

EVALUATION REPORT

Tubbataha Reefs Natural Park Philippines

Location: Cagayancillo, Palawan, Philippines; Sulu Sea, Pacific Ocean

Global Ocean Refuge Status: Nominated (2017), Evaluated (2017)

MPAtlas.org ID: 14761

Manager(s): Angelique Songco

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1.1 Eligibility Criteria: Biodiversity Value (must satisfy at least one)

- a. *Includes area of high species richness or endemism within the context of the biogeographic region.*

Tubbataha Reefs Natural Park (TRNP) is located within the Coral Triangle, considered the global center of marine biodiversity.¹ TRNP contains high species richness and abundance. Documented organisms include 360 species of coral, 640 species of fish, 13 species of marine mammals, 23 species of elasmobranchs, 2 species of marine turtles, 7 species of sea grass, 66 species of algae, and 100 species of birds (7 resident).^{2,3} Both atolls contained within the park are uninhabited by people, save for official park rangers.⁴

- b. *Includes demonstrated historic or predicted ecological refugia.*

The coral reefs in the Coral Triangle region are comparatively resilient to the effects of climate change.⁵ The high level of coral cover, geographic remoteness, and high conservation status provide the reefs at TRNP with a high level of resilience.⁶ The resiliency may be a result of the specific combination of wave energy, tidal fluctuations, and reef morphology.⁷

- c. *Includes rare, unique, or representative ecosystems.*

The habitats found within TRNP are relatively pristine and healthy representations of coral reef ecosystems in the Coral Triangle – most of these ecosystems are not in such good condition. Information on endemic species is limited, though it is known that an endemic sub-species of Black Noddy resides within the park.⁸

- d. *Includes area important for threatened species (including those identified by the IUCN Red List or national legislation), keystone species, or foundational species. Important areas include migration pathways and breeding, nursery, feeding, or assembly areas.*

One-hundred eighty-one of the species found in TRNP are threatened to some degree, from vulnerable to critically endangered. The park is a breeding and rookery ground for many species of migratory and resident seabirds, including the critically endangered

¹ Tubbataha Reefs Natural Park. (2012). *Location*. Retrieved May 2017 from <http://tubbatahareef.org/wp/location>

² Tubbataha Reefs Natural Park. (2015). *General Management Plan 2015 – 2021*. Retrieved May 2017 from <http://tubbatahareef.org/wordpress/wp-content/uploads/2012/11/TRNP-General-Mgt-Plan-2015-2021.pdf>

³ Angelique Songco, Tubbataha Reefs Natural Park manager, personal communication, June 19, 2017.

⁴ Tubbataha Reefs Natural Park. (2012). *Compliance and Enforcement Plan*. Retrieved May 2017 from <http://tubbatahareef.org/wordpress/wp-content/uploads/2012/11/Compliance-and-Enforcement-Plan-2012.pdf>

⁵ Tubbataha Reefs Natural Park. (2012). *Global and Ecological Significance*. Retrieved May 2017 from http://tubbatahareef.org/wp/global_ecological_significance

⁶ Licuanan, W.Y. et al. (2017). *Coral benchmarks in the center of biodiversity*. Marine Pollution Bulletin, Vol. 114, 1135-1140.

⁷ Arceo, H.O. et al. (2001). *Coral bleaching in Philippine reefs: Coincident evidences with mesoscale thermal anomalies*. Bulletin of Marine Science, Vol. 69 (2).

⁸ Tubbataha Reefs Natural Park. (2015). *General Management Plan 2015 – 2021*. Retrieved May 2017 from <http://tubbatahareef.org/wordpress/wp-content/uploads/2012/11/TRNP-General-Mgt-Plan-2015-2021.pdf>

Christmas Island Frigate. It is also a nesting site for endangered green and hawksbill sea turtles.⁹

e. Qualifying Designations

- RAMSAR (1999)
- Hope Spot (as part of the Coral Triangle Marine Protected Area System)

1.2 Eligibility Criteria: Effective Management & Compliance (must satisfy all)

a. The MPA is designated by a legitimate and functional government representing the interests of civil society, and the MPA’s implementation meets the IUCN standards for recognizing indigenous peoples’ rights.

The area that is now TRNP was relatively undisturbed until overexploitation became a problem in the 1980s.¹⁰ Tubbataha Reef National Marine Park, a 332 km² no-take park, was designated through Presidential Proclamation 306 by President Corazon Aquino in 1988. In 2001, the park’s management office was established.¹¹ In 2006, President Gloria Macapagal-Arroyo expanded the park to include Jessie Beazley Reef and renamed it Tubbataha Reefs Natural Park. Formal legislation, Republic Act No. 10067, was passed in 2010. The Act itself includes language that encourages outreach and stakeholder involvement. For example, “Establishment and management of zones shall involve the concerned stakeholders by undertaking such steps as dialogue and community and resource-use mapping.”¹² Due to its remote location and volatile weather patterns, local communities have not historically overexploited or relied as heavily on TRNP as on more accessible areas. The park is now promoted to locals as a fisheries nursery, as stated in the 2012 Compliance and Enforcement Plan: “The park is primarily managed to maintain its ecological value of enriching fisheries in surrounding waters thereby sustaining the livelihoods of Filipinos.”¹³

b. The MPA is designated to enhance the biodiversity value of the site.

The 2010 legislation states, “The zoning plan shall give primary consideration to protection and conservation of all life forms. ... [The zoning plan] shall also take into consideration the effective protection of habitats, fragile ecosystems, and unique areas.”¹⁴ TRNP has consistently been a no-take park since its founding in 1988. The published mission statement of the park is, “We, the stakeholders of Tubbataha, commit to conserve

⁹ Tubbataha Reefs Natural Park. (2015). *General Management Plan 2015 – 2021*. Retrieved May 2017 from <http://tubbatahareef.org/wordpress/wp-content/uploads/2012/11/TRNP-General-Mgt-Plan-2015-2021.pdf>

¹⁰ Tubbataha Reefs Natural Park. (2015). *General Management Plan 2015 – 2021*. Retrieved May 2017 from <http://tubbatahareef.org/wordpress/wp-content/uploads/2012/11/TRNP-General-Mgt-Plan-2015-2021.pdf>

¹¹ Angelique Songco, Tubbataha Reefs Natural Park manager, personal communication, June 19, 2017.

¹² Congress of the Philippines. (2010). *Republic Act No. 10067*. Retrieved May 2017 from http://www.tubbatahareef.org/downloads/ra_10067.pdf

¹³ Tubbataha Reefs Natural Park. (2012). *Compliance and Enforcement Plan*. Retrieved May 2017 from <http://tubbatahareef.org/wordpress/wp-content/uploads/2012/11/Compliance-and-Enforcement-Plan-2012.pdf>

¹⁴ Congress of the Philippines. (2010). *Republic Act No. 10067*. Retrieved May 2017 from http://www.tubbatahareef.org/downloads/ra_10067.pdf

its outstanding universal value through responsible stewardship and genuine partnerships.”¹⁵

c. The MPA designation is permanent or is effective for at least 25 years.

The designation is permanent.¹⁶

d. A management plan, updated within the last 15 years, identifies and prioritizes significant threats to biodiversity and addresses those threats with measurable actions; the resources and capacity to implement the management plan are identified and secured.

A comprehensive management plan was published in 2015, subsequent to smaller plans covering regulations, enforcement, tourism management, communications, and emergency protocols having been published between 2008 and 2014. The stated management goal is: “To preserve the outstanding universal value of Tubbataha and to manage it in a sustainable basis.” To that end, 2 policies describe their approach: “1) The TRNP shall be managed under a no-take policy to conserve and protect its outstanding universal value for the enjoyment of present and future generations, and 2) Collaboration and stakeholder engagement shall be the main approach in implementing management programs, strategies, and activities.”¹⁷

The plan identifies major concerns and desired outcomes for management. Concerns include accessibility (for both tourists and potential staff), illegal fishing, marine debris, stakeholder ownership, energy exploration, nearby shipping routes, and finances. The desired outcomes are protection of biodiversity, maintenance of legal and management structure, stakeholder participation, and public understanding of TRNP’s value.

To address those identified concerns, management is divided into four main programs: conservation management, conservation awareness, research and monitoring, and sustainable resource management. Conservation management covers staff training, tourism regulation and compliance, long-term financing, and implementing the zoning scheme. Conservation awareness encompasses the public outreach program. Research and monitoring covers regular ecosystem monitoring and targeted research. Sustainable resource management includes understanding factors that influence resource use, conducting community-based resource management activities, and implementing alternative livelihood projects.

Management activities are determined by the Tubbataha Protected Area Management Board (TPAMB), which is made up of 21 representatives from local and federal governments, environmental concerns, the military, the tourism industry, academia, NGO’s, and public stakeholders. The TPAMB is co-chaired by the federal Department of

¹⁵ Tubbataha Reefs Natural Park. (2015). *General Management Plan 2015 – 2021*. Retrieved May 2017 from <http://tubbatahareef.org/wordpress/wp-content/uploads/2012/11/TRNP-General-Mgt-Plan-2015-2021.pdf>

¹⁶ Congress of the Philippines. (2010). *Republic Act No. 10067*. Retrieved May 2017 from http://www.tubbatahareef.org/downloads/ra_10067.pdf

¹⁷ Tubbataha Reefs Natural Park. (2015). *General Management Plan 2015 – 2021*. Retrieved May 2017 from <http://tubbatahareef.org/wordpress/wp-content/uploads/2012/11/TRNP-General-Mgt-Plan-2015-2021.pdf>

Environment and Natural Resources and regional Palawan Council for Sustainable Development. Daily operations in the park are administered by the Tubbataha Management Office, which delegates tasks to rangers stationed within the park.

The effectiveness of the management plan is to be evaluated every 3 years, based on values (biodiversity, ecological goods and services, community benefits), impacts (water quality, shipping, illegal fishing, marine pollution, climate change, extreme weather), and uses (research, tourism), using IUCN categories of context, planning, input, process, output, and outcomes.¹⁸

- e. Regular monitoring of habitat and/or wildlife is conducted to measure progress with respect to conservation targets. A report of monitoring data is required at each GLORES audit after designation. Any negative biological trends identified through monitoring must be addressed in management plans. Progress toward identifying threats and addressing them must be documented.*

The park research and monitoring program involves collecting data both within the park and at nearby sites that serve as comparisons.¹⁹ Current research focuses on fish biomass/density, coral cover, and seabird population trends. Additional studies into the statuses of turtles, sharks, and cetaceans are undertaken when funding allows. In 1997, WWF-Philippines set up seven permanent monitoring transects at 5m and 10m depths within TRNP to facilitate annual benthic and fish community surveys. WWF-Philippines has also done studies in TRNP investigating the effects of climate change on coral reefs. TRNP also collaborates on research with the University of the Philippines Marine Science Institute.

- f. The MPA garners high regulation compliance rate. Evidence of adequate resources and capacity (including budget and staff) for enforcement is required.*

Regulation enforcement in TRNP is a shared responsibility between the Navy, National Police, Coast Guard, Department of Environment and Natural Resources, Department of Agriculture (Bureau of Fisheries and Aquatic Resources), Palawan Council for Sustainable Development, local government units, members of the TPAMB, and the TRNP superintendent and staff. Daily enforcement is the responsibility of the 10-12 park rangers who reside within the park at any given time. Ranger enforcement activities include at least eight patrols per week, targeted patrols upon receipt of intelligence, wide scale surveillance through radar at least every three hours, and overnight surveillance at South Islet at least once per month. Rangers are also responsible for boarding and inspecting every boat that enters the park (not including the buffer zone). In addition to direct enforcement action, the park's enforcement plan includes promoting voluntary compliance among both tourists and locals. Most of TRNP's funding comes from tourism

¹⁸ Tubbataha Reefs Natural Park. (2015). *General Management Plan 2015 – 2021*. Retrieved May 2017 from <http://tubbatahareef.org/wordpress/wp-content/uploads/2012/11/TRNP-General-Mgt-Plan-2015-2021.pdf>

¹⁹ Tubbataha Reefs Natural Park. (2012). *Scientific Research* Retrieved May 2017 from http://tubbatahareef.org/wp/scientific_research

fees, which averaged about 120,000 USD per year over the last five years.²⁰ The park has also received an average of about 82,000 USD in donations every year for the past five years.²¹ The bulk of its budget goes towards enforcement, with 36% of the total budget going to staff salaries, and 56% going to maintenance and operations.²²

The park's managers characterize enforcement of regulations in the park as active and consistent.²³

2.1 GLORES Award Status Criteria: Regulations

Scores 1-3 = Platinum, 3-4 = Gold, 4-5 = Silver

Classification and scoring (1-8) of zones based on fishing gear, bottom exploitation, aquaculture, and boating.

Additional consideration: Buffer zones – zones of reduced human impact surrounding core no-take protected areas – enhance the conservation value of core no-take areas. An MPA that includes a large (>100 km²) no-take zone (Zone regulation score 1-3) surrounded by a buffer zone with a score 3-5 may be considered for a GLORES Platinum Award.

The cumulative regulation score for Tubbataha Reefs Natural Park is 1.

The entire area of TRNP (970.3 km²) is a no-take zone, with non-extractive tourism and research allowed only by permit.²⁴ There are typically 1,000-1,500 visitors to the park each year, and their entrance fees represent the bulk of the park's funding.²⁵ Anchoring is not allowed, and mooring buoys are installed for dive boats with permits. It is worth noting that the harsh monsoon weather patterns at TRNP restrict all tourism activity to a roughly 12-week period between March and June.

The buffer zone surrounding the park (3,565 km²) has strict regulations. In addition to the non-extractive tourism and research allowed within the park, the buffer zone also allows boat passage, wind and solar energy exploration, limited military exercises, and "fishing by simple hand line used by municipal fishers".²⁶

²⁰ Tubbataha Reefs Natural Park. (2013). *Comprehensive Tourism Management Plan*. Retrieved May 2017 from http://tubbatahareef.org/wordpress/wp-content/uploads/2012/11/TRNP-Comprehensive-Tourism-Management-Plan_final-2013.pdf

²¹ Angelique Songco, Tubbataha Reefs Natural Park manager, personal communication, June 8, 2017.

²² Tubbataha Reefs Natural Park. (2012). *Compliance and Enforcement Plan*. Retrieved May 2017 from <http://tubbatahareef.org/wordpress/wp-content/uploads/2012/11/Compliance-and-Enforcement-Plan-2012.pdf>

²³ Angelique Songco, Tubbataha Reefs Natural Park manager, personal communication, June 14, 2017.

²⁴ Tubbataha Reefs Natural Park. (2008). *Rules and Regulations for the Entry and the Conduct of All Activities in the Tubbataha Reefs Natural Park and World Heritage Site*. Retrieved May 2017 from <http://tubbatahareef.org/wordpress/wp-content/uploads/2012/11/Park-Rules-and-Regulations-2008.pdf>

²⁵ Tubbataha Reefs Natural Park. (2013). *Comprehensive Tourism Management Plan*. Retrieved May 2017 from http://tubbatahareef.org/wordpress/wp-content/uploads/2012/11/TRNP-Comprehensive-Tourism-Management-Plan_final-2013.pdf

²⁶ Tubbataha Reefs Natural Park. (2014). *Buffer Zone Management Plan*. Retrieved May 2017 from

<http://tubbatahareef.org/wordpress/wp-content/uploads/2012/11/TRNP-Buffer-Zone-Management-Plan->

2.2 GLORES Award Status Criteria: Site Design and Management
3 Attributes = Platinum, 2 Attributes = Gold, 1 Attribute = Silver

- a. Size: MPA $\geq 100 \text{ km}^2$ or explicitly designed as part of a network of MPAs to support population connectivity*

TRNP covers an area of 970.3 km². It is also part of a Filipino network with two other MPA's designed specifically for sea turtle conservation.²⁷

- b. Isolation: Ecological or other protected area buffers surround ecosystem(s)*

The no-take protection of TRNP includes the entirety of the North Atoll, South Atoll, and Jessie Beazley Reef, as well as their nearshore waters. The limited-use buffer zone extends for 10 nautical miles beyond the park. It should be noted that the buffer zone will no longer allow international shipping traffic after July 2017.²⁸

- c. Age: Protections in the site, comparable to the current protections, are ≥ 10 years old*

The site has been protected in some form since 1988, although specific legislation designating the park was not passed until 2010.

- d. Community engagement: There is a formal process to engage the local community in the implementation and/or ongoing management of the MPA.*

Stakeholder engagement is a top management priority for TRNP. The designation legislation for the park specifies, “[The] State shall undertake to carry out comprehensive and holistic promotions, training, and information campaign programs for the benefit of the general public...with the end in view of fostering widespread awareness and concern for the Park...”²⁹ It also states, “Establishment and management of zones shall involve the concerned stakeholders by undertaking such steps as dialogue and community and resource-use mapping.” As mentioned previously, collaboration and stakeholder engagement are one of two pillars of the park’s management plan.³⁰ Local stakeholders have reserved seats on the TPAMB, and public outreach programs are included in two of the four major management programs.

²⁷ Angeliq Songco, Tubbataha Reefs Natural Park manager, personal communication, June 19, 2017.

²⁸ Angeliq Songco, Tubbataha Reefs Natural Park manager, personal communication, June 19, 2017.

²⁹ Congress of the Philippines. (2010). *Republic Act No. 10067*. Retrieved May 2017 from http://www.tubbatahareef.org/downloads/ra_10067.pdf

³⁰ Tubbataha Reefs Natural Park. (2015). *General Management Plan 2015 – 2021*. Retrieved May 2017 from <http://tubbatahareef.org/wordpress/wp-content/uploads/2012/11/TRNP-General-Mgt-Plan-2015-2021.pdf>

3.1 GLORES Network Priorities: Ecosystem Representation

TRNP protects one of the most pristine and globally revered Pacific coral reef ecosystems. Located in the tropics within the Coral Triangle, the habitats of TRNP include coral atolls, lagoons, open ocean (pelagic and benthic), and tidal flats.

Because the Global Ocean Refuge System is new this year, the ecosystems protected by Tubbataha Reefs Natural Park will be the first of these ecosystems within the region to be represented in a Global Ocean Refuge.

3.2 GLORES Network Priorities: Ecological Spatial Connectivity

Because the Global Ocean Refuge System is new this year, there are no other Global Ocean Refuges in the region with which to consider the ecological spatial connectivity contribution of Tubbataha Reefs Natural Park.

In future GLORES award cycles, we will describe the location of the MPA within the context of the existing GLORES network, considering connectivity.