

Main Indicators

Drivers			
Urban areas and Land Use	km2		
Industrial activities	number of installations/per industry type		
Polluted areas	km2		
Agricultural activities	km2		
Zootechnical activities	km2		
Aquacultures	km2		
Fishing	number of fishing ships per harbour* year-1		
Harbours	number		
Tourism structures and tourists	number of tourists and structures		
Population	number		
Pressure			
Toxic substances spill	number of spills occurrence year-1		
Commercial species captured/fish and bait	t/year		
Dredging	t/year		
Dredged material disposal	t/year		
Nutrient Loads	t/year		
Organic loads	t/year		
Maritime traffic	passenger (N/year), goods(t/year), Oil(t/year)		
State			
TRIX			
CSQI			
Bioeconomic map			
Bathing water	MPN		
Impact			
Bathing water	positive bathing quality (%)		

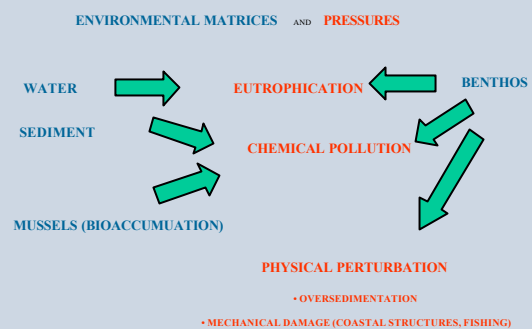
DIPARTIMENTO AMBIENTE

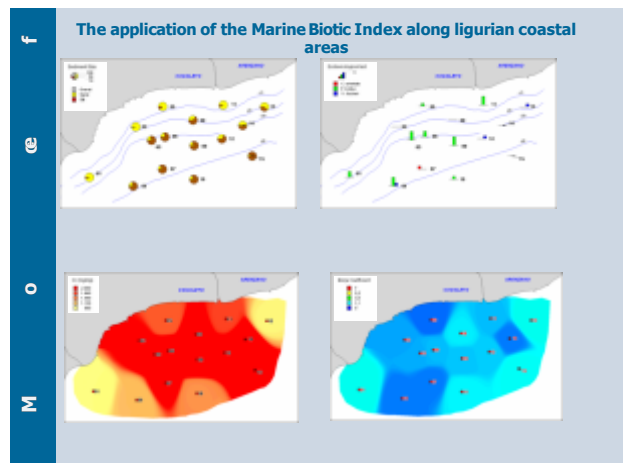
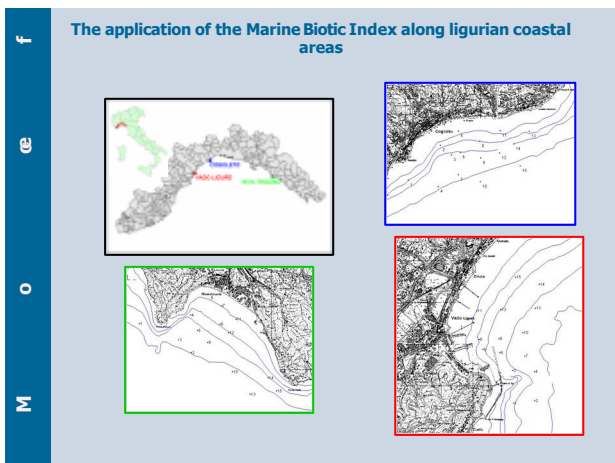
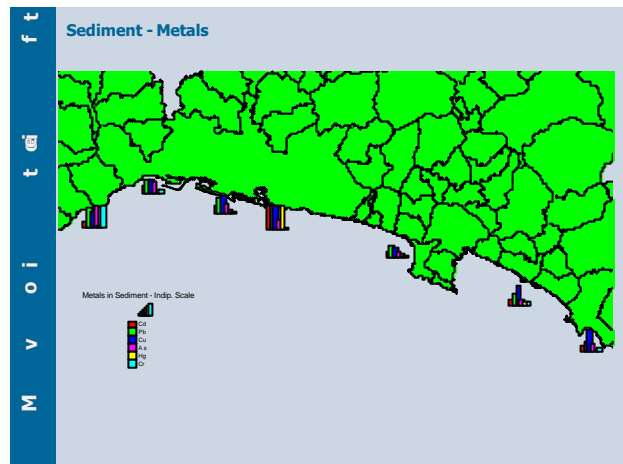
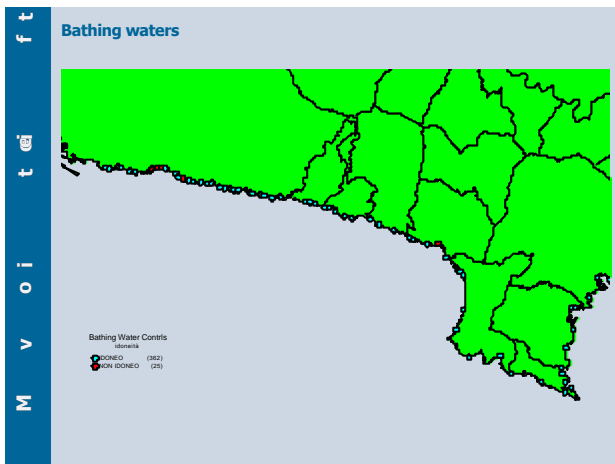
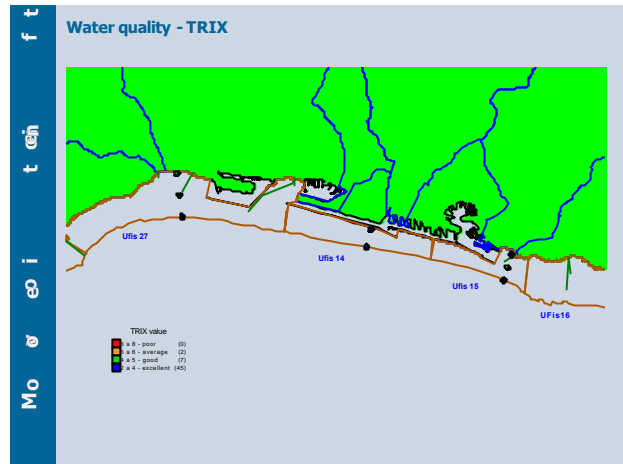
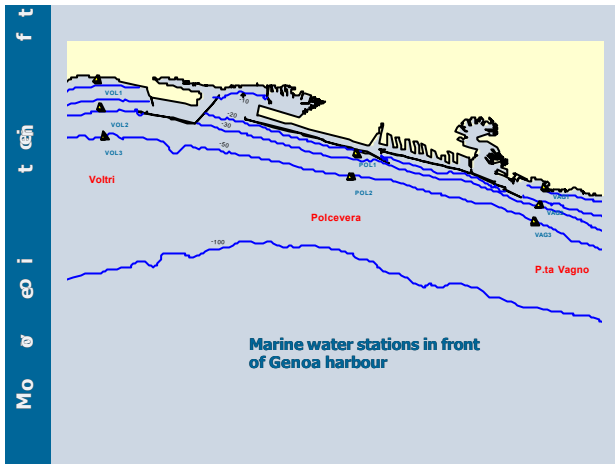
Monitoring of the marine and coastal environment by the Regione Liguria

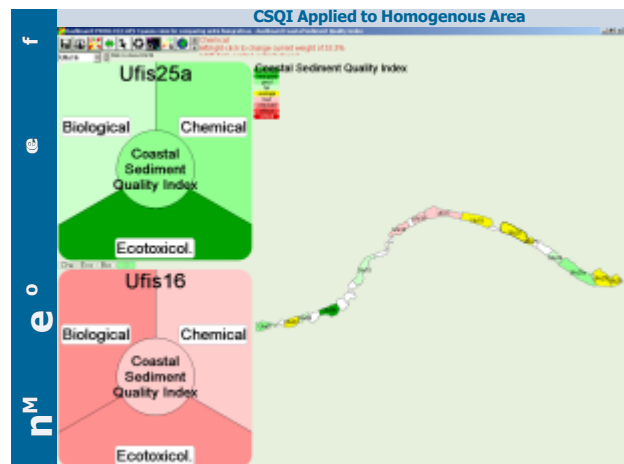
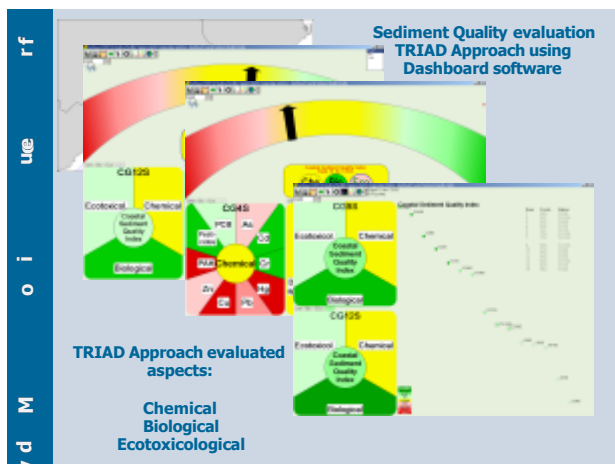
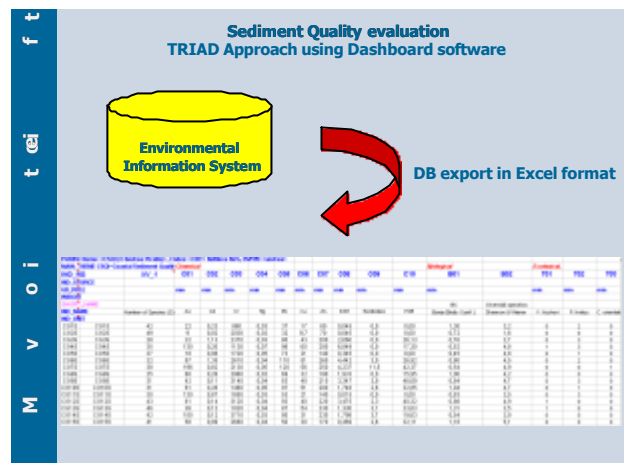
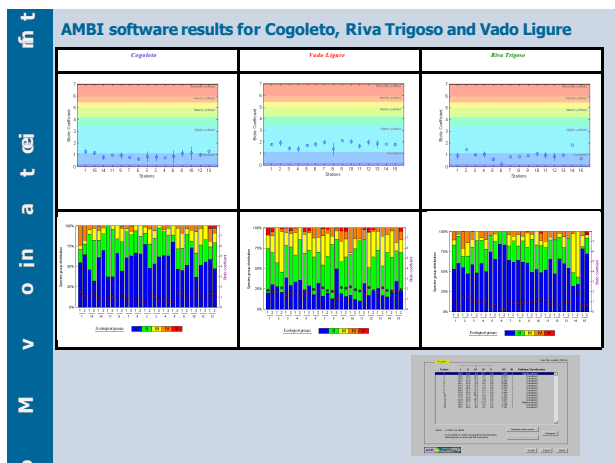
NATIONAL LAW N 152 DEL 1999
ANNEX1 : "MONITORING AND CLASSIFICATION OF COASTAL WATER



**UNDER 3000 METERS FROM COAST
or
UNDER 50 METERS OF DEPTH**

[illegible]





THE BIONOMIC MAP PROJECT

Regione Liguria

- Settore Opere Marittime ed Ecosistema Costiero
- Settore valutazione di impatto Ambientale
- Settore Parchi ed Aree Protette

SEA-BED BIOLOGICAL MAPPING THE BIONOMIC MAP (Scale 1:10.000)

SCOPE AND PRACTICAL USE

- ICZ MANAGEMENT AND PLANNING
- ENVIRONMENTAL IMPACT ASSESSMENT
- MONITORING OF THE COASTAL ECOSYSTEM

Methodology (integration of different sources of information in environment GIS)

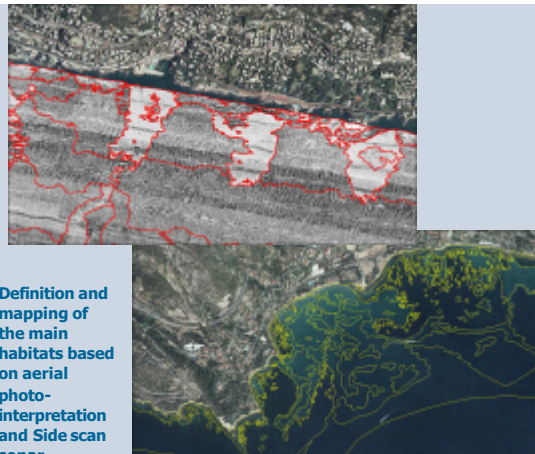
AERIAL PHOTOS Interpretation

SIDE SCAN SONAR Interpretation

Local and Detailed Studies

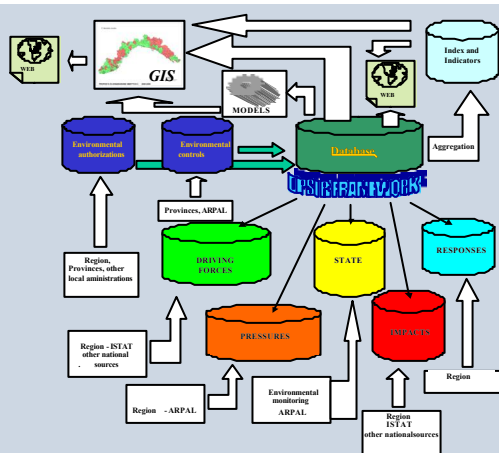
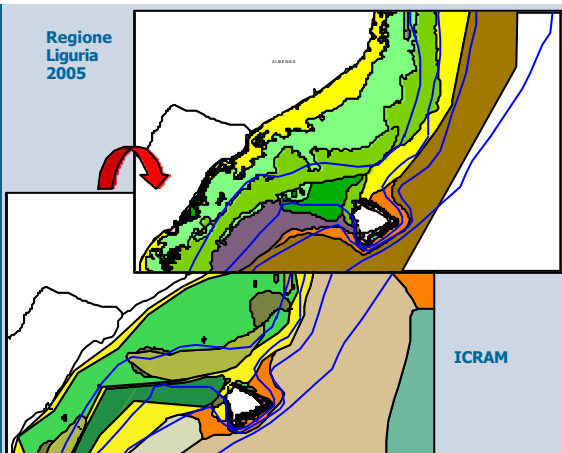
- Bibliography
- Environmental Impact assessment studies

GIS



Definition and
mapping of
the main
habitats based
on aerial
photo-
interpretation
and Side scan
sonar

Regione
Liguria
2005



Conclusions

The DPSIR approach is very important to apply environmental management measures following the integration principle (environmental, economic and social aspects)

The collection of environmental data in marine environment is very important, but expensive: we need statistical coeff. and models to evaluate drivers - pressure - state interactions and to define guidelines and instrument for Marine ecosystem risk assessment

The GIS and monitoring activities integrated with DPSIR framework (project ECO3) will be a good Decision Support System for coastal zone management

Contacs

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Thanks for your attention!