

## **Call for Research Proposals: Marine Reserves/MPAs Connectivity in the Israeli Mediterranean Waters**

### **Background**

The state of the oceans is a rising global concern. Research has demonstrated that Marine Protected Areas (MPAs) are often the most effective means to protect and restore marine ecosystems, habitats and biodiversity. International assessments of key biological variables consistently show that well managed MPAs have a positive impact on marine ecosystems and extended beneficial effects (both economic and ecological), even beyond the designated areas. Many countries have thus adopted marine conservation strategies that put MPAs front and centre.

Currently, declared marine reserves – the only recognized subset of MPAs in Israel thus far – occupy only 0.25% of the Israeli Mediterranean territorial water. These include six small reserves adjacent to the coastline. The Israel Nature and Parks Authority (INPA) aims to establish a network of large marine reserves in at least 20% of the Israeli Mediterranean. A detailed strategic plan for these marine reserves in the territorial water is already being assessed by the planning authorities. However, scientific gaps still remain in our understanding of MPA function, influence and effective management.

### **Goal**

Specifically, we miss information on the connectivity between existing and proposed MPAs, the transit time between them, and the sensitivity of the above to their sizes. A key principal of the planning is spacing MPAs to promote connectivity through the transport of larvae from one MPA to another. The length of time juveniles of a species spend in the water, moving with the currents as planktonic larvae between MPAs, affects the likelihood of survival. Thus, the planning of the locations and sizes of the MPAs requires filling the above mentioned gaps. The INPA together with Yad Hanadiv are interested in cooperating with the scientific community to fill these gaps.

We welcome studies based on numerical models, current measurements, drifters, or a combination of methods. A desirable outcome include (but not limited to) a connectivity matrix between the MPAs for every season and for various depths. Designated areas that are protected to some extent due to limited activities (e.g. military; industrial infrastructures) may also be included. A map of existing and proposed MPAs is attached.

### **Grant Structure and Duration**

The grant duration will be up to 3 years. Winning/Funded proposals may be granted up to a total of NIS 600,000. In the case that none of the proposals fit the call criteria, no proposal will be funded.

### **Review Process**

An international scientific steering committee will be appointed by Yad Hanadiv in partnership with the INPA. Its task will be to prioritize and oversee the review processes, monitor the progress of the selected proposals and guide the implementation of the results within local marine reserves. The evaluation of the proposals may be carried out, *inter alia*, by international experts invited by the scientific steering committee.

**Evaluation criteria:**

1. Applicability to the advancement of the scientific underpinning of local marine reserves. We expect tangible goals with clear milestones for delivery. **This will be the single most important criteria for pre-proposal evaluation.**
2. Project feasibility.
3. The scientific output relative to the budget. Thus, proposals that can provide matching from external sources may have an advantage.
4. Originality.

**Specific guidelines:**

Cover page should include:

- Title
- Author names with affiliations
- Contact details

Abstract:

Up to 500 words summarizing the research proposal.

Eight-page description of the proposed research:

1. Introduction, including the knowledge gaps to be addressed
2. Objectives, and applicability of the project to Israeli Mediterranean MPAs
3. Methodology, including preliminary results when applicable
4. Description of the research team and their ability to execute the proposed research
5. Specific deliverables, with direct relation to the objectives described, along with clear milestones to assess success
6. Timeline
7. Detailed budget (including 10% overhead). When available, matching options must be indicated. Justification should be included for major budget items.

Additional material:

1. Reference list
2. Up to 2 pages of figures and tables
3. Up to one page explaining how concerns raised in the pre-proposal stage were addressed

Budget:

- Up to 600,000 NIS, for up to 3 years.

Proposals should be written in a 11-12 pt font; 1.5-line spacing; normal margins (2.54cm). Footnotes should be avoided.

### **Timetable**

Proposals submission deadline: **30 August 2018, 08:00 Israel time**

### **Other Conditions**

The applicants must agree to publicly sharing their proposals and waive any claims to confidentiality of the information contained therein.

Principle investigator of the funded proposals will be required to present the progress, findings and results of the research to the scientific steering committee at the end of each year in a joint meeting. An elaborated final report must be submitted at the end of the grant term.

The committee has the authority to determine whether research progress is satisfactory, to request a new work plan and timetable or to choose not to renew the funding between years.

### **Contact for Submission**

Proposals should be sent by e-mail to the following address: **science4mpa@isees.org.il**

The proposal should be attached as a single PDF file.

