



Italy - Consorzio di Bonifica Veneto Orientale

Lagoon Management in the Upper Adriatic and Inner Waterway (Litoranea Veneta)

CONSORZIO DI BONIFICA



VENETO ORIENTALE
San Donà di Piave - Portogruaro

Dr. Agr.

Graziano Paulon

San Donà di Piave 20.10.2023



Veneto Orientale Land Reclamation Board (CBVO)



Veneto Region Land Reclamation Boards



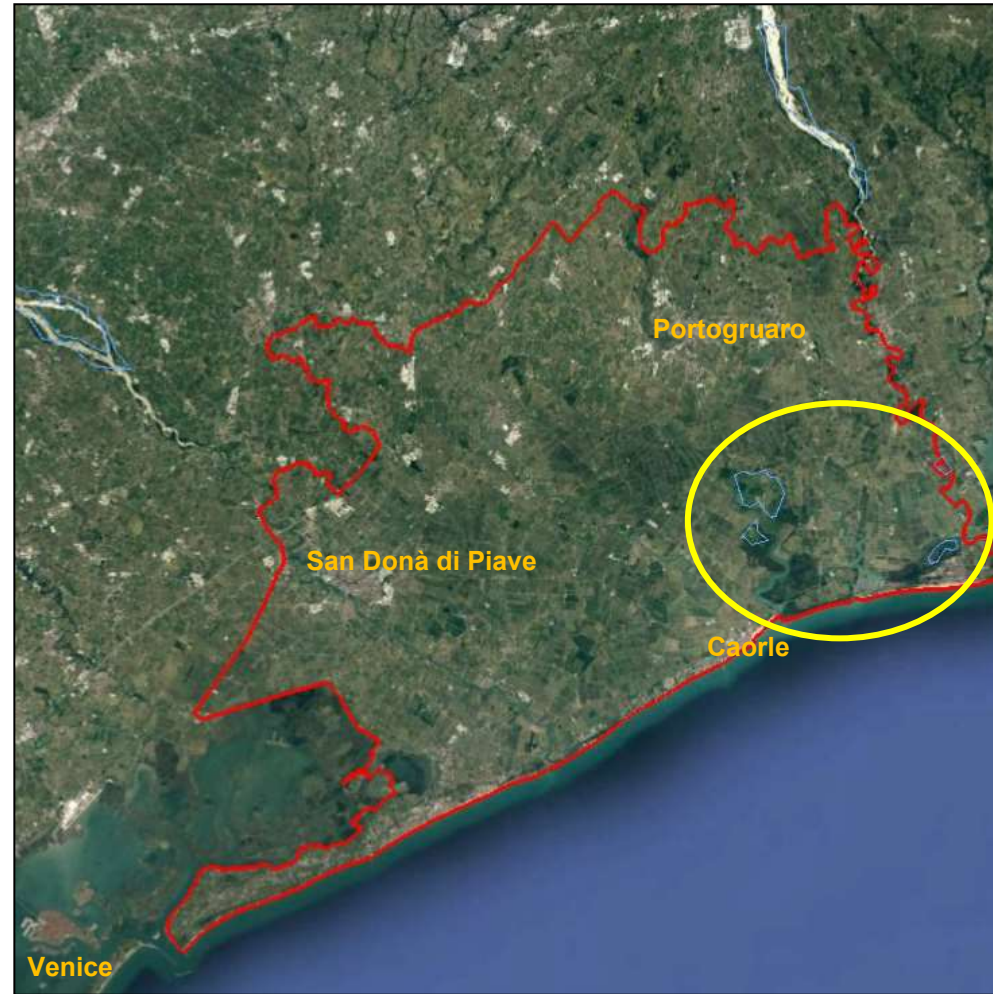
Land Reclamation Boards in the Veneto Region



1. Veronese
2. Adige Po
3. Delta del Po
4. Alta Pianura Veneta
5. Brenta
6. Adige Euganeo
7. Bacchiglione
8. Acque Risorgive
9. Piave
10. Veneto Orientale



Caorle Lagoon

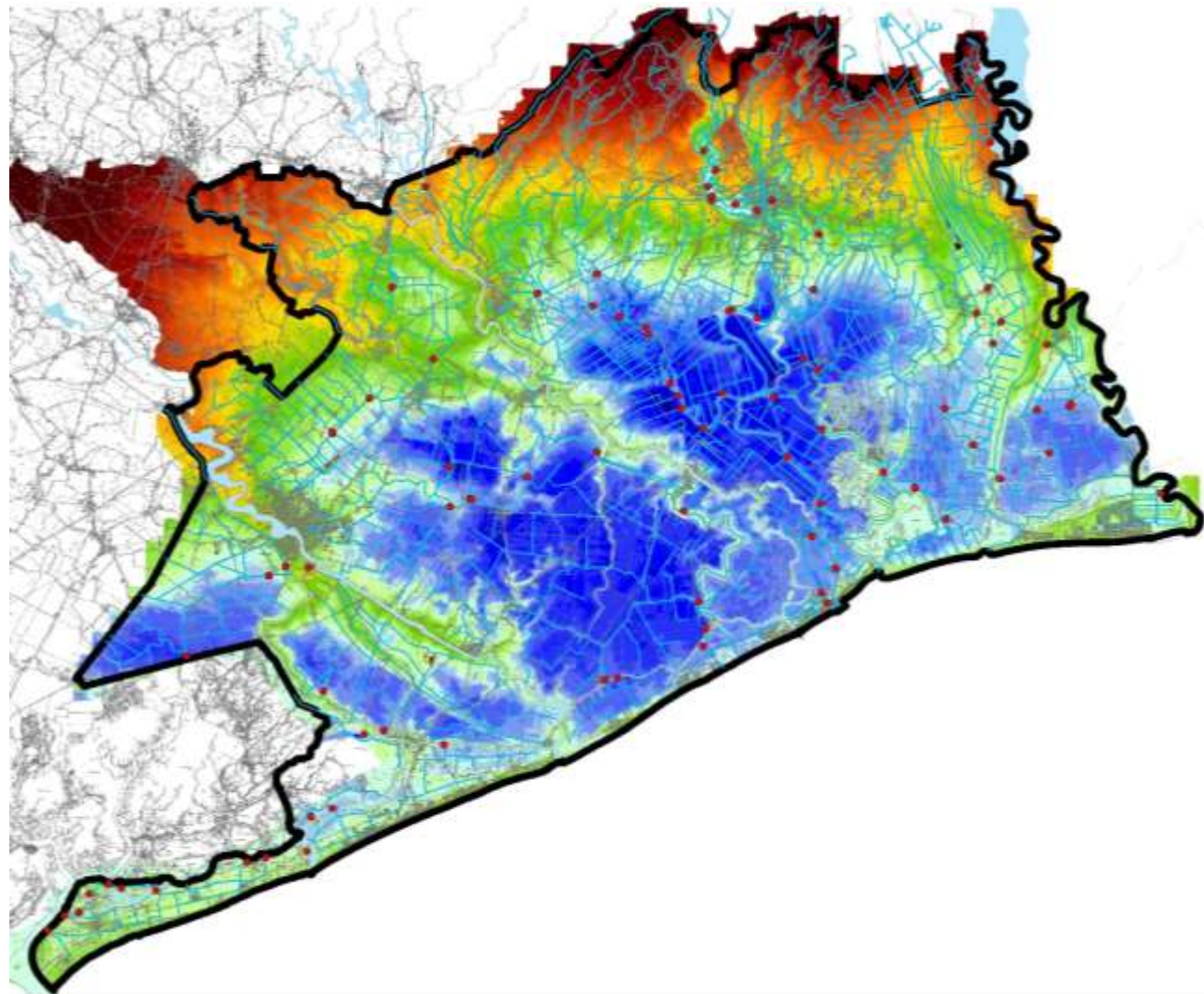
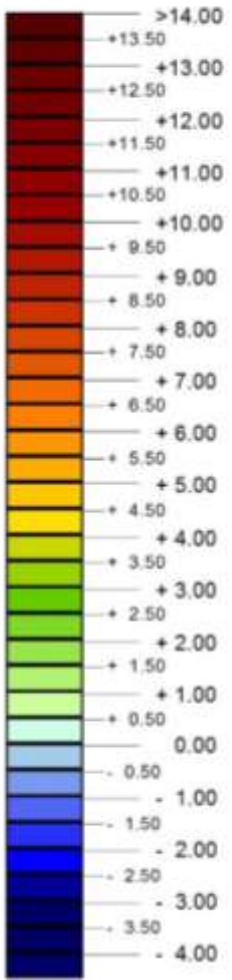


Estuary of Baseleghe canal, Nicosolo canal and Tagliamento river
Complex network of canals and interconnections



Veneto Orientale Land Reclamation Board

Elevation [m a.s.l.]



- > 113,359 ha
- > 53 Watersheds
- > 74,685 ha Undergoing Mechanical Drainage
- > 81 Pumping Stations: 434 m³/s
- > 2,065 km of Canals
- > 520 km of Embankments
- > 60,227 ha irrigated



Functions

Maintainance of drainage and irrigation network



Climate Change - Scenario

ipcc
INTERGOVERNMENTAL PANEL ON
climate change

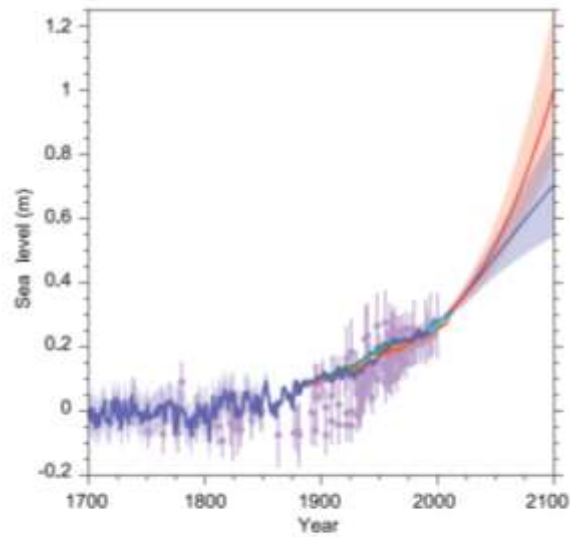
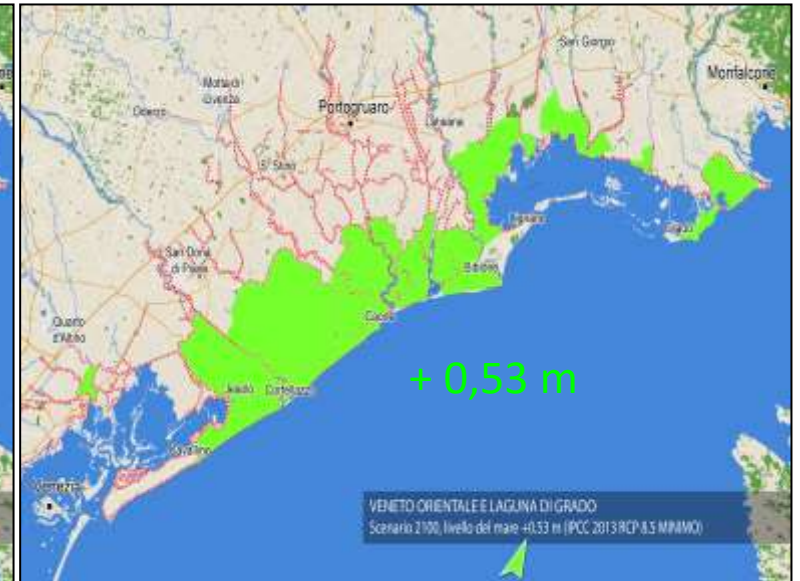
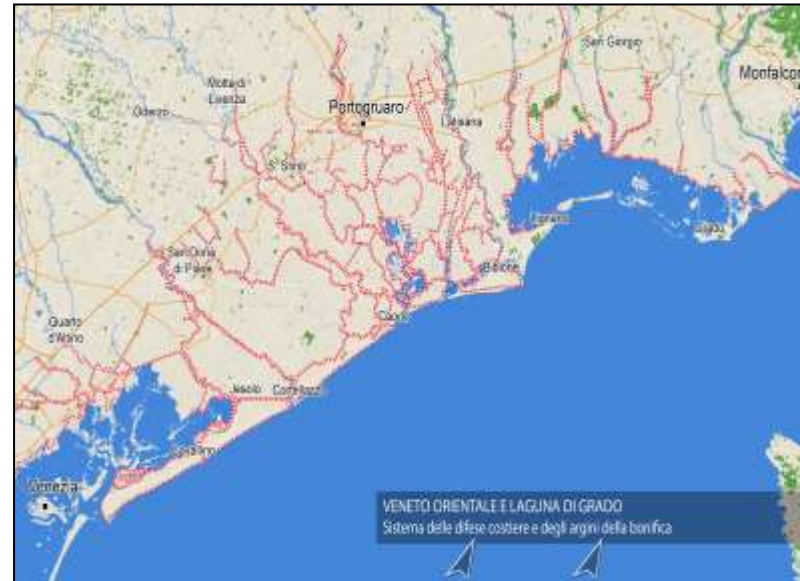
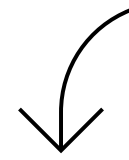


Figure 13.27 | Compilation of paleo sea level data, tide gauge data, altimeter data (from Figure 13.3), and central estimates and likely ranges for projections of global mean sea level rise for RCP2.6 (blue) and RCP8.5 (red) scenarios (Section 13.5.1), all relative to pre-industrial values.



Our Approach to Climate Change

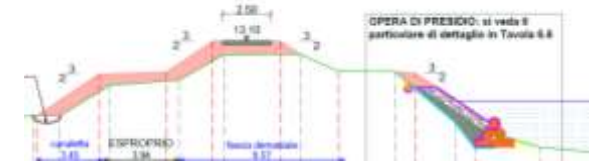
Planning & Scheduling



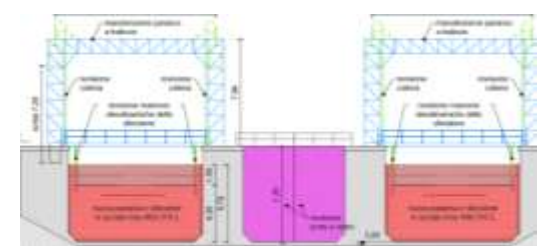
Emergency Management



Risk Reduction



Embankment Uplift



Functionality
Restoration of Artefacts



Upgrading
Pumping Station



Key Role of Land Reclamation



HISTORY

Regional Congress for Land Reclamation

San Donà di Piave
March 23-25, 1922

It was the starting point for approaching reclamation following the concept of «**Integrated Reclamation**»



«Integrated Reclamation is not just reclamation of the soil, but also of the man, and their relationship; better said, it is the realization of the relationship between the man and the soil that better fit the social cohousing. [...]»

«All the integrated reclamation works – with no exceptions – are of public utility: the State must take an interest in all of them, it must insure their execution, as well as their design, coordination and timing of execution, [...]»

(A. Serpieri 1927)

100y Later - National Land Reclamation Congress



Terre Evolute - Evolved Lands
Terre Volute - Wanted Lands





Ongoing Projects

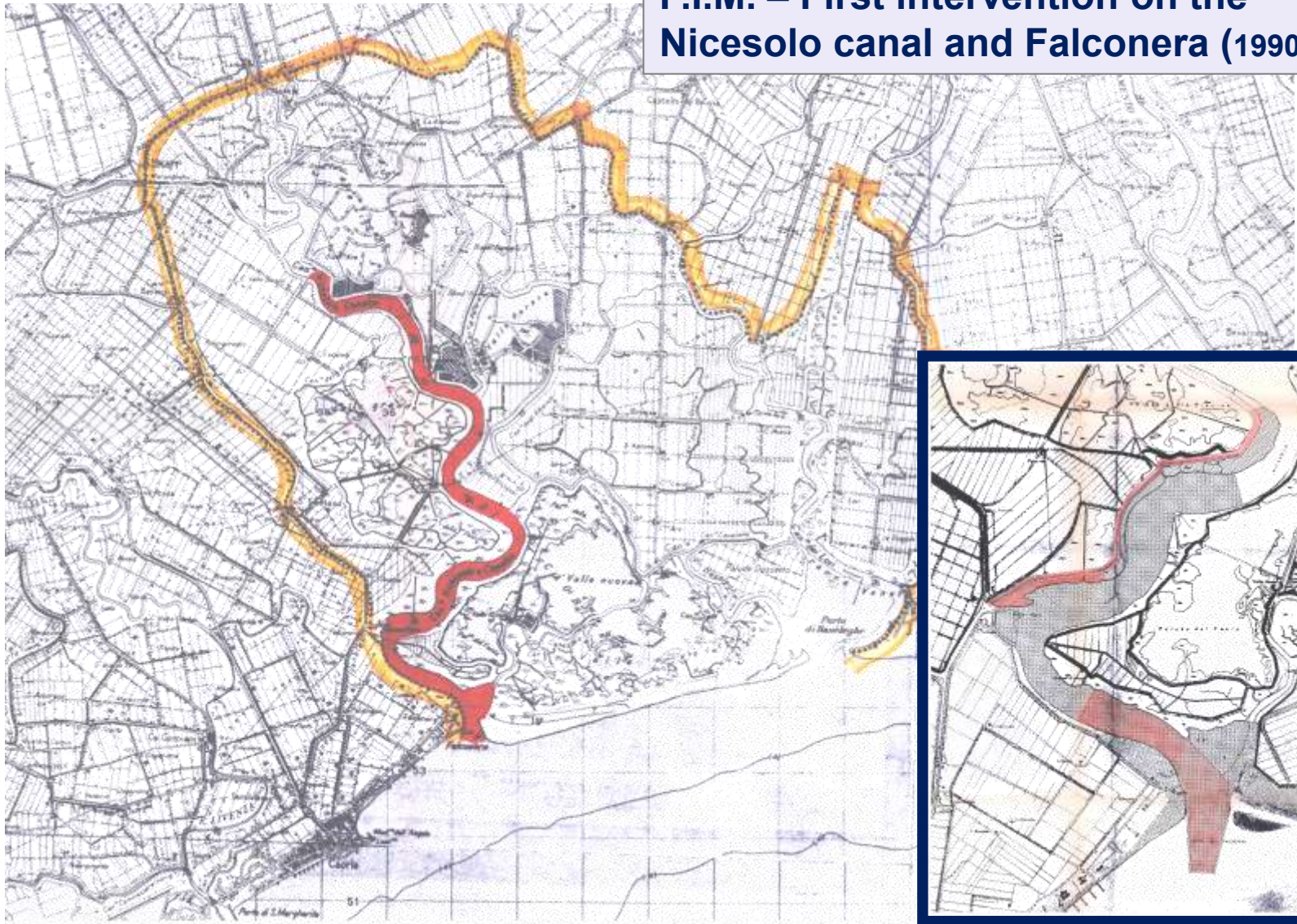


6.12.2002 - Amposta (España) Establishment of DELTAMED



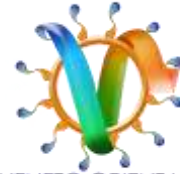
Caorle Lagoon

P.I.M. – First intervention on the Nicesolo canal and Falconera (1990)



Work carried out in the Caorle Lagoon











Future Strategies for Lagoon and Coastal Area

Goals

- Hydraulic safety
- Environmental protection and conservation
- Safeguard of landscape
- Restoration of lagoon canal bottoms
- Restoration of *Litoranea Veneta*
- Hydraulic exchanges between lagoon canals and the sea
- Quality of transitional waters
- Fertility and organic content in soils
- Diversification of tourism offerings and presence in coastal and lagoon areas
- Utilization of cycling and pedestrian paths and the use of navigable and lagoon areas
- Understanding of the cultural and landscape values of the territory
- Others...



Wetland Contract of the “Caorle Lagoon System”



Project co-financed by the European
Regional Development Fund

6 countries - 10 project partners
Goals:

- Integrate policies and actions for the protection and enhancement of the territory
- Actively involving all interested parties (including public authorities, local authorities, businesses, and other stakeholders)



Interreg
Italia-Slovenija



Co-funded by
the European Union

ECO2SMART

99,976.80 €

- Conservation of sandbars in the Caorle Lagoon
- Implementation of a single consultation table for the wetlands and lagoons of the North Adriatic Sea

Interreg
Italia-Slovenija



Co-funded by
the European Union

GRENNAT

119,109,78 €

- Monitoring system for salt intrusion into the water table
- App for irrigation management and upstream withdrawal monitoring in the Caorle lagoon



INTERREG Poseidone

437,500.00 €

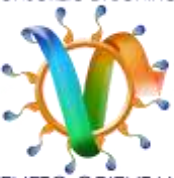
- Requalification of the waterway Litoranea Veneta: Enbankments Uplift, Bikelanes, ...
- Environmental Monitoring



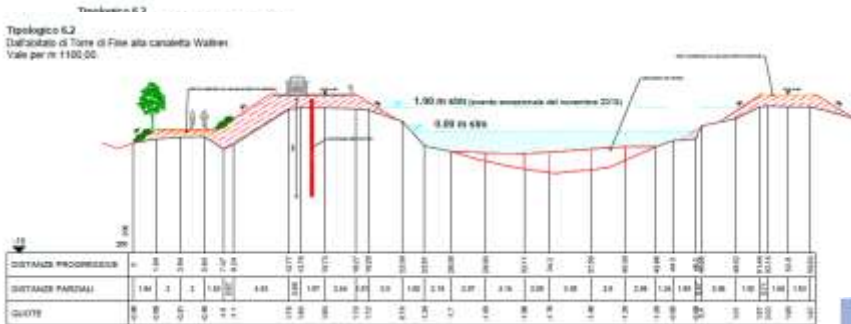
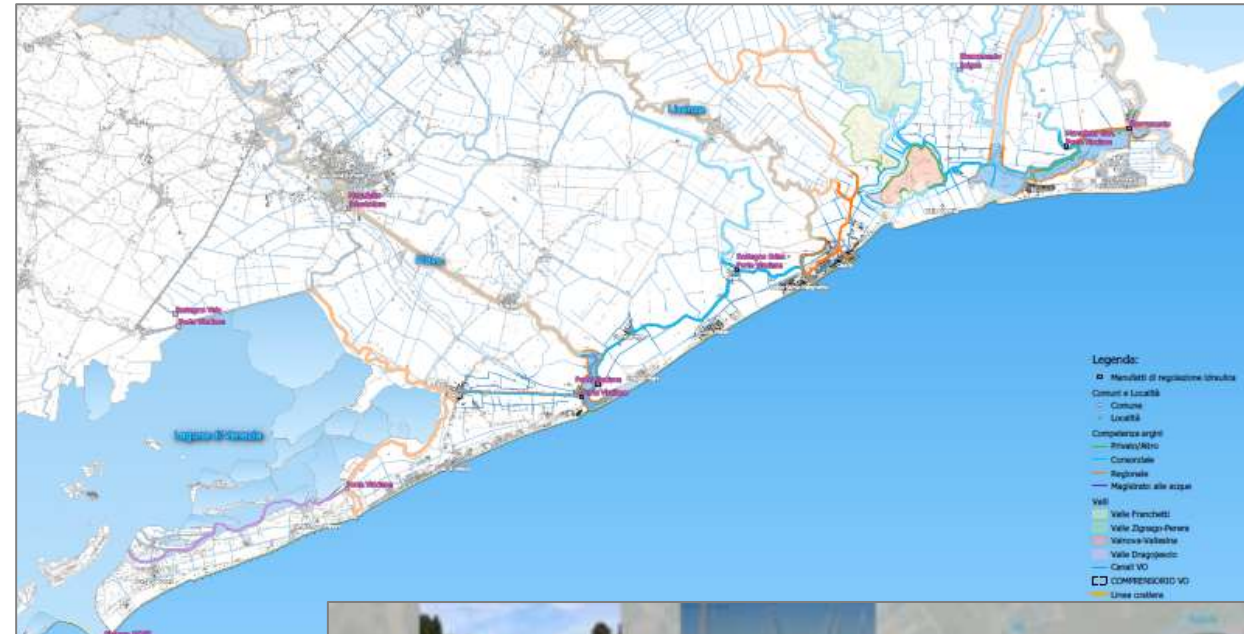
Co-funded by the European Union

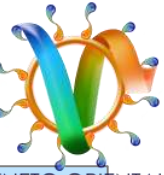
POSEIDONE

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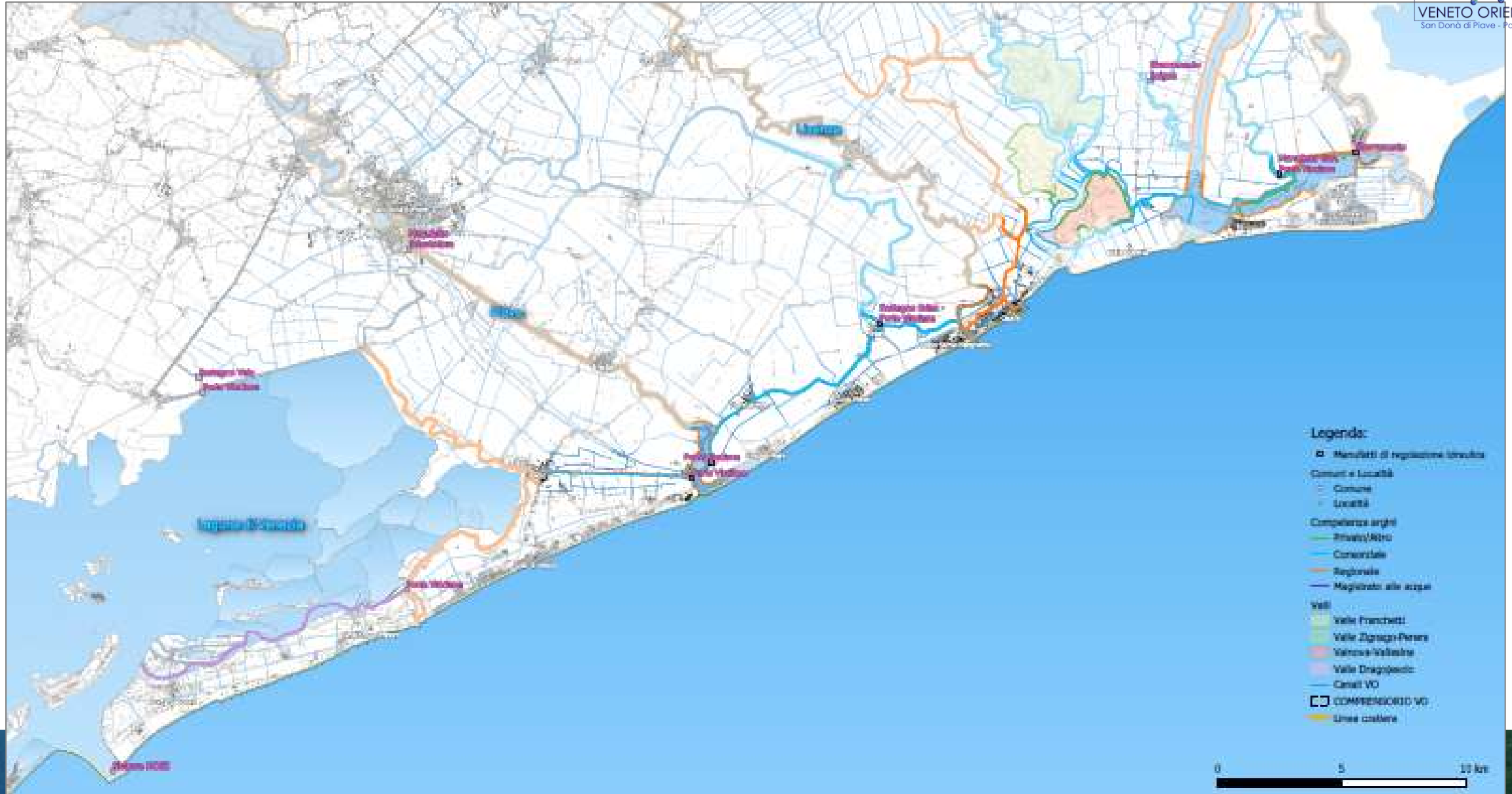


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Litoranea Veneta

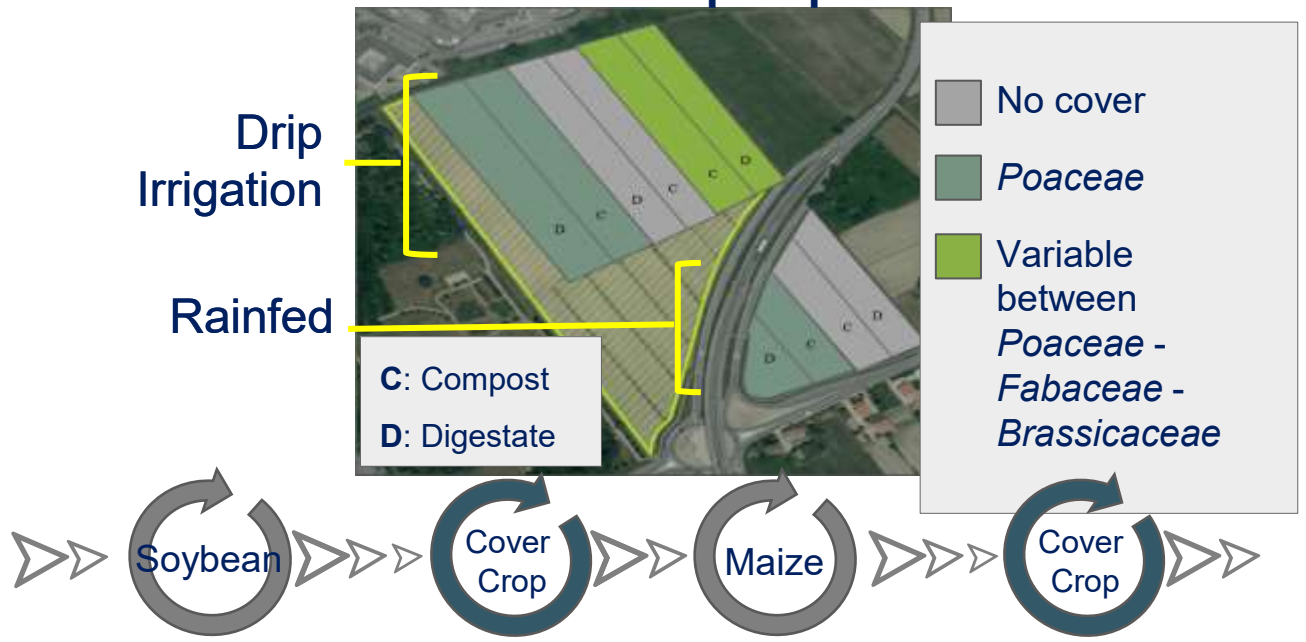


Experimental Farm Podere Fiorentina



- Goals**
- Identify agronomical practices to increase soil organic matter and water holding capacity
 - Define guidelines for local farmers

2 Organic Amendments × 2 Irrigation Strategies × 3 Cover Crops Species





deltamed

Thank You

Dott. Agr.

Graziano Paulon

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