

# SAIPAN LAGOON USERS EDUCATION PLAN NOVEMBER 2020 Updated with Appendices

Prepared by: Bureau of Environmental and Coastal Quality Division of Coastal Resources Management









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### List of Acronyms

BECQ	Bureau of Environmental and Coastal Quality	
CNMI	Commonwealth of the Northern Mariana Islands	
DCRM	Division of Coastal Resource Management	
DPS-Boating Safety	Department of Public Safety-Boating Safety	
DFW	Division of Fish and Wildlife	
DLNR	Department of Lands and Natural Resources	
MINA	Marianas Islands Nature Alliance	
MPA	Marine Protected Area	
MVA	Marianas Visitors Authority	
NMC	Northern Marianas College	
NMDOA	Northern Marianas Dive Operator's Association	
MSO	marine sports operator	
MSOA	Marine Sports Operator Association	
NAUI	National Association of Underwater Instructors	
NOAA	National Oceanic and Atmospheric Administration	
PADI	Professional Association of Diving Instructors	
PWC	personal watercraft	
SLUEP	Saipan Lagoon Use Education Plan	
SLUMP	Saipan Lagoon Use Management Plan	
SSI	Scuba Schools International	
UN	United Nations	
USCG	US Coast Guard	

### Acknowledgements

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Management, National Oceanic and Atmospheric Administration. This document is intended to be used for free within the public domain. Photo cover is captured by DCRM Enforcement.

### Introduction

The Saipan Lagoon is one of the most valuable resources within the Commonwealth of the Northern Mariana Islands (CNMI). Its waters serve various traditional, recreational, educational, and economic functions for visitors and the people of Saipan. On any given day, one can observe marine sports enthusiasts, fisher folk, and tourists sightseeing throughout the lagoon. In order to effectively manage a resource as vast as the lagoon, the Division of Coastal Resources Management (DCRM) developed the Saipan Lagoon Use Management Plan (SLUMP).

Resource managers of the CNMI have observed a significant increase of threats on lagoon resources. Most of these threats are a result of anthropogenic stressors while few occur naturally. Several of these impacts include water quality degradation attributed to land-based sources of pollution, climatic impacts to coral reefs, and direct impacts to benthic habitat from various activities. In order to effectively manage these impacts as a governmental entity, it is important that DCRM follow a framework for updating its policies and permitting requirements to ensure balance between resource use and conservation.

The implementation of the SLUMP allows DCRM to take the steps necessary to achieve its mission, which is to protect and enhance its coastal resources through effective and adaptive resource management. The SLUMP was developed in response to growing concerns regarding the degradation of the lagoon's ecosystem coupled with the increase in conflicting recreational and commercial uses. The document was originally developed in 1985 and has experienced several updates to adapt to emerging threats. The most recent update to the SLUMP was completed in 2017 and along with the update came a suite of management recommendations based on extensive stakeholder engagement. The full list of recommendations can be accessed on the DCRM website at the following link: <a href="https://dcrm.gov.mp/wp-content/uploads/Final-2017-SLUMP-Update\_wappendices.pdf">https://dcrm.gov.mp/wp-content/uploads/Final-2017-SLUMP-Update\_wappendices.pdf</a>.

This guide was developed in an effort to address Management Recommendation #4, "Develop and implement a unified Lagoon users' education plan." The updated SLUMP emphasized the need for unified messaging for sustainable use of the Saipan Lagoon. Education is a key component of increasing user safety and quality of experience. This provided information is intended to educate users to conduct their activities in a safe and environmentally cautious manner to minimize direct impacts on the lagoon's resources. DCRM solicited stakeholder feedback from the marine sports operators and tour guides.

The rules and regulations cited in this guidebook are enforceable by DCRM, the CNMI Department of Fish and Wildlife, and Department of Public Safety-Boating Safety Division. This was not created to be a legally binding document but rather a condensed version of the rules and regulations with best management practices. The SLUEP is intended to be an educational resource for all marine users and provide valuable content for the MVA and NMC Marine Sports Operator Eco-Certification course. It is the responsibility of all to protect and respect our lagoon and its resources.

Lastly, if you happen to observe a problem or an issue while you are out enjoying the lagoon, please contact DCRM at (670) 664-8300 or download the Reef Report App at the link below: <a href="https://dcrm.gov.mp/resources-publications/tools-and-apps/reef-report/">https://dcrm.gov.mp/resources-publications/tools-and-apps/reef-report/</a>.

### Summary of Stakeholder Engagement

DCRM was able to receive input from members of the marine sports operator and tour guide operator community for the plan at its maximum extent possible. The COVID-19 pandemic prolonged the engagement process and cancelled the initially planned workshop slated for May 2020 at Kanoa Resort. Beginning March, the pandemic significantly impacted tourism globally and locally, forcing marine sports operations on hiatus. With many marine sports operators finding themselves with high time availability, DCRM saw an opportunity to engage with them. DCRM resumed efforts to engage with stakeholders in August 2020 with consideration of social distancing measures. However, the loss of marine sports operators from financial and immigration pressure made achieving ample participants difficult so DCRM lastly proceeded with a workshop.

The first attempt was through the virtual approach. A SLUEP survey was developed in the ArcGIS Survey123 format. MSOs were informed of this engagement by email, the DCRM Facebook page, and the Going Coastal Instagram page. MSOs were given three following ways to provide input: schedule a Google Meets video call or phone call, submit comments via email after reviewing the document posted to our website, or complete our MSO Survey through the ArcGIS Survey123. This effort received an insufficient amount of participants. Thus, DCRM conducted two morning workshops incorporating social distancing measures to gather more participant feedback helpful for the plan and re-engage with marine sports operators and tour guide operators. The workshops were held on November 17 and 18, 2020 at the Kensington Hotel. Attendees were encouraged to take the SLUEP Survey in either physical form or virtual. Then they participated in an activity session that intended to receive more feedback for the plan. They were asked to identify threats/problems to Lagoon resources, barriers to sustainable use, and best practices for their activity. We had 23 participants from the engagement process. Appendix H provides the full results from both approaches in these categories.



FIGURE 1: SLUEP WORKSHOP WAS HELD ON NOVEMBER 17 & 18, 2020

Emerging themes from this engagement process were concerns of coral degradation, need for environmental knowledge through education, need for proper trash and waste management, need for

enforcement, addressing illegal activities, and need for interagency collaboration between government, public, and private sectors.

### REPORTED THREATS/PROBLEMS IDENTIFIED

Stakeholders identified that illegal activity was a pressing issue in the Saipan Lagoon followed by the degradation of coral reefs by users. Table 1 presents responses to the survey question, "What problems did you see at the Saipan Lagoon before COVID-19?" The highest issue identified was illegal activity. "Illegal activity" was not specified in the survey. In some video interviews, unpermitted operators were seen as a problem and that is attributed to their lack of awareness of DCRM rules and regulations since conditions are usually found in permits. Workshop attendees noted that driving on the beach is a persistent issue. Lack of awareness of environmental issues from the general tourism industry has been identified, expanding not only from the MSO community but the tour guide community as well. The diving MSOs, which consist of majority of participants, were concerned about the degradation of coral reefs based on their underwater experiences. Touching and walking on coral occurs at popular beaches. User conflict and crowdedness were also identified as this impacts the safety of in-water users, regardless of whether they were commercial or recreational. A boat captain expressed the difficulty of detecting those who spearfish in navigable waters as boats enter and exit Garapan Fishing Dock. Damage from boats, jet skis, and watersports were identified as well. In the workshop, the need for trash management and bathrooms were hot topics in the engagement session. Other threats identified were water quality issues, such as sunscreen use and city water drainage from the ports. Outside of the commercial sector, apathy and environmental noncompliance of environmental laws from island residents also threaten lagoon resources, which calls for education within this group as well.

What problems did you see at the Saipan Lagoon before COVID-19?	Count
Illegal activity	7
Degradation of coral reef caused by users	6
Conflict for space	3
User coral damage	2
Trash	2
Sunscreen use	1
Other: huge range of dirty drainage water around the port (lower base)	1
Other: Walking on corals	1
Other: same like before	1
I have not seen	1

TABLE 1: PROBLEMS DETECTED AT THE SAIPAN LAGOON DURING OPERATIONS

### FAMILIARITY WITH DCRM AND DPS BOATING SAFETY REGULATIONS

More respondents were familiar with DPS Boating Safety regulations than DCRM regulations. No one was 'extremely familiar' with DCRM Regulations, while 13% felt 'extremely familiar with DPS Boating Safety regulations. 22% of respondents were 'not familiar' with DCRM regulations while 6% were not 'not familiar' with DPS Boating Safety Regulations. This contrast indicates a need for more education on DCRM regulations for marine sports operators and may further support the course. Figure 2 and 3 illustrates level of familiarity amongst the survey participants.

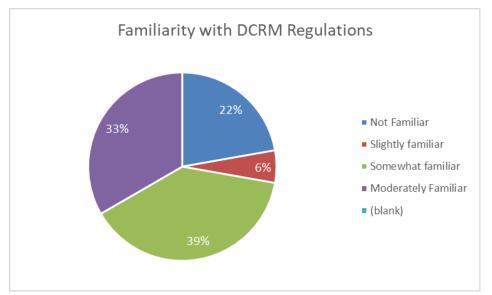


FIGURE **2:** FAMILIARITY WITH DCRM REGULATIONS

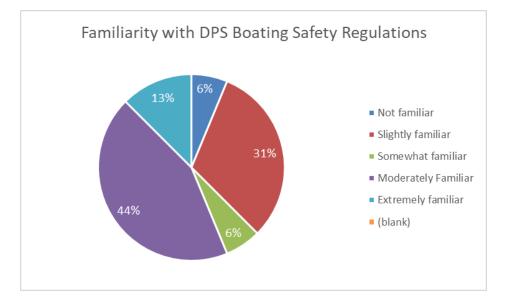


FIGURE **3**: FAMILIARITY WITH DPS BOATING SAFETY REGULATIONS

### WILLINGNESS TO TAKE MSO ECO-CERTIFICATION COURSE

With 56% expressing willingness to take the MSO Eco-Certification Course, there appears to be fair support for the Eco-Certification Course. The remaining 44% were uncertain, likely due to inactivity of their operations by COVID-19 and lack of funding available to pursue the course. Figure 4 shows the survey results regarding willingness to participate in the MSO Eco-Certification Course.

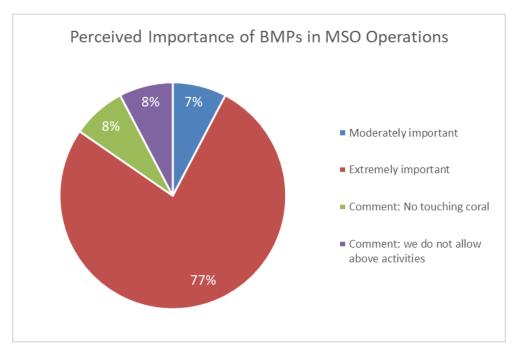


FIGURE 4: WILLINGNESS TO TAKE MSO ECO-CERTIFICATION COURSE

### BARRIERS, BEST PRACTICES, AND FEEDBACK FOR DCRM

Based on survey results shown in Figure 5, over 77% respondents saw best management practices as "Moderately" or "Extremely important" to their marine sports operations. It is important to note that the workshop provided an avenue for MSOs to voice their concerns and provide feedback on how DCRM and MVA can promote sustainable use that would be helpful to their operations. The participating non-motorized permitted MSOs, whom of many are divers, provided best practices – such as no feeding and handling of marine life and anchoring at designated areas – were already provided in the plan. These respondents were fairly supportive of education and suggested for more learning opportunities and outreach to emphasize and explain why these best practices are important to marine life. The biggest take way from their engagement is the need for widespread awareness of these practices within the tour guide and marine sports operator community with support and collaboration of government, community, private sector agencies. Ways to address awareness are more signage in strategic locations with appropriate language translations, education from tour guides to customers, informational brochures and materials at key places such as hotels and airport for tourists to keep or read. Lack of clarity on regulations may be addressed by signage at the sites. As previously mentioned,

environmental education should also expand to the local population with DOs and DON'Ts, likely through online platforms and Facebook pages. One concern that may be addressed is the implementation of public bathroom facilities and solid waste receptacles in regards to poor water quality at sites. Increased enforcement in surveilling these sites and addressing unwanted environment-damaging activity are important to increasing situational awareness and behavioral change within commercial site users. Grant opportunities may fund these outreach projects.





Motorized operators were less responsive in providing best practices. With the loss of revenue forcing them into survival mode, motorized operators' concerns were outside of environmental and safety needs. They could not afford the expenses of their operations, yet majority of them renewed to retain their DCRM permit. They explained the challenges of paying extra fees to avail of the DCRM permit along with the docking and transfer fees to maintain their business. One of the biggest concerns expressed in the workshop from this group is the need for designated mooring buoy sites since the closure of the outer cove marina. Potential for environmental violations, such as docking at sandy shoreline and boat traffic, may arise when tourism picks up until the outer cove is fixed. Another concern was how daily removal of jet ski courses disturbs sea grass and sandy bottoms. According to current DCRM permit conditions, jet ski course markings are required to be removed daily. Semi-permanent to permanent markers were encouraged as they were viewed to be less damaging.

# Importance of Saipan Lagoon Resources

The Saipan Lagoon is important for conducting marine sports businesses, so the quality of the marine resources, the beautiful coral reefs, crystal blue waters, and the marine life enhance the experience for the guests. Marine Sports Operators and their clients are responsible for maintaining and improving the quality of these resources. This plan further states how to conduct these best practices, but it is also important to know why. This quick fact sheet with resources briefly touches on the importance of these resources.

Corals and Coral Reefs	Marine Animals and Habitats	Water Quality
<ul> <li>256 species of coral found in the CNMI (~32% known in the world) (Micronesia Challenge)</li> <li>Corals are living animals that generate \$104.5 million every year in economic value to the CNMI. Tourism, compared to other ecosystem services, like fishing, highly benefit from coral and seagrass (Value of Ecosystem Services from Coral Reef and Seagrass Habitats in CNMI)</li> <li>Healthy coral provides food for our communities, supports marine biodiversity, protects our shoreline, and beautifies the ocean ecosystem.</li> <li>Globally, corals are threatened by climate change effects, such as bleaching and ocean acidification. Locally, they are impacted by overfishing, pollution, and physical damage by users. So it is important we care and treasure these creatures.</li> </ul>	<ul> <li>Marine animals – such as fish, crabs, lobsters, sea turtles – need a healthy ocean to thrive.</li> <li>Every marine animal has an important role in its ecosystem.</li> <li>Marine habitats – like seagrass and coral reefs – provide shelter and food for marine animals.</li> <li>Marine Protected Areas (see pg 10-11) are places with restrictions to protect and allow marine animal populations to grow so taking is not allowed there.</li> <li>Endangered marine animals are protected by US federal law. The sea turtle is a notable endangered animal. Keep a distance from one when you can and if you see anyone poaching a turtle, contact DLNR.</li> <li>Crown of Thorns are starfish that naturally migrate to the islands but may overeat corals. If you see Crown of Thorns in the water, please report to DCRM.</li> </ul>	<ul> <li>Saipan's waters receive pollution from in-water and further upland use. Usually water quality at beaches are bad after a rainfall event.</li> <li>BECQ conducts water quality testing to see if specific beaches are deemed "fishable and swimmable."</li> <li>Water quality signs are posted at majority beaches. A red flag means that it may be unsafe to swim or fish in this area within 300 ft (~91 m) of the posted signs for 48 hours, while a green flag means that it is safe. They are also found on the BECQ FB and Instagram pages, local news, and DEQ website.</li> <li>Marine water quality can affect the health of all life swimming and using the waters.</li> <li>Oil spillage from boats, defecation from users, sunscreen not safe for coral, and trash are threats to water quality.</li> </ul>

# "It's clear that the tourism industry depends on coral reefs. But now, more than ever, coral reefs are depending on the tourism industry."

Dr. Robert Brumbaugh, Director of Ocean Planning & Protection, The Nature Conservancy

# **Executive Summary: Quick Do's and Don'ts**

# All Sites

- Debrief customers on the site, noticing weather conditions and highlighting important environmental and safety practices.
- Wear sun protective clothing, such as long sleeves and hats, as much as possible to prevent need for sunscreen.
- If you were to use sunscreen, choose reef-safe products. (See page 36 for information on reef safe sunscreen.)
- Respect marine life and do not disturb the environment.
- Avoid stirring up sediment by keeping your distance from the ocean bottom.
- Do not touch coral and other living organisms and only touch ground when absolutely necessary. Sandy ground is okay. Do not step on the coral or walk on the reef. These activities physically damage coral and spreads coral disease.
- The take of coral and sand are not allowed. These break down into needed sand for the shoreline.
- Do not disturb any existing beach strand vegetation along the shorelines. Beach strand vegetation keep sand in place and prevents erosion.
- Do not litter. Avoid leaving any objects or personal items in the water or at the beach. Take your trash and everything you brought with you to avoid ocean pollution. Leave nothing but footprints.
- If possible, avoid urinating and defecating in the water.
- Do not park or drive vehicles on the beach area at any time. "Beach area" means those areas of unconsolidated deposits along the shore with their seaward boundary being at the low water mark or reef flat platform level extending in landward direction not less than 150 feet. [9 CMC § 5807 (b)]
- Do not participate in water sports activities while under the influence of alcohol, drugs, and other intoxicants.



FIGURE 6: DO NOT STEP ON CORAL BECAUSE IT WILL BE DAMAGED. PHOTO CREDIT: IYOR 2018

# All Marine Protected Areas

• Marine Protected Areas, or MPA, is defined as areas where you cannot take anything at all including fish, clams, octopus, other invertebrates, sand and shells. According to CNMI Public

Law 2-51, MPAs were established for fish and other marine life to produce higher populations that will drift into fished areas.

 Mañagaha Marine Conservation Area falls within the Saipan Lagoon. Like other MPAs, Mañagaha, has rules enforced and regulated by the Division of Fish and Wildlife (DFW). The island is also home to the protected wedge-tail shearwater birds nesting on the eastern coast of Mañagaha island. There are sections in this area where visitors are not allowed to enter. When you see a yellow chained fence and a sign shown in Figure 7, do not trespass. There are nests containing protected baby birds.



FIGURE 7: SHEARWATER BIRD NESTING SITE WARNING SIGN AT MAÑAGAHA

**PHOTO CREDIT: JAN IN SAIPAN** 

• CNMI Marine Protected Areas Interactive Map: https://becq-

dcrm.opendata.arcgis.com/app/cnmi-marineprotected-areas-web-app

- Follow the rules shown in *Figure 8*.
- Refer to DFW's Brochure on MPAs:

http://cnmicoralreef.com/uploads/cn mi/Images%20and%20documents%20f or%20individual%20pages/MPA%20br ochure%20Britta.pdf



FIGURE 8: MARINE PROTECTED AREA RULES TAKEN FROM THE DFW BROCHURE

# **Outside of the Lagoon Site Specific Practices**

# Grotto

- Only those that will be entering the water are allowed to cross over to the rock.
- The safe maximum number of people allowed at any given time on the rock is 17.
- The safe maximum number of snorkelers in the water is 29. Safe maximum number of divers is 20.
- If the Grotto is at full capacity, then the next group of divers or snorkelers must wait in line until there is enough space. The safe maximum number of people at the stairs is 24.<sup>1</sup>
- Dives must not exceed 50 minutes.
- Instructions shall be given to customers in the parking lot, prior to traversing down the steps.
- Discover dives shall not be allowed due to safety hazards. All divers must, at the very least, be Open Water certified.
- Once a dive is completed, the guide must escort his or her group off the rock so that the next group can begin their dive. The rock shall be kept as clear as possible.

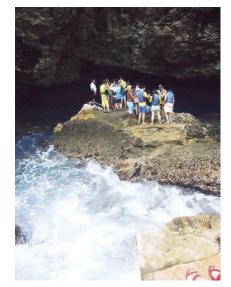


FIGURE 9: GROTTO CONDITIONS MAY BE UNSAFE FOR THOSE CROSSING TO THE ROCK.

# PHOTO CREDIT: FERDIE DE LA TORRE

- If there is a high surf advisory out, it shall be the decision of the security attendant, DLNR staff, and the lifeguard to determine if it is safe for tourists to enter.
- Do not defecate or urinate in the water. The waters in Grotto do not fully flush out into the ocean so what enters in the water likely remains.

# Laolao Bay

- Laolao Bay is a 'site-specific' MPA where sea cucumbers are protected by the law.
- Do not harass or harvest sea cucumbers.
- When entering into deeper waters, go with a guide or buddy.
- Please stay on the dive path, marked with buoys, to enter and exit.
- No motorized activities are permitted.

# **Obyan Beach**

- When entering into deeper waters, go with a guide or buddy.
- There is a strong rip current just beyond the reef flat, be mindful of the currents and if in doubt, do not go out. Refer to Appendix A for rip tide info.
- Please stay on the dive path, marked with buoys, to enter and exit.
- No motorized activities are permitted.

<sup>&</sup>lt;sup>1</sup> Safe capacity numbers were only recommended for safe and environmentally-sound use of Grotto based on a study by Yuknavage in 2015. Capacity numbers are not currently regulated or enforced.

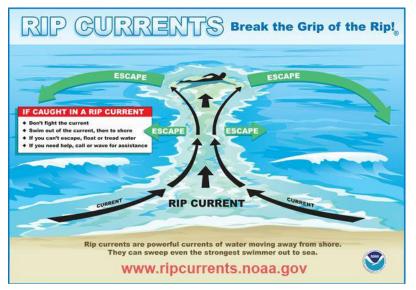


FIGURE 10: RIP CURRENTS INFOGRAPHIC. SEE APPENDIX A. PHOTO CREDIT: NOAA

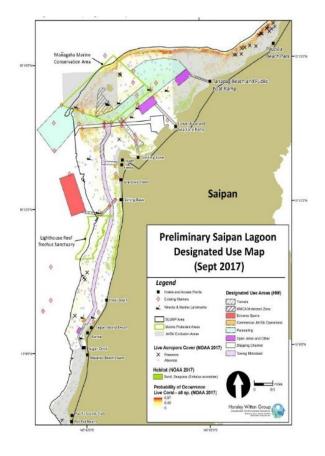
### **Sugar Dock**

- There is a strong rip current just beyond the reef flat, be mindful of the currents. When in doubt, do not go out.
- For divers, pair up with a buddy or stay close to the group and practice good buoyancy.

• For free divers, make sure you are with a buddy or group at all times.

### **User Maps**

The following maps are a product of several spatial planning workshops that DCRM hosted for marine sports operator community and other lagoon users (March 2018). Present at the workshop were local nonprofit organizations, recreational fishermen, marine sports operators, and partner government agencies.



At the workshop, DCRM staff asked a specific set of questions in order to provide structure to the conversations. The questions asked ranged from the preliminary use maps developed by the HWG team:

- Do you agree with the SLUMP Preliminary Use Maps? (as provided in the 2017 update)

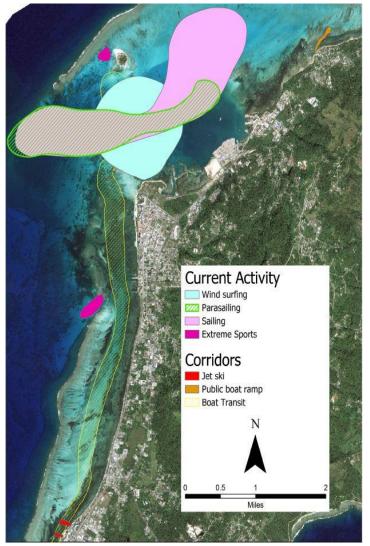


FIGURE 11: MAP DEPICTING CURRENT USER TRENDS.

TAKEN FROM THE SLUMP.

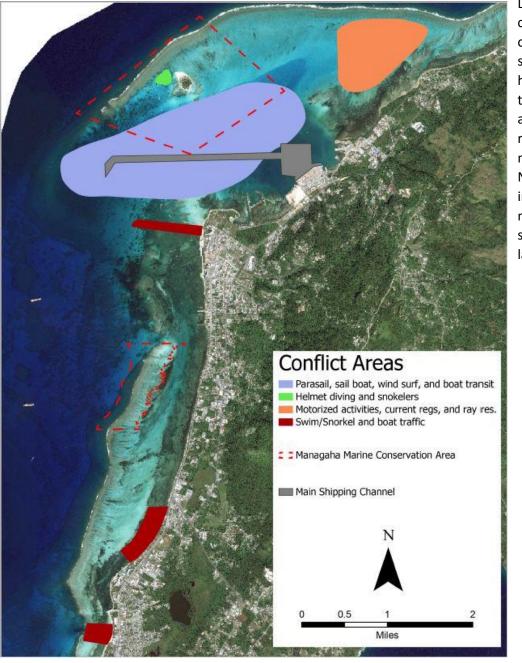
Where do you currently operate?

- Are you open to operating beyond the lagoon?

- Are you aware of special management areas within the lagoon (Marine Protected Areas, or MPAs, no-wake zone, etc.)?

Based on these survey questions, DCRM was able to develop the map shown in *Figure 11*.

Not surprisingly, the area with the highest number of user conflicts is the area surrounding Mañagaha, as seen in *Figure 12*. The area is highly congested as this is where large ferries shuttle tourists, sunset cruises operate, and an overwhelming majority of parasailing operators conduct their activities. The commercial shipping lane runs directly through this area.



Despite numerous competing activities occurring within such a small area, we have been fortunate that no recent major accidents were reported within the management area. Nonetheless, it is important to keep in mind the maritime safety rules and laws.

FIGURE 12: MAP DEPICTING AREAS WITHIN THE LAGOON WITH THE HIGHEST USER CONFLICT.

TAKEN FROM THE SLUMP.

### Health and Safety

The goals of this document are to reduce user conflict within the Saipan Lagoon and minimize direct impacts to its resources. The rules listed below are extracted from DPS-Boating Safety Regulations (NMIAC 150-20) and emphasize motorized vessel operator and swimmer safety within the lagoon.

### **Nearshore Operation**

No person shall operate a motorboat, aqua-plane, or watercraft of any description at a speed greater than five miles per hour within 200 yards (~183 m) of the shore. No person shall operate a motorboat towing a person on water skis, surfboard, or similar within 200 yards (~183 m) of the shore.

#### **Operation near swim zones**

- No person shall operate a watercraft or vessel of any description within a swimming zone.

#### **Operation Near Diving Flags**

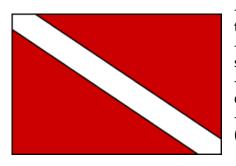


FIGURE **13:** DIVE FLAG SYMBOL PHOTO CREDIT: GOOGLE IMAGES Skin and scuba divers diving near any boating area are advised to display a dive flag so that it can be seen by boat operators.
Operator of a motorboat or any watercraft with a motor shall stay keep a distance of 100 ft (30.5 m) of any dive flag.
A dive flag is described as a red or orange flag with a white diagonal stripe from the top left corner to the lower right corner.
Distance of boats from the dive flag or in-water divers is 100 ft (30.5 m).

### **Operation of Motorboat near Other Water Activities**



FIGURE 14: MOTORIZED ACTIVITIES WITHIN THE SAIPAN LAGOON REQUIRE PRACTICING THE RULES OF THE ROAD FOR SAFE NAVIGATION.

PHOTO CREDIT: DCRM ENFORCEMENT

Strictly launch water boats from designated launching sites. The use of other beach sites as launching sites are prohibited. An operator of a motorboat or any type of watercraft with a propeller in the water shall stay reasonably clear of any sailboat, sailboard, or other vessel not propelled by a motor. Avoid collision by practicing the Rules of the Road. Stop the engine if you are in close proximity to a swimmer to prevent any unwanted injury or death.

### **Designation of Swimming Zones**

Swimming zones shall be established and marked in consultation with Division of Coastal Resources Management, Department of Public Safety-Division of Boating Safety, Marianas Visitors Authority, and adjacent land owners in the following areas:

- Kensington Hotel
- Aqua Resort Club
- Hyatt
- Fiesta Resort
- World Resort
- Kanoa Resort
- Pacific Islands Club
- South and West portions of Mañagaha

Seagrass trimming is only allowed by permitted project but only at 50% or below of the swimming area. Prior to this proposed seagrass reduction, the project must document the current composition of seagrass habitat. Thus, Lagoon users are not allowed to remove seagrass.



FIGURE 15: SWIMMING ZONES, LIKE THIS MARKED ONE IN MAÑAGAHA, INTENDS TO INCREASE SAFETY OF SWIMMERS AND SNORKELERS WHILE REDUCING IMPACT ON THE CORALS.

PHOTO CREDIT: DCRM ENFORCEMENT

### **Regulatory Context**

Activities conducted within the management area are permitted primarily through the marine sports operator (MSO) program administered by DCRM. The agency permits motorized and motorized marine sports activities. Banana boat, waterski/wakeboarding/kneeboarding, paragliding, chartering, sailing (with motor), jet ski, WaveRunner, SeaDoo Watercraft, Jet Boarding/Jet Surfing, Jet Ski Accessory use, Flyboard/Hoverboard, Motorized Kiteboarding, and Parasailing are identified motorized marine sports. SCUBA diving, diving, snorkeling, Aqua-cycle Water Trikes, Rowing/sculling, kayaking, snorkeling/swimming, standup paddleboarding, windsurfing/non-motorized kiteboarding, float tubes (not towed), and cliff diving are identified non-motorized marine sports. Special operation conditions are placed in to minimize the risk of negative impacts to coastal resources. In order to address the rapidly increasing number of uses, DCRM enacted a moratorium on new motorized marine sports operations. No new motorized permits shall be issued to prospective MSOs until SLUMP recommendations are met to better evaluate the capacity of the lagoon for the accommodation of additional users.

Additionally, the Marianas Visitor's Authority initiated a tour guide certification program, as mandated by CNMI Public Law 18-58, as a way to increase the quality, and not quantity of tour operators in the CNMI. The objective of this program is to develop qualified tour guides that have a clear understanding of their roles and responsibilities to promote the historical significance and environmental awareness of the CNMI.

# MOTORIZED AND NON-MOTORIZED MARINE SPORTS MANDATORY PERMIT CONDITIONS

Pursuant to Coastal Resources Management Rules and Regulations NMIAC § 15-10-610(a-d)

DCRM has the right to conduct random compliance inspections

All MSO permits shall expire on May 30th of each year

DCRM coastal permits are only valid if in compliance with other CNMI Regulatory Agencies

The permit holder shall be required to notify DCRM within five (5) days of any changes to the permitted activity

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 @GoingCoastal\_CNMI
 www.dcrm.gov.mp
 (670) 664-8300



FIGURE 16: MOTORIZED AND NON-MOTORIZED MARINE SPORTS MANDATORY PERMIT CONDITIONS. CREDIT: DCRM ENFORCEMENT

Source:

DCRM Rules and Regulations 15-10 and Jet Ski Rules and Regulations and 15-20 MVA Tour Guide Certification PL 18-58

## **General Provisions**

The following conditions are standard in all DCRM MSO permits:

- Minimize impacts of onshore activities upon wildlife, marine, and aesthetic resources.
- Do not take sand or gravel from the beach or nearshore areas.
- Do not disturb or remove beach vegetation as they help attenuate the effects of coastal erosion.
- Do not drive on the beach.
- Maintain a safe distance from live coral colonies. (25 ft or 10 m)
- Ensure effective hazardous materials handling.
- Report or remove hazardous debris on beaches and along coastal areas whenever possible.
- Do not refuel in-water.
- Utilize effective spill prevention kits to prevent oil spills and efficient clean-up when necessary.
- Use bilge socks or other absorbent devices to minimize the amount of fuel and oil from boat bilges and other vessel activities from entering the water.
- Always follow Department of Public Safety (DPS) Boating Safety and United States Coast Guard (USCG) rules.
- Boats and jet-skis shall be launched at approved docking areas.
- Do not walk on the reef.



FIGURE 17: DRIVING ON THE BEACHES DISTURB THE NATURAL SHORELINE HABITAT, WHERE SEA TURTLES POTENTIALLY REST.

### **CREDIT: DCRM SHORELINE MONITORING TEAM**

## IS MY OPERATION MARINE SP 1: IN COMPLIANCE?

### NON-MOTORIZED "SCUBA DIVING" STANDARD CONDITIONS

#### The goal of the Coastal Resource Management is to avoid impacts to the Commonwealth's coastal resources. Here are some steps you can take to make sure you are in compliance:



Everyone in the company should know their permit conditions.



Keep DCRM MSO cards during activities.







Do not throw trash in the waters.



Brief all customers on

best practices.

Do not disturb shoreline

vegetation.



Let DCRM know of changes to your contact information.

Keep project site clean at

all times.

Keep your permits updated.







No driving or parking on the beach.



Scan this code to visit DCRM's website for more



FIGURE 18: MARINE SPORT OPERATION COMPLIANCE STEPS. CREDIT: DCRM ENFORCEMENT

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Manage all necessary permits.

Inform everyone of insurance policy before

any operations.

No in-water fueling or

repairs.

# **Motorized Activities**

# Leaving the Dock

Prior to departure from the dock, it would be diligent to run through the checklist below:

- Observe the conditions of your vessel.
- Ensure that there is no oil in the bilge.
- Observe the weather conditions. Refer to Appendix B for weather resources.
- Ensure that the boat crew and divers are familiar with emergency procedures and underwater emergency precautions.
- Review your boat checklist (safety equipment).

# While on the boat

- Be mindful of the ocean's conditions.
- Check daily weather advisories.
- Always keep in mind the depth and substrate.
- Always keep lookout for non-motorized users, especially around the channels.
- Shut off the engines when the boat is close proximity to swimmers or persons in the water. Keep those in the water on the operator's side of boat always in view. These actions can prevent the blades from injury or death of persons in the water.
- Captain must abide to the Coast Guard's Rules of the Road. (See Appendix C).

# Approaching Mooring/ Dive Sites

- Approach mooring/ dive area with minimum speed to maintain steering.
- Stay 10 meters away from any bubbles. Maintain positive visual contact on divers to ensure that they are not surfacing.
- Choose an alternative dive site if there are more than two boats on the mooring.
- When moored, it is required that all boat captains and required crew remain onboard at all times during snorkeling or diving activities. Never leave a vessel unattended.
- Approach the mooring with your lead rope ready to pass through the mooring rope.
- Larger vessels should use longer lead ropes.
- Check on the length of the drop line and weighted line periodically. Do not let them break any corals or rest on the ocean floor.
- If, by accident or otherwise, your boat causes the mooring to be unusable or damaged, it is your responsibility to either fix the rope/ mooring or notify relevant agencies and make arrangements to have it repaired.
- Do not fish in dive sites, and treat all dive sites as sanctuaries.
- Under no circumstances shall a dive boat moor by stern, all mooring should be from the bow lines.

# Anchoring

Your ground tackle should be appropriate for the size of your boat and the substrate you are anchoring on:

- A Danforth anchor is the most appropriate for sandy areas.
- Be wary of the conditions before deciding on a location to drop anchor.
  - After a safe anchorage is selected, use a diver to position the anchor so as to minimize its impact. DCRM recognizes that some impacts may occur. All efforts should be made to anchor at a sandy bottom. Avoid anchoring on the coral reef.
- Do not disturb other boats or divers and keep a distance of 10 meters from bubbles.
- When weighing the anchor, use diver assistance if necessary to unhook or unwrap the chain. Never tie off the anchor line and use the boat's engine to pull the anchor free. This will severely disturb the rocks and corals around it.



FIGURE 19 DANFORTH ANCHORS ARE EXPECTED FOR SANDY BOTTOMS, AWAY FROM CORALS.

PHOTO CREDIT: SALTSTRONG.COM AND BOATING GEEKS.COM

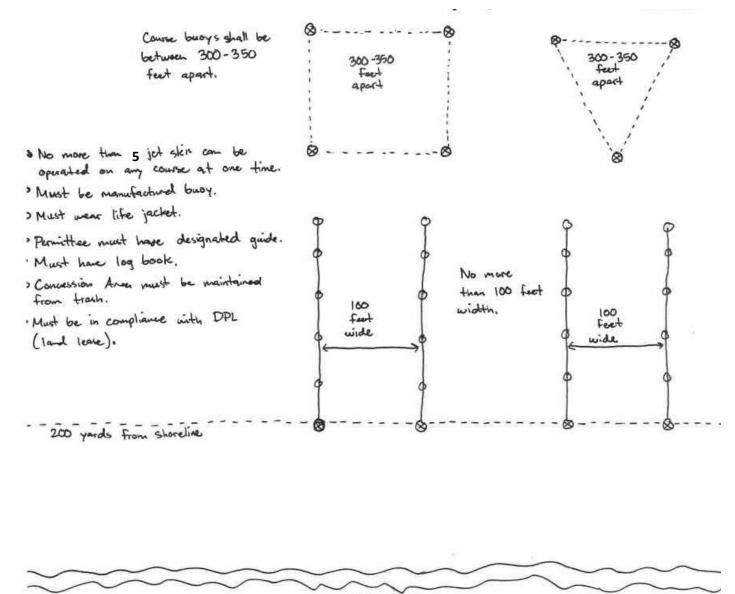
### **Emergency Contact**

In cases of immediate danger to life or property, call the Coast Guard on Channel 16 VHF-FM or dial 911 for DPS Boating Safety.

## **DCRM Permit Requirements**

- Operator must provide customers with brochures written in Chinese, Korean, and Japanese.
- Personal Water Craft shall not be operated by anyone younger than 16 years old.
- Operator and passenger must wear a life-jacket.
- A guide must be present whenever there are customers operating a jet ski.
- Proper fueling procedures must be followed at all times. They are as follows:
  - Hazardous materials (fuel, oil, cleaning agents) shall not be stored at the concession area and within the vessel. Emergency fuel in a sealed container is exempted.
  - o A spill containment kit shall be available at all times.
  - Refueling shall take place at least 75 feet (~23 m) away from the shoreline inland or on an impervious surface. Do not refuel in the water.
  - Jet skis must be maintained and in good condition. Inspection for any gas, oil, or hydraulic leaks shall be conducted prior to each use.
  - There shall never be more than five jet skis, including the guide, in operation at a designated course.
  - Permittee must mark a jet ski course with floating buoys at least 12 inches in diameter.
    - Course shall not be located within 200 yards (~183 m) of the shoreline.
    - Permittee's course shall not interfere with the transit corridor or other lagoon traffic.
    - Non-motorized vessels have the right-of-way.
    - Course buoys must be between 300-350 feet (~92 106 m) apart.
    - Customers shall not deviate from the marked course.
    - No permanent buoys or moorings of any type shall be placed in the lagoon.
    - Personal Water Craft shall not exceed 5 mph within 200 yards (~183 m) of the shoreline.





(Mean High Water Mark)

FIGURE 21: HANDWRITTEN DIAGRAM OF PERMIT REQUIREMENTS

PHOTO CREDIT: DCRM ENFORCEMENT

### **Best Practices per Specified Activity**

The conditions listed below are specific to the corresponding activity.

## Parasailing

The boat captain is responsible for every detail of his/her boat in operation.

- Only two boats per company may operate during regular business hours.
- Parasailing activities shall not interfere with existing shipping lanes or general boating safety within the lagoon and harbor.
- Only 10 operators are allowed within lagoon at a given time.
- Maintain your parasail equipment such as the tow rope and the canopy.
- Inform all the risks to your customers before the activity.
- Maintain a safe distance from the shoreline.

### Jet-Ski (Personal Watercraft or PWC)

- Hours of operation 8AM- 6 PM
- Jet Ski Launch Locations
  - Sugar Dock
  - Garapan Fishing Base



- Lower Base (DFW Boat Ramp)
- Smiling Cove Marina

## Jet Ski Exclusion Zones

- North Lagoon: Punta Flores and extending north.
- South Lagoon: The entire lagoon south of Sugar Dock and extending west.
- Micro Beach: 200 yds (~183 m) seaward from mean low water line from the northern end of the Fiesta Resort
- Grandvrio Hotel Beach: area extending 200 yds (~183 m) seaward from drainage at Carolinian Utt to southern edge of Fiesta Resort
- Kanoa and World Resort: area extending 200 yds (~183 m) seaward from Kanoa to World Resort. Swim zones of each hotel.
- Mañagaha.
- Susupe Lake.

See Appendix D for a larger map.

FIGURE 22: MAP OF JET SKI EXCLUSION ZONES OUTLINED IN DIFFERENT COLORS

### **PHOTO CREDIT: DCRM ENFORCEMENT**

### Jet-O-Vator

A new type of activity has risen recently in popularity involving an apparatus attached to a jet ski which propels the user. The user is strapped to the apparatus, and propelled skyward utilizing the jet stream created by the watercraft. This activity is required to operate within a designated area with the following conditions:



FIGURE 23: JET-O-VATOR IS A NEW ACTIVITY THAT SHOULD BE ONLY DONE IN AT DESIGNATED PART OF THE SAIPAN LAGOON.

### PHOTO CREDIT: DCRM ENFORCEMENT

• Current operations are limited to the area permitted approximately one-mile south of the *Trochus niloticus* sanctuary on the Garapan reef.

• Cease operations if there are marine mammals or other protected marine animals are present within 25 yds (~23 m) of the operations area. Marine animals include the hammerhead and white tip sharks and giant manta rays.

• Operator shall provide an existing trash bin and ensure that trash generated by clientele are properly disposed.

• Operator shall retain issued DCRM operations cards on their person at all times during operations. MSO cards apply to all commercial DCRM permitted watersports.

• All motorized watersports operations

shall be performed in such a manner as to prevent disruption of marine communities in the project activity areas.

- No more than five maximum personal watercrafts OR two boats are allowed to operate at same time on a designated course.
- Activities that produce wake are prohibited within 200 yds (~183 m) of the shoreline.

### **Banana Boat**

- Banana boating must not interfere with existing shipping lanes or general boating safety within the lagoon and harbor.
- Flipping is not allowed.

### Water-Ski / Wake Board

- Permittee shall mark a course for their operation. The markers shall be clearly identified by floating buoys that are at least 12 inches (~31 cm) in diameter.
- User must remain within the marked course.
- Operations shall not interfere with existing shipping lanes or general boating safety within the lagoon and harbor.
  - Activities must take place in an area with a sandy bottom and maintain a distance of at least 10 feet (~3 m) from any coral.

### **Non-Motorized Operations**



FIGURE 24: FOR SCUBA DIVING, DIVE MASTERS MUST INFORM THEIR CUSTOMERS OF GOOD ENVIRONMENTAL PRACTICES.

PHOTO CREDIT: DCRM CORAL REEF INITIATIVE

### **General provisions**

- Boats are required to stand-by their snorkelers at alltimes.
- Dive certification card is required before participating in any SCUBA open water activity.
- Always confirm your customers' skill level. Perform skill refresher activities prior to each activity.
- Be mindful of the ocean conditions. Use observations and resources (APPENDIX B) to help determine it would be safe to go in the water or not.
- Secure your equipment to prevent any snagging or dragging on corals.
- Do not stir up sediment from the ocean bottom.
- Do not harass, handle, chase, ride, or feed any marine animal.
- Permittee shall provide customers with tips on good environmental practices such as:
  - Do not touch, hold, or break any coral, shells, or marine life; whether dead or alive.
  - Be mindful of your buoyancy and take precaution that your body and dive equipment does not touch any coral or marine life.
  - Do not touch, collect, or remove shells, corals, or any marine life whether dead or alive.
  - Do not feed fish or any marine life.
  - Manage your trash responsibly.





FIGURE 25: MARINE ANIMALS, LIKE THE GREEN SEA TURTLE AND THE A. GLOBICEPS CORAL, RELY ON GOOD USER PRACTICES.

PHOTO CREDIT: (LEFT) DCRM CORAL REEF INITIATIVE AND (RIGHT) DOUGLAS FENNER

### **UN Green Fins**

The UN Green Fins initiative aims to protect and conserve coral reefs through environmentally friendly guidelines that promote a sustainable diving and snorkeling industry. Following the following practices will help reduce pressure on the Saipan Lagoon while practicing safe snorkeling. Their website overs free infographic posters on the importance of coral and best practices water. They have content translated in other languages, such as Chinese, Japanese, and Korean. Content can be accessed here: <a href="https://www.greenfins.net/posters">https://www.greenfins.net/posters</a>



FIGURE 26: GENERAL BEST PRACTICES FROM UN GREEN FINS PROGRAM. PHOTO CREDIT: GREEN FINS



FIGURE 27: PROVIDING LIFE JACKETS FOR CUSTOMERS SNORKELING IN PLACES LIKE THE GROTTO WOULD HELP THEM ACHIEVE BUOYANCY AND PREVENT ACCIDENTS. PHOTO CREDIT: MARRIOTT ACTIVITIES

# Snorkel

- Review permit conditions
- Avoid disturbing existing beach strand vegetation along the shoreline areas.
- Launching and landing of watercraft must be strictly done at approved launching facility.
- No touching step on the coral.

- Do not litter and avoid leaving any objects or personal items in the waters. Snorkeling activities must not be done intoxicated.

- Practice proper buoyancy.
- Use life jackets if customers cannot float or swim.

• Sticking to swimming within a designated swimming zone may reduce safety and environmental concerns.

### Freediving or Skin Diving

- Never dive alone. Always dive with a buddy trained in apnea and rescue.
- Do not hyperventilate.
- Dry training is much safer than wet training.
- Always dive within your limits. Make slow steps and progress.

# Seawalker

- Remain in the course marked by floating buoys. The course must be marked with at least 12-inch (~31 cm) wide buoys through the Seawalker operators and be removed at the end of each operation day with the exception of one site identifying site.
- Operation must closely monitor every Seawalker activity to ensure that user remains within marked course.
- Operation must also manage a logbook with the date, time, patron's name, and vessel registration number for future inspection.
- Vessel must not discharge any sewage, trash, or bilge water into the ocean.



FIGURE 28: SEAWALKER ACTIVITIES ARE ONLY ALLOWED WITHIN THE MARKED COURSE. PHOTO CREDIT: FERDIE DE LA TORRE

### SCUBA

- Dive operators must be SCUBA-certified (such as PADI or NAUI) at the appropriate level (dive master) to handle customers. At that level, they will be able to perform emergency first response.
- It is important for customers to get or be certified by a recognized diving training organization (such as PADI, SSI, and NAUI) to learn about the science of diving and necessary safety practices as SCUBA diving can be a risky activity. Uncertified divers may not be as experienced or have the skill sets to conduct safe dives. They may not also be as well protected as those who are.
- The maximum ratio of divers to instructors/guides is 5:1.
- For dive operations by boat, boats are required to stand-by divers at all times according to USCG law.
- Perform briefings prior to all dive activities. Review dive plan and educate customers about direct impacts to resources and safety hazards in that particular area. Follow Green Fins Code of Conduct (Figure 7). Remind customers of safety measures and communication hand signs. Important ones include the Signal, Time, Elevate, Look, Ascend signals.
- Be aware of the weather conditions. Strenuous conditions, like strong currents or cold temperatures, may tire out divers and overuse their air supply. Be aware that corals that may have not been exposed during at the beginning of the tour may be exposed over time with the changing tide. Refer to Appendix A for rip tide info and Appendix B for weather resources.
- Make sure to be aware of your customers' skill levels and dive within their limits. Improper ascents may cause decompression sickness that may lead to death.
- All dive equipment for paying customers shall include a regulator, reserve air tank, pressure and depth gauges.
- Make sure you and your customers check the gears' functionality before entering the water.
- Avoid using gloves as they can give a false sense of security and make it easier for divers to touch potentially dangerous marine life.
- Make sure your customers are breathing continuously and managing their air-supply. Use the rule of thirds by designating a third of the air supply for the outward journey, a third for the return journey, and the last third for the safety reserve. The rule of thirds may be adapted for situations where the entry and exit are not in the same place and the out-and-back profile. Always ensure enough air in the tank before ascending.
- Practice safe descents and ascends. Maintain a rate of ascent no faster than 30 ft (~10 m) per a minute. A 3-minute safety stop at 15 ft (~5 m) will greatly help decrease chances of decompression sickness.
- Never use the inflator button to get to the surface.
- Be aware of your surroundings. Below may have corals or other divers to avoid. Refer to Figure 7 for environmental best practices when diving.
- Practice good buoyancy at the surface and underwater.
- Secure your equipment to avoid dragging and snagging at rocks and corals.
- Make sure that each diver has a designated diving buddy in case of an emergency.
- Keep your distance from marine life. Avoid touching them as they may be potentially dangerous.
- Ensure that your customers will not be flying within 24 hours after the diving to protect from potential health issues. PADI recommends that single dives have a minimum preflight surface

interval of at least 12 hours and that repetitive dives or multiple diving days have a minimum preflight surface interval of at least 18 hours.

- Regular maintenance is required for all equipment. Extreme and repetitive use of equipment can cause dysfunction and failure and put the customer at risk. Do not let maintenance go until there are signs of problems. Take care of it before it happens.
- To reduce the transmission of COVID-19, follow PADI's Best Practices to Reduce COVID-19 Transmission Risk: <u>https://www.padi.com/sites/default/files/documents/2020-05/PADI%20Best%20Practices%20to%20Reduce%20Transmission%20Risk.pdf</u>



FIGURE 29: SCUBA DIVING AT OLEAI, LIKE ALL DIVE SITES, REQUIRE GOOD BUOYANCY AND CAREFUL ATTENTION TO AVOID CONTACT WITH CORALS. PHOTO CREDIT: DCRM ENFORCEMENT





# Guidelines to the Code of Conduct

As a Green Fins member this dive centre is committed to protecting the marine environment by following this best practice. If you notice lack of compliance to any of the following practices please report to info@greenfins.net.



www.greenfins.net

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FIGURE 30: BEST PRACTICES FOR DIVING. PHOTO CREDIT: GREEN FINS



FIGURE **31**: SAFE KAYAKING AND PADDLE BOARDING CONSIDER THE ENVIRONMENTAL CONDITIONS.

PHOTO CREDIT: MARIANAS TREKKING

# Paddle Sports/ Kayak and Standup Paddleboard Sports (SUP)

- Be aware of offshore winds and water current advisories.

- Avoid going into the water if the weather conditions exceed your skill level.

- Wear a leash on your paddleboard in case you fall.

- Stay clear of any swimmers or other marine sports users.

- Do not stand up on a canoe or kayak as it may cause the boat tilt or flip.

- Set a reasonable pace so that everyone can stay together. Avoid leaving behind anyone in the group behind.

- Avoid having loose rope in or dangling from your boat. It can quickly become a hazard for yourself or marine life

- that may get entangled.
- Never tie anyone in, or to, the kayak.
- Communicate effectively on the water by considering that wind and water sounds can make hearing others difficult. Whistles and hand signals may be preferable.
- Always be prepared for the unexpected flip.
- Never paddle drunk or intoxicated.
- Stay clear of any coral substrate.

# Sailing (non-motor, includes hobie cats and the traditional *sakmans*)

- Follow the Navigation Rules from the US Coastal Guard, which can be referenced in Appendix C.
- Be aware of offshore winds and water current advisories.
- Stay clear of any swimmers or other marine sports users.
- Be aware of the tides.

# **Best Management Practices**



FIGURE **32**: TRADITIONAL SAILING IN THE CNMI SHARE THE WATERS.

## PHOTO CREDIT: 500 SAILS

A mindful considerate approach to Lagoon use is important to reducing or preventing further degradation of coral reefs, marine life, and other marine resources. The following best management practices focus on how to better take care of the reef with emphasis of proper waste management as trash input to our ocean remains a lucrative issue in the CNMI. It is recommended that you brief your customers on these practices before you have them conduct the activity.

# "Reef Friendly Practices"

• Utilize hats, rash guards, and other sun protective gear as much as possible. Sun protective clothing with a UPF rating will prevent harmful rays from the sun from hitting your skin and reduce the need for sunscreen.

- Apply reef safe sunscreen rather than conventional sunscreen. Reef safe sunscreen do not have oxybenzone and octinoxate. Studies have found that they harm marine life and cause coral bleaching. The best reef safe sunscreen is zinc oxide-based. Non-nano titanium dioxide is also a safe alternative. To ensure you are using a reef safe sunscreen, look to The Safe Sunscreen Council: <u>https://safesunscreencouncil.org/</u>.
- Remove makeup before entering into the water.
- Do not touch, hold, or break any coral or marine life, whether dead or alive.
- Control buoyancy and take care not to touch coral or other organisms with your body, dive equipment, or camera.
- Do not step or walk on coral or coral reefs.
- Do not collect shells or corals.
- Stick to the swim zone as much as possible to prevent any safety or environmental issues.
- Do not anchor any vessel within any MPA except in case of an actual emergency or for scientific purposes permitted by the Division.
- Do not feed the marine fish. It is actually against the law to do so. Feeding the marine fish will make them reliant on people for food, reducing their role of eating algae that overgrows on coral. Feeding fish will make them unhealthy and so will the coral reefs. In Mañagaha, where fish feeding often occurs, fish have shown aggressive behaviors toward swimmers such as biting.
- Remove marine debris when possible and dispose properly.
- Participate in local citizen science coral reef monitoring, like the Eyes of the Reef campaign. DCRM's Eyes of the Reef campaign provides free trainings and educational resources for citizens to identify and report important threats to coral reefs, such as disease, pollution, invasive Crown of Thorns outbreak, and bleaching. Reach out to DCRM if you are interested in a free training. The more reports to address the problems, the better we can take action to protect our reef.
- Maintain a clean area, provide adequate garbage receptacles on board vessels and dispose of garbage responsibly.
- Incorporate concepts from UN Green Fins program.
- Report any environmental problems you see using DCRM's Reef Report app found at <u>https://dcrm.gov.mp/</u>.

# Conclusion

The health of the Lagoon is affected by quality of use. The Saipan Lagoon User Education Plan provides valuable information for Marine Sports Operators to practice safe and environmentallyconscious best practices and encourage their clients to properly use the Lagoon sustainably. It also helps MSOs prevent any potential violations. Through the collaboration of MVA, NMC, and the MSO community, DCRM intends that this plan will feed into curriculum for an NMC MSO Eco-Certification Course led by MVA. The course aims to increase better use of the Lagoon while benefitting permitted MSOs with knowledge and a DCRM permit discount incentive. To increase the effectiveness of this plan, it may be expected to undergo updates and changes as the course builds institutional capacity. Activities and user behaviors in the Saipan Lagoon may also change over time. New activities may also emerge. Therefore, the SLUEP updates will continue to work toward a more informed MSO community as recommended by the SLUMP and supported by stakeholders. A well-informed and cooperative MSO and tour guide operator community will greatly improve the CNMI's efforts to conserve our precious Saipan Lagoon and protect our beautiful coral reefs. For any questions regarding the DCRM regulations and other content in the SLUEP, contact DCRM at <u>planning@dcrm.gov.mp</u> or (670) 664-8300.

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# **Educational Resources**

BECQ Imagine Anti-Litter Ads - Contact DCRM for the .mp4 files

CNMI Coral Reef Protection Video: https://www.youtube.com/watch?v=Sef7\_UJ\_yyE

DCRM Enforcement Marine Sports Areas webpage: <u>https://dcrm.gov.mp/our-programs/enforcement/marine-sports-areas/</u>

DCRM Saipan Lagoon Use Management Planning webpage: <u>https://dcrm.gov.mp/current-projects/saipan-lagoon-use-management-planning/</u>

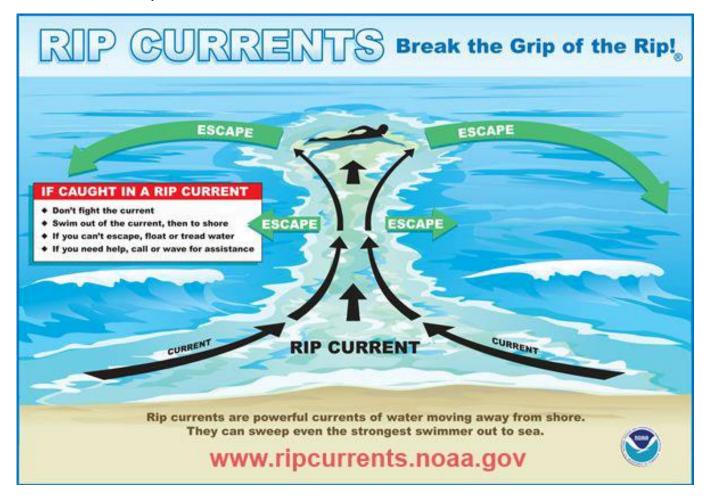
Green Fins: <a href="https://www.greenfins.net/posters">https://www.greenfins.net/posters</a>

Marine Recreation Best Management Practices Brochure: <u>http://cnmicoralreef.com/uploads/cnmi/Images%20and%20documents%20for%20individual%20pages/</u> <u>MSO%20Brochure.pdf</u>

Rip Currents Safety: <u>https://www.weather.gov/wrn/spring2019-rip-currents-sm</u>

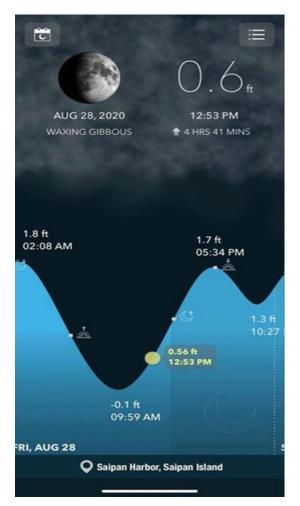
Saipan Lagoon Use Management Plan Update – 2017 FINAL: <u>https://dcrm.gov.mp/wp-content/uploads/Final-2017-SLUMP-Update\_wAppendices.pdf</u>

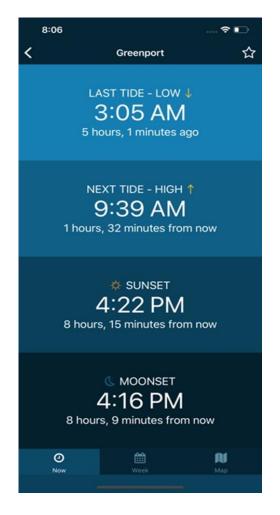
#### **APPENDIX A: NOAA Rip Currents Resource**



# **APPENDIX B: Resources for Checking Weather Conditions for Safety**

## For tides







Tide Alert App– shows when the low and high tides are happening on Saipan. This is important as tides are important for the activities. A rising tide may pose

dangers to activities at deeper waters. A decreasing tide may not be suitable for swimming around corals. You can even see the moon phase and when the sunrises and sunsets.



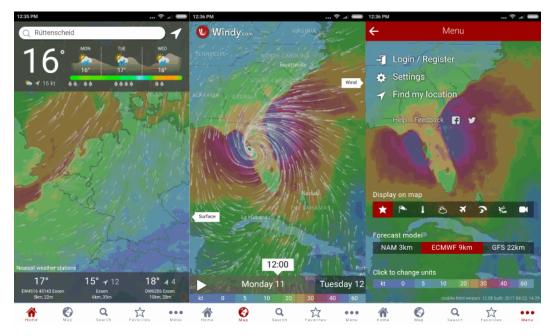
Tides Near Me App – shows when the time of the last and next tide and current will come. This app also shows the time when the sun and moon will rise or set.

# For the weather and ocean conditions



Windy App – Great for seeing the wind direction and strength at certain times. Wind patterns can influence the strength of the ocean currents and the surface water turbulence. Windy is also good for seeing where typhoon disturbances are likely occur. The visualization is a map of the world so you can even zoon to other parts of the Pacific to predict if the water will get worse in the next few days. Great for the typhoon season

(July through January).





Windfinder App – Great all-in-one app for getting numbers on wind, weather, and wave forecasts. Especially helpful for sailors, kitesurfers, and windsurfers. They show wind speed, waves, wind gusts, wind speed, air pressure, wind gusts, precipitation, waves, tides, and wind speed.





NOAA National Weather Service Website– The official national forecasts for the week based on readings from the Saipan International Airport. NWS offers radar & satellite image, weather elements forecast (in a graph), and other technical forecasts.

https://forecast.weather.gov/MapClick.php?zoneid=GUZ004

Current conditions a Saipan Island, 4 Lat: 15.12° N Lon: 14	aipan International Airport (PGSN)		
1	Partly Cloudy <b>BOO'F</b> Barometer 29.85 in Dewpoint 79°F (26°C) Visibility 10.00 mi Heat Index 107°F (42°C) Last update 31 Aug 11:54 am ChST		More Information: Local Forecast Office More Local Wy 3 Day History Mobile Weather Hourly Weather Forecast
Detailed forecast for <b>Saipan</b>			Topographic v Click Map For Forecast
Today	Partly cloudy with isolated showers in the morning, then partly sunny with isolated showers and thunderstorms in the afternoon. East winds 10 to 15 mph. Highs near 89.	8	
Tonight Through Tuesday Night	Mostly cloudy. Scattered showers and isolated thunderstorms for guam, isolated showers and thunderstorms for the northern marianas. East winds 5 to 15 mph shifting to the north tuesday afternoon. Lows around 77. Highs near 87.		
Wednesday Through Friday	Partly cloudy with isolated showers. Northeast winds 10 to 15 mph. Highs near 89. Lows in the upper 70s.		0
Friday Night Through Sunday	Mostly cloudy with isolated showers and thunderstorms. Lows in the upper 70s. Highs in the upper 80s.		452 m <sup>Supan</sup> NORTHEN MARIANA ISLANDS
Additional Fore	casts and Information		
ZONE AREA FORECAS' Forecast Discussion Printable Forecast Text Only Forecast	FOR SAIPAN Tabular Forecast Hourly Weather Forecast	Disclaimer	
		Last Update:	407 AM ChST Mon Aug 31 2020



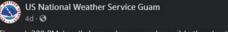
US National Weather Service Guam Facebook Page – Although focused primarily at Guam, the US NWS Guam page provides helpful posts on current weather disturbances of the Marianas region.

# https://www.facebook.com/NWSGuam

For the official webpage on the National Weather Service, you can also look for other forecasts in text. <u>https://www.weather.gov/gum/PublicForecasts</u>

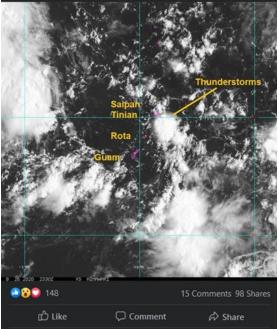


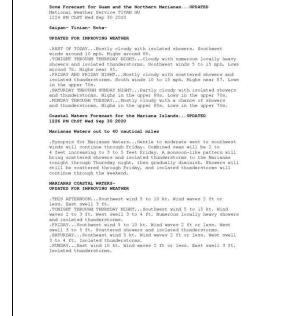
CNMI EOC State Warning Point Facebook Page – The local Emergency Operations Center provides zone weather and tide forecasts published in text. They also release official special weather and hazard advisories (such as earthquake/tsunami or military trainings) from the Office of the Governor and Homeland Security and Emergency Management Agency.



Through 200 PM, locally heavy showers and possible thunderstorms are developing over Tinian and Saipan and adjacent coastal waters.

If you will be driving, be alert for heavy downpours, low visibility and brief flooding of roads. If you will be outside, seek shelter if you see lightning or hear thunder. Boaters can expect visibility down to half a mile in heavy showers, stay below deck if thunder is heard or lightning is seen.





# **APPENDIX C: USCG Quick Rules of Road**

Full document accessible here: https://www.navcen.uscg.gov/pdf/navRules/navrules.pdf

All of the Quick Rules of Road are important but these are highlighted:

## Rule 5

Every vessel shall at times maintain a proper look-out by sight and hearing as well as by all available means appropriate in the prevailing circumstances and conditions so as to make a full appraisal of the situation and of the risk of collision.

## Rule 9

A vessel proceeding along the course of a narrow channel or fairway shall keep as near to the outer limit of the channel or fairway which lies on her starboard side as is safe and practicable

A vessel engaged in fishing shall not impede the passage of any other vessel navigating within a narrow channel or fairway.

## Rule 12

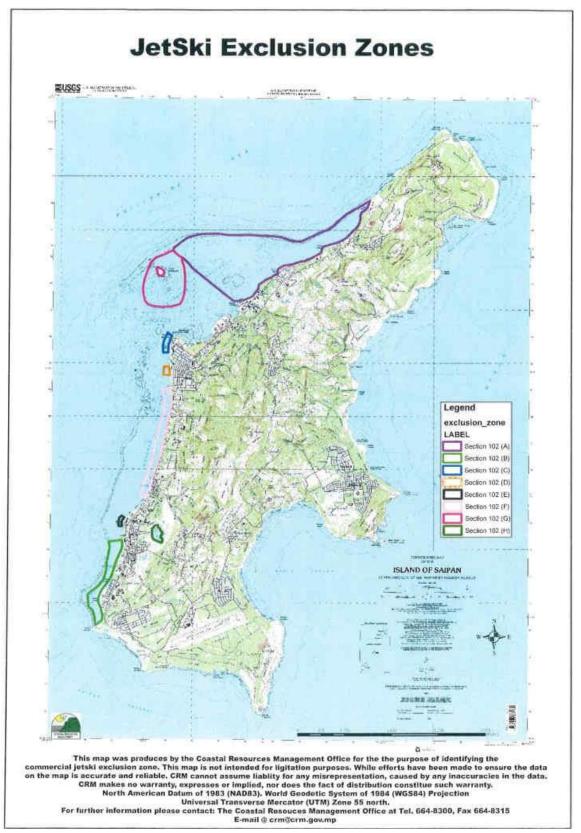
When two sailing vessels are approaching one another, so as to involve risk of collision, one of them shall keep out of the way of the other as follows:

(i) when each has the wind on the different side, the vessel which has the wind on the port side shall keep out of the way of the other

(ii) when both have the wind on the same side, the vessel which is to windward shall keep out of the way of the vessel is to leeward;

(iii) if a vessel with the wind on the port side sees a vessel to windward and cannot determine with certainty whether the other vessel has the wind on the port or on the starboard side, she shall keep out of the way of the other.

#### APPENDIX D: JET SKI EXCLUSION ZONE MAP



#### **APPENDIX E: GREEN FINS RESOURCE**



www.greenfins.net

fcggo

# **APPENDIX E: ENGAGEMENT RESULTS**

Taken from surveys, video interviews, and email responses

### Threats/Problems at Saipan Lagoon

- Stepping on coral
- Harvesting or collecting of coral
- Anchoring in wrong areas regarding mooring
- Lack of participation or apathy
- Unpermitted diving operations
- Uncertified or unqualified dive instructors in emergency first response
- Coral bleaching
- Coral deteriorating
- Lack of operating restroom facilities
- Pollution (sewage, non point source, outfalls)
- Lack of security/enforcement
- Damage from boats, jet skis, and watersports
- Marine debris
- User conflict between commercial and personal lagoon users
- Lack of strict penalties
- Lack of clarity on regulations
- Lack of appropriate signage
- Lack of environmental awareness from tourism
- Driving on the beach
- Fishing pressure
- Loss of marina, causing traffic and potential docking violations
- Sexual harassment that may be addressed by understanding cultural differences

## Barriers to Sustainable Use

- Lack of awareness amongst users
- Apathy or ignorance
- Lack of awareness from citizens and community
- Education (certifications, expand to new areas)
- Lack of enforcement
- Reduction of enforcement staff at prime tourist sites
- Lack of responsibility and monitoring of actions for behavioral change
- Lack of strict penalties
- Lack of clarity on regulations
- Overcrowdedness
- Government willingness to cooperate

### Best Practices or solutions

- Awareness of site-specific hazardous conditions
- Anchoring at designated areas away from sensitive areas

- Coast Guard training is recommended for boat captains
- Bring no trash when launching and manage trash responsibly
- Debrief customers before all activities
- Know where to navigate
- Spread out and safety first [regarding space]
- Make more smoking areas
- Do not touch corals
- Require participation and collaboration between community, private sector, and government sector
- Improve communication and enforcement through surveillance and collaborative means
- Stronger regulation and penalties
- More education from tour guides to customers
- Banning sale of sand, etc.
- Multilingual outreach material that are shared and available at key places like hotels and airport
- Feeding and handling of marine life
- Need for signage at beaches translated in key languages
- Operable and accessible bathroom facilities
- Education for local population groups, such as young students on the Dos and Don'ts lagoon use through social media
- Limit ratio of instructors to customers [in diving]
- Understanding of cultural behaviors in handling customers to improve workplace behavior and prevent any disputes
- Private entities to host trash bins
- Operator is responsible for customers feeding marine life
- More environmental education on marine life protection for MSOs and tour operators
- Tour guides and MSOs must share best practices with customers