

Supplementary Material 2: Main views of scientists and MPA managers in Project 1 (from Pelletier et al. 2005).

1. A variety of MPAs and MPA managers
<ul style="list-style-type: none">• Several legal instruments entailing different governances (state, region, council, and local stakeholder initiatives)• Differing MPA histories: distinct ages, different and evolving management objectives• Several levels of management: MPA staff, participatory committees, environmental administration, national agency
2. Scientists with distinct interests about MPAs
<ul style="list-style-type: none">• View 1: MPAs as a laboratory for studying ecological or socioeconomic processes• View 2: MPAs as a management instrument within the dynamics of the coastal social-ecological system• Contribution to MPA ME assessment for decision-support• Expertise provider for MPA activities
3. Existing interactions between MPA managers and scientists
<ul style="list-style-type: none">• MPA scientific committees: an official committee for discussing high-level scientific issues• Research projects do not always involve actual interactions with managers• Management plans formalize the stakes, goals, and management orientations and are an opportunity for framing science inputs to MPA• Private consultants have variable expertise level; MPAs sometimes confuse them and academic scientists

4. MPA manager' perceptions
<ul style="list-style-type: none">• Mismatch in time frames between management and science: MPA projects take years, but management issues may change very shortly• Lack of communication on research projects and their outcomes• From small MPAs to large parks: MPA are part of the larger picture of coastal management• Experienced redundancy between projects• MPAs need scientific activities, including research• Lack of operational and rigorous outcomes: science from consultants may not meet objectives• Need for an operational science-based toolbox for MPA managers
5. Scientists' perceptions
<ul style="list-style-type: none">• Mediating and facilitating structures and organizations are needed• Long-term science academic observatories should be mobilized for MPA and coastal management• Existing studies and data should be made more accessible to scientists, in particular those conducted by consultants• Monitoring should be made more systematic and based on protocols adapted to both assessment and research goals
6. MPA managers' knowledge needs
<ul style="list-style-type: none">• Ecosystem connectivity• Better appraisal of the actual vulnerability of protected species• Data on uses in and around MPAs: characterization, assessment of pressures. Fishing (professional, recreational, and illegal), diving, boating, and the interactions between them• Maps of habitats, biodiversity and uses are indispensable• Uncertainties and risks must be quantified and integrated in the assessments