

**EFOP-3.6.1-16-2016-00004**

**ÁTFOGÓ FEJLESZTÉSEK A PÉCSI TUDOMÁNYEGYETEMEN  
AZ INTELLIGENS SZAKOSODÁS MEGVALÓSÍTÁSA  
ÉRDEKÉBEN**

# **LAND COVER/LAND USE CHANGE IN HUNGARY**

**Dénes Lóczy, Institute of  
Geography, University of Pécs**

**SZÉCHENYI**  2020



MAGYARORSZÁG  
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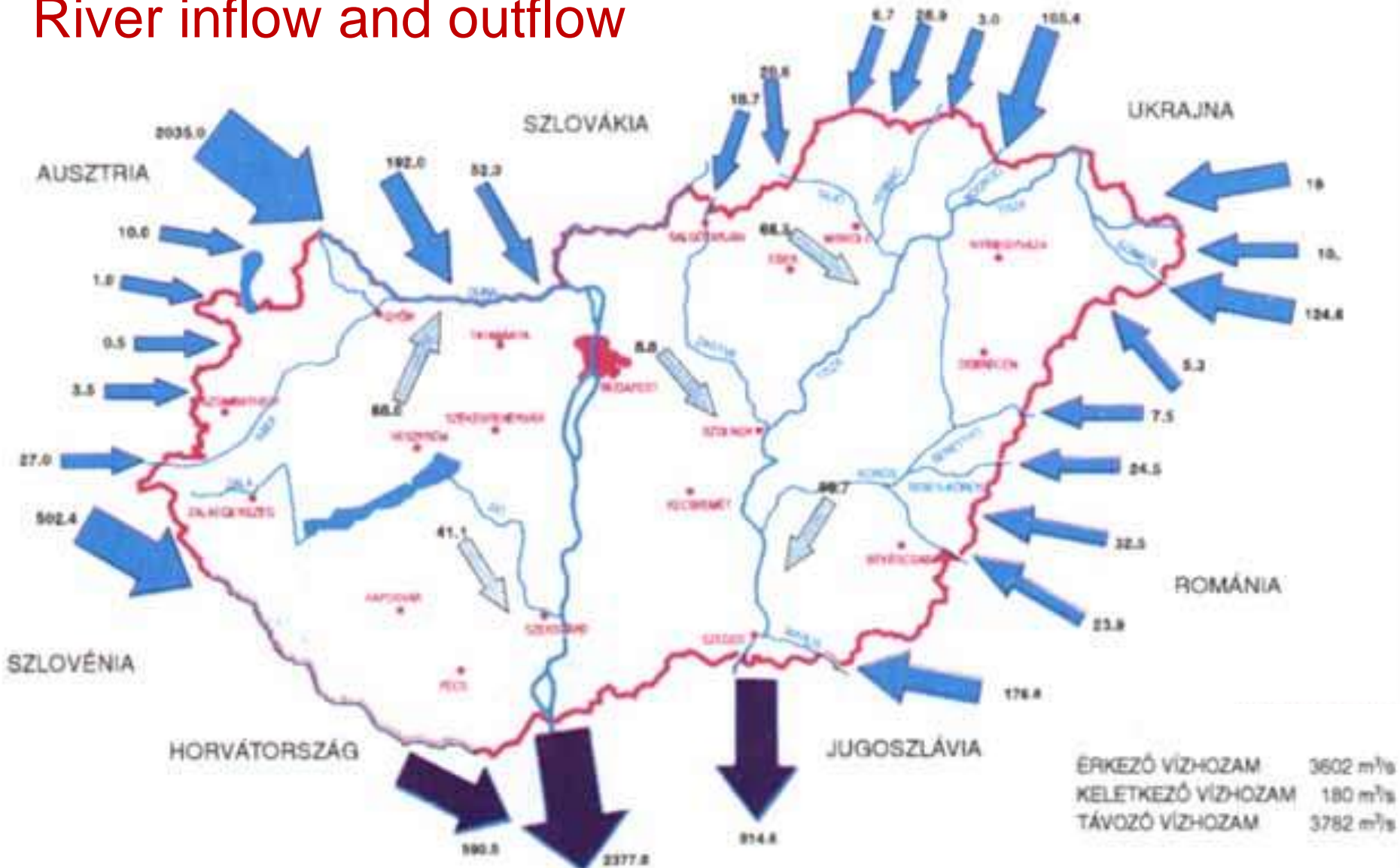
**BEFEKTETÉS A JÖVŐBE**

# SCERIN-5 CAPACITY BUILDING WORKSHOP

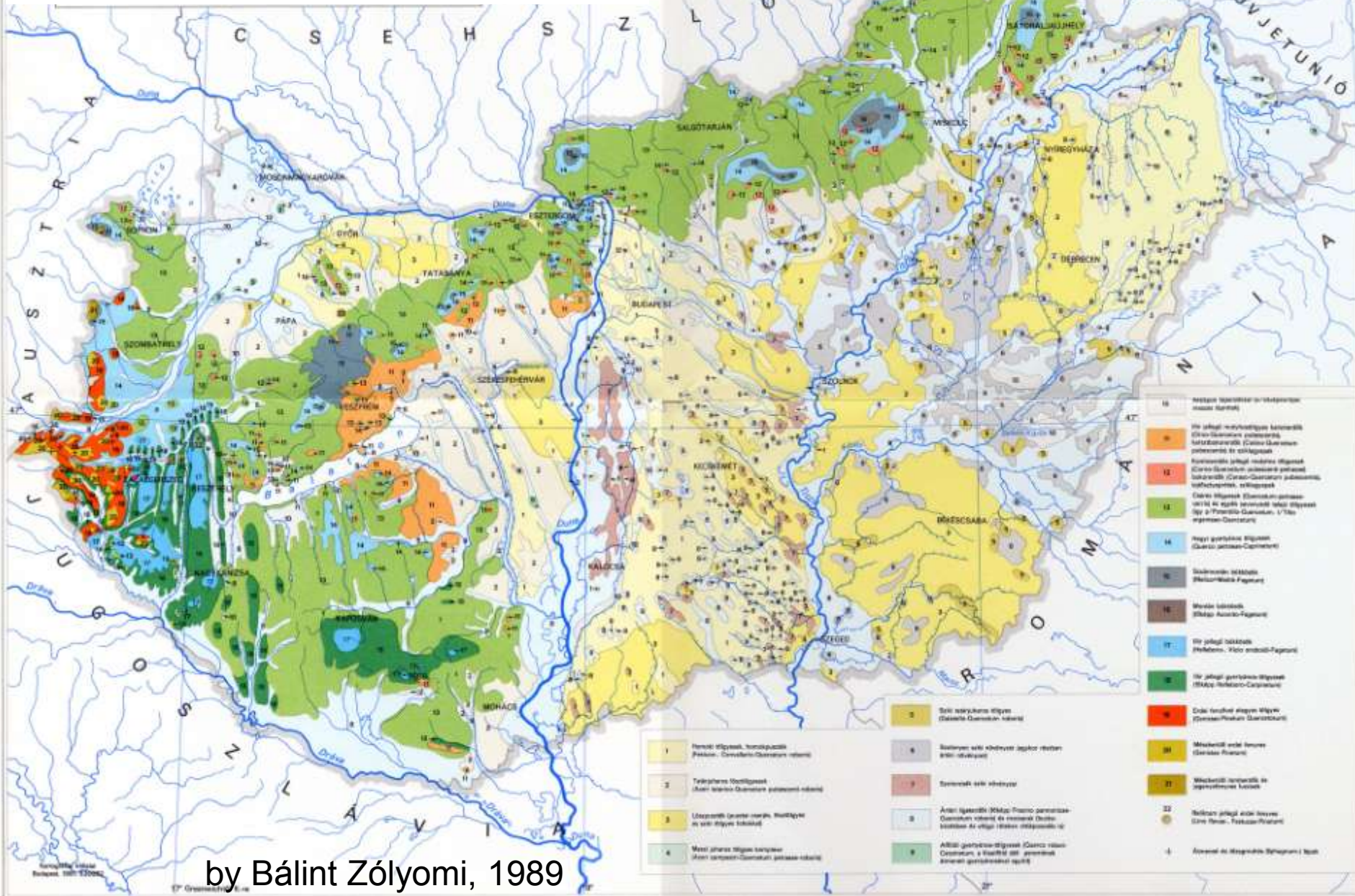


# SCERIN-5 CAPACITY BUILDING WORKSHOP

## River inflow and outflow



# Natural vegetation of Hungary



# SCERIN-5 CAPACITY BUILDING WORKSHOP

Flooded and waterlogged areas in the Carpathian Basin before river regulations and land drainage



# SCERIN-5 CAPACITY BUILDING WORKSHOP

## Golden Crown land evaluation system

- introduced by Act VII/1875
- aim: taxation – 20 % (after 1924: 25 % of cadastral net income)
- land inventory in 6 classes: arable, garden, **meadow**, pasture, vineyard, forest, **reed-beds**



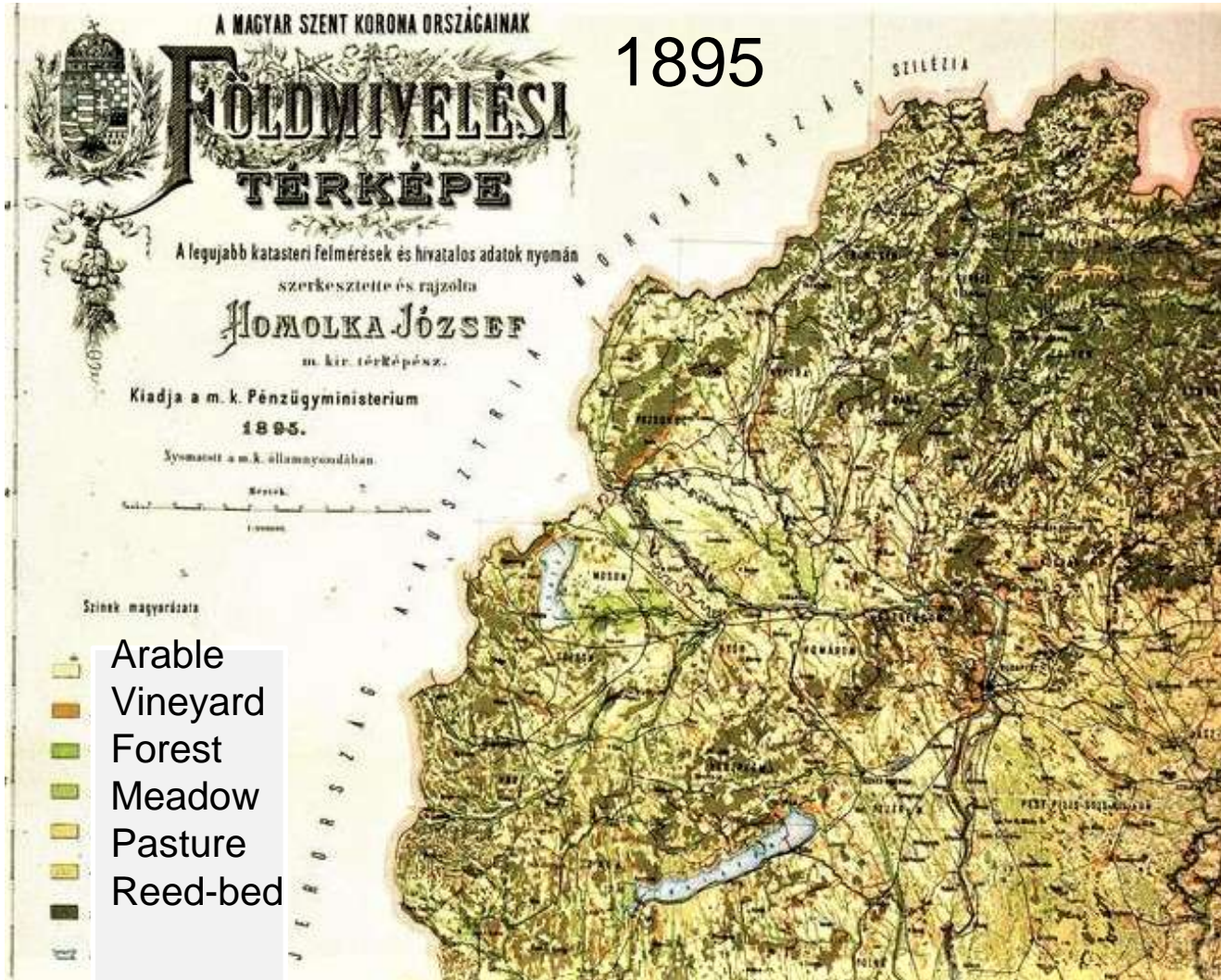
# SCERIN-5 CAPACITY BUILDING WORKSHOP

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## Flood hazard and control



# SCERIN-5 CAPACITY BUILDING WORKSHOP



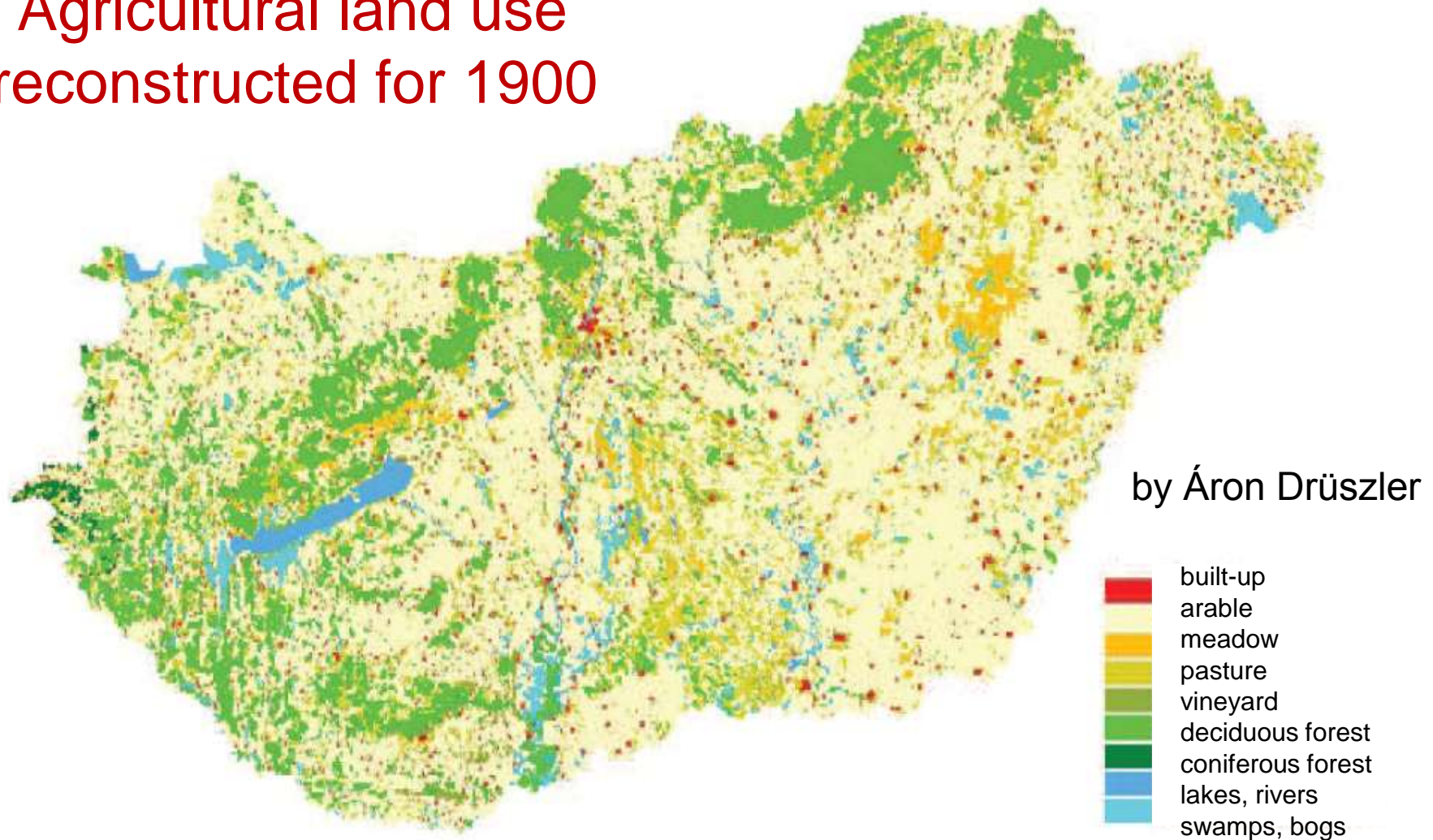
Land use  
classes in  
agricultural  
land

Arable  
Vineyard  
Forest  
Meadow  
Pasture  
Reed-bed



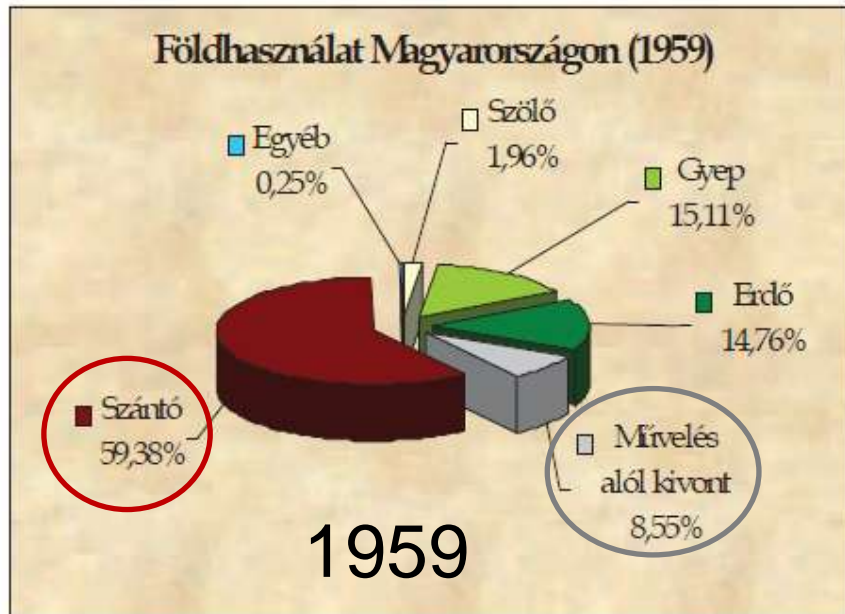
# SCERIN-5 CAPACITY BUILDING WORKSHOP

Agricultural land use  
reconstructed for 1900



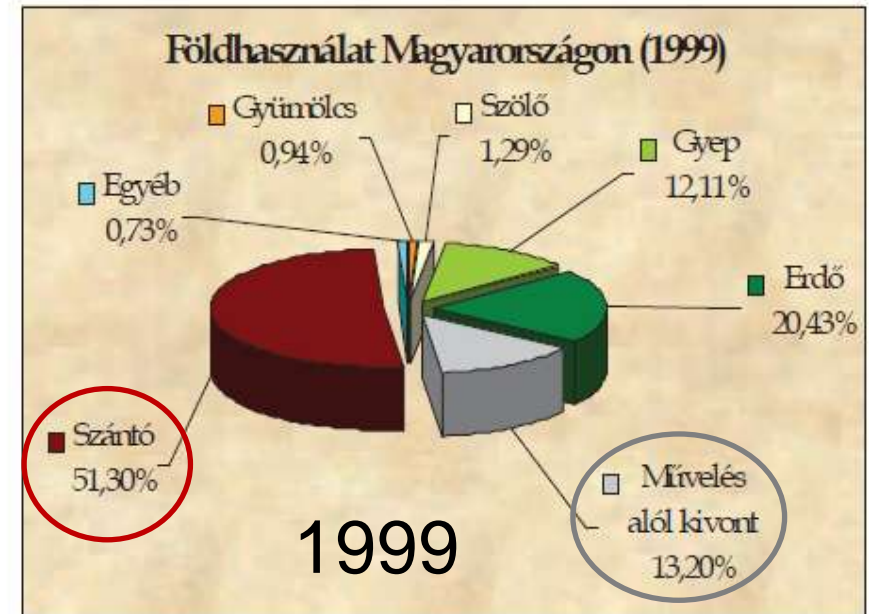
# SCERIN-5 CAPACITY BUILDING WORKSHOP

## Land use under socialism (1959) and after (1999)



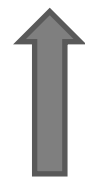
arable

abandoned



arable

abandoned

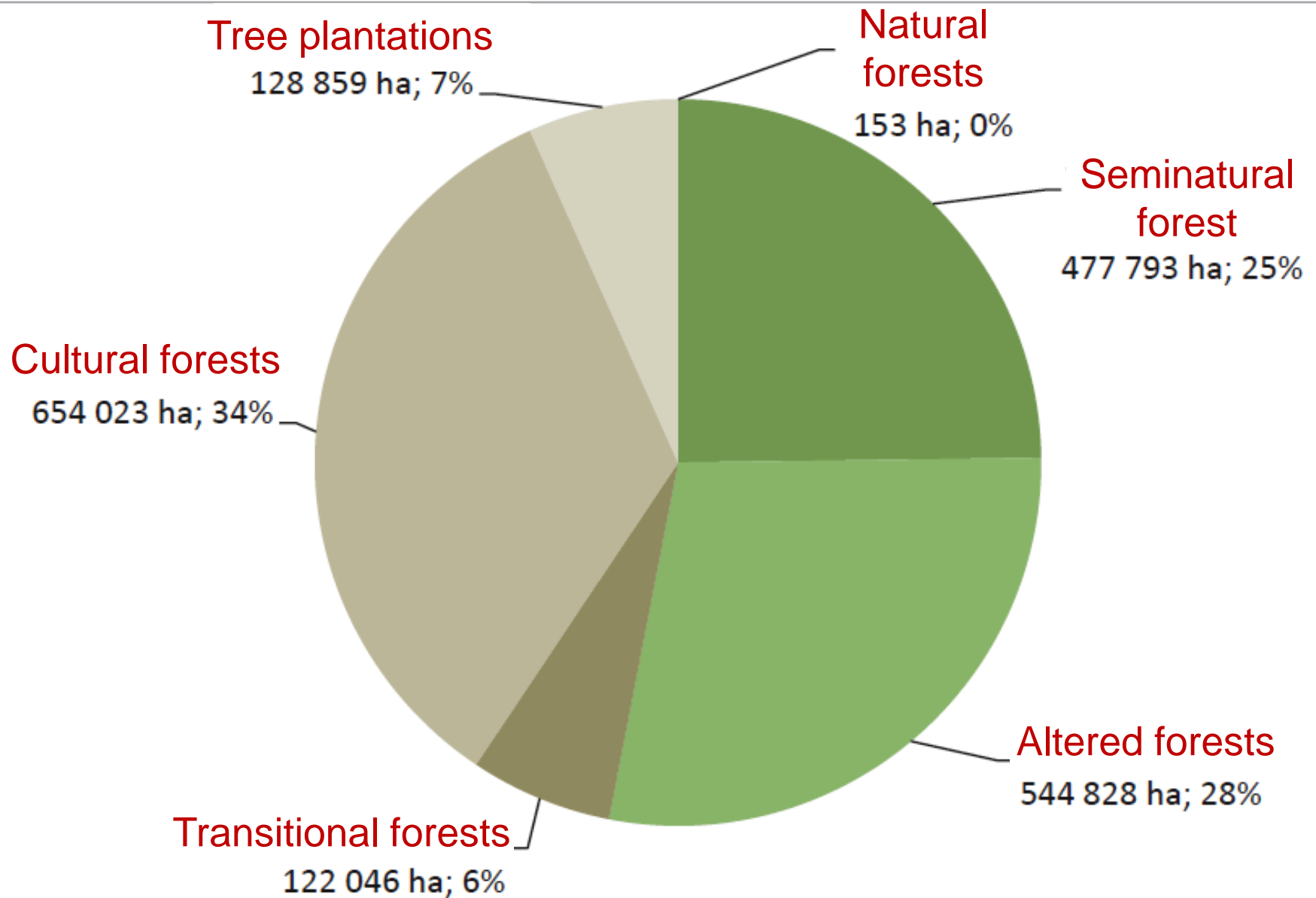


# SCERIN-5 CAPACITY BUILDING WORKSHOP

## Forests in Hungary



# SCERIN-5 CAPACITY BUILDING WORKSHOP

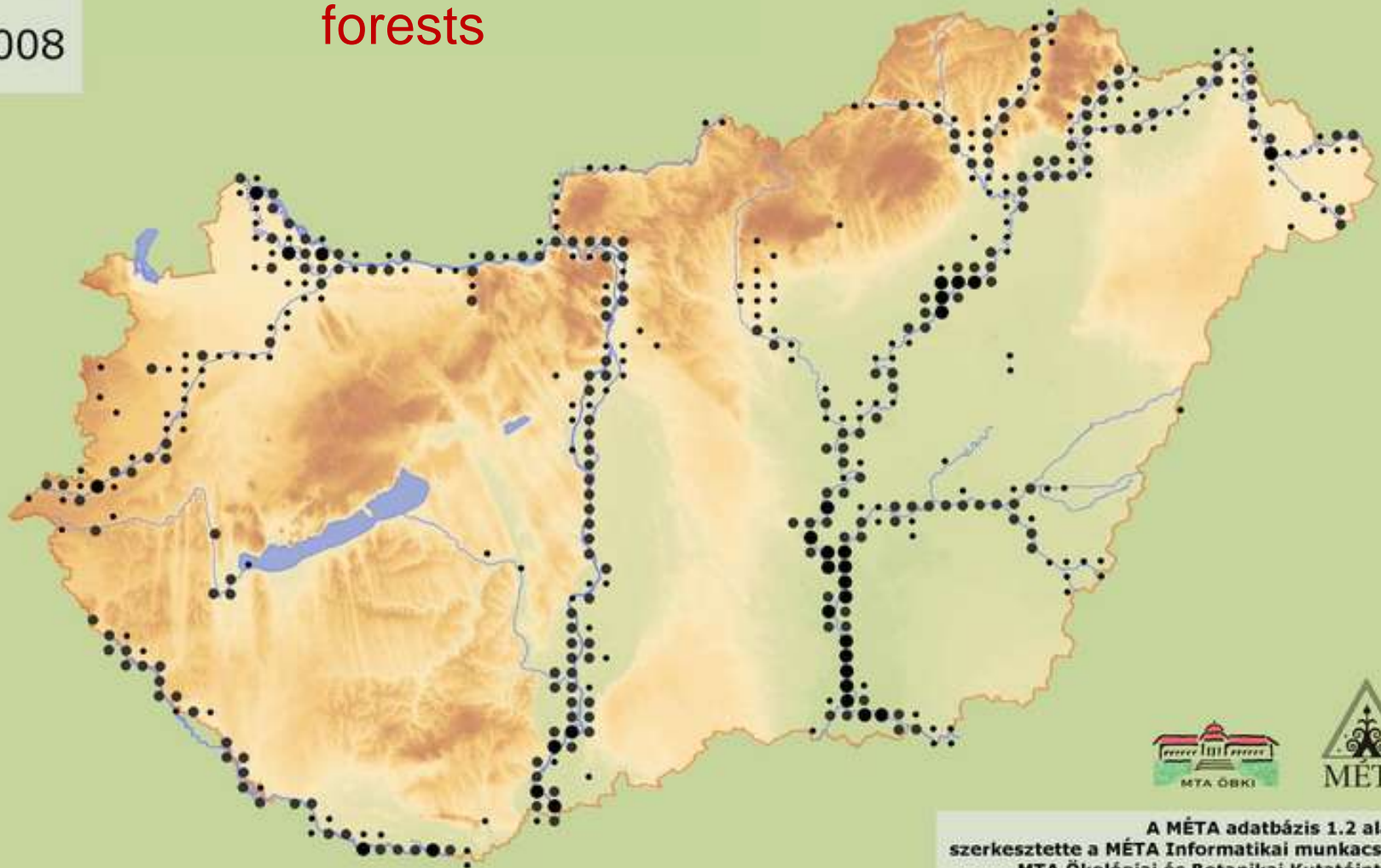


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**J4**

2008

Riverine willow-poplar  
forests



A MÉTA adatbázis 1.2 alapján  
szerkesztette a MÉTA Informatikai munkacsoport  
MTA Ökológiai és Botanikai Kutatóintézete  
Vácrátót, 2008. november



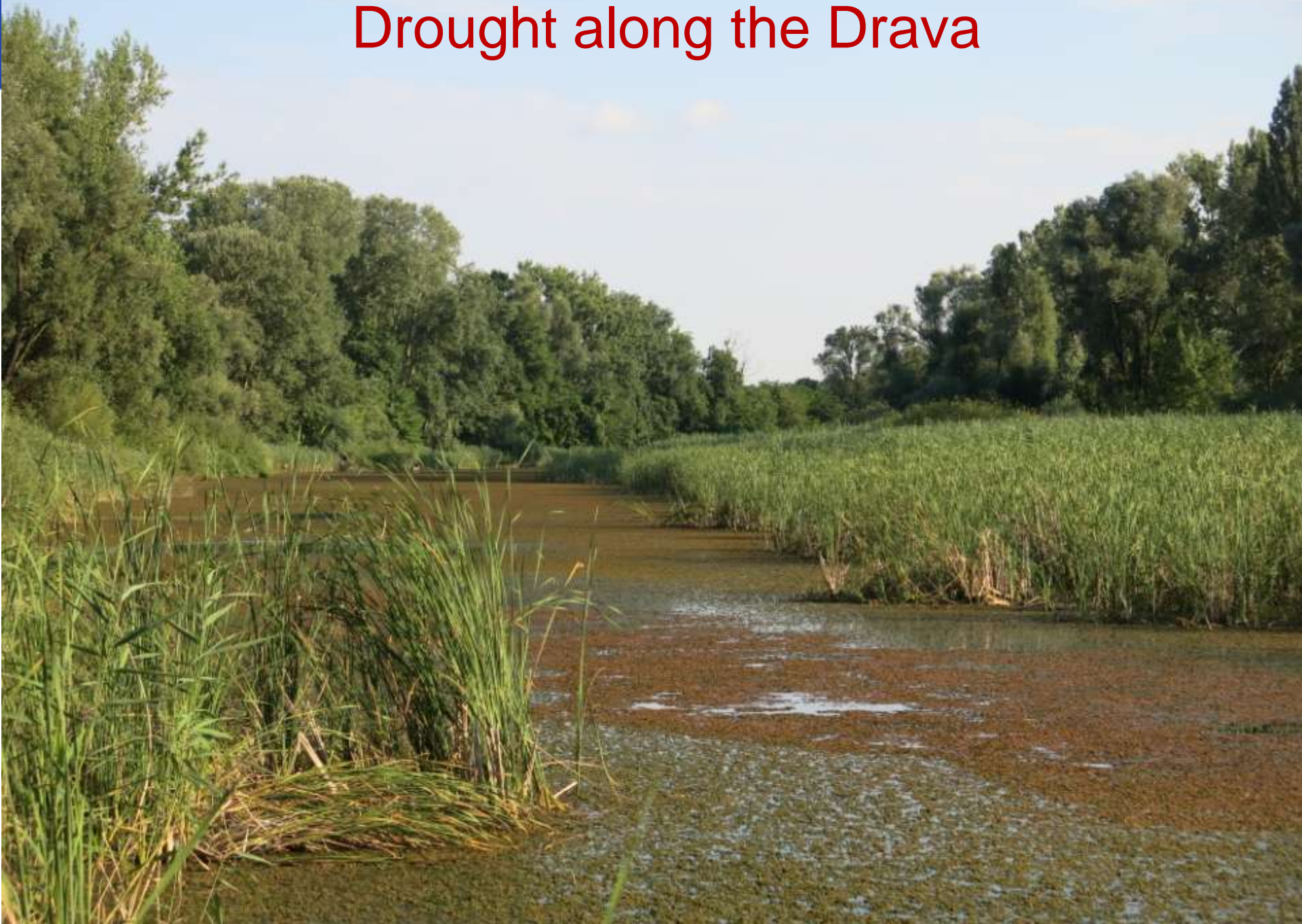
Floodplain forest  
along the Drava

# SCERIN-5 CAPACITY BUILDING WORKSHOP

An economically backward region with cultural jewels



# Drought along the Drava



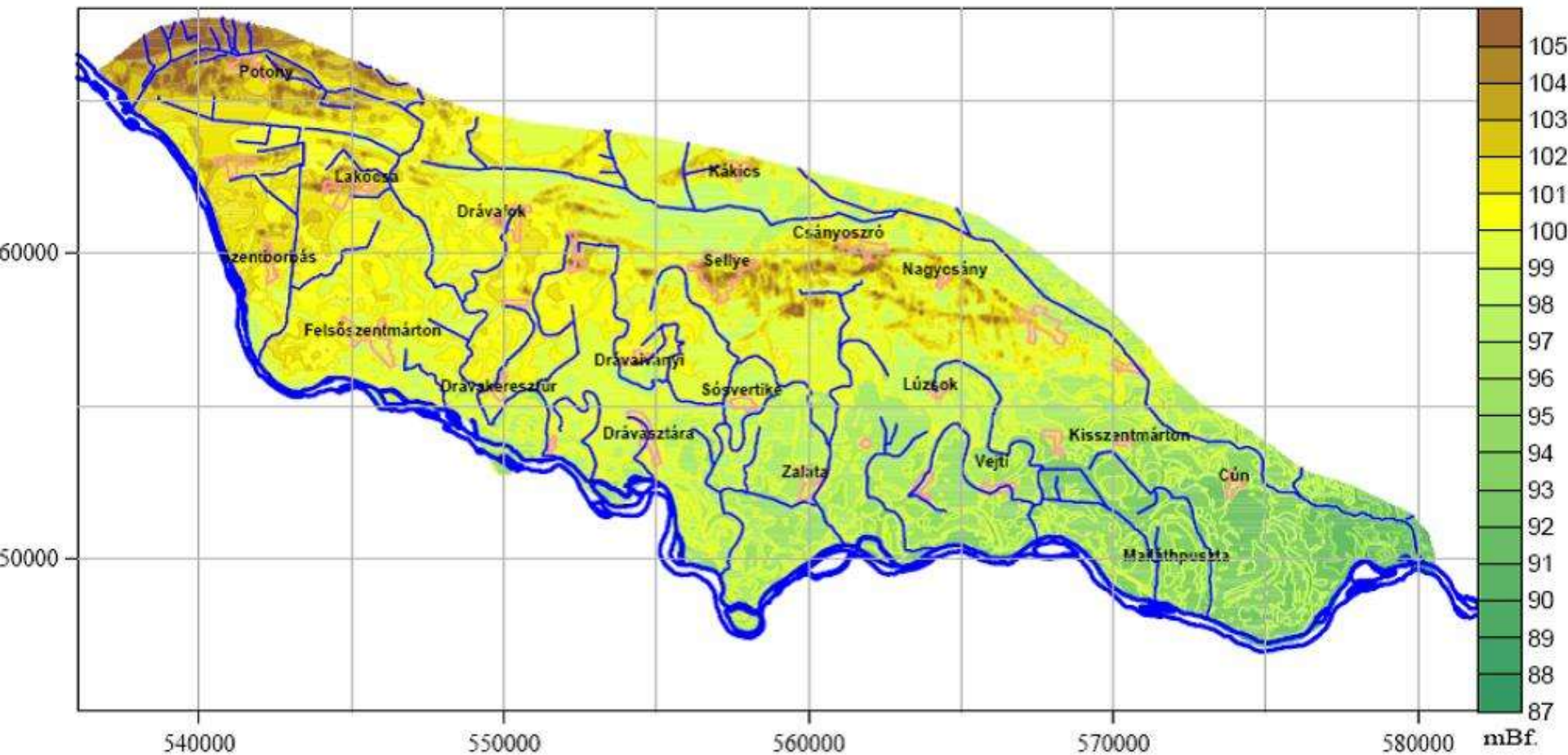


# The Old Drava Project

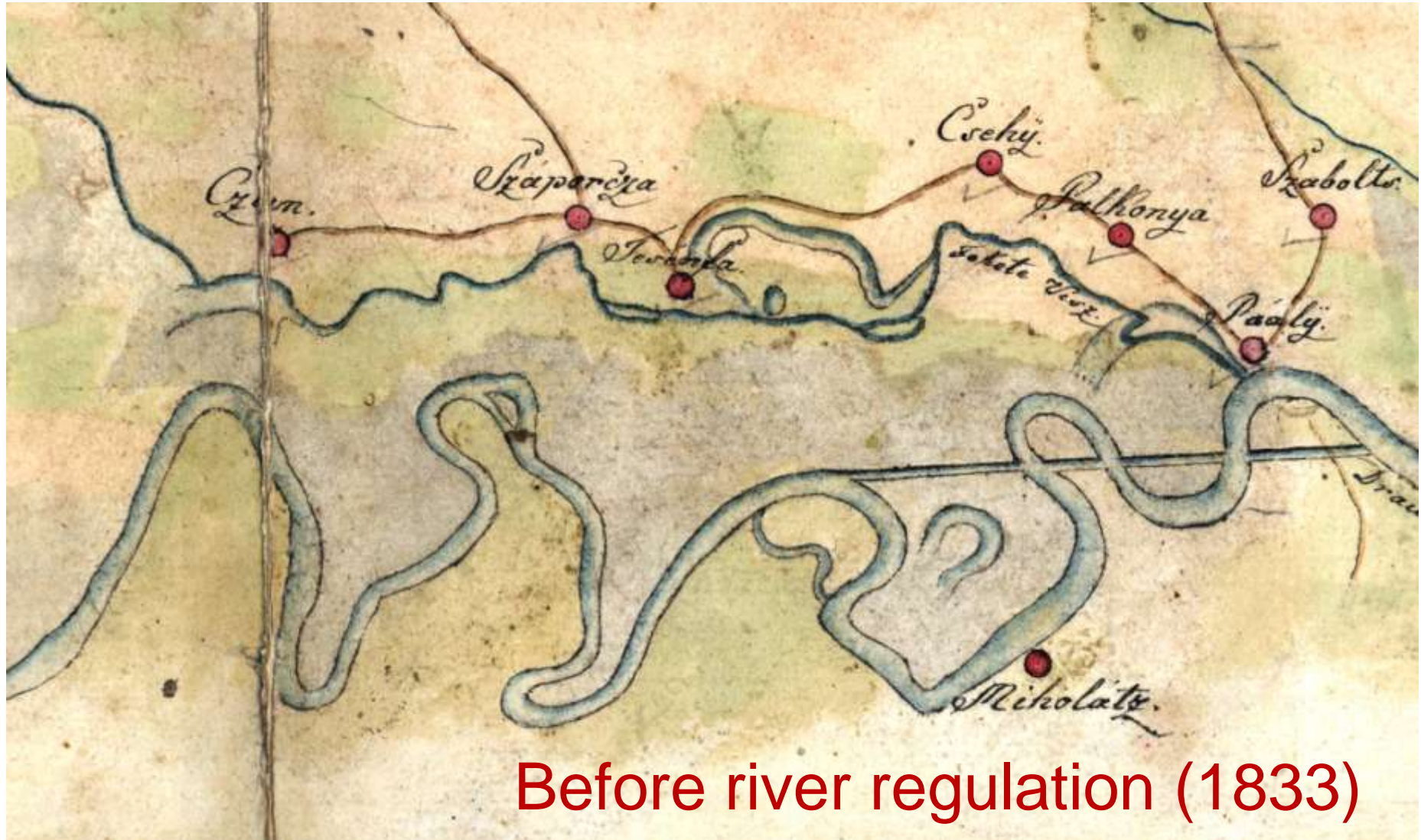
- an ambitious regional development programme
- **landscape management plan**: restoration of some of the traditional and environment-friendly economic activities widespread before river regulation
- a new **water governance** strategy – groundwater replenishment,  
irrigation in 5,000 hectares of agricultural fields  
establishment of 700 hectares of open water surfaces
- **critical points**:  
retention of floodwater through the revitalization of old meandering channels and afforestation  
environmental/ecological flow (ensured by the construction of bottom weirs and flood gates)
- Land management and landscape pattern should be adjusted to the water supply realized by the recharge system, while the scheme primarily intends to meet the water demand of large-scale farming.

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## Old Drava water replenishment network

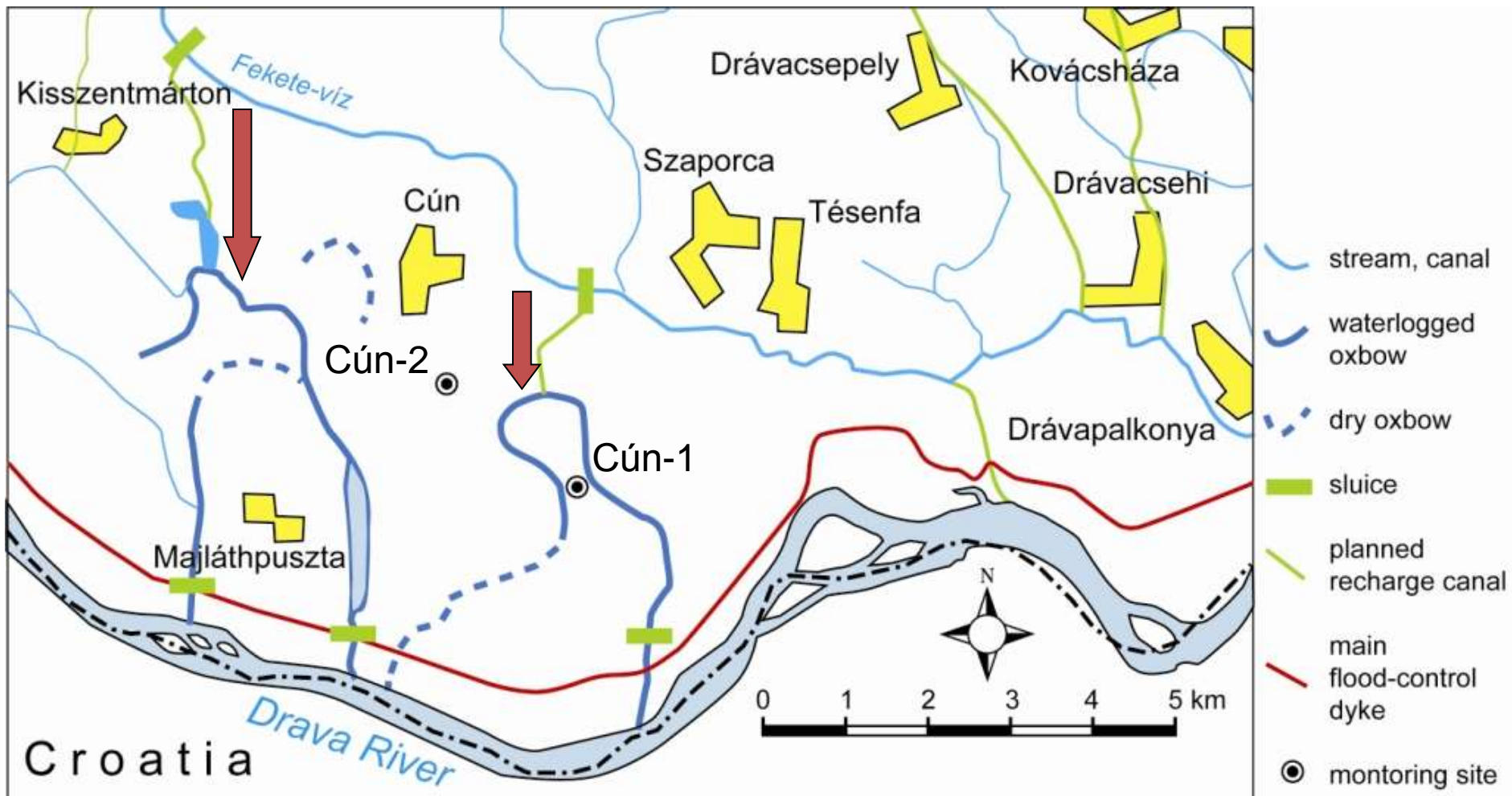


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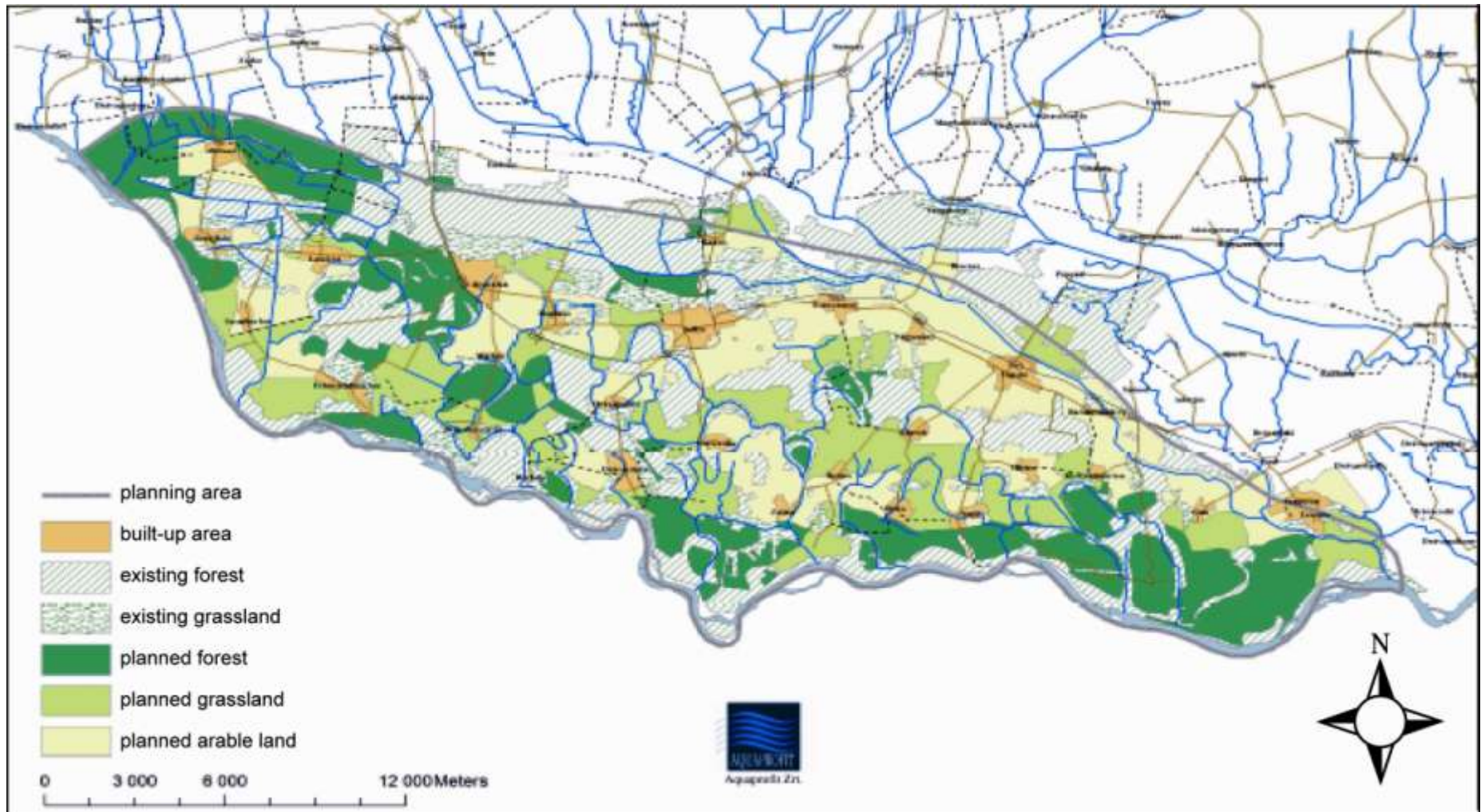


Before river regulation (1833)

# Oxbow rehabilitation project



# Planned land use change



# THANK YOU FOR YOUR ATTENTION!

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