

# “JASPERS EXPERIENCE WITH EU FUNDED PROJECTS IN THE FLOOD SECTOR”



Rome, 8<sup>th</sup> October 2014

# Introduction JASPERS

## Water Sector



### Who is JASPERS:

- Project advisory facility to EU countries, mainly for major projects
- Assist in Preparation of Structural Fund projects
- Largely funded by EC; managed by European Investment Bank.

### What does JASPERS:

- EC grant approval: 366 projects worth EUR 64.1bn (since 2007)
- 60% of all EU-28 major projects, 95% of all major projects in initial JASPERS countries
- 30% from water sector (*drinking water, wastewater, flood risk management, coastal protection*).

### Further JASPERS support:

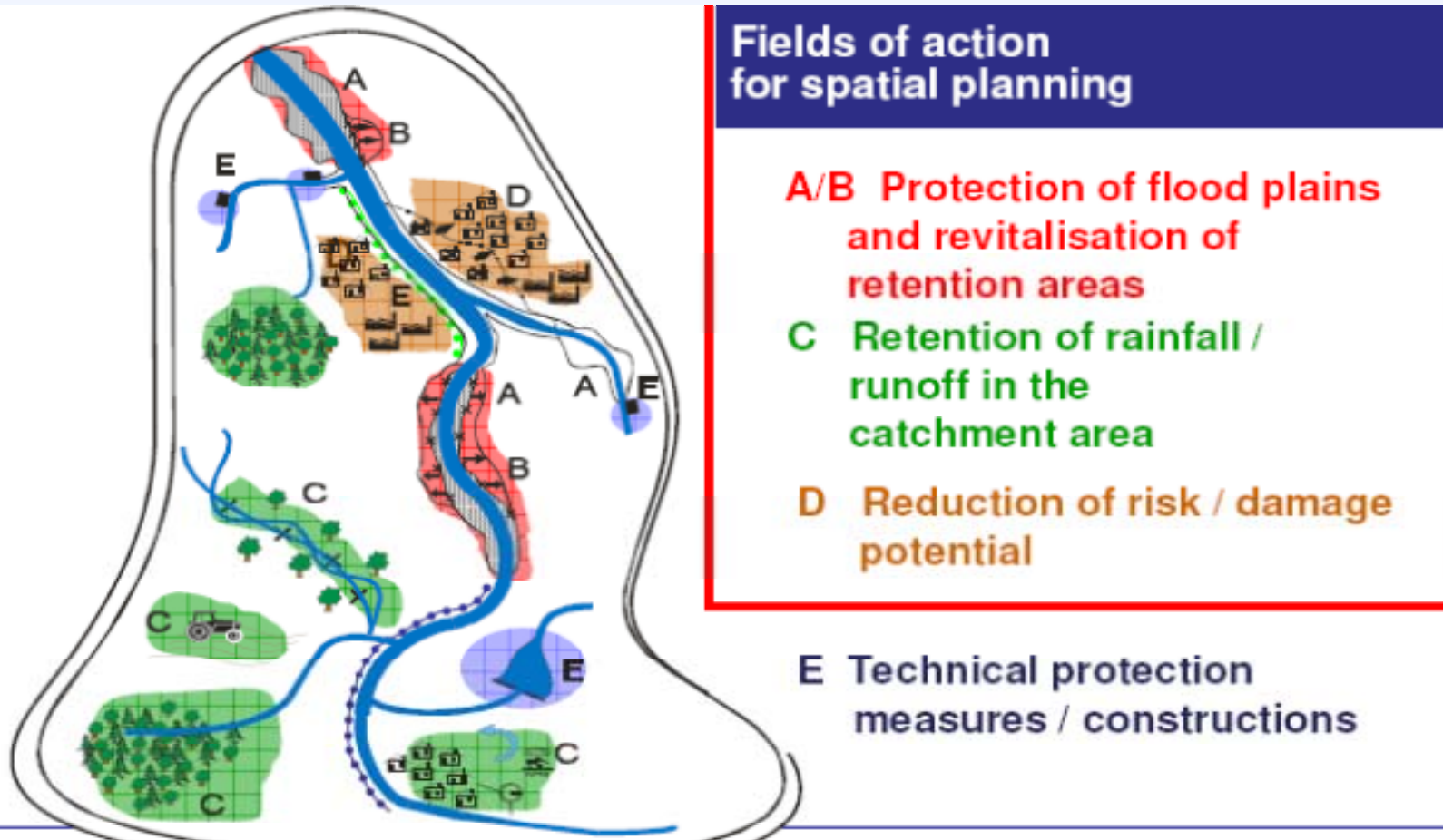
- Selectively for non-major projects, systemic/horizontal issues and focused capacity building/training
- JASPERS Networking Platform: knowledge sharing activities, dissemination of good practices among JASPERS stakeholders (EU Member States, EC, EIB, EBRD)

# Assessment of Flood Projects: Main Challenges

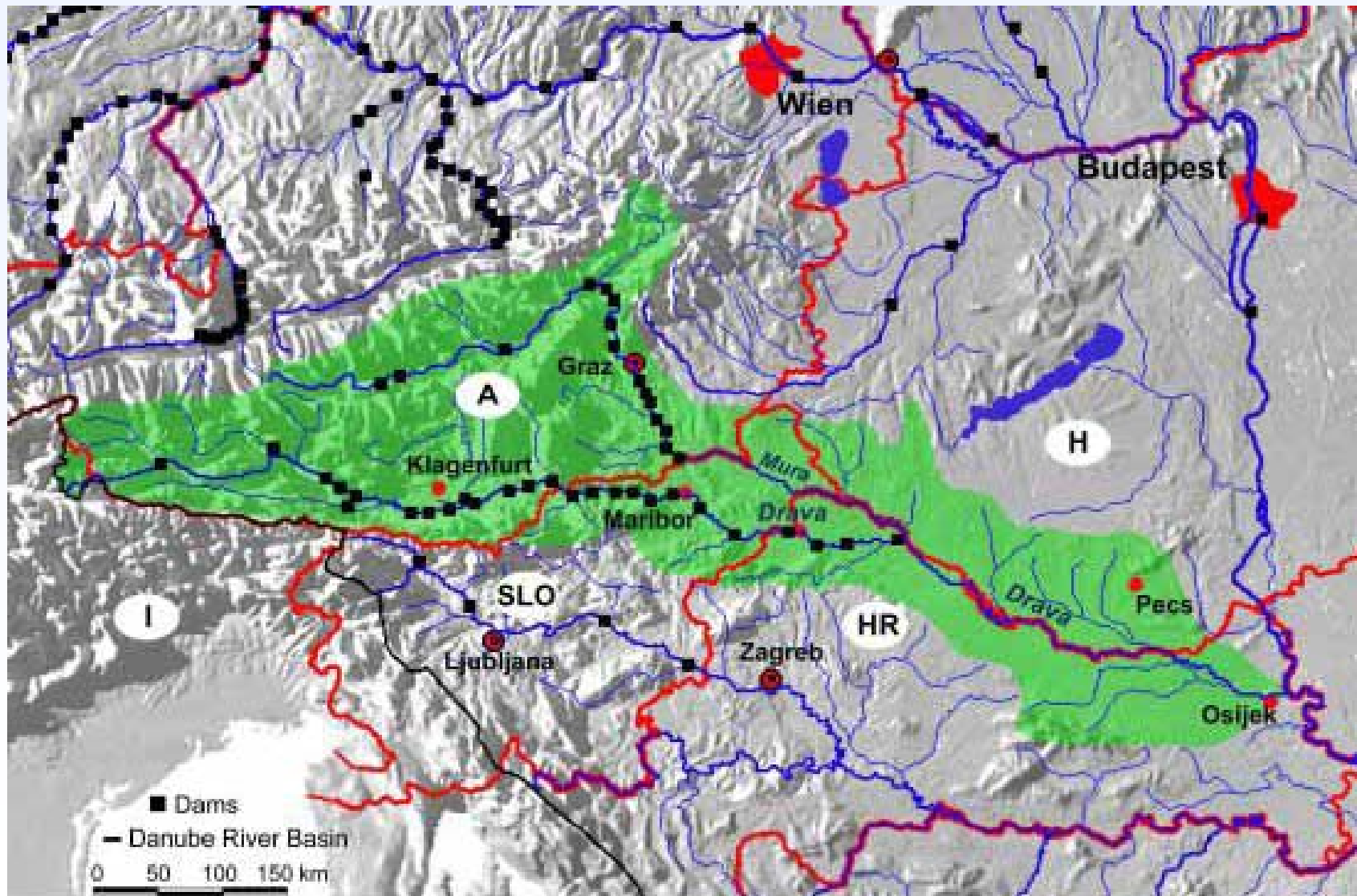
- A. Planning on a River Basin level (National and International)**
- B. Flood modelling**
- C. Combination of Measures (River needs space)**
- D. Overdue maintenance**
- E. Non Structural Measures**

# A. Planning on a River Basin level National and International

- **Advantages are evident but in practice not fully applied**



# Example 1. International river basin approach



## Example 2. River Basin Planning

### ➤ Passing of the flood wave

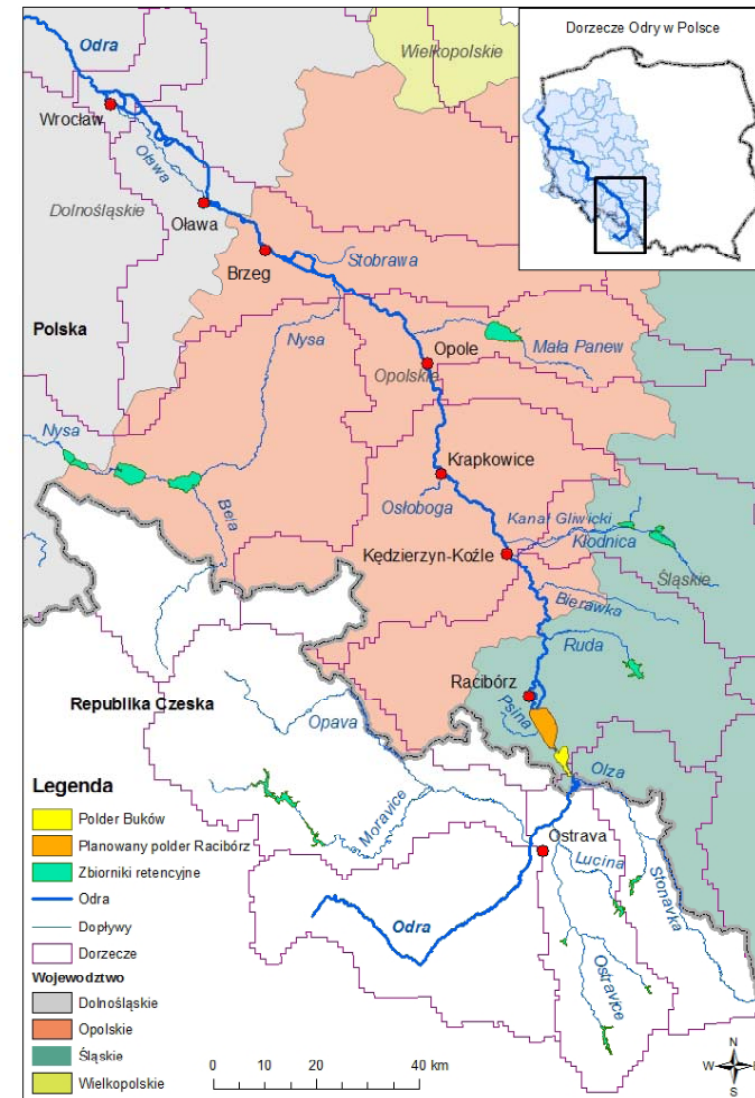
- Restoring dikes
- Hydraulic capacity of the river

### ➤ Upstream retention reservoirs

- On main river, incl. cross border
- On tributaries: tool to avoid coincidence of peak waves

### ➤ Protection of main urban areas

- Safeguarding main assets and population



# B. Flood Modelling

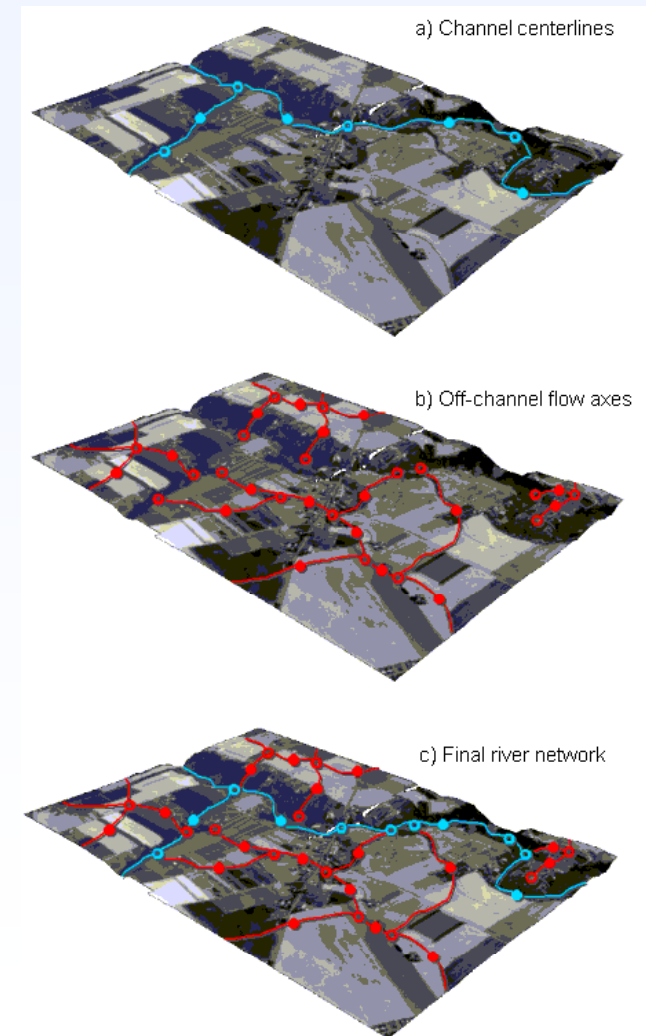
## Issues faced:

- Flood modelling generally applied but not always ‘state of the art’
  - Models from previous, outdated studies (‘protected’ versions)
  - Not always latest modelling techniques
  - Climate change impact included?

## Acknowledged:

- Necessary tool in programme development and operations

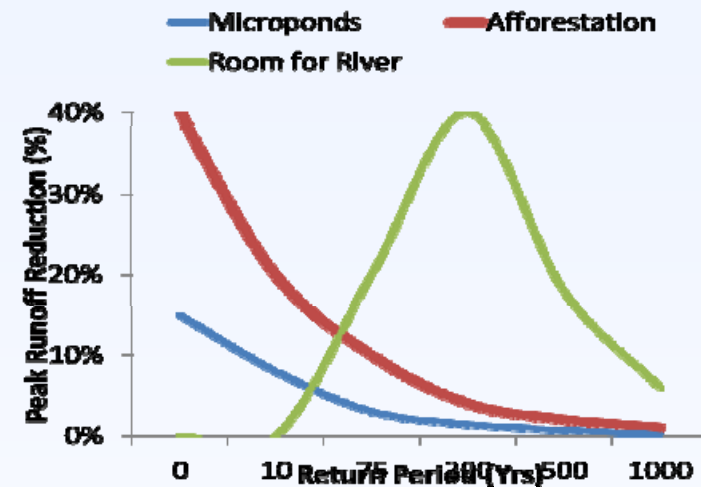
## 1D -2D modelling



## C. Combination of measures Upstream / River needs space

- **Upstream “Giving back to nature” measures are green and effective**
  - Especially high potential on smaller tributaries
  - Less effective for extreme weather events
  - To be used in combination with ‘concrete’ measures
  - Environmental limitations in flood plains (Natura 2000)

- **JASPERS examples:**
  - Forest retention
  - Widening river bed
  - Retention reservoirs



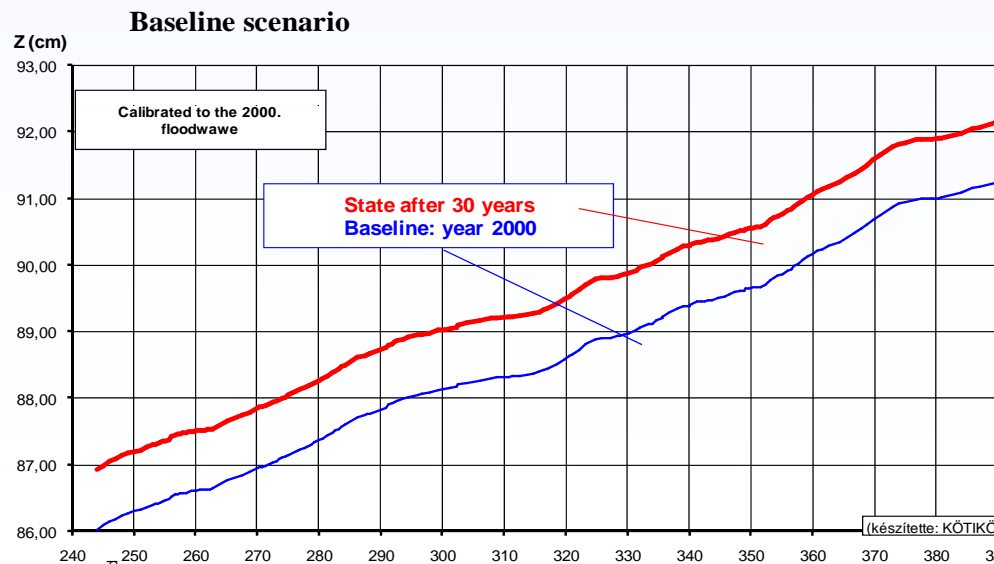


# D. Overdue maintenance: Restoring historical situation

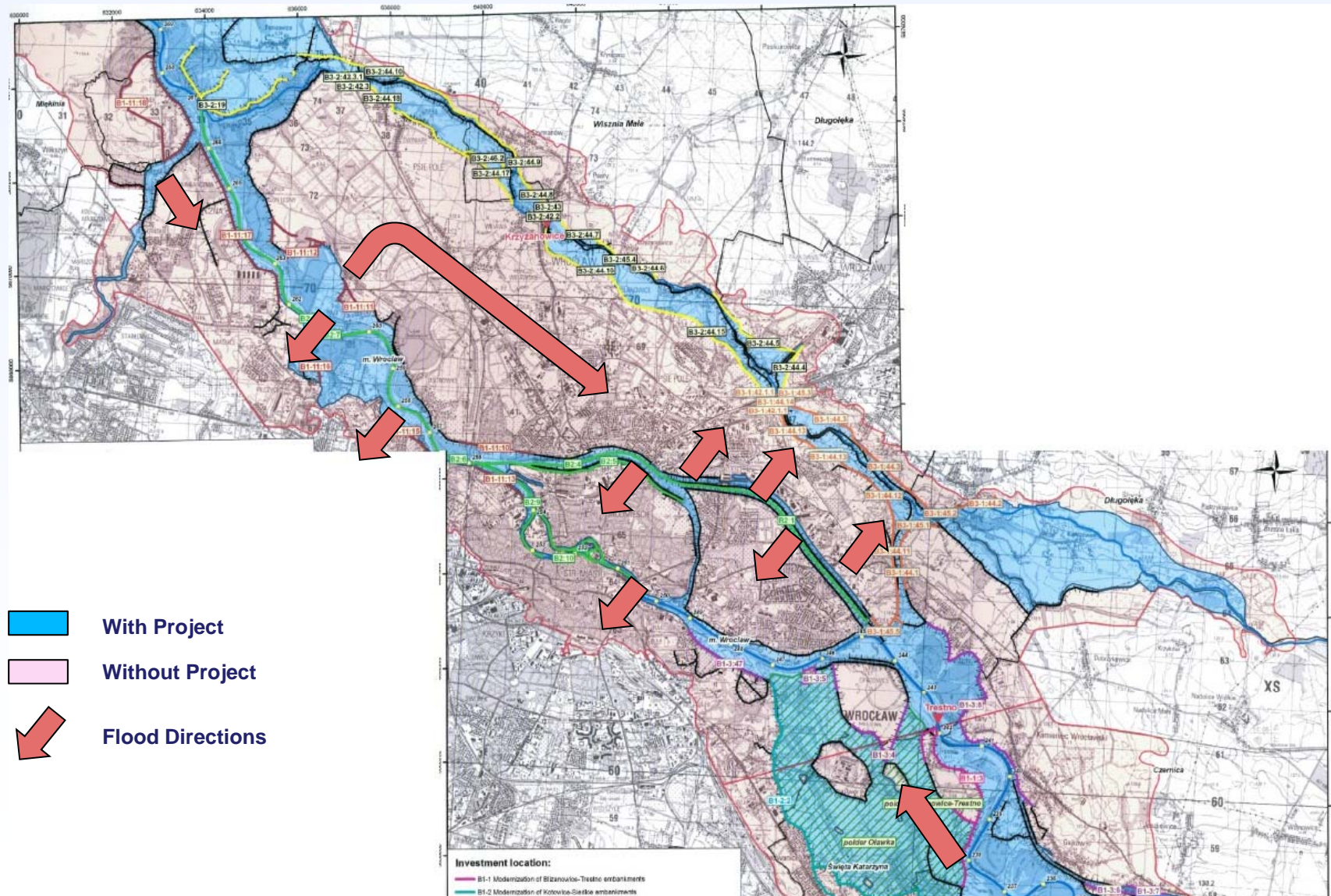
## Overdue maintenance problems:

- Silted and overgrown river beds
- Funding and Management problems
- 'Shock effect': environmentally sensitive

## Dredging: Good or Bad?



# Example: dredging project



# E. Non-structural measures

## Optimise, Plan and Talk

### Large potential for better management tools and systems

- Improved flow management (hydropower operations, etc.)
- International communication
- Take into account climate change
- Spatial Planning
- Let it flood (where possible)



# By the way: Climate Change Workshop

**Brussels, 21-22 October 2014:**

**JASPERS Network Platform Workshop on Thematic  
Objective 5:**

**“Promoting Climate Change Adaptation, Risk prevention  
and Management” in the Water Sector**

**Special attention for the ex-ante conditionality:**

**“The existence of national or regional risk assessments for  
disaster management, taking into account climate change  
adaptations”**

- **Good practice in project development, incl. examples  
from several member states**



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