

Environmental Impact Assessment for the Waste-to-Energy Plant Project in Thilafushi

Biodiversity and Critical Habitat Assessment



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I. Introduction

1. The ADB Safeguard Policy Statement (ADB 2009) requires assessment of whether the project is planned in an area that may qualify as Critical Habitat or Natural Habitat. This assessment followed more detailed guidance in International Finance Corporation Performance Standard 6 and its recently updated accompanying guidance note (IFC 2012, 2019).
2. ADB SPS requires that any projects financed by ADB shall not implement project activities and components in area of critical habitat/s, unless (i) there are no measurable adverse impacts on the critical habitat that could impair its ability to function, (ii) there is no reduction in the population of any recognized endangered or critically endangered species, and (iii) any lesser impacts are mitigated. If a project is located within a legally protected area, ADB requires that the project implement additional programs to promote and enhance the conservation aims of the protected area. In an area of natural habitats, there must be no significant conversion or degradation, unless (i) alternatives are not available, (ii) the overall benefits from the project substantially outweigh the environmental costs, and (iii) any conversion or degradation is appropriately mitigated. ADB SPS further requires the use of precautionary approach in the use, development, and management of renewable natural resources.
3. In order to assess whether the Greater Malé Waste-to-Energy Project (WTE project) is located in a critical habitat, an initial screening was undertaken using the Integrated Biodiversity Assessment Tool (IBAT).¹ Results show that the location of the WTE project is likely a critical habitat. Therefore, a critical habitat assessment is needed to confirm the results.
4. This biodiversity and critical habitat assessment is applicable to the WTE project. Apart from the information from the IBAT screening, this report is also based on the baseline information provided in the EIA for the WTE project, which was supported with literature review and field data collection.

II. Definition of Critical Habitat

5. Critical habitat is defined in ADB SPS (2009) as a subset of both natural and modified habitat that deserves particular attention. Critical habitat includes areas with high biodiversity value, including (i) habitat required for the survival of critically endangered or endangered species; (ii) areas having special significance for endemic or restricted-range species; (iii) sites that are critical for the survival of migratory species; (iv) areas supporting globally significant concentrations or numbers of individuals of congregatory species; (v) areas with unique assemblages of species or that are associated with key evolutionary processes or provide key ecosystem services; and (vi) areas having biodiversity of significant social, economic, or cultural importance to local communities.

¹ The Integrated Biodiversity Assessment Tool (IBAT) is a multi-institutional programme of work involving BirdLife International, Conservation International, IUCN, and UNEP-WCMC. IBAT provides a basic risk screening on biodiversity. It draws together information on globally recognised biodiversity information drawn from a number of IUCN's Knowledge Products: IUCN Red List of Threatened Species, Key Biodiversity Areas (priority sites for conservation) and Protected Planet/The World Database on Protected Areas (covering nationally and internationally recognised sites, including IUCN management categories I–VI, Ramsar Wetlands of International Importance and World Heritage sites).

III. Areas of analysis

6. Critical Habitat and Natural Habitat assessment ideally takes place across sensible ecological or political units that are sufficiently large to encompass all direct and indirect impacts from the project. These areas of analysis (AoAs) are thus often much broader than the direct project footprint. AoAs may be separate or combined, depending on the ecology of the biodiversity concerned.

7. Considering the extent of potential impacts on aquatic biodiversity from the Project an aquatic AoA was identified as the 50-km study area to make consistent with the default range in the IBAT Screening. This area is approximately within the Zone 3 of Maldives, within which common biological communities and/or management issues exist (Figure 1).

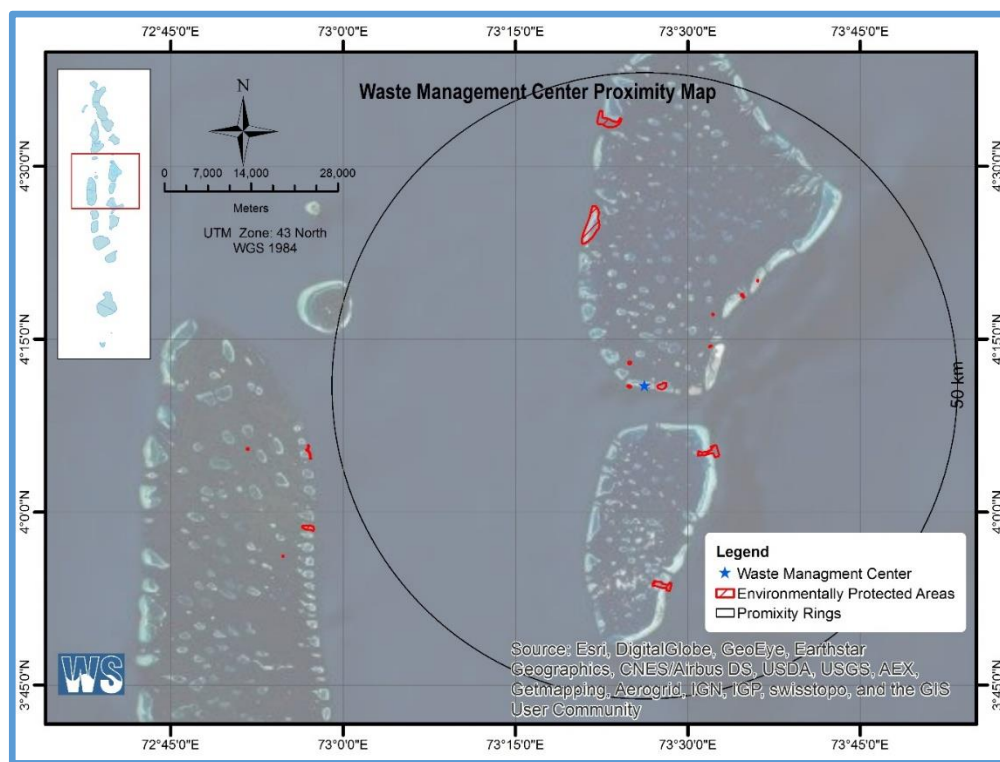


Figure 1: 50km buffer zone from project site at Thilafushi

8. Identification of AoAs does not mean that the project has any obligations across them. The aim of this Critical Habitat Assessment is to identify whether the broad units qualify as Critical Habitat and, if so, for which biodiversity features. This information helps to prioritize impact assessment and to focus mitigation efforts.

IV. Thresholds of Critical Habitat

1. To identify if a certain species can qualify the project AoA as Critical Habitat, the IFC Guidance Note 6 (2019)² has been used.

V. Critical Habitat Screening and Assessment

2. Critical habitat screening considered critical habitat-qualifying biodiversity candidates identified within the EIA as actually or potentially present. In each case, reasons are identified for each biodiversity feature likely meeting or not meeting Critical Habitat. IBAT was used as the initial screening for critical habitat values. Performance Standard 6 (PS6) defines these values for critical habitat (PS6: para. 16) and legally protected and internationally recognized areas (PS6: para. 20). The IBAT was used to screen for known risks within a standard 50km buffer of the project area at Thilafushi (see **Error! Reference source not found.**).

VI. Criteria 1 – 3: Critically Endangered or Endangered Species, Endemic and/or Restricted-range species Migratory or Congregatory Species

3. Habitat of significant importance to priority species can trigger critical habitat status. IBAT was used to create a preliminary list of priority species that could occur within the AoA. This list is drawn from the IUCN Red List of Threatened Species (IUCN RL). Due to the uncertainty surrounding the assessment at this preliminary stage, the list of species for which Critical Habitat may be triggered is still provisional and will require further analysis as reiterated in the conclusion.
4. The justification for the assessment has been provided in Table 1.
5. It should be noted that this list is preliminary and other species not currently included or poorly represented such as birds, fish, and invertebrates may come to light and require inclusion following monitoring and field surveys, continued desk study, and stakeholder engagement during project implementation.

² https://www.ifc.org/wps/wcm/connect/5e0f3c0c-0aa4-4290-a0f8-4490b61de245/GN6_English_June-27-2019.pdf?MOD=AJPERES&CVID=mRQjZva

Table 1: Critical Habitat Screening Assessment

Species Name	Criteria 1 CR or EN Species	Criteria 2 Endemic / Restricted Range Species	Criteria 3 Migratory / Congregatory Species	Rationale
Mammals				
Blue Whale <i>Balaenoptera musculus</i>	EN	-	M	About 5,000 individuals of this species survive today in three populations: North Atlantic, North Pacific, and the Southern Hemisphere. According to interviews with local people, there has been only few sightings of Blue Whales in Maldives waters and is regarded as an uncommon visitor to the Maldives. There is no recorded information that can confirm the regular occurrence of this species in the AoA. It is very unlikely that the Project AoA holds >0.5% of the global population of this species, and >5 pairs, at least seasonally. <i>Balaenoptera musculus</i> does not appear to qualify the Project area as Critical Habitat.
Birds				
Matsudaira's Storm-petrel <i>Oceanodroma matsudairae</i>	-	RS	M	Population is only known to breed on the Volcano Islands in southern Japan. After breeding the species move south across equatorial belt and then winters in the equatorial belt. Only recorded in Ha. Atoll (Anderson & Baldock 2001), which is not within the AoA. There is a possibility that the species could occur near the coast in the Project AoA. This is, however, unlikely given degradation and development in that area. Based on the available information, <10% of the species' range overlap the terrestrial AoA, and there is low likelihood that suitable habitat exists in the Project area. <i>Oceanodroma matsudairae</i> does not appear to qualify the Project area as Critical Habitat.

Species Name	Criteria 1 CR or EN Species	Criteria 2 Endemic / Restricted Range Species	Criteria 3 Migratory / Congregatory Species	Rationale
Odonata				
<i>Enallagma maldivense</i>	CR	RS	-	<i>Enallagma maldivensis</i> is a species of damselfly. There is insufficient data available for this species. No data is available on its population size in the AoA nor population size for the entire country. Dragonflies normally are found in freshwater habitats. No information is available on the presence of freshwater habitats (e.g. ponds) in the AoA. On a precautionary basis, it is possible that the terrestrial AoA holds more than 0.5% of the global population of this globally Critically Endangered damselfly. As such, <i>Enallagma maldivense</i> qualifies the project AoA as Critical Habitat.
Fishes				
Pondicherry Shark <i>Carcharhinus hemiodon</i>	CR	-	-	The Pondicherry Shark is a rare shark found on the continental and insular shelves of the eastern Indian Ocean and the western Pacific, from India to New Guinea. Thought to be extinct, recently found near a seasonal fishing village in Sri Lanka. There have been no recorded sightings in Maldives. It is very unlikely that the Project AoA holds >0.5% of the global population of this species, and >5 pairs. <i>Carcharhinus hemiodon</i> does not appear to qualify the Project area as Critical Habitat.
Bowmouth Guitar shark <i>Rhina ancylostoma</i>	VU*	-	-	Although this shark is found throughout coastal areas across the Indian Ocean, sightings of this species in Maldives is rare. There is no recorded information that can confirm the regular occurrence of this species in the AoA. There is no reason to suspect that the AoA holds disproportionately high or low populations. The Project only occupies a small percentage of the AoA and is not predicted to have broad-scale impacts. Without further information, it thus seems unlikely that the Project could have impacts on this shark that would impact it to a level that it would become Endangered. As such, <i>Rhina ancylostoma</i> does not qualify the Project area as Critical Habitat.

Species Name	Criteria 1 CR or EN Species	Criteria 2 Endemic / Restricted Range Species	Criteria 3 Migratory / Congregatory Species	Rationale
Bottlenose Wedge shark <i>Rhynchobatus australiae</i>	CR	-	-	<p>The Bottlenose Wedgefish inhabits inshore waters on the continental shelves, specifically enclosed bays, estuaries, and coral reefs. It is found in South-East Asia and Australia.</p> <p>Although this shark is also found throughout coastal areas across the Indian Ocean, sightings of this species in Maldives is rare. There is no recorded information that can confirm the regular occurrence of this species in the AoA. It is very unlikely that the Project AoA holds >0.5% of the global population of this species, and >5 pairs. <i>Rhynchobatus australiae</i> does not appear to qualify the Project area as Critical Habitat.</p>
Whale Shark <i>Rhincodon typus</i>	EN	-	-	<p>Whale sharks are commonly found within Maldives. A possible resident population exists in ADh. Atoll which is outside the AoA. Sightings are rare within the AoA. It is very unlikely that the Project AoA holds >0.5% of the global population of this species, and >5 pairs. <i>Rhincodon typus</i> does not appear to qualify the Project area as Critical Habitat.</p>
Shortfin Mako Shark <i>Isurus oxyrinchus</i>	EN	-	M	<p>The Shortfin Mako is an offshore littoral and epipelagic species found occurring in tropical and warm-temperate waters of all oceans. It is a highly migratory species making extensive journeys of over 3,000 kilometers. This species is found throughout Maldives. However, occurrence close to the atolls is very rare. There is no recorded information that can confirm the regular occurrence of this species in the AoA. It is very unlikely that the Project AoA holds >0.5% of the global population of this species, and >5 pairs. <i>Isurus oxyrinchus</i> does not appear to qualify the Project area as Critical Habitat.</p>

Species Name	Criteria 1 CR or EN Species	Criteria 2 Endemic / Restricted Range Species	Criteria 3 Migratory / Congregatory Species	Rationale
Great Hammerhead <i>Sphyrna mokarran</i>	EN	-	-	<i>Sphyrna mokarran</i> is a coastal-pelagic and semi-oceanic tropical hammerhead occurring close inshore and well offshore, over the continental shelves, island terraces, and in passes and lagoons of coral atolls, as well as over deep water near land. Sightings are seasonal during the start of North-east Monsoon. According to diver community, southern atolls have the most likelihood of sightings which fall outside the AoA. The great hammerhead ranges widely throughout the tropical waters of the world. For this reason, it is very unlikely that the Project AoA holds >0.5% of the global population of this species, and >5 pairs. <i>Sphyrna mokarran</i> does not appear to qualify the Project area as Critical Habitat.
Ornate Eagle Ray <i>Aetomylaeus vespertilio</i>	EN	-	-	The Ornate Eagle Ray has a sporadic distribution in the Indo-West Pacific, including Maldives. It occurs on the inner continental shelf to depths of 110 m over soft sandy substrate. Rarely seen and one sighting at Landaa Giraavaru, Baa Atoll, Maldives was recorded on February 2018. This area is outside the AoA. It is very unlikely that the Project AoA holds >0.5% of the global population of this species, and >5 pairs. <i>Aetomylaeus vespertilio</i> does not appear to qualify the Project area as Critical Habitat.
Longfin Mako <i>Isurus paucus</i>	EN	-	-	The Longfin Mako is widespread in tropical and warm temperate waters, and likely occurs in all oceans, although its distribution is poorly recorded. Sightings of this species in Maldives is rare. It is very unlikely that the Project AoA holds >0.5% of the global population of this species, and >5 pairs. <i>Isurus paucus</i> does not appear to qualify the Project area as Critical Habitat.

Species Name	Criteria 1 CR or EN Species	Criteria 2 Endemic / Restricted Range Species	Criteria 3 Migratory / Congregatory Species	Rationale
Sky Emperor <i>Lethrinus mahsena</i>	EN	-	-	This species is found in coral reef habitats and adjacent sandy and seagrass areas. Commercially fished in most of its habitat, but there are no evidences that it happens in the Maldives as well. It is very unlikely that the Project AoA holds >0.5% of the global population of this species, and >5 pairs. <i>Lethrinus mahsena</i> does not appear to qualify the Project area as Critical Habitat.
Echinoderms				
Golden Sandfish <i>Holothuria scabra</i> ; Golden Sandfish <i>Holothuria lessona</i> ; Black Teatfish <i>Holothuria nobilis</i>	EN	-	-	All these holothurian species are fished commercially, with some local populations in sharp decline due to overexploitation. All three species have a wide range across Indo-Pacific tropical seas. No information is available about the presence and abundance of these species in the project AoA; however, it is very unlikely that the Project AoA holds >0.5% of the global population of this species, and >5 pairs. <i>Holothuria spp.</i> do not appear to qualify the Project area as Critical Habitat.
Corals				
<i>Acropora rudis</i>	EN	-	-	This species is found in the northern Indian Ocean and the central Indo-Pacific. Found also in the Maldives, however, data lacks on population size. The AoA is already impacted and not all the reefs are in pristine conditions, and this species was also not found during the underwater surveys. It is extremely unlikely the Project AoA holds >0.5% of the global population of this species. <i>Acropora rudis</i> does not appear to qualify the Project area as Critical Habitat.

CR – Critically Endangered under IUCN Red List; EN – Endangered under the IUCN Red List; RS – Restricted Range Species under IUCN; M – migratory.

*- Recently changed to vulnerable status in IUCN Red List

VII. Criterion 4: Unique assemblages of species that are associated with key evolutionary processes

6. As is the case for the majority of Indo-Pacific islands, the Maldives Archipelago has been subject to long and extreme isolation that has allowed evolutionary processes to generate unique, endemic flora and fauna. Beyond this general context, however, there is no reason to believe that the terrestrial or aquatic AoA host particularly unusual or key evolutionary processes. Unique assemblages of species associated with key evolutionary processes thus do not qualify the Project area as Critical Habitat.

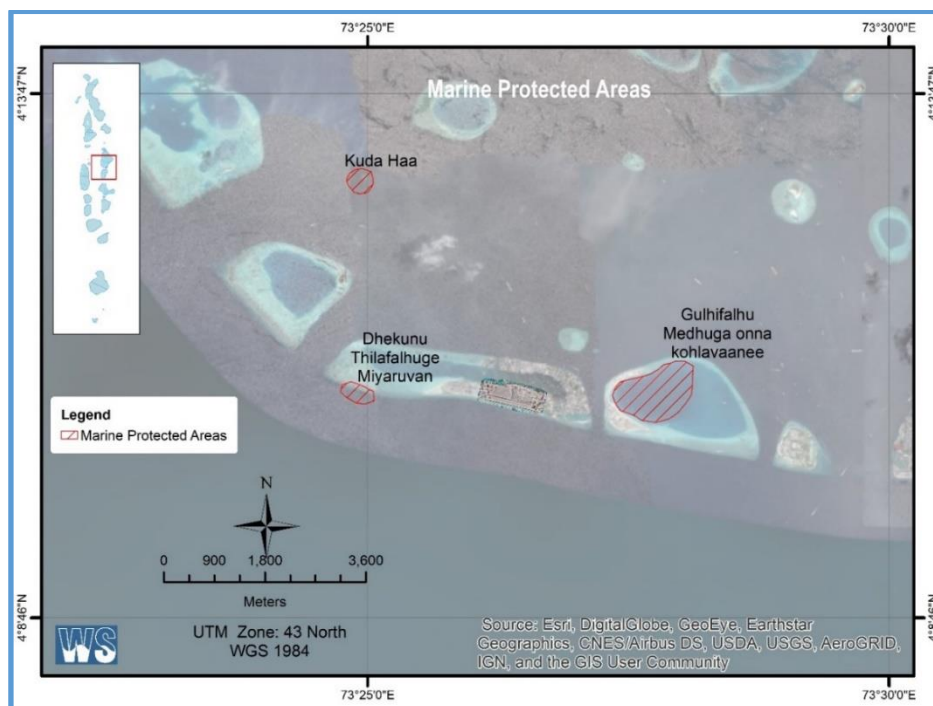
VIII. Criterion 5: Areas having biodiversity of significant social, economic, or cultural importance to local communities (including ecosystem services)

7. This additional assessment considers the ecosystem services from biodiversity in general. The assessment of significance of ecosystem services to local communities is assessed retrospectively in line with the consultation with local dive communities.

8. Ecosystem services affected by the project are prioritized when all three of the following criteria are met: (i) the project might affect the ability of others to benefit from the service; (ii) the affected service is important to beneficiaries' well-being; and (iii) beneficiaries do not have viable alternatives for that service.

9. The limited information presented does not give reason to believe that the Project terrestrial or aquatic AoA are sufficiently important to local people that they represent Critical Habitat under this criterion. However, it is beyond the scope of this assessment to collect additional information on ecosystem services, and then to assess which may qualify the project area as Critical Habitat.

Figure 2. 5km buffer zone from project site at Thilafushi



IX. Legally protected areas and internationally recognized areas

10. There are some areas near to the Project. The nearest MPA to the WTE project site is the “*Lions Head*” (Dhekunu Thilafalhuge Miyaruvani), around 1 km from the proposed plant. Additionally, as a precautionary approach, a more focused habitat assessment was conducted for this MPA. Results show that none of the IUCN species categorized as critically endangered species, endangered species or vulnerable species is found within this MPA. Results also show that none of nationally protected species is found within this MPA either. A complete assessment of the Lions Head is attached as Annex 2.

24. Following IFC (2019), none of the protected areas found in the Project AoA meets the thresholds for Critical Habitat for some species for which it was designated. For this reason, none of the protected areas found in the AoA qualify the Project area as Critical Habitat.

X. Conclusion and Recommendations

25. The WTE project will be established in Maldives, a country rich in biodiversity. Based on the initial screening using IBAT, the project site is likely to be a critical habitat at least for a terrestrial insect.

11. In the course of project implementation, it is highly recommended that continuous marine underwater monitoring be undertaken around Thilfushi island to confirm the extent of biodiversity in various seasons of the year, including assessment of features pertinent to critical habitats. In cases when future information determines the existence of critical habitat within the study area, the WTE project should be able to demonstrate that:

- (i) It does not lead to measurable adverse impacts on those biodiversity values for which the critical habitat was designated, and on the ecological processes supporting those biodiversity values;
- (ii) It does not lead to a net reduction in the global and/or national/regional population of any Critically Endangered or Endangered species over a reasonable period of time; and
- (iii) It has integrated into its management program a robust, appropriately designed, and long-term biodiversity monitoring and evaluation program.

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Annex 1: IBAT assessment report



Integrated Biodiversity Assessment Tool

WORLD BANK GROUP BIODIVERSITY RISK SCREEN

Report generated on 20/11/2019 by Francesco Ricciardi under the license number 2780-5415 held by ADB. www.ibat-alliance.org

Project Name: Thilafushi WTE

Location: [4.2, 73.4]

Overlaps with:

Protected Areas	11
Key Biodiversity Areas	0
IUCN Red List	15
Critical Habitat	Likely



Displaying project location and buffers: 10.0 km, 50.0 km



This report is based on IFC Performance Standard 6 (PS6) but applies to World Bank Environmental and Social Standard 6 (ESS6)





About this report

IBAT provides initial screening for critical habitat values. Performance Standard 6 (PS6) defines these values for critical habitat (PS6: para. 16) and legally protected and internationally recognized areas (PS6: para. 20). PS6 will be triggered when IFC client activities are located in modified habitats containing "significant biodiversity value," natural habitats, critical habitats, legally protected areas, or areas that are internationally recognized for biodiversity. References to PS6 and Guidance Note 6 (GN6) are provided to guide further assessment and detailed definitions where necessary. Please see <https://www.ifc.org/ps6> for full details on PS6 and GN6.

The report screens for known risks within a standard 50km buffer of the coordinates used for analysis. This buffer is not intended to indicate the area of impact. The report can be used to:

- Scope risks to include within an assessment of risks and impacts
- Identify gaps within an existing assessment of risks and impacts
- Prioritize between sites in a portfolio for further assessment of risks and impacts
- Inform a preliminary determination of critical habitat
- Assess the need for engaging a biodiversity specialist
- Identify additional conservation experts or organizations to inform further assessment or planning

WARNING: IBAT aims to provide the most up-to-date and accurate information available at the time of analysis. There is however a possibility of incomplete, incorrect or out-of-date information. All findings in this report must be supported by further desktop review, consultation with experts and/or on-the-ground field assessment as described in PS6 and GN6. Please consult IBAT for any additional disclaimers or recommendations applicable to the information used to generate this report.

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Priority Species

Habitat of significant importance to priority species will trigger critical habitat status (See PS6: para 16). IBAT provides a preliminary list of priority species that could occur within the 50km buffer. This list is drawn from the IUCN Red List of Threatened Species (IUCN RL). This list should be used to guide any further assessment, with the aim of confirming known or likely occurrence of these species within the project area. It is also possible that further assessment may confirm occurrence of additional priority species not listed here. It is strongly encouraged that any new species information collected by the project be shared with species experts and/or IUCN wherever possible in order to improve IUCN datasets.

IUCN Red List of Threatened Species - CR & EN

The following species are potentially found within 50km of the area of interest.
For the full IUCN Red List please refer to the associated csv in the report folder.

Species name	Common name	IUCN Category	Group
Carcharhinus hemiodon	Pondicherry Shark	CR	CHONDRICHTHYES
Rhina ancylostoma	Bowmouth Guitarfish	CR	CHONDRICHTHYES
Rhynchobatus australiae	Bottlenose Wedgefish	CR	CHONDRICHTHYES
Enallagma maldivense		CR	INSECTA
Balaenoptera musculus	Blue Whale	EN	MAMMALIA
Rhincodon typus	Whale Shark	EN	CHONDRICHTHYES
Isurus oxyrinchus	Shortfin Mako	EN	CHONDRICHTHYES
Sphyrna mokarran	Great Hammerhead	EN	CHONDRICHTHYES
Aetomylaeus vespertilio	Ornate Eagle Ray	EN	CHONDRICHTHYES
Isurus paucus	Longfin Mako	EN	CHONDRICHTHYES
Acropora rudis		EN	ANTHOZOA





Biodiversity features which are likely to trigger Critical Habitat

Protected Areas

The following protected areas are found within 10.0 km and 50.0 km of the area of interest.
For further details please refer to the associated csv file in the report folder.

Area name	Distance	Recommendation
Giravaru Kuda Haa	10.0 km	● Assess for biodiversity risk
Hans Hass Plave (Gulhi Falhu)	10.0 km	● Assess for biodiversity risk
Lions Head (Thilafalhu Miyaruvani)	10.0 km	● Assess for biodiversity risk
Banana reef (Gaathu Giri)	50.0 km	● Assess for biodiversity risk
Embudhoo Kandulhi	50.0 km	● Assess for biodiversity risk
Guraidhoo Kandu	50.0 km	● Assess for biodiversity risk
Huraa Mangrove	50.0 km	● Assess for biodiversity risk
Makunudhoo Kandu	50.0 km	● Assess for biodiversity risk
Nassimo Thila (Lankan Thila)	50.0 km	● Assess for biodiversity risk
Rasfari	50.0 km	● Assess for biodiversity risk
Thanburudhoo Thila (HP Reef)	50.0 km	● Assess for biodiversity risk

Key Biodiversity Areas





The following key biodiversity areas are found within 10.0 km and 50.0 km of the area of interest.
For further details please refer to the associated csv file in the report folder.

Area name	Distance	Recommendation
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Species with potential to occur

Area Taxonomic group	Total assessed species	Total (CR, EN & VU)	CR	EN	VU	NT	LC	DD
CHONDRICHTHYES	28	19	3	5	11	2	4	3
INSECTA	1	1	1	0	0	0	0	0
MAMMALIA	10	1	0	1	0	0	7	2
ANTHOZOA	124	23	0	1	22	40	53	8
HOLOTHUROIDEA	31	5	0	3	2	0	15	11
ACTINOPTERYGII	656	3	0	1	2	3	628	22
REPTILIA	2	1	0	0	1	0	1	0
AVES	36	2	0	0	2	4	30	0
MAGNOLIOPSIDA	5	0	0	0	0	0	5	0
AMPHIBIA	1	0	0	0	0	0	1	0
HYDROZOA	2	0	0	0	0	0	2	0
MALACOSTRACA	8	0	0	0	0	0	7	1
LILIOPSIDA	3	0	0	0	0	0	3	0



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Area Taxonomic group	Total assessed species	Total (CR, EN & VU)	CR	EN	VU	NT	LC	DD
POLYPODIOPSIDA	1	0	0	0	0	0	1	0
GASTROPODA	66	0	0	0	0	0	65	1
BIVALVIA	1	0	0	0	0	0	1	0



Country-level summary

Coming soon





Recommended Experts and Organizations

For projects located in critical habitat, clients must ensure that external experts with regional expertise are involved in further assessment (GN6: GN22). Clients are encouraged to develop partnerships with recognized and credible conservation organizations and/or academic institutes, especially with respect to potential developments in natural or critical habitat (GN6: GN23). Where critical habitats are triggered by priority species, species specialists must be involved. IBAT provides data originally collected by a large network of national partners, while species information is sourced via the IUCN Red List and affiliated Species Specialist Groups. These experts and organizations are listed below. **Please note that this is not intended as a comprehensive list of organizations and experts. These organizations and experts are under no obligation to support any further assessment and do so entirely at their discretion and under their terms. Any views expressed or recommendations made by these stakeholders should not be attributed to the IFC or IBAT for IFC partners.**

Relevant national or regional organizations

IBAT integrates information developed by a global network of conservation agencies, organizations and experts. These efforts are coordinated by the IBAT Alliance (BirdLife International, Conservation International, IUCN and UNEP-WCMC) who compile and maintain this information as globally standardized databases. The local partners most relevant to the area of analysis are:

Wild Bird Society of Japan Address: Maruwa Building, 3-9-23 Nishi-Gotanda, Shinagawa-ku, Tokyo 141-0031, Japan Web: <http://www.wbsj.org/>

BirdLife Asia Regional Office Address: 354 Tanglin Road, #01-16/17, Tanglin International Centre, Singapore 247672
Email: singapore.office@birdlife.org Web: <http://www.birdlife.org/asia>

Directory for Species Survival Commission (SSC) Specialist Groups and Red List Authorities

URL: http://www.iucn.org/about/work/programmes/species/who_we_are/ssc_specialist_groups_and_red_list_authorities_directory/



Annex 2: Critical Habitat Assessment for Lions Head MPA