

Coastal Management Plan Coastal Environment and Local Management: Good Practices and Experiences

Ms. Chiara Vicini

APAT

Agency for Environmental Protection and Technical Services

Contents

1. Introduction
2. EU Policies and international level
3. The coastal planning in Italy
4. Case - study: the coastal plan of *Liguria* Region
5. Conclusions
6. Appendix:
 - 6.1 SEA procedure applied to coastal planning
 - 6.2 SEA applied to Liguria coastal Plan

1. Introduction

Coastal resources have been, and will continue to be, placed under multiple, intense and often competing anthropic pressures.

The specificity of the coastal zone like *sensitive* zone, as more and more reduced not renewal resource and has carried to the development of legislative instruments and the deepening of specific techniques of planning.

Beginning from the Coastal Zones Management Act approved from the federal government of the USA in 1972 and until to the most recent marine outlines Integrated Coastal and Marine Zones Management (UNEP, 1995). The planning model that emerges is constituted from the coordination of instruments of various nature that contribute to the respective levels the several agencies (from the national government to the local administrations) and that it needs of a diffused **sensitization** and operating involvement of the public and the private ones.

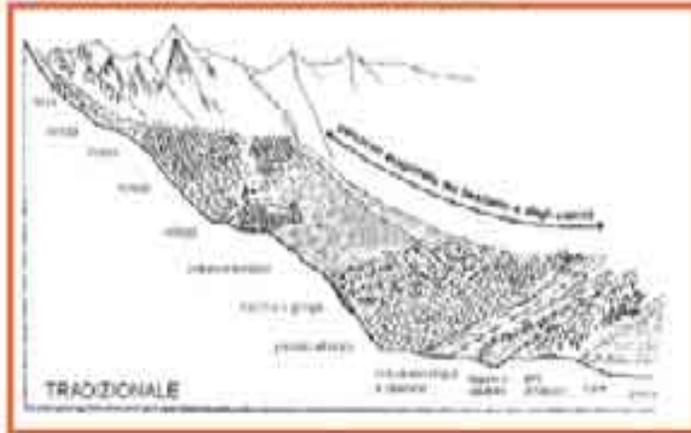
2. EU Policies and international level

The international agreements has regarded already at the beginning of the century the exploitation of the fisheries resources, in order then to move itself successively on the relative issues to the exploitation of the bottom and the marine foundation.

In the last few decades the agreements are mainly revolts to the fight against marine pollution (MARPOL) and to the coastal environmental conservation that needs a detail protection (RAMSAR). In the specific within of the Mediterranean it is obligation to recall the Convention of Barcelona (1978) and the successive protocols.

2. EU Policies and international level

L'USO DEL LITORALE MEDITERRANEO (Urban Plans 1980)

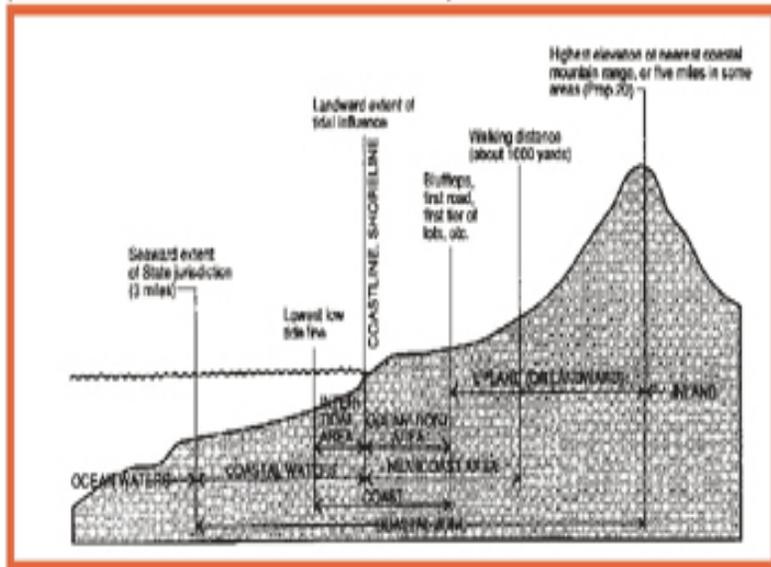


- At the level of planning it is important to recall the activity of the Action plan of the Mediterranean sea, promoted from the United Nations, that the Plan Bleu has produced to important documents which - that defines the perspectives of development of the Mediterranean river basin - and has cured the document writing set up on the principles of the management integrated (like the Plan for the island of Rhodium).
- To EU level, the attention for the problems of the coastal zones, than date at least from 1973 (the Recommendations approximately the protection of the coastal zones) has been confirmed in V the Program of action (1993) and in documents produced within specific programs (ENVIREG, LIFE).

2. EU Policies and international level

- To an other level, the document exited from the Rio Conference of 1992, so-called Agenda XXI, characterizes the picture of the economic, social, environmental actions on which the governments they are engaged, with the perspective of the sustainable development.
- In Agenda XXI a specific chapter is dedicated to the sea and to the coastal areas, with special attention to the problems of the pollution, the fisheries, the sea level rise, of the small islands and the tropical zones.

SUDDIVISIONE DELL'AREA COSTIERA
(California Coastal Zone Conservation Commissions 1975)



2. EU Policies and international level

- The attention of the countries members, based on the environmental aspects, specifically is turned, for the countries of the Mediterranean, to control the indiscriminate use of the coastal area where the tourist development represents the main opportunity of economic development.
- Such tendency is confirmed also from the launch demonstrative program in the 1996 from European Commission, on the Integrated Management of the Coastal Zones concentrated, for the Mediterranean, in the objective 1 zone.

3. The coastal planning in Italy



- In Italy the situation of the coastal planning turns out still extremely conflicting and fragmented between the various competences of the State, the Regions and the Municipalities.
- Relatively to the emerged coastal territory, to beyond the generic location of wrap coastal of the first 300 meters, like good to subject to landscaped tie, fixed from the Galasso (Law n.431/1985). Do not exist in Italy, contrarily to how happens in other countries, measures of active protection that allow to contrast the always increasing question of transformation of the coastal area.

3. The coastal planning in Italy

- ✓ The recent change of the legal framework, that it has involved the *passage* of the marine and coastal competences from the State to the Regions, involves the regional level like optimal for the performance of policies of spatial planning and integrated coastal management.
- ✓ In Italy the competences inherent to the integrated management of the coasts have been entrusted to the Regions with Law n. 59/97 and Decree n.112/98.
- ✓ The Decree n.616/1977 partially transferred to the Regions the coastal planning competences, being maritime works and coastal defense works, competences of the State. The tasks and the criteria for the defense of the coasts come directly exercised from the Ministry or through making the technical organisms to it head, between which APAT, ICRAM and ENEA.
- ✓ Some Regions have regional planning laws and elaborate plans and programs of management integrated of the coasts, in performance to the recommendation of the European Parliament.

3. The coastal planning in Italy

The national legislation indicates that the planning of the use of the territory is remitted to the local and regional authorities.

The management of coastal area and the control of the erosion promoted from the regional governments is financed from the central administration.

The strategies of the ICZM are pursued through regional programs, therefore it has not been emitted regulation on a national level with regard to the integrated management of the coast.

4. Case - study: The coastal plan of *Liguria* Region

The analysis of the actual conditions of coastal area shows a quantitative increase of urban sprawl, marking by an expansive cycle of a strong one transformation of the coastal environment.

At the same time the equipment of services and the deficiencies of infrastructures affect the economic and the touristic system and the quality of life of the residents.



4. Case - study: The coastal plan of *Liguria* Region

General objectives:

- Protection of emerged and submerged coast, affected by landscaping and environmental great value zone;
- Re qualification of coastal zones interested by urban sprawl;
- Defense of littoral zone affected by marine erosion and nourishment;
- Development of public and tourist use of coastal area;
- Re adaption and development of system of tourist ports;
- Re use of railway - lines decommissioned along the coast;
- Improvement of the mobility in the coastal zone.

4. Case - study: The coastal plan of *Liguria* Region

Structure (1):

The coastal zone in the plan is divided in two principal sectors*:

Ground section: elevation ranging from the shore line (o) to 200 mt

Sea section: ranging from 0 to – 100 (bathymetric line)

*The definition of coastal area is a function of morphological characterization of the territory

4. Case - study: The coastal plan of *Liguria* Region

Structure (2):

The plan is articulated in four section:

1. The materials/documents useful for deepening of the knowledge;
2. The indications relative at four principal regional topics:
 The defense of littoral zone, the system of tourist harbours, the reuse of railway - lines , the mobility in coastal area;
3. The prescriptions to the Local Authorities for implementing the local level plan instruments;
4. The correlated normative for the implementation of the plan.

|

4. Case - study: The coastal plan of *Liguria* Region

A) Defense of littoral zone and nourishment

In Liguria on approximately 359 km of coast only 94 km are constituted from sand beach. The interventions in order to maintain the consistency of this resource affected on the environment and the landscape with remarkable impacts.



The Plan is proposed to develop conditions for one more natural evolution of the coast line and to guarantee of a greater stability through a complex of organic interventions based on two fundamental components:

- a) a complex of works on the river basins and a treatment of the high coasts to favor the restoration of a greater solid transport of sediments to sea;
- b) a system of nourishment of shore line and a complex of marine defense works for unitary features of the shoreline

4. Case - study: The coastal plan of *Liguria* Region

B) The system of tourist ports

This system is actually characterized from a dispersion of localizations with many existing ports of reduced ability and at low level of service

The plan previews an increment of the number of places for private boat through the reuse of the decommissioned commercial harbour basins and the adaptation of the existing ports.

The new works are estimated on the base of the sensibility of the coast tied to the morphology, to the marine environment, to the naturalistic and landscaping goods in the area.

4. Case - study: The coastal plan of *Liguria* Region

C) The reuse of railway – lines decommissioned

The phenomenon of the movement towards mount of some railway - lines has left free areas along coast of great landscaping and environmental quality.

The Plan had use this topic as an requalification occasion of wraps coastal and like resource for the development of the cities.

Reuse through the realization of a system of bicycles tracks, pedestrian walks long coast and of the reorganization of an efficient public transportation system.

4. Case - study: The coastal plan of *Liguria* Region

D) The mobility system in coastal area

The topic regarding the environmental problems and the level of congestion of the viability net, to forehead of a remarkable ground occupation and of the general degradation of the coastal landscape.

The Plan pursues a strategy based on the sustainable development of the resources and the potentialities at regional level, with an high feasibility, and aimed at the control of the negative fallen back ones on the environment acting on various foreheads:

- in the urbanized area, through policies of incentive to the use of the public transportation and to the diffuse realization of parkings;
- in the main roads, with interventations aimed at the improvement of the fluidity of the traffic.

5. Conclusions

The plan of coastal defense is the principal instrument to manage the coast, through the governance of dynamic equilibrium of sea-energy and sediments and the recovery of naturalistic environment.

Objectives:

- Protect the human settlements and the coastal ecosystems from erosion and flooding
- Discipline the river extraction activity
- Contain the phenomena of soil subsidence
- Quantify the situations of degradation of the environmental system and the relative causes
- Planning the realization of protection works of shorelines through reconstitution of the submerged beach, of the dunes system and re-naturation of coastal zone

5. Conclusions

The activity of planning is divided in three main phases:

1. Knowledge

The technical scale to collect data is the physiographic unit (river basin level)

2. Mapping

Identification of the erosion or flooding risks due to the morphological, anthropic and meteo-marine conditions, through appropriate methodology, for evaluate the future development of the phenomena

3. Prescriptions

The normative part of the Plan contains also technical and economical feasibility of structural or no structural interventions to mitigate the risks on territory, with the priority list and the restrictions imposed by law, the plan of decommissioned infrastructure relocation.

- **At the end of planning process the instrument must to be subordinate to a SEA procedure !**

6. Appendix:

6.1. SEA procedure applied to coastal planning

- By 21st July 2004 the Directive on Strategic Environmental Assessment (SEA) must have been implemented in the Member States. This will be a significant milestone in a process which, in one form or another, has been in hand since the 1970s when the European Commission first became interested in Environmental Impact Assessment.
- The assessment of the effects of plans, programmes and policies (so-called SEA), takes place at a much earlier stage when alternatives are less likely to be fixed, when the cumulative effects of large and small projects can be more easily taken into account, and when environmental objectives can be more easily integrated into proposals. Unlike EIA (relating to projects), SEA also enables the effects of activities to be taken into account.

”

6. Appendix:

6.1. SEA procedure applied to coastal planning

- The Directive require an environmental assessment of plans and programmes which have relevant effects on the environment.
- Strategic Environmental Assessment will be mandatory for: plans and programmes which are prepared for agriculture, forestry, fisheries, energy, industry, transport, waste management, water management, telecommunications, tourism, town and country planning, or land use and plans and programmes requiring assessment under the Directive on Habitats (92/43/EEC).

6.2. SEA applied to Liguria coastal Plan

The deepening to support of such procedure have regarded the contents of the coastal planning, the innovations brought from the process of Integrated Coastal Management Zones and the structure of the tourist industry.



6.2. SEA applied to Liguria coastal Plan

Some of principal steps of the assessment phase:

- The screening of the effects of the programs of works in the tourist ports system through the use of gap analysis and checklists.
- The identification and assessment of alternatives and their influence on interested environmental systems.
- The provisions of maintenance and monitoring.

In this case, the methodology of SEA has been applied to the system of the tourist ports, through the assessment of the environmental parameters and of the impacts deriving from the actions proposed from coastal Plan.

The SEA has defined an alternative scenario to the Plan prescriptions, able to assure the development of sector (the tourist ports system), without pressures on natural environment.