

Hele Islands Conservation Area (HICA) Resource Management Plan



**Visions of a long-lasting enjoyment, beauty, productivity and life for
owners, stewards and users of Hele Islands Ecological Systems**

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for a living planet®

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For the:

Hele Islands Descendants Association (HIDA) and People having traditional rights of ownership and usage of Hele Islands terrestrial and marine environment and its bountiful resources

Through:

WWF-SI Program

“It is when traditionalism and modernism are in harmony, when both traditional and modern conservation programs compliment each other, then that is when we will begin to see those big, colorful & practical promises.”

Mervyn George Siloko

Principle trustee

Hele Islands

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**CORAL TRIANGLE
INITIATIVE**

ON CORAL REEFS, FISHERIES AND FOOD SECURITY

This report was completed as part of the Coral Triangle Initiative on Coral Reefs, Fisheries and Food Security (CTI-CFF) National Program in the Solomon Islands. The Solomon Islands Government through the Ministry of Environment, Climate Change, Disaster Management and Meteorology (MECDM) and Ministry of Fisheries and Marine Resources (MFMR), and CTI partners, seek to ensure marine and coastal resources are sustainably managed, to secure the long term improvement of the livelihoods of Solomon Islanders.

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A. HELE ISLAND CONSERVATION AREA (HICA).

1. Background: The setting & site history

Solomon Islands as being the third largest archipelago in the South Pacific Islands, comprising to almost a thousand islands is due to its known association with the Pacific Ring of Fire. While most of the volcanic high islands are now dormant, a number of smaller islands are still active and a good number of them are located in the Western Province. Hele Islands are located in the Western Province, which is generally known to the whole of Solomon Islands as a strong maritime province and are stationed within the proximity of the southern fault line of the Solomon Sea. The combination of pristine lagoons, prime dive sites and lush forest have immense appeal to visitors. The many lagoons of the Western Province are a visible delight from the air and the combination of greens, white strips, light turquoise to dark blues is breath taking, hence Hele is among the top exotic sites in the province.

Hele Islands, like all other islets, islands or blocks of land in the Solomon Islands, it is governed under customary tenure systems of certain tribal groups. With its biological richness and vibrancy, while owners only initiate frequent visits to these islands, visitations by other users have been more regular. Despite such infrequent visitation by island holding groups, their cultural affinity, defense and stewardship are kept intact since past generations up until today.

Due to all these natural attributes, in addition to tourist entrepreneurs; interests have also been gauged by conservation organizations, researchers and academics. Owing to the islands' customary ownership status as being paramount but very sensitive, preliminary action in establishing foreigner-indigenous partnership process, identification of the right and appropriate island holding groups have to be identified became the first and most important task. This planning document is a reflection of the aspiration and long hours of planning by Hele Islands resource owning family groups after a series of meetings facilitated by two successive environmental institutions hence producing a blue print for a long-lasting enjoyment of their local and precious natural and cultural heritage.

2. Physical & Biological Description of Hele Islands:

a) Island :

Flora

Flora composition and distribution on Hele Islands is still unknown. However anecdotal evidences show a relative change in dominant vegetation species as one goes down further south, having greater exposure to high wave surges from the dominant southeast trade winds. Species distribution and aggregation is attributed to the physical condition of island locale. In general, the overall floral composition of the islands is typical of any islands in this archipelago. This section will only highlight the various variances in species abundance on certain islands only.

The northern tip of the northern most islands, Riana Island is foraged with *Casuarina spp* with the whole island covered with typical tropical coastal vegetation. There is however a marked distinction between Riana's flora and the southern-most island, Ngirasa Island. In contrast to Riana's north coast, Ngirasa's southern coast is lined with stout, robust and salt tolerant vegetation, hence reflected by the name of the island. Ngirasa is the name of the stout beach mangrove also known as Reef Barrier Mangrove, *Pemphis acidula*. The island of Kulokulo however possesses an interesting floral assemblage. Kulokulo Island however supports the growth of larger and older trees species locally known as *naginagi* or kerosene wood.

Fauna

Hele Islands still lacks information about the fauna composition and distribution. This poses opportunities for the need to perform comprehensive studies of fauna on these islands.

Avi Fauna

While there is also minimal knowledge of the avi fauna of Hele Islands, a number of informal surveys of birds of Hele Islands were being conducted. However according to anecdotal testimonies, these islands not only provide perfect refuge and home to a vast array of bird species, they have also become perfect breeding grounds for certain species. All of the eight islands are known for the nesting and breeding grounds for the Melanesian Scrub Fowl, generally and locally known as Megapod Bird. Of particular specialty and regional significance, having very high conservation value is Ngirasa Island, the nesting and breeding island of Nicobar Pigeon and Grey Mountain Pigeon. Kulokulo Island is known as the breeding ground for sea terns. With these islands having high avi-faunal roosting, nesting and breeding areas, posing very high conservation values, full scale research is hereby crucial into determining species composition and distribution and breeding seasons in December.

b) Marine

Environment

The marine environment of Hele Islands is of exceptional beauty possessing extra ordinary geomorphologic and biological features. Beginning with Rihana Island in the North to Mariu Island in the south (refer to Map in Appendix 1), the islands are arranged in a zigzag pattern. Due to this geological route, two deep basins appear on either sides of the 'z'-shaped island chain. Both of these basins experience high wave surges and calm waters depending on the dominant trade winds. During the Southeast Trades, the eastern basin experiences high wave surges while the western basin is calm and vice versa during the North-westerly.

As Hele Islands reef system is an extension of the Nono Lagoon barrier reef system, the reef structure is relatively narrow. Since no shallow lagoons are formed either sides of the reef system, the reefs drop immediately into the deep basins on both opposite side. The back reef on the windward side is much narrower than the leeward side. Vibrant coral growth only occurs on the reef crest. The reef front drops vertically right into the abyss.

Fauna

Coral, invertebrate and finfish species composition and distribution is still unknown except for knowledge of the regular users of Hele Islands marine resources. According to local fisherfolks who frequent these island reef systems testified that passages between islands are also spawning aggregation sites for certain reef species including the lucrative grouper and bump-head parrot fish. The drop off the southern tip of the Rihana Island reef is also the home to the sharks.

Of the animals that inhabit this reef system, Green Turtles are by far the most desired, hunted and monitored. Nesting beaches occur on all islands during nesting seasons but the hot spots for breeding place are on Mariu and Kulokulo Islands. Reports compiled on a survey done on 11-17th September, 2003 confirmed that hawksbill turtle mainly nests at Mariu island while green turtle's nesting place is on Kulokulo island. While other reptile population status is also unknown, there is also sighting of salt water crocodiles on these islands.

Flora

Knowledge on marine flora assemblage is still lacking.

WWII Relics/wrecks

There are no WWII wreckages within accessible depths around the islands' reef systems. There is however one wreckage off Kukokulo Island and Ngirasa island.

3. Hele Islands Marine Tenure System:

Customary marine and land boundaries and tenure systems have intricate associations with the geological boundaries of the Melanesian Archipelago. Certain geological features determine the customary land and marine boundaries such as mountain ridges, valleys, rivers, coastal points, deep passages, etc. Applying this natural-cultural principle to the location of these islands; historical ownership is owed to the settlers of Tetepare Island who most of them now settle and now own the natural resources of Nono Lagoon. With the vast exodus of Tetepare settlers out from the island to other islands due to the spread of a mystic plaque, present-day descendants have now scattered all over the islands of Western Province. Present-day descendants of the principle owner of these islands, a Tetepare Island settler, now settle in Gatokae, South Vangunu and Nono Lagoon. Forty kilometers south of these islands is the active Kavachi submarine volcano.

The marine and land tenure is matrilineal. Local history recorded that the owners of Hele Islands are the descendants of two sisters Pojoriko and Goloriko originally from Leilei, Tetepare Island. These two sisters were the last to leave Tetepare. Pojoriko's descendants could be found in present Kavolavata village, Bili village and Peava village on Gatokae Island while Goloriko's descendants could found in the present Bareho village and Bopo village, South Vangunu. Through traditional means others are also given the rights on some of the islands by the original owners.

4. Resource Use Patterns:

Hele Islands is a storehouse of natural resources that attain both subsistence and economic importance. These island resources are harvested when targeted resources within the vicinity of settlements of the islands' owning family groups run low, hence Hele Islands ecosystem is hereby regarded as 'reserved stocks'. In addition to the island owning groups are regular users who settle on adjacent coastal communities of Vangunu and Gilbertese settlers (Rawaki settlers) on Kohingo Island who frequently visit these islands more often than the owners of these ecosystems to harvest a wide range of resources. Unlike the owners who adhere strongly to their religious (SDA) beliefs on prohibiting them to harvest any sea creatures that "do not have fins and scales" which implies to all other marine organisms apart from fin-fish, these users mostly target these prohibited marine resources. Owners on the other hand, benefit from their island resources by harvesting land-based resources and the marine resources that are religiously permitted. In this light, non-owners are regarded as "users" while owners are regarded as "owners".

a) Land resource use

Determined by their economic livelihood preference and religious beliefs, the owners mostly target island resources that do not go contrary to these two underlying forces. Island resources that support their economic livelihoods that are provided on the islands include kerosene wood, the wood that is used for making carvings. As these important resources become scarce within their settlement area, owners begin to sail to these islands to harvest these caring wood.

Though not a common delicacy, melanesian scrub fowl (megapode) eggs are also harvested, especially when picnicking, camping and/ or a fishing trip is executed. When a fishing trip is planned for Hele Islands, one is expected to camp on these islands as fishing on Hele Islands requires a longer period of time out from settlement areas and therefore camping for two to three nights becomes inevitable. When this happens, a quick source of protein will always be dug-up megapode eggs. Nusa Lavata, the biggest of all the Hele Islands is also a source of income for owners due to the presence of a coconut plantation. Again a week-long trip is planned when harvesting coconuts for copra becomes a necessity.

Land-based resources that are of great value to 'users' (non-owners) of Vangunu Island include turtle eggs and sacred artefacts from the tabu sites. These users know the nesting seasons and therefore plan their harvesting trips according to the nesting seasons. The best nesting beach is on Mariu Island which is also the site where most of the tabu sites are housed. For Gilbertese users, they also plan their trips to these islands according to the nesting and hatching seasons not so much so for turtles but especially for the Nicorba Pigeons. Travelling a distance of almost 160 kilometers (to and from the islands), these trips are very ambitious and determined. Upon arrival, harvesting of the parent birds, hatchlings and the eggs must compensate such distance being travelled. These nesting seasons directly coincide with the festive seasons of Christmas and New Year which therefore adds to the quota to compensate for the distance travelled.

b) Marine Resource use

Island owners harvest fin-fish species on occasional basis only. As the Hele Islands reefs are regarded as marine banks, whenever occasions and programs anticipates a greater number of participants, fishing trips to these islands are one week prior to the program these programs include weddings, church programs and school fundraising programs. Fishing for individual livelihoods is rarely initiated except when friends, distant relatives and in-laws request permission for marketing purposes. Also on occasional basis, young folks who are members of the island owning families who do not always stay in tune with the religious believe make occasional visits to these island reefs to harvest beche de mer, when prices are competitive.

Non-owners on the other hand harvest almost everything that comes into sight that has both palatable and economic values. Vangunu settlers regularly visit these islands primarily for fishing but when over-night camping is required then other marine resources such as trochus, clam shell, green lips, black lips, corals, war relics and turtles are harvested. Gilbertese harvesters, during their bird hunting trip also use this opportunity to hunt for sharks (for fins).

There is yet a third user of the islands' marine resources. These are the tourist operators operating in Marovo Lagoon and Gatokae Island. Uepi Resort in Marovo Lagoon uses these islands reef systems as prime dive sites, visiting these islands also on regular basis. Wilderness Lodge on Gatokae Island brings her guests to these islands not for diving but for surfing. In addition to the tourists, yachties also make occasional visits to these islands spending visiting all these eight islands.

5. The visions and the main focus of Hele Islands Conservation Area (HICA): Management Plan.

The name of the conservation area is called, **"Hele Islands Conservation Area" (HICA)**

Vision:

"To conserve the marine flora and fauna, habitats and water quality of the Hele Islands Marine Protected Area. The Marine Protected area will support commercial and recreational activities which are compatible with the maintenance of environmental quality and be valued as an important ecological, economic, historical and social asset by the Association".

The management Plan for the Hele Islands Conservation Area (marine protected area) provides a detailed description of the ecological and social values of the area, management objectives, strategies and targets. The goal of the plan is to facilitate the conservation of the marine biodiversity of the area and to ensure that the existing and the future MPAs' values are managed within an ecologically sustainable framework.

The plan also provides mechanisms for the community and visitors to actively participate in the day to day management of the area. The management plan for

the conservation area should not be viewed in isolation, but as an integral part of a suite of complimentary management practices that occur within and adjacent to the MPA. These include fisheries regulations, wildlife protection, pollution control and environmental impact assessment, as well as maritime transport and safety measures. The plan has been prepared to complement the management objectives of the adjacent island marine protected area. In addition, it should be noted that many marines species are not permanent residents of the marine protected area and move in and out of the protected area during different stages of their lifecycles.

The water quality within the conservation area may also be affected by activities outside the protected area and by land-base activities. It is therefore critical that the environmental management objectives of the environment external to and within the protected area are compatible. The plan provides a framework to achieve the integration and close cooperation between marine management and the regulatory agencies that is necessary to achieve the conservation and sustainable management objectives outlined in the plan.

6. The purpose of HICA Sites

The purpose for the management and conservation of HICA are derived from widespread community discussions and during Management Committee Meetings and the newly established “**Hele Islands Descendants Association (HIDA)**”.

Management objectives identify what the primary aims of management area and reflect the statutory responsibilities of the HIDA. Objectives have been developed based on all of the ecological and social values of the MPA. Where a significant pressure/s on an ecological value has been identified, the management objective addresses the specific pressure/s. When there is not an obvious existing pressure or threat, the management objective provides broader direction to management in relation to protecting the value from the most likely future threats. Management objectives for social values address, where appropriate, the effect of the activity on other values of the reserves and the complementary interests of other statutory management arrangements or activities that exist in the reserves.

7. Status of HICA sites and the participating community management roles.

HICA Sites are within the customary marine and sea area owned by the descendants of Hele Islands who are residing in Bili, Kavolavata, and Peava villages on Gatokae Island, Viru, Bareho in Nono Lagoon and Bopo in South Vangunu. It is the descendants fishing ground but also has a significant cultural, historical and economic value from time immemorial.

Ownership rights between Islands’ owning factions and current users have been a long standing issue preventing a formal establishment of conservation programs on these islands. Island owners have relative high regard for managing resources on the islands and within the reefs, whereas users have very little concern for sustainable use of these resources.

The geographical isolation of these islands is the biggest challenge for owners to enforce both traditional and modern monitoring system over the use of the islands' resources. Owners living in Bareho Village are barricaded by other islands of the Nono Lagoon Barrier islets, while Viru and Gatokae settlers are isolated from these islands by great distances.

Regular harvesting of Hele Islands' island and marine resources by 'users' is by far the greatest threat to Hele Islands' natural resources. Harvesting of turtles and turtle eggs during nesting seasons, nicobar birds (adult & chicks) and eggs during nesting seasons and over-harvesting of sea cucumber has been the growing concern of Hele Islands owners. As Hele Islands is relatively isolated to the settlement areas of the owners, users within close proximity to these islands have easy access to these environments enabling them to have greater advantage of harvesting these resources without the watchful eyes of the owners.

Through joint participation of both the owners and the users within South New Georgia and Gatokae Island by establishing the authority 'Hele Islands Descendants Association' (HIDA), the participating communities can have a say in the management of HICA.

8. The Planning Process.

The leaders of Hele Islands have been working hard to establish the organised entity to be registered as "Hele Islands Descendants Association" (HIDA). With the help of WWF SI, a number of meetings and consultations have been held with the Principle Trustee and the Executive of the Association and they have all agreed to come up with a plan to conserve the entire 8 Islands of Hele so that the descendants of Hele Islands can enjoy the economic benefits that may have derived from their resources.

The Association through the programs and activities organised by the management team of the HICA would see the dreams of the descendants of Hele Islands in conserving the islands for the future benefit of their children.

B. OBJECTIVES OF MANAGEMENT AREAS:

With the establishment of the HICA, HIDA plans to achieve the following management objectives:

Objective 1: To protect, conserve and manage the species and habitats in HICA to help ensure food security for future generations.

Objective 2: To promote the conservation of Hele Islands, including coral reef systems, seagrass and mangrove communities, fish spawning aggregation sites, birds nesting sites and turtle nesting sites in a healthy and productive state.

Objective 3: To encourage and regulate appropriate use, appreciation and enjoyment of the HICA.

Objective 4: To involve stakeholders in planning, establishment and monitoring processes for HICA.

Objective 5: To support livelihoods of Hele Islands Owners by appropriately converting the natural and cultural heritage of these islands into monetary values.

C. MANAGEMENT AREA OPERATION:

1. Management Framework & Guidelines

- *Best Practice Management Model*

The conservation of marine biodiversity and management of human activities to maintain their sustainability are achieved through a number of complementary mechanisms that include marine conservation reserves, fisheries regulations, pollution control and environmental impact assessments of development proposals. In this way, the management of the Hele Islands MPA will employ both specific management strategies and generic strategies to ensure that human activities are carefully managed to meet conservation and sustainable use objectives.

- *Ecological and Social Values*

The conservation of marine biodiversity and the management of human uses are the major objectives of the MPA. These broad objectives need to be defined operationally to be useful in a management context. This is achieved by first identifying the key ecological and social values of the Islands, and then setting management objectives, strategies and targets in relation to these values.

Ecological values are the intrinsic physical, chemical, geological and biological characteristics of an area. For management purposes, the major ecological values are listed individually in this plan. However, in reality, the marine environment of the reserves is a structurally and functionally complex array of relationships between plants and animals interacting with their physical environment.

The ecological values should (where appropriate) include:

- species and communities that have special conservation status;
- key species endemic to the reserve;
- key structural components of the ecosystem (e.g. coral reef);
- exploited species and communities (e.g. targeted fish populations); and
- key physical-chemical components of the ecosystem (e.g. water and sediment quality and geomorphology).

Social values are the major cultural, aesthetic, recreational and economic attributes of the MPA.

- *Management Strategies*

Specific management strategies or actions provide direction on how the management objective/s for each value will be achieved. All strategies outlined in this plan have been defined as high (H), medium (M) or low (L) priority to

provide an indication of their relative importance. The strategies considered to be critical to achieving the long-term objectives of the reserves are designated as key management strategies. A proposed timeline for implementing the management strategies is outlined in Appendix 5. It should be noted that management priorities may alter in response to changes in usage patterns or to new knowledge acquired during the life of the management plan.

- *Performance Measures*

Performance measures are **indicators of management effectiveness** in achieving the MPAs' objectives and targets. Performance measures should be quantitative, representative and, where possible, simple and cost effective.

The management plan usually contains generic performance measures (e.g. often diversity and abundance/biomass). Specific performance indicators will be developed during the design and implementation of monitoring programs. Performance measures for indirect (e.g. nutrient enrichment impacts on corals) and direct (e.g. anchoring impacts on corals) impacts should focus on surrogate (e.g. changes in phytoplankton biomass and species composition) and direct (e.g. changes in coral cover) measures of the value respectively. These will be developed during the early phase of the implementation of the plan. In regard to the active social values (i.e. those social values that have the potential to negatively affect the ecological values of the MPA) the performance assessment approach incorporates information on the status and level of the human activities. This information is important in monitoring human activities to assist in determining trends in use, and in assessing impacts of these social values on the ecological values of the MPA.

- *Management Targets*

Management targets represent the **end points of management**. Targets should be measurable, time bound and expressed spatially. Ecological targets will be set as either the 'natural state' or some acceptable departure from the 'natural state'. Quantitative targets for marine habitats in un-zoned areas of the marine management area will be developed in consultation with stakeholders in the early phase of the management plan's implementation, following additional habitat mapping to more accurately define the extent of habitats. The long-term target provide specific benchmarks to assess the success or otherwise of management actions within the life of the management plan. The short-term target, where identified, provides a rehabilitation milestone and is used when the condition of the value is well below the desired condition (i.e. the long-term target). The targets for active social values (e.g. recreational fishing, commercial fishing, nature-based tourism, water sports, and scientific research) are process-based and are generally stated as "Implementation of management strategies within agreed timeframes". This ensures that strategies for the social values are implemented in accordance with the management objectives.

- *Key Performance Indicators*

Key performance indicators (KPIs) are a **measure of the overall effectiveness** of management in relation to the strategic objectives of the MPAs. KPIs relate specifically to the management targets for key ecological and social values and

reflect the highest conservation (from biodiversity and ecosystem integrity perspectives) and management (social) priorities of the HICA and the community. KPIs are a key element of the audit process. The values of the reserves were prioritized and a risk assessment of the pressures on these values was developed and will be periodically reviewed. The KPIs for the MPAs will be the management targets for water quality, coral reef communities, mangrove communities, turtles and fish.

- *Determining Management Priorities*

Management of the MPA aims to conserve the marine biodiversity, while maintaining opportunities for people to appreciate and enjoy the area, where these activities are compatible with maintaining the MPAs' values. A pro-active and precautionary approach to conserving marine biodiversity is used to determine management priorities. A risk assessment is undertaken by considering the likelihood of existing and potential pressures affecting the ecological and social values and their associated ecological and social consequences.

The relative level of risk posed by existing and/or potential pressures on the values of the MPA can be assessed by considering the following factors:

- The *biological intensity* of the pressure – pressures that impact lower trophic levels (i.e. primary producers such as coral reef communities) are often of greater management concern than pressures on higher trophic levels;
- The *temporal* scale of the pressure – ongoing pressures are generally of greater management concern than pressures that are short-lived;
- The *spatial* scale of the pressure - pressures that occur over a large area are often of greater management concern than localized pressures;
- The *social consequence* – acknowledges that different pressures have different social and political consequences. A high socio-economic/political consequence is often of greater management concern;
- The *probability* of a pressure occurring within the timeframe of the management plan.

The natural attributes and the major uses of the Hele Islands area are relatively well known, but the short-term and long-term cumulative ecological effects of pressures are not fully understood. For the purposes of developing management priorities, pressures on the values are confined to current pressures and pressures likely to occur during the life of the management plan and considered to be manageable within a marine protected area context. By definition, this excludes global pressures such as climate change. The potential impact of these global pressures is, however, considered in the development of the strategies for the management of the Islands. The vision and strategic objectives of the plan provide the longer term (>10 years) direction for management of the reserves.

2. Location and Description of Hele Islands Conservation Area (HICA).

Nestled between the southern barrier islands of Nono Lagoon (South of Marovo Lagoon) and the weather coast of Vangunu Island to the north, Tetepare island to the southwest and Coral Sea to the southeast, is a chain of uninhabited, unspoilt, unhurried and so often a totally forgotten paradise.

Located in the most geological and biological desirable location it has become the home and vibrant breeding grounds to Solomon Island rear island, marine and bird life. Totaling up to 8 islands, these islands are foraged with thick miniature tropical forest, lined with sun soaked golden beaches some bedecked with coconut palms, inspiring the inquisitive minds and beckoning the likes of any visitors who sails or flies into the Western Province. Bordering the Marovo Lagoon complex and the New Georgia Group, Hele Islands gracefully provides a transition point where ocean currents, faunal and floral species meet.

Hele Islands are geologically part of the Marovo Lagoon complex, closely connected with the south-western barrier islets of Nono Lagoon and the interconnecting reef between Nono Lagoon and Tetepare Island. This Nono Lagoon barrier reef system runs eastward, parallel to Vangunu Island's southern weather coast and then southwest-wards towards Tetepare Island. The barrier islands that abruptly turn southwest-wards forming a new geological and biological system and boundary is what makes up the Hele Islands Reef Complex.

The Hele Islands Conservation Area consists of 8 Islands in the following order and starting from Mariu, Kulokulo, Ngirasa, Jave, Tungu, Hasana and Riana which are located off the Southern coast of Vangunu/New Georgia, approximately more twenty to thirty kilometers south from Seghe.

In the north and west of the reserves, the boundaries are congruent with the seaward limit of about thirty nautical miles from the territorial baseline. The remaining boundary has been defined to include the habitats in their entirety, use east-west and north-south boundary lines where possible for ease of enforcement. The boundaries of the MPA and tenure in the Hele islands are shown in Annex 3.

3. Management Rules for HICA.

HICA Management Committee makes the following management rules within the Hele Islands Conservation Area sites. These management rules shall only apply and relevant to HICA Sites. They are in two categories, category 1 – **specific rules** within HICA sites (activities not permitted) and category 2 – refers to **general rules** (allowed with certain restrictions).

i. Category 1: Specific Rules (*activities strictly not permitted*)

To ensure a vibrant and productive island and marine environment on Hele Islands these rules encompass all areas within the Hele Islands reef system. These rules include:

- a). No dynamite fishing ;
- b). No use of natural poisons;
- c). No use of hookah gear for the purpose of fishing;

- d). No turtles and/or turtle eggs are to be harvested at any time;
- e). No dugongs are to be harvested at any time;
- f). No green snail to be harvested at any time;
- g). Respect of national fisheries regulations, including legal sizes for trochus, sea urchin, crayfish and coconut crabs;
- h). Live coral destruction and mining is not permitted;
- i). Removal of sand, gravel or dead coral from Hele Islands is not permitted;
- j). No rubbish to be disposed of in sea (includes plastics and non-Bio-degradable materials, such as batteries, petrol, oil, and fertilizers);
- k). No killing of wildlife, such as birds or possum, for sport or export;
- l). Introduction of exotic species (i.e. Santa Cruz Chicken) is discouraged;
- m). Boats must be closely monitored to prevent disposal of wastes into inshore MPA areas;
- n). No harvesting of nicobar bird at any time;

In addition to these above rules, additional rules and management practices are to be adhered to in each of the two types of MPA.

1.1: Permanent Closures

Rules safeguarding areas demarcated as Permanent MPA are as follows:

- 1) Permanent MPAs (no-take) are established over critical inshore areas such as coral reefs, mangroves, seagrass beds, and spawning aggregation areas
- 2) No resource extraction activities of any kind are permitted in these Permanent MPA sites for either subsistence or cash generation purposes
- 3) Recreation, such as picnicking, can occur provided users abide by Rules established by Hele Islands Conservation Associations Management Committee.

i. Category 2: General Rules (Activities permitted with certain restrictions)

2.1: Multiple-use Closures

The following rules apply in these areas:

- 1) Critical habitats within a multiple use MPA are managed according to HICA guidelines (i.e. reefs, seagrass beds, mangroves)
- 2) Netting and night spear diving for cash purposes is not permitted
- 3) Hand collection of invertebrates and edible seaweed is allowed based on quotas set aside by responsible HICA Resource Management Committee
- 4) Seasonal closures shall be established where appropriate with rules and guideline designed by responsible HICA Resource Management Committee
- 5) Rotational Closures shall be established where appropriate with rules and guidelines designed by responsible HICA Resource Management Committees
- 6) Aquaculture development shall be established where appropriate with rules and guidelines designed by responsible HICA Resource Management Committees
- 7) Hand-line fishing is permitted – but restricted in some areas.

Any changes in the rules shall be considered by the HICA Resource Management Committee.

4. ACCESS TO HELE ISLANDS CONSERVATION AREAS.

All visitors to HICA Sites must notify the officers of the Conservation Area after obtaining access permission from the HICA Management Committee. Within the Conservation area, the authorized officers shall direct the visitors to the appropriate sites after completing all personal formalities and other information.

5. STAFF

Staff and Officers to work for HICA sites would be recruited locally from the qualified personels of Hele Islands Descendants Association (HIDA) Members. The quality and quantity of staffs and conservation officers shall be recruited according to the needs and capacity of the Association.

6. STAFF TRAINING AND DEVELOPMENT.

Relevant and proper training program for facilitators, conservation officers and staff would be put in place. Some members of the Association have been given appropriate training by other tourist establishment especially in the area of scuba diving. This particular training has resulted in some of the members being qualified as dive masters.

However, perhaps there is going to be a need to train enforcements officers to regulate the conservation sites. Other trainings in management skills, accounting and administration would be pursued with relevant training institutions.

7. SITE MANAGEMENT AND AUTHORITY:

(a) Roles & Responsibilities: Hele Islands Descendants Association (HIDA).

The overall management of the HICA is overseen by the **Hele Islands Descendants Association** (HIDA). This association is comprised of the descendants from the original owners of Hele Islands being off-springs of Tetepare people. Each represents the family owners and the principle owner residing in Bareho, Viru Harbor on South New Georgia and Bili, Peava and Kavolavata Village on Gatokae Island,

For the sole responsibility of taking care of Hele Islands environment and its resources, the HICA management committee is responsible for the following:

- (a) To protect, conserve and manage species and habitats with the HICA to ensure food security for future generations;
- (b) To promote the aim to maintain the productive state of the conservation area;
- (c) To manage the conservation area as part of a comprehensive And representative system of locally managed protected conservation areas to contribute to the long-term ecological viability of marine, terrestrial and wildlife systems;
- (d) To monitor and evaluate the status of resources and the effects of the management programme on those resources;
- (e) To encourage and regulate the appropriate use, appreciation And enjoyment of the conservation area;
- (f) To involve and consult with local communities in planning, establishment and monitoring processes for the conservation area;
- (g) To draw up a Management Plan for approval by local communities and the Provincial Executive before its final adoption, and to keep the same under review thereafter (every 2 years);
- (g) To attempt to resolve any disputes or conflicts arising among The participating communities or within the conservation area (seeking redress from the courts if necessary);
- (h) To present a detailed progress report at least once a year to the Provincial Executive.

The Association may also have the authority to issue permits for study and research within the HICA, although this still requires discussion with the Western Province executive committee. A levy system, likely on an honesty basis with local dive shop operators, may also be imposed to ensure revenue generation of the HICA to cover its basic operational costs.

(b) Constitution of Hele Islands Descendants Association (HIDA).

Management of HICA must be governed by policies and guidelines set forth by the constitution of Hele Islands Descendants Association (HIDA).

(c) Garbage, oil and sewage disposal

The HICA Sites should be kept free of garbage, oil and sewage disposal, waste, tins, plastics, bottles and other harmful materials to the marine life. Hele Islands' natural beauty in itself speaks a lot, however, many times boats passing through disposed off rubbish in the ocean which many find themselves washed up on the shores of the Hele Islands.

The disposal of garbage, oil and sewage would be part of the management rules of HICA to control any unnecessary disposal of rubbish within the management sites. Proper guidelines should be drawn to disposal of rubbish. A proper toilet facility should be provided for the visitors.

(d) Control of coastal erosion

Natural disaster can cause erosion and thus inevitably affect the islands shorelines. Due to rough weather, high tide and the pressure from current, shorelines are eroded and sand being washed away. The HICA management committee should put in place a strategy to counteract any effects from such natural disaster.

There is to be no cutting of large old trees and mangroves, and clearing of beach vegetation around all eight islands in the conservation area. HICA management committee should encourage replanting of *naginagi*, kerosene tree along the islands coastline.

(e) Tabu sites

The Hele Islands by communities around the southern coast of New Georgia (Vuru Harbour), Nono Lagoon and South Vangunu are known as sacred islands, hence preventing regular visits; even from the island owning families seldom visit these islands due to this customary affiliation. These islands also possess a lot of *kastom stories* (traditional folklores), reaffirming the traditional ownership of these islands. While all the islands have specific sense of sacredness, the easternmost Island of Mariu is the Island that hosts the bodies of the original owners of these islands, hence regarded as the most sacred island or tabu island. Here lies the bones of their fore-bearers, and as usually encountered the "spirits are very much active and alive".

Thus, the traditional value and tabu sites are present on nearly all islands. However, the Management Committee must put in place appropriate measures to ensure these tabu sites are protected.

8. FINES AND PENALTIES

Fines and penalties are stipulated in the constitution. However, breaking of any rules and regulations contained in this management plan will be subject to a fine of an amount to be decided by the HICA Management Committee in collaboration with the Provincial and National Legislation. The officers appointed by HICA Management Committee are authorised to issue citations to

any one in violation of these management rules, in accordance to the Western Province Fisheries Ordinance and the Association constitution.

Copies of HICA Management Plans and rules with its appropriate maps will be displayed on the sites and in all members/descendants villages' notice boards.

9. RESEARCH AND MONITORING

Developing an understanding of the natural and social environment of the reserves is critical to effective management. Research provides background information on the ecological and social environment and an understanding of what is 'natural' as a benchmark for monitoring programs. As much of this information does not exist at this stage for the MPA, research programs need to focus on establishing the natural state of key ecological values and identifying key processes supporting these values. Research programs should be designed to fill key gaps in current knowledge relevant to management. Licenses under the HICA Regulations may be required to conduct research within the reserves. Specific research strategies are detailed for each ecological and social value (section 9) and scientific research as a value of the reserves is outlined in section 9.2.8.

Monitoring the state of the marine environment is essential to the effective management of the MPA. A monitoring program is a key strategy to allow the early detection of detrimental impacts and thereby provide the trigger for management action to mitigate potential impacts before undesirable changes in the MPA values occur. The detection of human-induced changes requires an understanding of what is 'natural' as a benchmark and this information is provided through strategic research programs. Where changes have occurred and remediation measures have been implemented, a monitoring program should determine the rate of recovery of an affected area. Specific monitoring strategies are detailed for each ecological and social value.

It is encouraged that a proper monitoring and research program should be established to improve our understanding of our flora and fauna, fish, corals, water quality, sea grass and other marine resources. The research and monitoring program of the HICA shall be done in collaboration with the HICA Management Committee. Monitoring of marine invertebrates and other resources can be done at intervals with the appropriate technology to carry out technical data collections of the available resources.

Subject to section 44 (1)-(4) of the Western Province Fisheries Ordinance 2011, researchers not associated with HICA, WP or MFEC are expected to obtain permission from the HICA Management Committee to conduct research in the conservation area, and to obtain permission to conduct research is as follows:

- (1) An application needs to be filed with the HICA Management Committee. This application should be on the official letter head of the sponsoring Organisation;
- (2) Include the purpose of the proposed research, reasons why it is important, how it will benefit the HICA and the surrounding

community, a work plan, and schedules of activities;

- (3) Upon its receipt, the application will be considered at the next meeting of the HICA Management Committee, and if approved must be submitted to the appropriate government and provincial authorities for their approval;
- (4) If the researcher wishes, he may call a special meeting of the Management Committee to consider the application, but the expenses for such meeting will be paid by the researcher;
- (5) Upon the approval by the management committee, all proper documentation and provincial and national permits must be sought and approved.

All reports, raw materials collected during the course of the research, which may result in any of the publications, should be made available to the HICA Management Committee and the Executive of HIDA, with the original copyrights held by Hele Islands Descendants Association (HIDA). Any traditional knowledge obtained by the researchers must be acknowledged and shall remain the property of the Association. All photographs taken within the boundaries of HICA sites should be acknowledged and copies of all photographs should remain with the Association.

Research done and results taken must comply to the principles of the 1992 UN Convention on Biological Diversity (CBD) and the bio-prospecting rules of International Treaties by respecting the Hele Islands Descendants Association peoples' right to consent on the use of resources, its by-products and in benefits sharing. Any profit derived from the use of this knowledge must be returned to HIDA members.

10. COMMUNITY INVOLVEMENT, TRAINING AND DEVELOPMENT.

(a) Development Plans & Options:

Hele Islands Descendants Association (HIDA) shall put in place a Development plan for HICA. The plan shall be for 3-5 years and must indicate all intended activities of HIDA regarding the development of HICA. In the plan there should also be development options which the Association may think appropriate. Together with the plan, a development budget indicating the cost of the activities must also be put in place.

HICA Management Committee must ensure that the development taking place in the conservation area is in line with the Associations objective.

(b) Training Needs:

A community training and awareness program on the issues and lessons learnt from the conservation program as an integral part of human development needs in the community. Community awareness is to be a top priority program to be hosted and organized by HIDA.

(c) Distribution of Economic Benefits

Equal share of economic benefits to owners of eight islands have been emphasized as very important to the co-operation and togetherness of the Association.

11. RELATIONSHIP WITH OTHER STAKEHOLDERS.

The HICA Management Committee through the Association will be responsible for outsiders and other organizations by signing an MOA or an MOU. Through co-operations with other interested organizations, it is expected that the interests, goals and aims of HICA Management Committee be further realized. The Western Provincial Government will be informed of the program activities.

HIDA, the local CBO for Hele Islands' owners would play a major role in facilitating many of the activities. Exchange of information, training and participation in various program activities should be the base of mutual relationship and understanding with other parties.

12. LONG TERM PLANNING AND SUSTAINABILITY.

12.1 Conservation Plans and Business Plans

To ensure a long term sustainability of Hele Islands conservation program, two important strategic documents must be compiled and adhered to: 1) Hele Islands Conservation Plan and 2) Hele Islands Business (Development) Plan. These documents will be the blue-print for field, administration and financial undertakings of Hele Islands Conservation Association. These working documents must have a fixed timeframe, either a 3-Year Planning Program or a 5-Year Planning Program. At the end of the allocated time frame, the documents are reviewed and designed for the next set of timeframe.

12.2 Capacity Building Programs

More targeted capacity building work for the HICA to function independently is required. A good start will be a focus on developing capacities of a general manager and a team of community wardens who will be tasked with enforcing the management plan and with educating subsistence users within the HICA about the sustainable management of marine resources. It is envisioned that these community wardens will report to the HICA management committee and will be employed by the Hele Islands Descendants Association (HIDA). Donor funding may be sought to pay these wages and to provide training, however the long term objective would be for the HIDA to finance the payment of staff through a levy on tourists, or through a budget line from the WP government. Potential support for HIDA through an endowment should also be investigated.

Training programmes must be developed for these community rangers, covering areas of community engagement, negotiation and conflict resolution as well as conservation management and resource monitoring programmes.

12.3 Financing of the HICA

There are several options for the financing of the HICA. The members of the HICA committee have already discussed the possibility of a levy on tourists and divers using the marine environment of the HICA. One option that has already been discussed and seems to be one of the simplest and most straightforward

systems would be for the dive operators to remit this to the HICA on an honesty system. An alternative might be to charge the levy at the airport on visitors arriving to Seghe. There are numerous options available and these required further discussions between WWF Solomon Islands, HICA Management Committee and the WP government. Options for long term financing via an international NGO should also be explored.

12.4 Review of the Management Plan

It is important that this plan has the degree of flexibility to be able to operate and change in the village content but is realistic rigid enough to deliver on the conservation objectives.

Changes will be made, if necessary upon the majority vote of the resource management committee. A review process of this management plan will be done every two (2) years. Ongoing biological and socio-economic monitoring exercise shall also be used to determine the need for change in rules of this management plan.

13. APPROVAL AND ENDORSEMENT OF HICA RESOURCE MANAGEMENT PLAN.

The HICA Resource Management Plan document has been discussed, agreed and accepted by the Executive of Hele Islands Descendants Association and HICA Management Committee in its meeting on

.....2011

We, the undersign confirm our endorsement of the Plan by our signatures:

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.....
Principal Trustee

ANNEX: 1

HELE ISLANDS DESCENDANTS ASSOCIATION (HIDA) **MANAGEMENT SITE**

TERMS OF REFERENCE

HELE ISLANDS CONSERVATION AREAS MANAGEMENT AUTHORITY

The management of the Hele Islands MPA sites is overseen by the Hele Island Descendants Association (HIDA) through its resource management arm, Hele Island Conservation Areas Management Committee (HICA-MC). This management body has been established by the constitution. The management body is comprised of representatives of the Tetepare descendants who settled at Bili village, Kavolavata village and Peava village on Gatokae Island; and the descendants of Tetepare who settled on Bareho village, Viru in South New Georgia, and Bopo village on Vangunu Island.

(i) Role of HICA Management Committee (HICA-MC).

The basic responsibility of the HICA-MC is to supervise the implementation of the management plans and management rules for the HICA Management sites.

The other functions of the HICA-MC are:

- Powers to declare any marine sites of 8 islands of Hele Islands within the customary areas of HICA as management areas;
- Apply periodic restriction on the harvesting of sea resources as it sees fit for the benefit of the community and the resource base;
- Formulate, periodic review of bylaws and rules affecting the sites on short term and for a longer period of time if need be;
- Review the management plan and decide on any changes affecting management rules;
- Enforcement of management rules through appointed Community Conservation Officers;
- To screen and approve all external research applications to conduct research on HICA sites;
- Periodic advise to Hele Islands Descendants Association (HIDA) and the Principle Trustee on the status of HICA sites;
- Recommend training for HICA staff and officers.
- Approve research applications.
- To resolve any disputes or conflicts arising among the participating communities or within the conservation area;
- To present a detailed progress report at least once a year to the appropriate Provincial Executive.

(ii) HICA-MC Membership

The HICA-Management Committee members will be according to the numbers stipulated in the HIDA Constitution.

Apart from the above members, the appropriate Government Organization and NGO would be asked to have a member to sit in the committee.

There are other senior members of the tribe who resided in other parts of Solomon Islands, who by virtue of their membership and status within HICA can be called to attend the meetings. They are eligible to cast vote.

The HICA management committee meets four times a year and more frequently if needed, to make decisions affecting the HICA management sites. These meetings are only for management committee members.

(iii) HICA-MC meetings

The HICA-MC shall meet at least once a quarter or once in three months or four times a year and shall be held in a place appointed. The Hele Islands Management Office is to be the venue of all HICA-MC meetings. A quorum of 50% plus two office bearers is required to conduct any business. In addition an annual general meeting is held in which all members of the public are entitled to attend.

In consultation with the chairman, the Secretary shall call an extra ordinary meeting according to circumstances and should the need arise.

(iv) Term of Office

The term of office of each members of HICA-MC shall be in accordance to the terms provided by the rules of the committee or the constitution. Term of office for members who are not members of the Hele Islands Descendants Association (HIDA) shall be 2 years.

(v) Decision making

Only committee members have the right to vote on management decisions. Should the HICA-MC cannot come to a consensus over a customary issue affecting any of the HICA sites, the matter must be referred to the executive committee for decision. The executive committee will consult the principle trustee on the best option to take to maintain the recognized powers of the principle trustee.

The decisions on management policy, changes in rules and bylaws or matters affecting the HICA sites not of a customary nature, is to be jointly considered by HICA-MC and the executive committee for a solution.

(vi) Resolving Disputes

It is the responsibility of the HICA-MC to resolve any disputes arising from the administration and uses of the Management Area. Any dispute that is trivial in nature and of the ownership rights shall be referred to the Executive Committee or the Principle Trustee.

(vii) Approval of Management Plan

The plan shall be presented to the HICA Executive for comments and then on receiving their endorsement, be presented to the members of the association. On receiving the agreement of the association, it is submitted to the Principle Trustee for endorsement.

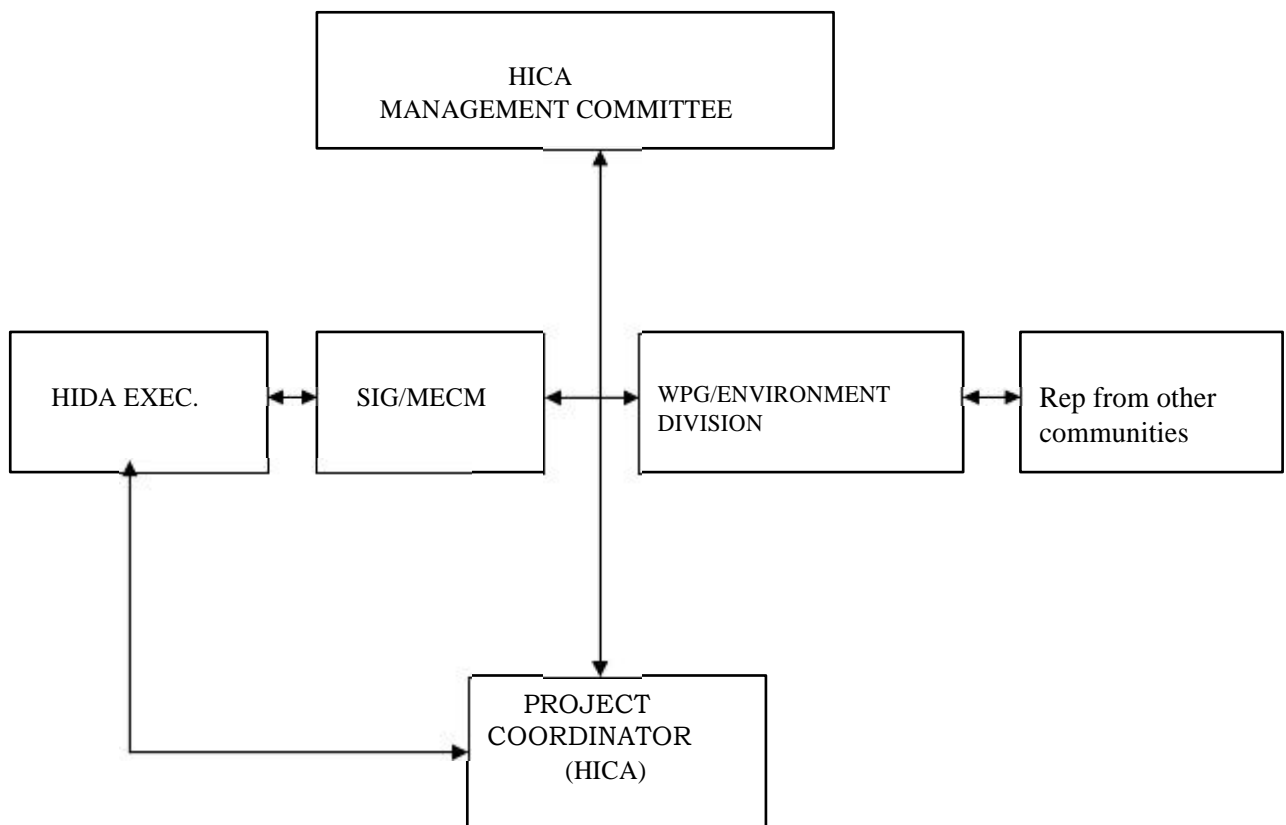
(viii) Payment of allowances/stipends

Appropriate sitting allowances per day would be paid to the members of the committee in any officially duly called meeting. For members residing outside Boboe travelling arrangement would be made for both ways or in the alternative members to pay their own fares and be refunded on production of properly authorized receipts

Daily allowances for HICA-MC members attending meetings would be considered by the Association.

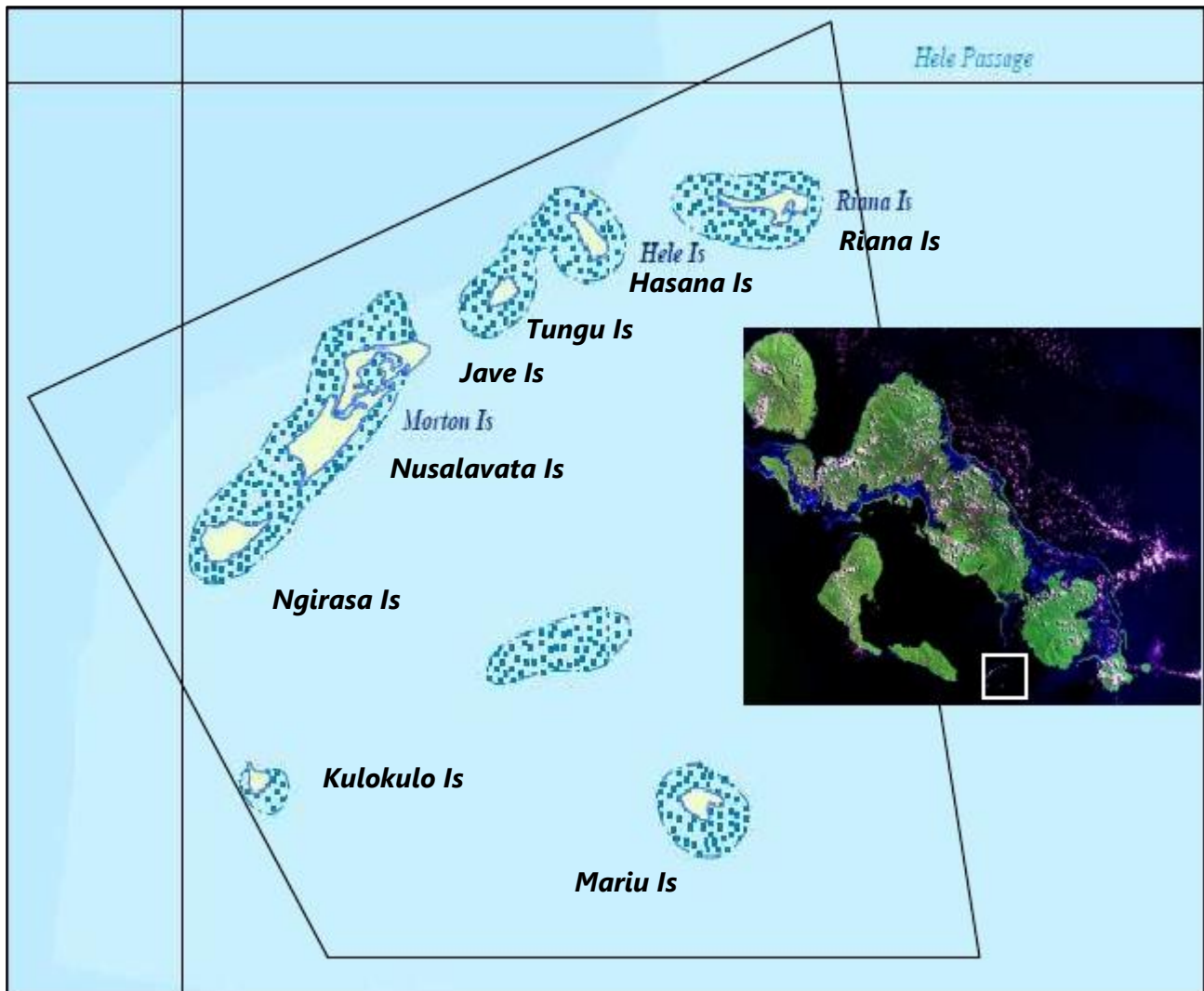
ANNEXE 2:

ORGANISATION STRUCTURE OF HICA MANAGEMENT COMMITTEE



AN N EX E. 3

Map of Hele Islands Marine Protected Area



ANN EXE. 4

Summary of Generic Research Objectives, Strategies and Targets

Management objective/s

1. To obtain an appropriate understanding of the biodiversity and key ecological and social processes within the reserves.
2. To promote ecological and social research in the reserves that improve knowledge *of the reserves and provides the technical basis for management decisions.*

Strategies

1. Develop and progressively implement a coordinated and prioritized research program focusing on key values and processes of the MPA;
2. Develop detailed habitat and wildlife distribution maps for the MPA;
3. Develop and maintain a database of human usage and its impacts in the reserves, and use these data to assess the sustainability of marine-based activities;
4. Gather baseline data for values for which insufficient data exist, so changes in values over time can be assessed;
5. Identify, prioritize and communicate high priority ecological and social research projects relevant to the management of the MPA and consistent with the prioritized research program to appropriate research organizations;
6. Develop and maintain a database of historical and current research in the MPA;
7. Facilitate scientific and social research in the area conducted by research academic and educational institutions;
8. Develop partnerships with stakeholders and the community to implement research programs.

Target

1. Establishment of priority baselines against which change can be measured.
2. Implementation of management strategies within agreed timeframe.

ANN EXE. 5

Summary of Generic Monitoring Objectives, Strategies and Targets

Management objective/s

1. To monitor key ecological values at risk and human usage in the MPA.
2. To promote ecological and social monitoring in the MPA that can detect changes to the ecological values.
3. To provide information that supports management decisions.

Strategies

1. Develop and progressively implement a coordinated and prioritized ecological and social monitoring program for the MPA, including community-based monitoring programs;
2. Monitor change in key values within the MPA against adequate baseline data;
3. Ensure that proponents of development proposals or activities with the potential to impact on the MPAs' values conduct appropriate compliance monitoring programs

Target

Implementation of management strategies within agreed Timeframes.