











Natura 2000 Biogeographical Process Mediterranean Kick-off Seminar

Thessaloniki, 26 – 28 May 2014

Coastal Working Group











Introductions

Chair:

Zrinka Jakl, Association for Nature, Environment and Sustainable Development Sunce

Facilitator:

Bernie Fleming, Fleming Ecology



1. Selected Habitats and their conservation status

| Natura code | Description | CS |
|-------------|---|----|
| 1110 | Sandbanks | XX |
| 1120 | Posidonia beds | U1 |
| 1170 | Reefs | U1 |
| 1150 | Coastal lagoons | U2 |
| 1310 | Salicornia and other annuals | U2 |
| 1410 | Mediterranean salt meadows | XX |
| 1420 | Mediterranean and thermo-Atlantic scrub | XX |
| 2110 | Embryonic shifting dunes | U2 |
| 2230 | Malcolmietalia dune grasslands | U1 |
| 2250 | Dunes with Juniperus | U1 |



2. Main issues, problems

Urbanisation

Outdoor recreation

Pollution

Agriculture

Abiotic processes



3. Management needs and practices

Development of management plans (and their implementation)

Consistent implementation of existing legislation

Communication/awareness-raising

Site/habitat restoration and management

Focused/integrated research



4. Bottlenecks and problemsLack of awareness in the public and decision-makersCompetent authorities have competing priorities and lack resources, knowledge and skills to deliver biodiversity targets



5. Solutions and opportunities

Education and awareness-raising across all sectors

Development of effective working relationships with competent authorities

Development of integrated plans and policies at local and wider scales to integrate policy and practice across all users

Consistent, responsible use of legislation by competent authorities



Presentation of two case studies:

- The Kalochori Lagoon
 - Dr Lydia Alvanou, Axios Delta Management Authority, Greece
- Actions Integrated Coastal Habitat Management
 - Dr Graziano Caramori, Istituto Delta Ecologia Applicata, Italy



Specific threats and pressures by habitat type: Marine

| 1120-Posidonia | 1170 - Reefs | 1110 - Sandbanks |
|-------------------------|---|---|
| Land reclamation | Land reclamation | Land reclamation |
| Illegal + trawl fishing | Illegal + trawl fishing | |
| Unregulated anchoring | Unregulated anchoring | |
| Eutrophication | Eutrophication | Eutrophication |
| Hydrodynamic changes | Hydrodynamic changes | Hydrodynamic changes |
| Pollution | Pollution | Pollution |
| Invasive species | Invasive species | Invasive species(?) |
| Climate change | Climate change | Climate change |
| Illegal aquaculture | | |
| | Sea urchin barrens | Dredging |
| | Invasive grazing fish species | Breakwater construction |
| | Changes in population dynamics | Beach protection |
| | Wastewater systems/thermocline | Coastal defence |
| | Illegal coral collection | |
| | Physical disturbance – divers | |
| | Note – complex is varied and needs to be split into more subtypes | Note – close link to sand dune habitats and turtles |



General pressures – all habitats: Marine

Oil and gas drilling (especially in the Adriatic

Blue growth and competition for space with new users – wind farms, minerals

Lack of awareness and education

Tourism/coastal development

Competition for space with established uses – tourism, fishing, conservation at the national and local level

Insufficient co-operation with other sectors (tourism, fisheries, planners)

Insufficient communication within the conservation sector

Insufficient law enforcement

Political priorities lie elsewhere

Complex issues eg Gibraltar proposes to explore measures to restore lost Posidonia beds but results elsewhere can be variable and if pursued needs twin-track approach of managing existing threats. Concerns exist that effective restoration may encourage lack of protection elsewhere



Additional issues: Marine

Vents 1180 - distribution poorly understood with new research information only becoming available now The following habitats support highly characteristic species which should be included in future discussions: Posidonia meadows - Posidonia Reefs - Cystoseira Sandbanks/coastal dunes - Marine turtles Caves - monk seals



| Lack of information | | Sharing k | nowledge |
|---|--|-----------|-----------------|
| Action | Outputs / mechanisms | Who | When / where |
| Sharing experiences on SEA and NIA | Collate and share best practice via Communication Platform Forum and other networks | All | Ongoing |
| Sharing experiences on concrete examples of managing habitats and eliminating threats | Build knowledge base through Communication Platform Promote existing or adapt/develop new guidelines: habitat-threats-possible management solutions-case studies – relevant project/institutions references | All | Ongoing |
| Communicate current efforts being taken on EU level to build stronger synergies among closely related directives, strategies (WFD, Marine strategy, Barcelona convention), especially related to monitoring | Workshop related to this will take place December 2014 EC distribute more information through Natura 2000 platform, national focal points, NGO networks | | |



| Lack of information | | Sharing kr | owledge |
|--|---|------------|-----------------|
| Action | Outputs / mechanisms | Who | When / where |
| Link to marine biogeographical process | Separate seminar on marine Natura 2000 will be organized by the EC in early 2015, including all biogeographical regions | | Early 2015 |
| Improved | Develop large scale <i>Posidonia</i> monitoring based on upper border identified through aerial/satellite images - Joint Research Center may provide images and help on this? | | |
| Improved management of Posidonia beds | For priority areas with good <i>Posidonia</i> meadows and reefs promote no anchoring zones and permanent mooring systems installation | | |
| | Identify and promote no dredging zones and assessment of alternative possibilities | | |



| Lack of awareness | | Increasing knowledge | |
|--|---|-------------------------|-----------------|
| Action | Outputs / mechanisms | Who | When / where |
| Awareness – raising and | Promote and encourage better involvement of other sectors in Natura 2000 management – involve them in seminars and other events such as this one, raise their awareness, understanding, build support | | |
| education of communities and other sectors | Promote benefits of Natura 2000 in local communities Promote benefits of management plans Promote successful labelling schemes that can give added values to products and services from Natura 2000 sites, develop Natura 2000 label, certificates of origin etc. | | |
| Influence others | When there will be opportunities to improve directives lobby that tools/measure that have shown to be efficient move from status "recommended" into "obligatory" (e.g. management plans) | | |
| ICZM | Promote it, increase awareness about it, lobby its ratification. Share ICZM examples, techniques, tools, promote data sharing (e.g. satellite images) | | |



| Lack of awareness | | Increasing knowledge | |
|---|---|---|-----------------|
| Action | Outputs / mechanisms | Who | When / where |
| Training (option to be paid by participants) | Training on <i>Posidonia</i> management for administration representatives from various sectors and countries – could be organized by the Greek Hellenic Institute for Marine Research | | |
| Conferences, workshops | Workshop on experiences and possibilities of sea grasses restoration, could be organised by Gibraltar | Department of Environment, Gibraltar(?) | To be confirmed |
| Guidelines with management examples/case studies Study visits | Establish links with existing work, explore existing guidelines (MedPAN, RAC/SPA, other), examples from Life and other projects; promote them, if needed adapt and/or update them, strengthen their influence and number of reached users by promoting them on Natura 2000 platform, EC web site, recognition, etc. | | |
| Note | All of these events and tools would be most effective if they dealt with only one habitat, or one habitat and very closely related priority species (eg sand banks – turtles, caves-monk seals) | | |



| Lack of awareness | | Increasing | knowledge |
|---|---|------------|-----------------|
| Action | Outputs / mechanisms | Who | When / where |
| Raise awareness among the scientific and conservation communities | Raise awareness about Natura 2000, inform on process of biogeographical seminars on management of Natura 2000, identify experts and relevant contacts at: • Coordination for the implementation of marine strategy monitoring, June 2014, Madrid • Conference on <i>Posidonia</i> and coraligenous communities (research, monitoring), October 2014, Slovenia | | |

FINAL NOTE:

These results were based on a working group composed of in total 8 participants, comming from Greece, Cyprus, Gibraltar, Belgium (EC) and Croatia which represent only small part of EU Mediterranean countries

Representatives were scientists, NGO, government middle managment administration officials Participants had no manadate to give official commitments to implement proposed actions



Specific threats and pressures by habitat type: Coastal

| 1150 | 1110 | 1310, 1420, 1410 |
|---|---|--|
| 1. Declining water quality, resources and dynamics | | 1. Land reclamation |
| 2. Inadeguate freshwater input, both too high, too low or of not good quality | | 2. Urbanisation |
| 3. Erosion (natural and man-induced) | 1. Erosion (natural and man-induced) | 3. Artificial freshwater input |
| 4. Negative sediment budget (ie sediment retained at the hydrographic basin or district, sensu Water frame Directive) | 2. Negative sediment budget (ie sediment retained at the hydrographic basin or district, sensu Water frame Directive) | 4. Unsustainable recreational activities |
| 5. Inadequate management of water flow via artificial structures (eg dams) | 3. Inadequate management of water flow via artificial structures (eg dams) | 5. Unsustainable water management |
| 6. Urbanisation | | 6. Overgrazing |
| 7. Inappropriate agriculture and aquaculture | | 7. Garbage |
| 8. Unsustainable recreation | | |
| 9. Invasive alien species | | |



Specific threats and pressures by habitat type: Coastal

| 2110, 2230 | 2250 |
|---|---------------------------------|
| 1. Unsustainable recreational activities | 1. Overgrazing |
| 2. Lack of sediment within system (eg dams) | 2. Unsustainable agriculture |
| 3. Land reclamation | 3. Illegal loging |
| 4. Sand removal (1110) | 4. Fire |
| 5. Garbage | 5. Garbage |
| 6. Coastal defence | 6. Invasive aliens |
| 7. Invasive species | 7. Sediment removed from system |
| 8. Beach cleaning | |
| | |



Common issues for applied to some or all habitats: Coastal

1150, 1310, 1420, 1410, 2110, 2230, 2250

Lack of public awareness

Need for monitoring to establish the scale, distribution and trends of the biodiveristy resource

Climate change

Water Framework Directive (WFD) – the interelationshop between the Nature Directives and WFD was a constant theme throughout the workshop both in terms of the need to identify and achieve water quality standards but also the opportunity provided by the WFD to operate at the hydrographic basin, or district, scale which links to the water quantity and quality issues.

An overall ack of integrated (management) planning able to manage competing land uses such as industry, recreation, tourism, urbanisation and conservation

Coastal wetland habitats are closely related to other sectors in terms of supporting fisheries, agriculture, flat land for construction, recreational oportunities and other types of biodiversity eg enormous bird populations

The need to improve the management of people (especially tourists) on fragile coastal habitats especially sand dunes ,but also those supporting large populations of birds

The need for consistent implementation by competent authorities of existing domestic and European legislation to enable coastal managers to avoid the deterioration or loss of features



Coasta lagoons - 1150

| Pressure/th reat | Action |
|------------------|--|
| 1,2,5,7 | Explore the establishment and management of multi-functional landscapes/zones/wetlands around lagoons to provide biodiversity and other benefits (eg watere reserve fo agricultural, recreational, hydrological) for the Natura site and other users and communities (LIFE ADICLIM) via traditional and innovative management (eg green filters) |
| 1,3,4,9 | Design of flow management structures to allow management of sediment release and flow management |
| 6,8 | Explore measures to identify the 'carrying capacity' of lagoons and other fragile habitats and the measures to manage recreational impacts eg access roads |
| 7 | Implementation of best sustainable (extensive?) aqua/agricultural practices |
| 1-9 | Secure the favourable conservation status and sustainable management of threatened coastal lagoons of northern Greece and other Countires facing similar issues along with associated sand dune habitats and bird populations. Note, this project proposed port-workshop. |



Sandbanks - 1110

| Pressure/th reat | Action |
|------------------|---|
| 1,3,4,9 | Design of flow management structures to allow management of sediment release and flow management |
| 6,8 | Explore measures to identify the 'carrying capacity' of lagoons and other fragile habitats and the measures to manage recreational impacts eg access roads |
| 7 | Implementation of best sustainable (extensive?) aqua/agricultural practices |
| 1-9 | Secure the favourable conservation status and sustainable management of threatened coastal lagoons of northern Greece and other Countires facing similar issuess along with associated sand dune habitats and bird populations. Note, this project proposed port-workshop. |



1310, 1410, 1420

| Pressure/threat | Action |
|-----------------|--|
| 2,4,6,7 | Managing livestock and public access to site |
| 2,4,7 | Raise public awareness |

2110, 2230

| Pressure/threat | Action |
|-----------------|---|
| 1,5 | Managing public access eg by beach zoning/management plan, limiting access points |
| 3,5,8 | Raise public awareness |
| 2,4,9 | Management of sediment cell to retain sediment within system |
| 6 | Encourage dune tevelopment techniques eg beach-cleaning, sand traps |



2250

| Pressure/threat | Action |
|-----------------|--|
| 1,3,4,5 | Managing/limiting access in response to assessment of 'carrying capacity' via access points, paths, bridges(!) |
| 1,3,4,5 | Raise public awareness |
| 6 | Habitat restoration eg from <i>Pinus</i> invasion |
| 6 | Monitoring of extent , trends and types of invasive species to inform sustainable management strategies |



| Inadequate management | | Finding best practice | |
|--|--|--|--|
| Action | Outputs / mechanisms | Who | When / where |
| Management of multi-functional wetlands around coastal lagoons | Establish LIFE project (or similar) to explore the establishment of multi-functional wetlands around Natura 2000 coastal lagoons supporting agricultural, recreational and biodiversity assets/functions eg green filters, agricultural, reservoirs, provision of freshwater/saline areas, sediment management. Issues to include funding, knowledge, best practice, partners, and network of experts and stakeholders. | To be decided but perhaps by a partnership of Greek Management Auhorities. Initial tasks required include estbalishment of core group of 'activists' to scope, develop and lead the project via the Forum and then via a face-to-face workshop in the next few months. Projects could be combined into one | Workshop(s) to be held before winter 2014 to lead to project proposals according to LIFE/INTERREG etc timetables. |
| Secure sustainable management and FCS of Greek coastal lagoons | Establish LIFE project designed to explore and identify best practice for the management of northern Greek coastal lagoons and associated sand dune habitats and bird populations to inform lagoon management across the whole of the Mediterranean. | | contractor support to establish. Alternatives could explore support via Barcelona Convention (RACSPA) |



| Lack of information | | Sharing knowledge | |
|--|--|---|-----------------|
| Action | Outputs / mechanisms | Who | When / where |
| Share information on green filters | Upload examples onto Communication Platform | All | Now and ongoing |
| Share information on management of people on beaches | Upload examples of signs, leaflets etc to Communication Platform | All | Now and ongoing |
| Improve design of dams/sluices | Promote collaboration between engineers and biologists to improve design | This could possibly form a component of the proposed LIFE project to secure the management of Greek coastal lagoons | To be decided |



Thank you to all the delegates!





Thank you to the Axios Delta Management Authority and the Commission!



