to external organisations of interest such as Vukovar-Srijem County, Ministry of Environment, and District Srem)	1	RCR 104	Centre for climate change monitoring taken up by organisations	1
	NbS for drought extremes mitigation based on existing infrastructure	1		Drought extremes mitigation NbS measures based on existing infrastructure taken up by organisations	1







Piezometer

Drilling of a piezometric well

Piezometer



Barrier near Lipovac on the river Bosut







The sluice on the river Bosut





Building of future Centre for Climate change monitoring



Partners: > Hrvatske šume, Ltd.- Lead partner

- > JP Vojvodinašume Partner
- Hrvatske vode Partner
- > JVP Vode Vojvodine Partner
- Competence Centre Ltd– Partner
- Fond "Evropski poslovi" Autonomne Pokrajine Vojvodine - Partner





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војводине





## Total budget: 2.820.000,00 EUR EU funds: 2.400.000,00 EUR (85%)

Partner	Budget
HŠ Ltd.	448.500 EUR
JP Vojvodinašume	536.500 EUR
Hrvatske vode	675.000 EUR
JVP Vode Vojvodine	590.000 EUR
CEKOM Ltd.	285.000 EUR
Fond "Evropski poslovi" APV	285.000 EUR



# The most important items of the budget

Item	Planned budget		
Groundwater monitoring system	322.000 EUR (110.000 eur HR+ 212.000 eur SRB)		
Software for dynamic modeling of groundwater + meteorological stations	265.000 EUR (185.000 eur HR + 80.000 eur SRB)		
Renovation of the Center for Climate Change Monitoring	100.000 EUR (HR)		
Equipping the Center for Climate Change Monitoring	64.000 EUR (HR)		
Upgrading of the Lipovac barrier's crown on the river Bosut	500.000 EUR (HR)		
Reconstruction of the sluice on the river Bosut	470.000 EUR (SRB)		
Restoration of Radosava pond	90.000 EUR (SRB)		



## **Expected overall result of the project**

Increasing resistance to climate change and preserving the biodiversity of the Spačva-Bosut basin ecosystem



Pedunculate oak tree – after extreme weather event



Croatia - Serbia

# Thank you!

The presentation was held by:



