



Implementing the Strategic Action Programme for the South China Sea and Gulf of Thailand (SCS SAP Project)

FIRST MEETING OF THE REGIONAL SCIENTIFIC AND TECHNICAL COMMITTEE (RSTC) OF THE SCS SAP PROJECT

17-19 October 2022, Bangkok, Thailand

REPORT OF ACHIEVEMENTS OF THE FISHERIES REFUGIA PROJECT

PHILIPPINES

National Fisheries Research and Development Institute



UNOPS



Presentation Outline

Introduction

Key Achievements

Issues and Challenges

Recommendations





Establishment and Operation of a Regional System of Fisheries *Refugia* in the South China Sea and Gulf of Thailand

Valeriano M. Borja



Implementing the Strategic Action Programme for the South China Sea and Gulf of Thailand (SCS SAP Project)



Introduction

The Philippines through the National Fisheries Research Institute (NFRDI) is an implementing Partner of the the project entitled “Establishment and Operation of a Regional System of Fisheries *Refugia* in the South china Sea and Gulf of Thailand. The Project is the United Nations Environment Programme (UNEP) initiative and funded by the Global Environment Facility (GEF). The UNEP GEF project is being administered by the Southeast Asian Fisheries Development Center (SEAFDEC) and is now called the SEAFDEC UNEP GEF Fisheries *Refugia* project and is also known as Fisheries *Refugia* for short name.





Fisheries *Refugia*

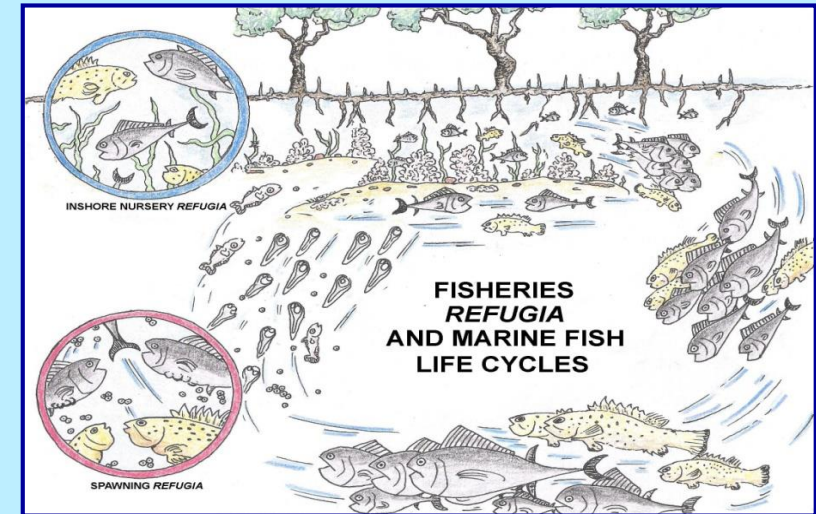
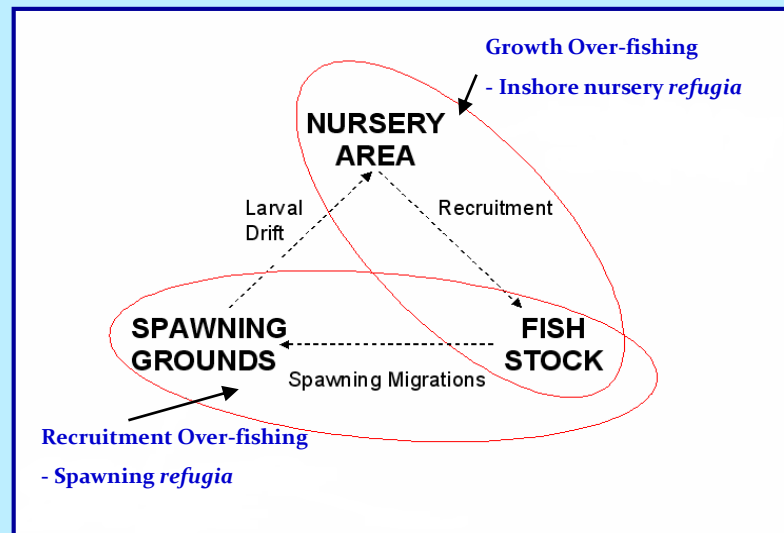
- Specific areas of significance of the life-cycle of fish species
- Should be defined in space and time
- Should NOT be no-take zones
- Serve to safeguard spawning aggregations, nursery grounds, and migration routes

Fisheries Refugia are “Spatially and geographically defined, marine or coastal areas in which specific management measures are applied to sustain important species [fisheries resources] during critical phases of their life-cycle, for their sustainable use.”



The Fisheries *Refugia* Concept and Priority Types

Fisheries *refugia* are sites of importance to critical stages of the life-cycle of fish species



Source
Function

Spawning Refugia
(Pelagic species)

Nursery Refugia
(Demersal Species)

Sink
Function





Long-term Goals:

To contribute to:

1. Improve integration of habitat and biodiversity conservation, consideration and the management of fisheries in the SCS and GoT;
2. Improve national management of the threats to fish stock and critical habitat linkages within fisheries refugia; and
3. Enhance uptake of good practice in integrating fisheries management and biodiversity conservation in the design and implementation of regional and national fisheries management systems.





Medium-term Objectives:

1. Build the resilience of Southeast Asian Fisheries to the effects of high and increasing levels of fishing efforts;
2. Improve the understanding among stakeholders including fisherfolk, scientist, policy makers, and fisheries managers of ecosystem and fishery linkages as a basis for integrating fisheries and ecosystem/ habitat management; and
3. Build the capacity of fisheries departments to engage in meaningful dialogue with environment sector regarding the improvement in all fisheries and management of interactions between fisheries and critical marine habitat.





End of the Project Targets:

By 2022:

- ✓ to have established a regional system of a minimum of 14 (3) refugia for the management of priority trans-boundary fish stocks and endangered species;
- ✓ To have prepared and implemented fisheries management systems in the identified priority refugia, base on and consistent with the ASEAN SEAFDEC REGIONAL GUIDELINES for Responsible Fisheries in Southeast Asia.





Participating Countries:

- 1.Cambodia**
- 2.Indonesia**
- 3.Malaysia**
- 4.Philippines**
- 5.Thailand**
- 6.Viet Nam**





Component 1. Identification and management of fisheries and critical habitat linkages at priority fisheries *refugia* in the South China Sea

Activities:

1.1 Developing fisheries and coastal habitat information and data collection programmes for the Calamianes islands, Bolinao and Masinloc sites;

1.2 Facilitating agreement among stakeholders on the boundaries of fisheries refugia at the Calamianes Islands, Bolinao and Masinloc sites;

1.3 Developing Community Based Management Plans for the Calamianes Islands, Bolinao and Masinloc fisheries *refugia* sites;

1.4 Establishing operational management for the Calamianes Islands, Bolinao and Masinloc fisheries *refugia* sites;

1.5 Strengthening civil society and community organizations participation in the management of fisheries refugia sites.





Component 2. Improving the management of critical habitats for fish stocks of transboundary significance via national actions to strengthen the environment and knowledgebase for fisheries *refugia* management in the Philippines

Activities:

- 2.1 Enhancing policy guidance for improved management of the effects of fishing on critical habitats;
- 2.2 Defining the policy and legal basis for formal designation and establishment of fisheries refugia in the Philippines;
- 2.3 Development of national guidelines on the establishment and operation of fisheries refugia;
- 2.4 Reforming national policy, legal and planning frameworks for demarcating boundaries and managing refugia;





Component 3. Information management and dissemination in support of national-level implementation of the fisheries refugia concept in the Philippines

Activities:

3.1 Enhancing national uptake of best practices in integrating fisheries and biodiversity conservation;

3.2 Improving community acceptance of area-based approaches to marine management;

3.3 Knowledge generated & experiences from establishing and operating fisheries refugia captured & shared nationally, regionally and globally.





Component 4. National coordination for integrated fish stock and critical habitat management in the Philippines

Activities:

- 4.1 Strengthened cross-sectoral coordination in the establishment and operation of fisheries refugia in the Philippines;
- 4.2 Harnessing national scientific and technical expertise and knowledge to inform policy, legal and institutional reforms for fisheries refugia;
- 4.3 Catalyzing local community action via establishment and operation of site-based management boards at 3 priority refugia sites





Implementing Agency



NATIONAL FISHERIES RESEARCH AND DEVELOPMENT INSTITUTE



Implementing the Strategic Action Programme for the South China Sea and Gulf of Thailand (SCS SAP Project)



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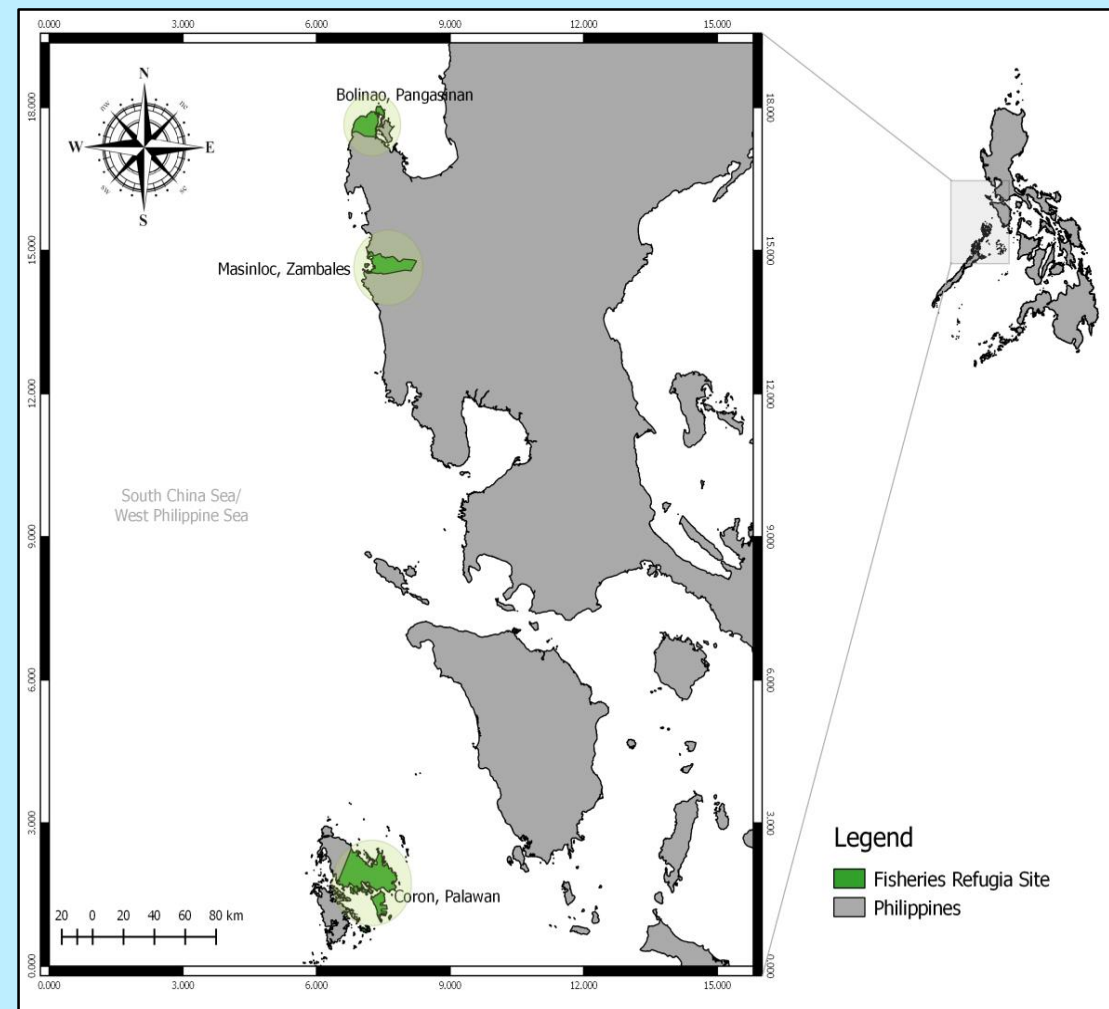
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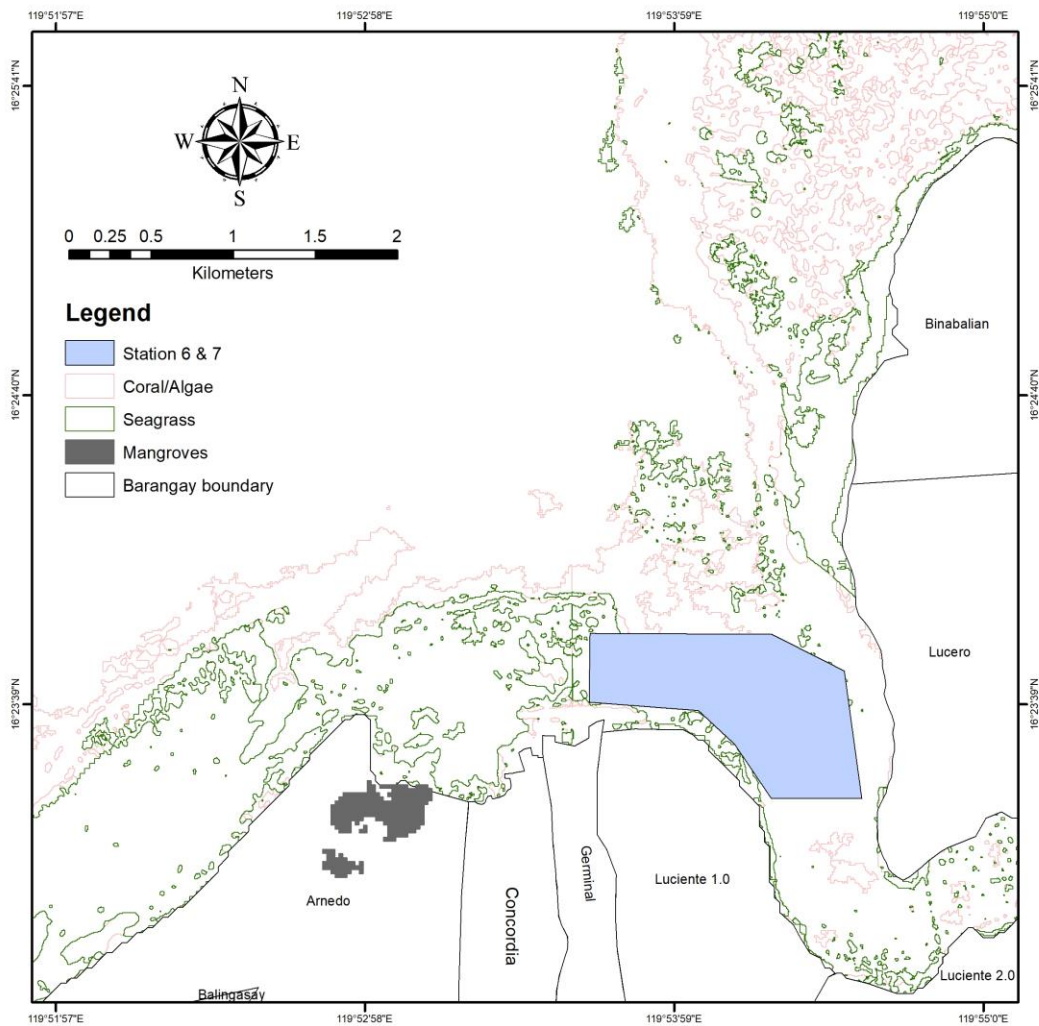




REFUGIA SITES IN THE PHILIPPINES:

- 1. Bolinao, Pangasinan**
- 2. Coron, Palawan**
- 3. Masinloc, Zambales**





BOLINAO, PANGASINAN PHILIPPINES

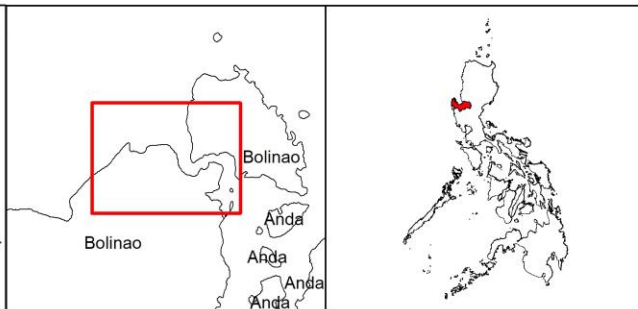
Proposed Refugia Sites

Station 6 & 7: 99.84 hectares

Coordinate System: GCS WGS 1984

Datum: WGS 1984

Units: Degree



Bolinao Site

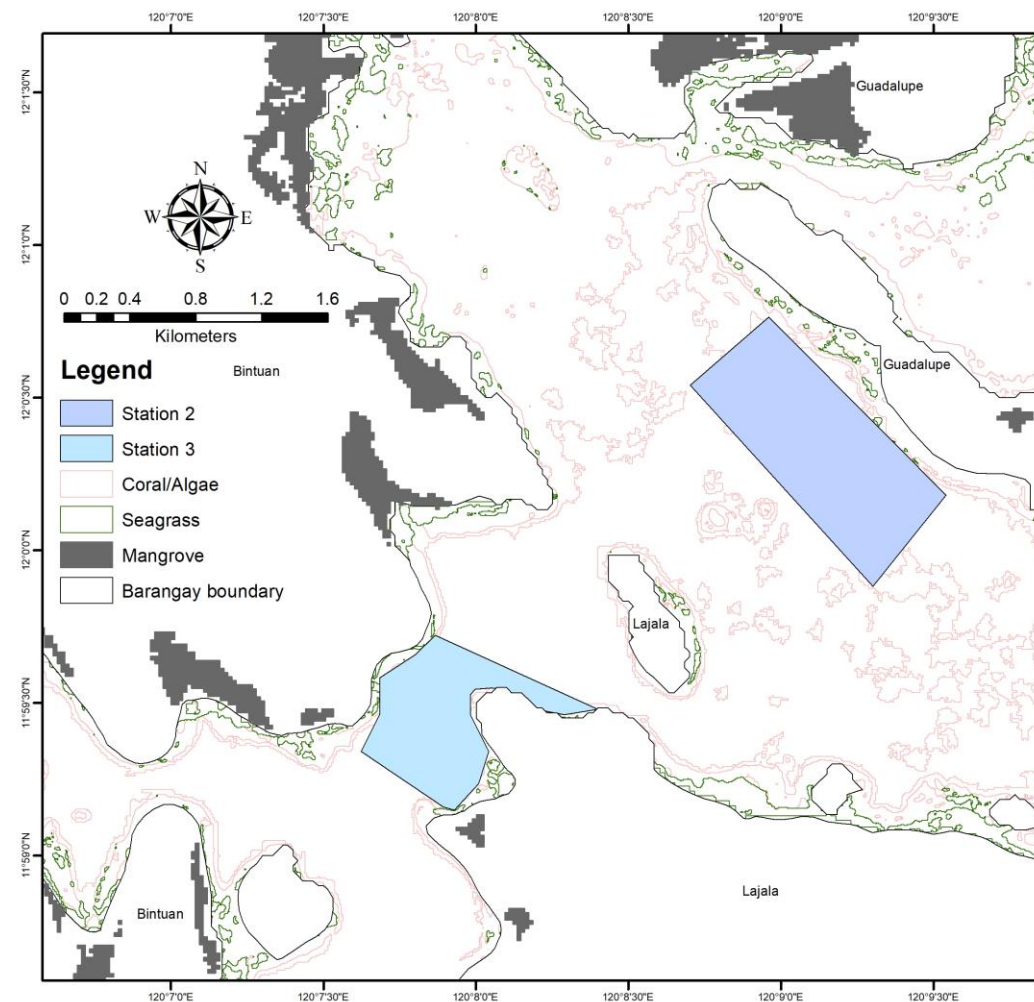
Bolinao, Pangasinan		
Point	Latitude	Longitude
1	16.3980441	119.8950987
2	16.3942697	119.8950503
3	16.3938615	119.9010221
4	16.3919962	119.9030112
5	16.3890416	119.9050331
6	16.3890270	119.9099803
7	16.3960149	119.9090250
8	16.3980276	119.9050513



Target Habitat: Seagrass



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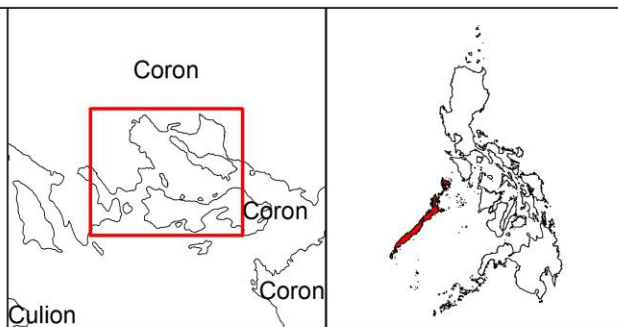


CORON, PALAWAN PHILIPPINES

Proposed Refugia Sites

Station 2: 103.27 hectares
Station 3: 59.93 hectares

Coordinate System: GCS WGS 1984
Datum: WGS 1984
Units: Degree



Coron Site

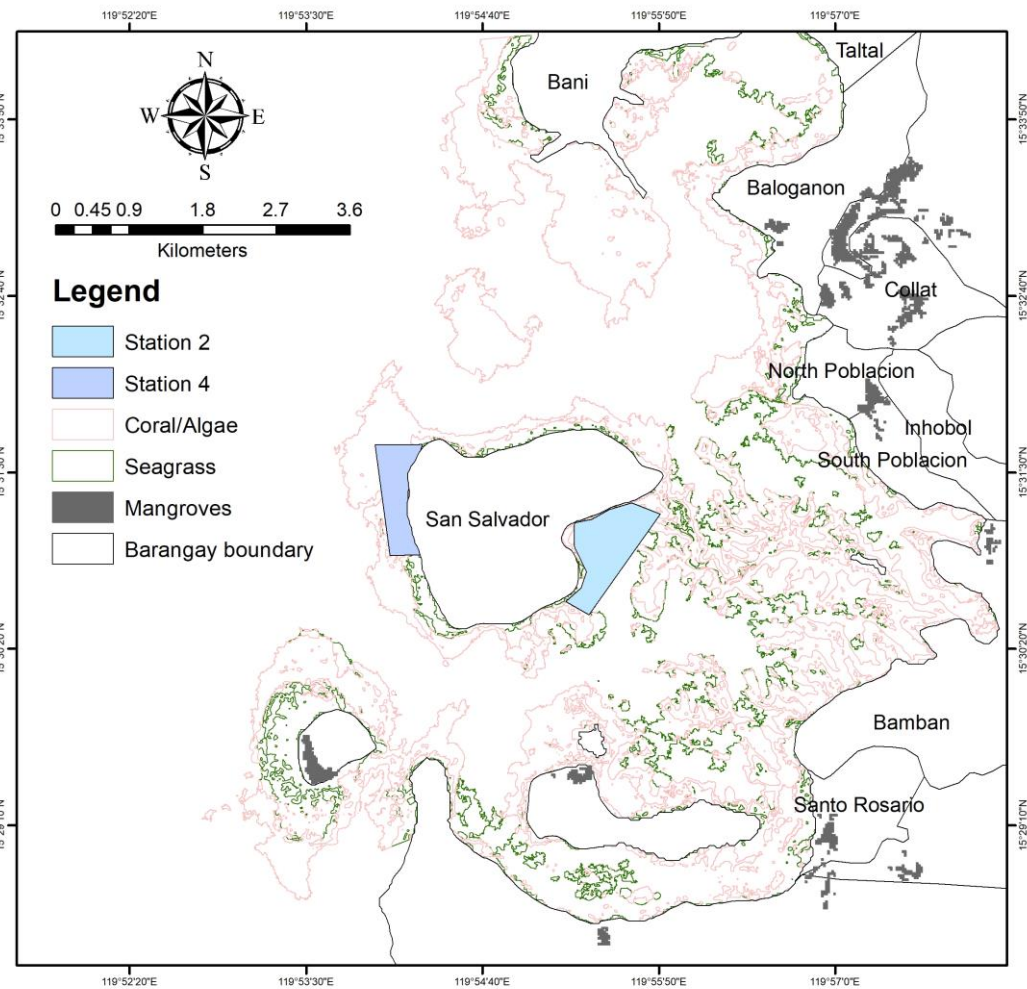
Coron, Palawan		
Point	Latitude	Longitude
1	12.0127417	120.1493244
2	12.0090223	120.1450388
3	11.9980370	120.1550200
4	12.0030079	120.1590131
1	11.99132500	120.13998611
2	11.99102500	120.13813333
3	11.99127222	120.13683611
4	11.99244167	120.13493611
5	11.99248056	120.13415000
6	11.99240556	120.13329167
7	11.99210556	120.13301667
8	11.99101667	120.13303056
9	11.98899722	120.13402778
10	11.98725278	120.13346111
11	11.98579167	120.13215556
12	11.98597500	120.13154722
13	11.98901667	120.12706667
14	11.99101389	120.12804722
15	11.99301667	120.12804722
16	11.99429444	120.13001667
17	11.99535833	120.13110556

Target Habitat: **Mangrove**



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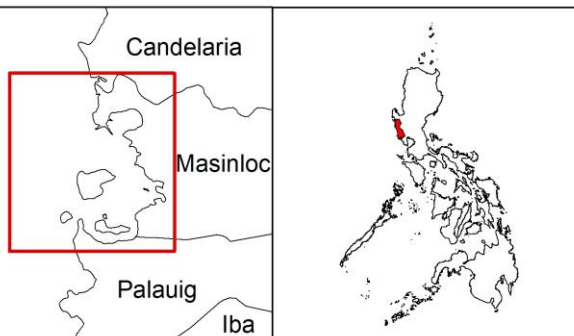


MASINLOC, ZAMBALES PHILIPPINES

Proposed Refugia Sites

Station 2: 71.68 hectares
Station 4: 49.01 hectares

Coordinate System: GCS WGS 1984
Datum: WGS 1984
Units: Degree



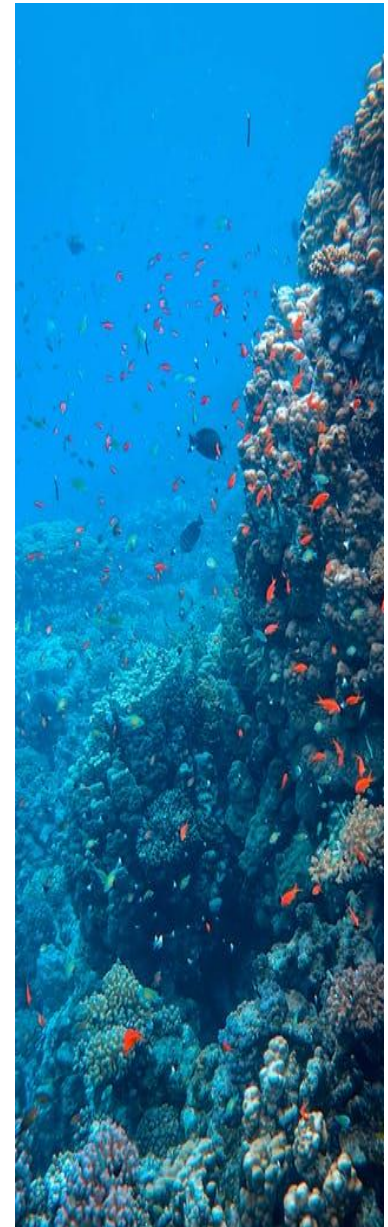
Masinloc Site

Masinloc, Zambales		
Point	Latitude	Longitude
1	15.52806111	119.89927222
2	15.52808333	119.90447500
3	15.52285556	119.90286667
4	15.52033889	119.90299722
5	15.51811667	119.90340556
6	15.51594444	119.90427222
7	15.51584444	119.90090000
8	15.52806111	119.89927222
1	15.52039167	119.93071111
2	15.50928056	119.92285556
3	15.51077500	119.92029722
4	15.51228056	119.92198333
5	15.51406389	119.92255833
6	15.51688611	119.92120278
7	15.51941944	119.92123056
8	15.51982222	119.92311389
9	15.52088611	119.92507222
10	15.52163333	119.92755556

Target Habitat: **Coral Reef**



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Priority Species

Bolinao, Pangasinan

Family Name: Siganidae

English Name: Rabbitfish



Coron, Palawan

Scientific Name: *Caesio cuning*

English Name: Redbelly yellowtail fusilier



Scientific Name: *Decapterus muroadsi*

English Name: Whitetipped mackerel scad



Masinloc, Zambales

Scientific Name: *Pterocaesio tesellata*

English Name: One-stripe fusilier



Scientific Name: *Auxis thazard*

English Name: Frigate tuna



Scientific Name: *Sardinella fimbriata*

English Name: Fringescale sardine





Engagement of Stakeholders: Site Committee Meetings





Engagement of Stakeholders: Trainings





Engagement of Stakeholders: Information-Drive





Issues and Challenges

- Difficulty in conducting site-based meeting and activities due to mobility restrictions brought about by the pandemic.
- Site-based management committee continue to ask the ways forward of the project: “What is next?”, “Will there be additional budget for monitoring and evaluation?”, etc.





Recommendations

Present the recommendations and action points for integration and collaboration of the SCSSAP and FR Projects and activities, fisheries and coastal habitat management, etc.

For continuity purposes, CSC SAP should consider the Fisheries Refugia Sites established.

Best practices/lessons learned can be of use for SCS SAP implementation (ie science-based policy making, EAFM, transparency in consultative process)





Recommendations

Close co-operation/partnership between implementing agencies both FR and SCS SAP.

