

**REPORT OF THE SECOND TECHNICAL EXPERTS MEETING ON MANAGEMENT OF
TRANSBOUNDARY SPECIES FOR NORTHERN ANDAMAN SEA**

Chonburi Province, Thailand

12-13 July 2018



THE SECRETARIAT

SOUTHEAST ASIAN FISHERIES DEVELOPMENT CENTER

Supported by the Government of Sweden

Through the SEAFDEC-Sweden Project

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REPORT OF THE SECOND TECHNICAL EXPERTS MEETING ON MANAGEMENT OF TRANSBOUNDARY SPECIES FOR NORTHERN ANDAMAN SEA

12-13 July 2018, Chonburi Province, Thailand

I. INTRODUCTION

1. The **Second Technical Experts Meeting on Management of Transboundary Species for Northern Andaman Sea** was organized by the SEAFDEC-Sweden Project on 12-13 July 2018 at Mercure Hotel, Pattaya City in Chonburi Province, Thailand. The Meeting was attended by Technical Focal Points (TFP) of Myanmar and Thailand, SEAFDEC Secretariat, Training Department (TD), Marine Fishery Resources Development and Management Department (MFRDMD), Regional Fisheries Policy Network Members (RFPN) and Technical Resource Persons from Thailand. The list of participants appears in **Annex 1**.

2. The Meeting was convened, as follow-up to *the first Technical Experts Meeting on Management of Transboundary Species of Northern Andaman Sea*, held on 13-14 March 2018 in Bangkok, where Myanmar and Thailand TFPs, agreed to produce a draft map out of the data collected and compiled provided by both countries. The draft maps are discussed, revised and updated in this Meeting. Based on the data quality, the Meeting will assess and identify the possible future needs for coordination and collaboration of fisheries measures based on the produced maps that could be beneficial to secure a sustainable stock assessment of these transboundary species.

II. OPENING OF THE MEETING

3. *Dr. Jacob Hagberg*, International Fishery Policy Expert, on behalf of SEAFDEC Secretary-General welcomed the participants and thanked everyone for attending the Meeting. He emphasized on the need to review the map developed by TD and develop mechanism to share data and information between the countries.

4. As no further comment, except the change in the title of the Meeting, the Agenda presented had been adopted.

III. BACKGROUND AND OBJECTIVES OF THE MEETING

5. *Dr. Bamroongsak Chatanathawej*, Andaman Sea and Mekong River Basin Sub-region Coordinator, briefly explained the background, objectives, agenda and expected outputs of the Meeting. The detail including prospectus and agenda appears in **Annex 2**.

IV. DISCUSSION AND REVISION OF DRAFT MAPS ON THE TARGET TRANSBOUNDARY SPECIES FOR NORTHERN ANDAMAN SEA

- **Anchovies**

6. *Mr. Rakkiet Punsri*, SEAFDEC/TD, presented the anchovy maps and information of Northern Andaman Sea. The fishing grounds are along the coastal area from Myeik to Dwei. The main fishing gear is purse seine with luring light and major species is *Stolephorus indicus*. The major spawning grounds lies on off coastal areas of 8 villages, namely, Naung Zin village; Yan Taung village; Ka Net Thiri village; Auk Tha Yet Chaung village; Kyun Hla kyun; Kaw Dwe kyun; Ma Nwe kyun and Pyin sa bu kyun. Myanmar explained to reconfirm spawning grounds of anchovies. The DOF collected information from local fishermen through interviewing, checking log book and close monitoring of fishing activities of small anchovies in these areas.

7. The Meeting was noted the spawning grounds presented are major spawning grounds but there would be other spawning grounds. Currently, Myanmar is not capable to identify anchovies into species

level which was *S. indicus* and *S. commersonii* as inquired from the Meeting. Myanmar representative agreed on maps presented by TD. Detailed map appears in **Annex 3, Annex 4, Annex 7** and **Annex 8**.

8. For the regulation, Myanmar has three months closing season for all fishing grounds from June to August on yearly basis to prohibit trawlers, purse seine, trap, long-line, drift net and all. DOF regulation in 1991 announced on limiting fishing areas, fishing method and fishing gears in coastal area. The prohibited fishing gears are purse seine with mesh size less than 1 inch; purse seine with light luring; trawlers with engine, paired trawler; trawlers with mesh size less than 2 inch for catching fish and 1.5 inch for catching prawns which limits only one net per boat; push net with engine and clam dredging with engine. For protected area, Myanmar has provided the Locally Managed Marine Area (LMMA); Marine Protected Area (MPA); Marine Natural Park and Shark Protective Zone. Detailed map appears in **Annex 24** and **Annex 25**.

9. The Meeting requested Myanmar to verify the spawning ground and make available information to TD. The sources of data must be identified either a cruise survey sampling sites for scientific references in the future. It can be useful for Thailand to cooperate with Myanmar in future on research collaboration of anchovies identification.

10. TD also presented maps layers of anchovy information from Ranong and Phang-nga Province (north of Phuket Island) areas in Thailand. The anchovies spawning grounds locate between Thailand and Myanmar border and around Phayam Island of Ranong Province of which three species of anchovies, namely, *Encrasicholina punctifer*, *E. heteroloba* and *E. devisi* spawning grounds closely locate almost the same area. The fishing grounds are between Thailand and Myanmar waters, around Phayam Island, Kra Island and Surin Island. The main fishing gear caught the same three major species of anchovies namely, *E. punctifer*, *E. heteroloba* and *E. devisi*, are anchovy purse seine with light luring. Detailed spawning grounds, fishing grounds and larvae distribution see also in **Annex 3, Annex 5, Annex 6, Annex 7** and **Annex 9**.

11. The prohibited areas for anchovies fishing is between 3-5 NM from shoreline likewise some fishing gears as listed in the Ministerial Regulation issued by Ministry of Agriculture and Cooperatives. Thailand representatives agreed on maps presented by TD. The Meeting was informed that DOF Thailand has capability to identify anchovy species from characteristics at larvae and egg stages. Detailed map appears in **Annex 24** and **Annex 26**.

12. The Meeting requested Thailand to verify the regulation especially anchovy purse seine with light luring fishing gear. It was also noted that fishing ground and fishing gear were similar with Myanmar on its nearby islands.

- **Mackerels (Short-body or Indo-Pacific mackerel and Indian mackerel)**

13. *Mr. Sukchai Arnupapboon*, SEAFDEC/TD, presented map layers of mackerel spawning ground for Myanmar. The spawning ground is around Myeik Archipelago Island of Myanmar, and other in the north of Andaman Sea. Data sent to TD from Myanmar was not identified to different species level. However, Myanmar representative confirmed the information on spawning ground sent where the data was taken during the survey since 2015 and from interviewing the master fishermen. The fishing ground as reported is the same of spawning ground. The fishing season is high during April and May, then lower during October to December. Detailed map appears in **Annex 10, Annex 11, Annex 13, Annex 14** and **Annex 16**.

14. Next to Thailand, TD presented map layers of spawning and nursery grounds of short mackerel and Indian mackerel were found at area of 1.6-10 NM from shoreline and fish larval concentrate around 3-10 NM off the west coast of Ranong Province near Phayam Island and south of Surin Island and west coast of Thai-Mueang District of Phang-Nga Province. The spawning season of short mackerel is all year round with two peaks in November to May and July to September. The highest spawning season is in February to May. The fishing ground of short mackerel is near

Thailand-Myanmar border in Ranong Province of a depth ranging from 10-40 m. There are two peaks for short mackerel fishing season are February to April and September to November. For the Indian mackerel, spawning season is found in January to March with peak in March and in August to September with peak in September. The highest spawning season is in March and September. The fishing grounds locate off Ranong to Satun province shoreline of depth ranging from 10-80 m and the fishing season is March to April and October. The main fishing gear is purse seine. Detailed spawning and fishing grounds see also in **Annex 10, Annex 12, Annex 13, Annex 15, Annex 16 and Annex 17.**

15. BOBLME study in 1987, reported short mackerel migrated between Myanmar and Thailand during February to May. The fishes may stay in Myanmar of sizes about 16 cm, then by June to July of sizes about 16.5-18.5cm swim to Thai water. The migration route pattern may indicate that these fishes are spawned in Thai waters; however, more scientific evidence must be claimed. In a program study conducted by MFRDMD showed that some fishes moved downward to Myanmar, with similarity to result of BOBLME study.

- **Neritic Tunas (Frigate, Long-tail tuna and Kawakawa)**

16. TD presented the Neritic tunas fishing and spawning ground in Myanmar waters. There are eleven areas of spawning ground that could be found near small islands along the coast of two provinces which were also indicated the fishing ground. The sites of spawning ground were determined according to the larval occurrence, but not sorted by species. The spawning season was recorded for each species of Neritic tunas (Kawakawa, long-tail and frigate tuna). Myanmar confirmed and agreed the maps presented. Myanmar confirmed the fishing ground as reported by interviewing of fishing master and supported by a Gonado-Somatic Index study. The Meeting also noted the spawning ground where larval occurrence can be sighted; it could also be the spawning area. Detailed map appears in **Annex 18, Annex 19, Annex 21 and Annex 22.**

17. TD presented the map layers of Neritic tunas for Thailand by species on spawning ground and spawning season. The spawning sites for long-tail tuna and kawakawa are close to each other. Thailand confirmed and agreed on the maps, however, additional information must be added to the spawning ground as a reference to their updated record. The spawning ground of Neritic tunas, on larva and juveniles will also be added. The fishing ground is located in two locations (Ranong Province and Phang-Nga Bay) with peak from November to January. The main fishing gear for catching Neritic tunas is purse seine with light luring and Fish Aggregating Device (FAD), operating in the area of depth ranging from 20 to 80 m. Detailed spawning and fishing grounds see also in **Annex 18, Annex 20, Annex 21 and Annex 23.**

V. DISCUSSION ON THE AVAILABILITY OF ADDITIONAL DATA

18. The Meeting suggested Thailand checked the area for specific prohibition of fishing gear with light luring. The fishing ground for anchovy must be rechecked in Northern Andaman Sea as they were old data which could be replaced with the new data. Map layers for spawning ground for Neritic tunas in Thailand must be updated and inputted additional data on spawning ground for mackerel based in geographic information data.

19. Myanmar was asked to send additional data for anchovy from the on-going study within one month to TD. For the migration of mackerel between Thailand and Myanmar, TD will add an extra layer from results of tagging study into map layers of the sub-region.

VI. IDENTIFY POSSIBLE NATIONAL MEASURES TO SECURE A SUSTAINABLE STOCK STATUS OF ANCHOVIES, MACKERELS, AND NERITIC TUNAS IN NORTHERN ANDAMAN SEA

20. On Neritic tunas, there was not enough scientific data to prove that they were transboundary species, although some previous studies conducted to collaborate the findings. As to the indication of over capacity stock status of Neritic tunas in both countries, the assessment of landing data study must

be presented. Myanmar collected landing data using SOP from SEAFDEC and found that species composition was dominated by kawakawa. Thailand suggested having data sharing from Malaysia and Indonesia.

21. Myanmar does not have specific regulation on Neritic tunas but it has closed area for fishing. The Meeting suggested using as guide of the Indian Ocean Tuna Commission (IOTC) management measures that can be adopted for Myanmar national measure. Both countries in Northern Andaman Sea agreed to conduct further stock assessment study for future management.

VII. NEXT STEP AND WAY FORWARD

22. Thailand could help Myanmar on data collection and species identification. The Acoustic survey data of Thailand can be used by Myanmar. For future collaboration, the Meeting agreed to improve data collection, Observer on Board Program can support to observe fish on board. However cooperation of Member Countries to implement must be done. There is need to improve data by area and the total catch landing. The results on BOBP study must be reviewed to use as reference for further enhancement of the presented data. Thailand proposed to push forward these activities under the MoU between Thailand and Myanmar.

23. On mackerels, with all the data at hand, The Meeting agreed each country to decide on how to work together and discuss with the higher authority. At present, there are collaboration and cooperation among scientists for joining sampling study areas. The Meeting suggested Thailand proposes the concept paper on information of the needs provided by Myanmar for future collaboration of a project.

24. On Neritic tunas, the Meeting requested Myanmar to improve the landing and catch data, if there is need for further assessment. The Meeting realized the need for updated data to estimate MSY. The Meeting also noted that IOTC started collecting sample tissue of Neritic tunas in Myanmar, Member Country of IOTC can apply to use funding.

25. Conclusion has been made and asked for more detail to revise additional data prepared by secretariat at the Meeting. The Meeting recommended countries to consider the final revision of preliminary maps sent by TD to provide additional information of shape-file including one map of spawning grounds, migration route, fishing ground must be sent to TD within a week. SEAFDEC/TD will send the updated final map back to countries in GIS format using of QGIS free software; and countries should have 4 weeks after the final maps to be sent to the countries changes and adopted of the maps. Detailed conclusion and ways forward for improvement of data and information can be considered in **Annex 27**.

VIII. CLOSING OF AGENDA

26. *Dr. Jacob Hagberg* in behalf of SEAFDEC Secretary-General thanked all the participants. He underlined the concrete ideas to work on the map and improved as time go on for the finalization of the map. He also acknowledged the great work of TD, and then declared the Meeting closed.

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BACKGROUND AND OBJECTIVES OF THE MEETING

By Dr. Bamroongsak Chatananthawej



2nd Technical Experts Meeting on Management of Transboundary Species for the Northern Andaman Sea
12-13 July 2018, Pattaya, Thailand

Background:

- SEAFDEC-Sweden Project organized the first meeting of the *Technical Experts Meeting on Management of Transboundary Species for Northern Andaman Sea* on 13-14 March 2018 in Bangkok.
- Myanmar and Thailand here agreed to develop digital maps of biological features such as spawning and nursery areas as well as present fisheries regulations, fishing grounds and protected areas for Anchovies, Mackerels and Neritic tunas.
- The resulting maps can serve as inputs to future coordination of national and international fisheries measures.
- SEAFDEC/Training Department (TD) have supported the countries by producing a first set of draft maps based on the data provided by the countries.

2nd Technical Experts Meeting on Management of Transboundary Species for the Northern Andaman Sea
12-13 July 2018, Pattaya, Thailand

Objectives

- To discuss, update and revise the digital maps developed by SEAFDEC/TD
- To agree on the final format of the maps
- To identify possible national measures to secure a sustainable stock status of transboundary fish stocks in the Northern Andaman Sea

2nd Technical Experts Meeting on Management of Transboundary Species for the Northern Andaman Sea
12-13 July 2018, Pattaya, Thailand

Outline of this Meeting

- Discussion and Revision of Draft Maps on the Target Transboundary Species for the Northern Andaman Sea. *The meeting will discuss, update and revise the maps made by SEAFDEC/TD on Anchovies, Mackerels and Neritic Tunas.*
- Discussion on the Availability of Additional Data. Draft a workplan to develop joint maps of these data in the Northern Andaman Sea. *Countries to discuss if there are any additional data for Anchovies, Mackerels and Neritic Tunas that should be added to the maps before finalization of the maps.*
- Identify Possible National Measures to Secure a Sustainable Stock Status of Anchovies, Mackerels and Neritic Tunas in the Northern Andaman Sea. *Country by country and Plenary discussion on Anchovies, Mackerels and Neritic Tunas. Based on the draft maps the countries will discuss and identify possible national measures to secure a sustainable stock status of transboundary fish stocks.*

2nd Technical Experts Meeting on Management of Transboundary Species for the Southern Andaman Sea
10-11 July 2018, Pattaya, Thailand

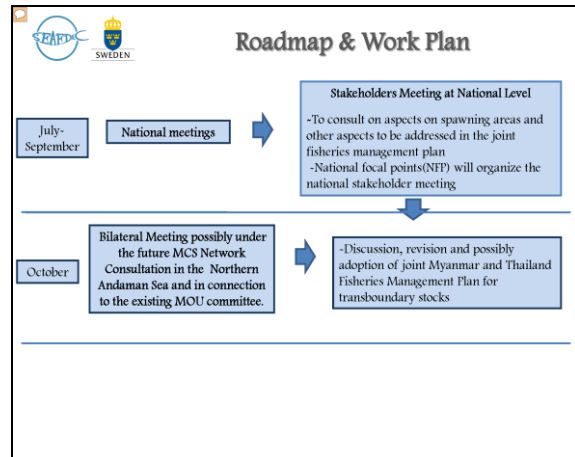
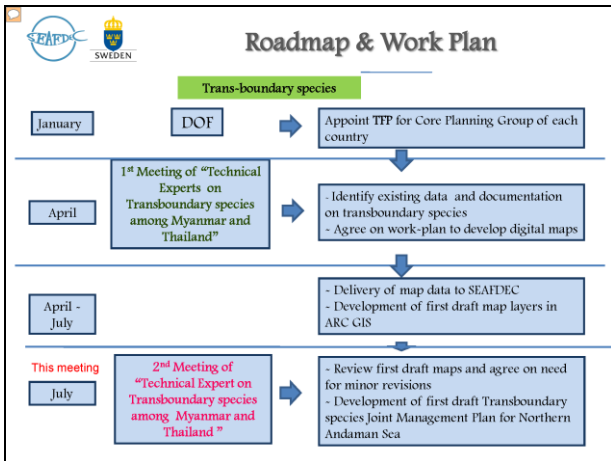
Expected Outputs

- Updated and agreed maps of features related to Anchovies, Mackerels and Neritic tunas
- An initial set of national measures to secure sustainable stock status that can form the basis for the development of sub-regional agreements in the Northern Andaman Sea between Myanmar and Thailand.

Technical Experts Meeting on Management of Transboundary Species for the Northern Andaman Sea
12-13 July 2018, Pattaya, Thailand

Process for coordinating management of transboundary species in Northern Andaman Sea

Compile biological data on Anchovy, Mackerel and Neritic tuna as well as existing fisheries regulations.	March
Make digital maps covering North Andaman Sea with this information.	April - June
Myanmar and Thailand confirm that the maps are correct and agree on the content	This meeting (July)
Based on the maps develop a draft management plan with a draft agreement between Myanmar and Thailand	July - October
Revision and agreement among Myanmar and Thailand	October



2nd Technical Experts Meeting on Management of Transboundary Species for the Northern Andaman Sea
12-13 July 2018, Pattaya, Thailand

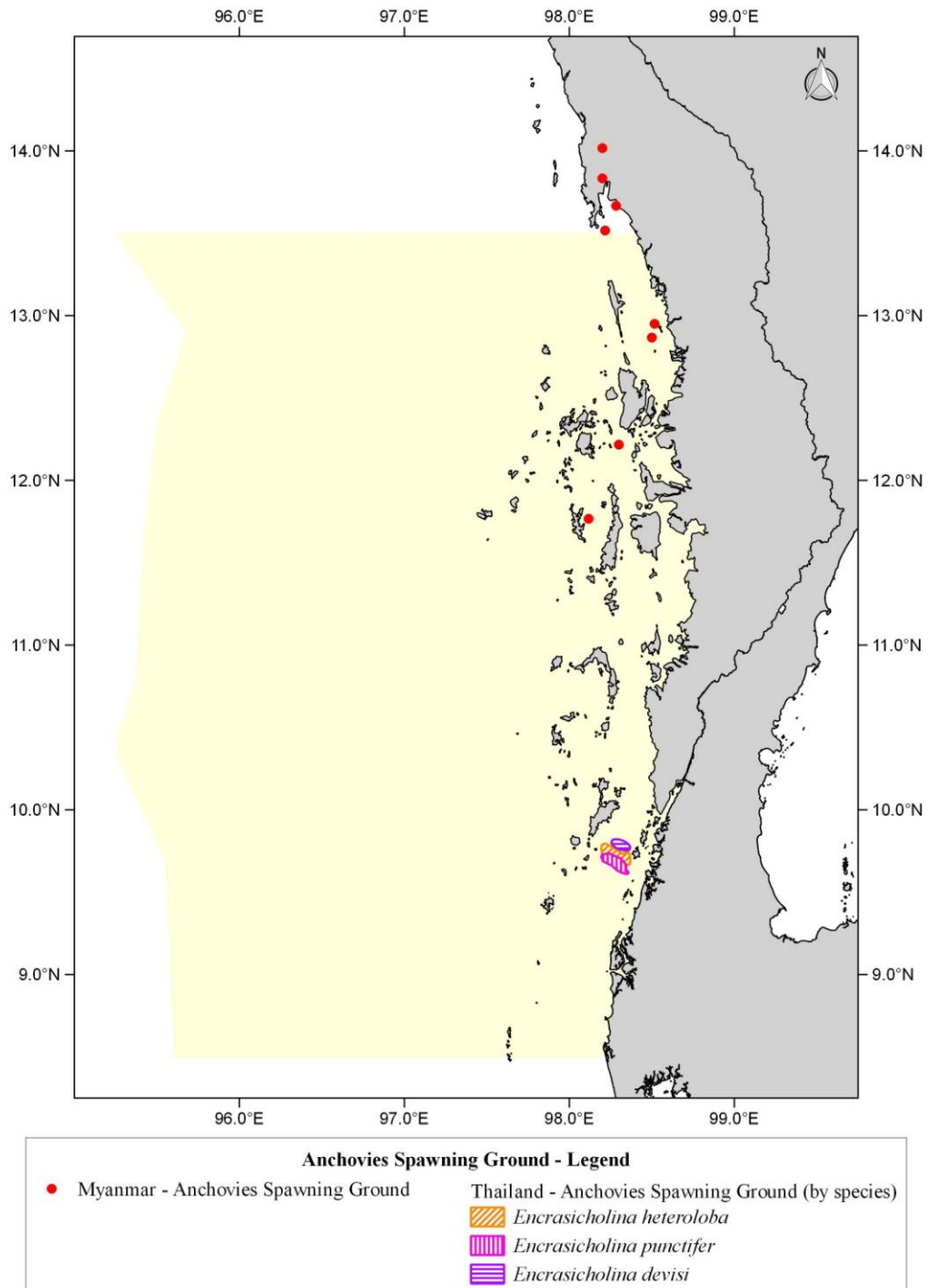
AGENDA

- 2nd Technical Experts Meeting on Management of Transboundary Species for the Northern Andaman Sea
12-13 July 2018, Pattaya, Thailand
- ### Meeting Agenda
- 12 July 2018**
- **Agenda 1:** Opening of the Meeting
 - **Agenda 2:** Introduction on background, objectives and agenda of the Meeting
 - **Agenda 3:** Discussion and Revision of Draft Maps on the Target Transboundary Species for the Northern Andaman Sea of Anchovies, Mackerels and Neritic Tunas.
- 13 July 2018**
- **Agenda 4:** Discussion on the Availability of Additional Data.
 - **Agenda 5:** Identify Possible National Measures to Secure a Sustainable Stock Status of Anchovies, Mackerels and Neritic Tunas in the Northern Andaman Sea. Country by country and Plenary discussion on Anchovies, Mackerels and Neritic Tunas.
 - **Agenda 6:** Next Step and Way Forward
 - **Agenda 7:** Closing of the Meeting

DISCUSSION AND REVISION OF DRAFT MAPS ON THE TARGET TRANSBOUNDARY SPECIES FOR NORTHERN ANDAMAN SEA

Northern Andaman Sea Sub-region: Anchovies Spawning Grounds

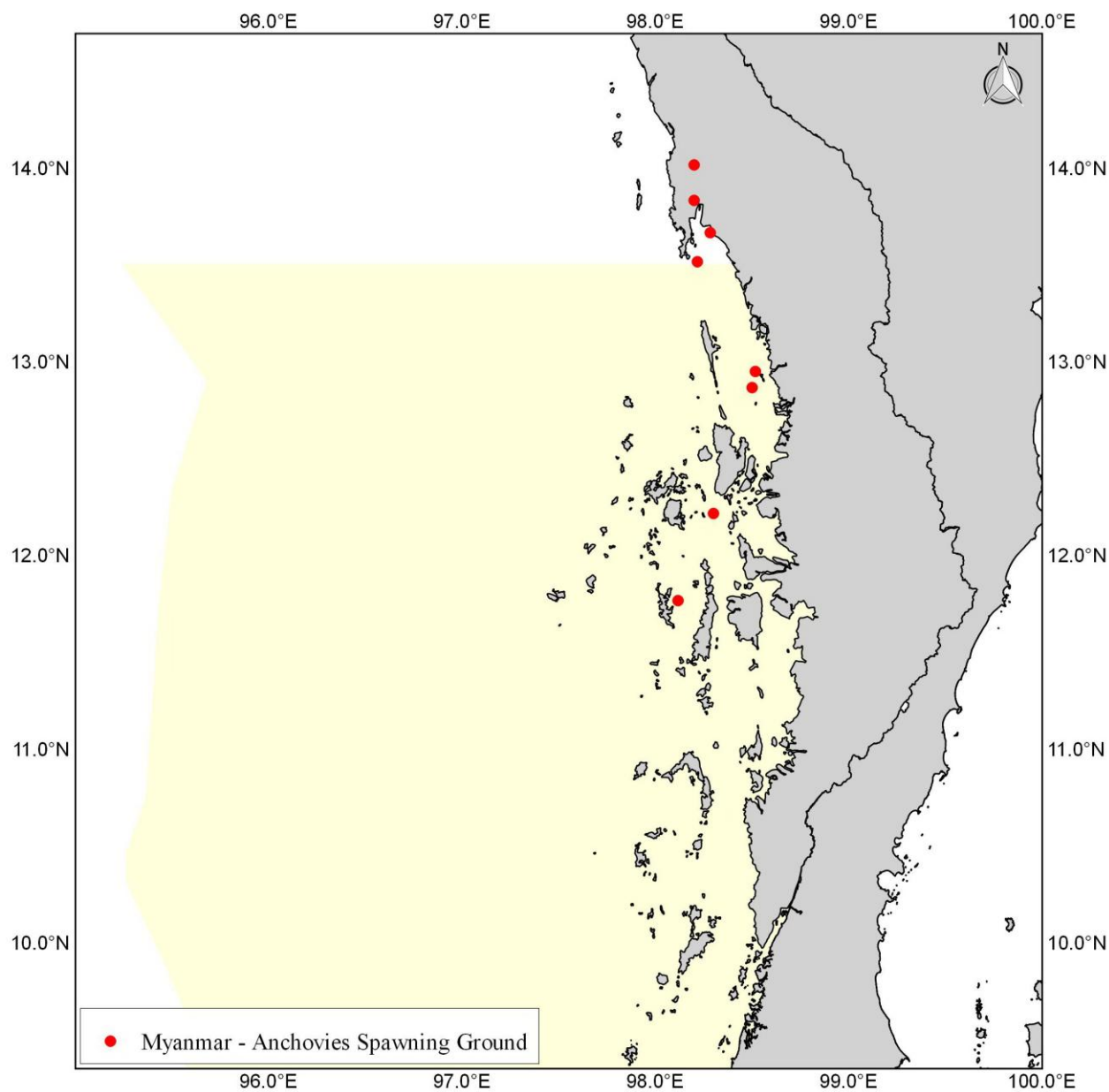
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DISCUSSION AND REVISION OF DRAFT MAPS ON THE TARGET TRANSBOUNDARY SPECIES FOR NORTHERN ANDAMAN SEA

Northern Andaman Sea Sub-region (MM): Anchovies Spawning Grounds

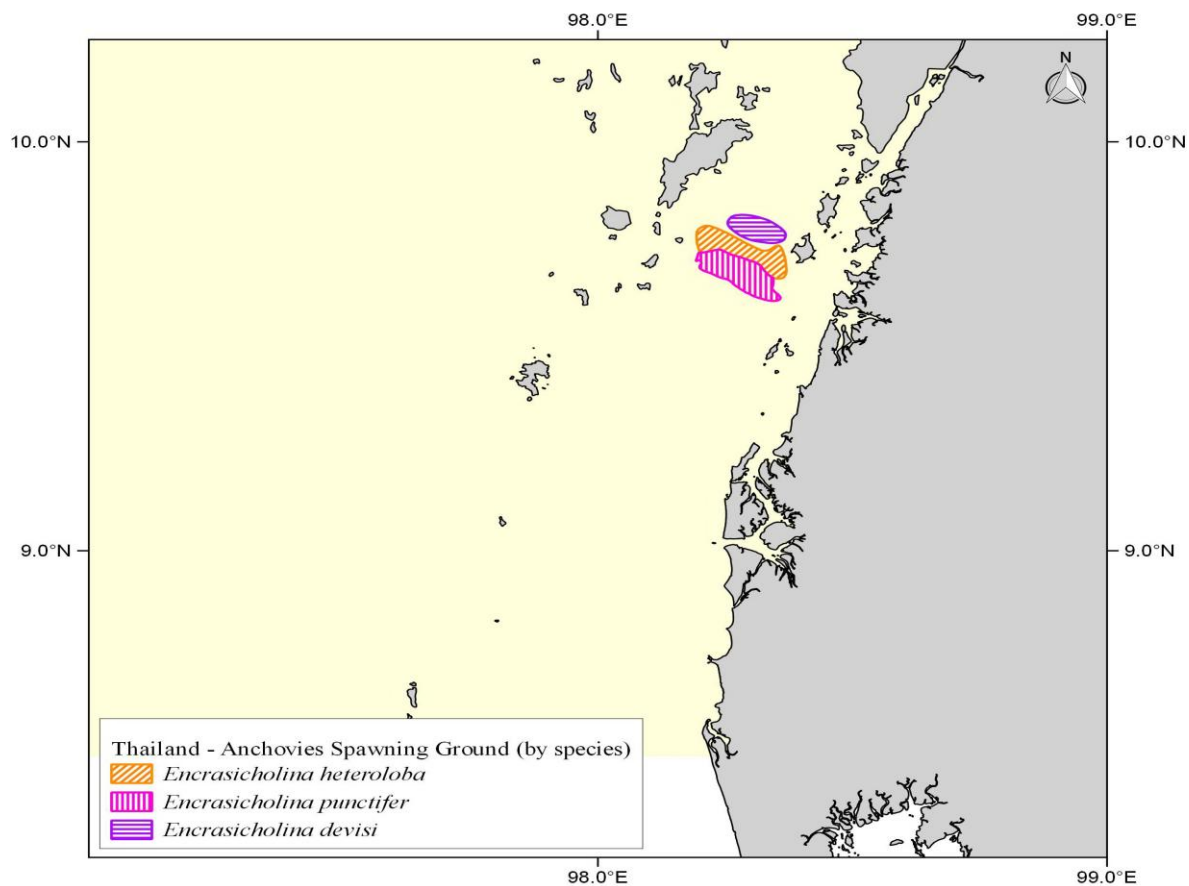
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DISCUSSION AND REVISION OF DRAFT MAPS ON THE TARGET TRANSBOUNDARY SPECIES FOR NORTHERN ANDAMAN SEA

Northern Andaman Sea Sub-region (TH): Anchovies Spawning Grounds

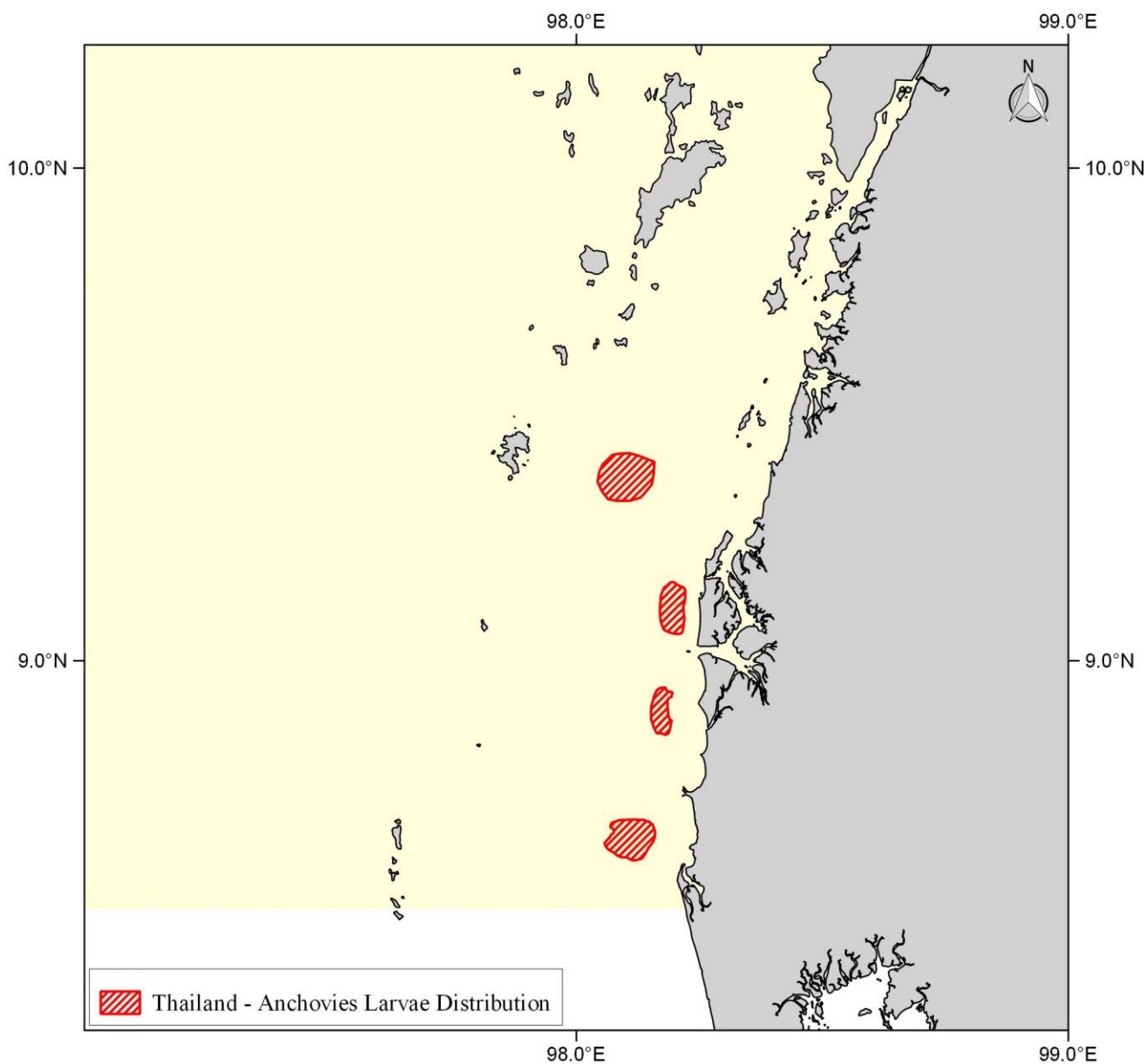
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DISCUSSION AND REVISION OF DRAFT MAPS ON THE TARGET TRANSBOUNDARY SPECIES FOR NORTHERN ANDAMAN SEA

Northern Andaman Sea Sub-region (TH): Anchovies Larvae Distribution

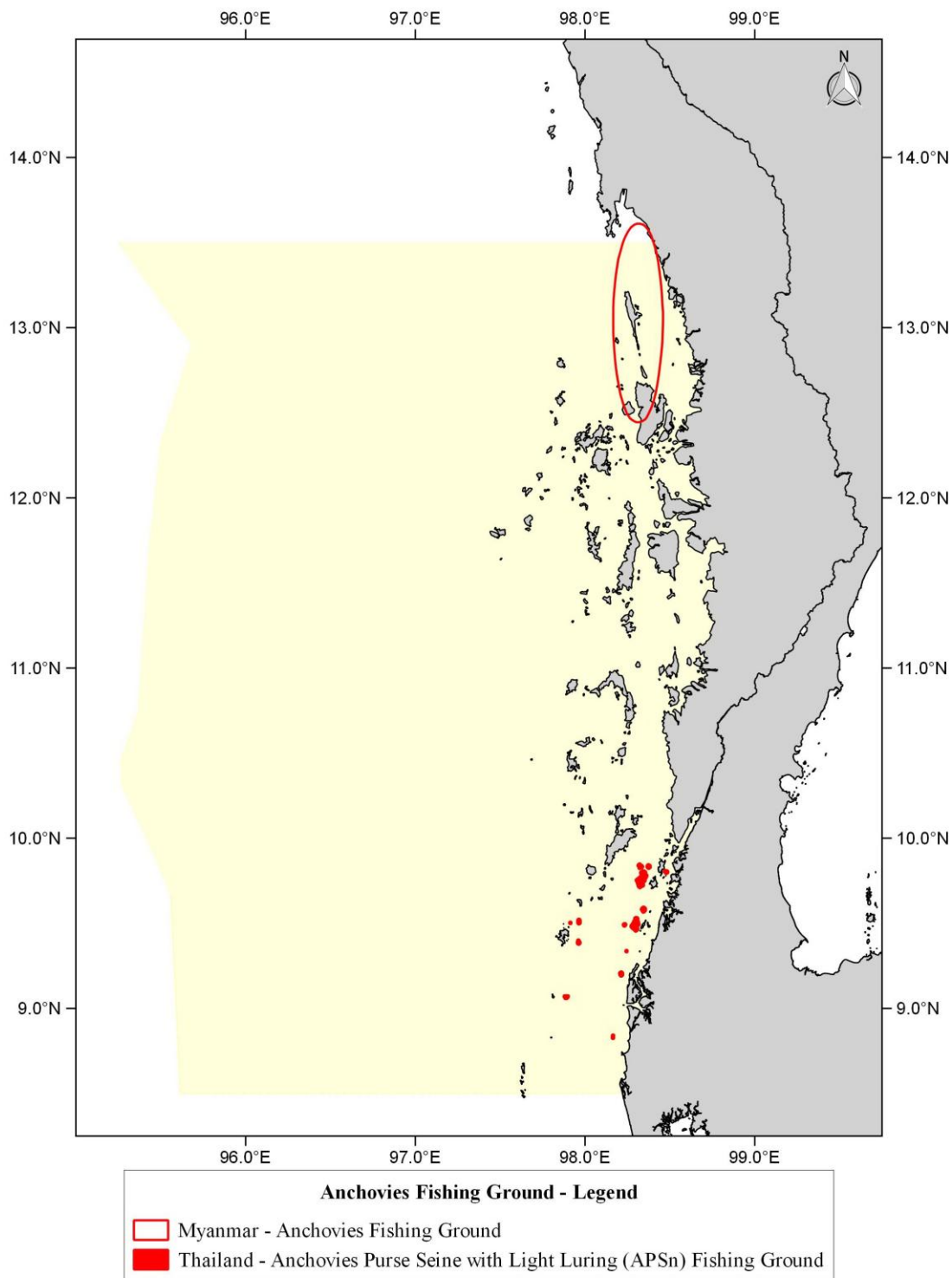
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DISCUSSION AND REVISION OF DRAFT MAPS ON THE TARGET TRANSBOUNDARY SPECIES FOR NORTHERN ANDAMAN SEA

Northern Andaman Sea Sub-region: Anchovies Fishing Grounds

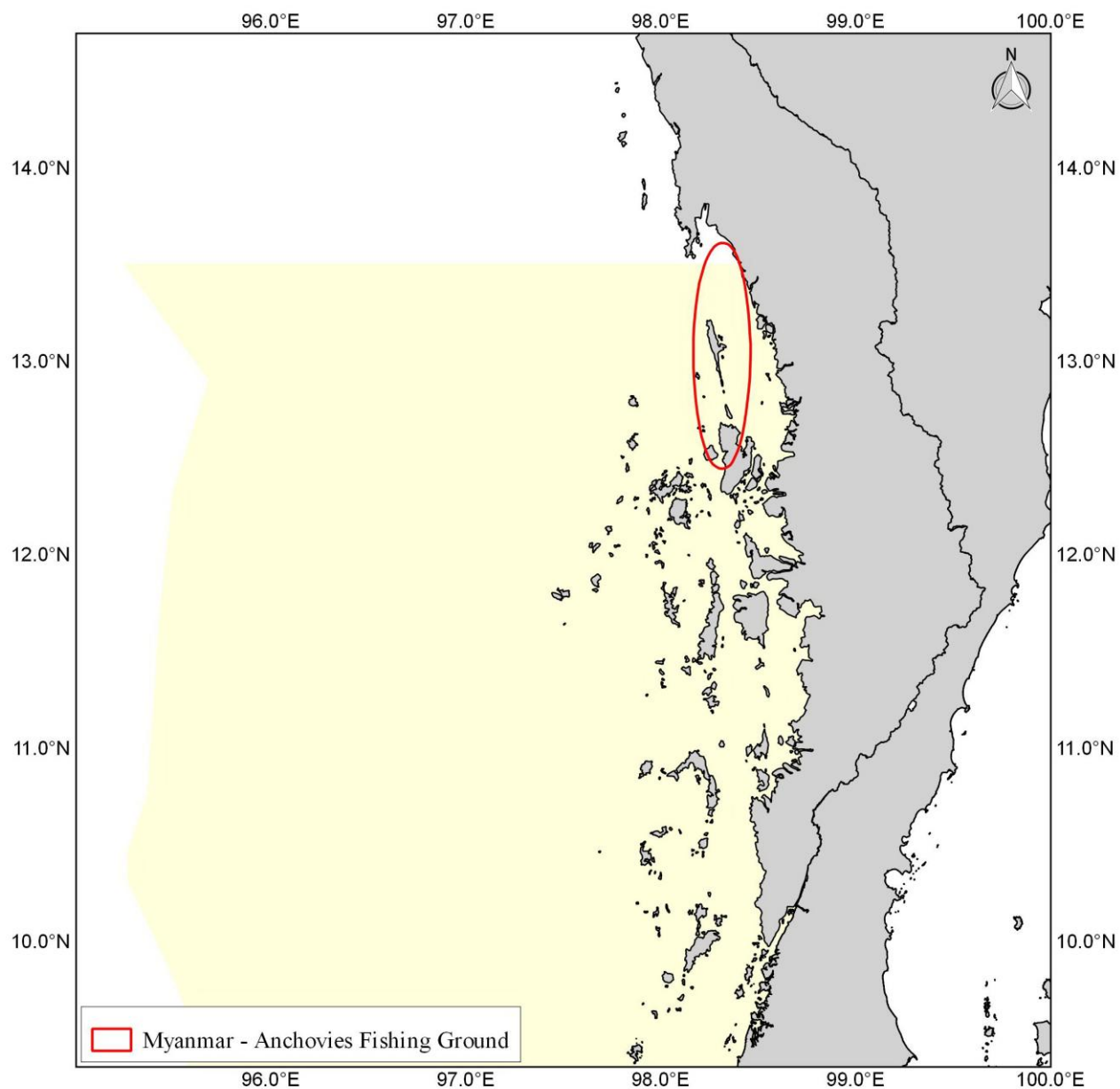
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DISCUSSION AND REVISION OF DRAFT MAPS ON THE TARGET TRANSBOUNDARY SPECIES FOR NORTHERN ANDAMAN SEA

Northern Andaman Sea Sub-region (MM): Anchovies Fishing Grounds

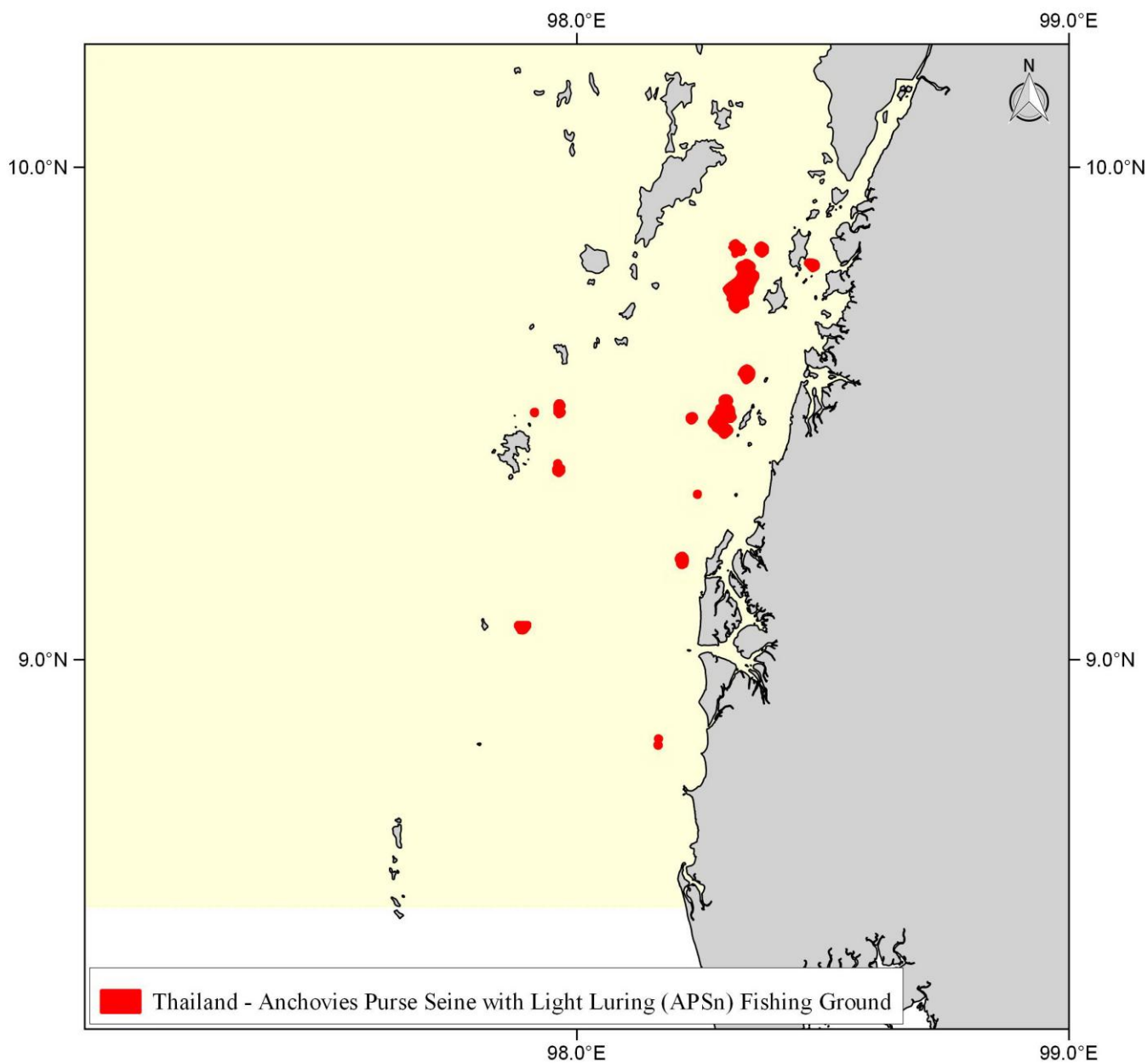
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DISCUSSION AND REVISION OF DRAFT MAPS ON THE TARGET TRANSBOUNDARY SPECIES FOR NORTHERN ANDAMAN SEA

Northern Andaman Sea Sub-region (TH): Anchovies Fishing Grounds

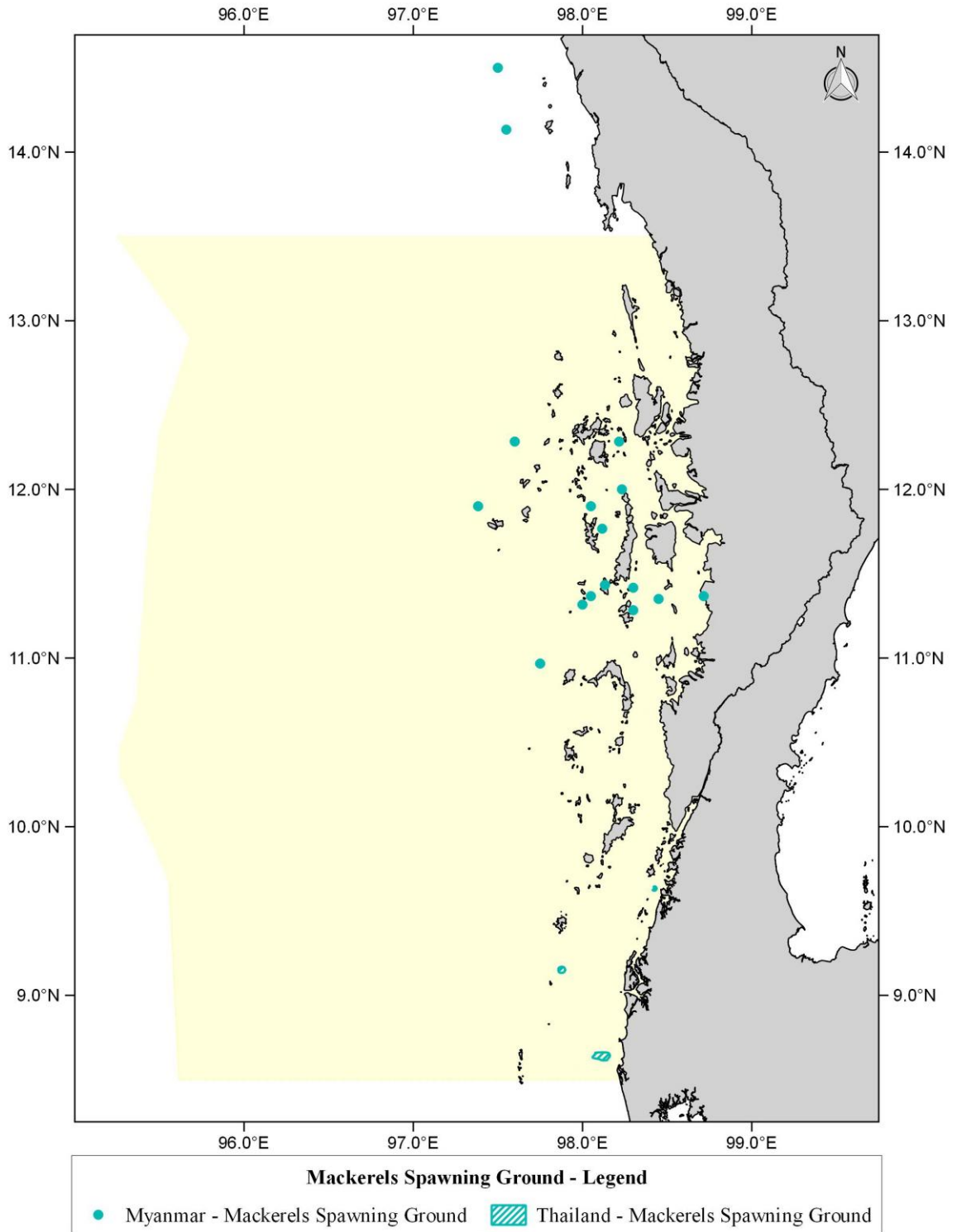
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DISCUSSION AND REVISION OF DRAFT MAPS ON THE TARGET TRANSBOUNDARY SPECIES FOR NORTHERN ANDAMAN SEA

Northern Andaman Sea Sub-region: Mackerels Spawning Grounds

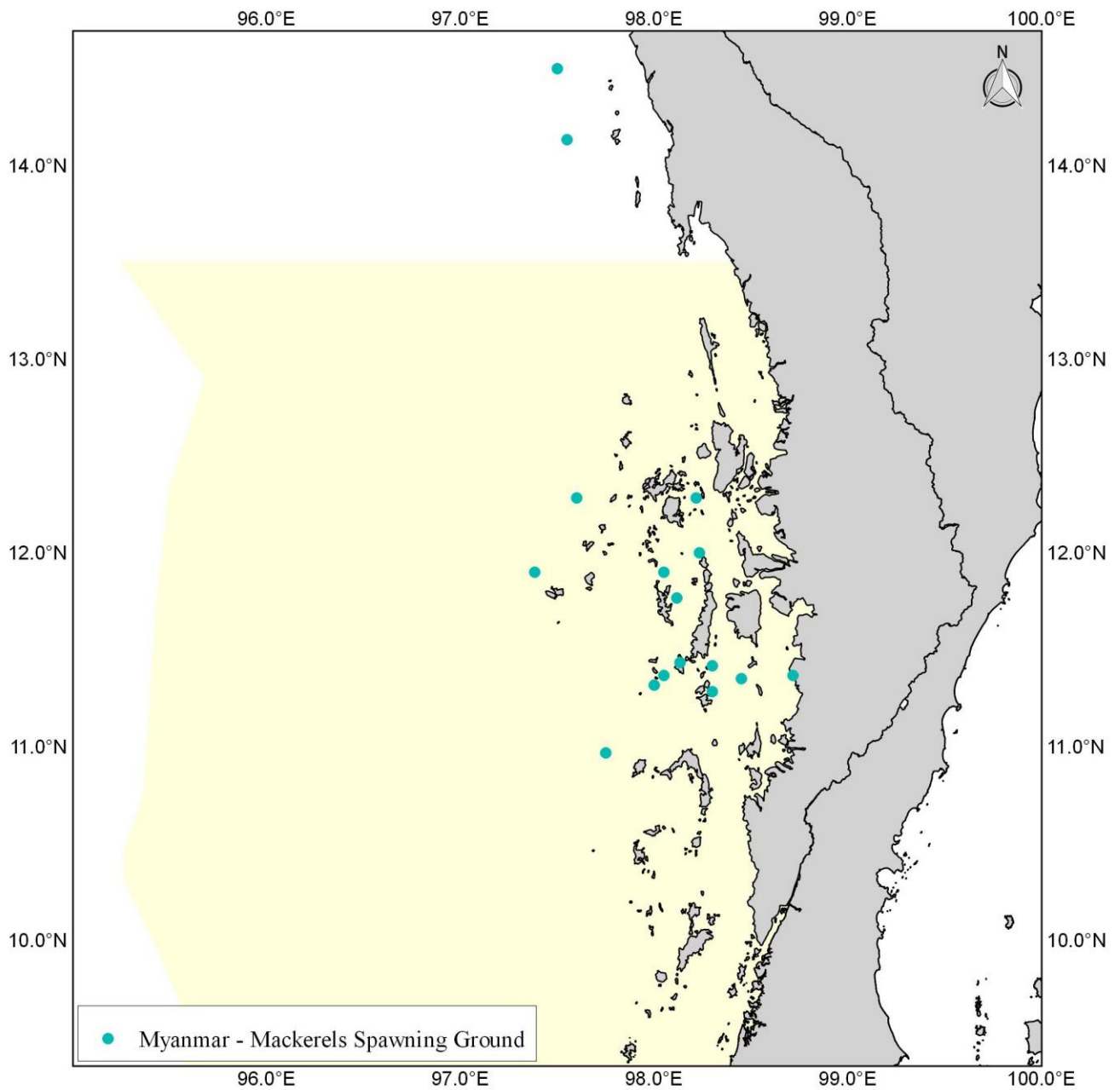
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DISCUSSION AND REVISION OF DRAFT MAPS ON THE TARGET TRANSBOUNDARY SPECIES FOR NORTHERN ANDAMAN SEA

Northern Andaman Sea Sub-region (MM): Mackerels Spawning Grounds

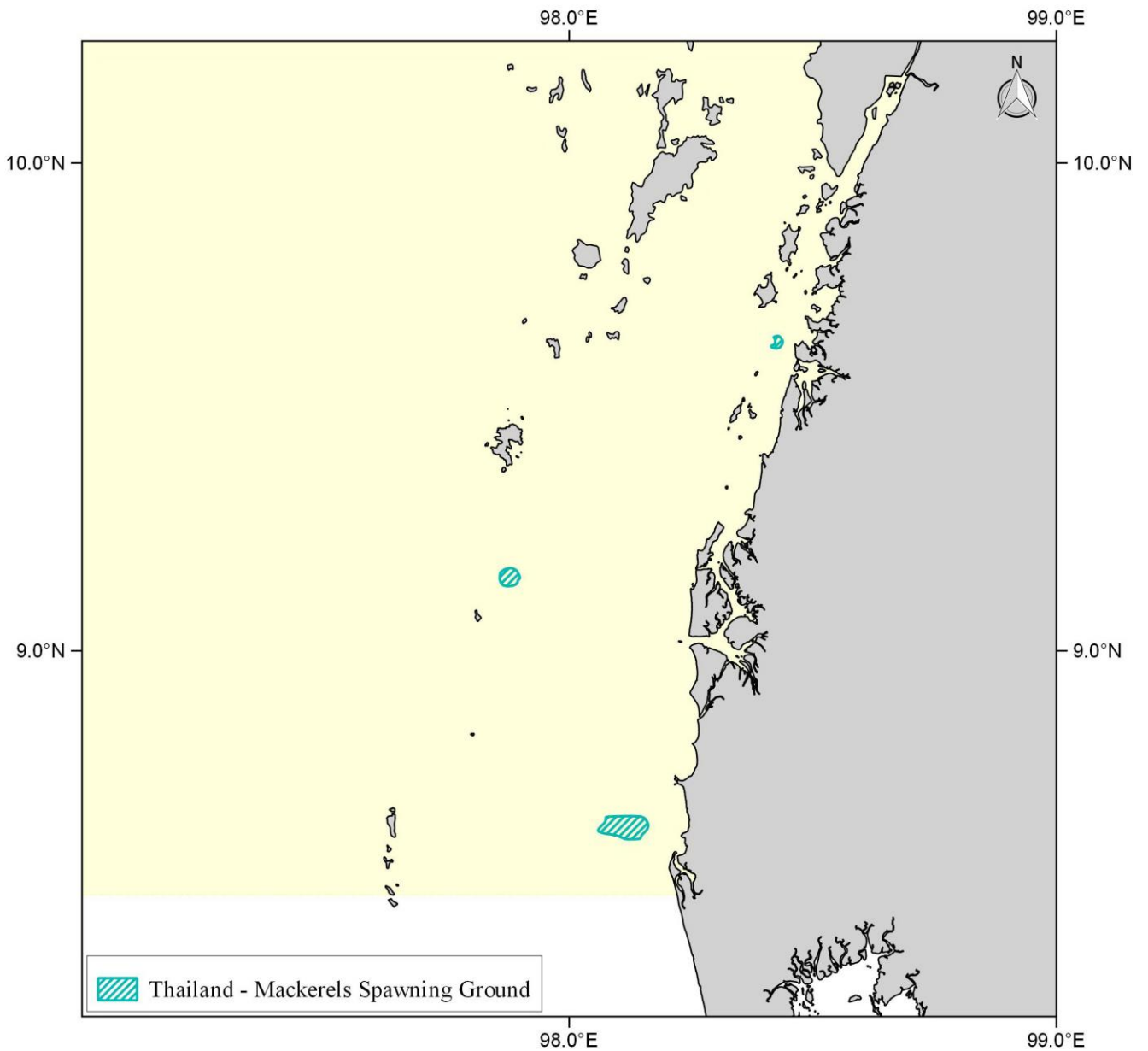
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DISCUSSION AND REVISION OF DRAFT MAPS ON THE TARGET TRANSBOUNDARY SPECIES FOR NORTHERN ANDAMAN SEA

Northern Andaman Sea Sub-region (TH): Mackerels Spawning Grounds

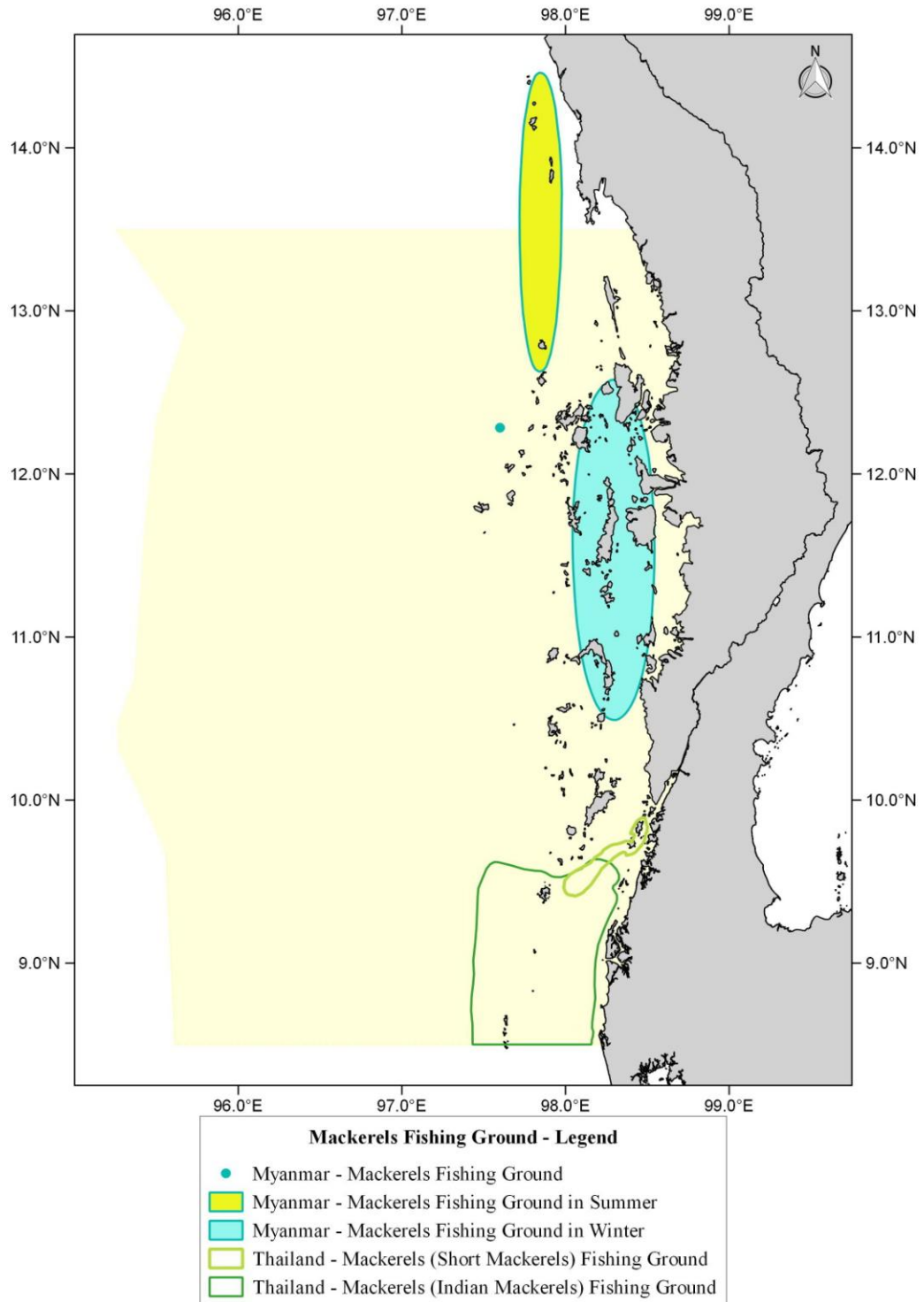
(Updated 21 January 2019)



DISCUSSION AND REVISION OF DRAFT MAPS ON THE TARGET TRANSBOUNDARY SPECIES FOR NORTHERN ANDAMAN SEA

Northern Andaman Sea Sub-region: Mackerels Fishing Grounds

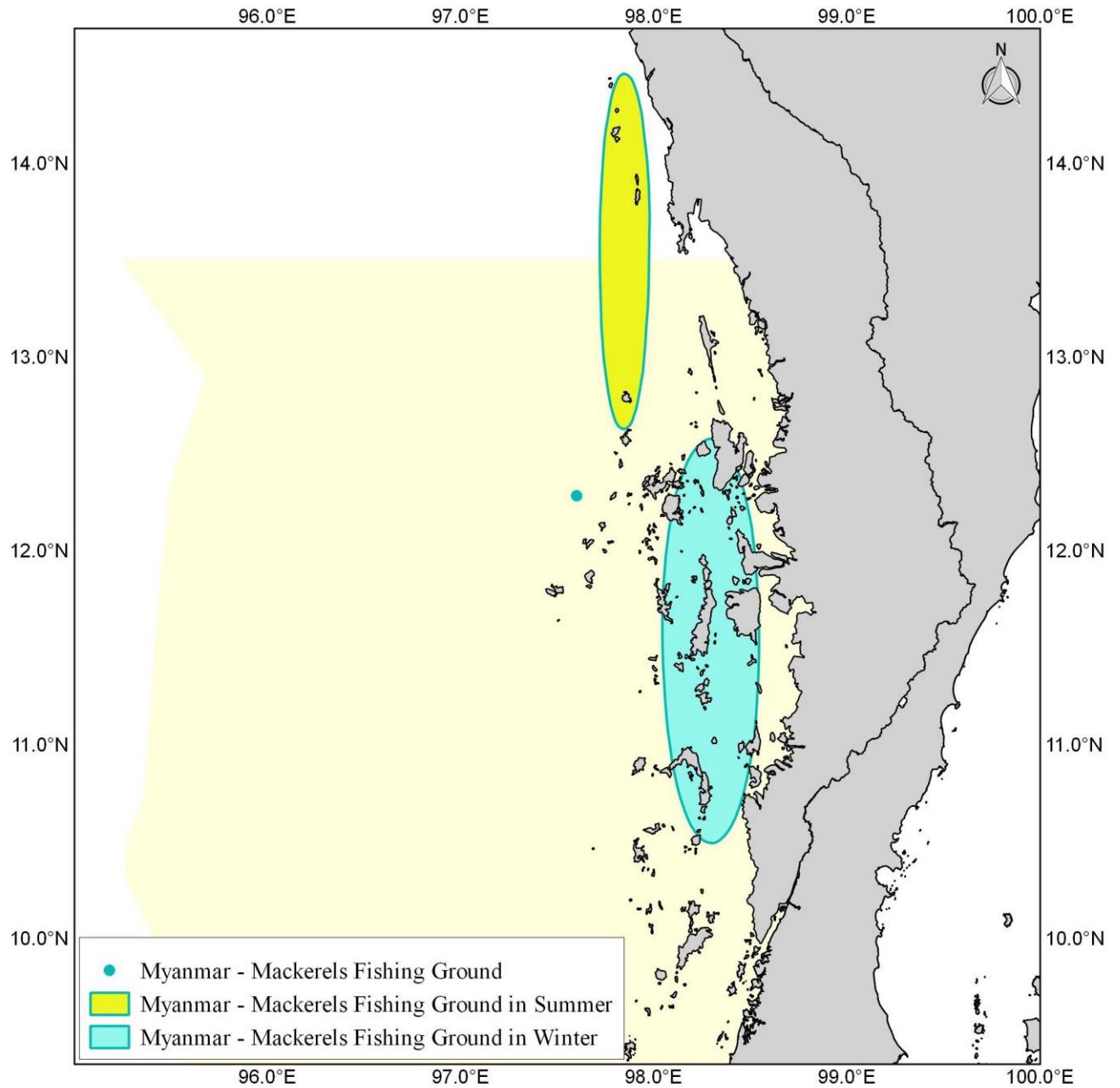
(Updated 21 January 2019)



DISCUSSION AND REVISION OF DRAFT MAPS ON THE TARGET TRANSBOUNDARY SPECIES FOR NORTHERN ANDAMAN SEA

Northern Andaman Sea Sub-region (MM): Mackerels Fishing Grounds

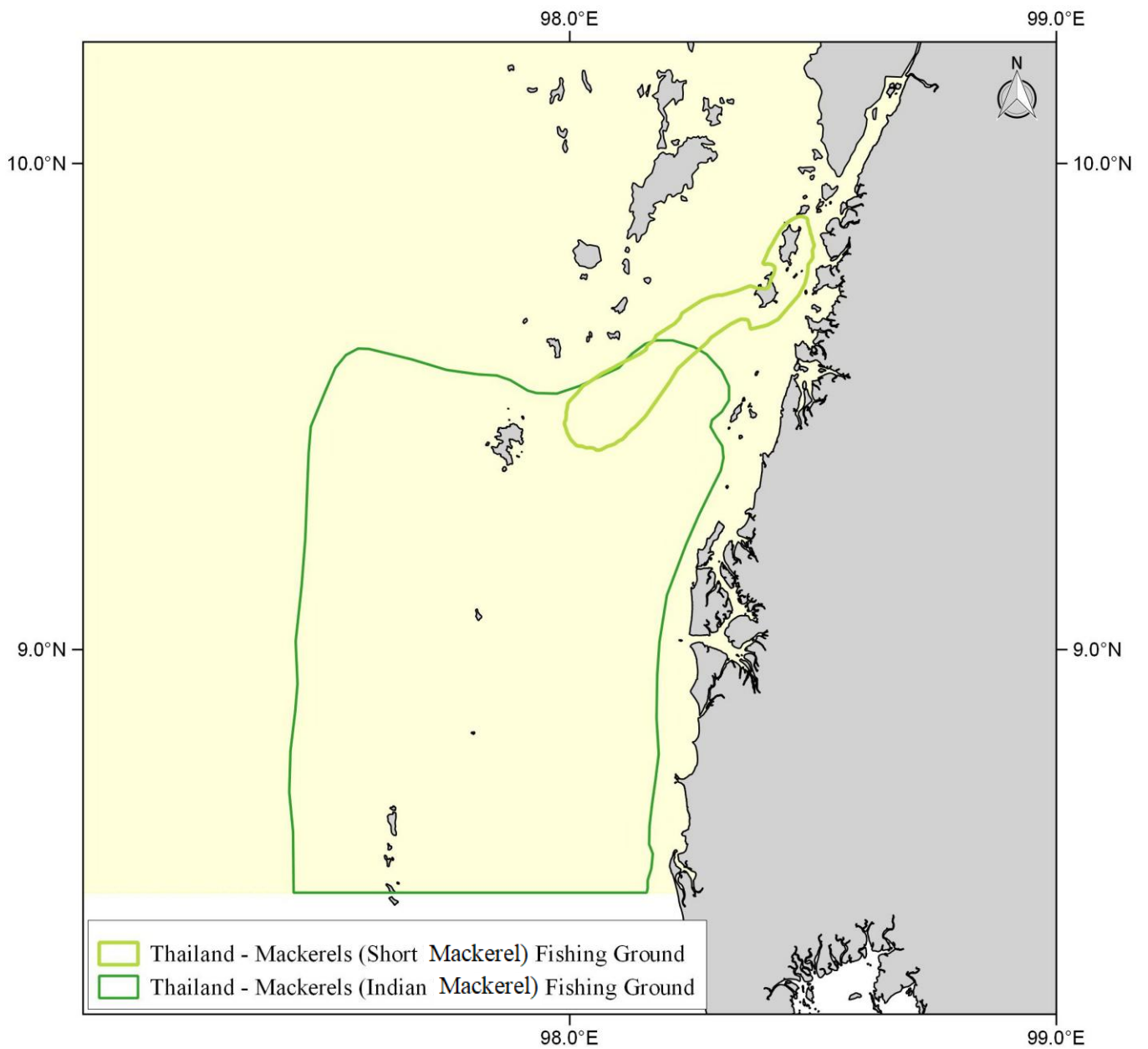
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DISCUSSION AND REVISION OF DRAFT MAPS ON THE TARGET TRANSBOUNDARY SPECIES FOR NORTHERN ANDAMAN SEA

Northern Andaman Sea Sub-region (TH): Mackerels Fishing Grounds

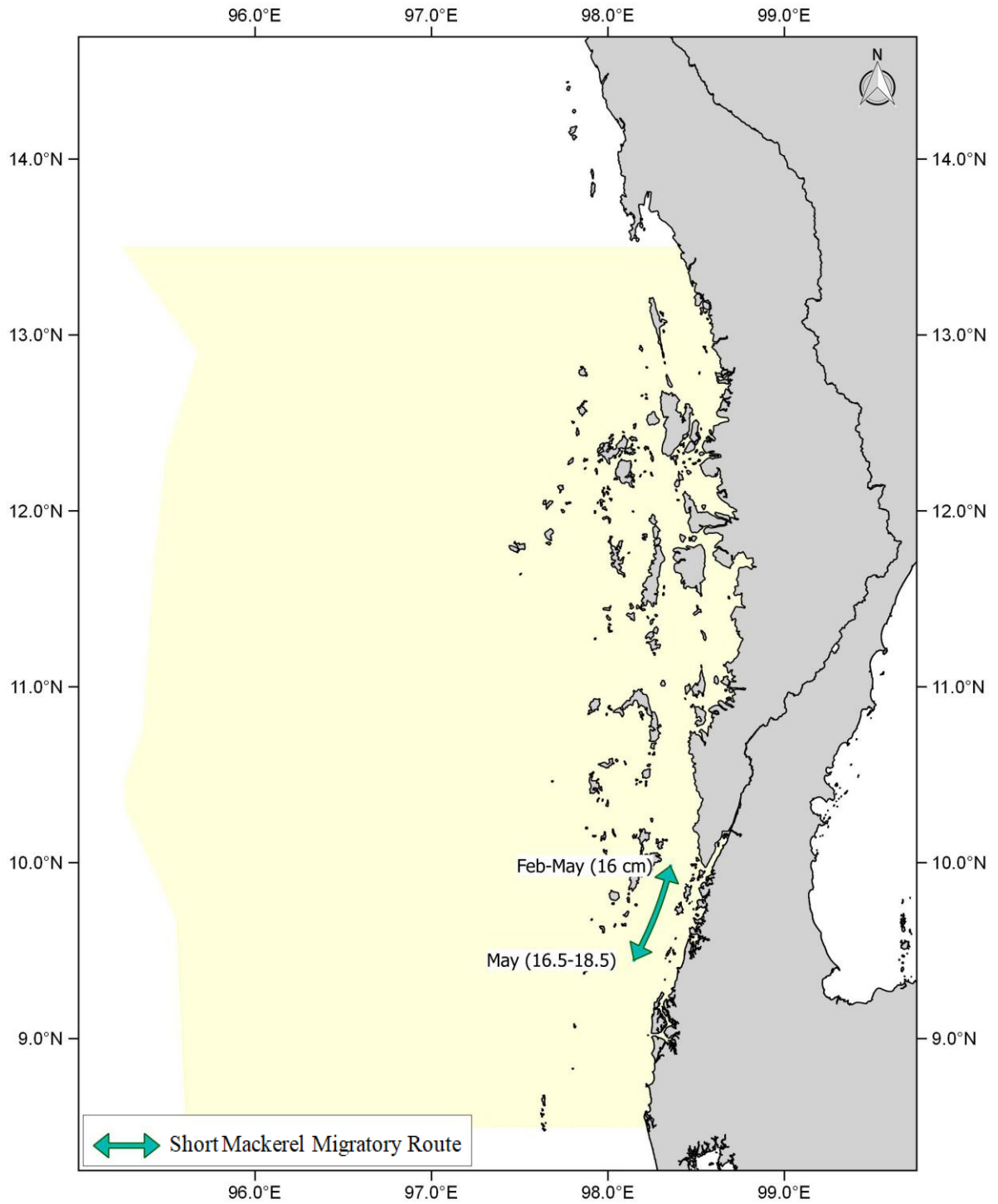
(Updated 21 January 2019)



DISCUSSION AND REVISION OF DRAFT MAPS ON THE TARGET TRANSBOUNDARY SPECIES FOR NORTHERN ANDAMAN SEA

Northern Andaman Sea Sub-region: Short Mackerel Migratory Route

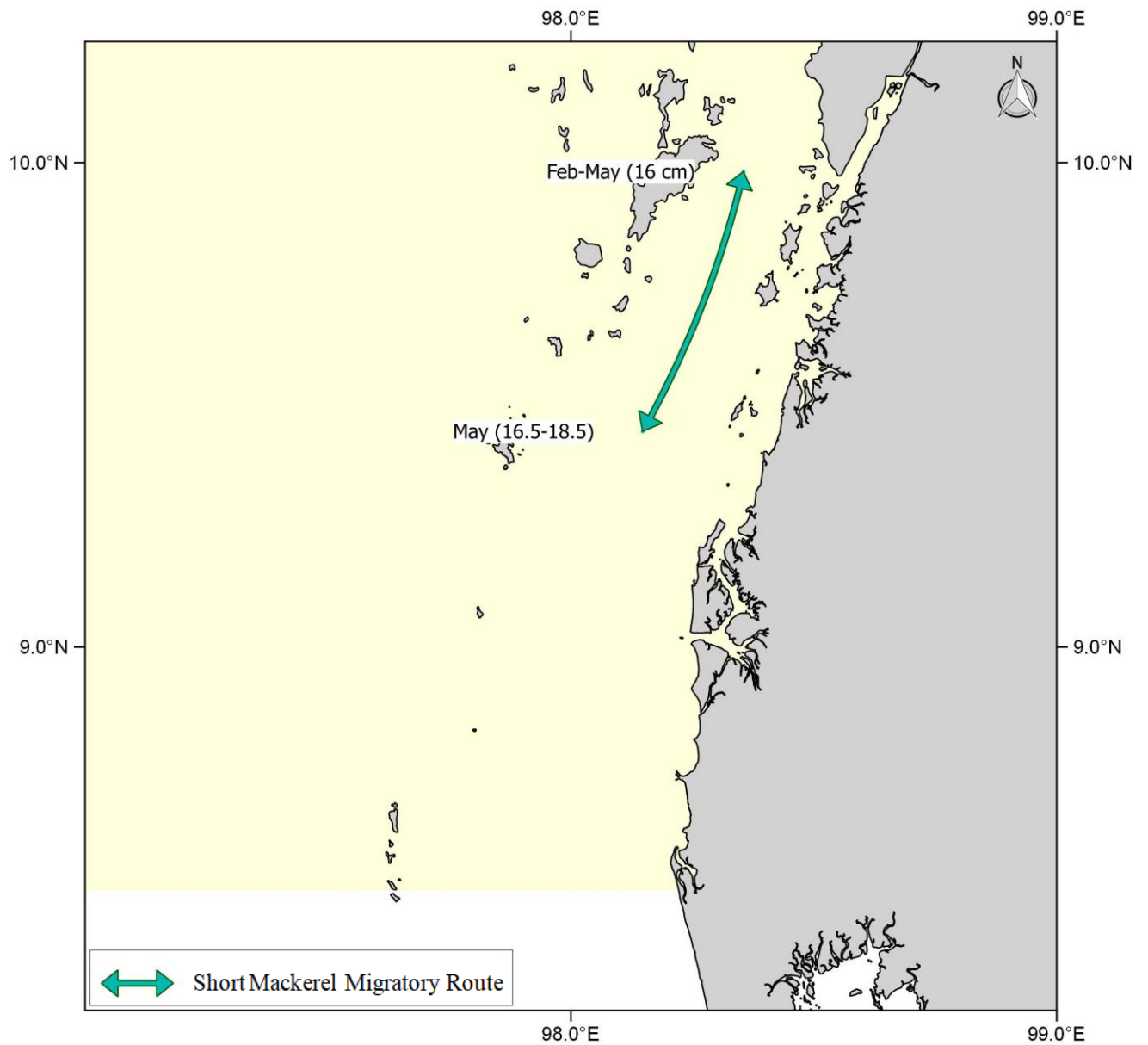
(Updated 21 January 2019)



DISCUSSION AND REVISION OF DRAFT MAPS ON THE TARGET TRANSBOUNDARY SPECIES FOR NORTHERN ANDAMAN SEA

Northern Andaman Sea Sub-region (TH): Short Mackerel Migratory Route

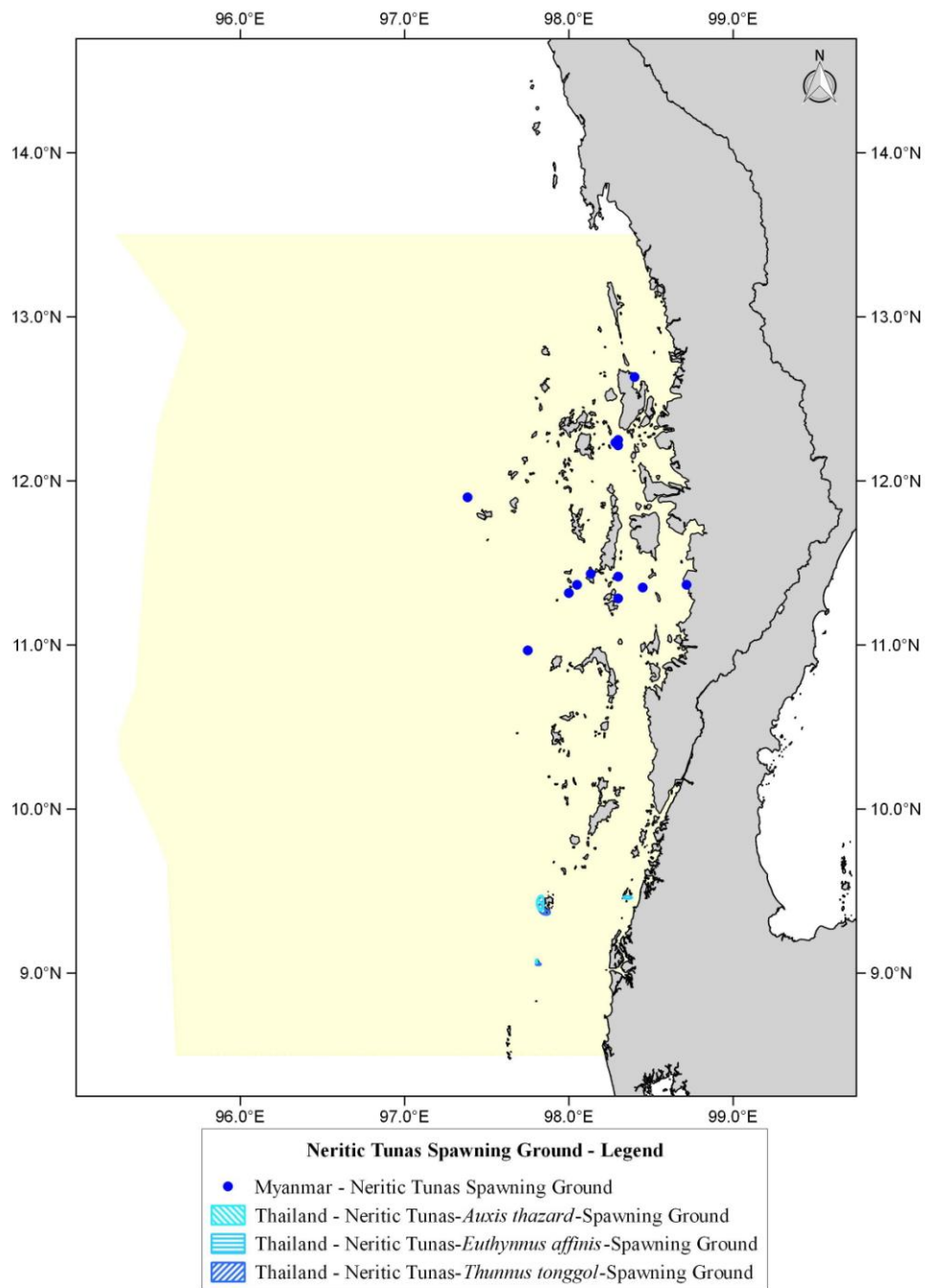
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DISCUSSION AND REVISION OF DRAFT MAPS ON THE TARGET TRANSBOUNDARY SPECIES FOR NORTHERN ANDAMAN SEA

Northern Andaman Sea Sub-region: Neritic Tunas Spawning Grounds

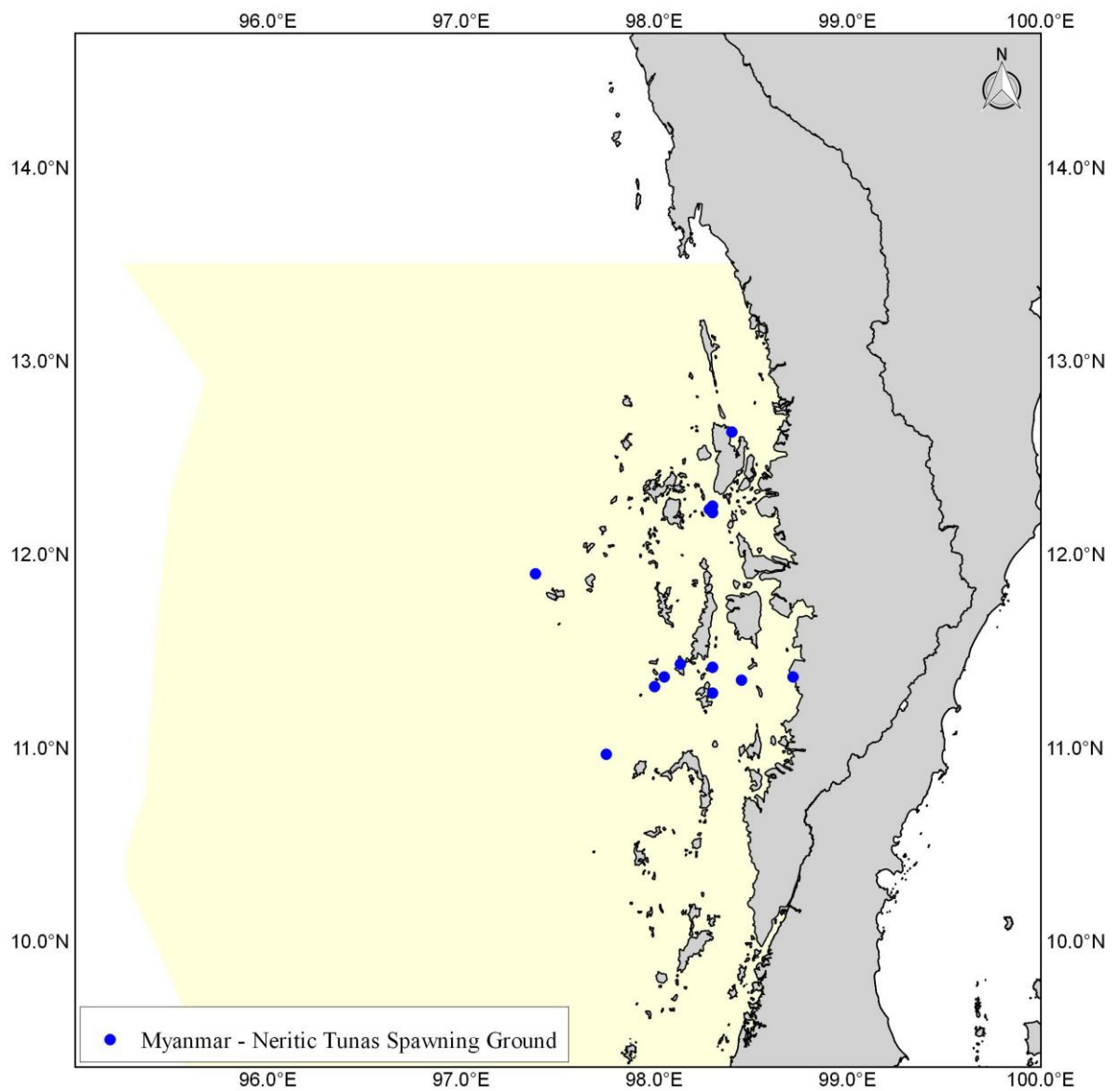
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Northern Andaman Sea Sub-region (MM): Neritic Tunas Spawning Grounds

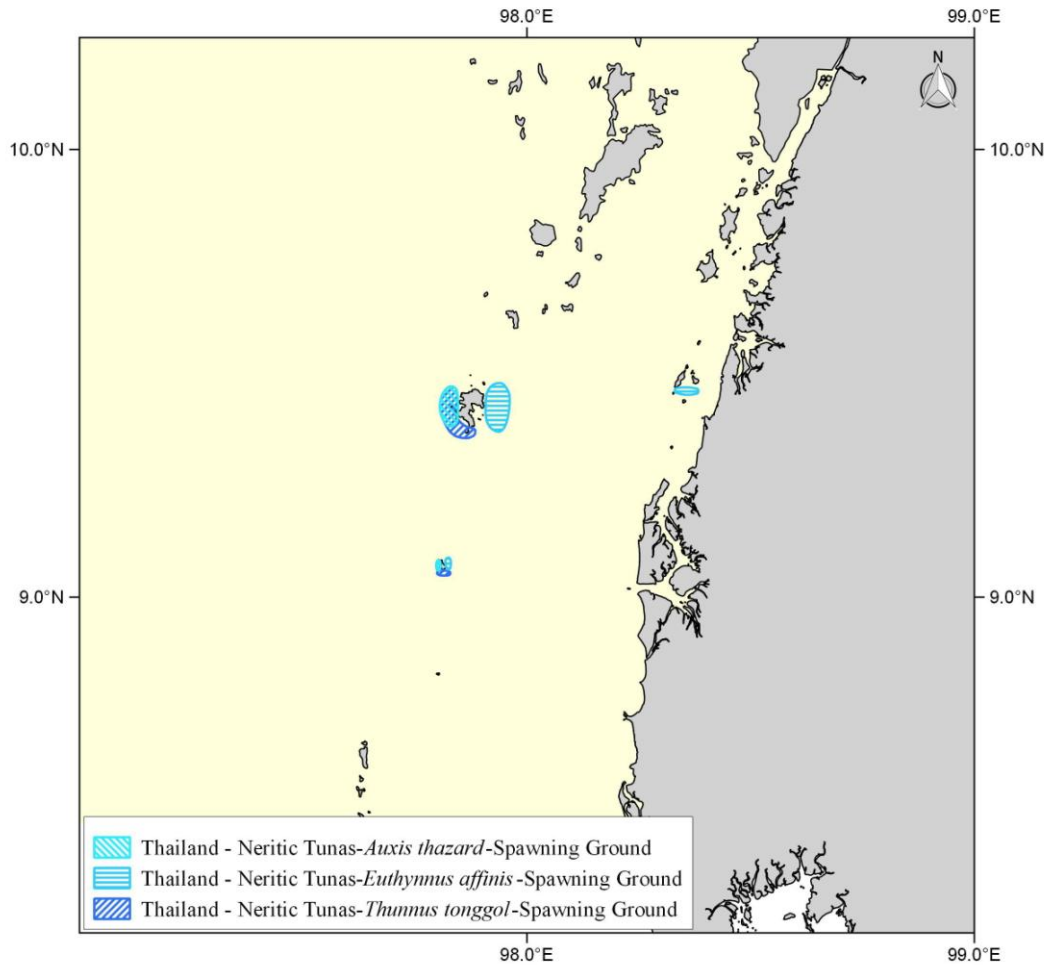
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Northern Andaman Sea Sub-region (TH): Neritic Tunas Spawning Grounds

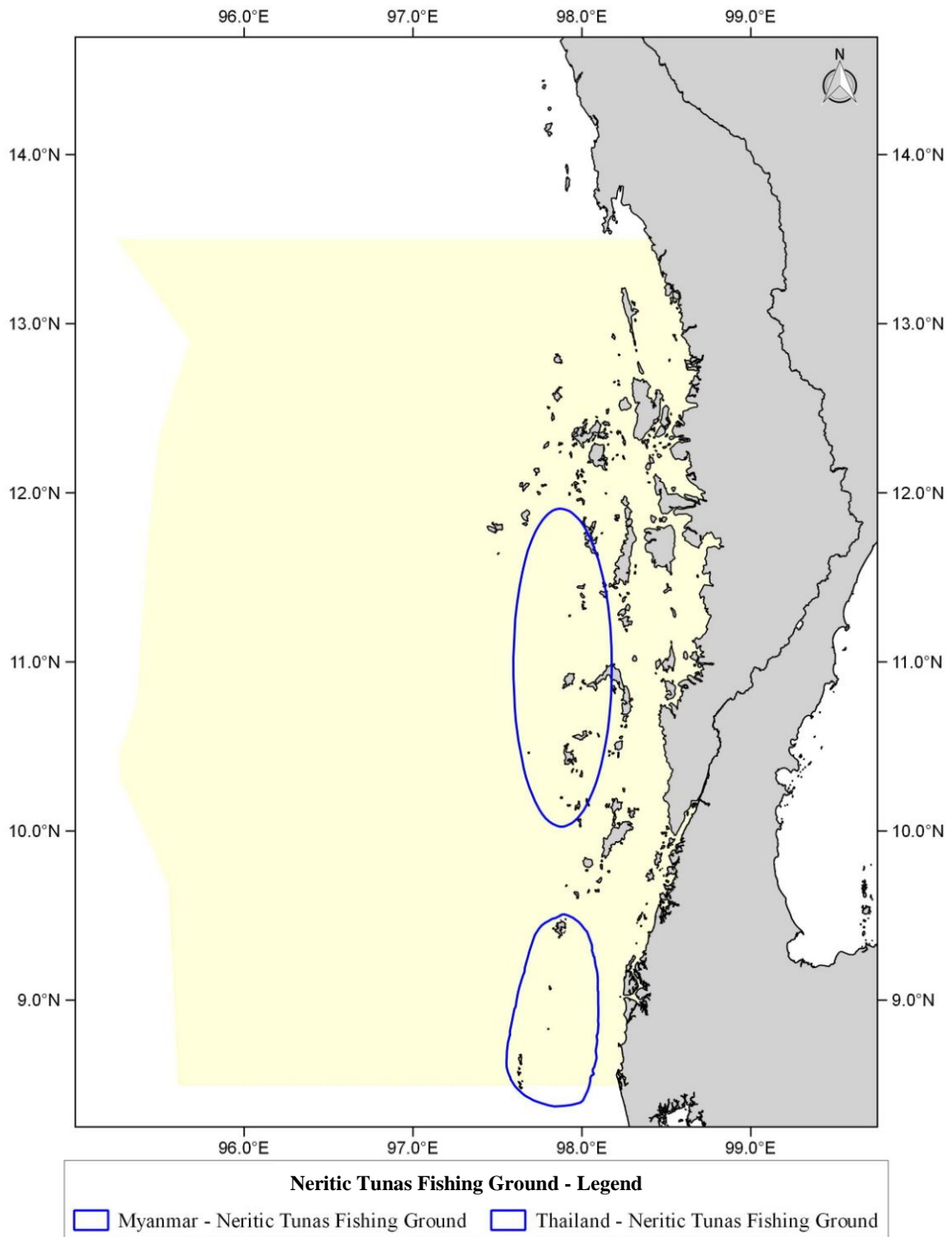
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Northern Andaman Sea Sub-region: Neritic Tunas Fishing Grounds

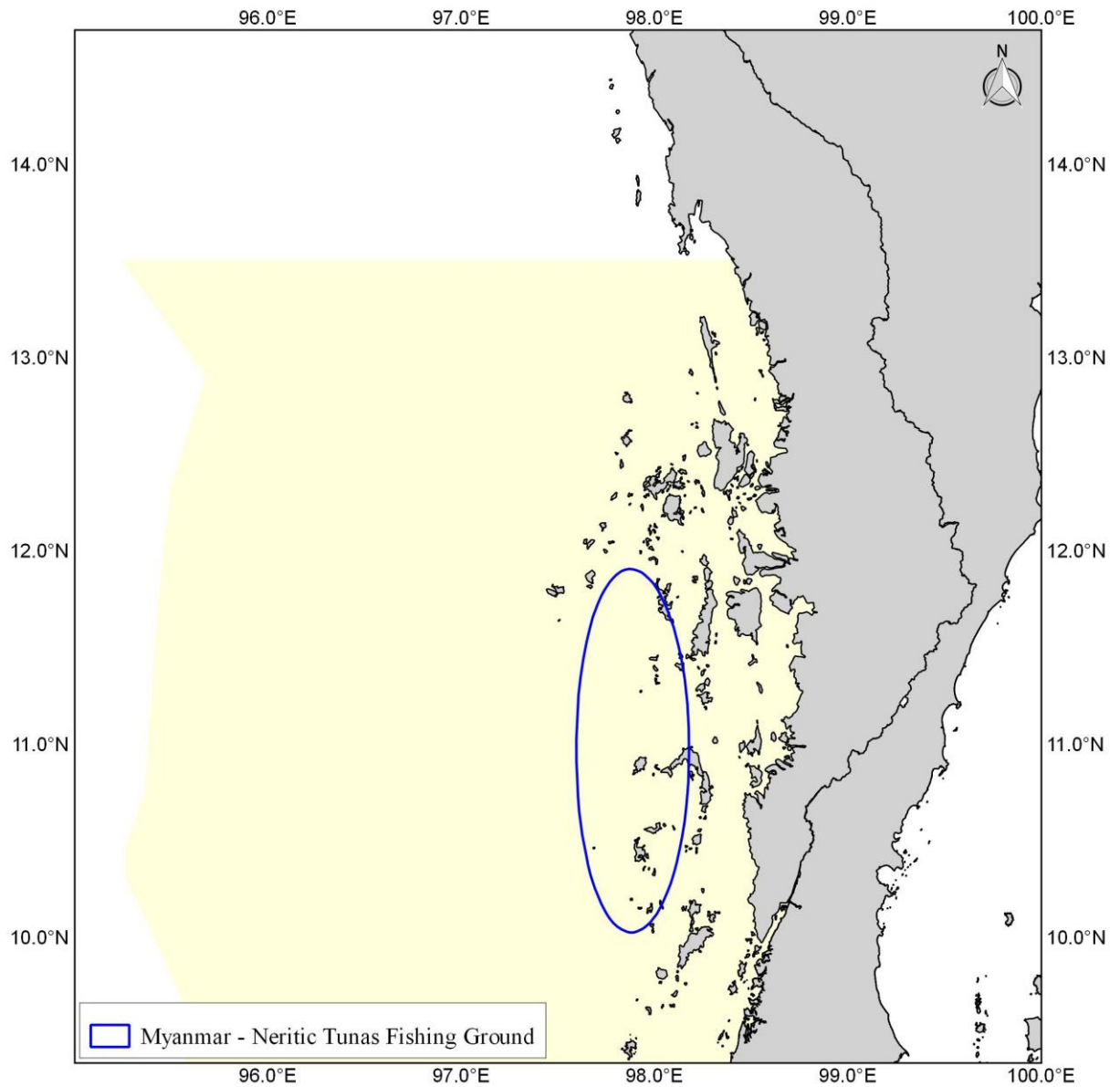
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Northern Andaman Sea Sub-region (MM): Neritic Tunas Fishing Grounds

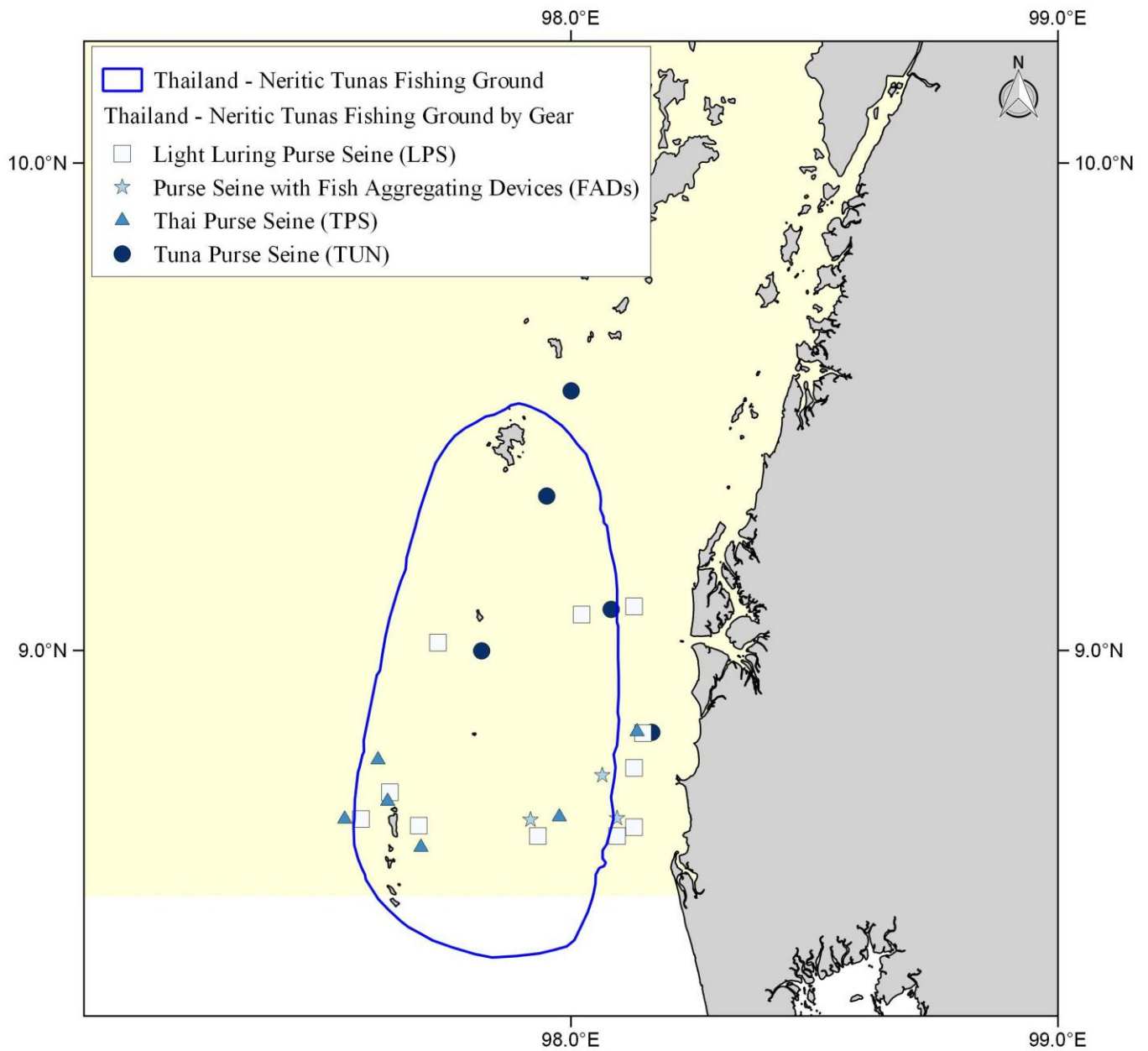
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Northern Andaman Sea Sub-region (TH): Neritic Tunas Fishing Grounds

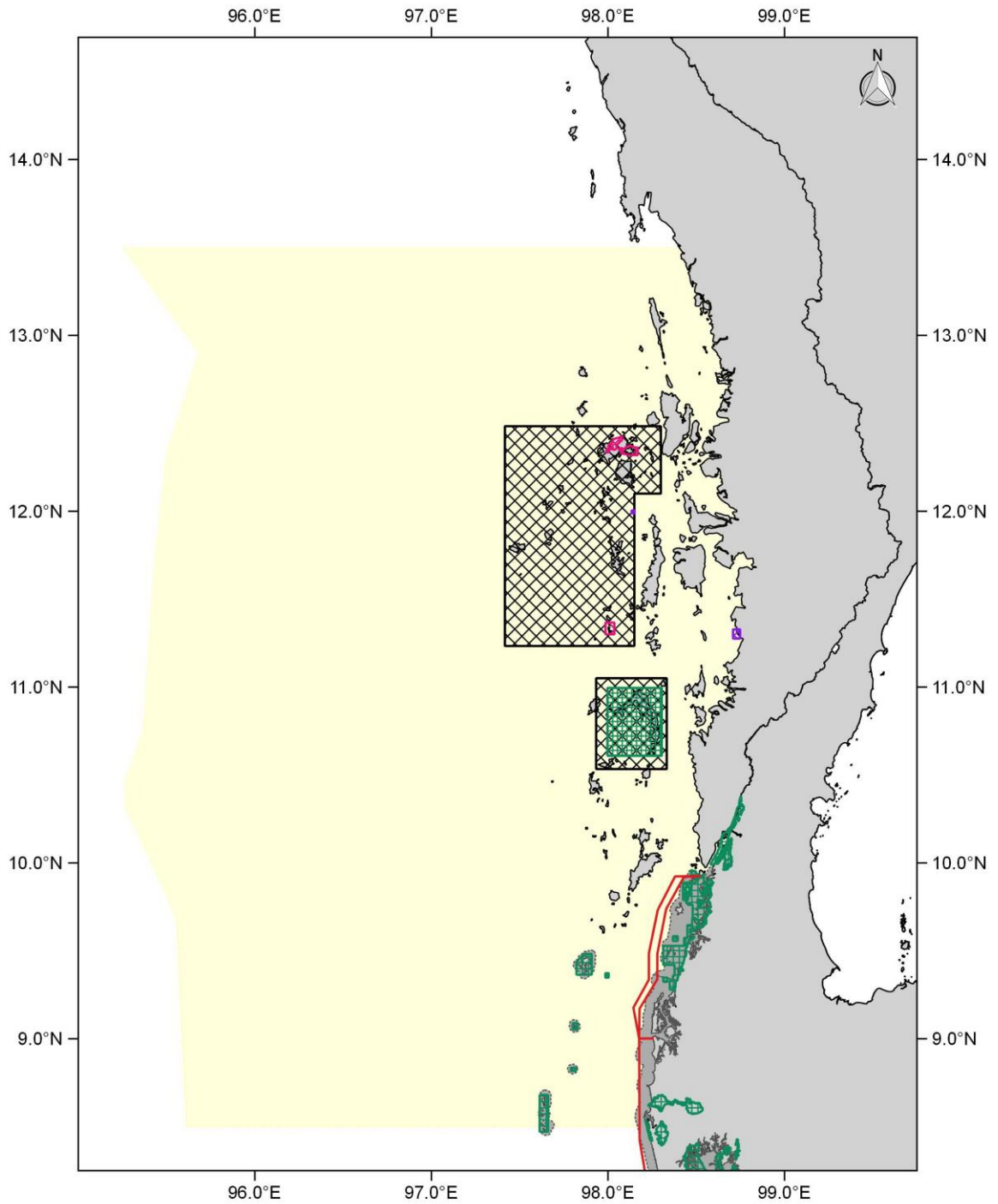
(Updated 21 January 2019)



DISCUSSION AND REVISION OF DRAFT MAPS ON THE TARGET TRANSBOUNDARY SPECIES FOR NORTHERN ANDAMAN SEA

Northern Andaman Sea Sub-region: National Measures

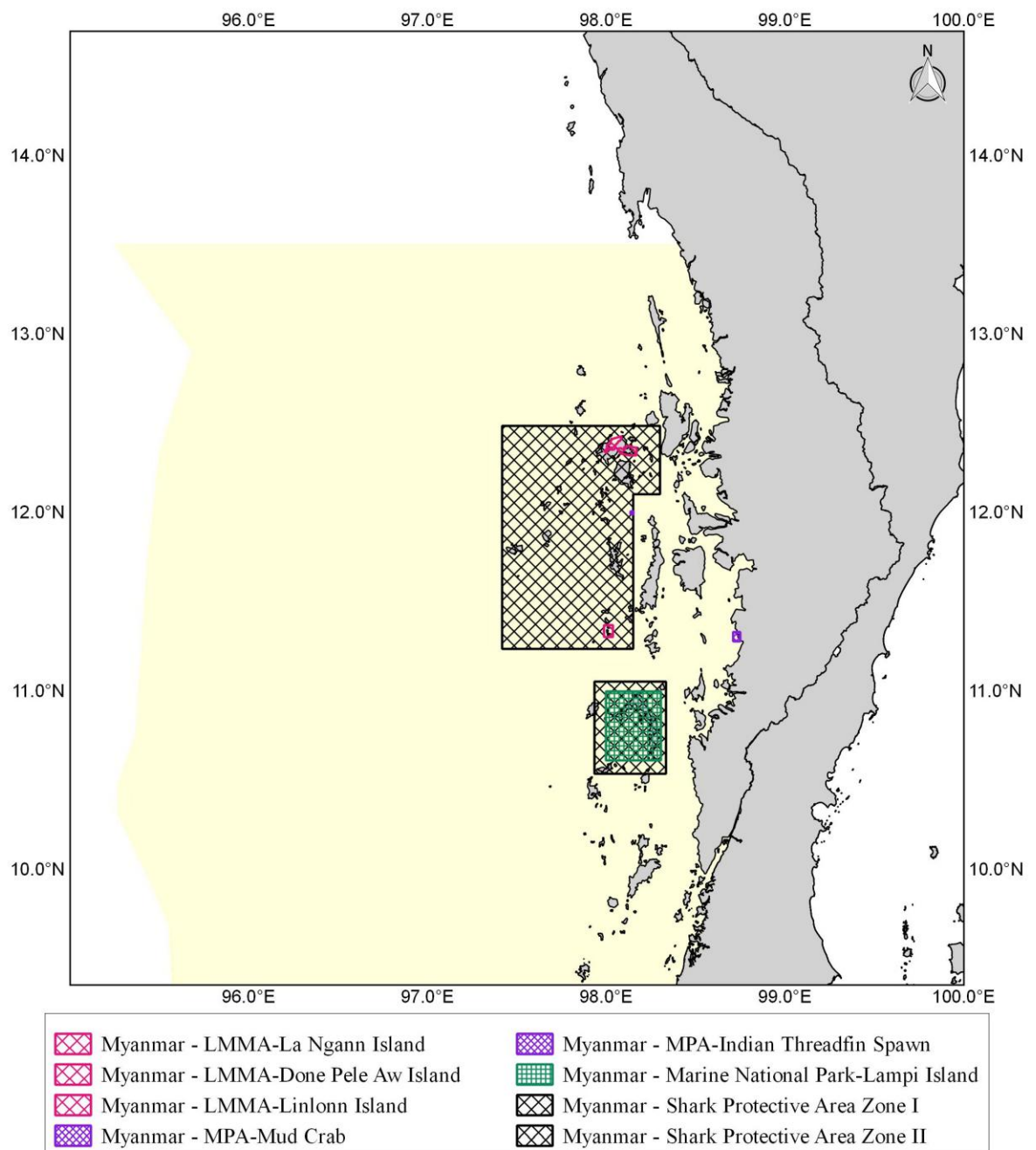
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DISCUSSION AND REVISION OF DRAFT MAPS ON THE TARGET TRANSBOUNDARY SPECIES FOR NORTHERN ANDAMAN SEA

Northern Andaman Sea Sub-region (MM): National Measures

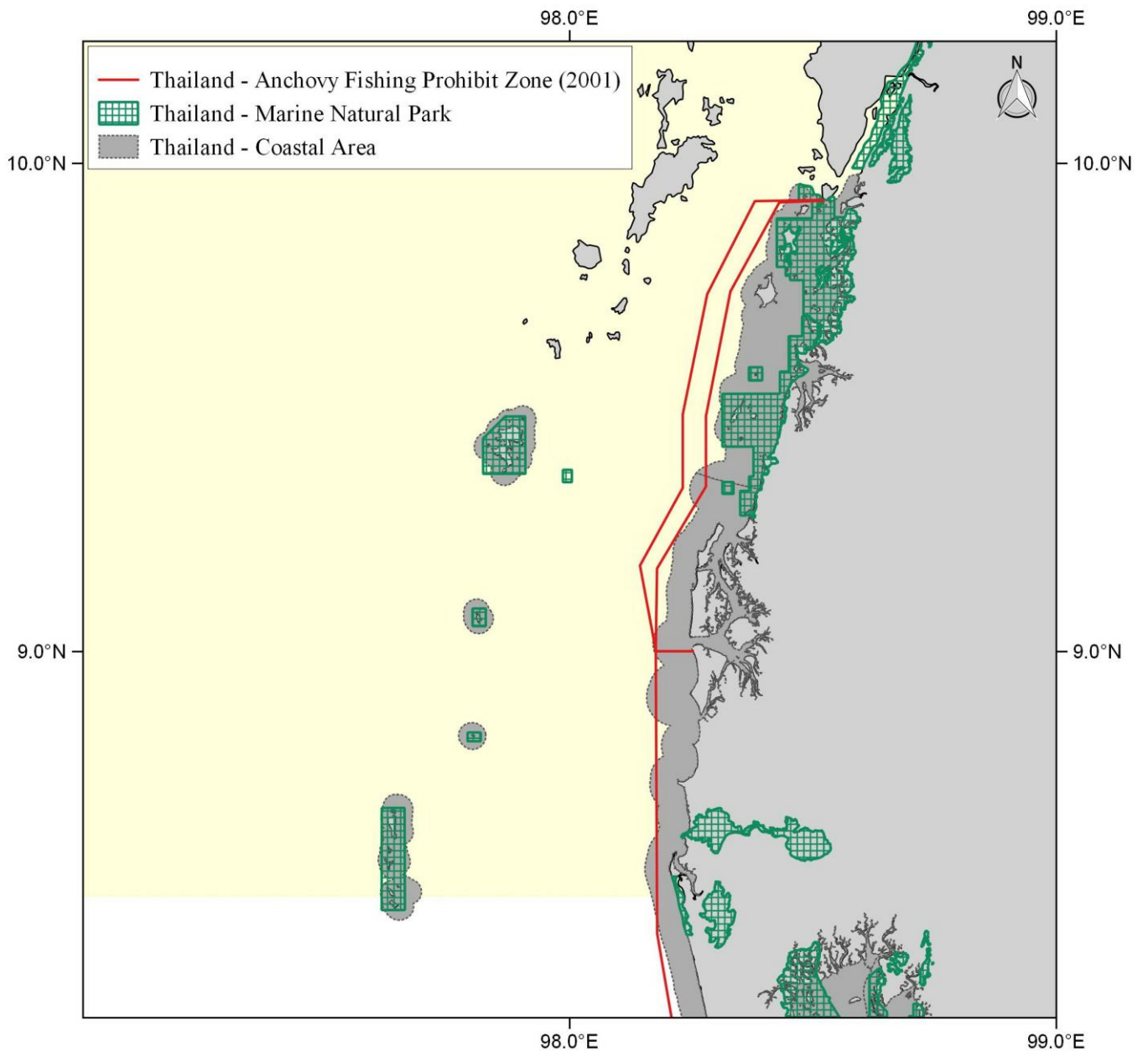
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DISCUSSION AND REVISION OF DRAFT MAPS ON THE TARGET TRANSBOUNDARY SPECIES FOR NORTHERN ANDAMAN SEA

Northern Andaman Sea Sub-region (TH): National Measures

(Updated 21 January 2019)



CONCLUSION AND WAYS FORWARD

2nd Technical Experts Meeting on Management of Transboundary Species for Northern Andaman Sea

12-13 July 2018, Chonburi province, Thailand

The Meeting took note of the suggestion points from the participants on the proceeding of the Meeting:

1. Final revision of **Preliminary Maps** to be includes in the proceeding of the Meeting
2. Source of Information: The country will provide any additional information (if any) to TD and also provide information on the specific sources of Information
3. Shape file: includes one maps of spawning ground, migration route, fishing ground of both countries etc. The Meeting agreed that the border line of each country will be excluded.
4. SEC will send the list of additional information as discussed during the Meeting to countries within week of 16-20 July 2018
5. TD will put all together maps.
6. Countries will send the update data back to TD, Deadline for provide additional data 13 August 2018
7. Final maps
 - a. The final maps will send to countries. Countries will have 4 weeks after the final map has been sent to request changes from the date the final map is sent to countries. If no comments has been received after 4 weeks the map is considered adopted and agreed by the countries.

The Way forward, concept paper of the data collection for Improvement of data and information drafted and will be considered.

Data to be revised or updated in Northern Andaman Sea map

- **Thailand:** On anchovy Thailand are going to check the area for specific prohibition of light luring gear which looked strange on the map.
- **Thailand:** Will check on the fishing ground for northern Andaman sea on anchovy. Either remove because they are old data or keep or revise with new data.
- **Thailand:** Map layers for spawning grounds for Neritic tuna in Thailand must be updated.
- **Thailand:** Have additional data on spawning ground for mackerel based on GI data.
- **Myanmar:** Myanmar may have additional data for anchovy from ongoing studies within the time limit of one month. In that case they will send to TD.
- **Myanmar:** Square for spawning ground for Neritic tuna in Myanmar could be changed to a circle.
- Migration of mackerel between Thailand and Myanmar, TD will add an extra layer with results from tagging study.