

Healthy reef, Palawan.
Photo: P Mumby

THE TOOL: MPA placement optimization tool



WHAT KIND OF TOOL IS IT?

The tool is a software program.

WHAT ARE THE DIFFERENT PARTS TO IT?

It is a single, stand-alone software program with supporting materials including a user guide, a scientific paper and a policy brief.

WHAT DOES IT DO?

The Marine Protected Area (MPA) placement tool helps users optimize larval dispersal around MPAs in order to achieve flexible management objectives, including both biodiversity conservation and fishery benefits. It does this by generating an input file for the popular Marxan software.

HOW DOES IT WORK?

The tool is used as part of the *Rebuilding reef fisheries with Marine Protected Areas (MPAs) toolbox*. Priority MPA locations identified by the tool are likely to harbour fish populations that are self-replenishing, supported by the influx of larvae from other areas, and/or sending larvae to other areas most important for fisheries or threatened by other disturbances.

WHEN IS IT USED?

The tool is used to maximize the expected effectiveness of MPAs for both biodiversity conservation and fisheries management.

IN WHAT FORMAT IS IT AVAILABLE?

It is a software program available for installation as an executable file.

WHO IS THE TARGET END-USER?

- Policy makers
- Government and NGO planners undertaking marine spatial planning
- Researchers studying MPA design

WHAT USER SKILLS ARE REQUIRED?

Ideally, users will have a basic understanding of marine population dynamic processes. However, prior knowledge or expertise is not necessary as a software user guide, a scientific paper and a policy brief are made available alongside the tool.

WHERE DO YOU ACCESS THE TOOL?

The tool is available for download from the CCRES website (www.c cres.net).

WHAT IS THE COST OF USING THE TOOL?

The tool is open-access and is available free of charge, under the user agreement and stated terms and conditions (see www.c cres.net/terms).

IS TECHNICAL TRAINING OR SUPPORT REQUIRED?

A user guide and scientific paper are available to support users.

For best results, training in use of this tool is recommended. For more information, contact Prof Peter Mumby (p.j.mumby@uq.edu.au).

