

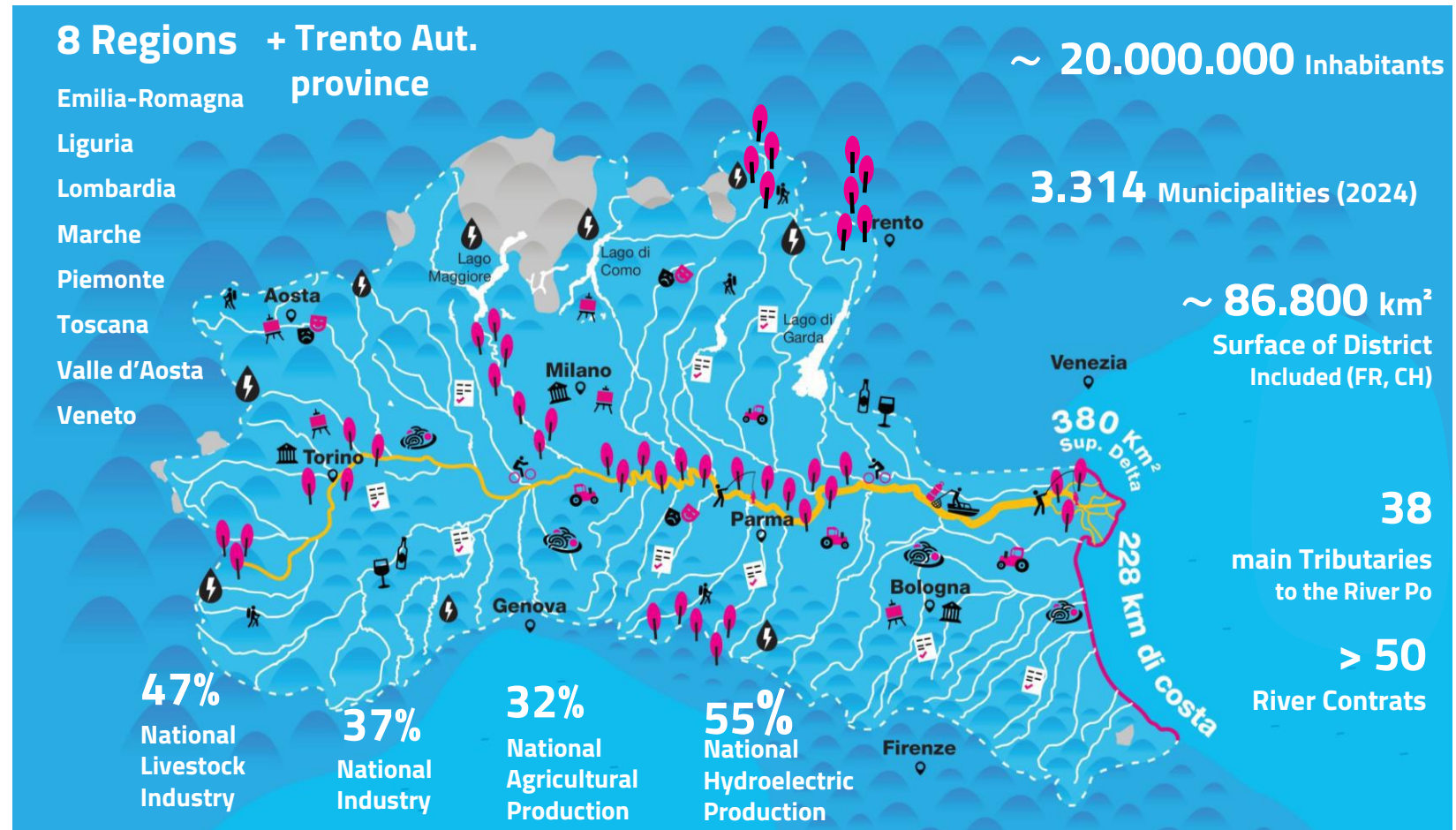


Autorità di bacino distrettuale del fiume Po

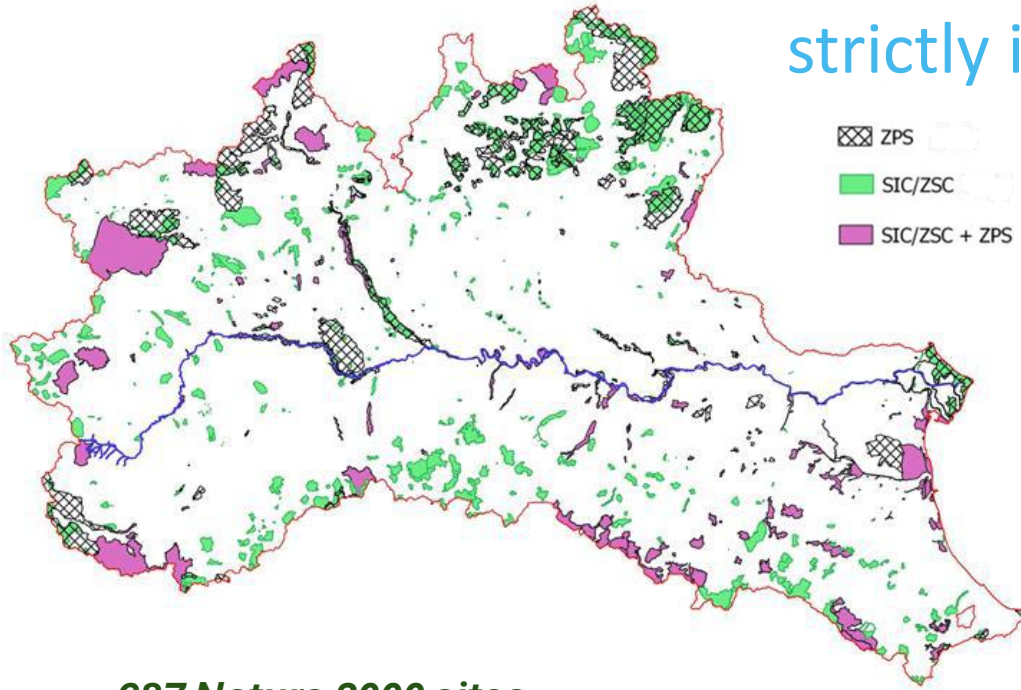
Policies that work:italian and dutch Institutions to protect the blue gold (The case of Po basin)

Alessandro Bratti
General Secretary
(Rimini, 6 November, 2024)

Po River Hydrographic District



River Po basin ecological corridors and biodiversity: our natural capital strictly interconnected with water



687 Natura 2000 sites

cover 20% of the entire river district

52 Natura2000 sites along the River Po



A characteristic ox-bow lake along river Po



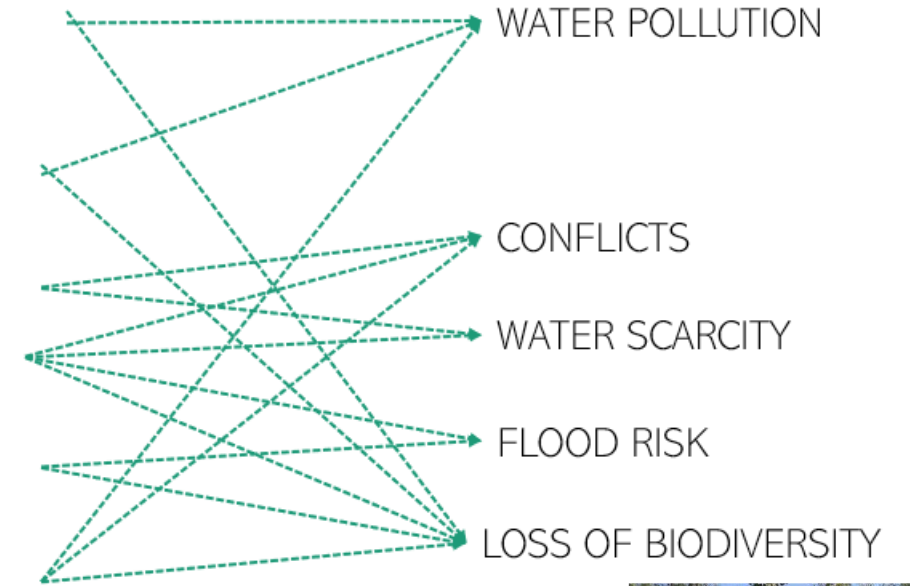
Egretta garzetta and Sterna hirundo



The Po river Delta

Main criticalities

1. POINT DISCHARGES FROM URBAN SETTLEMENTS AND INDUSTRIES
2. DIFFUSED POLLUTION FROM AGRICULTURAL RUN OFF
3. WATER ABSTRACTION
4. CLIMATE CHANGE
5. HYDROMORPHOLOGICAL ALTERATIONS
6. PRESENCE OF INVASIVE SPECIES



....in a climate changing context

The Po River Basin District is located in the climatic transition zone between the Mediterranean and Northern Europe, in which *uncertainty* about the *future climate* is *higher* than in other European areas



climate change and biodiversity are interconnected.

Innovative and multi-sectoral actions are needed to prevent and mitigate the complex threats to human health from the ongoing and interconnected crises of climate change, biodiversity loss and pollution.

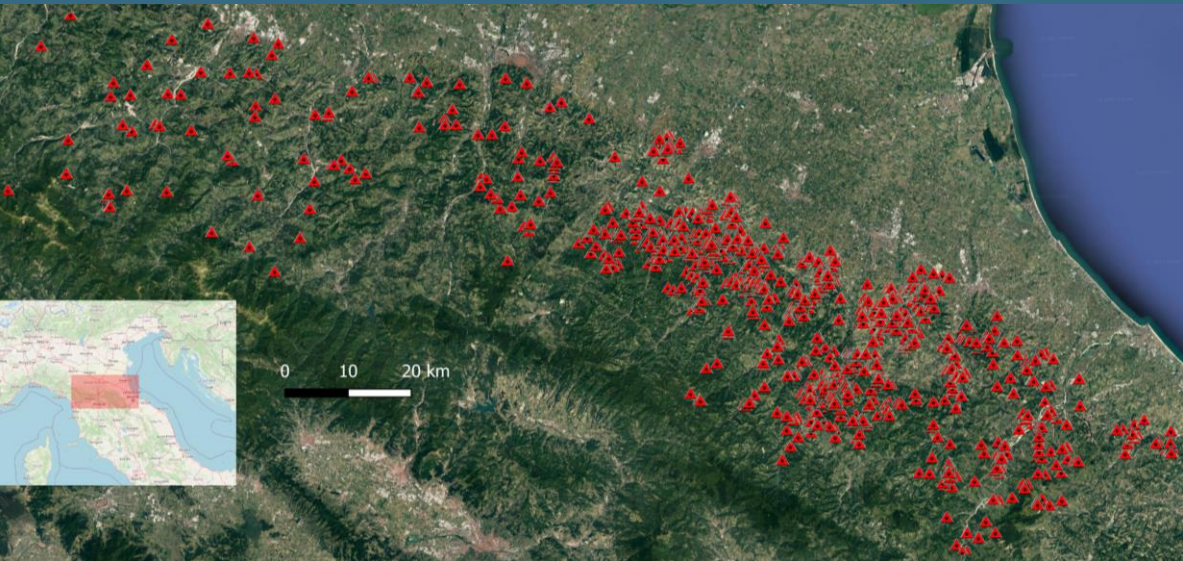


Flood events in Romagna, May 2023



Drought and water scarcity, summer 2022

Flooding in South East Po Basin in 2023/2024

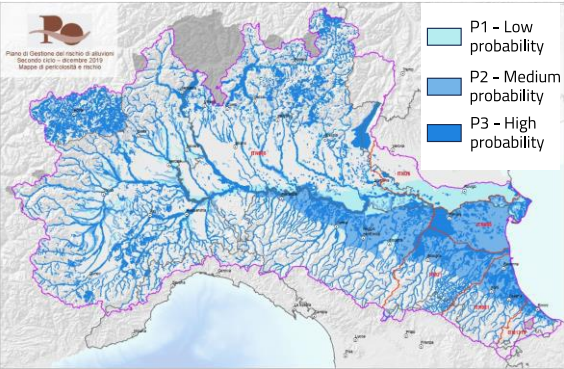


The rainfall events of 1-3 May and 16-17 May together accounted for **50% of the average annual rainfall** in the Emilia-Romagna region. The rainfall event affected the entire river network, both natural and artificial, causing the **flooding of 23 rivers**. Widespread flooding has occurred in the area between Bologna and Rimini, with **levee breaches** and widespread **slope instability** throughout the hilly and mountainous area (>80,000 landslides).



The main river network consists of the Po river and its main tributaries that flow in the plains and the main mountain valleys. The main river network has a length of about **6000 km**.

FLOOD RISK MANAGEMENT PLAN - FRMP



Flood hazard map

Some flood risk numbers

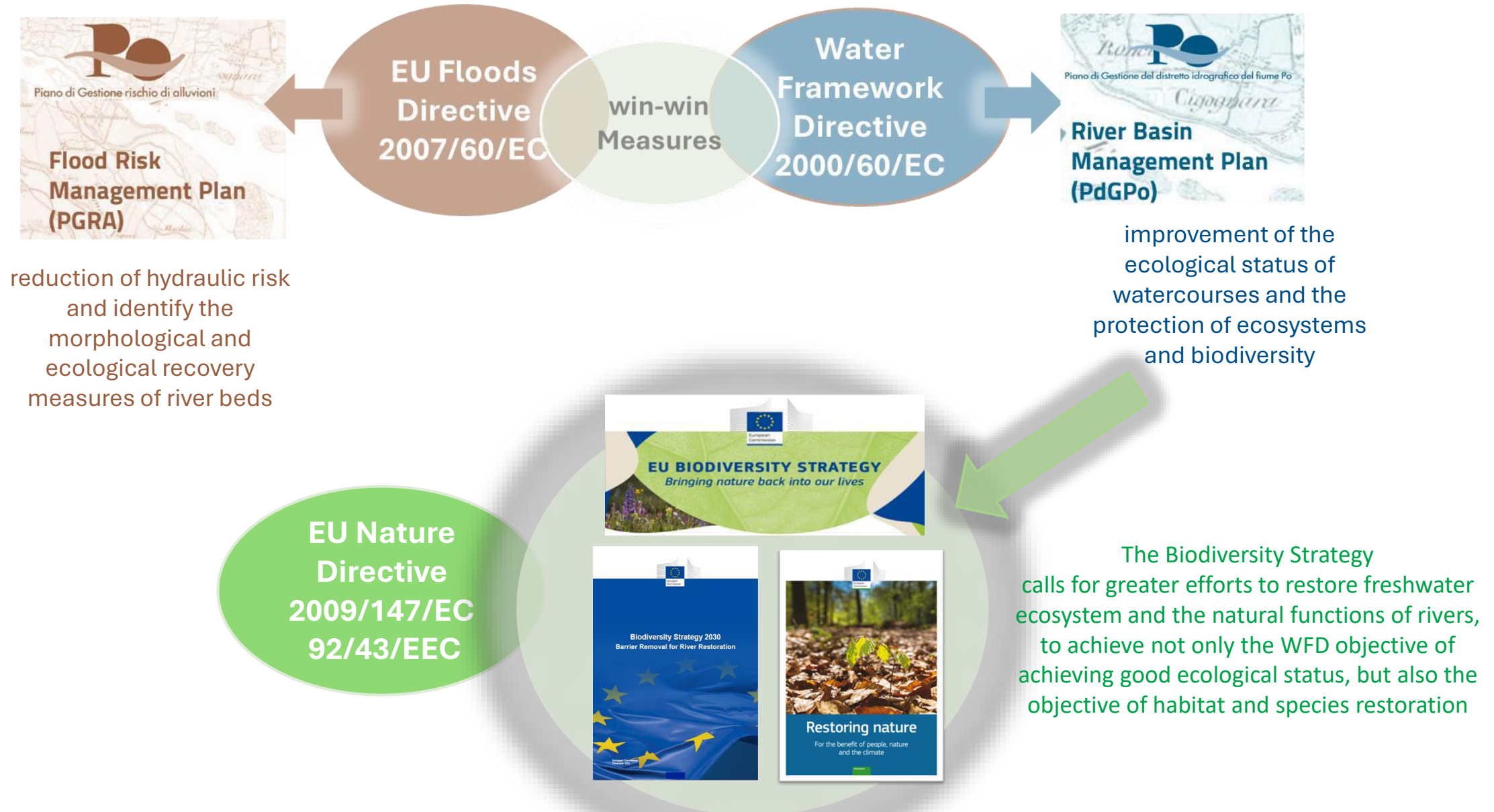
- 34%** District area potentially subject to flooding
- > 3 million** District inhabitants living in areas with medium flood hazard level (P2)
- ~ 4000 km** Total length of district rivers levees



A satellite map of a mountainous region, likely in the Himalayas, showing a large area outlined in red and a smaller area within it outlined in cyan. The terrain is rugged with many peaks and valleys. The text "Challenges and Solutions" is overlaid in yellow.

Challenges and Solutions

The integrated planning: an opportunity for NbS

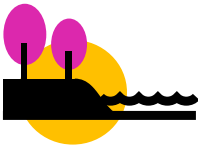


FRMP – Plan measures typologies

Measures to adapt to climate change and win-win



Sediments management
(General Sediment Management Programme)



Vegetation management in the riverbed and floodplain areas



Return of naturalness to watercourses to improve the natural lamination of floods



Relocations
Adjustment of bridges



Monitoring and control of levee vulnerability



Assessment of residual risk in fascia C, flood forecasting, warning and emergency management



Levee relocation



Improvement of the outflow capacity and flood plains by lowering the flood plains



Controlled flooding

Grey measures



Adjustment and completion of levee systems and expansion tanks

Our commitment to the protection and restoration of biodiversity in the Po area



WATER QUALITY

Improve knowledge of nutrient transport to the sea

Links between Water Framework Directive and Nature Directives (Birds and Habitat)



ECOSYSTEM RESTORATION



Natural connections for Natura2000 in Northern Italy to 2030

ecological restoration of habitats and species and reducing the impact of invasive alien species

strengthen the governance of the Natura 2000 network and connection areas



THE VALUE OF NATURE

Enhancement of wetlands and their role in mitigating climate change

knowledge of the ecological values and ecosystem services provided by the river system



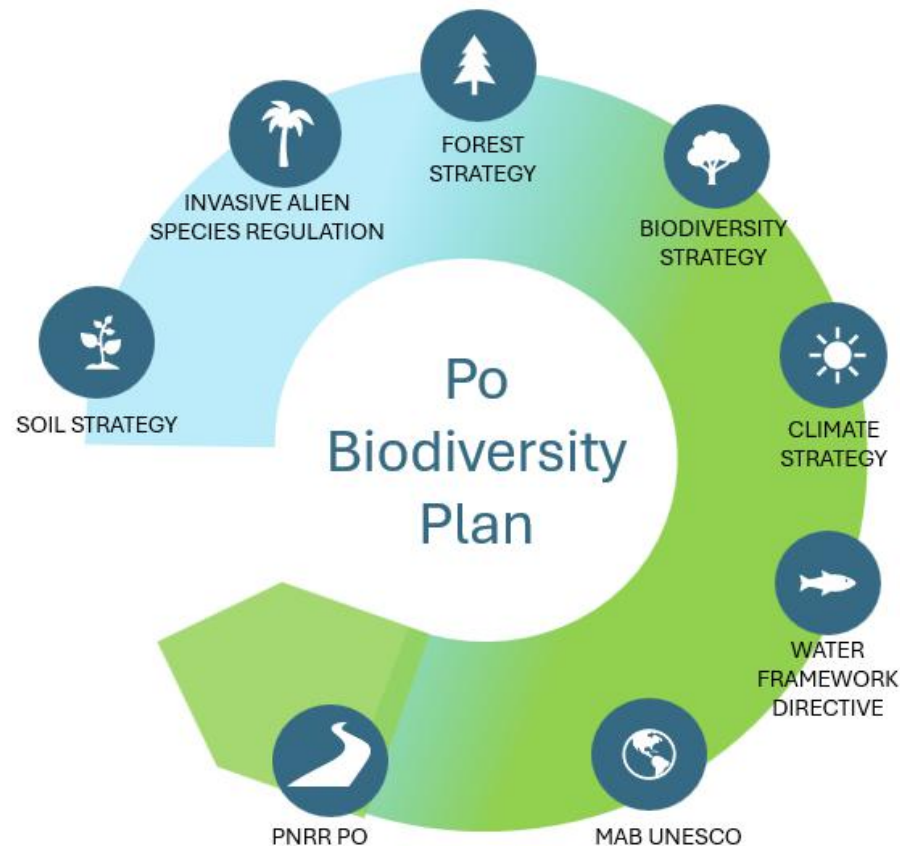
EDUCATION AND AWARENESS RAISING

The "Divento un Po Grande" Project supports the new generations of the UNESCO Po Grande MAB Reserve

Pilot awareness-raising action "Adopt the Sturgeon"

Research and development for the biodiversity of the Po River District

Concrete actions for
WORKING WITH NATURE to
increase natural capital through
the **protection,**
management and
restoration of the
functions of complex aquatic
ecosystems



ACTIVITY 1 – Organization of the “First Forum on Biodiversity, Natural Capital and Ecosystem Services in the Po River District”



ACTIVITY 2 – Biodiversity Plan of Po district - Guidelines and proposals for measures for the integration of biodiversity protection objectives into district planning

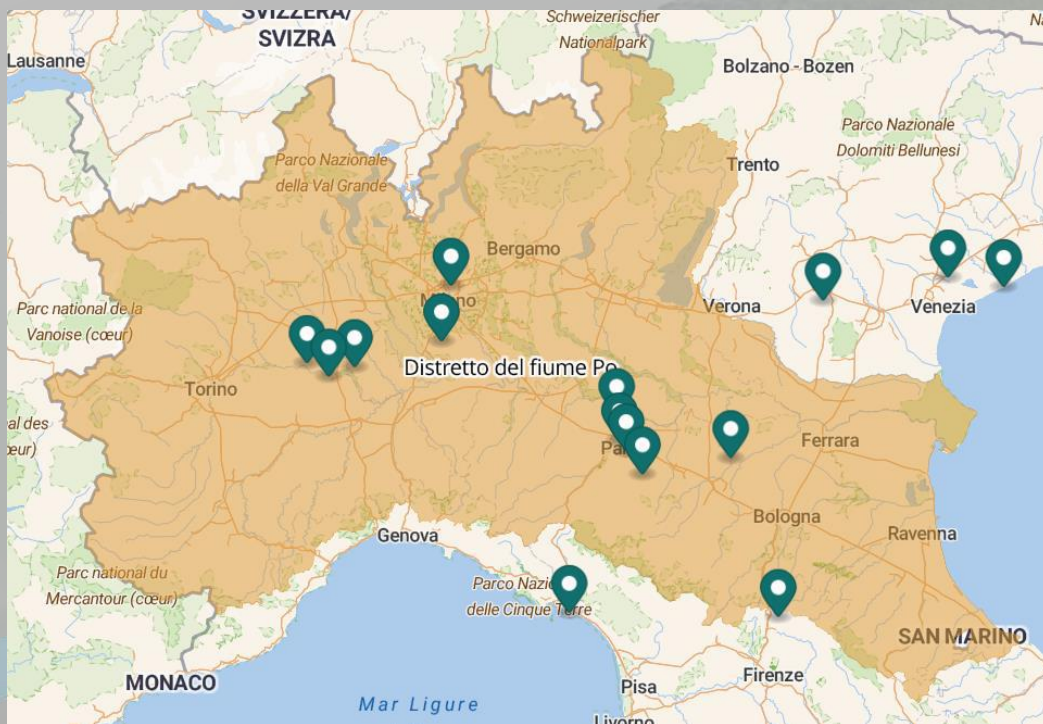
Working groups

ACTIVITY 3 – Creation of the Nature Positive Solutions Network, with the economic world



Nature Positive
N E T W O R K

GOOD PRACTICES FOR THE VALORIZATION OF NATURE



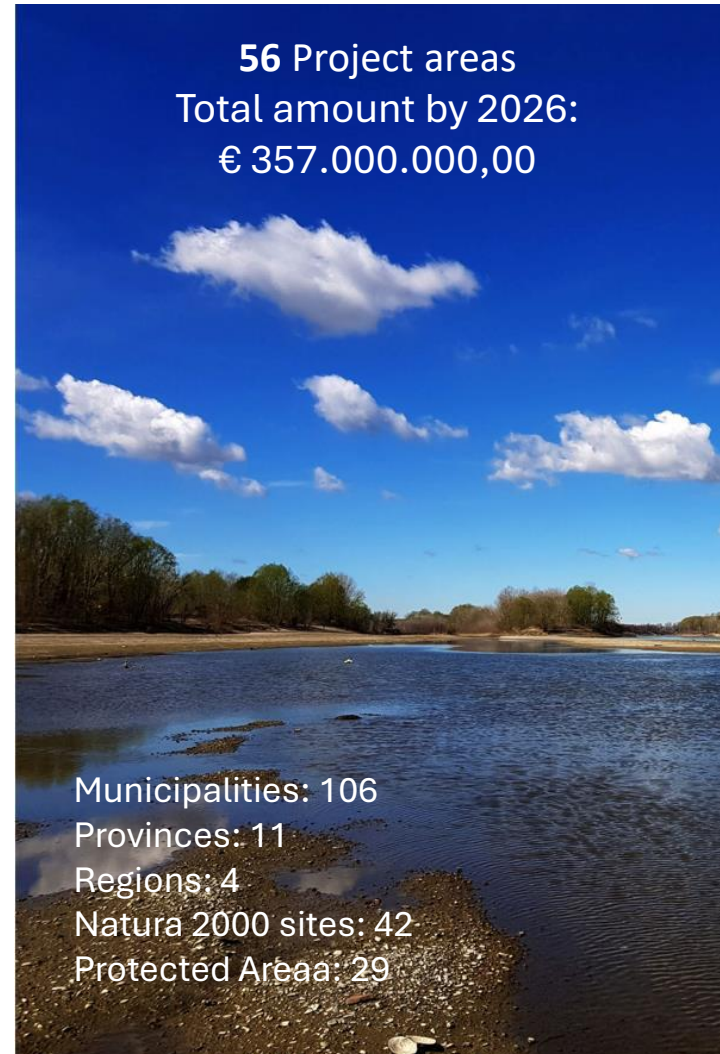
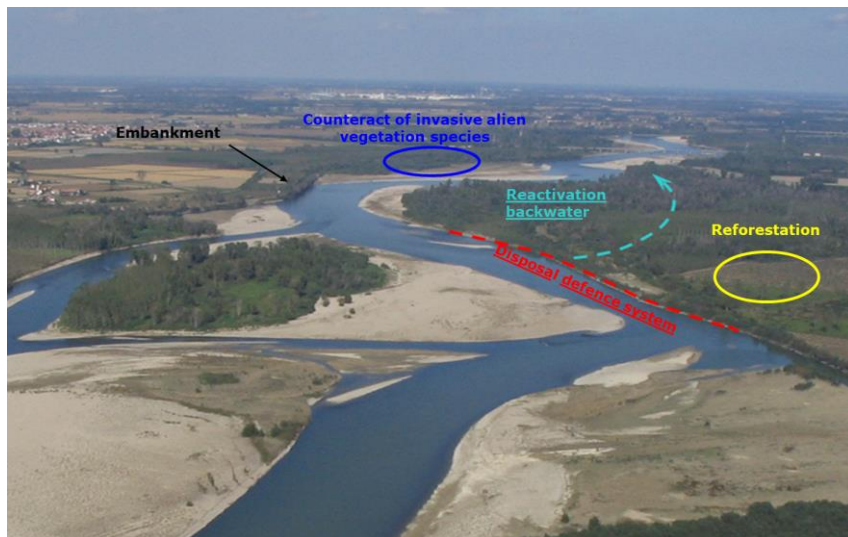
The **Nature Positive network** is a dynamic network of companies that wish to make a difference in Italy by concretely committing themselves to the **transition** of the production system towards a nature-positive economy.

How? Through the implementation of effective actions in favor of the protection and enhancement of nature

Around 30 companies have already signed up their commitment towards a nature-positive economy in the Po River District

<https://naturepositivenetwork.net/>

The restoration of river ecosystems to improve the ecological status and reduce hydraulic risk



ENVIRONMENTAL-NATURAL INTERVENTIONS



Reforestation



Requalification of oxbow lakes and of abandoned branches



Control of invasive alien species

HYDRAULIC-MORPHOLOGICAL INTERVENTIONS



Reduction of the artificial riverbed, alongside the adjustment of navigation groynes and the decommissioning/ modification of defense works



Restoration and re-opening of oxbow lakes, abandoned branches and opening new fluvial branches

Culture-based Solutions: MAB UNESCO Biosphere Reserve



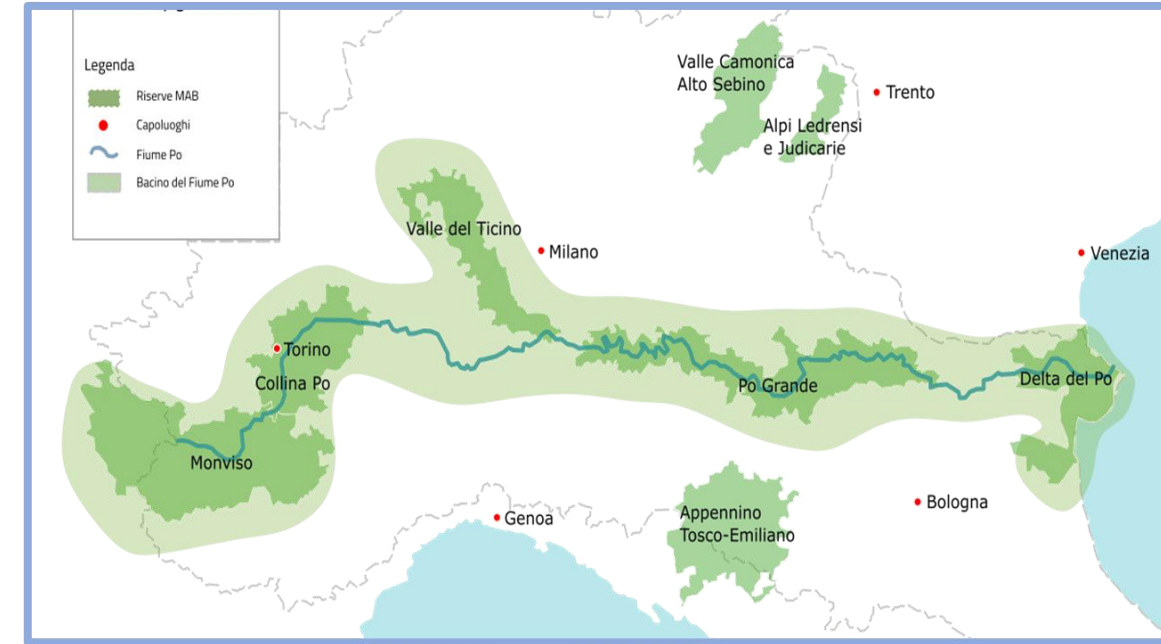
CONSERVATION: contribute to the conservation of landscapes, ecosystems, and species



DEVELOPMENT: foster economic and human development that is socio-culturally and ecologically sustainable



LOGISTIC SUPPORT: support in the demonstration of projects, environmental education and training, research and monitoring related to local, regional and global issues of conservation and sustainable development



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Riserva della Biosfera

**PO
GRANDE**
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