

dr. Aleš Bizjak
Institute for Water of the Republic of Slovenia

Sustainable Integrated Management of
International River Corridors in SEE Countries
(SEE River)

Contemporary River Corridor Management: From local to transboundary level, from top down to bottom up

European River Restoration Conference
Vienna, 13 September 2013

Content of the presentation

- Drava River Vision Declaration 2008
- SEE River project: basic information
- Challenges of contemporary river corridor management
- SEE River project approach and main expected results
- Contribution of the SEE River Session and its participants to the SEE River project and to the ERRC 2013

Drava River Vision Declaration 2008

Drava River Vision Declaration 2008

- Initiated by the **Drava River Vision International Symposium of LIFE project Life Vein Upper Drau River (Carinthian Government)** in September 2008
- At the Symposium the **Drava River Vision Declaration** was signed by 5 high officials from riparian states Italy, Austria, Slovenia, Croatia and Hungary
- **Over 120 participants**, including 14 present SEE River project partners and observers, attended the Symposium



Drava River Vision Declaration 2008

DECLARATION



DECLARATION

concerning common approaches to water management, flood protection, hydropower utilisation and nature and biodiversity conservation in the Drava River basin

Based on the holding, from 23 to 25 September 2008 in Maribor, Slovenia, of the International Symposium "Drava River Vision", in which representatives from water management and nature conservation bodies, education institutions and nongovernmental organizations (NGOs) from the Drava River riparian states Italy, Austria, Slovenia, Croatia and Hungary participated in response to popular demand for the protection and maintenance of the river landscape of the Drava River across the different national borders concerned, and in order to strive for a good status of the river, aspiring to support and strengthen existing strong common approaches to water management, flood protection, hydropower utilization and biodiversity conservation in the river basin, offering our intention to cooperate in the conservation, administration and further appropriate development of the Drava River and its associated topographical, hydrological and ecological systems.

PRESENT SITUATION:

The Drava River (Italian: Drava, German: Drau, Slovenian: Drava, Croatian: Drava, Hungarian: Dráva) is a tributary of the Danube, and has its source at Tatzlach (Italy), approximately 1,450 m above sea level. It flows through Italy, Austria, Slovenia, Croatia and Hungary, and discharges into the Danube at Orsiak (Croatia) at approximately 90 m above sea level. With a length of 746 km and a median flow of 360 m³/s, the Drava River is the fourth largest tributary of the Danube.

The Drava River basin is rich in natural resources of water and raw materials, and offers huge potential for sustainable development.

During past centuries, large-scale human activities in the Drava River basin have been carried out. In the last decades, however, large-scale human activities have been reduced. In the last decades, however, large-scale human activities have been reduced. In the last decades, however, large-scale human activities have been reduced.

Along the Drava River there are important and well preserved ecological core zones, with a huge diversity of animal and plant species. Many of these areas have been placed under protection by the governments concerned, through protection regimes such as National Parks and Nature Parks, and they form part of the "Natura 2000" European protected areas network. In the EU candidate country Croatia, the nomination of suitable Natura 2000 areas is in preparation, alongside other national protected area designations. The EU has supported many river restoration and rehabilitation projects in recent years, which have several flood protection objectives as well as the conservation of wild fauna, flora and habitats. Increasing areas of natural inundation has been a benefit not only for rare and endangered wildlife but also for the status of the waters.

Overall there has been an obvious improvement in the water quality of the Drava River in recent decades. This has been achieved by the connection of numerous settlements and industrial plants to sewage systems and wastewater treatment plants, which generally operate at high efficiency. There is, nonetheless, still a need for action in several areas.

The International Symposium "Drava River Vision" is a part of the LIFE Project "The New Upper Drava River".

47 | DRAVA RIVER VISION



DECLARATION

To secure the values and ecological functions of the Drava River basin for generations to come, we agree the following ten objectives as priorities for the future.

1. To promote the Drava River as a model for integrated implementation of EU policies on water and nature protection

The EU Directives on water management (Water Framework Directive), flood protection (Flood Directive), and biodiversity conservation (Habitats Directive and Birds Directive) constitute a fundamental basis for river basin management in the Drava River catchment. Integrational coordination and exchange of information can positively reinforce the implementation of relevant policies.

2. To enhance flood protection through the improvement of flood warning systems and through increased information exchange

Flood protection in the Drava River basin is a shared responsibility of all riparian countries. To give warnings in flood prone areas at an early stage, flood risk must be detected sufficiently early to provide time for people to react in a context of cross-border coordination and climate change along the Drava River, emphasis should be given in future to the improvement and adjustment of flood warning systems.

3. To enhance flood protection through the improvement of flood warning systems and through increased information exchange

Recent insights – particularly those relating to the impact of climate change – find river security measures for protection from floods alone may not provide the most effective solutions. In the face of climate change and an expected increase in extreme flood events, we aspire to an improvement in the flood situation and raising the level of system security along the Drava River – this means in the first instance preservation, and then, where necessary and feasible, cessation or reduction of other water retention areas.

Water retention areas (reservoirs) can provide important services of water regulation and flood protection. Further river restoration and related river projects with these multiple benefits will be encouraged, both on national level and in a transboundary context, taking into account the economic capacities of particular states.

5. To maintain and further develop the Drava River as an "ecological backbone"

Ecological core zones along the Drava River such as Natura 2000 areas, nature conservation areas, landscape conservation areas or free flowing river sections form an "ecological backbone" of the river basin. This transboundary landscape network has to be safeguarded through river transboundary cooperation. The establishment of riparian protected area systems such as the proposed UNESCO Biosphere Reserve "Danube-Drava-Mura" across five riparian countries forms a key part of this, and will be supported.

6. To reestablish the ecological connectivity of the Drava River for migratory fish

As a result of numerous barriers, the Drava River is no longer possible for fish migrating over long distances. In the future we aim to cooperate in establishing appropriate measures, including fish passes and fish ladders, to support fish migration in the Drava River and its tributaries, in accordance with the objectives of the Water Framework Directive and the Habitats Directive.

The International Symposium "Drava River Vision" is a part of the LIFE Project "The New Upper Drava River".

48 | International Symposium / 23 - 25 September 2008 / Maribor, Slovenia

DECLARATION



7. To establish the Drava River as a cross-border recreation area

The Drava River provides an attractive location for holidaymakers. A 366 km Drava River cycle path leads from the river's source to Maribor in Slovenia. Opportunities for sustainable regional recreation developments of this kind, based on the Drava River's intrinsic values, should be further explored. We aim to enhance the quality of the Drava River's environment for those who seek recreation and relaxation in an attractive landscape setting.

8. To use opportunities for the Drava River to be a connecting lifeline for different nations

After many years of fragmented approaches, today's more unified Europe offers new opportunities to bring together the people of many different origins who live in the Drava River basin. Those responsible for water management and nature conservation in each country will initiate new dialogues with their counterparts in the other riparian countries, in coordinated efforts towards the shared aim of a high quality of life for the people in this region.

9. To undertake integrated river basin management rather than fragmented sectoral measures

International agreements concluded in recent years such as "Agenda 21" and EU Directives such as those on Water, Floods, Flora, Fauna and Habitats, Wild Birds and Sustainable Energy Sources, together with the shift in social perception which these texts represent, strengthen the ongoing development of more sustainable approaches in the field of flood protection and hydropower. Modern approaches to industries such as these, therefore, in a context of integrated river basin management, seek to integrate economic, ecological and social aspects. Harmonized planning of water management, flood protection, hydropower use, recreation and biodiversity conservation can lead to sustainable solutions that also have higher public acceptance.

10. To undertake further development of the Drava River area in partnership with its resident human populations

Those engaged in agriculture, forestry, tourism, energy production and economic development, as well as residents in urban environments, are all part of the Drava River basin. It is important to bring the objectives of sustainable development of the Drava River into line with the needs of these different sectors, in order to ensure any conflict between ecosystem values and economic development is resolved.

Signatures and signal for full support of the Drava River Vision Symposium, Maribor, 24 September 2008

by the Heads of Delegation of the International Commission for the Protection of the Danube River from the Danubian States Austria, Croatia, Hungary and Slovenia and by the Director of the Department for Hydraulic Engineering of Bolzano, South-Tyrol in Italy.

Richard Stodler
Austrian HCD to the ICPR

Zeljko Orsagic
Croatian HCD to the ICPR

Gyula Hollo
Hungarian HCD to the ICPR

Willy Bissler
Slovenian HCD to the ICPR

Rudolf Pullinger
Italian Representation Hydraulic Engineering

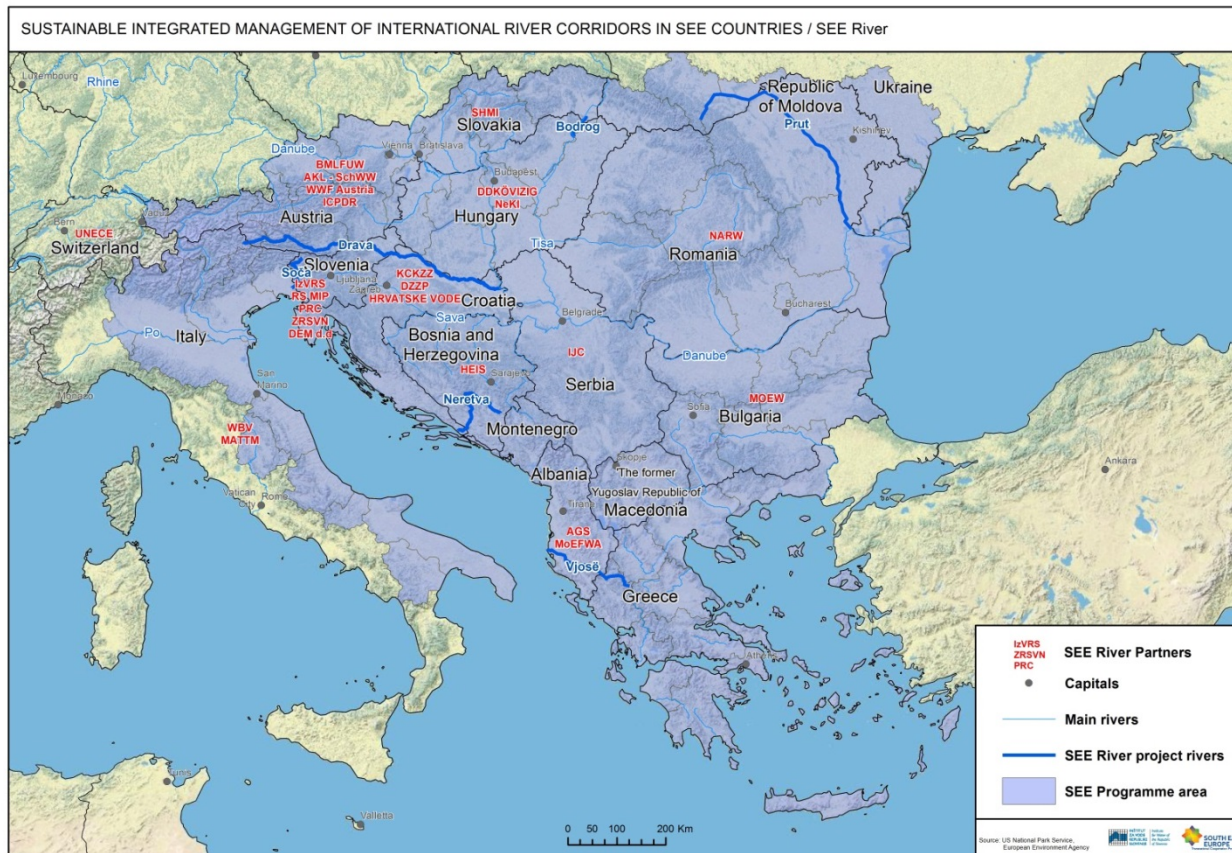
and adopted by the Participants at the Drava River Vision Symposium.

Let us join forces in the conservation and sustainable development of the Drava River – an aquatic ecosystem functioning as a corridor of recovery in the heart of Europe!

The International Symposium "Drava River Vision" is a part of the LIFE Project "The New Upper Drava River".

SEE River project: basic information

SEE River – basic information and partnership



THE PROJECT

- project funded by the South East Europe Territorial Cooperation Programme
- lead Partner: Institute for Water of Republic of Slovenia
- project Partners: 26 from 11 countries (22 +4 international)
- project duration: 1 October 2012 – 30 September 2014
- total project value: 2,107,354.30 € (85% co-financed by EU)

THE PARTNERSHIP

- different sectors
- different administrative levels
- different types of organisations
- partners from 5 Drava-riparian states (IT, AT, SI, HR, HU)
- partners, representing territories of 5 other rivers: Bodrog, Neretva, Prut, Soča, Vjosa (SK, BiH, RO, RS, AL)

SEE River pilot transboundary rivers



SEE River pilot transboundary rivers

	Fiscalina (I) (60 km ²)	Drau (A) (60 km ¹)	Drava (SI) (50 km ¹)	Drava (HR) (60 km ²)	Drava (H) (40 km ²)
flood protection	X	X	X	X	
nature conservation	X	X	X	X	X
forestry	X			X	X
agriculture	X				X
land use	X			X	
tourism	X				X
transport	X				
hydropower utilisation			X	X	
minning				X	
navigation					X
fishing					X

SEE River pilot transboundary rivers



Challenges of contemporary river corridor management

Contemporary River Corridor Management

- *operates on combination of local, regional, national and transboundary levels,*
- *ensures accomplishment of all protective and developmental sectoral goals, initiatives and measures as well as interests of riparian local communities,*
- *respects accomplishment of good water status, flood risk reduction, biodiversity preservation and other state based demands,*
- *involves stakeholders from relevant sectors from the very beginning of the planning proces,*
- *considers supposition that water needs more space than we usually do understand in our perception, planning and activities.*

Challenges of CRCM

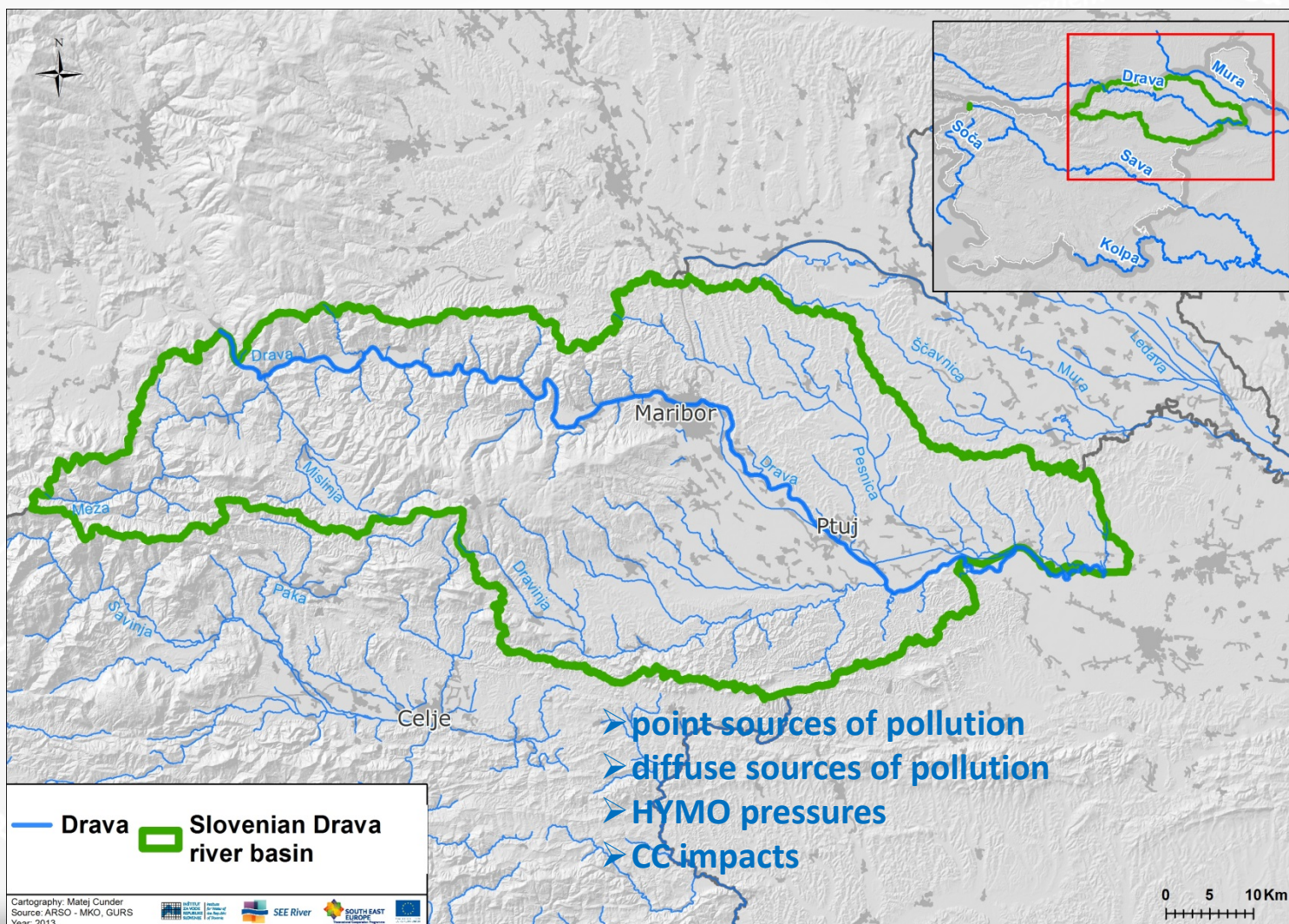
Challenges of contemporary river corridor management:

- *Determination of the area of work – the river corridor.*
- *Determination of the vision of the river – what is a contemporary river?*
- *Cross-sectoral approach with early involvement of stakeholders..*
- *Top-down and bottom up approach and combinations.*

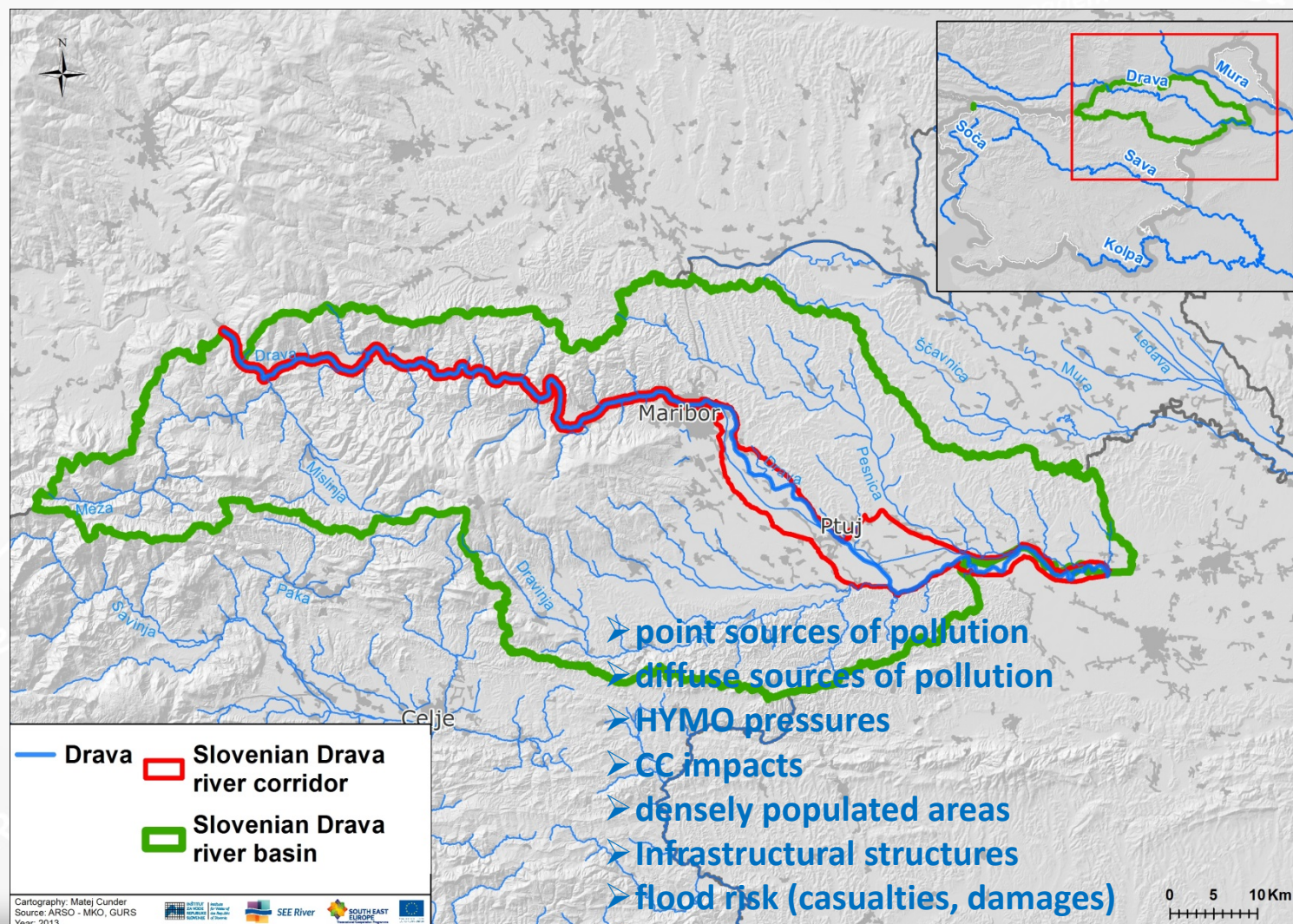
(1)

Challenges of CRCM: river corridor determination

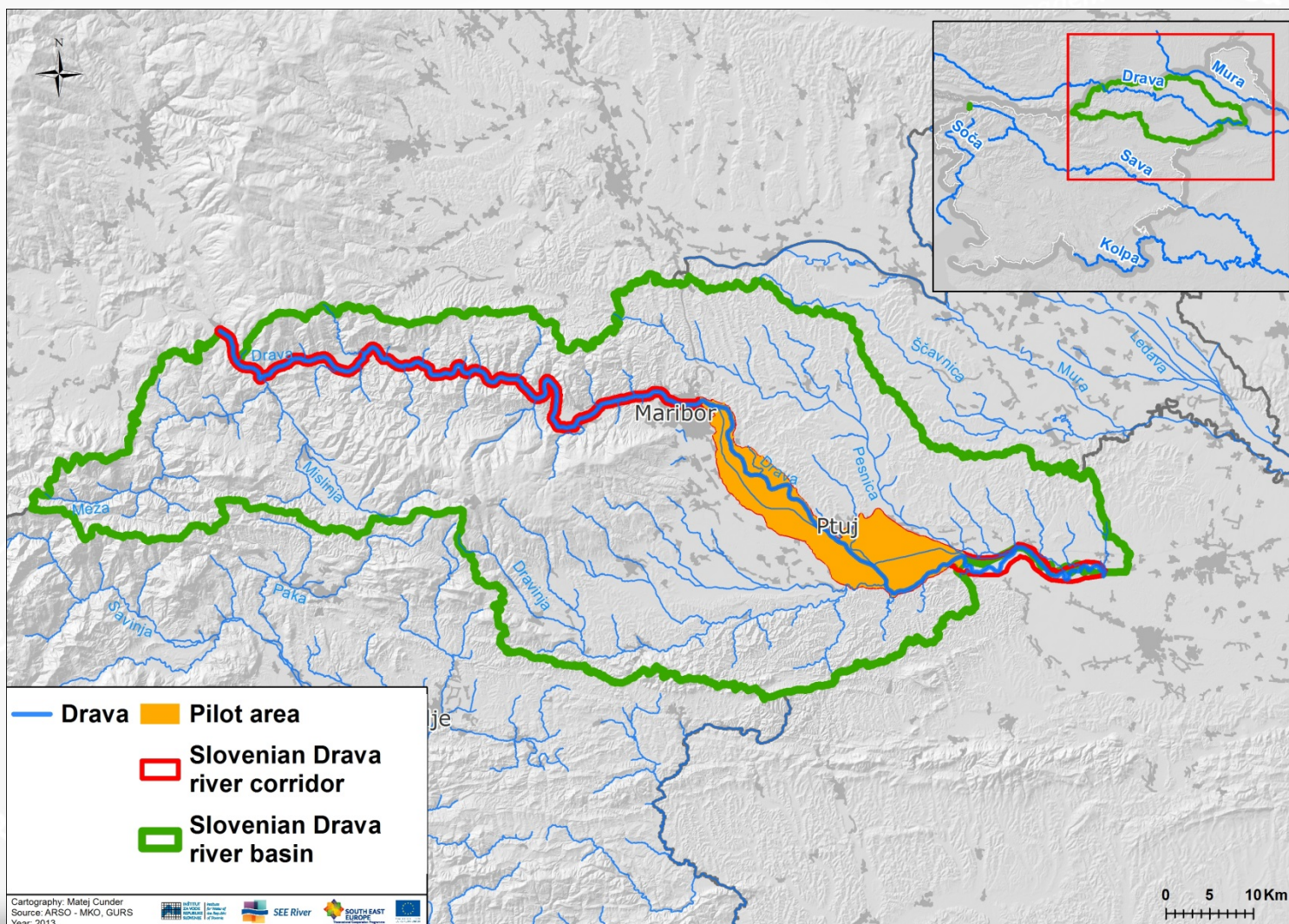
River corridor determination



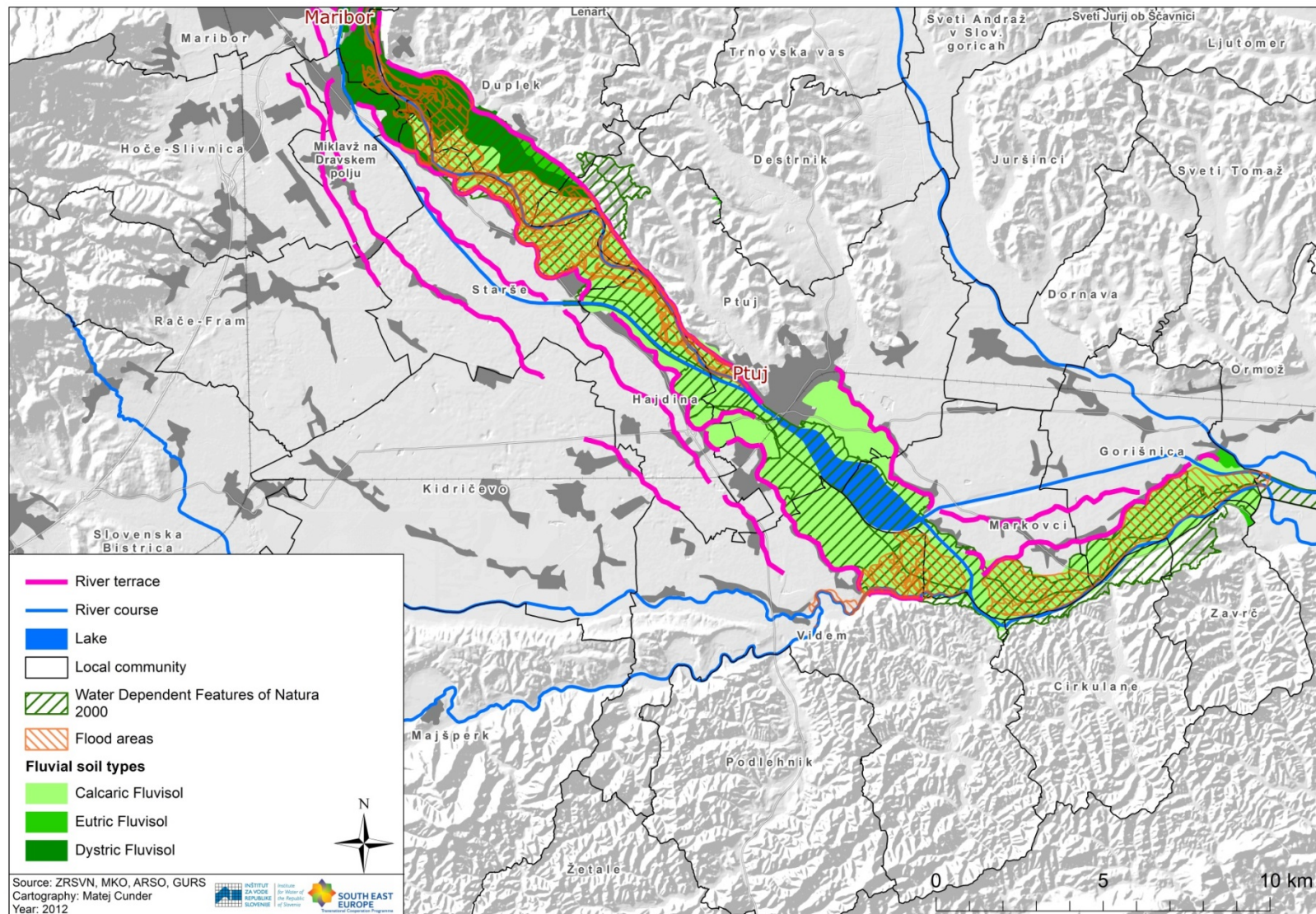
River corridor determination



River corridor determination



River corridor determination



River corridor determination



Drava River, downstream Maribor, 30 August 2013



Drava River, downstream Maribor, 5 November 2012



Drava River, downstream Maribor, 5 November 2012

Challenges of river corridor determination

- *Not an administrative category, rather a scientific one.*
- *Not a mandatory area of work, rather pragmatic one.*
- *Agreement on a robust method for delienation.*
- *Lack of data.*

(2) Challenges of CRCM: articulation of a common vision of a river

Vision of a river – experiences from the past

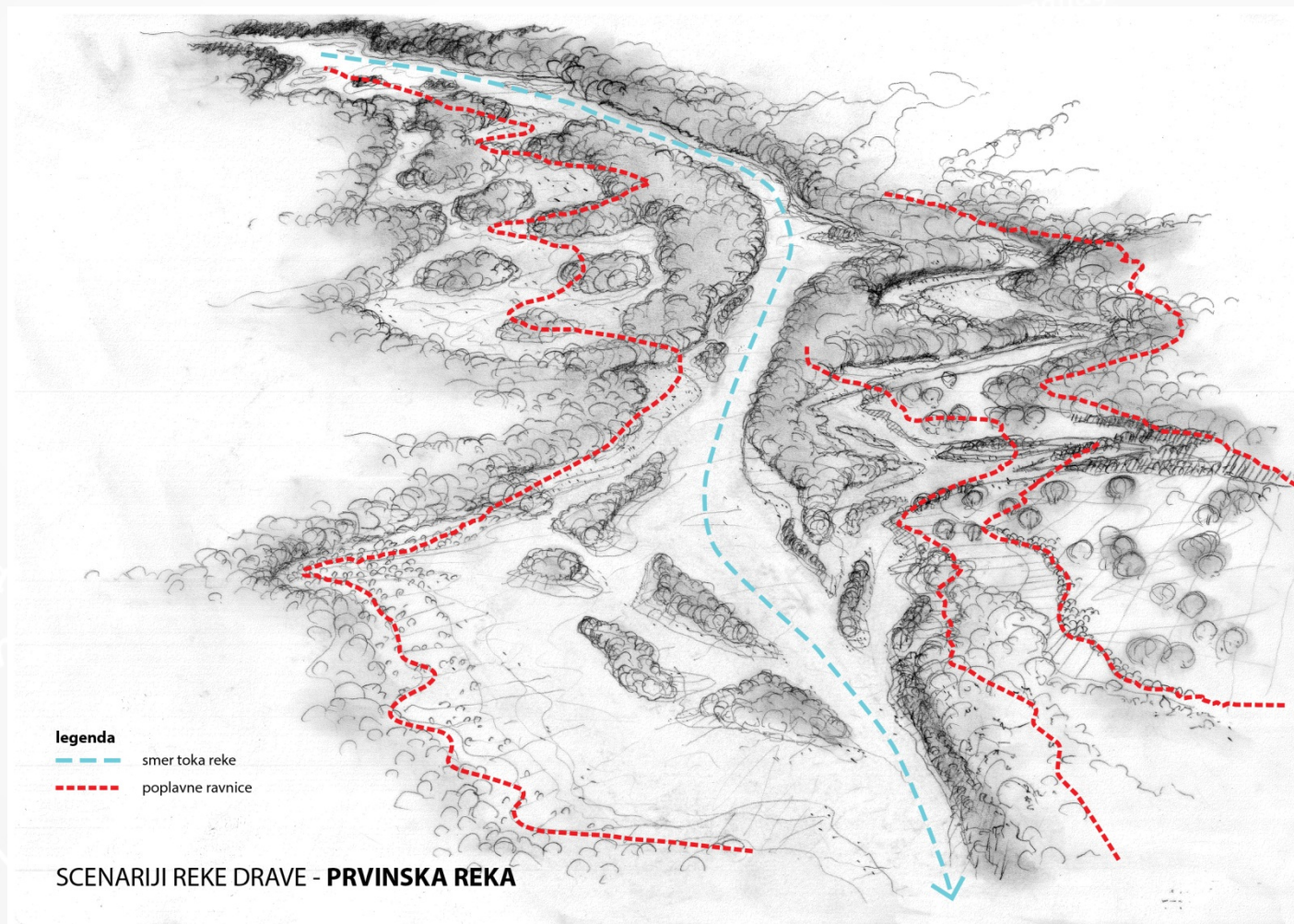


Sava River, View from Šmarna gora (Marko Pernhart, around 1850).

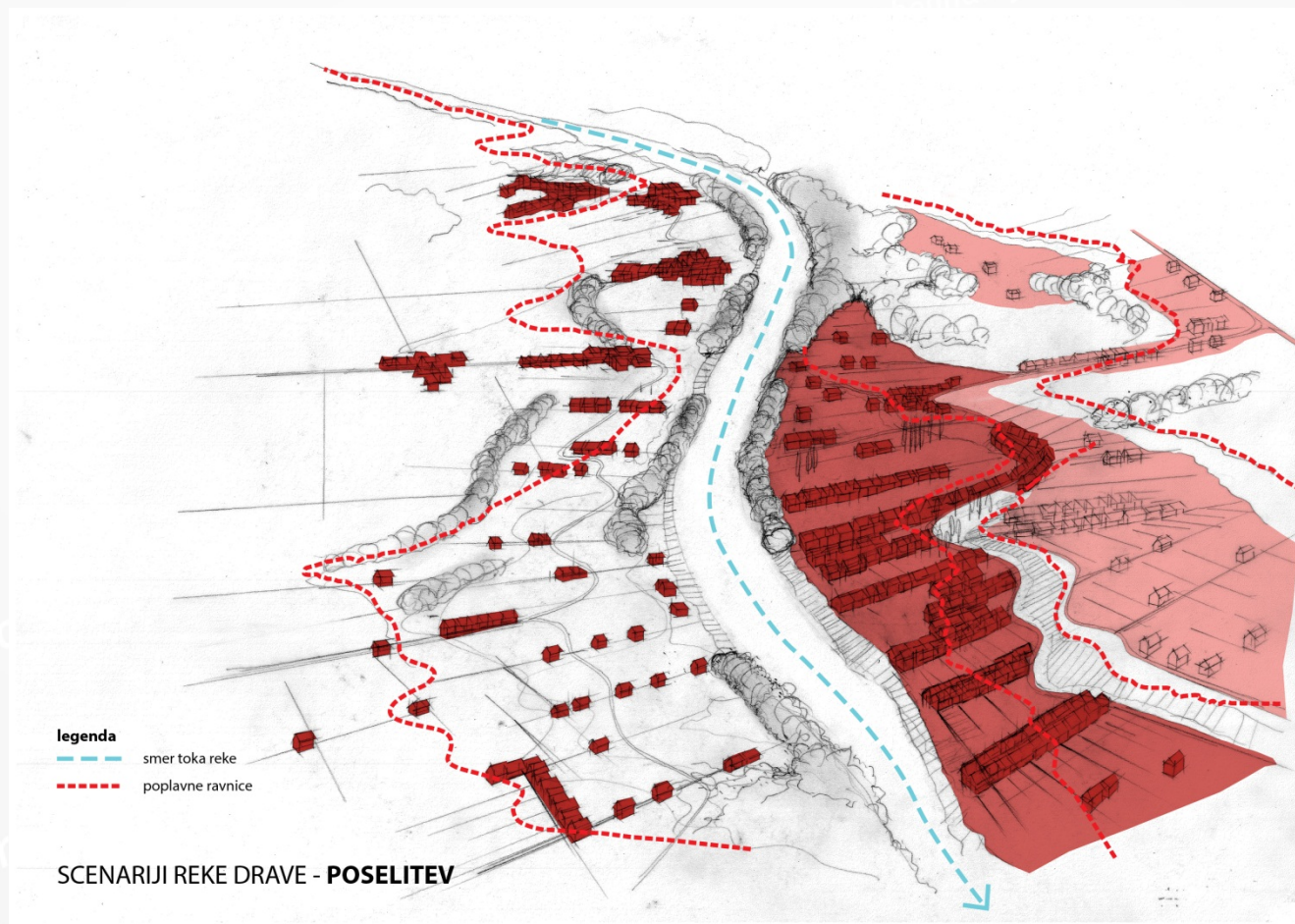


Sava River, View from Šmarna gora (2012).

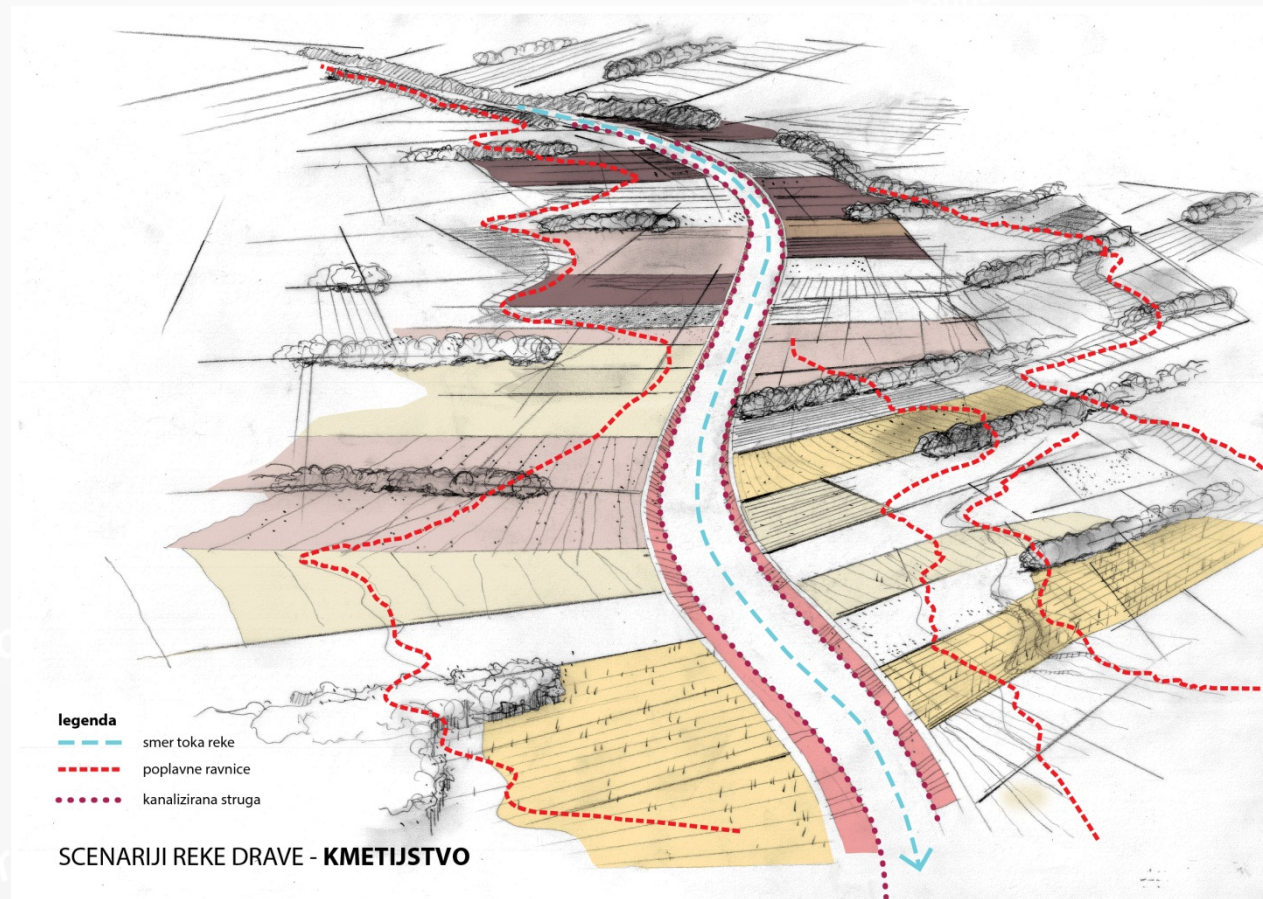
Vision of a river – a Middle Ages river?



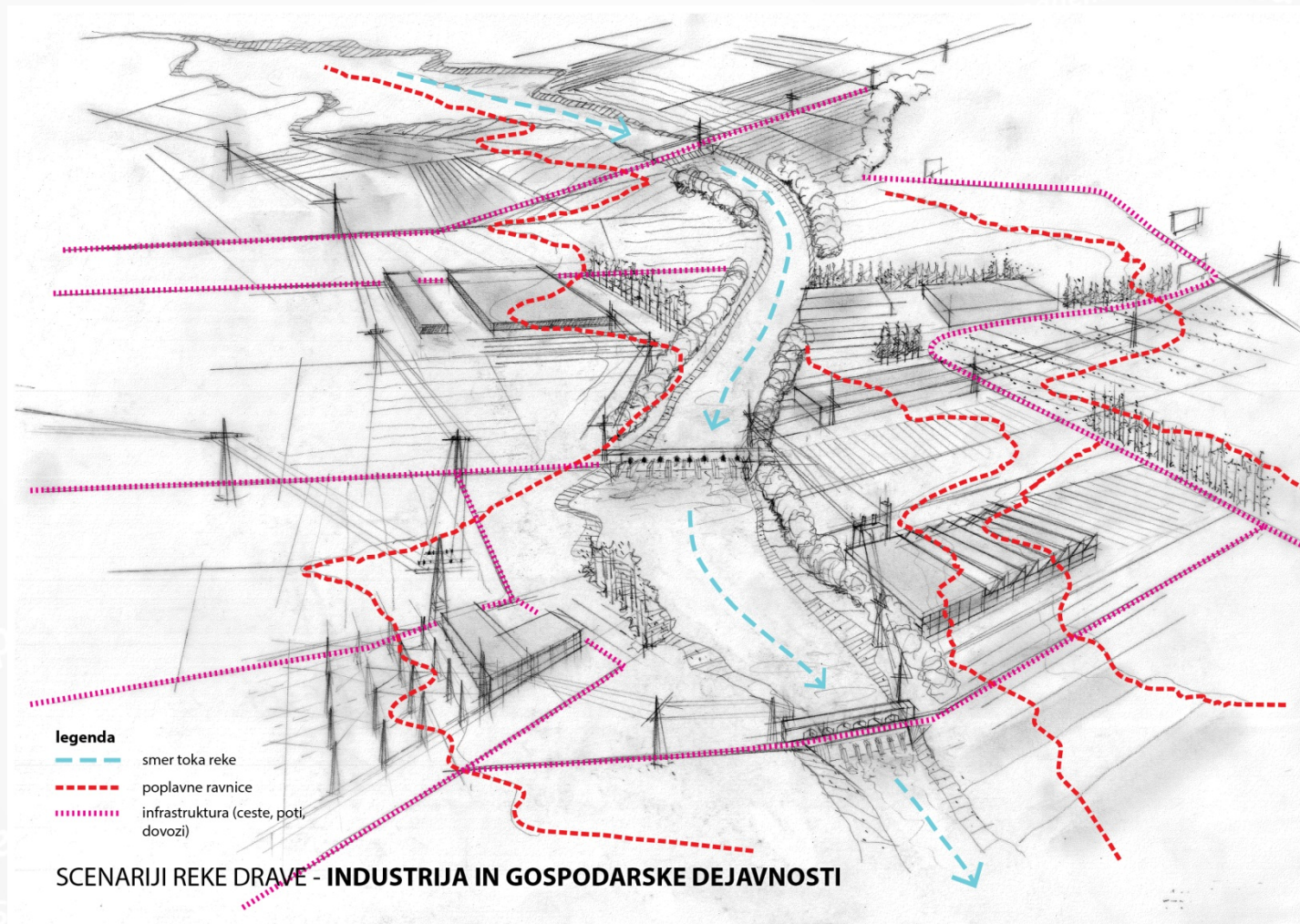
Vision of a river – an overpopulated river?



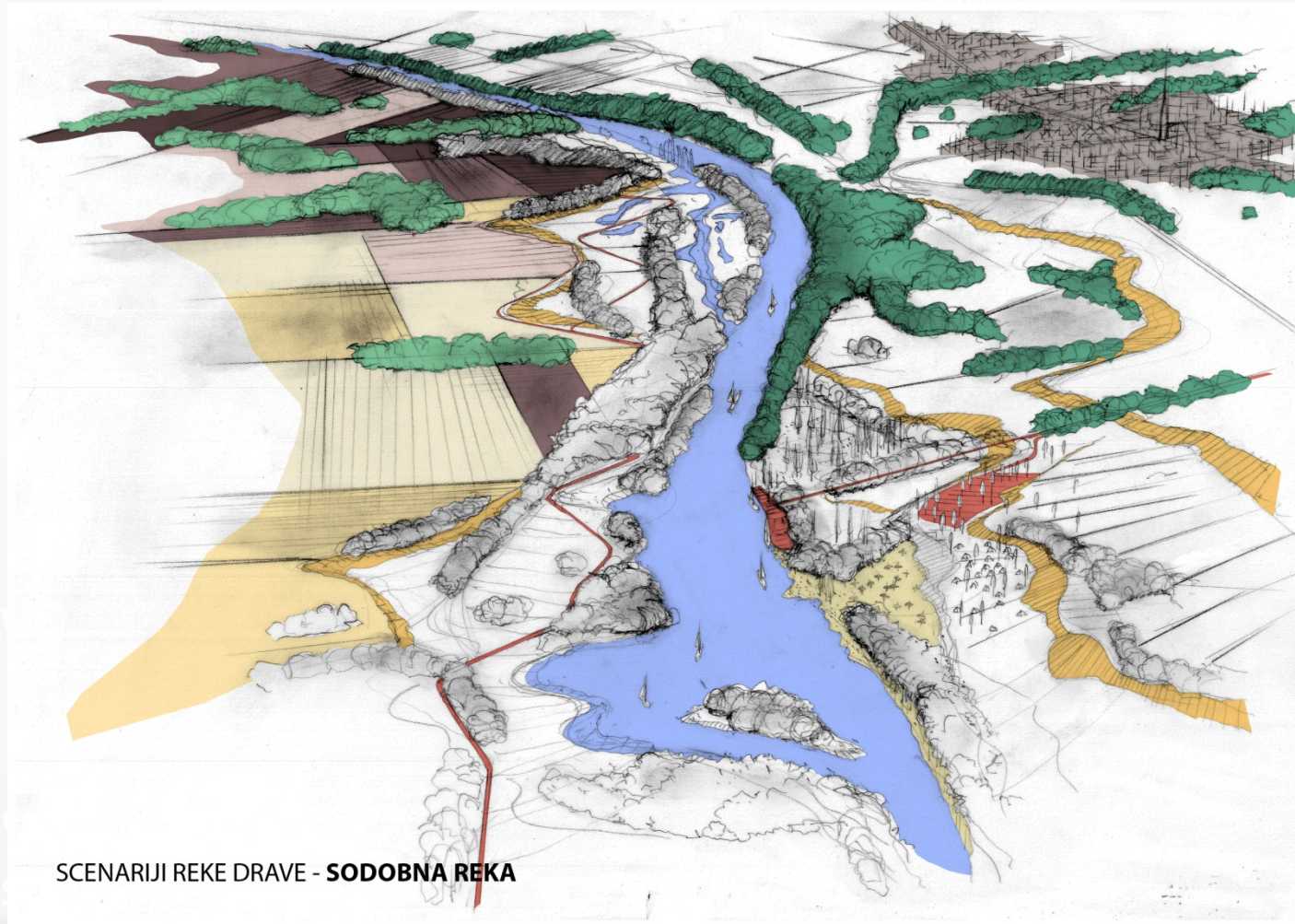
Vision of a river – an agricultural river?



Vision of a river – an industrial river?



Vision of a river – a contemporary river!



Challenges of articulation of a common vision of a river

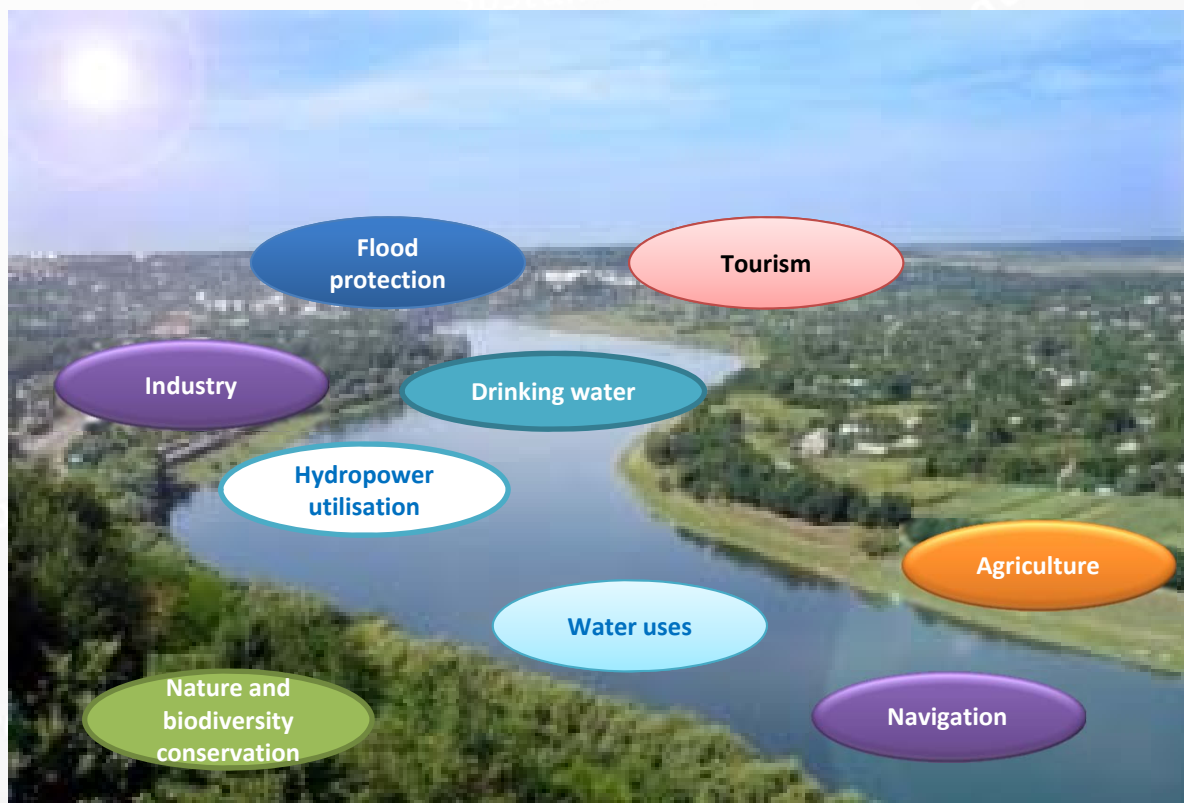
- *Development of systematic and robust approach.*
- *Building consensus omnium about a common vision.*
- *Anchoring decisions made.*
- *Ensuring commitment of the involved parties to the agreed vision.*

(3)

Challenges of CRCM: cross-sectoral, top down and bottom up approach

Cross-sectoral approach

Sectoral objectives are often antagonistic and thus provide a challenge for authorities when it comes to the implementation stage.



Top-down and bottom up approach

Management of local, regional, national and international river corridors is affected by:

Variety of interests
on local, regional,
national and
international level.

Wide scope of
national and
international
legislation.

EU directives, in
particular WFD, FD,
HD, BD and RES
directive.

International
agreements and
conventions.

Challenges of cross-sectoral, top down and bottom up approaches

- *Lack of knowledge and understanding of administrative and management processes.*
- *Lack of understanding of sectoral objectives.*
- *Lack of trust among stakeholders representing different sectors and levels,*
- *Lack of appropriate, facilitated communication between stakeholders from different sectors and levels – local, regional and national level.*
- *Lack of clear responsibilities on the administrative level.*
- *Lack of coordination bodies with necessary skills that would ensure effective cooperation between levels and sectors.*

SEE River project approach and main expected results

SEE River project key issues

Project goal

To improve capacities of existing local, regional, national and international structures for effective transboundary and cross-sectoral linking and networking in executing river corridor management issues (by promotion of the SEE River TOOLKIT).

Project theme

Cross-sectoral participatory management of transboundary river corridors.

Project aim

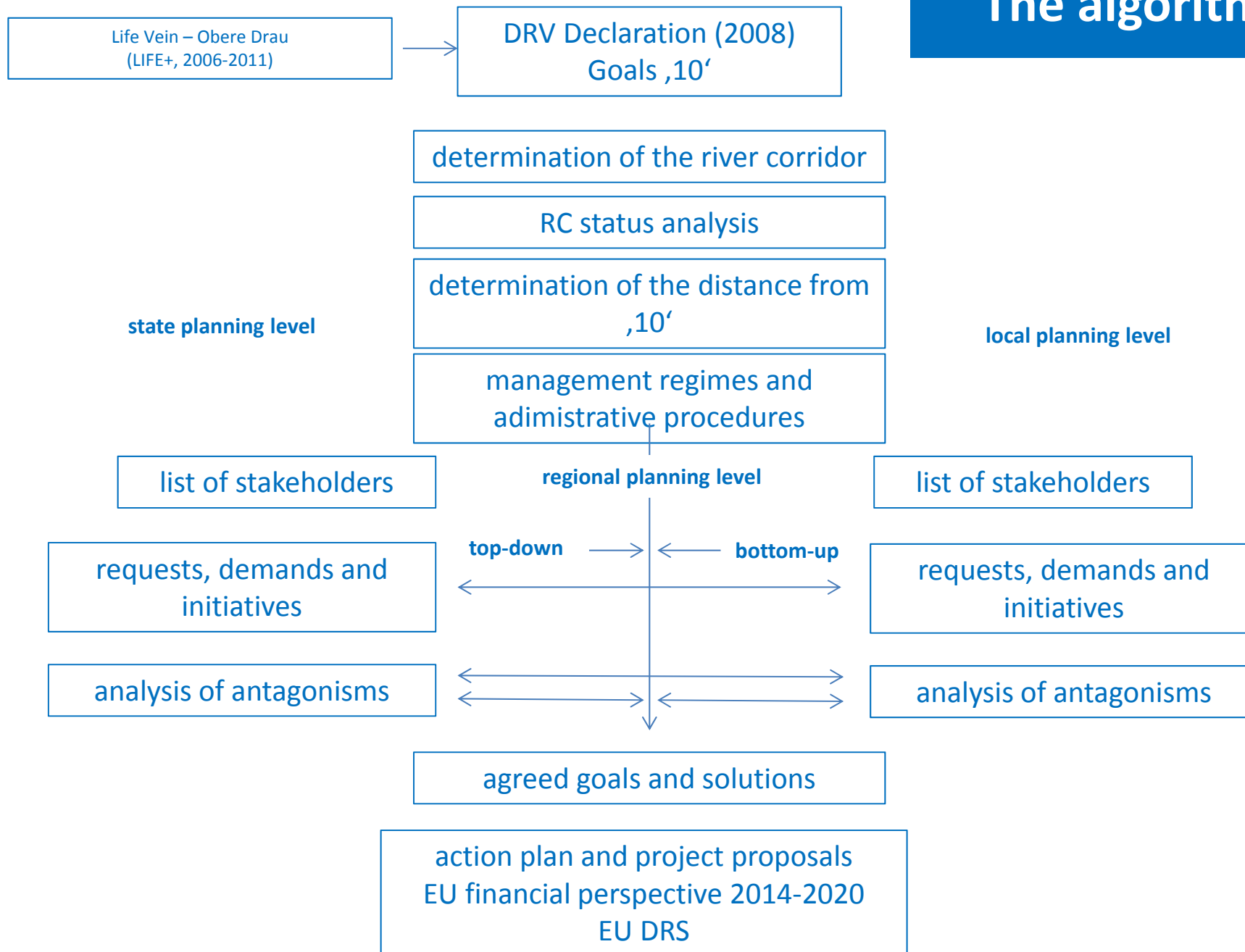
To empower the **multi-sectoral stakeholders sharing** the territory of an **international river corridor** to gain knowledge on contemporary river corridor management, **exceeding sectoral, local and national interests** in order to ensure good water status and flood protection, preserve nature, biodiversity and ecosystems, and to **enable development** at the same time.

In this way we want to make rivers in SEE and beyond contemporary rivers.

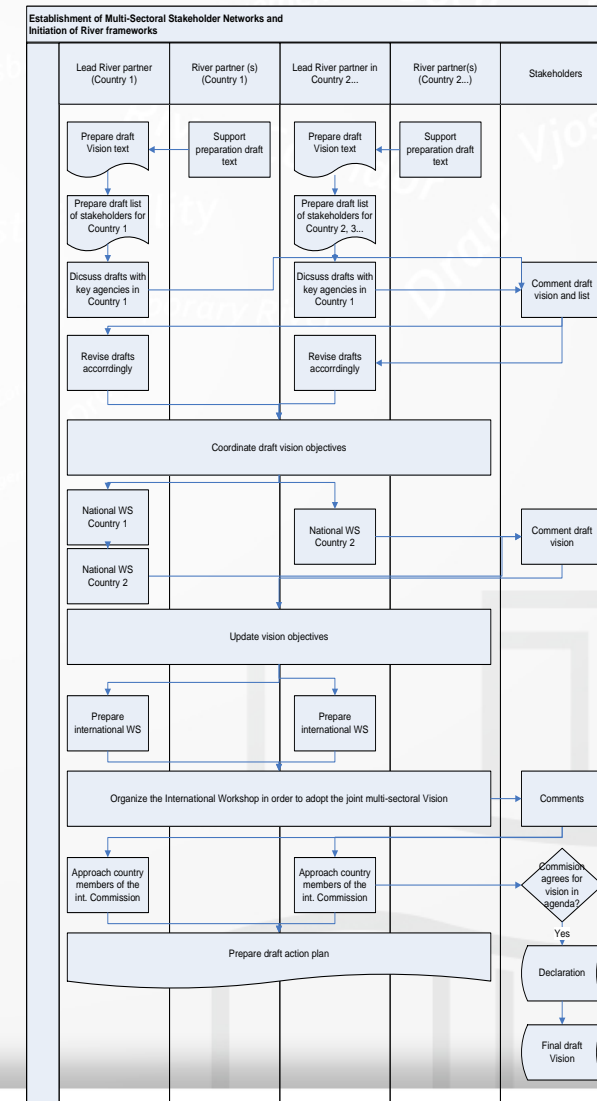
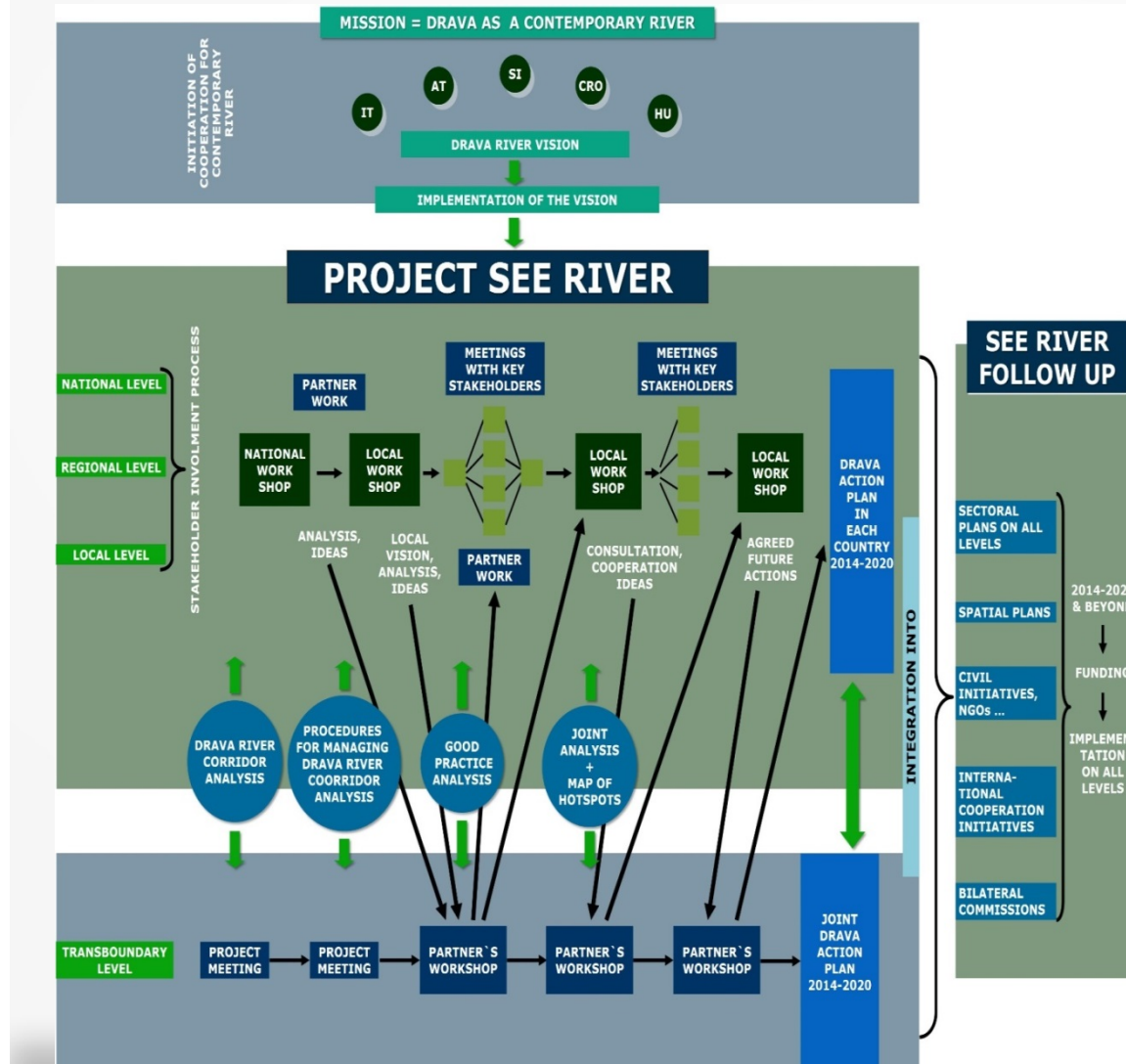
SEE River project – the approach

- Predefined and manageable area of work.
- Involvement of relevant stakeholders from the beginning of the process.
- Cross-sectoral approach.
- Involvement of riparian local communities.
- Procedural disposition.
- Harmonised approach and simultaneous development in several countries.
- Development of a method for cross sectoral reconciliation.
- Comparison of results of same or similar methods in several countries.

The algorithm



SEE River project – the approach



SEE River – main expected project results

- Toolkit for Integrative Management of International River Corridors developed as a joint approach to integrative management of river corridors in SEE;
- Drava River Action Plan for integrative management of the International Drava River;
- 5 Local Action Plans for future management of 5 Pilot Areas on the Drava River corridor;
- 5 Draft Action Plans for integrative management of the Bodrog, Neretva, Prut, Soca, and Vjosa river corridors;
- 11 follow-up project proposals prepared on the basis of future joint actions agreed during stakeholder workshops for preparation of the Drava River Action Plan and pilot actions, and through the initiation of Draft River Action Plans on the other five SEE river corridors;
- Sustainability plan for future cooperation and expansion of the SEE RIVER network of experts.

SEE River Toolkit – pragmatism

stakeholders to be involved in each phase of the decision making processes

approaches for establishing common vision, goals and river action plans

techniques for communication, dialogue, facilitation, moderation, mediation



SEE River
TOOLKIT

procedures and phases for harmonisation of diverse objectives on planning levels

integration of the transnational agreements into relevant sectoral documents on N, R and L level

SEE River Toolkit

SEE River Toolkit is:

- *a generally applicable, practical how-to-do-it guidance to help authorities reach a common agreement on management of river corridors for harmonisation of conservation and development interests.*

SEE River Toolikt end-users are:

- *policy makers and public administrations with legal responsibilities in river corridors (management) at local, county/regional and national levels:
Governmental bodies: ministries, province/county/district/local offices,
Public agencies and management institutions for spatial planning, transport, nature, (drinking, irrigation) water, floods, etc.*
- *stakeholders (mostly private but some may be government-owned) with vested interests in the river corridor (land and/or river resource users):*
- *land owners, industry, agriculture, forestry, fisheries, recreation/tourism, NGOs etc.*
- *other potentially Interested public (local residents, schools, universities etc.)*

Contribution of the SEE River Session and its participants to the SEE River project and to the ERRC 2013

Contribution of the SEE River session participants



Thank you for your attention!

ales.bizjak@izvrs.si

www.see-river.net