

# River Restoration in Hungary



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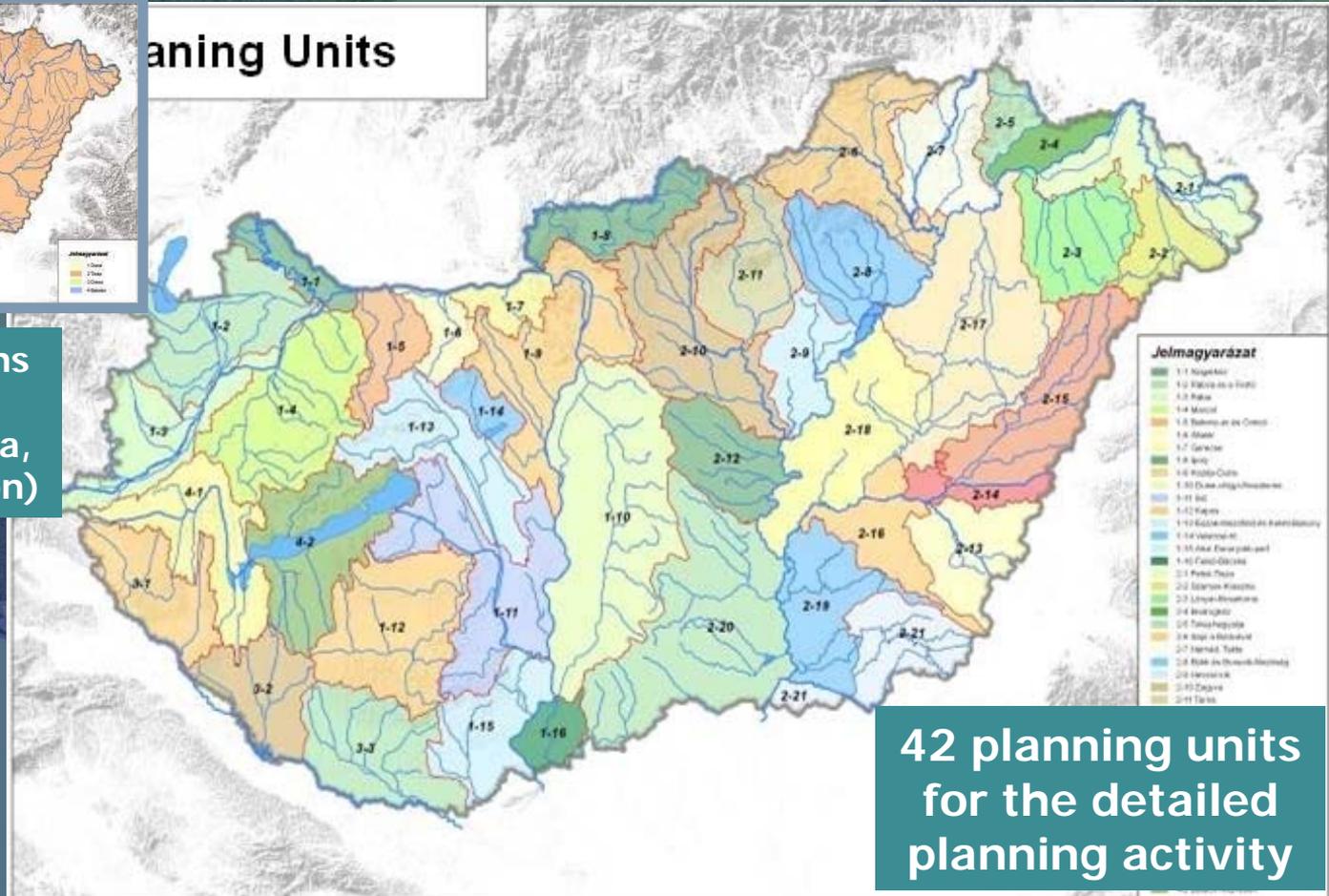
# Sub-basins in Hungary

River Basin Management Plan  
Sub-Basin Regions



4 sub-basins  
(Danube,  
Tisza, Dráva,  
Lake Balaton)

Planning Units



42 planning units  
for the detailed  
planning activity

# Participants in the planning

**Competent authorities:**

**VM, VKKI  
(Ministry and Central Directorate)**

**The plans prepared by:**

**Local directorates in consortium with  
ÖKO Zrt Consulting Co.**

**Participating institutions:**

**Green Authorities, National Park  
Directorates**

**Ministerial / international partners:**

**Other ministries and their national or  
regional institutions  
Neighbouring countries**

**Other interested partners:**

**Municipalities, self governments,  
water boards, professional technical and  
civil organisations, producers, population**

**The plans are endorsed by:**

**Water Councils, VM**

**Participants in the implementation:**

**Local Directorates, Consultants by tenders,  
construction and maintenance companies**

# International cooperation

- Roof report prepared by ICPDR with active Hungarian participation
- Agreement with 7 neighbouring countries in the framework of transboundary commissions



# Programme of Measures by interested fields and offices

- Agriculture and rural development
- Water resources management
- Spatial planning and local government
- Economy, energy and transport
- Nature heritage protection
- Other governance issues



# RBMP of Hungary

- RBMP of Hungary was sent to Bruxelles in due time in December 2009
- Hungarian Government approved the Plan in March 2010.
- Costs of implementation:
  - 2007-2013: 1500 billion HUF (5,3 billion Euro)
  - 2014-2027: 1300 billion HUF (4,6 billion Euro)



# Activities for river restoration

- rehabilitation of river stretches;
- rehabilitation of river side arms and oxbows;
- rehabilitation of canals;
- rehabilitation of reservoirs;
- reconstruction or rehabilitation of smaller water-systems and watercourses;
- rehabilitation of lakes;
- development of navigability on waterways;

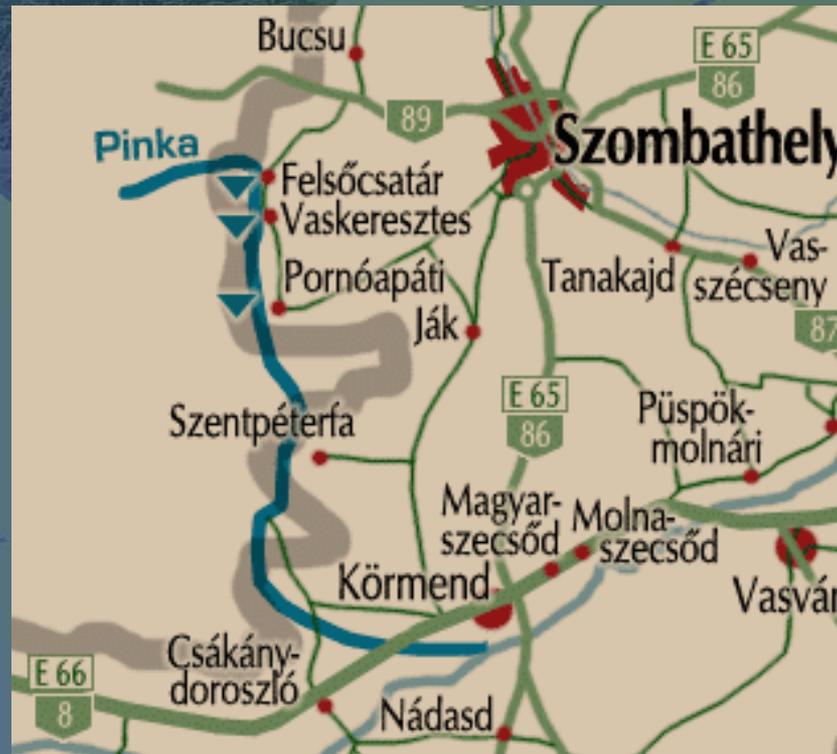


# Activities for river restoration

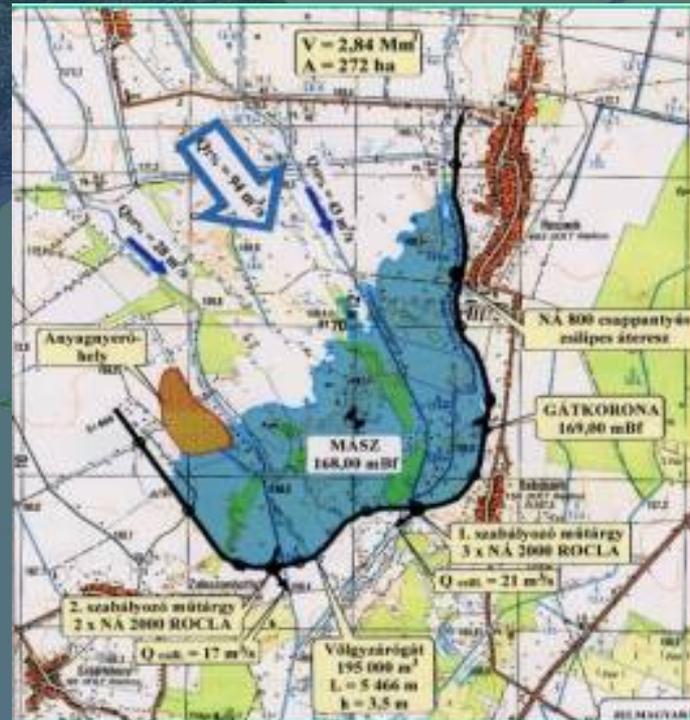
- rehabilitation of natural conditions along the rivers, rehabilitation of wetlands, participation in nature conservancy projects;
- rehabilitation of flood plains;
- rehabilitation of water conveyance capacity;
- development of sustainable flood and inland water protection;
- providing free passages for fishes in the rivers and reservoirs;
- protection of water quality in river systems, water pollution control;



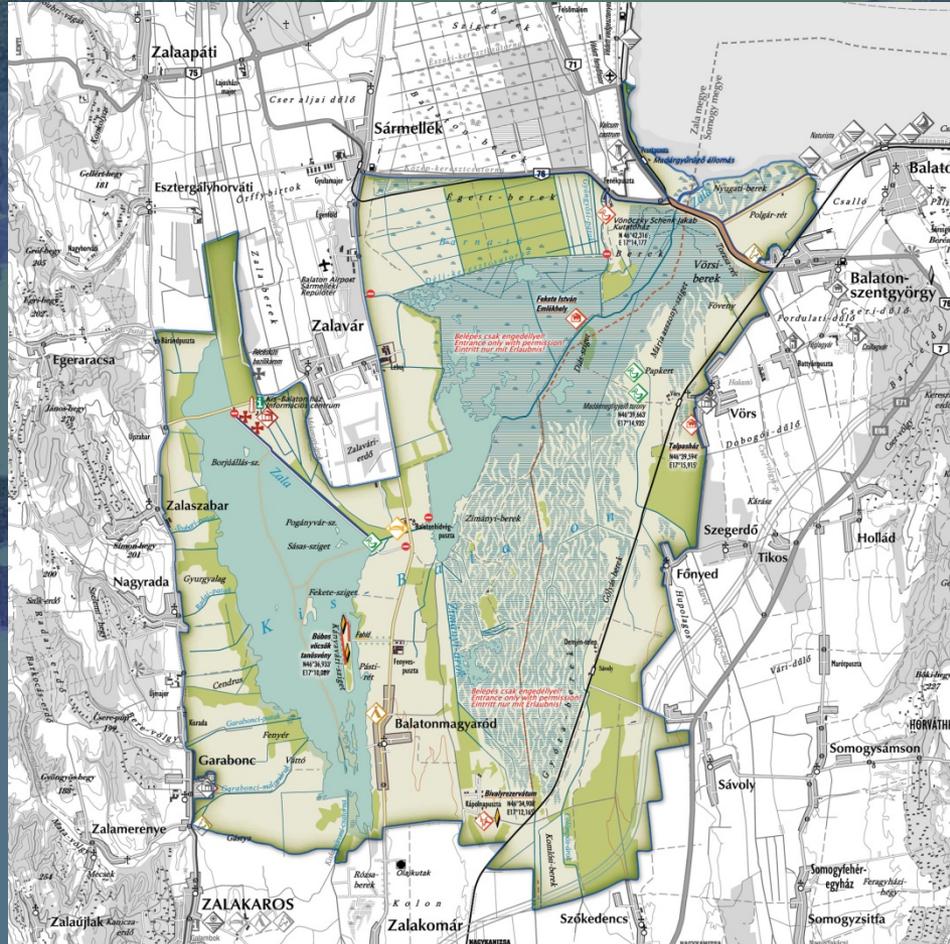
# Reconstruction of smaller water-systems/watercourses: Pinka



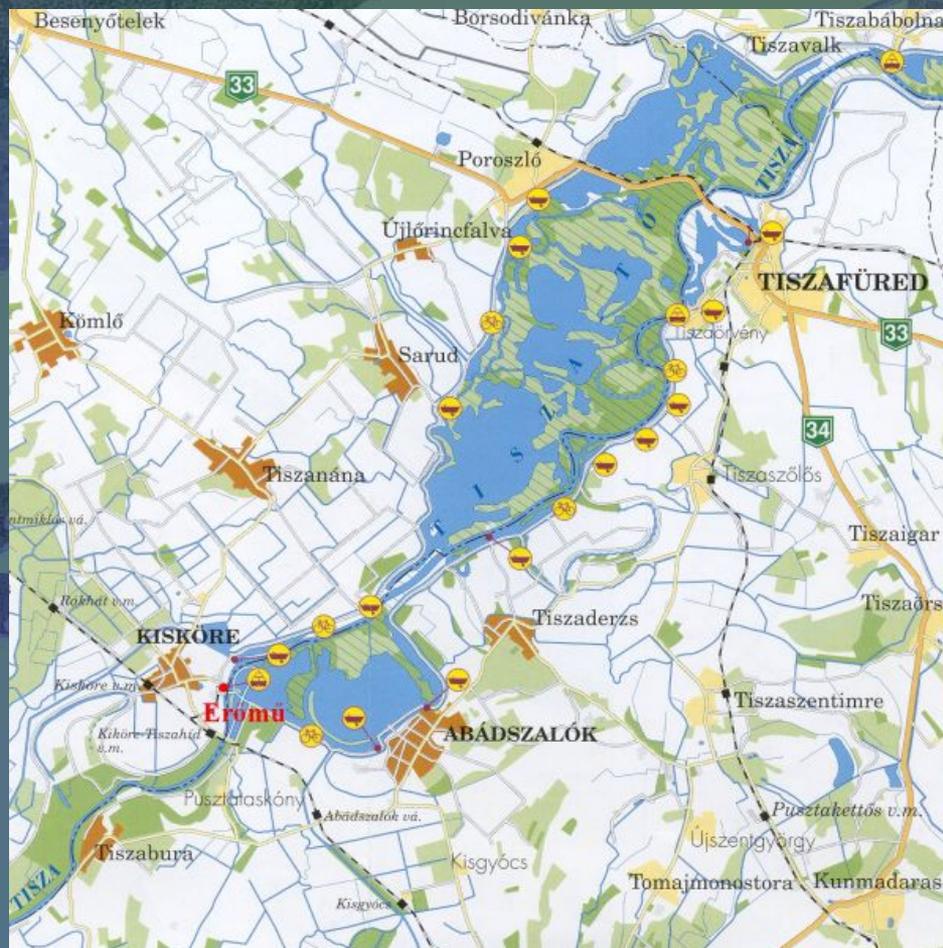
# Kebele water reservoir



# Restoration of lakes – Small Balaton.



# Restoration of lakes – Tisza Lake



# Restoration of lakes – Tata Old Lake (Öreg-tó)



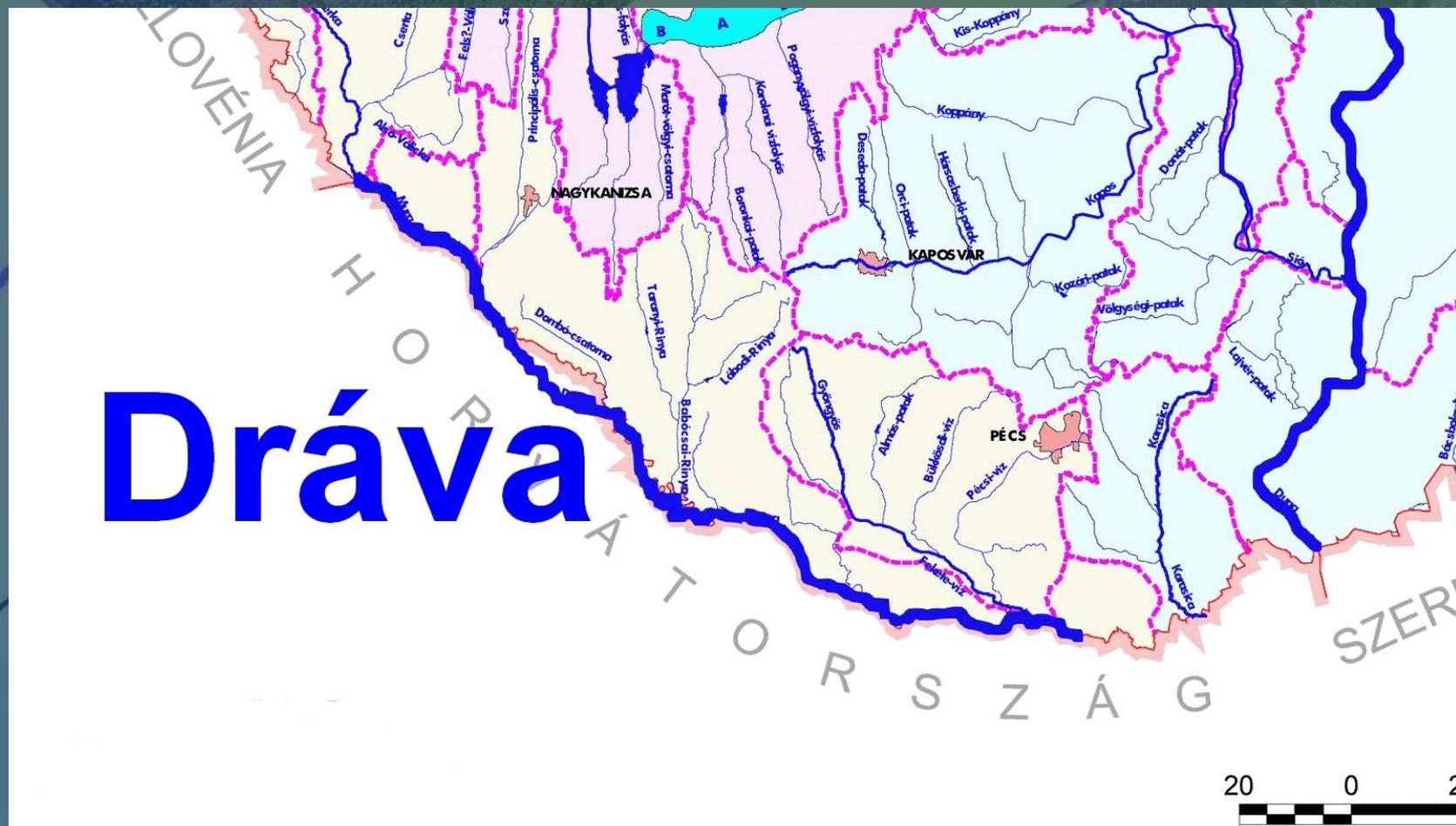
# Development of navigability contributes to the restoration of rivers

Some rivers are important waterways therefore the development of navigability contributes to the restoration of these rivers. Some examples for these type of activities:

- Development of navigability on the Danube river between Dunaszekcső and the the country boundary. It is important from the point of view of development of modal transport on the Danube international waterway.
- Reconstruction works on the Hungarian-Croatian frontier section of the Dráva river help to maintain the safe navigation.



# Hungarian-Croatian frontier section of the Dráva



# Water rehabilitation projects to protect the nature

- wetland rehabilitation,
- water supply for nature protection areas,
- participation in NATURA 2000 programme



# Sustainable river regulation and flood protection

Better sustainability contributes to river restoration by minimising the direct flood protection costs

- Ráckeve-Soroksár side arm of river Danube
- Danube project
- New Vásárhelyi Plan for river Tisza



# Protection of water quality in the river systems

- Hungarian-Slovenian project
- Hungarian-Romanian-French project for the Körös
- Danube GEF project
- Hungarian-Romanian cooperation on the Tur river catchment



# Protection of water quality

## River system: Körösök



# Water pollution caused by communal wastes

- Hungarian-Ukrainian special plastic bottle collection system
- Waste collection system in neighbouring Transcarpathian region



# Managing of environmental risks

- Cyanide pollution on River Tisza in 2001  
(Tisza-Lake water quality was protected)
- Red mud spill from Ajka Aluminium Ltd  
tailing pond in 2010  
(Danube water quality was protected)



# Summary

- **river restoration were made and are in progress almost in the whole area of Hungary**
  - Danube, Tisza, Dráva, Körös River System, Rába, Répce, Pinka, Ipoly), smaller watercourses and lakes
- **flood protection, development and research activities are also important to economise the monetary resources for the sake of river restoration.**



# Latest development: Danube Strategy

- One pillar of the Strategy is „Protecting the environment in the Danube Region”
- Two main goals:
  - to restore and maintain the quality of waters
  - to manage environmental risks

In the future we shall also work actively  
for the restoration of rivers!



**Thank you  
for Your kind attention!**

**Moito obrigado!**

