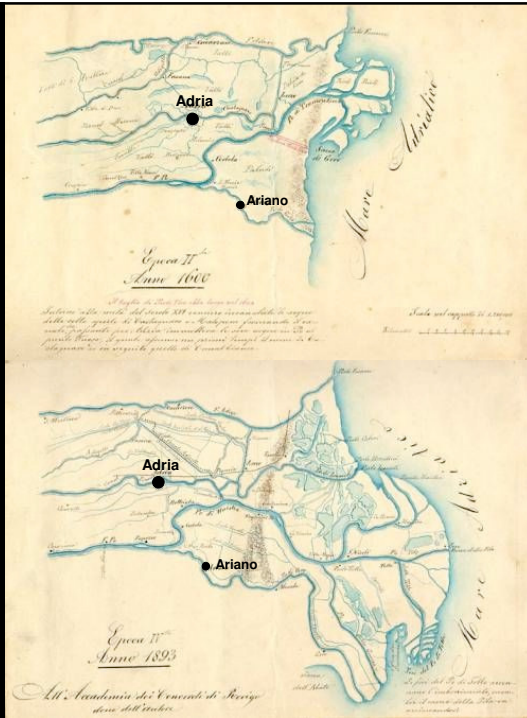




1. Ordinary planning system would be progressively oriented to a climate change perspective
 2. A proper balance between built and natural environment to be maintained especially in wetlands
 3. The Po Delta area is in an intensive (and conflict full) phase of planning
-
1. Management Plans devoted to the SPA (Special Protected Areas) according the EU Nature 2000 Network can provide a contribution to climate protection policies

Historic evolution: the "Cut" of Porto Viro



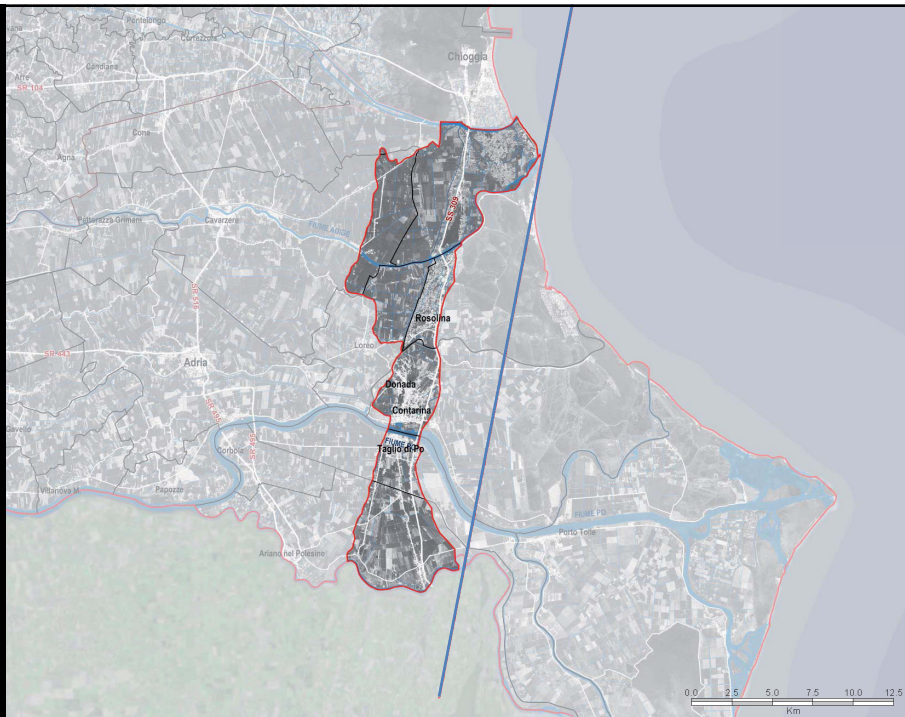
1600-1604

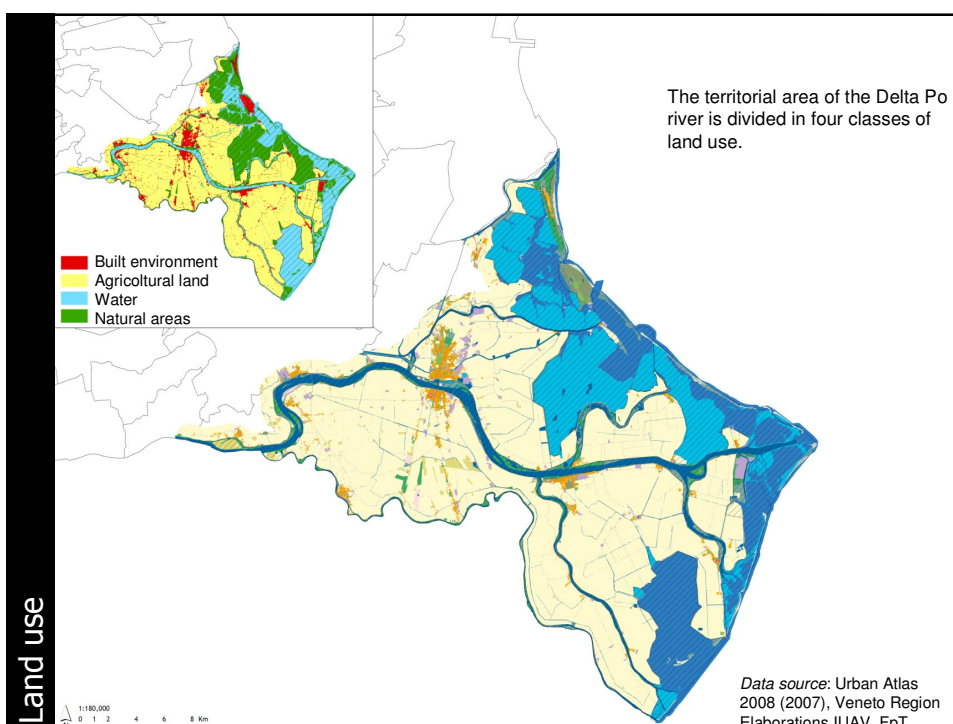
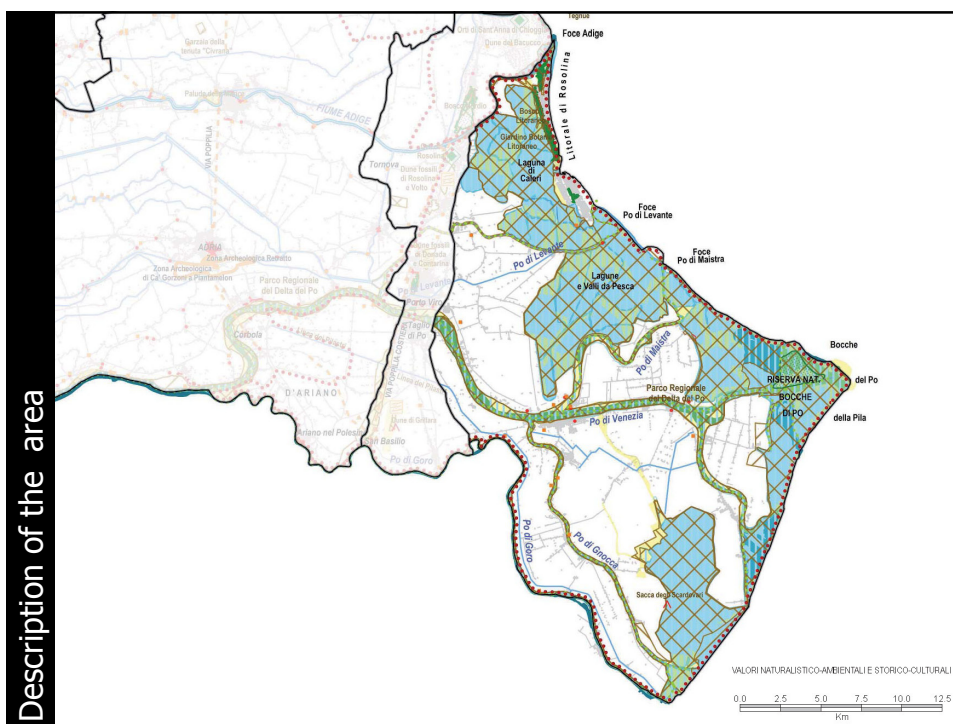
Venetians decided to deviate the Po river towards south with the construction of an artificial canal because the sediments of the river would have filled the Venice lagoon.

XIX

The eastwards growth of the Po river created new land where new settlements have been established during the last 100 years.

Fossil dunes





1972 (hectares)

1	1.231,65	Urban sprawl	0.87
2	589,23	Productive areas	0.41
3	79.774,38	Agricultural areas	56.11
4	26.391,24	Complex cultivation systems	18.56
5	4.184,46	Woods	2.94
6	3.804,84	Beaches, dunes, sands	2.68
7	8.109,18	Fishing valley and salted pads	5.70
8	11.085,66	Lagoon	7.80
9	7.011,99	Water	4.93
TOT 142.182,63			

2000 (hectares)

1	4.452,39	Urban sprawl	3.14
2	1.965,24	Productive areas	1.38
3	95.332,68	Agricultural areas	67.16
4	8.776,17	Complex cultivation systems	6.18
5	4.033,62	Woods	2.84
6	1.138,32	Beaches, dunes, sands	0.80
7	9.642,06	Fishing valley and salted pads	6.79
8	10.216,44	Lagoon	7.20
9	6.381,63	Water	4.50
TOT 141.938,6			

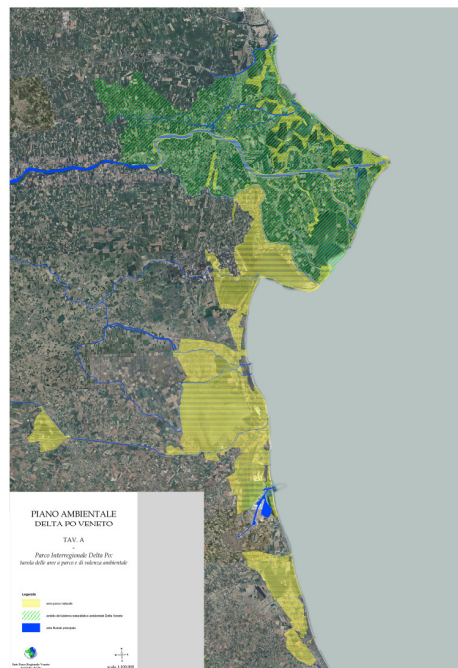
Data source: luav, 2009

19.463 ha of “complex cultivation systems” became agricultural areas
2666 ha of “beaches and dunes” have been lost

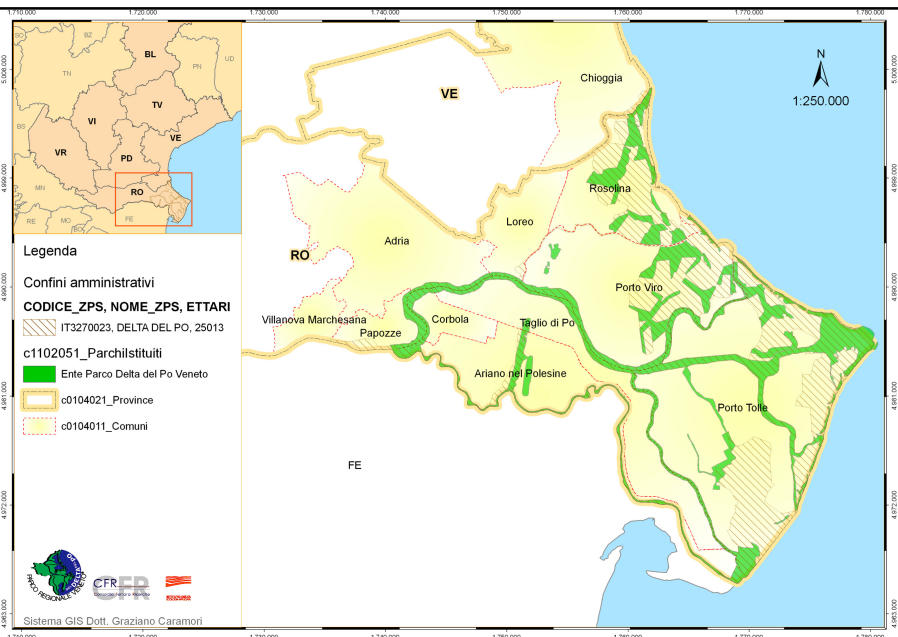
Delta Park has had a long procedure of constitution: at the beginning the proposal was one single Delta park between the regions of Veneto and Emilia Romagna, but at the end **two different regional parks authorities** had been founded.

During the years the **collaborations** has been supported between these two parks, but different administration -with different procedures and goals- made it **difficult**.

Similar issues and contests have been **managed and planned separately** (two regions, different planning systems)

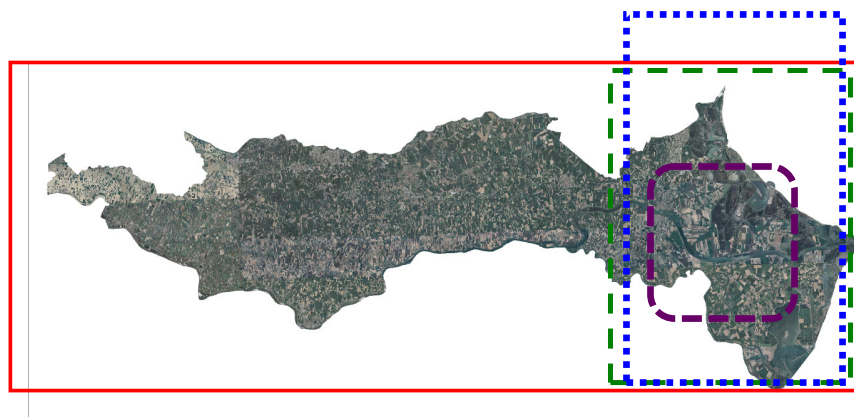


Management of Delta Po Area

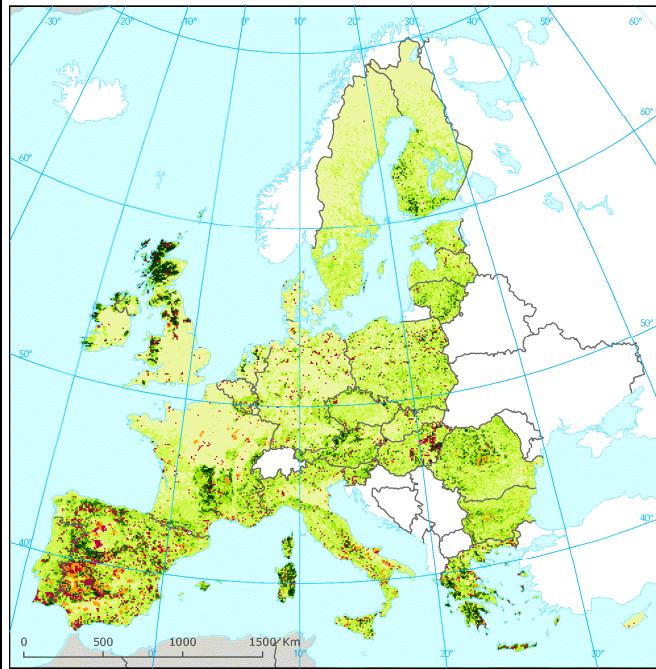


Part of the Delta Po is managed by the park authority

Planning system in Rovigo Province and Delta



- Provincial plan (50 municipalities)
- - - Area Plan (9 municipalities)
- - - Management Plan SPZ DELTA PO (11 municipalities – trans-provincial)
- - - Plan of Regional Park Authority (or Environmental Plan)
9 municipalities partially covered– only protected area

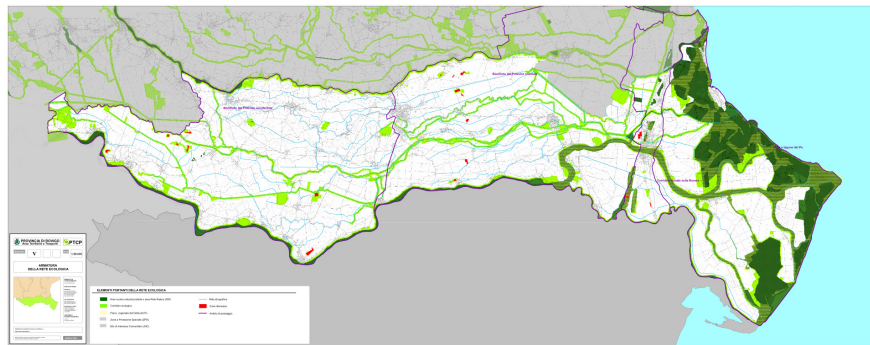


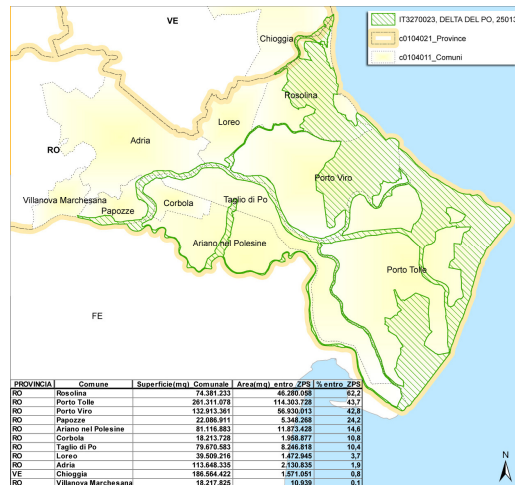
Preliminary distribution map of high nature value (HNV) farmland in western and central Europe

- Natura 2000
- Prime butterfly areas
- Important bird areas

HNV farmland %
(Corine land cover based estimate)

- 0
- 1-25
- 25-50
- 50-75
- 75-100
- Outside report coverage





The special protected areas SPA "Delta del Po", EU code IT 3270023, involves the territories of Rovigo and Venice Provinces

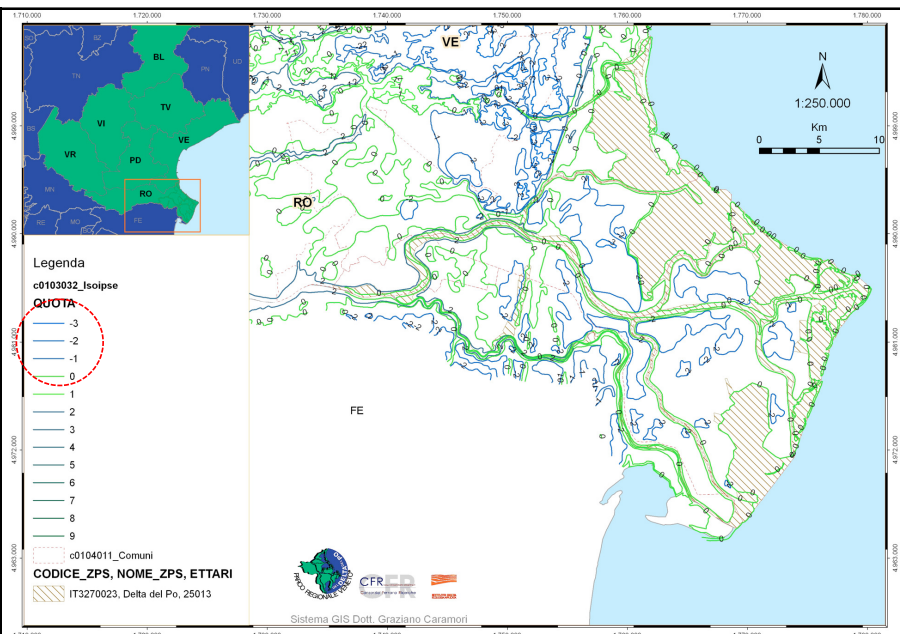
The SPA is 25.013 ha including 11 municipalities.

Shorter planning processes in comparison with ordinary planning instruments, less conflictual

Important!

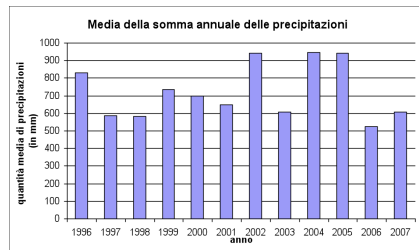
Il SPA management plan is not an ordinary planning tool: it is an operative instrument to control land uses and verify compatibility with natural habitat conservation

Elaborations Istituto Delta srl e IUAV FpT



Average altitude of Delta Po is under the level of the sea

Elaborations Istituto Delta srl e IUAV FpT

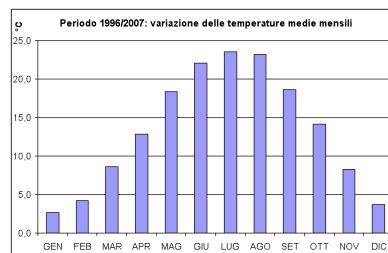
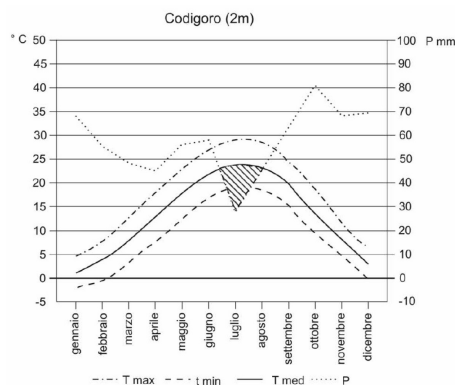


The north part of Adriatic coast is not included in the Mediterranean Climatic Region (Rivas-Martínez et al., 2004)

Limited rainfalls in the June 2003-2005-2006

Not related with a general decrease of rainfalls amount (change of frequency)

New scenario for local economy especially agriculture



Main values emerged during participatory process

- V₅ Economic and job opportunities
- V₇ Environmental quality
- V₈ Peculiar activities
- V₉ Visibility and distinction
- V₁₀ Fauna
- V₁₁ Hydro geological balance
- V₁₅ Relationship with public administration
- V₁₆ Rural use
- V₂₁ Salinization
- V₂₆ Sustainable tourism
- V₃₂ Fragility
- V₃₉ Natural environment knowledge

What the ZPS plan do:

The perspective is the habitat protection from external menaces:

a) Natural hazards connected with climate scenario

The saline wedge

In the last 20 years the saline wedge from the mouth of Po river has been revealed until 25-30km from the coast (during 1960's never exceeded the 2 km). This phenomenon let impossible to use water for irrigation in an area bigger than 20 ha.

Consequences: losing of agriculture varieties (due the salinity of the land), losing of habitat

Solutions: specific supports to local agriculture (habitat oriented)

What the ZPS plan do:

The perspective is the habitat protection from external menaces:

a) Hazards connected with human activities

The plan mapped over 600 project promoted by different public and private bodies

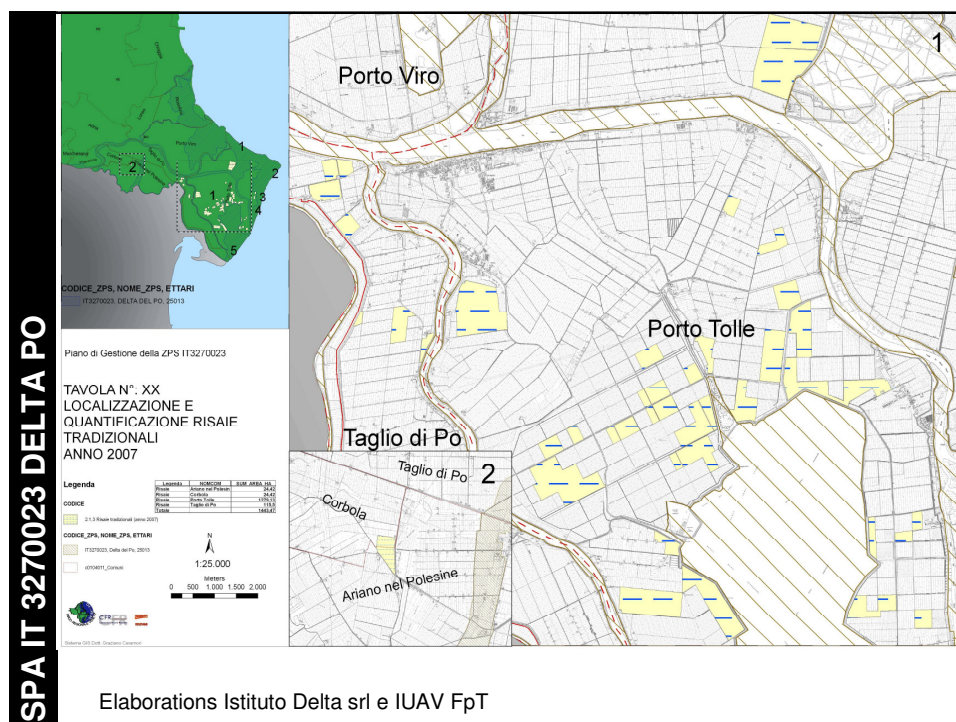
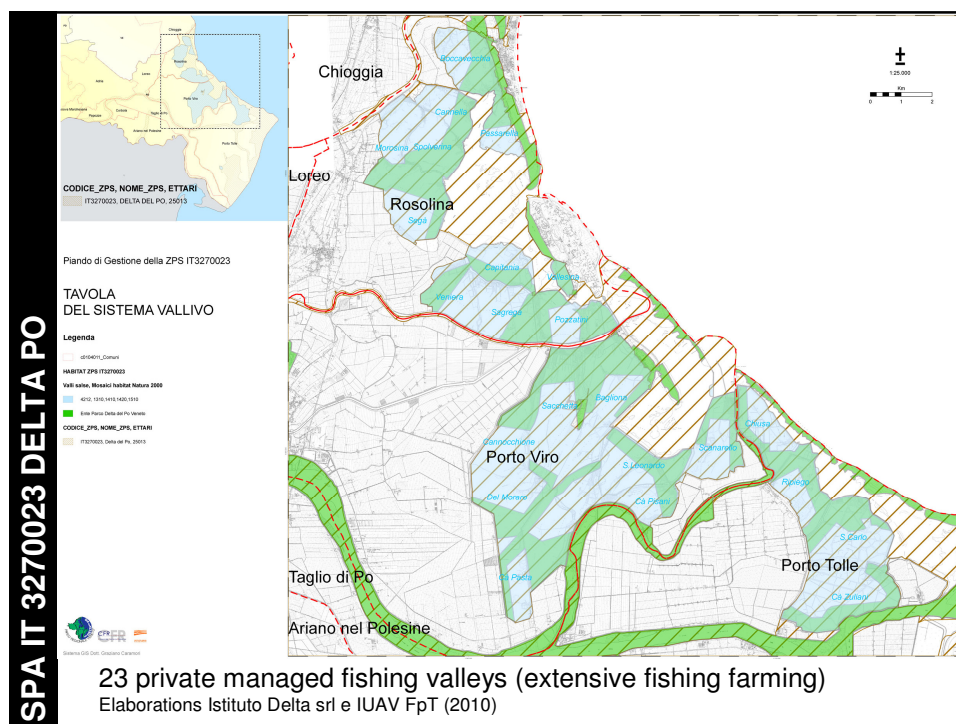
Ordinary activities of maintenance (simplification)

23 valleys for extensive fishing valleys (private owned or managed)

Solutions:

agreements with local fishing valleys for a co-joint management of the SPA;

updated rules for environmental assessments (for maintenance)



The complexity of a Delta area requires a system of *governance* with an institution or an institutional committee able to coordinate the different actors

In the case of Delta Po in Italy this role can be played by the Regional Park Authority

To have the possibility to coordinate efficaciously different levels of institution and policy makers, the Delta Park Authority have to assume a central role in planning debate of the Delta, in particularly to close rapidly the currently planning phase

At the same time the coordination with the other park authority in Emilia Romagna side have to be implemented.
Some projects of collaboration between the two authority are going in this direction

The implementation of climate policy in the area of Delta Po have to pass first of all through the existing planning tools framework.

Urgency of a “climate appendix” to the existing planning and management plans and tools

The Nature 2000 management plans (compulsory all over Europe) can represent an opportunity in this sense

I
- - -
U
- - -
A
- - -
V

Università Iuav
di Venezia

University Iuav of Venice
Faculty of Urban and Regional Planning

Francesco Musco, PhD
francesco.musco@iuav.it
climatechange@iuav.it