



Life + Making Good Natura

Making public Goods provision the core business of Natura 2000 LIFE11 ENV/IT/000168

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'Making Good Natura' (09/2012-06/2016) aims to establish and demonstrate innovative approaches to preserve biodiversity based on the concept of ecosystems services.

The project's specific objectives include:

- Identifying and evaluating the ecosystems services provided by Natura 2000 network sites
- Creating innovative models (e.g. PES) for funding the implementation of Natura 2000 management plans and conservation measures
- Creating and demonstrating models for better governance in conservation management and for the socio-economic development of local communities







Valorizing ecosystem services for financing Natura 2000 sites





















MGN - Project Idea

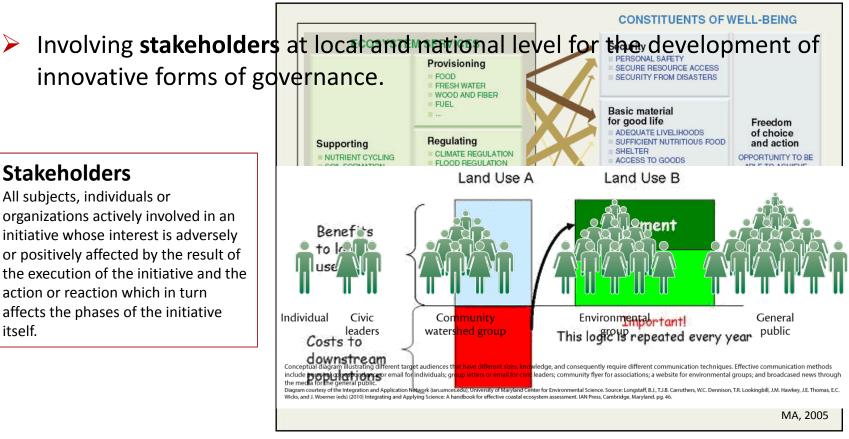


- Evaluating ecosystems services provided by the Natura 2000 network
- Improving habitat management through *Payments for Ecosystems Services* (PES) and other innovative forms of self-financing

innovative forms of governance.

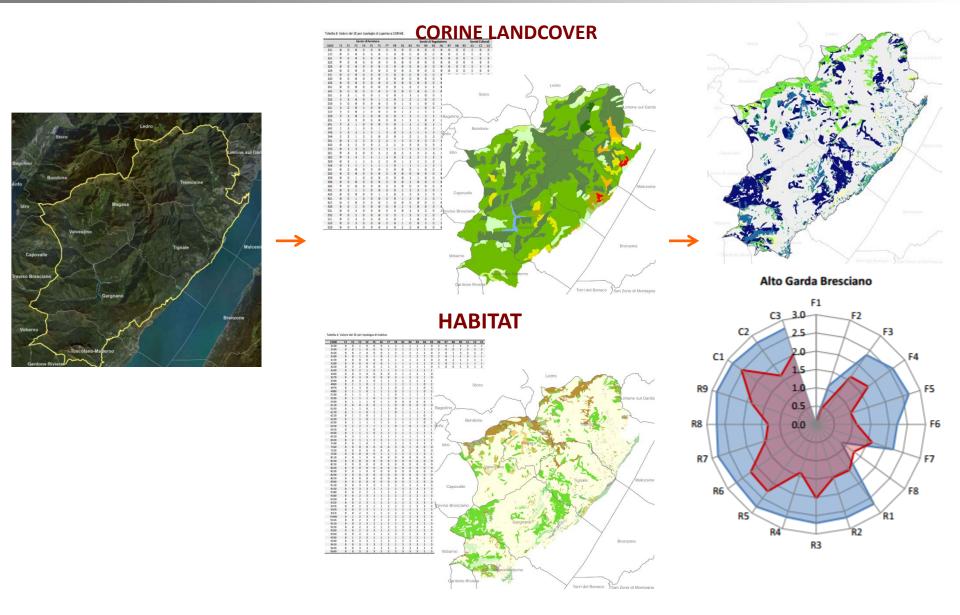
Stakeholders

All subjects, individuals or organizations actively involved in an initiative whose interest is adversely or positively affected by the result of the execution of the initiative and the action or reaction which in turn affects the phases of the initiative itself.



GIS-based ES analysis





Stakeholders-based ES analysis



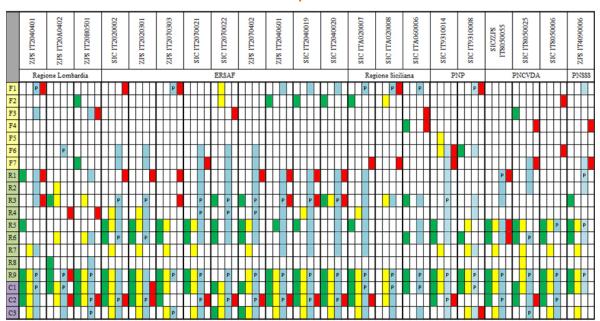
SITE MANAGEMENT AUTHORITY QUESTIONNAIRES





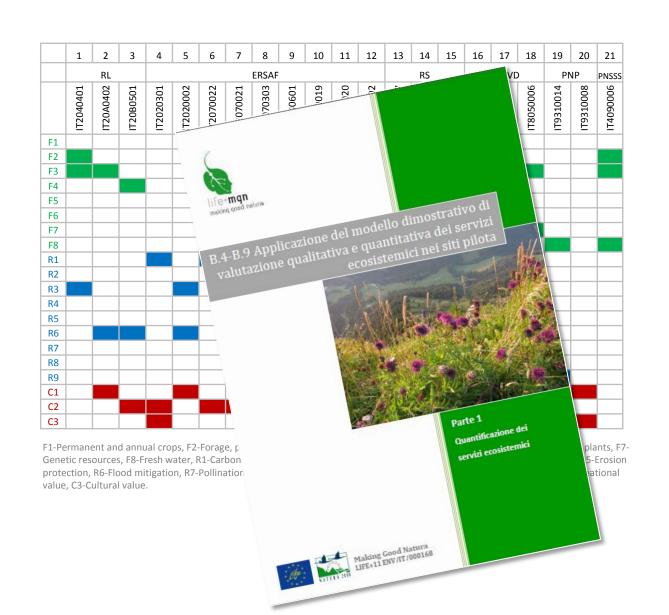






Application in the study sites





Quantification of supply, demand and monetary value of 13 different ES

In total: 58 ES

Quantitative assessment



Supply evaluation

Biophysical quantification based on land use and environmental attributes:

Direct data

- real
- Models/estimates
- potential



Demand evaluation

Local/regional quantification

- Consumption of the inhabitants (beneficiaries)
- Risk areas

Monetary evaluation

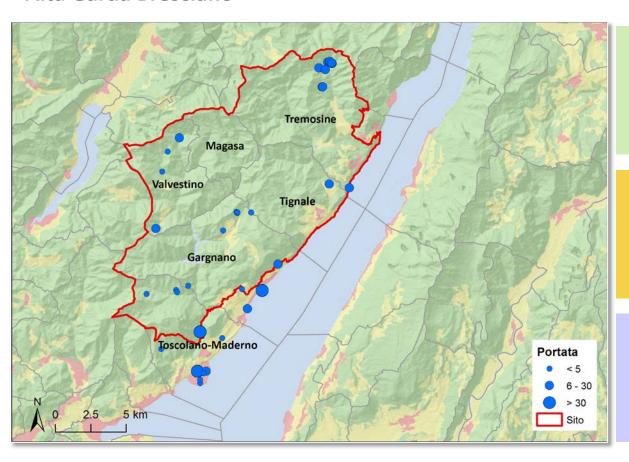
- Direct/indirect use value
- Replacement cost, avoided cost
- Tourist expenses

Different for each ES!
Different for each site!

Water supply



Alta Garda Bresciano



SUPPLY

Total drinking water supply

6.266.169 mc/year

DEMAND

Consumption of residents

1.110.525 mc/year

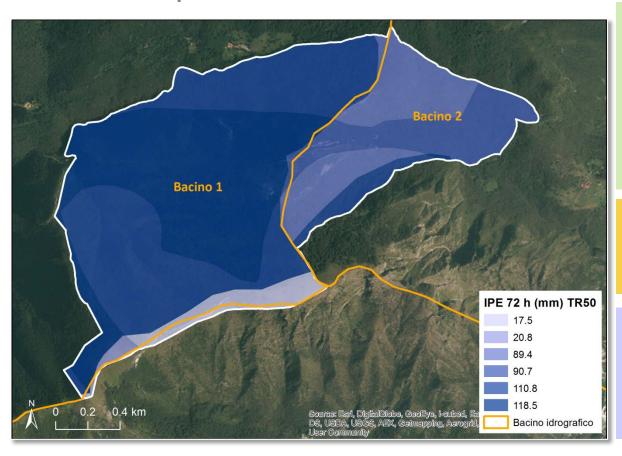
MONETARY

Market value **4.918.433,79 €/year**

Flood regulation



Sasso Malascarpa



SUPPLY

Total water retention capacity

340,070 mc

considering an extreme event of 72h of rain with a return-time of 50 years

DEMAND

NOT QUANTIFIABLE

MONETARY

Replacement cost € 3,167,788.00

Key Questions



- 1. Ecosystem services assessment on project basis: What is/are the best method(s) (inexpensive, not requiring in depth knowledge, reasonably reliable, able to measure differences on a small level and after a few years)?
- For Natura 2000 sites, a simple qualitative evaluation doesn't require in depth knowledge, is not expensive and can be useful to prioritise ES before the eventual quantitative assessment;
- Quantitative assessment can't be inexpensive at small scale (Natura 2000 site), because it requires very detailed data (Corine Land Cover works better at large scale rather than small scale);
- For quantitative assessment we used different methods for each ES and study site (see B1 and B4-B9 reports).

Key Questions



2. What should/could be the measuring unit(s) and terminology used (status, trends, and/or monetary value)?

- Biophysical assessement is a first step for an eventual monetary evaluation which is necessary for defining PES;
- For assessing ES of Natura 2000 sites very detailed data are needed;
- The main constraint is data unavailability to effectively measure ES and their trends.

Key Questions



- 3. What would be the recommendation for LIFE projects, in particular, as regards common standards, since we urgently need to define a common EU wide methodology and measuring units for ecosystem services on LIFE project level for the LIFE project indicators?
- Sites' management authorities are crucial for collecting data and assessing
 ES;
- A common EU definition and methodology is needed in order to compare results from different assessements, but differences among spatial scales have to be considered;
- Involvement of stakeholders is very important to increase the acceptance of restrictions in protected areas, promote sustainable practices and support conservation activities.



Participatory Approaches to Payment for Ecosystem Services







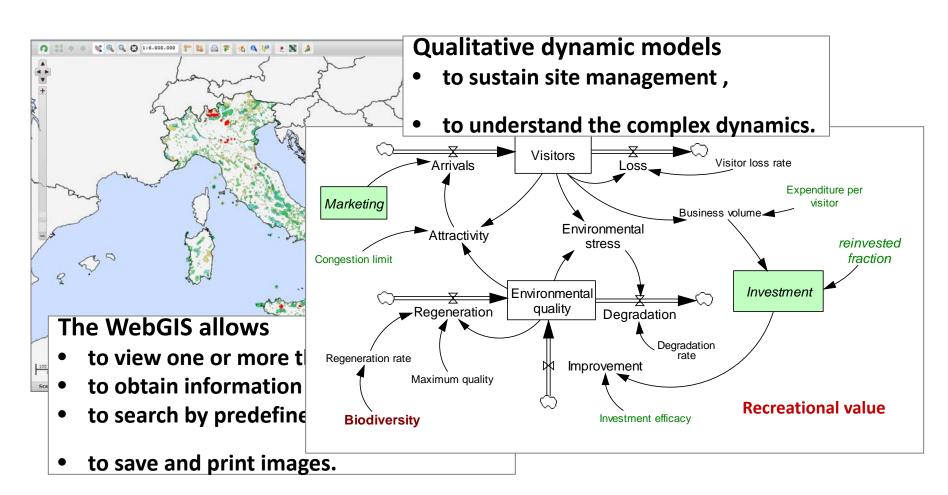
http://www.cursa.it/ecms/it/pubblicazioni/pas-saggi

WebGIS and Qualitative Dynamic Model





Software for valuation and quantification of ecosystem services













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