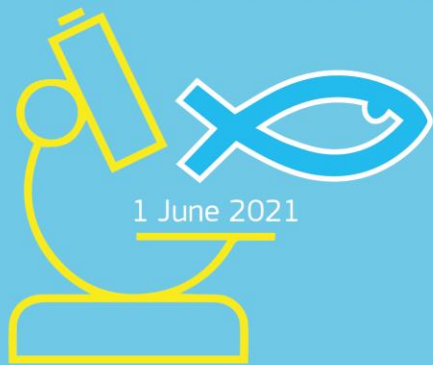




2021 Seminar on Fisheries Science



1 June 2021





How MPAs can best contribute to fisheries sustainability

Joachim Claudet

 @JoachimClaudet



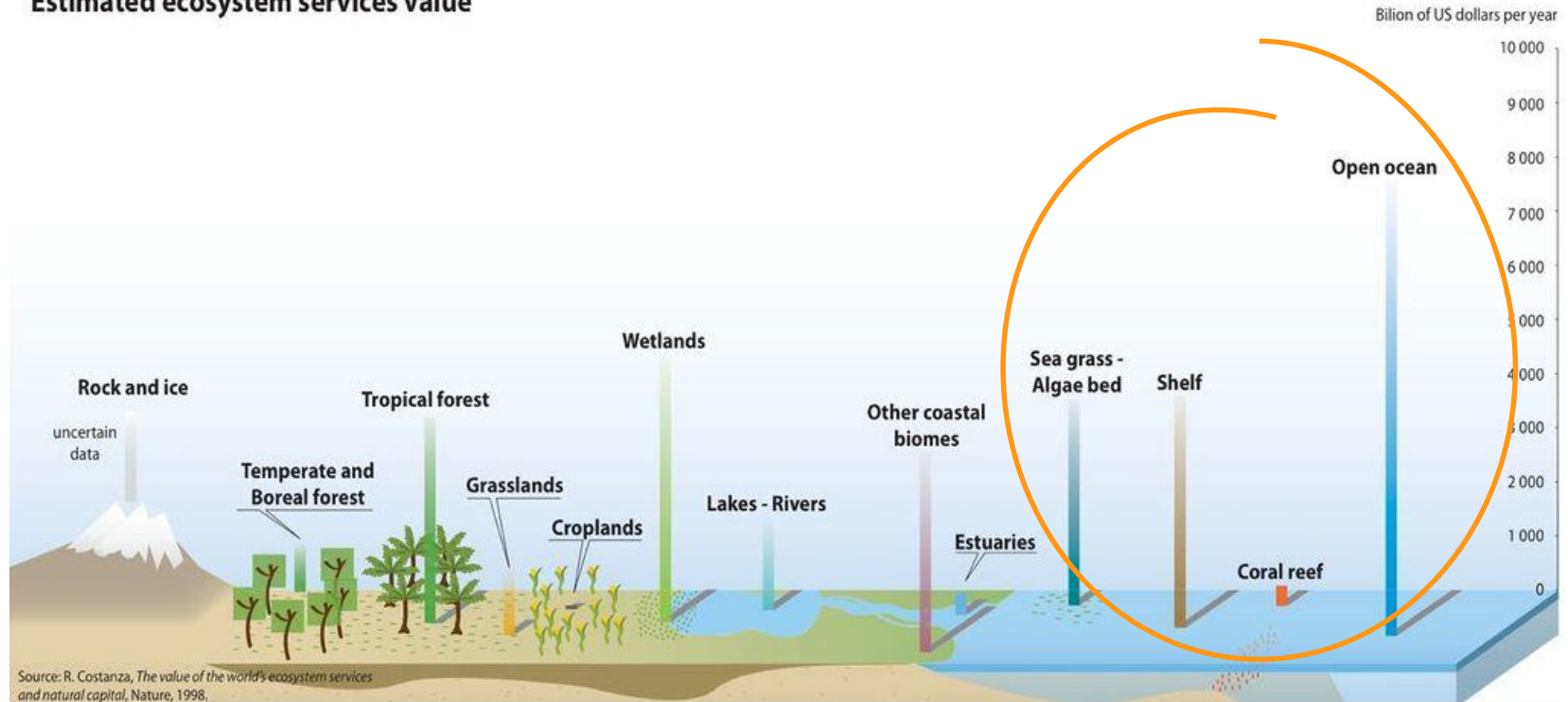


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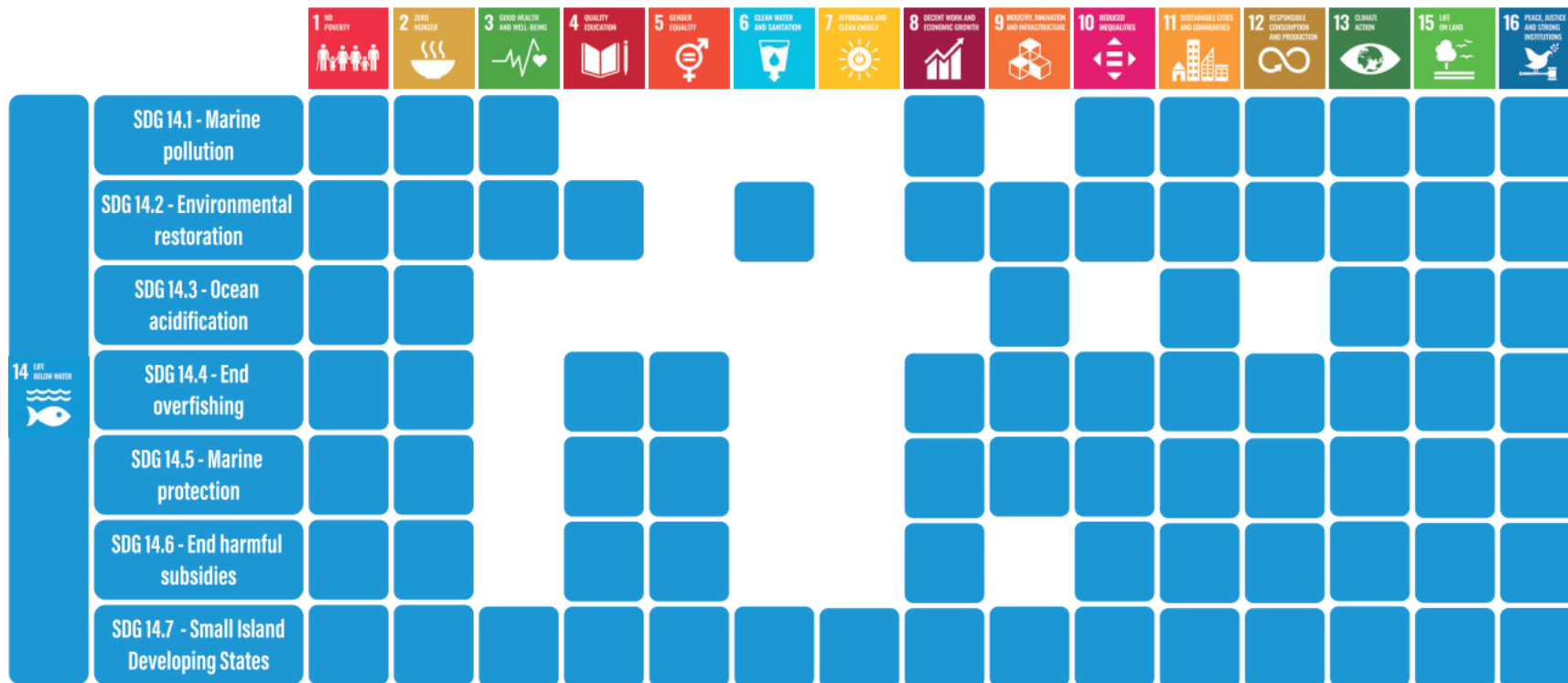
*Our wellbeing depends
on a healthy Ocean...*

Valuable ecosystem services, including fisheries

Estimated ecosystem services value



A healthy Ocean contributes to UN SDGs



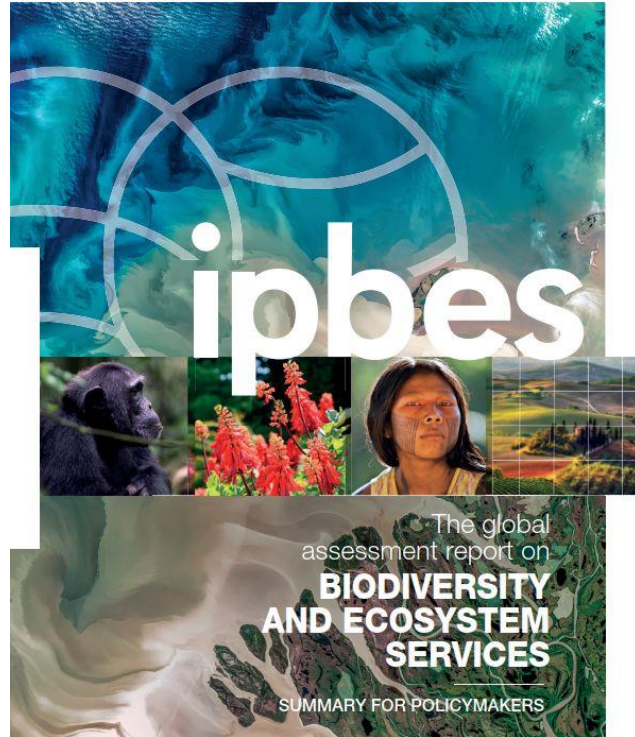


“

*Our wellbeing depends
on a healthy Ocean...*

but the Ocean is highly threatened...

Threats on ecosystems



B1 For terrestrial and freshwater ecosystems, land-use change has had the largest relative negative impact on nature since 1970, followed by the direct exploitation, in particular overexploitation, of animals, plants and other organisms, mainly via harvesting, logging, hunting and fishing. In marine ecosystems, direct exploitation of organisms (mainly fishing) has had the largest relative impact, followed by land-/sea-use change.

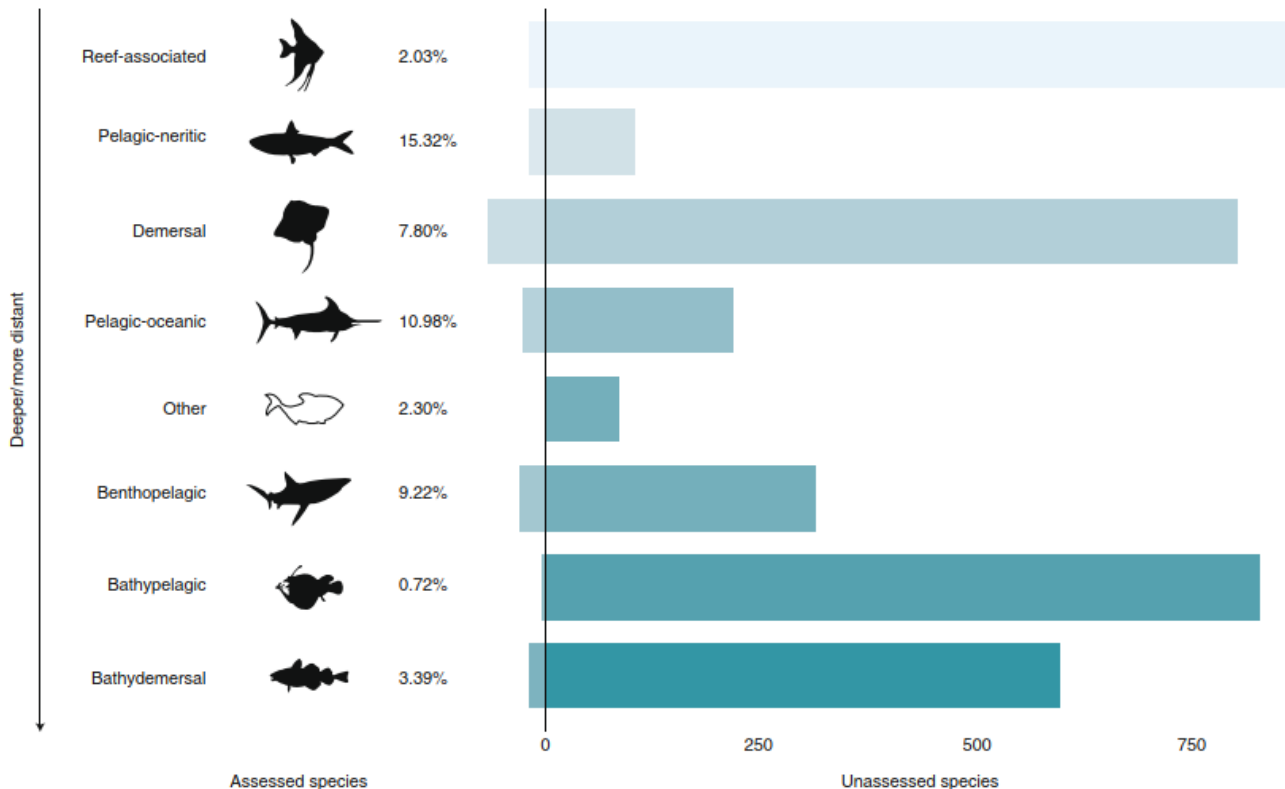
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*Our wellbeing depends
on a healthy Ocean...*

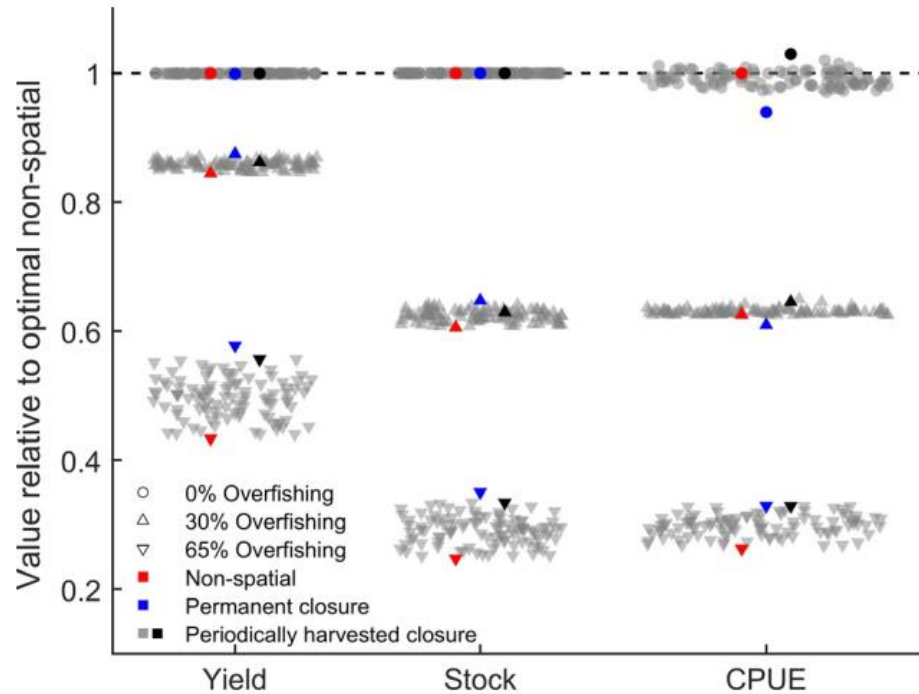
but the Ocean is highly threatened...

however, solutions do exist.

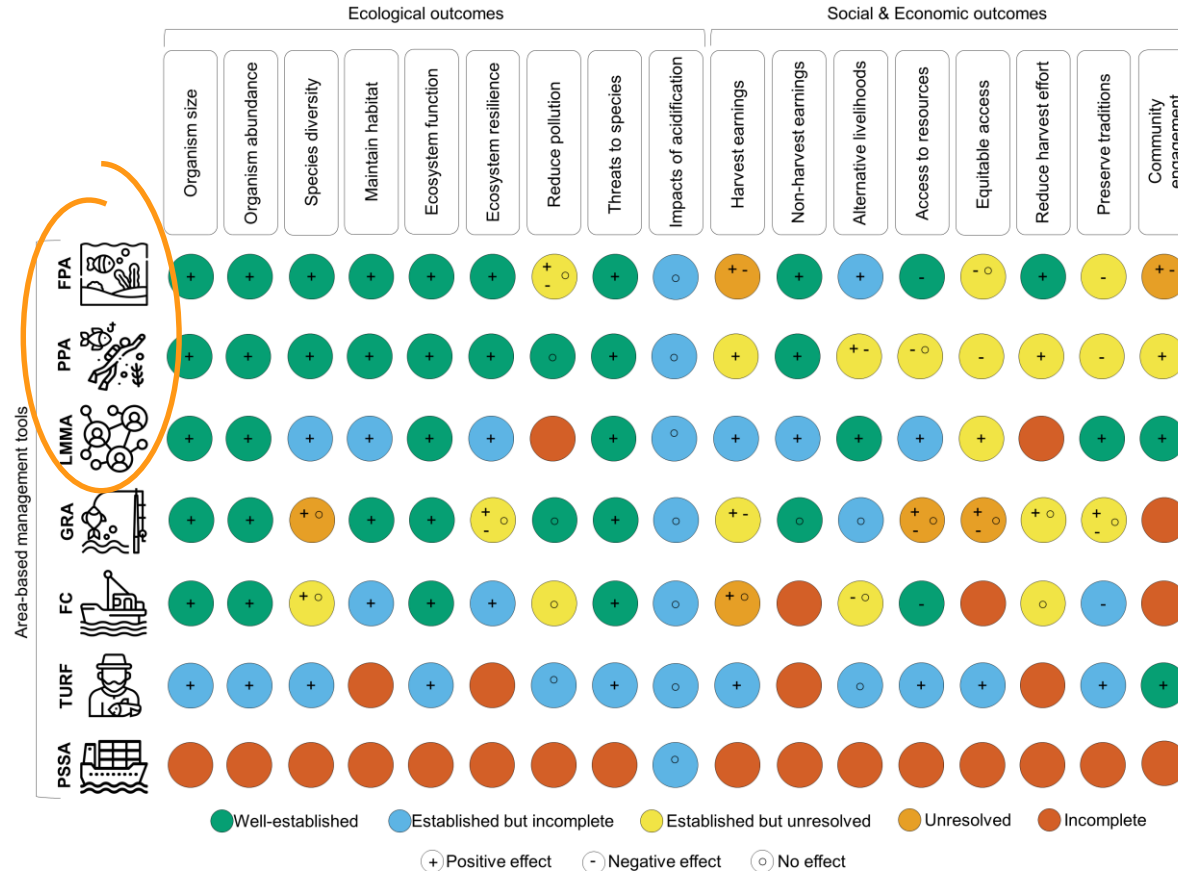
Fisheries management cannot rely on yield targets alone



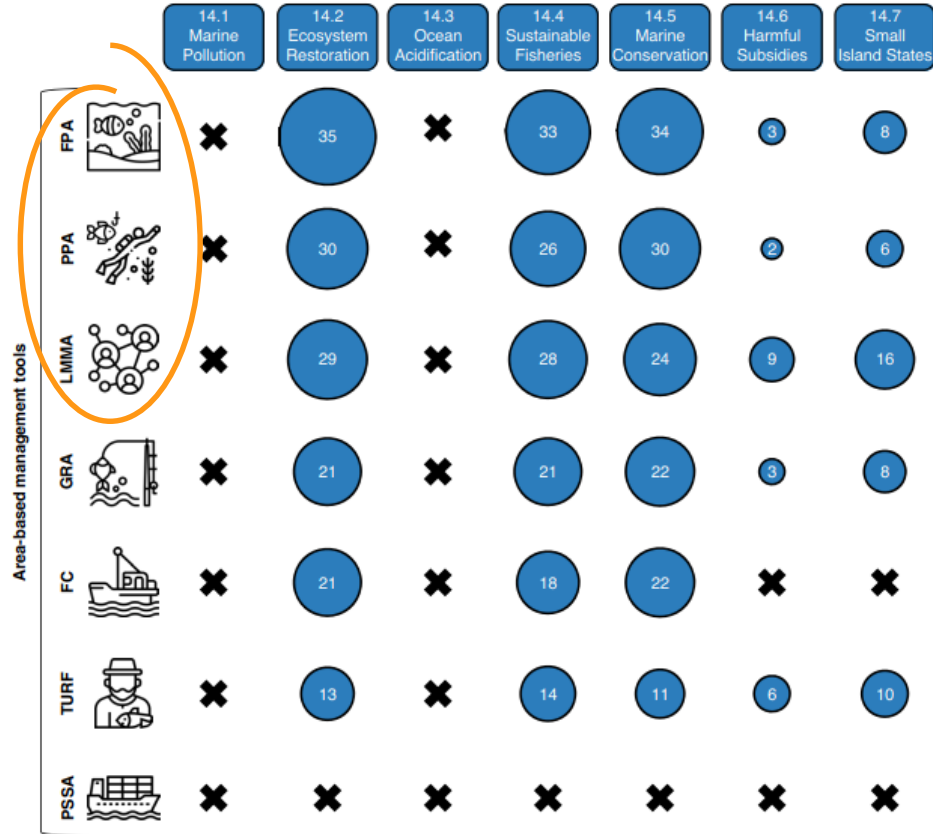
Spatial management performs better than non-spatial



MPAs deliver the largest range of benefits



MPAs contribute the most to SDG 14 targets



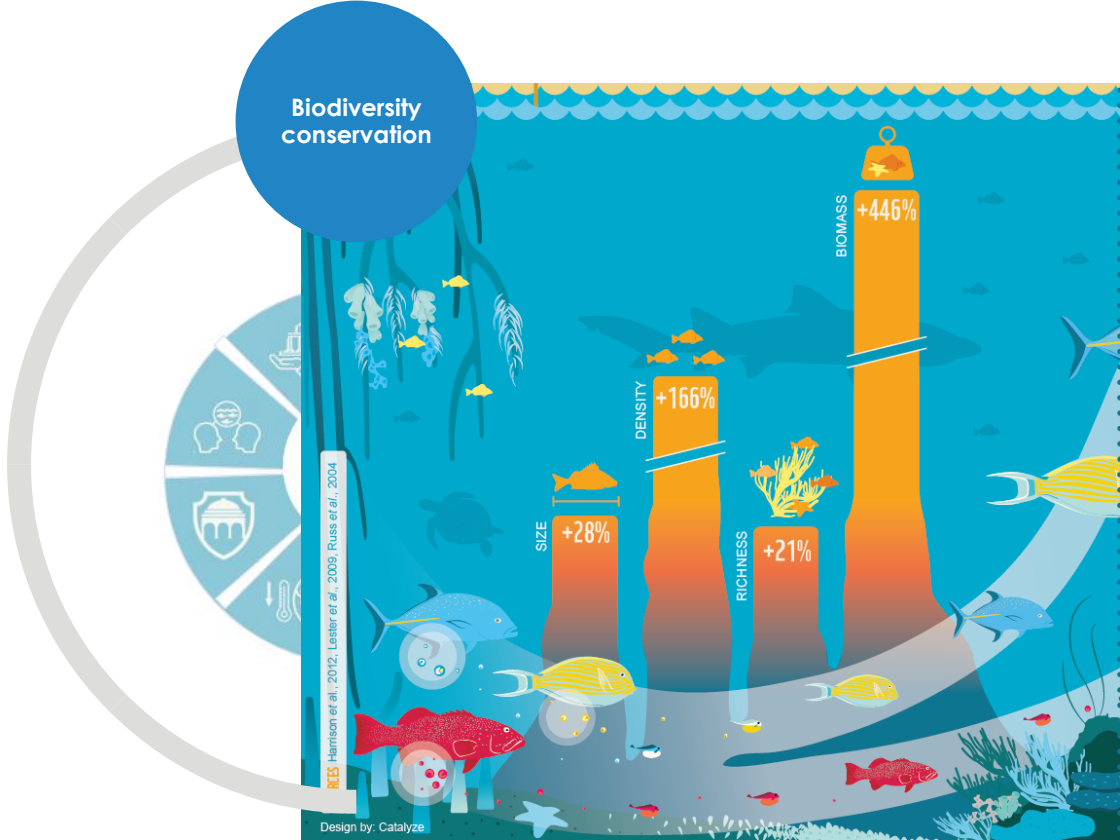


MARINE PROTECTED AREAS

Recognized multiple fisheries benefits

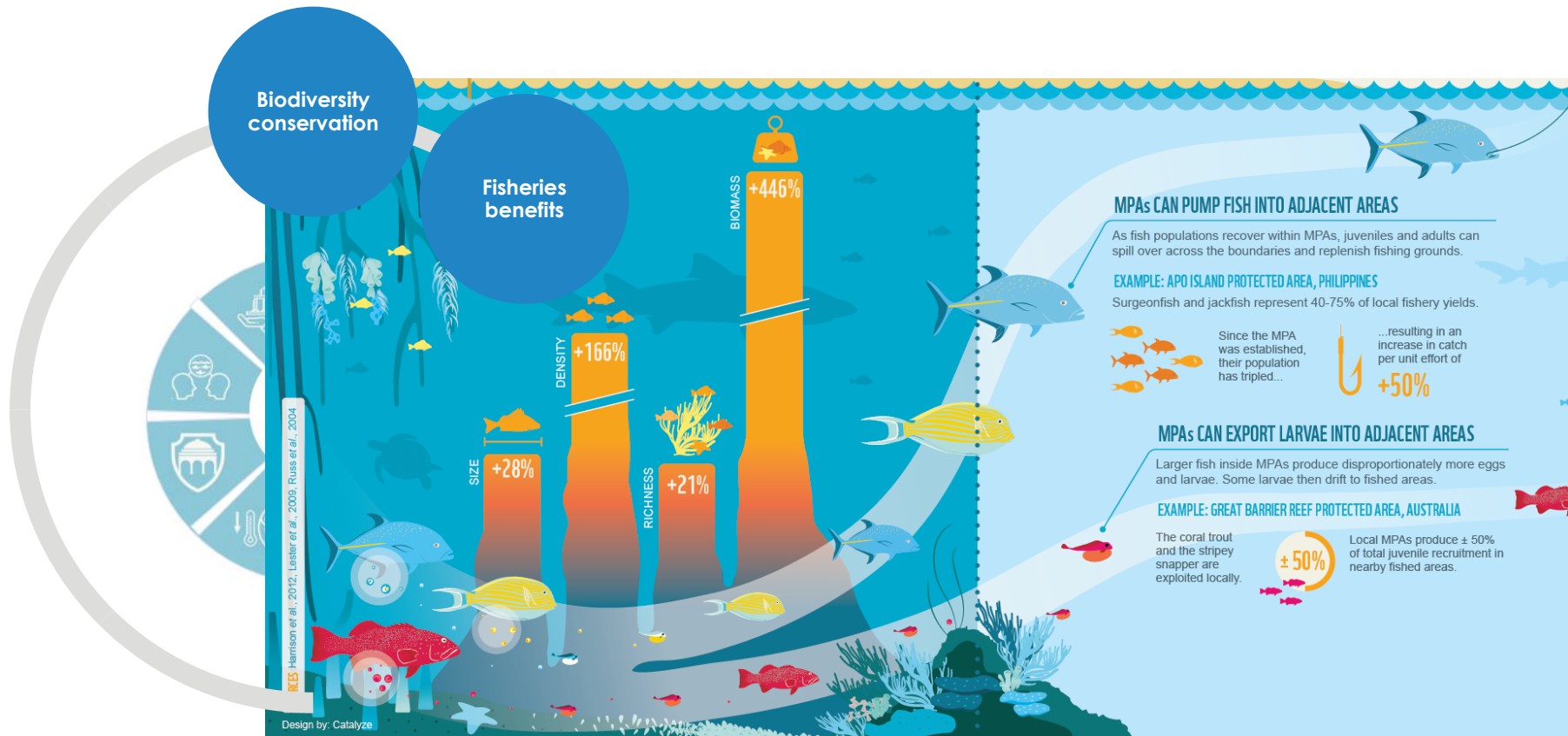


More resilient ecosystems for fisheries to rely on



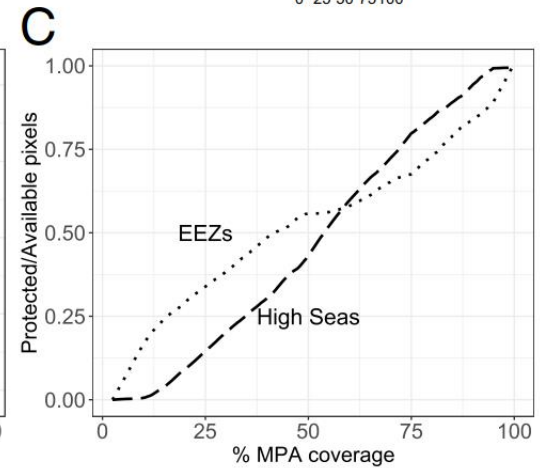
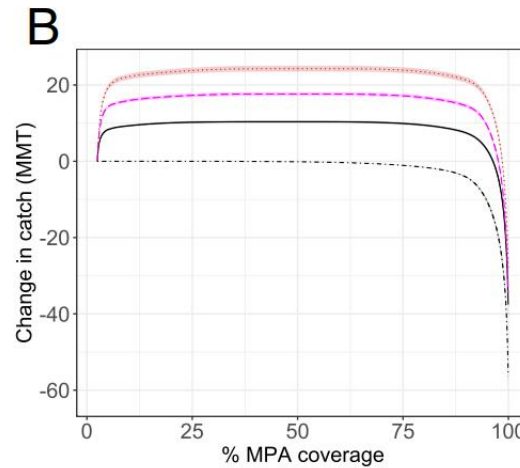
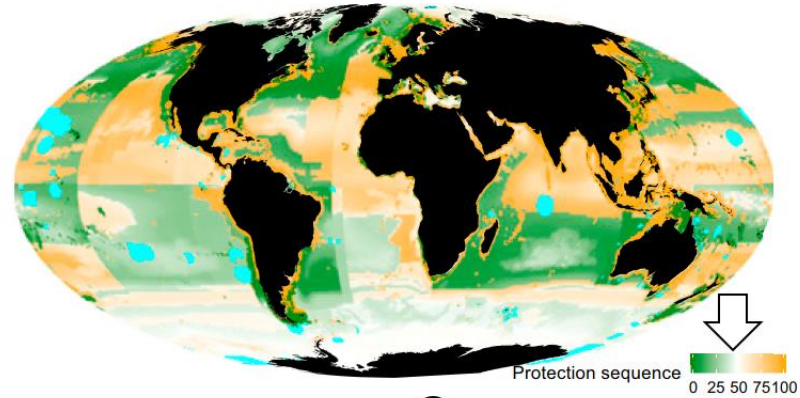
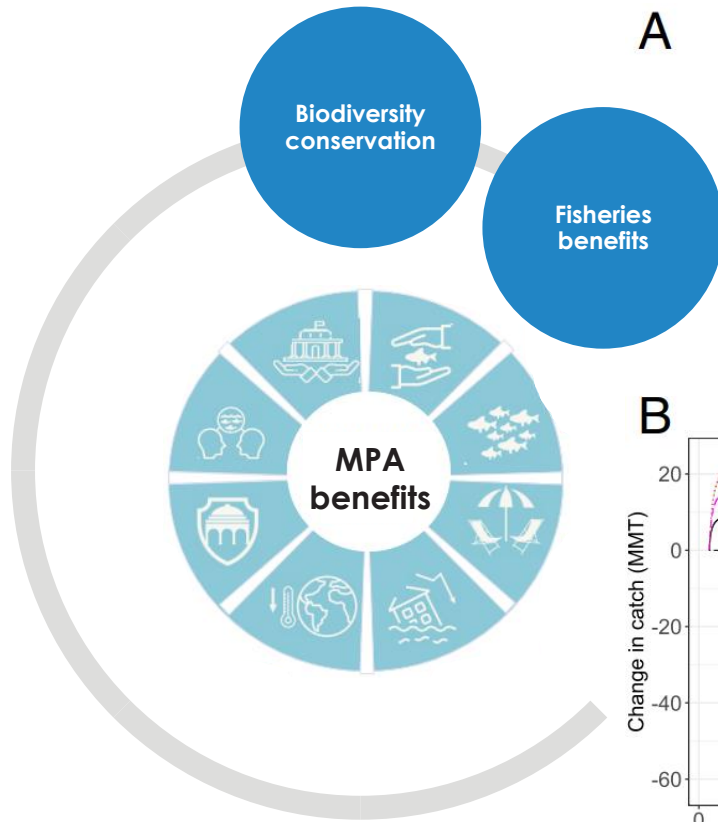
Claudet et al. 2008 – *Ecology Letters*
Lester et al. 2009 – *Marine Ecology Progress Series*

More and bigger fish to catch



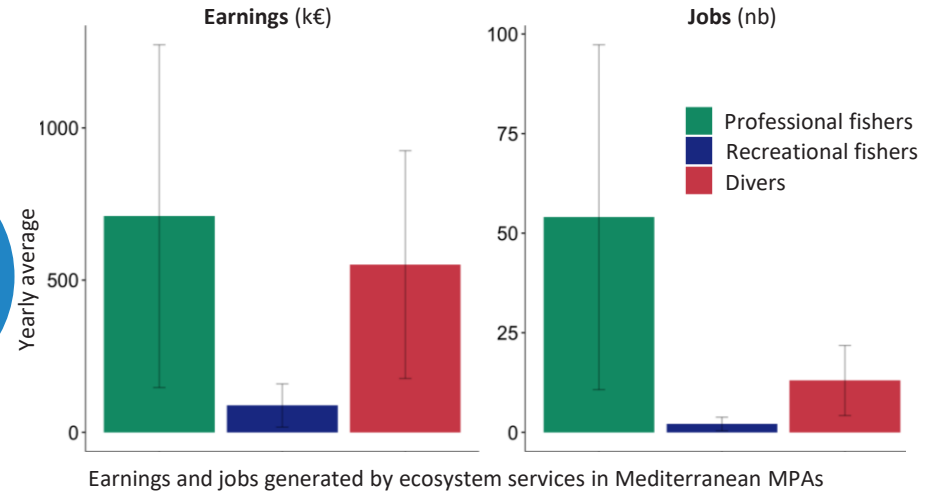
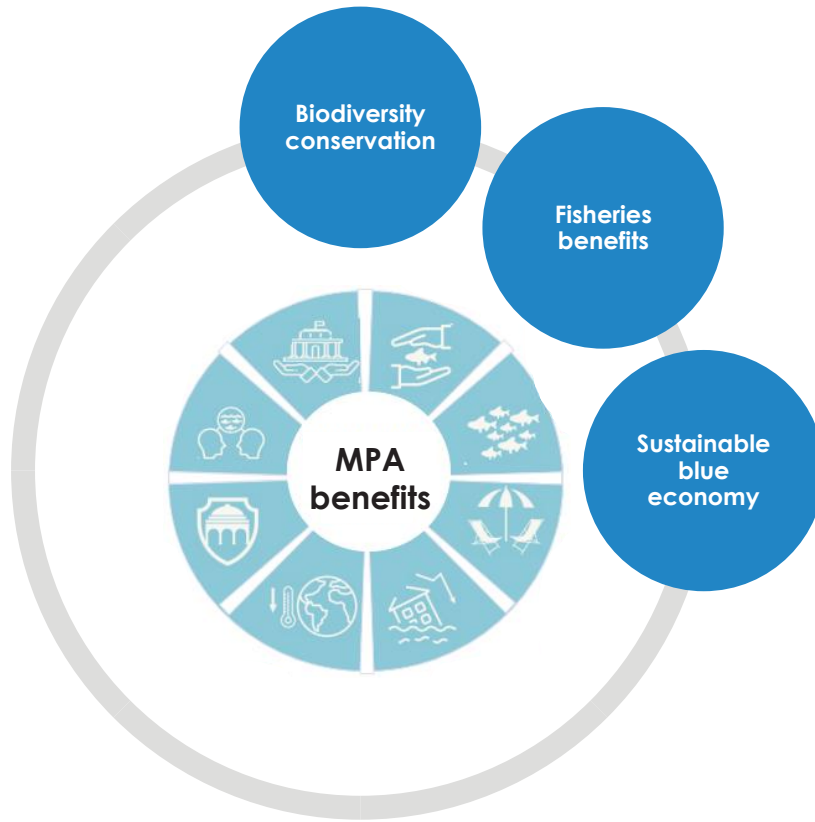
Gaines et al. 2010 – *Proceedings of the National Academy of Sciences*
Di Lorenzo et al. 2016 – *Journal of Nature Conservation*
Marshall et al. 2019 – *Frontiers in Ecology and the Environment*
Di Lorenzo et al. 2020 – *Fish and Fisheries*

Fisheries benefits offset lost fishing grounds



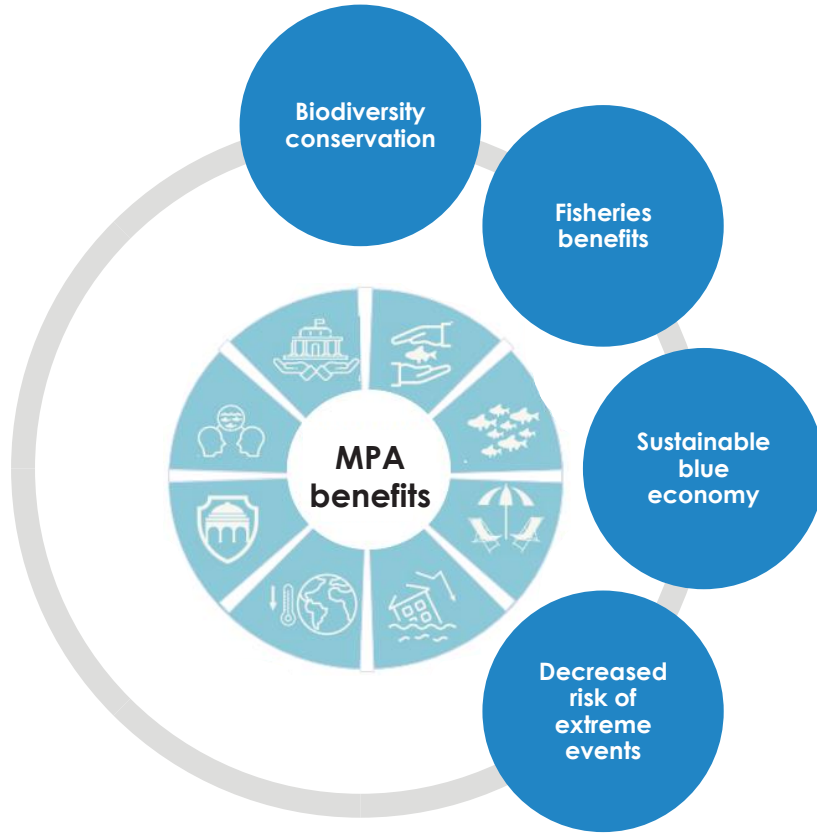
+5% MPAs -> +20% catch increase

More profitable jobs

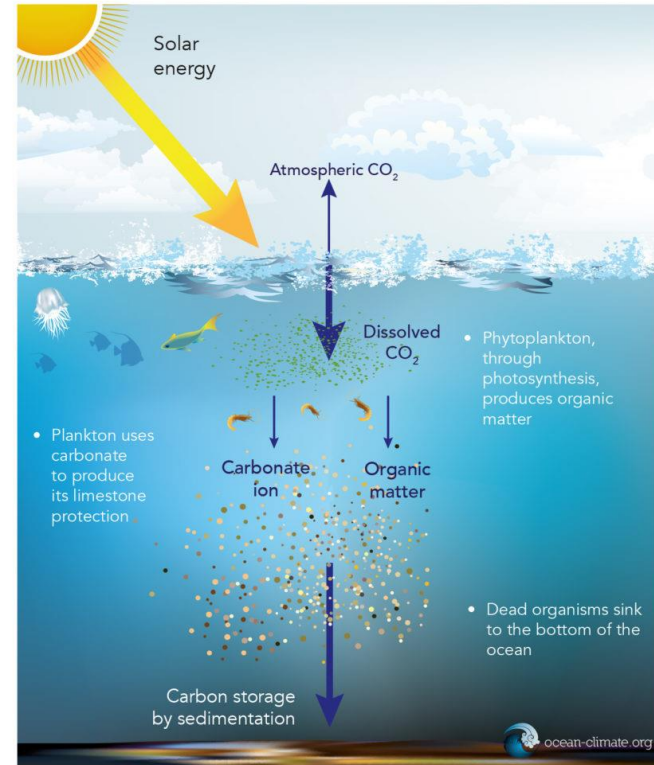
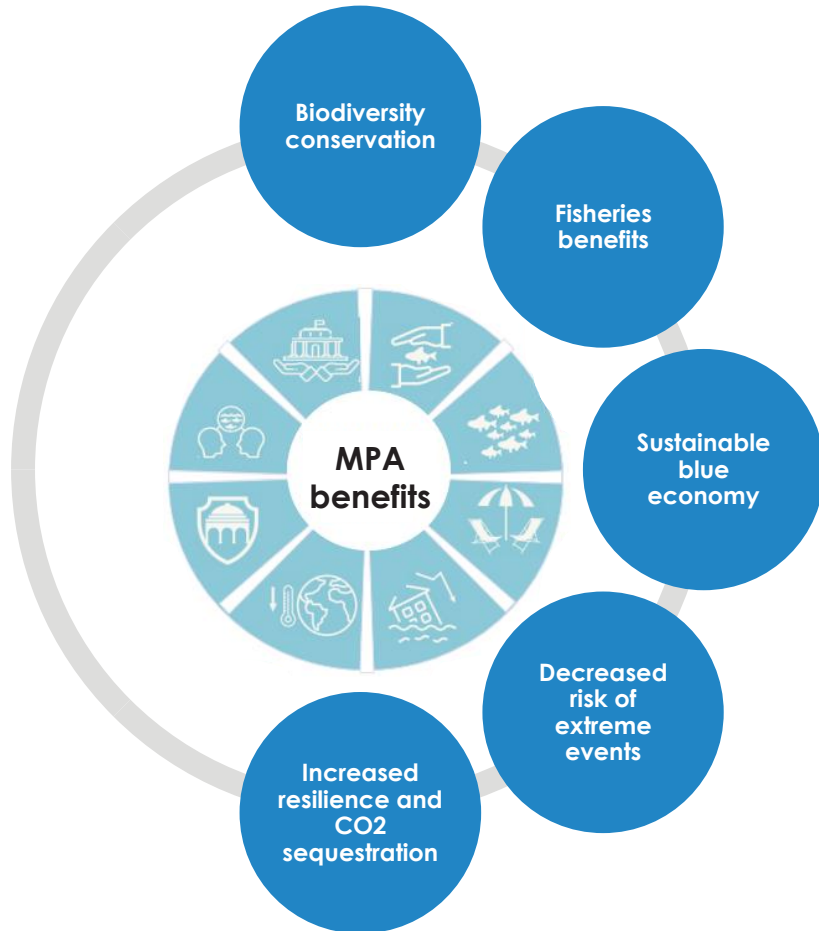


Earnings and jobs generated by ecosystem services in Mediterranean MPAs

Better protected households

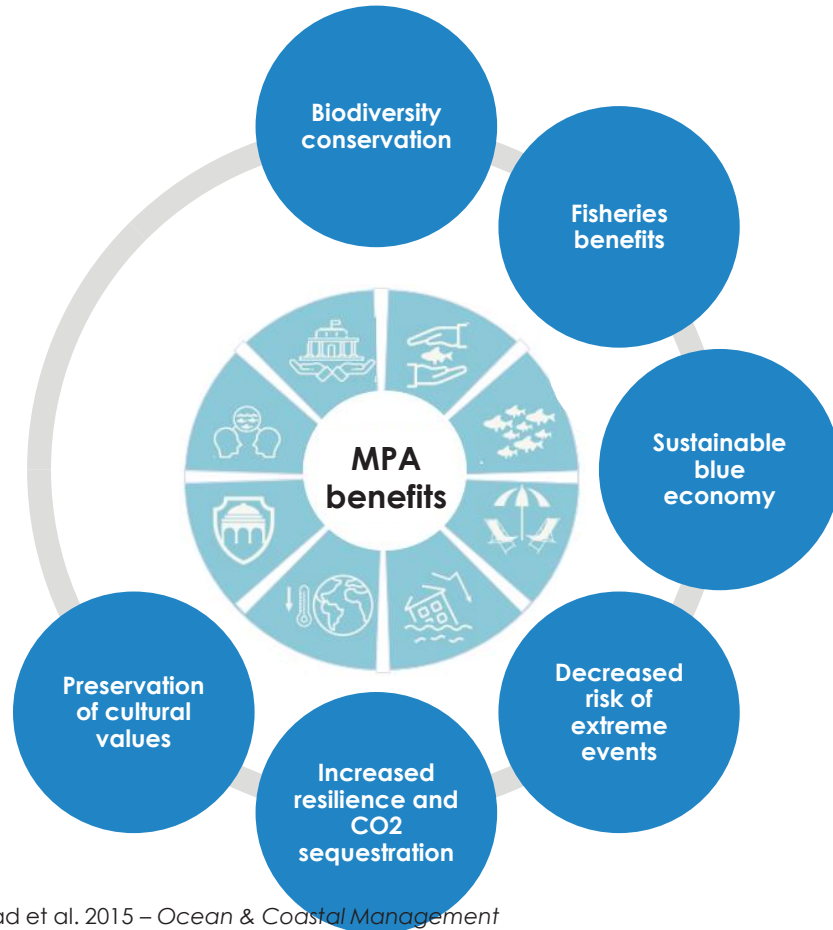


Safer climate

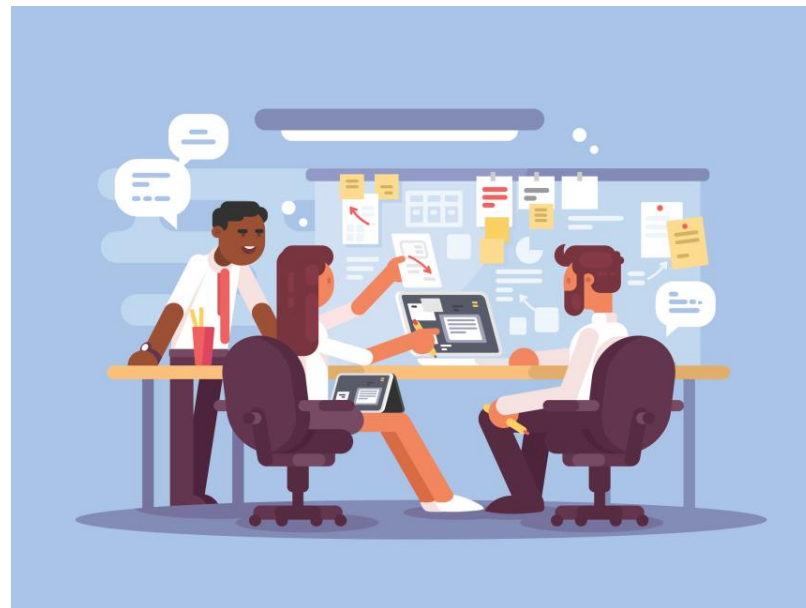
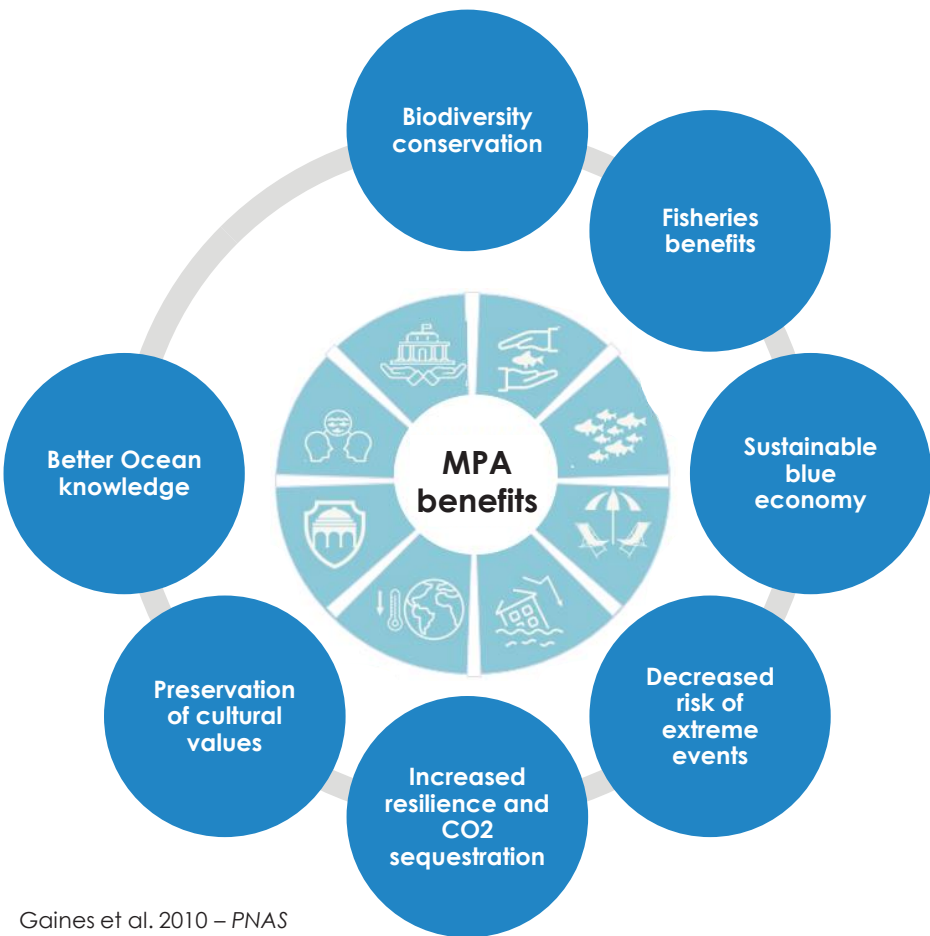


Biological carbon pump

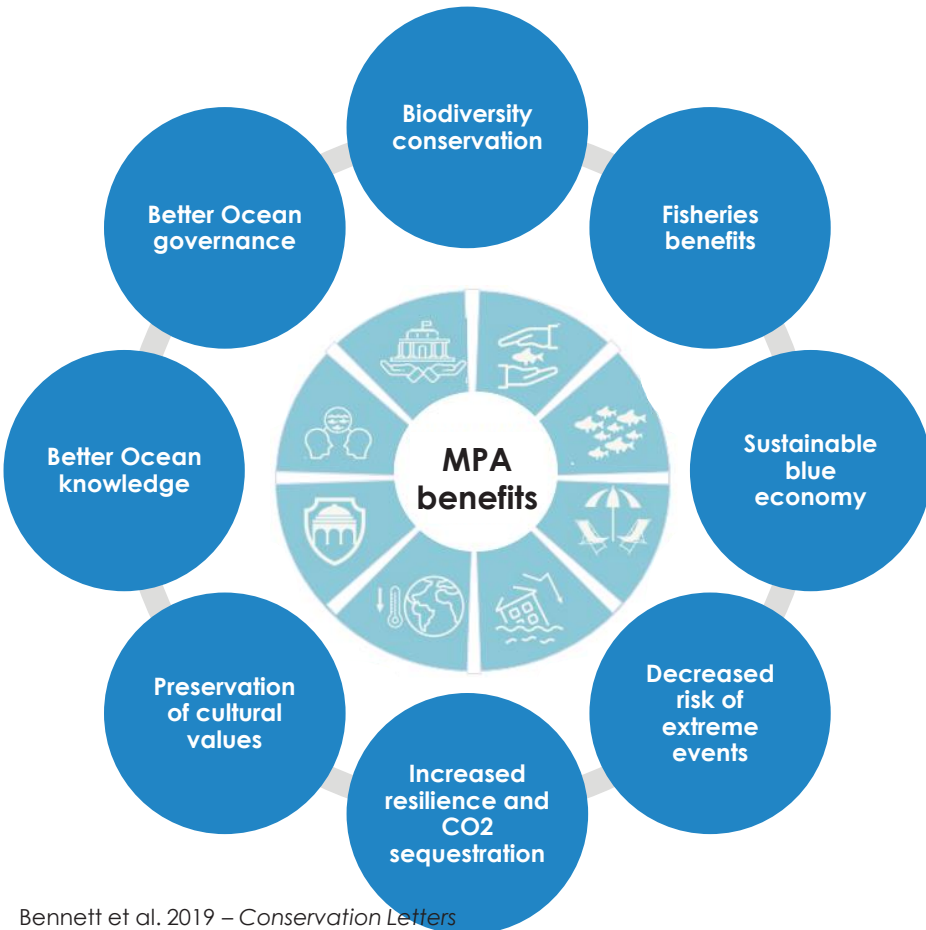
Better recognition of traditional activities



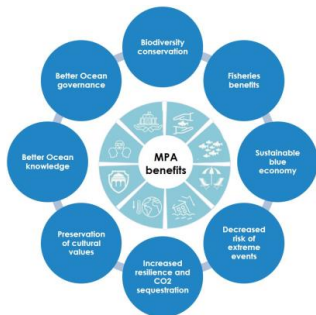
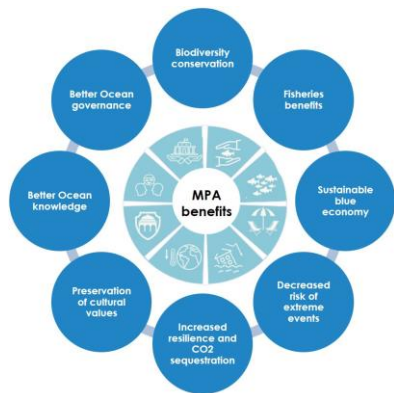
Better informed and managed fisheries



Stewardship



Benefits, even socioeconomic, depend on the level of protection





KEY MESSAGES

Protecting the ocean, is preserving our fisheries



IMPLEMENT MPAs
to boost
fisheries sustainability

ENSURE FULLY PROTECTED AREAS ARE PRESENT
to ensure
the delivery of multiple fisheries benefits

FISHERIES SUSTAINABLE MANAGEMENT IS PART OF A SAFE FUTURE
to secure
food provisioning, resilient ecosystems and a safe climate

