

CONTINGENCY PLAN

Tubbataha Reefs Natural Park and World Heritage Site

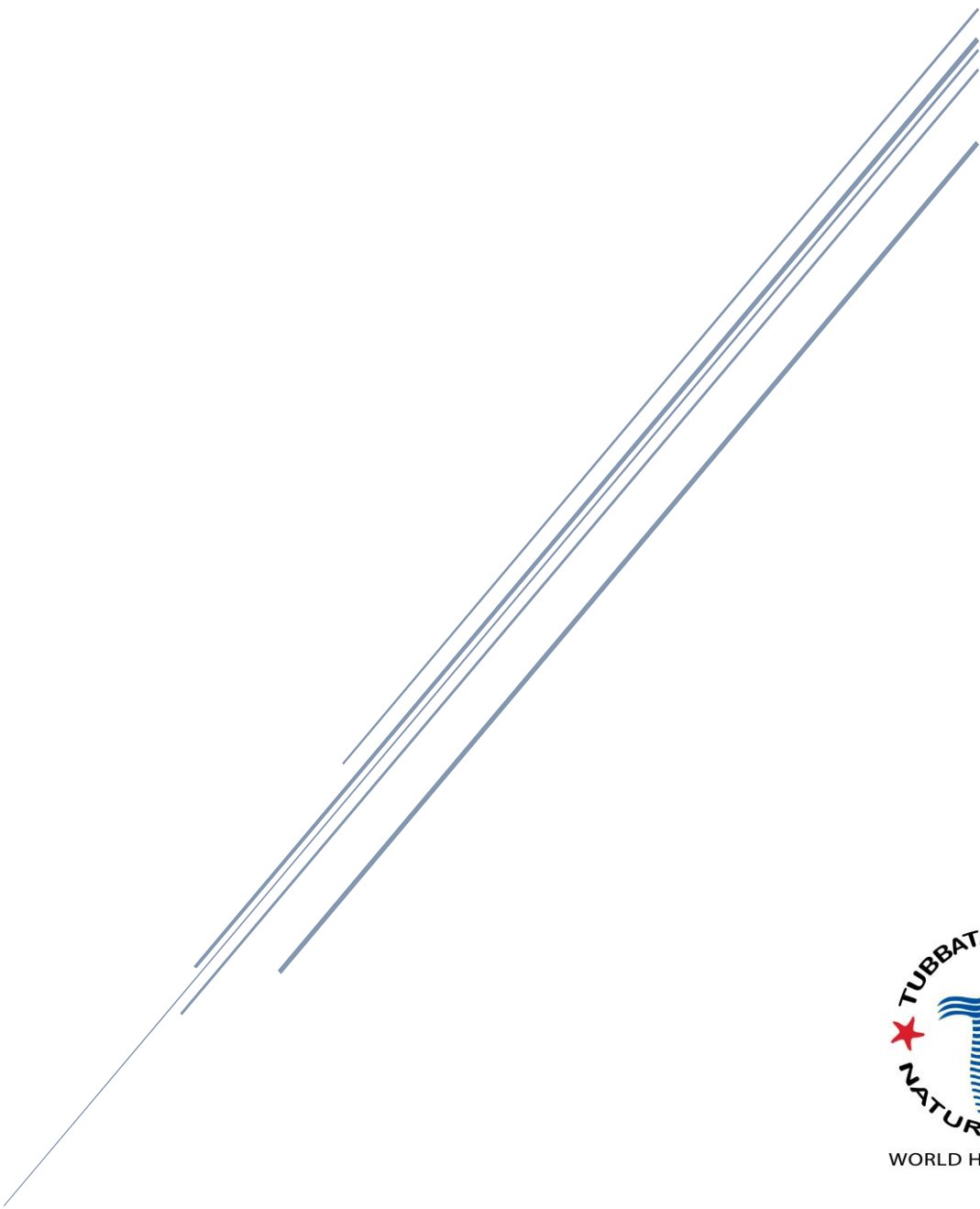


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ACRONYMS

AHP	Adventist Hospital - Palawan
AIS	Automatic Identification System
CGDPAL	Coast Guard District Palawan
CP	Contingency Plan
DB	Dive Boat
DCS	Decompression Sickness
DFA	Department of Foreign Affairs
DILG	Department of the Interior and Local Government
DO	Dive Operator
IC	Incident Commander
ICS	Incident Command System
IEC	Information, Education, and Communications
IMO	International Maritime Organization
IMT	Incident Management Team
LPG	Liquified Petroleum Gas
MPR	Marine Park Rangers
NAVFORWEST	Naval Forces West
NBI	National Bureau of Investigation
ONP	Ospital ng Palawan
PB	Patrol Boat
PCG	Philippine Coast Guard/Coast Guard District
PDRRMO	Provincial Disaster Risk Reduction and Management Office
PNP	Philippine National Police
POL	Petroleum, oil, and lubricants
PPPO	Palawan Police Provincial Office
PRETT	Provincial Rapid Emergency Telecommunications Team
RA	Republic Act
RDANA	Rapid Damage Assessment and Needs Analysis
RS	Ranger Station
SRR	Search, Rescue, and Retrieval
TMO	Tubbataha Management Office
TPAMB	Tubbataha Protected Area Management Board
TRNP	Tubbataha Reefs Natural Park
UNESCO	United Nations Educational, Scientific and Cultural Organization
WESCOM	Western Command

CHAPTER I. BACKGROUND

ABOUT THE CONTINGENCY PLAN

In terms of disaster risk, the Philippines ranked third among all of the countries with the highest risks worldwide according to the World Risk Report 2018 (World Economic Forum, 2018). To address the root causes of vulnerabilities to disasters, strengthen the country's institutional capacity for disaster risk reduction and management, and build the resilience of local communities to disasters including climate change impacts, among other things, the Philippine government enacted Republic Act 10121.

Republic Act No. 10121, otherwise known as the "Philippine Disaster Risk Reduction and Management Act of 2010", provides for the development of policies and plans and the implementation of measures for all aspects of disaster risk reduction and management. This includes good governance, risk assessment and early warning, knowledge building and awareness-raising, reducing underlying risk factors, and preparedness for effective response and early recovery. The Act applies to all levels of government, civil societies, private sectors, and all other disaster risk management stakeholders.

The Act mandates every LGU to create a Local Disaster Risk Reduction and Management Plan (LDRRMP) covering four aspects of DRRM as specified in the National Disaster Risk Reduction Management Council's framework, namely: disaster preparedness, response, prevention, and mitigation, and rehabilitation and recovery.

The risks inherent in scuba diving and the remoteness of Tubbataha dictate that a contingency plan be formulated specifically for the Park. Risks could affect tourists and/or marine park rangers stationed in the area and response could be influenced by distance from medical facilities or necessary support and equipment.

This Contingency Plan covers the entire Tubbataha Reefs Natural Park and World Heritage Site and describes the actual execution or implementation of a contingency plan for the below-identified hazard when a crisis occurs. It was formulated in 2020 with the guidance of the Provincial Disaster and Risk Management Office of the Province of Palawan and will be applicable until modified, updated, or revised.

The Plan builds on the 2007 Risk Analysis and Planning section of the Business Plan of TMO, its 2012 TRNP Emergency Plan, and the 2013 TRNP Emergency and Risk Reduction Plan. Its structure follows the provincial Contingency Plan and highlights the seven (7) hazards most likely to affect the Tubbataha Reefs in terms of their impacts on tourists and marine park rangers. Each hazard is treated by unpacking four subsections: Anatomy of the Hazard, Scenario, Coordination, Command and Control, and Needs and Activities Inventory.

The Cluster Approach for each disaster is adapted pursuant to NDCC Memorandum Circular No. 5, series of 2007. This approach clusters the groups of agencies and organizations that need to work together and undertake coordination functions at the strategic level to provide resource support for tactical response. Each cluster has designated lead and definitive roles and responsibilities for the systematic delivery of response and services. The Philippine government recognizes fifteen (15) Emergency Response Clusters. Only six (6) of these response clusters were found to be applicable in most hazards in Tubbataha. The cluster International Humanitarian Assistance, for example, was not considered in the hazard Oil and Chemical Spill. These are:

1. Health
2. Search, Rescue, and Retrieval
3. Management of the Dead and Missing
4. Logistics
5. Emergency Telecommunication
6. International Humanitarian Assistance

Resources available for utilization are identified per cluster in every hazard. The inventory lists all the resources available at the Tubbataha ranger station, onboard dive boats, and from agencies with specific mandates to address certain hazards (e.g., PCG for oil and chemical spill response). Furthermore, contingency protocols identified in the 2014 Emergency and Risk Reduction Plan (Tubbataha Protected Area Management Board and Tubbataha Management Office, 2012) were outlined and incorporated in this document. These contingency protocols will serve as a guide to TMO in the event of emergencies.

INTRODUCTION

The Tubbataha Reefs Natural Park (TRNP) is an isolated haven for marine biodiversity in the heart of the Sulu Sea, Philippines. It is located about 80 nautical miles east of Puerto Princesa City and 40 nautical miles southwest of the municipality of Cagayancillo. TRNP covers 97,030 hectares of no-take (strict protection) zone. It is comprised of about 10,045 hectares of coral reefs and surrounding waters. A 10nm-wide buffer zone covering an area of about 356,500 hectares of open sea encircles the park. TRNP is composed of two uninhabited atolls, the North and South Atolls, and the Jessie Beazley Reef in the northwest (see Figure 1). A lighthouse, built-in 2019, is located at the southernmost part of the South Atoll. The Ranger Station is located near a sandbar in the southwestern part of the North Atoll, while Bird Islet is located in the northeast. The Ranger Station is home to a combined team of 8-10 men from the Philippine Navy, Philippine Coast Guard, Municipality of Cagayancillo, and the TMO with the main role and function of protecting the park from threats.



Figure 1. Map of Tubbataha Reefs Natural Park

There are no inhabitants in the park, save for these rangers who are on two-month tours of duty and the tourists that come between March and June every year. Although there is no closed season on tourism, nature makes travel difficult and unsafe beyond the summer months. While its relative inaccessibility creates a natural period of rest for marine wildlife and its habitat after a hectic summer season, it is also the source of management difficulties for the rest of the year in terms of resupply and rotation of rangers. The Park’s remoteness can therefore be both a blessing and a curse to management.

The Tubbataha Protected Area Management Board (TPAMB) manages the park through its implementing arm, the Tubbataha Management Office (TMO). Through the mentorship of Shell B.V., TMO staff drafted the Business Plan for TRNP in 2007 with a chapter on Risk Analysis and Planning. Risks affecting the Outstanding Universal Value (OUV) of Tubbataha and strategies to circumvent them were identified in the chapter. In 2010, the UNESCO World Heritage Committee, cognizant of the challenges posed in the 2009 Global Assessment Report on Disaster Risk Reduction, Risk and Poverty in a Changing Climate (UNISDR, 2009) published a Resource Manual

on Managing Disaster Risks (UNESCO, 2010). It aimed to raise the awareness of World Heritage managers and administrators on the extent of risks associated with disasters.

The UNESCO resource manual, although primarily written for cultural heritage site managers, nevertheless provided good advice for natural sites. It identified the three main stages of disaster risk management (see Figure 2) and highlighted the need for preparedness before and after an incident.

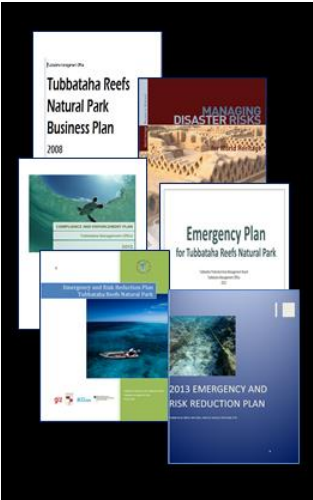


Figure 2. The evolution of the TRNP Disaster and Risk Reduction Plan.

In collaboration with stakeholders and partner agencies, TMO drafted the TRNP Emergency Plan in 2012, which laid out protocols to be followed for some of the risks and/or emergency conditions. In 2013, a TRNP Emergency and Risk Reduction of Plan was developed integrating major learnings from previous plans.

On 2 August 2019, TMO organized a meeting with the Western Command, Philippine Navy, Philippine Coast Guard, I-CARE, Philippine Airforce, and the Provincial Disaster Risk Reduction Management Office (PDRRMO) to formulate a Contingency Plan (CP) for Tubbataha. The workshop was funded by Saguda Palawan, Inc., and was called to update the Contingency Plan in the face of the recent disappearance of a scuba diver in the Park and the experience in multi-sectoral response to the incident.

With the older plans as a reference and with the recent incident in mind, hazards were identified and weighed in terms of probability of occurrence and impact. Probability and impact were rated from 1 to 5, with 5 being the most probable and impactful. The average score of both parameters was used to rank the hazards.

HAZARDS IDENTIFIED

Hazard	Probability		Impact		Average (P + I ÷ 2)	Rank
	Rate	Remarks	Rate	Remarks		
1. Medical emergencies (DCS, medical conditions)	5	Large number of divers; Diver demographics show high probability for medical conditions; Diving is an inherently high risk	3	Impacts individuals rather than large groups; More manageable; Isolation will delay response	4	1
2. Oil/Chemical spill	2	Increasing maritime traffic, the probability is lesser because of PSSA and IMO regulation	5	Devastating environmental impacts; Long response time	3.5	2-4
3. Terrorism/Piracy	2	Limited to tourist season; Increased security during the season	5	Devastating impact on national tourism	3.5	2-4

4. Maritime incidents (capsize, collision, grounding, man overboard, boat malfunction)	3	Seven grounding incidents; several dive boat malfunction;	4	Potential loss of life and property; Long response time; environmental impact	3.5	2-4
5. Natural hazards: tsunami/storm surge/strong typhoon)	1	Existence of reefs as a natural barrier against surge	5	Potential loss of life and property	3	5-6
6. Diving incidents (missing person)	1	Safety measures in place on dive boats	5	Major impact on resources for SAR; Potential loss of life;	3	5-6
7. Fire (ranger station, dive boat, patrol boat)	2	RS: Fuel and LPG DB: Electrical, Fuel, LPG PB: Electrical, Fuel	3	May or may not involve loss of life	2.5	7

Seven (7) hazards that were most likely to affect Tubbataha were identified and ranked as follows:

- Rank 1 - Medical emergencies (DCS, medical conditions)
- Rank 2 - Oil/Chemical spill
- Rank 3 - Terrorism/Piracy
- Rank 4 - Maritime incidents (capsize, collision, grounding, man overboard, boat malfunction)
- Rank 5 - Natural hazards: tsunami/storm surge/strong typhoon
- Rank 6 - Diving incidents (missing person), and
- Rank 7 - Fire (ranger station, dive boat, patrol boat)

Most of the hazards identified are human-induced except for ‘Natural Hazard: tsunami/storm surge/strong typhoon’.

GOALS AND OBJECTIVES

Goal:

To provide effective, efficient, well organized, and well-coordinated response mechanisms in the event of the occurrence of hazards in Tubbataha Reefs Natural Park and World Heritage Site. Such mechanisms shall help to protect lives, properties, and the environment, and restore normal operations after the occurrence of hazards.

General Objectives:

1. To determine the immediate tasks required for the hazard response operation;
2. To conduct an inventory of available resources;
3. To establish proper coordination through efficient communication and linkage among people and groups involved in hazard response.

CHAPTER II. HAZARDS

SECTION 1: MEDICAL EMERGENCIES

A medical emergency is an injury or illness that is acute and poses an immediate risk to a person's life or long-term health. These emergencies may require assistance from another person, who should ideally be suitably qualified to do so, although some of these emergencies can be dealt with by the victim themselves. Depending on the severity of the emergency, and the quality of any treatment given, it may require the involvement of multiple levels of care, from first aiders to Emergency Medical Technicians and emergency physicians. Any response to an emergency medical situation will depend strongly on the situation, the patient involved and the availability of resources to help them.

TRNP attracts an annual average of about 3,000 visitors from March till June every year. The majority of these visitors engage in diving activities and scuba diving is a fundamentally risky sport. Whoever may be involved, rangers need to always know how to respond and what their options are. Because of the remoteness of Tubbataha, rangers need to be trained at least in first aid because they are likely to be exposed to possible life and death situations at some point during their tour of duty.

Furthermore, as Tubbataha is mainly a scuba diving destination, there is a high risk of decompression sickness among divers. The incidence of diving-related DCS ranges from 1 to 35 events per 10,000 dives, depending on the region of the world and specific class of diving (i.e., recreational, commercial, military, or scientific) (Dardeau et al, 2012). Decompression sickness (DCS) is a complex, possibly fatal, condition resulting from a change in barometric pressure due to a sudden increase (flying) or decrease (diving) in altitude (Pulley, 2012). Whether the condition is mild or serious, hospital treatment is necessary. Thus, all DCS cases in TRNP will require immediate evacuation. Furthermore, all DCS cases should be given first aid to increase the chances of full recovery whether symptoms are mild or serious.

A. Anatomy of the Hazard

ROOT CAUSES	EARLY WARNING SIGNS	TRIGGERING FACTORS	EXISTING MITIGATING MEASURES
Inherent risk (Decompression sickness)	Skin rash, irregular breathing, numbness, prolonged fatigue	Scuba diving	Conduct dive briefing; rehydrate; physical fitness; level of certification and experience; medical equipment and first aid practitioners onboard
Exceed diving limits (Decompression sickness)		Existing medical condition, dehydration	

Underlying medical condition	May not have early warning signs	Scuba diving, overfatigue, stress conditions, diet, failure to take medicines	Required medical checkup for rangers and TMO staff; medical certificate of tourists; conduct of dive briefings on emergencies; medical equipment and first aid practitioners available onboard
Accidents	May not have early warning signs-	Bad environmental conditions; human error	Safety precautions; medical equipment and first aid practitioners available onboard
Human-animal contact	Proximity to wildlife	Human error; Provoking wildlife;	Implement rules and regulations; conduct pre-departure briefings;

B. Scenario Generation

SITUATIONS	MOST LIKELY (Normal Activities)	BEST (with counter-measures)	WORST
(Decompression sickness)	Safe diving activity	Stay within the diving limits	Serious symptoms (e.g., irreversible nervous system damage, coma), death
Underlying medical conditions	Dived without medical incident	Manifestation of a medical condition, but appropriately addressed	Medical conditions not addressed appropriately. Paralysis, death.
Accidents	No untoward incidents	Effective response	Serious injuries, med-evac required, no medical personnel present, no equipment, and first-aid supplies, bad weather, death
Human-animal contact	No contact	Contact without trauma to either human or animal	Loss of life or limb, med-evac required, no medical personnel present, no equipment and first-aid supplies, bad weather, death

C. Coordination, Command, and Control

1) Cluster Identification

CLUSTER	OFFICES/AGENCIES INVOLVED									LEAD OFFICE / AGENCY
Health	ONP	WESCOM Hospital	AHP	DO	MPR/TMO					MPR/TMO
Search, Rescue, and Retrieval	PDRRMO	WESCOM	PCG	NFW	DO					WESCOM
Management of the Dead and Missing	PDRRMO	WESCOM	DILG	PNP Crime Lab	NBI	PPPO	PCG	NFW	DO	DILG/ PDRRMO
Logistics	PDRRMO	WESCOM	PCG	NFW	DO					PDRRMO
Emergency Telecommunications	PDRRMO	WESCOM	PCG	NFW	PRETT	DO	MPR			PDRRMO
International Humanitarian Assistance	DFA	WESCOM								DFA

2) Summary of Cluster Identification/Members

CLUSTER	LEAD AGENCY/ OFFICE	MEMBER AGENCIES/OFFICES
Health	Marine Park Rangers/ Tubbataha Management Office	Ospital ng Palawan, Western Command, Adventist Hospital, Dive Operators
Search and Rescue	Western Command	PDRRMO, Coast Guard District Palawan, Naval Forces West, Western Command, Dive Operators
Management of the Dead and Missing	Department of Interior and Local Government/Provincial Disaster Risk Reduction and Management Office	National Bureau of Investigation, Philippine National Police Crime Lab, Palawan Police Provincial Office, Coast Guard District Palawan, Naval Forces West, Dive Operators
Logistics	Provincial Disaster Risk Reduction and Management Office	Coast Guard District Palawan, Western Command, Naval Forces West, Dive Operators
Emergency Telecommunication	Provincial Disaster Risk Reduction and Management Office	Coast Guard District Palawan, Naval Forces West, Western Command, Dive Operators, PRETT
International and Humanitarian Relations	Department of Foreign Affairs	Western Command, Philippine Coast Guard

a) Health

Lead Agency: Marine Park Rangers/Tubbataha Management Office

Implementing partners: Ospital ng Palawan, Western Command, Adventist Hospital, Dive Operators

Specific objectives:

- To ensure that all medical emergencies are immediately attended to.

Protocols

- Once a medical emergency is reported, the cluster response will be activated.

Duties and Responsibilities

i. Marine Park Ranger/Tubbataha Management Office

- MPR to report to TMO in case of serious medical emergencies requiring evacuation.
- TMO to coordinate with medical facilities and dive operator involved, upon request.
- TMO to coordinate with medical facilities for emergencies involving TMO personnel

i. Ospital ng Palawan

- Conduct examination of DCS patient
- Treat for decompression sickness

ii. Western Command

- To provide transport for patients of medical emergencies
- To provide medical assistance to MPR/TMO personnel for work-related medical emergencies

iii. Adventist Hospital Palawan

- Provide medical services

iv. Dive Operator

- Provide first aid to patients and seek advance medical assistance
- Immediately report to MPR in case of serious medical emergencies
- Evacuate injured clients, if needed
- Coordinate with medical facilities
- Coordinate with TMO
- Take full responsibility during medical emergencies involving their clients

b) Management of the Dead and Missing (MDM)

Lead Agency: DILG/ PDRRMO

Implementing partners: National Bureau of Investigation, Philippine National Police Crime Lab, Palawan Police Provincial Office, Coast Guard District Palawan, Naval Forces West, Dive Operators

Specific Objectives:

- To assist in the proper identification and disposition of the remains in a sanitary manner with caution to prevent negative psychological and social impact on the bereaved and concerned parties.

Protocols:

- The recovery and retrieval of dead bodies will be done through the different Search and Rescue Units (SARs) and will be coordinated with the SRR Cluster. The MDM Cluster will handle the body and hand over to proper authorities for proper processing and management.
- The concerned dive operator/TMO shall inform the bereaved family.

Four Major Activities of MDM Cluster:

- Identification of the dead
- Final arrangement for the dead
- Management of the missing persons
- Management of the bereaved families

(a) Identification of the Dead

- The dive operator or his/her representative or the MPR/TMO will lead the activities needed for proper identification of the declared dead body. A Death Certificate shall be secured from the Local Health Officer.

(b) Final Arrangement for the Dead

- The dive operator or his/her representative or the MPR/TMO shall report such death to the concerned Local Health Officer
- The dive operator or his/her representative or the MPR/TMO shall coordinate the final arrangement for the dead with the legitimate claimants.

(c) Management of the Missing Persons

- The dive operator or his/her representative or the MPR/TMO shall provide psychosocial support to the families of the missing persons

(d) Management of the Bereaved Families

- The concerned dive operator/TMO shall inform the bereaved family of the client/guest.

Protocols

- The concerned dive operator or his/her representative or the MPR/TMO should take every effort to identify the body at the site where it is found.
- All items of property that are on the body should remain on it. On the other hand, items associated with a body should be collected as property and tagged with the body.
- Care must be taken not to lose, contaminate, or switch the body, body parts, or property to be removed and transported. All dead bodies and body parts retrieved onsite should be placed in cadaver bags (note: place one retrieved body per bag or one retrieved body part per bag, as one body part is considered one dead body). Put a bag around the head if there is a potential loss of teeth (e.g. badly burned or crushed remains). If body bags are not available, use plastic sheets, bed sheets, or other locally available materials (ADPC, 2012).
- When transporting a dead body from Tubbataha to Puerto Princesa, it is advisable to use a vessel, preferably closed, with floors that are either waterproof or covered with plastic.
- When transporting on land, it is advisable to use a truck or van, preferably closed, with floors that are either waterproof or covered with plastic.
- Never use an ambulance to transport dead bodies because such is for the living. If there is no other choice, disinfect the ambulance after use.

Duties and Responsibilities

- All dead bodies and body parts should be placed in cadaver bags.
- For deaths caused by natural disasters, all unidentified bodies of the dead shall be turned over to the National Bureau of Investigation (NBI) for proper identification.
- For deaths due to human-induced disasters, the Philippine National Police (PNP) is tasked to identify the bodies. Both will issue a Certificate of Identification for all examined/processed and identified bodies. The City/Municipal Health Officer shall issue the Death Certificate based on the Certificate of Identification issued by the NBI/PNP.
-

c) Logistics

Lead: Provincial Disaster Risk Reduction & Management Office

Implementing partners: Coast Guard District Palawan, Western Command, Naval Forces West, Dive Operators

Specific Objectives:

- To provide an efficient and effective logistics coordinating structure that will harmonize the activities of all clusters and encourage regular info-sharing among all stakeholders and other partners.
- To formulate, update, implement, and monitor logistical policies, plans, programs, and procedures that will harmonize the activities of each cluster.
- The Logistics Cluster through coordination, monitoring, identification, and deployment covers the following:
 - Transportation (land, sea, and air) including the provision of equipment and machines (and required fuel) to provide the needed access and mobility for all cluster operations
 - Inventories (consolidation of resources available among partners and cluster members), and

- Tracking of deployed items

Duties and Responsibilities

ii. Provincial Disaster Risk Reduction & Management Office

- Receive and facilitate the request for logistical support
- Provision of logistics in the transportation of emergency assistance in the affected area
- Constant gathering of official reports and significant data.

iii. Coast Guard District - Palawan

- Provide watercraft for the transport of the patient
- Provide medical personnel

iv. Western Command

- Contribute to emergency transportation by committing their land, sea, and air assets based on needs and requests from PDRRMO
- Coordinate units in Palawan regarding the availability of necessary equipment

v. Naval Forces West

- Contribute to emergency transportation by committing their land, sea, and air assets based on needs and requests from PDRRMO

vi. Dive Operator

- Provide emergency transport for their client in need of medical attention
- Provide food and other necessities to those who assisted during the medical emergencies

vii. Marine Park Ranger/Tubbataha Management Office

- Deploy watercraft and personnel to assist in response operations

d) Emergency Telecommunication

Lead Agency: Tubbataha Management Office

Implementing Partners: Provincial Disaster Risk Reduction and Management Office, Coast Guard District Palawan, Naval Forces West, Western Command, Dive Operators, Palawan Rapid Emergency Telecommunications Team

Specific Objectives:

- To facilitate communications, collaboration, cooperation, coordination, and commitment among cluster members in medical emergencies

Duties and Responsibilities

i. **Tubbataha Management Office**

- Provide communications, collaboration, cooperation, coordination, and commitment among cluster members in medical emergencies
- Coordinate with PDRRMO, if necessary

ii. **Provincial Disaster Risk Reduction & Management Office**

- Provide basic telecommunications coverage around the main operational area for the Command Center and other responders, if necessary
- Provide a directory of services containing the contact information of the different key players in managing medical emergencies
- Conduct repair and maintenance activities of communication equipment, as needed

iii. **Coast Guard District - Palawan**

- Provide communications assistance and render reports/updates on activities and incidents to TMO

iv. **Naval Forces West**

- Provide communications assistance and render reports/updates on activities and incidents to TMO

v. **Western Command**

- Provide communications assistance and render reports/updates on activities and incidents to TMO

vi. **Palawan Rapid Emergency Telecommunications Team**

- Assist in conveying warning messages and information in accordance with the request of the Provincial Disaster Risk Reduction Management Council (PDRRMC)
- Provide an alternate provincial communication system for emergencies through its prepositioned local groups and facilities.
- Coordinate with other local and national radio groups

vii. Dive Operator

- Maintain communication with TMO/MPR every two (2) hours during a medical emergency
- Submit incident report

e) International and Humanitarian Assistance

Lead Agency: Department of Foreign Affairs

Implementing Partner: Western Command, Philippine Coast Guard

Duties and Responsibilities:

- Establish Information Desks for information and coordination with other foreign partners/agencies
- Coordination with IT Personnel for the preparation of technical materials and other reports

D. Needs and Activities Inventory

a) Health

QUANTITY	UNIT	RESOURCE	AGENCY/OFFICE	RESOURCE LOCATION	REMARKS
2		30 ft speed boats	TMO	TRNP	
1		17 ft dinghy	TMO	TRNP	
1	set	OIWR Equipment	TMO	TRNP	
1	Tank	Medical Oxygen	TMO	TRNP	
18	tank	Medical Oxygen	All Dive Boats	TRNP	
18	set	First Aid Kits	All Dive Boats	TRNP	
2	set	First Aid Kits	TMO	TRNP	
	person	BLS trained	All Dive boats	TRNP	
18	Set	Spine Board	All dive boats	TRNP	
	person	Emergency Medical Technician	Dive boats (?)	TRNP	
	set	Automated External Defibrillator	Dive boats: DP/DA, Atlantis,	TRNP	
1		Hyperbaric chamber	ONP	PPC	

b) Management of the Dead and Missing

QUANTITY	UNIT	RESOURCE	AGENCY/OFFICE	RESOURCE LOCATION	REMARKS
1	box	Gloves	TMO	TRNP/PPC	

c) Logistics

QUANTITY	UNIT	RESOURCE	AGENCY/OFFICE	RESOURCE LOCATION	REMARKS
2		30 ft speed boats	TMO	TRNP	
1		17 ft dinghy	TMO	TRNP	
36		Speed boats	All dive boats	TRNP	Availability varies
18		First Aid Kits	All Dive Boats	TRNP	
2		First Aid Kits	TMO	TRNP	
1200	li	Fuel	TMO	TRNP	Availability varies
18		Dive boats		TRNP/PPC	Availability varies
1		Generator set	TMO	TRNP	
18		Generator set	All dive boats	TRNP	Availability varies

d) Emergency Communication

QUANTITY	UNIT	RESOURCE	AGENCY/OFFICE	RESOURCE LOCATION	REMARKS
1	unit	Satphone	TMO	TRNP	
18	unit	Satphone	All dive boats	TRNP	Availability varies
2	unit	SSB	TMO	TRNP/PPC	
18	unit	SSB	All dive boats	TRNP	Availability varies
3	Unit	Marine band	TMO	TRNP	
	unit	Marine band	All dive boats	TRNP	Availability varies
1	unit	Internet	TMO	TRNP	
6	Unit	Internet	Dive boats: Atlantis, DP, Resolute, Stella, Infiniti, Solitude	TRNP	Availability varies
1	Unit	Handheld radio	TMO	TRNP	
54	Unit	Handheld radio	All dive boats	TRNP	Availability varies

SECTION 2. OIL AND CHEMICAL SPILL

From the standpoint of TMO, its role in the management and containment of oil/chemical spills is limited. The agency with the mandate, logistics, and expertise to handle such situations is the PCG. Furthermore, the Facility Contingency Plan implemented by the PCG needs to consider that the TRNP habitat is primarily made up of shallow reef flats and deep drop-offs and, as such, may vary in sensitivity and required approach (Philippine Coast Guard, 2008). It must also consider the potential after-effects to the habitat and prioritize the use of environment-friendly dispersants, solidifiers, and other response agents.

A. Anatomy of the Hazard

ROOT CAUSES	EARLY WARNING SIGNS	TRIGGERING FACTORS	EXISTING MITIGATING MEASURES
Ships grounding	May not have early warning signs	Equipment malfunction; human error; bad weather condition	Compliance to maritime regulations; updated training for personnel
Leakage from vessels	May not have early warning signs	Collision and allision; ships grounding; poorly maintained equipment	Compliance to maritime regulations; updated training for personnel
Collision	May not have early warning signs	Human error; engine failure; faulty navigational system; bad weather condition	Compliance to maritime regulations; updated training for personnel; monitor weather condition
Allision (running upon a stationary ship)	May not have early warning signs	Human error; engine failure; faulty navigational system; bad weather condition	Compliance to maritime regulations; updated training for personnel; monitor weather condition

B. Scenario Generation

SITUATIONS	MOST LIKELY (Normal Activities)	BEST (with counter-measures)	WORST
Ships grounding	No grounding	Grounding without oil/chemical spill and major damages to life and property	Grounding with oil spill; damage to human and marine life and property
Leakage from vessels	No leakage	Leakage immediately contained	Oil and chemical spill; damage to marine life
Collision/Allision	No collision incident	Collision with no major damages and leakage	Oil and chemical spill; damage to marine life

1) Cluster Identification

CLUSTER	OFFICES/AGENCIES INVOLVED							LEAD OFFICE / AGENCY
Search, Rescue and Retrieval	PDRRMO	PCG	NFW	WESCOM	DO			PCG
Logistics (Transport, supplies, facilities, equipment)	PDRRMO	PCG	NFW	WESCOM	DO			PCG
Emergency Telecommunications	PDRRMO	PCG	NFW	WESCOM	PRETT	DO	MPR	PCG

2) Summary of Cluster Members

CLUSTER	LEAD AGENCY/ OFFICE	MEMBER AGENCIES/OFFICES
Search and Rescue	Coast Guard District - Palawan	Naval Forces West, Western Command, Dive Operators
Management of the Dead and Missing	Coast Guard District - Palawan	Naval Forces West, Western Command, Dive Operators
Emergency Telecommunication	Coast Guard District - Palawan	Provincial Disaster Risk Reduction and Management Office Naval Forces West, Western Command, Dive Operators, Palawan Rapid Emergency Telecommunications Team, Marine Park Ranger, Tubbataha Management Office

a) Search, Rescue, and Retrieval

Lead Agency: Philippine Coast Guard - Coast Guard District Palawan

Implementing Partners: Provincial Disaster Risk Reduction and Management Office, Naval Forces West, Western Command, Dive Operators

Specific Objectives:

- To identify the location and source of spills and apply mitigating measures.

Duties and Responsibilities

i. **Coast Guard District - Palawan**

- Deployment of the necessary and appropriate response team to the affected area.
- Contain and recover oil/chemical spill.
- Conduct cleanup of the residual spill
- Assess damage and submit a copy of the report to the TPAMB

ii. **Provincial Disaster Risk Reduction & Management Office**

- Provide augmentation of personnel trained in oil/chemical spill response

iii. **Naval Forces West**

- Augment response team, equipment, and vessel

iv. **Western Command**

- Augment response team, equipment, and vessel

v. **Dive Operator**

- Report presence of oil/chemical spill
- Assist in containment, recovery, and cleanup of oil/chemical spill

b) Logistics

Lead: Coast Guard District-Palawan

Implementing partners: Provincial Disaster Risk Reduction and Management Office, Western Command, Naval Forces West, Dive Operators

Specific Objectives:

- To provide an efficient and effective logistics coordinating structure that will harmonize the activities of all clusters and encourage regular info-sharing among all stakeholders and other partners.

- To formulate, update, implement, and monitor logistical policies, plans, programs, and procedures that will harmonize the activities of each cluster.
- The Logistics Cluster through coordination, monitoring, identification, and deployment cover the following:
 - Transportation (land, sea and air) this also includes provision of equipment and machines (and its required fuel) to provide the needed access and mobility for all cluster operations
 - Inventories (consolidation of resources available among partners and cluster members) and
 - Tracking of deployed resources

Duties and Responsibilities

- i. **Philippine Coast Guard**
 - Facilitate request for logistical support
 - Provision of logistics and transportation of emergency assistance in the affected area
 - Prioritize loading of aid cargo as ‘must load’
- ii. **Provincial Disaster Risk Reduction & Management Office**
 - Provide assistance in transporting needs to facilitate oil/chemical spill response
- iii. **Naval Forces West**
 - Provide assistance in transporting needs to facilitate oil/chemical spill response
- iv. **Western Command**
 - Provide assistance in transporting needs to facilitate oil/chemical spill response
- v. **Dive Operator**
 - Provide assistance in transporting needs to facilitate oil/chemical spill response

c) Emergency Telecommunication

Lead Agency: Coast Guard District-Palawan

Implementing Partners: Provincial Disaster Risk Reduction and Management Office, Naval Forces West, Western Command, Dive Operators, Palawan Rapid Emergency Telecommunications Team, MPR/TMO

Specific Objective:

- To facilitate communications, collaboration, cooperation, coordination, and commitment among cluster members in incidents of oil/chemical spill

Duties and Responsibilities

i. Coast Guard District – Palawan

- Provide communications assistance and render reports/updates on activities and incidents to TPAMB

ii. Provincial Disaster Risk Reduction & Management Office

- Provide basic telecommunications coverage around the main operational area for the Command Center and other responders, if necessary
- Provide a directory service containing the contact information of the different key players in managing oil/chemical spill
- Conduct repair and maintenance activities of communication equipment, as needed

iii. Naval Forces West

- Provide communications assistance and render reports/updates on activities and incidents to TMO

iv. Western Command

- Provide communications assistance and render reports/updates on activities and incidents to TMO

v. Dive Operator

- Maintain communication with TMO/MPR every two (2) hours during oil/chemical spill response
- Submit incident report

vi. Palawan Rapid Emergency Telecommunications Team

- Assist in conveying warning messages and information in accordance with the request of PDRRMO
- Provide an alternate provincial communication system for emergencies through its prepositioned local groups and facilities.
- Coordinate with other local and national radio groups

vii. Tubbataha Management Office

- Provide communications, collaboration, cooperation, coordination, and commitment among cluster members in medical emergencies
- Coordinate with PDRRMO, if necessary

D. Needs and Activities Inventory

a) Search, Rescue and Retrieval

QUANTITY	UNIT	RESOURCE	AGENCY/OFFICE	RESOURCE LOCATION	REMARKS
2		30 ft speed boats	TMO	TRNP	
1		17 ft dinghy	TMO	TRNP	
		Trained PCG personnel	CGD-PAL	PPC	
		Oil Spill boom	CGD-PAL	PPC	

b) Logistics

QUANTITY	UNIT	RESOURCE	AGENCY/OFFICE	RESOURCE LOCATION	REMARKS
2	Unit	30 ft speed boats	TMO	TRNP	
1	Unit	17 ft dinghy	TMO	TRNP	
36	Unit	Speed boats	All dive boats	TRNP	Availability varies
18	Set	First Aid Kits	All Dive Boats	TRNP	
2	Set	First Aid Kits	TMO	TRNP	
1200	Li	Fuel	TMO	TRNP	Availability varies
18		Dive boats		TRNP/PPC	Availability varies
1	Set	Gen set	TMO	TRNP	
18	Set	Gen set	All dive boats	TRNP	Availability varies

c) Emergency Communication

QUANTITY	UNIT	RESOURCE	AGENCY/OFFICE	RESOURCE LOCATION	REMARKS
1	Pc	Satphone	TMO	TRNP	
18	Pcs	Satphone	All dive boats	TRNP	Availability varies
2	Set	SSB	TMO	TRNP/PPC	
18	Set	SSB	All dive boats	TRNP	Availability varies
3	Set	Marine band	TMO	TRNP	
		Marine band	All dive boats	TRNP	Availability varies
1	Set	Internet	TMO	TRNP	
6	Set	Internet	Dive boats: Atlantis, DP, Resolute, Stella, Infiniti, Solitude	TRNP	Availability varies
1	Set	Handheld radio	TMO	TRNP	
54	Set	Handheld radio	All dive boats	TRNP	Availability varies

SECTION 3. MARITIME INCIDENTS

The increasing maritime travel surrounding the park potentiates general maritime incidents and their concomitant medical emergencies. Whether involving tourists, fellow rangers, or crew of vessels, marine park rangers need to know what their options are and how to respond. Again because of its remoteness, rangers need to train at least in first aid because they will likely be exposed to possible life and death situations at some point in their tour of duty. Risks to property or assets, though considered not as urgent as risks to life, may become an emergency by itself or may develop into one if/when the loss of said property or its function (e.g., patrol boat) endangers the lives of people. Financial losses may also be incurred hindering the effective management of TRNP.

A. Anatomy of the Hazard

ROOT CAUSES	EARLY WARNING SIGNS	TRIGGERING FACTORS	EXISTING MITIGATING MEASURES
Capsizal	Weather condition; overloading;	Bad weather condition; overloading;	Cancellation of diving activity when weather is not favorable; monitor weather;
Grounding		Human error; engine failure; faulty navigational system; bad weather condition;	Compliance to maritime regulations; updated training for personnel; monitor weather condition
Man Overboard	Drunkenness, bad weather condition	Human error; bad weather; unsafe environment (e.g., slippery floors, absence of handlebars, etc)	Think safety first; duty watchman; safety precautions in place;
Boat Malfunction	Hard starting engine	Lack of maintenance; engines too old;	Regular maintenance of floating assets; regular replacement of engine; training of personnel on boat maintenance and troubleshooting;

B. Scenario Generation

SITUATIONS	MOST LIKELY (Normal Activities)	BEST (with counter-measures)	WORST
Capsize	Safely arrived in destination, no sailing during bad weather	Boat capsized with no casualties; to stay within the vicinity of the vessel	Injury; missing person; shark attack
Grounding	No grounding	Grounding without major damage to life and property	Grounding with oil spill; damage to human and marine life
Man Overboard	No incident	Rescued	Missing person
Boat Malfunction	No malfunction	Malfunction repaired; passengers safely arrived at destination	Boat and passengers missing; loss of life and property

C. Coordination, Command and Control

1) Cluster Identification

CLUSTER	OFFICES/AGENCIES INVOLVED								LEAD OFFICE / AGENCY
Search, Rescue and Retrieval	PDRRMO	PCG	NFW	WESCOM	DO				PCG
Management of the Dead and Missing	PDRRMO	DILG	NBI	PNP Crime Lab	WESCOM	PPPO	PCG	NFW	DILG/ PDRRMO
Logistics	PDRRMO	PCG	WESCOM	NFW	DO				PCG
Emergency Telecommunications	PDRRMO	PCG	NFW	WESCOM	PRETT	DO			PCG

2) Summary of Cluster Members

CLUSTER	LEAD AGENCY/ OFFICE	MEMBER AGENCIES/OFFICES
Search and Rescue	Coast Guard District Palawan	Provincial Disaster Risk Reduction and Management Office, Naval Forces West, Western Command, Dive Operators
Management of the Dead and Missing	Department of Interior and Local Government/ Provincial Disaster Risk Reduction and Management Office	National Bureau of Investigation, Philippine National Police Crime Lab, Western Command, Palawan Police Provincial Office, Coast Guard District Palawan, Naval Forces West, Dive Operator
Logistics	Coast Guard District Palawan	Provincial Disaster Risk Reduction and Management Office, Western Command, Naval Forces West, Dive Operators
Emergency Telecom	Coast Guard District Palawan	Provincial Disaster Risk Reduction and Management Office, Naval Forces West, Western Command, Dive Operators, Palawan Rapid Emergency Telecommunications Team, Marine Park Rangers/Tubbataha Management Office
International Humanitarian Assistance	Department of Foreign Affairs	Western Command, Philippine Coast Guard - Coast Guard District - Palawan

a) Search, Rescue, and Retrieval

Lead Agency: Philippine Coast Guard - Coast Guard District - Palawan

Implementing Partners: PDRMO, Naval Forces West, Western Command, Dive Operators, MPR/TMO

Specific Objectives:

- To ensure the safety and security of the response teams deployed by the SRR cluster
- To ensure timely, effective, and efficient conduct of SRR operations
- To facilitate and assist in the retrieval, identification, and proper management of human remains
- To provide support for an effective, timely, organized, and systematic search, rescue, and retrieval operations in all emergencies to further minimize loss of lives and casualties, including the hand-over of casualties to the Health Cluster for proper treatment and management
- To coordinate and deploy all available search and rescue teams from the government, civil society, the private sector, and the international community.

Duties and Responsibilities

i. **Coast Guard District-Palawan**

- Deployment of the necessary and appropriate response teams & equipment for coordinated and responsive conduct of Search, Rescue, and Retrieval (SRR) operations, if necessary
- Perform other functions as requested within the mandate and capacity of PCG

ii. **Provincial Disaster Risk Reduction & Management Office**

- Coordinate the deployment of SRR Teams in the affected areas for proper endorsement to the Incident Command posts on the ground.
- If necessary and depending on the magnitude of the incident, activate Incident Management Team
- Collect status reports and requests of the deployed SRR Teams on the ground.
- Coordinate with other response clusters for their SRR requirements

iii. **Naval Forces West**

- Provide assistance during response operations

iv. **Western Command**

- Deploy necessary and appropriate response teams & equipment for coordinated and responsive conduct of Search, Rescue, and Retrieval (SRR) operations
- Coordination with the Incident Management Team
- Provide support in the assessment of the incident

v. **Dive Operator**

- Report incident to MPR
- Provide immediate response to the incident, if capable

vi. **Marine Park Ranger/Tubbataha Management Office**

- Assist SSR and in coordination

b) **Management of the Dead and Missing**

Lead: Department of Interior and Local Government/ Provincial Disaster Risk Reduction and Management Office

Implementing partners: National Bureau of Investigation, Philippine National Police Crime Lab, Western Command, Palawan Police Provincial Office, Coast Guard District Palawan, Naval Forces West, Marine Park Ranger/Tubbataha Management Office, Dive Operator

Specific Objectives:

- To assist in the proper identification and disposition of the remains in a sanitary manner with caution to prevent negative psychological and social impact on the bereaved and the community.

Protocols:

- The recovery and retrieval of dead bodies will be done through the different Search and Rescue Units (SARs) and will be coordinated with the SRR Cluster. The MDM Cluster will handle the body and hand over to proper authorities for proper processing and management.
- The concerned organization or agency shall inform the bereaved family of their client/personnel

Four Major Activities of MDM Cluster:

- Identification of the dead
- Final Arrangement for the dead
- Management of the missing persons
- Management of the bereaved families

(a) Identification of the Dead

- The dive operator or his/her representative or the MPR/TMO will lead the activities needed for proper identification of the declared dead body. A Death Certificate shall be secured from the Local Health Officer.

(b) Final Arrangement for the Dead

- The dive operator or his/her representative or the MPR/TMO shall report such death to the concerned Local Health Officer
- The dive operator or his/her representative or the MPR/TMO shall coordinate the final arrangement for the dead with the legitimate claimants.

(c) Management of the Missing Persons

- The dive operator or his/her representative or the MPR/TMO shall provide psychosocial support to the families of the missing persons

(d) Management of the Bereaved Families

- The concerned dive operator/TMO shall inform the bereaved family of the client/guest.

Protocols

- The concerned dive operator or his/her representative or the MPR/TMO should take the effort to identify the body at the site where it is found.
- All items of property that are on the body should remain on it. On the other hand, items associated with a body should be collected as property and tagged with the body.
- Care must be taken not to lose, contaminate, or switch the body, body parts, or property to be removed and transported. All dead bodies and body parts retrieved onsite should be placed in cadaver bags (note: place one retrieved body per bag or one retrieved body part per bag, as one body part is considered one dead body). Put a bag around the head if there is a potential loss of teeth (e.g. badly burned or crushed remains). If body bags are not available, use plastic sheets, bed sheets, or other locally available materials (ADPC, 2012).
- When transporting a dead body from Tubbataha to Puerto Princesa, it is advisable to use a vessel, preferably closed, with floors that are either waterproof or covered with plastic.
- When transporting on land, it is advisable to use a truck or van, preferably closed, with floors that are either waterproof or covered with plastic.
- Never use an ambulance to transport dead bodies because such is for the living. If there is no other choice, disinfect the ambulance after use.

Duties and Responsibilities

- All dead bodies and body parts should be placed in cadaver bags.
- For deaths caused by natural disasters, the unidentified bodies shall be turned over to the National Bureau of Investigation (NBI) for proper identification of all declared dead bodies.
- For deaths due to human-induced disasters, the Philippine National Police (PNP) is tasked to identify the bodies. Both will issue a Certificate of Identification for all examined/processed and identified bodies. The City/Municipal Health Officer shall issue the Death Certificate based on the Certificate of Identification issued by the NBI/PNP.

c) Logistics

Lead: Philippine Coast Guard - Coast Guard District-Palawan

Implementing partners: Provincial Disaster Risk Reduction and Management Office, Western Command, Naval Forces West, Dive Operators, Marine Park Rangers/Tubbataha Management Office

Specific Objectives:

- To provide an efficient and effective logistics coordinating structure that will harmonize the activities of all clusters and encourage regular info-sharing among all stakeholders and other partners.

- To formulate, update, implement, and monitor logistical policies, plans, programs, and procedures that will harmonize the activities of each cluster.
- The Logistics Cluster thru coordination, monitoring, identification, and deployment cover the following:
 - Transportation (land, sea, and air) also includes the provision of equipment and machines (and its required fuel) to provide the needed access and mobility for all cluster operations
 - Inventories (consolidation of resources available among partners and cluster members) and
 - Tracking of deployed items

Duties and Responsibilities

i. Coast Guard District – Palawan

- Provide watercraft for the transport of a patient
- Provide medical personnel

ii. Provincial Disaster Risk Reduction & Management Office

- Receive and facilitate the request for logistical support
- Provision of logistics in the transportation of emergency assistance in the affected area
- Constant gathering of official reports and significant data.

iii. Western Command

- Contribute to emergency transportation by committing their land, sea, and air assets based on needs and requests from PDRRMO
- Coordinate units in Palawan regarding the availability of necessary equipment

iv. Naval Forces West

- Contribute to emergency transportation by committing their land, sea, and air assets based on needs and requests from PDRRMO

v. Dive Operator

- Provide emergency transport for their client in need of medical attention
- Provide food and other necessities to those who assisted during the medical emergencies

vi. Marine Park Ranger/ Tubbataha Management Office

- Provide watercraft and personnel to assist in response operations

d) Emergency and Telecommunication

Lead Agency: Philippine Coast Guard - Coast Guard District - Palawan

Implementing Partners: Provincial Disaster Risk Reduction and Management Office, Naval Forces West, Western Command, Dive Operators, Palawan Rapid Emergency Telecommunications Team, Marine Park Rangers/Tubbataha Management Office

Specific Objective:

- To facilitate communications, collaboration, cooperation, coordination, and commitment among cluster members in response to maritime incidents

Duties and Responsibilities

i. Coast Guard District - Palawan

- Provide communications and render reports/updates on activities and incidents to Emergency Operations Center

ii. Provincial Disaster Risk Reduction & Management Office

- Provide basic telecommunications coverage around the main operational area for the Command Center and other responders, if necessary
- Provide a directory service containing the contact information of the different key players in managing maritime incidents
- Conduct repair and maintenance activities of communication equipment, as needed

iii. Naval Forces West

- Provide communications assistance and render reports/updates on activities and incidents to Emergency Operations Center

iv. Western Command

- Provide communications assistance and render reports/updates on activities and incidents to Emergency Operations Center

v. Dive Operators

- Maintain communication with MPR/TMO every two (2) hours during SRR operations
- Submit incident report

vi. Palawan Rapid Emergency Telecommunications Team

- Assist in conveying warning messages and information in accordance with the request of PDRRMO
- Provide an alternate provincial communication system for emergencies through its prepositioned local groups and facilities.
- Coordinate with other local and national radio groups

vii. Tubbataha Management Office

- Provide communications, collaboration, cooperation, coordination and commitment among cluster members in maritime incidents
- Coordinate with PCG, if necessary

e) International and Humanitarian Assistance

Lead Agency: Department of Foreign Affairs

Implementing Partners: Western Command, Philippine Coast Guard - Coast Guard District

Duties and Responsibilities:

- Establish Information Desks for the information and coordination with other foreign partners/ agencies
- Coordination with the IT Personnel for the preparation of technical materials and other reports

D. Needs and Activities Inventory

a) Search, Rescue, and Retrieval

QUANTITY	UNIT	RESOURCE	AGENCY/OFFICE	RESOURCE LOCATION	REMARKS
2	Set	30 ft speed boats	TMO	TRNP	
1	Set	17 ft dinghy	TMO	TRNP	
		SOLAS Trained	Dive boats	TRNP	Availability varies depending on presence of dive boats in TRNP. All crew are SOLA trained
		WASAR trained	Dive boats	TRNP	PCG personnel
		BLS trained	Dive boats	TRNP	Availability varies. BLS is included in SOLAS training
18	Set	Spine Board	All dive boats	TRNP	Availability varies
		Emergency Medical Technician	Dive boats (?)	TRNP	Availability varies
		Automated External Defibrillator	Dive boats: DP/DA, Atlantis,	TRNP	Availability varies
2	Pcs	Life ring	TMO	TRNP	
	Pcs	Life ring	All dive boats		Availability varies
1	Pcs	Life raft	TMO	TRNP	
18	Pcs	Life raft	All dive boats	PPC	Availability varies
36	Set	Speed boats	All dive boats	TRNP	Availability varies
4	unit	GPS	TMO	TRNP	
18	unit	GPS	All dive boats	TRNP	Availability varies
1		AIS	TMO	TRNP	
18		AIS	All dive boats	TRNP	Availability varies
2		Emergency Position Indicating Radio Beacon (EPIRB)	TMO	TRNP	
		Emergency Position Indicating Radio Beacon (EPIRB)	All dive boats	TRNP	Availability varies
10		Life Vest	TMO	TRNP	

500		Life Vest	All dive boats	TRNP	Availability varies
2	sets	Scuba gears	TMO	TRNP	
6	sets	Scuba gears	TMO	PPC	
300	sets	Scuba gears	All dive boats	TRNP	Availability varies

b) Management of the Dead and Missing

QUANTITY	UNIT	RESOURCE	AGENCY/OFFICE	RESOURCE LOCATION	REMARKS
1	box	Gloves	TMO	TRNP/PPC	

c) Logistics

QUANTITY	UNIT	RESOURCE	AGENCY/OFFICE	RESOURCE LOCATION	REMARKS
2		30 ft speed boats	TMO	TRNP	
1		17 ft dinghy	TMO	TRNP	
36		Speed boats	All dive boats	TRNP	Availability varies
18		First Aid Kits	All Dive Boats	TRNP	
2		First Aid Kits	TMO	TRNP	
1200	li	Fuel	TMO	TRNP	Availability varies
18		Dive boats		TRNP/PPC	Availability varies
1		Gen set	TMO	TRNP	
18		Gen set	All dive boats	TRNP	Availability varies

d) Emergency Communication

QUANTITY	UNIT	RESOURCE	AGENCY/OFFICE	RESOURCE LOCATION	REMARKS
1		Satphone	TMO	TRNP	
18		Satphone	All dive boats	TRNP	Availability varies
2		SSB	TMO	TRNP/PPC	
18		SSB	All dive boats	TRNP	Availability varies
3		Marine band	TMO	TRNP	
		Marine band	All dive boats	TRNP	Availability varies
1		Internet	TMO	TRNP	
6		Internet	Dive boats: Atlantis, DP, Resolute, Stella, Infiniti, Solitude	TRNP	Availability varies
1		Handheld radio	TMO	TRNP	
54		Handheld radio	All dive boats	TRNP	Availability varies

SECTION 4. TERRORISM AND PIRACY

Security risks to TRNP may come in the form of terrorism, piracy, or intrusion and may well result in harassment, abduction, or even death. Considering the remoteness of the park and the limited number of rangers on duty at a given time, these risks are of utmost concern for management. Although preventive measures should minimize the probability and severity of impacts, rangers need to be knowledgeable of the best courses of action should the event occur.

A. Anatomy of the Hazard

ROOT CAUSES	EARLY WARNING SIGNS	TRIGGERING FACTORS	EXISTING MITIGATING MEASURES
Extremism	Intelligence report; travel advisories; presence/detection of suspicious elements	Lack of fund; ideologies; destabilization; gaining media attention; socio and political stability	Intensified maritime and airborne patrols; collaborate with Wescom re intelligence; regular AIS/RADAR monitoring; effective communication; early warning system in all boats and ranger station; exercise vigilance
Economic reasons	Intelligence report; travel advisories; the presence of suspicious elements	Unemployment;	Intensified maritime and airborne patrols; collaborate with WesCom re intelligence; regular AIS/RADAR monitoring; effective communication; early warning system in all boats and ranger station; exercise vigilance

B. Scenario Generation

SITUATIONS	MOST LIKELY (Normal Activities)	BEST (with countermeasures)	WORST
Terrorism and piracy	No terrorism and piracy	No casualties/hostage-taking; Immediate coordination and response;	Hostage taken; seajacking; casualties; loss of life

C. Coordination, Command, and Control

1) Cluster Identification

CLUSTER	OFFICES/AGENCIES INVOLVED			LEAD OFFICE / AGENCY
Search, Rescue and Retrieval	WESCOM	DDO	PCG	WESCOM
Management of the Dead and Missing	DILG	PDRRMO		DILG/PDRRMO
Logistics	WESCOM	PDRRMO	DO	WESCOM

Emergency Telecommunications	WESCOM	TMO/MPR	DO	WESCOM
International Humanitarian Assistance	DFA	WESCOM		DFA/WESCOM

2) Summary of Cluster Member

CLUSTER	LEAD AGENCY/ OFFICE	MEMBER AGENCIES/OFFICES
Search and Rescue	Western Command	Dive Operators, Philippine Coast Guard - Coast Guard District - Palawan
Management of the Dead and Missing	Department of Interior and Local Government	Provincial Disaster Risk Reduction & Management Office
Logistics	Western Command	Provincial Disaster Risk Reduction & Management Office, Dive Operators
Emergency Telecom	Western Command	Marine Park Rangers/Tubbataha Management Office, Dive Operators
International and Humanitarian Relations	Department of Foreign Affairs	Western Command

a) Search, Rescue, and Retrieval

Lead Agency: Western Command

Implementing Partners: Dive Operators, Philippine Coast Guard - Coast Guard District Palawan

Specific Objective:

- Minimize severity of impacts by ensuring safety of human life

Duties and Responsibilities

i. Western Command

- Deploy necessary and appropriate response team and assets to TRNP.

ii. Dive Operators

- Report presence of suspicious elements and incidents

iii. Philippine Coast Guard

- Augment response team, equipment, and vessel

b) Management of the Dead and Missing

Lead Agency: Department of Interior and Local Government/ Provincial Disaster Risk Reduction and Management Office

Implementing partners: Dive Operator, Marine Park Rangers/Tubbataha Management Office

Specific Objectives:

- To provide assistance in the proper identification and disposition of the remains in a sanitary manner with caution to prevent negative psychological and social impact on the bereaved and the community.

Protocols:

- The recovery and retrieval of dead bodies will be done through the different Search and Rescue Units (SARs) and will be coordinated with the SRR Cluster. The MDM Cluster will handle the body and hand over to proper authorities for proper processing and management.
- The concerned organization or agency shall inform the bereaved family of their client/personnel.

Four Major Activities of MDM Cluster:

- Identification of the dead
- Final Arrangement for the dead
- Management of the missing persons
- Management of the bereaved families

(a) Identification of the Dead

- The dive operator or his/her representative or the MPR/TMO will lead the activities needed for proper identification of declared dead body. A Death Certificate shall be secured from the Local Health Officer.

(b) Final Arrangement for the Dead

- The dive operator or his/her representative or the MPR/TMO shall report such death to the concerned Local Health Officer
- The dive operator or his/her representative or the MPR/TMO shall coordinate the final arrangement for the dead with the legitimate claimants.

(c) Management of the Missing Persons

- The dive operator or his/her representative or the MPR/TMO shall provide psychosocial support to the families of the missing persons

(d) Management of the Bereaved Families

- The concerned dive operator/TMO shall inform the bereaved family of the client/guest.

Protocols

- Military protocol will apply.
- Per DOH’s guidelines (2012), the SAR Team should observe and document (sketch and/or photograph) the location and position of each body/body part at the scene prior to removal of the body. The team should take the effort to identify the bodies at the site where they are found. Standardized and prenumbered tags should be attached to the bodies that provide the name (if known), approximate age, sex, and location of the body. The tag should be placed on a waterproof label then securely attach it to the body/body part. Each body should also be photographed from face down to the chest with reference number (wipe the face with wet cloth to make the face recognizable).
- All items of property that are on the body should remain on it. On the other hand, items associated with a body should be collected as property and tagged with the body. Location of loose items (e.g. proximity to which body) should be documented prior to collection
- Care must be taken not to lose, contaminate or switch the body, body parts, or property to be removed and transported. All dead bodies and body parts retrieved onsite should be placed in cadaver bags (note: place one retrieved body per bag or one retrieved body part per bag, as one body part is considered one dead body). Put a bag around the head if there is a potential loss of teeth (e.g. badly burned or crushed remains). If body bags are not available, use plastic sheets, bed sheets, or other locally available materials (ADPC, 2012).
- When choosing vehicles to transport dead bodies, it is advisable to use trucks or vans, preferably closed, with floors that are either waterproof or covered with plastic. Never use an ambulance to transport dead bodies because such is for the living. If there is no other choice, disinfect the ambulance after use.
- If necessary, the concerned dive operator or his/her representative or the MPR/TMO should take the effort to identify the body at the site where it is found.

Duties and Responsibilities

- All dead bodies and body parts should be placed in cadaver bags.
- For deaths due to terrorism and piracy, the Philippine National Police (PNP) is tasked to identify the bodies. PNP will issue Certificate of Identification for all examined/processed and identified bodies. The City/Municipal Health Officer shall issue the Death Certificate based on the Certificate of Identification issued by the PNP.

c) Logistics

Lead Agency: Western Command

Implementing partners: Provincial Disaster Risk Reduction and Management Office, Dive Operators

Specific Objectives:

- To provide an efficient and effective logistics coordinating structure that will harmonize the activities of all clusters and encourage regular info-sharing among all stakeholders and other partners.
- To formulate, update, implement and monitor logistical policies, plans, programs and procedures that will harmonize the activities of each cluster.

- The Logistics Cluster through coordination, monitoring, identification and deployment cover the following:
 - Transportation (land, sea and air) this also includes provision of equipment and machines (and its required fuel) to provide the needed access and mobility for all cluster operations
 - Inventories (consolidation of resources available among partners and cluster members) and
 - Tracking of deployed items

Duties and Responsibilities

- i. **Western Command**
 - Facilitate request for logistical support
 - Provision of logistics and transportation of emergency assistance in affected area
 - Prioritize loading of aid cargo as ‘must load’
- ii. **Provincial Disaster Risk Reduction & Management Office**
 - Provide assistance in transporting needs to facilitate response to terrorism and piracy
- iii. **Dive Operator**
 - Provide assistance in transporting needs to facilitate response to terrorism and piracy

d) Emergency Telecommunication

Lead Agency: Western Command

Implementing Partners: Provincial Disaster Risk Reduction and Management Office, Marine Park Ranger/Tubbataha Management Office, Dive Operator

Specific Objectives:

- To facilitate communications, collaboration, cooperation, coordination and commitment among cluster members in incidents of terrorism and piracy

Duties and Responsibilities

- i. **Western Command**
 - Activate emergency operations center
- ii. **Provincial Disaster Risk Reduction & Management Office**
 - Provide basic telecommunications coverage around the main operational area for the Command Center and other responders, if necessary
 - Provide a directory services containing the contact information of the different key players in managing response to terrorism and piracy
 - Conduct repair and maintenance activities of communication equipment, as needed

iii. Marine Park Ranger/Tubbataha Management Office

- Provide communications assistance and render reports/updates on activities and incidents to EOC

iv. Dive Operator

- Provide communications assistance and render reports/updates on activities and incidents to TMO

e) International and Humanitarian Assistance

Lead Agency: Department of Foreign Affairs

Implementing Partners: Western Command

Duties and Responsibilities:

- Establish Information Desks for the information and coordination with other foreign partners/ agencies
- Coordinate with IT Personnel for the preparation of technical materials and other documents

D. Needs and Activities Inventory

a) Search, Rescue and Retrieval

QUANTITY	UNIT	RESOURCE	AGENCY/OFFICE	RESOURCE LOCATION	REMARKS
2		30 ft speed boats	TMO	TRNP	
1		17 ft dinghy	TMO	TRNP	
		SOLAS Trained	Dive boats (?)	TRNP	Availability varies
		WASAR trained	Dive boats (?)	TRNP	Availability varies
		BLS trained	Dive boats (?)	TRNP	Availability varies
18		Spine Board	All dive boats	TRNP	Availability varies
		Emergency Medical Technician	Dive boats (?)	TRNP	Availability varies
		Automated External Defibrillator	Dive boats: DP/DA, Atlantis,	TRNP	Availability varies
2		Life ring	TMO	TRNP	
		Life ring	All dive boats		Availability varies
1		Life raft	TMO	TRNP	
18		Life raft	All dive boats	PPC	Availability varies
36		Speed boats	All dive boats	TRNP	Availability varies

4		GPS	TMO	TRNP	
18		GPS	All dive boats	TRNP	Availability varies
1		AIS	TMO	TRNP	
18		AIS	All dive boats	TRNP	Availability varies
2		Emergency Position Indicating Radio Beacon (EPIRB)	TMO	TRNP	
		Emergency Position Indicating Radio Beacon (EPIRB)	All dive boats	TRNP	Availability varies
10		Life Vest	TMO	TRNP	
500		Life Vest	All dive boats	TRNP	Availability varies
2	sets	Scuba gears	TMO	TRNP	
6	sets	Scuba gears	TMO	PPC	
300	sets	Scuba gears	All dive boats	TRNP	Availability varies

b) Management of the Dead and Missing

QUANTITY	UNIT	RESOURCE	AGENCY/OFFICE	RESOURCE LOCATION	REMARKS
1	box	Gloves	TMO	TRNP/PPC	

c) Logistics

QUANTITY	UNIT	RESOURCE	AGENCY/OFFICE	RESOURCE LOCATION	REMARKS
2		30 ft speed boats	TMO	TRNP	
1		17 ft dinghy	TMO	TRNP	
36		Speed boats	All dive boats	TRNP	Availability varies
18		First Aid Kits	All Dive Boats	TRNP	
2		First Aid Kits	TMO	TRNP	
1200	ltrs	Fuel	TMO	TRNP	Availability varies
18		Dive boats		TRNP/PPC	Availability varies

d) Emergency Communication

QUANTITY	UNIT	RESOURCE	AGENCY/OFFICE	RESOURCE LOCATION	REMARKS
1		Satphone	TMO	TRNP	
18		Satphone	All dive boats	TRNP	Availability varies
2		SSB	TMO	TRNP/PPC	
18		SSB	All dive boats	TRNP	Availability varies
3		Marine band	TMO	TRNP	
		Marine band	All dive boats	TRNP	Availability varies
1		Internet	TMO	TRNP	
6		Internet	Dive boats: Atlantis, DP, Resolute, Stella, Infiniti, Solitude	TRNP	Availability varies
1		Handheld radio	TMO	TRNP	
54		Handheld radio	All dive boats	TRNP	Availability varies

SECTION 5. NATURAL HAZARDS

The incidence and magnitude of storms entering the Philippine Area of Responsibility (PAR) have increased over the past years. Although none have yet directly hit the TRNP, it is always prudent to prepare for such an event. Thus, in the event of a category 5 storm forecast projected to directly traverse TRNP, rangers on duty at the ranger station will be evacuated immediately. Although this may render the park vulnerable to other threats, in this case, management has decided to prioritize human life above all else. Furthermore, in case of a tsunami and super typhoon alert, evacuation will be the immediate course of action for marine park rangers and divers. The natural hazards include the tsunami, storm surge, and super typhoon.

A. Anatomy of the Hazard

ROOT CAUSES	EARLY WARNING SIGNS	TRIGGERING FACTORS	EXISTING MITIGATING MEASURES
Movement of Sulu and Negros Trench	Shaking ground/water, drop in water level, and roaring sound; PHIVOLCS Advisory	Movement of Sulu and Negros Trench	Preparedness for evacuation; climate proof facilities; PHIVOLCS advisory monitoring;
Hightide with tropical cyclone	PAGASA Advisory	Hightide with tropical cyclone	Preparedness for evacuation; climate proof facilities; PAGASA advisory monitoring;
Super typhoon	PAGASA Advisory	Super typhoon	Preparedness for evacuation; climate proof facilities; PAGASA advisory monitoring;

B. Scenario Generation

SITUATIONS	MOST LIKELY (Normal Activities)	BEST (with counter-measures)	WORST
Tsunami and Storm surge	No tsunami and storm surge	Safe evacuation with no casualties	Loss of life and property

C. Coordination, Command and Control

1) Cluster Identification

CLUSTER	OFFICES/AGENCIES INVOLVED								LEAD OFFICE / AGENCY
Health	MPR/TMO	ONP	WESCOM Hospital	AHP	DO				MPR POIC/TMO
Search, Rescue and Retrieval	PDRRMO	PCG	WESCOM	NFW	DO				WESCOM

Management of the Dead and Missing	PDRRMO	PCG	NBI	PPPO	DO	PNP Crime Lab	DILG	NFW	DILG/PDRRMO
Logistics (Transport, supplies, facilities, equipment)	PDRRMO	PCG	NFW	WESCOM	DO				PDRRMO
Emergency Telecommunications	PDRRMO	PCG	NFW	WESCOM	DO	PRETT	MPR		PDRRMO
International Humanitarian Assistance	WESCOM	DFA							DFA

2) Summary of Cluster Members

CLUSTER	LEAD AGENCY/ OFFICE	MEMBER AGENCIES/OFFICES
Health	Marine Park Rangers/Tubbataha Management Office	Ospital ng Palawan, Western Command, Adventist Hospital, Dive Operators
Search and Rescue	Western Command	Provincial Disaster Risk Reduction & Management Office, Philippine Coast Guard - Coast Guard District Palawan, Naval Forces West, Dive Operators
Management of the Dead and Missing	Department of Interior and Local Governement/Provincial Disaster Risk Reduction & Management Office	National Bureau of Investigation, Palawan Police Provincial Office, Western Command, Philippine Coast Guard - Coast Guard District Palawan, PNP Crime Lab, Naval Forces West, Dive Operators
Logistics	Provincial Disaster Risk Reduction & Management Office	Philippine Coast Guard - Coast Guard District Palawan, Naval Forces West, Dive Operators
Emergency Telecom	Provincial Disaster Risk Reduction & Management Office	Philippine Coast Guard - Coast Guard District Palawan, Naval Forces West, Dive Operators Palawan Rapid Emergency Telecommunications Team
International and Humanitarian Relations	Department of Foreign Affairs	Western Command

a) Search, Rescue, and Retrieval

Lead Agency: Western Command

Implementing Partners: Provincial Disaster Risk Reduction & Management Office, Philippine Coast Guard – Coast Guard District -Palawan, Naval Forces West

Specific Objectives:

- To coordinate and deploy all available Search and Rescue teams from the government, civil society, the private sector, and the international community.
- To ensure the safety and security of the response teams deployed by the SRR cluster
- To ensure timely, effective and efficient conduct of SRR operations
- To facilitate and assist in the retrieval, identification and proper management of human remains
- To provide support for an effective, timely, organized and systematic search, rescue and retrieval operations to affected areas in all emergencies to further minimize loss of lives and casualties, including the hand-over of casualties to the Health Cluster for proper treatment and management.

Duties and Responsibilities

i. Western Command

- Deploy necessary and appropriate response teams & equipment for coordinated and responsive conduct of Search, Rescue and Retrieval (SRR) operations
- Coordination with the Incident Management Team
- Provide support in the assessment of the incident

ii. Philippine Coast Guard – Coast Guard District Palawan

- Deployment of the necessary and appropriate response teams & equipment for coordinated and responsive conduct of Search, Rescue and Retrieval (SRR) operations, if necessary
- Perform other functions as requested within the mandate and capacity of PCG

iii. Provincial Disaster Risk Reduction & Management Office

- Coordinate the deployment of SRR Teams in the affected areas for proper endorsement to the Incident Command posts on ground.
- If necessary and depending on the magnitude of the incident, activate Incident Management Team
- Collect status reports and requests of the deployed SRR Teams on ground.
- Coordinate with other response clusters for their SRR requirements

iv. Naval Forces West

- Provide assistance during response operations

b) Management of the Dead and Missing

Lead: Department of Interior and Local Government/ Provincial Disaster Risk Reduction & Management Office

Implementing partners: National Bureau of Investigation, Philippine National Police Crime Lab, Palawan Police Provincial Office, Philippine Coast Guard – Coast Guard District Palawan, Western Command, Naval Forces West, Dive Operators, Marine Park Rangers/Tubbataha Management Office

Specific Objectives:

- To provide assistance in the proper identification and disposition of the remains in a sanitary manner with caution to prevent negative psychological and social impact on the bereaved and the community.

Protocols:

- The recovery and retrieval of dead bodies will be done through the different Search and Rescue Units (SARs) and will be coordinated with the SRR Cluster. The MDM Cluster will handle the body and transfer to proper authorities for proper processing and management.
- The concerned dive operator/TMO shall inform the bereaved family.

Four Major Activities of MDM Cluster:

- Identification of the dead
- Final Arrangement for the dead
- Management of the missing persons
- Management of the bereaved families

(a) Identification of the Dead

- The dive operator or his/her representative or the MPR/TMO will lead the activities needed for proper identification of declared dead body. A Death Certificate shall be secured from the Local Health Officer.

(b) Final Arrangement for the Dead

- The dive operator or his/her representative or the MPR/TMO shall report such death to the concerned Local Health Officer
- The dive operator or his/her representative or the MPR/TMO shall coordinate the final arrangement for the dead with the legitimate claimants.

(c) Management of the Missing Persons

- The dive operator or his/her representative or the MPR/TMO shall provide psychosocial support to the families of the missing persons

(d) Management of the Bereaved Families

- The concerned dive operator/TMO shall inform the bereaved family of the client/guest.

Protocols

- The concerned dive operator or his/her representative or the MPR/TMO shall take the effort to identify the body at the site where it is found.
- All items of property that are on the body should remain on it. On the other hand, items associated with a body should be collected as property and tagged with the body.
- Care must be taken not to lose, contaminate or switch the body, body parts, or property to be removed and transported. All dead bodies and body parts retrieved onsite should be placed in cadaver bags (note: place one retrieved body per bag or one retrieved body part per bag, as one body part is considered one dead body). Put a bag around the head if there is a potential loss of teeth (e.g. badly burned or crushed remains). If body bags are not available, use plastic sheets, bed sheets, or other locally available materials (ADPC, 2012).
- When transporting a dead body from Tubbataha to Puerto Princesa, it is advisable to use a vessel, preferably closed, with floors that are either waterproof or covered with plastic.
- When transporting on land, it is advisable to use a truck or van, preferably closed, with floors that are either waterproof or covered with plastic.
- Never use an ambulance to transport dead bodies because such is for the living. If there is no other choice, disinfect the ambulance after use.

Duties and Responsibilities

- All dead bodies and body parts should be placed in cadaver bags.
- For deaths caused by natural disasters, the unidentified bodies shall be turned over to the National Bureau of Investigation (NBI) for proper identification of all declared dead bodies.
- For deaths due to human-induced disasters, the Philippine National Police (PNP) is tasked to identify the bodies. Both will issue Certificate of Identification for all examined/processed and identified bodies. The City/Municipal Health Officer shall issue the Death Certificate based on the Certificate of Identification issued by the NBI/PNP.

c) Logistics

Lead Agency: Provincial Disaster Risk Reduction & Management Office

Implementing partners: Philippine Coast Guard – Coast Guard District Palawan, Western Command, Naval Forces West

Specific Objectives:

- To provide an efficient and effective logistics coordinating structure that will harmonize the activities of all clusters and encourage regular info-sharing among all stakeholders and other partners.
- To formulate, update, implement and monitor logistical policies, plans, programs, and procedures that will harmonize the activities of each cluster.
- The Logistics Cluster thru coordination, monitoring, identification and deployment cover the following:

- Transportation (land, sea, and air) this also includes provision of equipment and machines (and its required fuel) to provide the needed access and mobility for all cluster operations
- Inventories (consolidation of resources available among partners and cluster members) and
- Tracking of deployed resources

Duties and Responsibilities

- i. **Provincial Disaster Risk Reduction & Management Office**
 - Provide assistance in transporting needs to facilitate response operations
- ii. **Philippine Coast Guard – Coast Guard District - Palawan**
 - Facilitate request for logistical support
 - Provision of logistics and transportation of emergency assistance in affected area
 - Prioritize loading of aid cargo as ‘must load’
- iii. **Naval Forces West**
 - Provide assistance in transporting needs to facilitate response operations
- iv. **Western Command**
 - Provide assistance in transporting needs to facilitate response operations

d) Emergency Telecommunication

Lead Agency: Provincial Disaster Risk Reduction & Management Office

Implementing Partners: Coast Guard District Palawan, Naval Forces West, Western Command, Palawan Rapid Emergency Telecommunications Team, Marine Park Rangers/Tubbataha Management Office, Dive Operators

Specific Objectives:

- Facilitate communications, collaboration, and cooperation among cluster members in incidents of natural hazards.

Duties and Responsibilities

- i. **Provincial Disaster Risk Reduction & Management Office**
 - Provide basic telecommunications coverage around the main operational area for the Command Center and other responders, if necessary
 - Provide a directory services containing the contact information of the different key players in managing response to natural hazards

- Conduct repair and maintenance activities of communication equipment, as needed
- ii. **Philippine Coast Guard**
 - Provide communications assistance and render reports/updates on activities and incidents to EOC
- iii. **Naval Forces West**
 - Provide communications assistance and render reports/updates on activities and incidents to EOC
- iv. **Western Command**
 - Provide communications assistance and render reports/updates on activities and incidents to EOC
- v. **Palawan Rapid Emergency Telecommunications Team**
 - Assist in conveying warning messages and information in accordance with the request of PDRRMO
 - Provide alternate provincial communication system for emergencies through its prepositioned local groups and facilities.
 - Coordinate with other local and national radio groups
- vi. **Tubbataha Management Office**
 - Communicate, cooperate, and collaborate with cluster members
 - Coordinate with PDRRMO
- vii. **Dive Operators**
 - Communicate, cooperate, and collaborate with cluster members
 - Coordinate with TMO

e) International and Humanitarian Assistance

Lead Agency: Department of Foreign Affairs

Implementing Partners: Western Command

Duties and Responsibilities:

- Establish Information Desks for the information and coordination with other foreign partners/agencies
- Coordination with the IT Personnel for the preparation of technical materials and other documents/reports.

D. Needs and Activities Inventory

a) Health

QUANTITY	UNIT	RESOURCE	AGENCY/OFFICE	RESOURCE LOCATION	REMARKS
2		30 ft speed boats	TMO	TRNP	
1		17 ft dinghy	TMO	TRNP	
1	set	OIWR Equipment	TMO	TRNP	
1	Tank	Medical Oxygen	TMO	TRNP	
18	tank	Medical Oxygen	All Dive Boats	TRNP	
18	set	First Aid Kits	All Dive Boats	TRNP	
2	set	First Aid Kits	TMO	TRNP	
	person	BLS trained	All Dive boats	TRNP	
18	Set	Spine Board	All dive boats	TRNP	
	person	Emergency Medical Technician	Dive boats (?)	TRNP	
	set	Automated External Defibrillator	Dive boats: DP/DA, Atlantis,	TRNP	
1		Hyperbaric chamber	ONP	PPC	

b) Search, Rescue and Retrieval

QUANTITY	UNIT	RESOURCE	AGENCY/OFFICE	RESOURCE LOCATION	REMARKS
2		30 ft speed boats	TMO	TRNP	
1		17 ft dinghy	TMO	TRNP	
		SOLAS Trained	Dive boats (?)	TRNP	Availability varies
		WASAR trained	Dive boats (?)	TRNP	Availability varies
		BLS trained	Dive boats (?)	TRNP	Availability varies
18		Spine Board	All dive boats	TRNP	Availability varies
		Emergency Medical Technician	Dive boats (?)	TRNP	Availability varies
		Automated External Defibrillator	Dive boats: DP/DA, Atlantis,	TRNP	Availability varies
2		Life ring	TMO	TRNP	
		Life ring	All dive boats		Availability varies
1		Life raft	TMO	TRNP	
18		Life raft	All dive boats	PPC	Availability varies
36		Speed boats	All dive boats	TRNP	Availability varies
4		GPS	TMO	TRNP	
18		GPS	All dive boats	TRNP	Availability varies
1		AIS	TMO	TRNP	

18		AIS	All dive boats	TRNP	Availability varies
2		Emergency Position Indicating Radio Beacon (EPIRB)	TMO	TRNP	
		Emergency Position Indicating Radio Beacon (EPIRB)	All dive boats	TRNP	Availability varies
10		Life Vest	TMO	TRNP	
500		Life Vest	All dive boats	TRNP	Availability varies
2	sets	Scuba gears	TMO	TRNP	
6	sets	Scuba gears	TMO	PPC	
300	sets	Scuba gears	All dive boats	TRNP	Availability varies

c) Management of Dead and Missing

QUANTITY	UNIT	RESOURCE	AGENCY/OFFICE	RESOURCE LOCATION	REMARKS
1	box	Gloves	TMO	TRNP/PPC	

d) Logistics

QUANTITY	UNIT	RESOURCE	AGENCY/OFFICE	RESOURCE LOCATION	REMARKS
2		30 ft speed boats	TMO	TRNP	
1		17 ft dinghy	TMO	TRNP	
36		Speed boats	All dive boats	TRNP	Availability varies
18		First Aid Kits	All Dive Boats	TRNP	
2		First Aid Kits	TMO	TRNP	
1200	li	Fuel	TMO	TRNP	Availability varies
18		Dive boats		TRNP/PPC	Availability varies
1		Gen set	TMO	TRNP	
18		Gen set	All dive boats	TRNP	Availability varies

e) Emergency Communication

QUANTITY	UNIT	RESOURCE	AGENCY/OFFICE	RESOURCE LOCATION	REMARKS
1	Set	Satphone	TMO	TRNP	
18	Set	Satphone	All dive boats	TRNP	Availability varies
2	Set	SSB	TMO	TRNP/PPC	
18	Set	SSB	All dive boats	TRNP	Availability varies
3	Set	Marine band	TMO	TRNP	

	Set	Marine band	All dive boats	TRNP	Availability varies
1	Set	Internet	TMO	TRNP	
6	Set	Internet	Dive boats: Atlantis, DP, Resolute, Stella, Infiniti, Solitude	TRNP	Availability varies
1	Set	Handheld radio	TMO	TRNP	
54	Set	Handheld radio	All dive boats	TRNP	Availability varies

SECTION 6. DIVING INCIDENTS (Missing person)

Divers and other visitors could get completely separated from their group, with potentially fatal results. Rangers are the most strategic persons for immediate response. However, it should be recognized that the PCG and Western command have the authority on conducting search and rescue operation.

A. Anatomy of the Hazard

ROOT CAUSES	EARLY WARNING SIGNS	TRIGGERING FACTORS	EXISTING MITIGATING MEASURES
Underlying medical issues	May or may not have early warning signs	Scuba diving, overfatigue, stress conditions, diet, failure to take medicines; undiagnosed medical condition	Required medical checkup for rangers and TMO staff; medical certificate required from dive tourists; conduct of dive briefings on emergencies; medical equipment and first aid practitioners available onboard
Scuba Diving	Gear malfunction	Gear malfunction; poor gear maintenance; human error	Regular maintenance of scuba gear; backup scuba gear; maintain diving skill; follow diving protocol

B. Scenario Generation

SITUATIONS	MOST LIKELY (Normal Activities)	BEST (with counter-measures)	WORST
Missing person	No missing person	Person found/rescued;	Person not found

C. Coordination, Command and Control

1) Cluster Identification

CLUSTER	OFFICES/AGENCIES INVOLVED									LEAD OFFICE / AGENCY
Search, Rescue and Retrieval	PDRRMO	PCG	NFW	WESCOM	DO					PCG
Management of the Dead and Missing	PDRRMO	DILG	NBI	PNP Crime Lab	WESCOM	PPPO	PCG	NFW	DO	DILG/ PDRRMO
Logistics (Transport, supplies, facilities, equipment)	PDRRMO	PCG	NFW	WESCOM	DO					PCG

Emergency Telecommunications	PDRRMO	PCG	NFW	WESCOM	DO	PRETT	MPR			PCG
International Humanitarian Assistance	WESCOM	DFA								DFA

2) Summary of Cluster Members

CLUSTER	LEAD AGENCY/ OFFICE	MEMBER AGENCIES/OFFICES
Search and Rescue	Philippine Coast Guard	Provincial Disaster Risk Reduction & Management Office, Western Command, Naval Forces West, Dive Operators
Management of the Dead and Missing	Provincial Disaster Risk Reduction & Management Office	Palawan Police Provincial Office, Western Command, Philippine Coast Guard, National Bureau of Investigation, PNP Crime Lab, Naval Forces West, Philippine Coast Guard - Coast Guard District Palawan
Logistics	Philippine Coast Guard	Provincial Disaster Risk Reduction & Management Office, Naval Forces West, Western Command, Dive Operators
Emergency Telecom	Philippine Coast Guard	Provincial Disaster Risk Reduction & Management Office, Palawan Rapid Emergency Telecommunications Team, Naval Forces West, Western Command, Dive Operators
International and Humanitarian Relations	Department Foreign Affairs	Western Command

a) Search, Rescue and Retrieval

Lead Agency: Philippine Coast Guard

Implementing Partners: Provincial Disaster Risk Reduction & Management Office, Western Command, Naval Forces West, Dive Operators, Marine Park Rangers/Tubbataha Management Office

Specific Objectives:

- To coordinate and deploy all available search and rescue teams from the government, civil society, private sector, and the international community
- To ensure the safety and security of the response teams deployed by the SRR cluster
- To ensure timely, effective, and efficient conduct of SRR operations
- To facilitate and assist in the retrieval, identification and proper management of human remains
- To provide support for an effective, timely, organized and systematic search, rescue and retrieval operations to affected areas in all emergencies to further minimize loss of lives and casualties, including the hand-over of casualties to the Health Cluster for proper treatment and management.

Duties and Responsibilities

i. Philippine Coast Guard – Coast Guard District Palawan

- Deploy the necessary and appropriate response teams & equipment for coordinated and responsive conduct of Search, Rescue and Retrieval (SRR) operations in coordination with other agencies
- Perform other functions as requested within the mandate and capacity of PCG

ii. Western Command

- Deploy the necessary and appropriate response teams & equipment for coordinated and responsive conduct of Search, Rescue and Retrieval (SRR) operations: Water Search & Rescue Teams
- Coordinate with the Incident Management Team
- Assess conditions and response

iii. Provincial Disaster Risk Reduction & Management Office

- Monitor situation in the ground from PDRRMO
- Receive request for SRR augmentation (as EOC Secretariat)
- Request other PDRRMO Members for SRR augmentation
- Deploy SRR augmentation groups in coordination with the PRRMO and Cluster head

iv. Naval Forces West

- Deploy the necessary and appropriate response teams & equipment for coordinated and responsive conduct of Search, Rescue and Retrieval (SRR) operations in coordination with other agencies
- Perform other functions as requested within the mandate and capacity of NFW

v. Dive Operators

- Concerned dive operator (whose guest is missing) report the incident immediately to MPR
- Deploy watercraft for conduct of immediate search and rescue
- Coordinate with other agencies in the conduct of SRR

vi. Marine Park Ranger/Tubbataha Management Office

- Report immediately to TMO, NFW, and PCG
- Deploy watercraft for conduct of immediate search and rescue
- Coordinate with other agencies in the conduct of SRR

b) Management of the Dead and Missing

Lead Agency: Department of Interior and Local Government/ Provincial Disaster Risk Reduction & Management Office

Implementing partners: Department of Interior and Local Government, National Bureau of Investigation, Philippine National Police Crime Lab, Palawan Police Provincial Office, Philippine Coast Guard – Coast Guard District Palawan, Naval Forces West, Dive Operators

Specific Objectives:

- To provide assistance in the proper identification and disposition of the remains in a sanitary manner with caution to prevent negative psychological and social impact on the bereaved and the community.

Protocols:

- The recovery and retrieval of dead bodies will be done through the different Search and Rescue Units (SARs) and will be coordinated with the SRR Cluster. The MDM Cluster will handle the body and transfer to proper authorities for proper processing and management.
- The concerned dive operator/TMO shall inform the bereaved family.

Four Major Activities of MDM Cluster:

- Identification of the dead
- Final Arrangement for the dead
- Management of the missing persons
- Management of the bereaved families

(a) Identification of the Dead

- The dive operator or his/her representative or the MPR/TMO will lead the activities needed for proper identification of declared dead body. A Death Certificate shall be secured from the Local Health Officer.

(b) Final Arrangement for the Dead

- The dive operator or his/her representative or the MPR/TMO shall report such death to the concerned Local Health Officer
- The dive operator or his/her representative or the MPR/TMO shall coordinate the final arrangement for the dead with the legitimate claimants.

(c) Management of the Missing Persons

- The dive operator or his/her representative or the MPR/TMO shall provide psychosocial support to the families of the missing persons

(d) Management of the Bereaved Families

- The concerned dive operator/TMO shall inform the bereaved family of the client/guest.

Protocols

- The concerned dive operator or his/her representative or the MPR/TMO should take the effort to identify the body at the site where it is found.
- All items of property that are on the body should remain on it. On the other hand, items associated with a body should be collected as property and tagged with the body.

- Care must be taken not to lose, contaminate or switch the body, body parts, or property to be removed and transported. All dead bodies and body parts retrieved onsite should be placed in cadaver bags (note: place one retrieved body per bag or one retrieved body part per bag, as one body part is considered one dead body). Put a bag around the head if there is a potential loss of teeth (e.g. badly burned or crushed remains). If body bags are not available, use plastic sheets, bed sheets, or other locally available materials (ADPC, 2012).
- When transporting a dead body from Tubbataha to Puerto Princesa, it is advisable to use a vessel, preferably closed, with floors that are either waterproof or covered with plastic.
- When transporting on land, it is advisable to use a truck or van, preferably closed, with floors that are either waterproof or covered with plastic.
- Never use an ambulance to transport dead bodies because such is for the living. If there is no other choice, disinfect the ambulance after use.

Duties and Responsibilities

- All dead bodies and body parts should be placed in a cadaver bag.
- For deaths caused by natural disasters, the unidentified bodies shall be turned over to the National Bureau of Investigation (NBI) for proper identification of all declared dead bodies.
- For deaths due to human-induced disasters, the Philippine National Police (PNP) is tasked to identify the bodies. Both will issue Certificate of Identification for all examined/processed and identified bodies. The City/Municipal Health Officer shall issue the Death Certificate based on the Certificate of Identification issued by the NBI/PNP.

c) Logistics

Lead Agency: Philippine Coast Guard – Coast Guard District Palawan

Implementing partners: Provincial Disaster Risk Reduction & Management Office, Western Command, Naval Forces West, Dive Operators, Marine Park Rangers/Tubbataha Management Office

Specific Objectives:

- To provide an efficient and effective logistics coordinating structure that will harmonize the activities of all clusters and encourage regular info-sharing among all stakeholders and other partners.
- To formulate, update, implement and monitor logistical policies, plans, programs and procedures that will harmonize the activities of each cluster.
- The Logistics Cluster thru coordination, monitoring, identification and deployment cover the following:
 - Transportation (land, sea and air) this also includes provision of equipment and machines (and its required fuel) to provide the needed access and mobility for all cluster operations
 - Inventories (consolidation of resources available among partners and cluster members) and
 - Tracking of deployed resources

Duties and Responsibilities

i. Philippine Coast Guard

- Provide watercraft for transport of patient/body
- Provide medical personnel

ii. Provincial Disaster Risk Reduction & Management Office

- Receive and facilitate request for logistical support
- Provision of logistics in the transportation of emergency assistance in affected area
- Constant gathering of official reports and significant data.

iii. Western Command

- Contribute to emergency transportation by committing their land, sea and air assets based on needs and requests from PDRRMO
- Coordinate units in Palawan regarding the availability of necessary equipment

iv. Naval Forces West

- Contribute to emergency transportation by committing their land, sea and air assets based on needs and requests from PDRRMO

v. Dive Operator

- Deploy watercraft for conduct of immediate search and rescue
- Provide food and other necessities to SRR team, when necessary

vi. Marine Park Ranger/Tubbataha Management Office

- Deploy watercraft and personnel to assist in response operations

d) Emergency Telecommunication

Lead Agency: Philippine Coast Guard – Coast Guard District Palawan

Implementing Partners: Provincial Disaster Risk Reduction & Management Office, Naval Forces West, Western Command, Dive Operators, Palawan Rapid Emergency Telecommunications Team, Marine Park Rangers/Tubbataha Management Office

Specific Objectives:

- To facilitate communications, collaboration, cooperation, coordination, and commitment among cluster members in response to diving incidents

Duties and Responsibilities

- i. **Philippine Coast Guard – Coast Guard District Palawan**
 - Provide communications and render reports/updates on activities and incidents to Emergency Operations Center
- ii. **Provincial Disaster Risk Reduction & Management Office**
 - Provide basic telecommunications coverage around the main operational area for the Command Center and other responders, if necessary
 - Provide a directory services containing the contact information of the different key players in managing maritime incidents
 - Conduct repair and maintenance activities of communication equipment, as needed
- iii. **Naval Forces West**
 - Provide communications assistance and render reports/updates on activities and incidents to Emergency Operations Center
- iv. **Western Command**
 - Provide communications assistance and render reports/updates on activities and incidents to Emergency Operations Center
- v. **Dive Operator**
 - Maintain communication with TMO/MPR every two (2) hours during diving incidents
 - Submit incident report
- vi. **Palawan Rapid Emergency Telecommunications Team**
 - Assist in conveying warning messages and information in accordance with the request of PDRRMO
 - Provide alternate provincial communication system for emergencies through its prepositioned local groups and facilities.
 - Coordinate with other local and national radio groups
- vii. **Tubbataha Management Office**
 - Maintain constant communication with cluster members during diving incident
 - Coordinate with EOC

e) International and Humanitarian Assistance

Lead Agency: Department of Foreign Affairs

Implementing Partners: Western Command

Duties and Responsibilities:

- Establish Information Desks for the information and coordination with other foreign partners/ agencies
- Coordination with the IT Personnel for the preparation of technical materials and other

D. Needs and Activities Inventory

a) Search, Rescue and Retrieval

QUANTITY	UNIT	RESOURCE	AGENCY/OFFICE	RESOURCE LOCATION	REMARKS
2	Set	30 ft speed boats	TMO	TRNP	
1	Set	17 ft dinghy	TMO	TRNP	
		SOLAS Trained	Dive boats	TRNP	Availability varies
		WASAR trained	Dive boats	TRNP	Availability varies
		BLS trained	Dive boats	TRNP	Availability varies
18	pcs	Spine Board	All dive boats	TRNP	Availability varies
		Emergency Medical Technician	Dive boats	TRNP	Availability varies
		Automated External Defibrillator	Dive boats: DP/DA, Atlantis,	TRNP	Availability varies
2	Pcs	Life ring	TMO	TRNP	
	Pcs	Life ring	All dive boats		Availability varies
1	Pcs	Life raft	TMO	TRNP	
18	Pcs	Life raft	All dive boats	PPC	Availability varies
36	Unit	Speed boats	All dive boats	TRNP	Availability varies
4	Pcs	GPS	TMO	TRNP	
18	Pcs	GPS	All dive boats	TRNP	Availability varies
1	pcs	AIS	TMO	TRNP	
18	Pcs	AIS	All dive boats	TRNP	Availability varies
2	Set	Emergency Position Indicating Radio Beacon (EPIRB)	TMO	TRNP	
	Set	Emergency Position Indicating Radio Beacon (EPIRB)	All dive boats	TRNP	Availability varies
10	Pcs	Life Vest	TMO	TRNP	

500	Pcs	Life Vest	All dive boats	TRNP	Availability varies
2	sets	Scuba gears	TMO	TRNP	
6	sets	Scuba gears	TMO	PPC	
300	sets	Scuba gears	All dive boats	TRNP	Availability varies

b) Management of the Dead and Missing

QUANTITY	UNIT	RESOURCE	AGENCY/OFFICE	RESOURCE LOCATION	REMARKS
1	box	Gloves	TMO	TRNP/PPC	

c) Logistics

QUANTITY	UNIT	RESOURCE	AGENCY/OFFICE	RESOURCE LOCATION	REMARKS
2		30 ft speed boats	TMO	TRNP	
1		17 ft dinghy	TMO	TRNP	
36		Speed boats	All dive boats	TRNP	Availability varies
18		First Aid Kits	All Dive Boats	TRNP	
2		First Aid Kits	TMO	TRNP	
1200	ltrs	Fuel	TMO	TRNP	Availability varies
18		Dive boats		TRNP/PPC	Availability varies
1		Gen set	TMO	TRNP	
18		Gen set	All dive boats	TRNP	Availability varies

d) Emergency Telecommunication

QUANTITY	UNIT	RESOURCE	AGENCY/OFFICE	RESOURCE LOCATION	REMARKS
1	pc	Satphone	TMO	TRNP	
18	pc	Satphone	All dive boats	TRNP	Availability varies
2		SSB	TMO	TRNP/PPC	
18		SSB	All dive boats	TRNP	Availability varies
3		Marine band	TMO	TRNP	
		Marine band	All dive boats	TRNP	Availability varies
1		Internet	TMO	TRNP	
6		Internet	Dive boats: Atlantis, DP, Resolute, Stella, Infiniti, Solitude	TRNP	Availability varies
1		Handheld radio	TMO	TRNP	
54		Handheld radio	All dive boats	TRNP	Availability varies

SECTION 7. FIRE

The likelihood of fire occurring in the TRNP, although perceived to be low, should nevertheless be given importance because it poses a major threat to both life and property. The perceived high level of control of management in such situations means it can be prevented. Three specific areas at the park have been identified as vulnerable to fire, for which contingency plans have been drawn. These are:

- 1. Ranger station
- 2. Onboard dive boats
- 3. Patrol boat

There are several types of fire according to its fuel or heat source (Classification of Portable Fire Extinguisher, 1996). The more common types based on international standards as well as the materials used for putting them out is shown in Table 3.

Class A (ordinary combustibles) fires are probably the most common and, therefore, likely to occur in TRNP. It involves solid, organic material such as wood and cloth undergoing combustion. The next likely type of fire to occur would be Class K (kitchen) fires. Although this type of fire is often small and easily overcome, it can






American	Fuel/Heat source	Color Code & Symbol	Firefighting Materials/Equipment
Class A ("ash")	Ordinary combustibles		Douse with water or smother with wet cloth or sand/soil
Class B ("barrel")	Flammable liquids		Spray foam or use CO ₂ fire extinguisher
	Flammable gases		Use dry chemical fire extinguisher or cut off oxygen source (CO ₂ fire extinguisher)
Class C ("circuit")	Electrical equipment		Use CO ₂ or dry chemical fire extinguisher or dry sand; <u>Do not use</u> water, foam or any conductive agents
Class D ("dynamite")	Combustible metals		Smother with salt granules, dry sand or "dry powder" fire extinguisher
Class K ("kitchen")	Cooking oil or fat		Douse with liquid soap (saponification) or use CO ₂ or dry powder fire extinguisher; for small fires, just smother mechanically or cover to cut off oxygen

Table 3. The common types of fires based on international standards and the materials used for putting them out. (Source: Classification of Portable Fire Extinguisher, 1996).

quickly become a Class A fire if not attended to properly. Class D fire (combustible metals), on the other hand, is highly unlikely to happen in TRNP because of the absence of these metal forms (e.g., lithium, magnesium, plutonium, potassium, sodium, titanium, and uranium) in the area. In addition, it would require immense heat to cause these metals to combust, the magnitude of which is difficult to sustain. Nevertheless, in the unlikely event that such a fire occurs, it is important to remember that water should not be used as it provokes metal fires.

Effective use of firefighting equipment can reduce the impact of fire, hence the need for such equipment and expertise in each vulnerable site. To achieve this end, the following equipment must be prepared and ready for use:

- 1. Firefighting materials/equipment, e.g., extinguisher, axe, etc.
- 2. Filing cabinets - important documents should be kept in filing cabinets to facilitate their removal during evacuation
- 3. Medical supplies and equipment
- 4. Access to fast watercraft and aircraft, in the event of a medical evacuation from TRNP

It is also important that all personnel are aware of their tasks/responsibilities in the event of a fire. Since not everyone might be present during a fire, it would be helpful for all personnel to be aware

of the whole firefighting protocol as well as the preventive measures (e.g., always check LPG tanks and hoses for leaks and other irregularities, report and replace immediately) so as to reduce the likelihood of accidents. In addition, immediate access to oxygen would be ideal in cases of smoke inhalation during fires. Caution should be practiced when storing oxygen tanks, however, since this can also aggravate fire. Trainings in first aid and firefighting should also be provided to the TMO staff and rangers to assure proper execution of the plan in the event of fires.

A. Anatomy of the Hazard

ROOT CAUSES	EARLY WARNING SIGNS	TRIGGERING FACTORS	EXISTING MITIGATING MEASURES
Faulty electrical system (dive boat, ranger station)	Electrical spark	Lack of maintenance and inspection of electrical system	Regular maintenance and inspection of electrical system; firefighting equipment and personnel; available; proper storage of hazardous materials (e.g., POL, chemical products); fire safety plan established; Regular firefighting drills;
Spontaneous combustion	Overheating engines	Delayed response to fire; Heat, Fuel, Oxygen	Regular maintenance and inspection of engines and electrical system; firefighting equipment and personnel available; proper storage of hazardous materials (e.g., POL, chemical products); fire safety plan established; Regular firefighting drills;
Negligence	May not have early warning signs	Inattention to signs of fire triggers;	Hire professional and trained staff; proper storage of hazardous materials (e.g., POL, chemical products); fire safety plan established; Regular firefighting drills;

B. Scenario Generation

SITUATIONS	MOST LIKELY (Normal Activities)	BEST (with counter-measures)	WORST
Fire (ranger station, patrol boat, dive boat)	No fire	Fire contained immediately; no casualties; minimal damage to property	Ranger station/patrol boat/dive boats completely burned with casualties

C. Coordination, Command and Control

1) Cluster Identification

CLUSTER	OFFICES/AGENCIES INVOLVED									LEAD OFFICE / AGENCY
Health	ONP	WESCOM Hospital	AHP	DO	MPR/TMO					MPR POIC/TMO
Search, Rescue and Retrieval	PDRRMO	PCG	NFW	WESCOM	DO					PCG
Management of the Dead and Missing	PDRRMO	DILG	WESCOM	PNP Crime Lab	NBI	PPPO	PCG	NFW	DO	DILG/ PDRRMO
Logistics (Transport, supplies, facilities, equipment)	PDRRMO	PCG	WESCOM	NFW	DO					PCG
Emergency Telecommunications	PDRRMO	PCG	NFW	WESCOM	DO	PRETT	MPR			MPR/DO
International Humanitarian Assistance	DFA	WESCOM								DFA

2) Summary of Cluster Members

CLUSTER	LEAD AGENCY/ OFFICE	MEMBER AGENCIES/OFFICES
Health	Marine Park Rangers/Tubbataha Management Office	Ospital ng Palawan, Western Command, Adventist Hospital, Dive Operators
Search and Rescue	Philippine Coast Guard	Provincial Disaster Risk Reduction & Management Office, Coast Guard District Palawan, Naval Forces West, Western Command, Dive Operators
Management of the Dead and Missing	Provincial Disaster Risk Reduction & Management Office	Department of Interior Local Government, National Bureau of Investigation, Philippine Coast Guard - Coast Guard District Palawan, PNP Crime Lab, Western Command, Palawan Police Provincial Office, Naval Forces West, Dive Operators
Logistics	Philippine Coast Guard	Coast Guard District Palawan, Western Command, Naval Forces West, Dive Operators
Emergency Telecom	Marine Park Rangers/Dive Operators	Coast Guard District Palawan, Naval Forces West, Western Command, Dive Operators, Palawan Rapid Emergency Telecommunications Team, Marine Park Rangers
International and Humanitarian Relations	Department of Foreign Affairs	Western Command

a) Health

Lead Agency: Marine Park Rangers/Tubbataha Management Office/Dive Operators

Implementing partners: Ospital ng Palawan, Western Command, Adventist Hospital, Dive Operators

Specific objectives:

- To ensure that all medical emergencies are immediately attended to.

Protocols

- Once medical emergency is reported, cluster response will be activated.

Duties and Responsibilities

i. Marine Park Ranger/Tubbataha Management Office

- MPR to report to TMO in case of serious medical emergencies requiring evacuation.
- TMO to coordinate with medical facilities, upon request
- TMO to coordinate with medical facilities for emergencies involving MPR/TMO personnel

ii. Dive Operators

- Dive operator to report to MPR/TMO in case of serious medical emergencies requiring evacuation.
- Coordinate with medical facilities/TMO for emergencies involving their guests

iii. Ospital ng Palawan

- Conduct examination of patient and provide treatment

iv. Western Command

- To provide medical assistance to MPR/TMO personnel for work-related medical emergencies

v. Adventist Hospital

- Provide medical services

vi. Dive Operator

- Provide first aid to patients and seek advance medical assistance
- Immediately report and coordinate with MPR in case of serious medical emergencies
- Evacuate injured clients, if needed
- Coordinate with medical facilities
- Dive operators shall take full responsibility during medical emergencies involving their client

b) Search, Rescue, and Retrieval

Lead Agency: Philippine Coast Guard/Coast Guard District - Palawan

Implementing Partners: Provincial Disaster Risk Reduction & Management Office, Philippine Coast Guard, Naval Forces West, Dive Operators, MPR/TMO

Specific Objectives:

- To coordinate and deploy all available Search and Rescue teams from the government, civil society, private sector, and the international community.
- To ensure the safety and security of the response teams deployed by the SRR cluster
- To ensure timely, effective, and efficient conduct of SRR operations
- To facilitate and assist in the retrieval, identification and proper management of human remains
- To provide support for an effective, timely, organized and systematic search, rescue and retrieval operations to affected areas in all emergencies to further minimize loss of lives and casualties, including the hand-over of casualties to the Health Cluster for proper treatment and management.

Duties and Responsibilities

i. Philippine Coast Guard – Coast Guard District Palawan

- Deployment of the necessary and appropriate response teams & equipment for coordinated and responsive conduct of Search, Rescue and Retrieval (SRR) operations, if necessary
- Perform other functions as requested within the mandate and capacity of PCG

ii. Western Command

- Deploy necessary and appropriate response teams & equipment for coordinated and responsive conduct of Search, Rescue and Retrieval (SRR) operations
- Coordination with the Incident Management Team
- Provide support in the assessment of the incident

iii. Provincial Disaster Risk Reduction & Management Office

- Coordinate the deployment of SRR Teams in the affected areas for proper endorsement to the Incident Command posts on ground.
- If necessary and depending on the magnitude of the incident, activate Incident Management Team
- Collect status reports and requests of the deployed SRR Teams on ground.
- Coordinate with other response clusters for their SRR requirements

iv. Naval Forces West

- Provide assistance during response operations

v. Dive Operator

- Report incident to MPR
- Provide immediate response to the incident, if capable

vi. Marine Park Ranger/Tubbataha Management Office

- Provide immediate response to the incident, if capable
- Coordinate with other responders

c) Management of the Dead and Missing

Lead Agency: Department of Interior and Local Government/ Provincial Disaster Risk Reduction & Management Office

Implementing partners: National Bureau of Investigation, Philippine National Police Crime Lab, Palawan Police Provincial Office, Philippine Coast Guard – Coast Guard District Palawan, Western Command, Naval Forces West, Dive Operators

Specific Objectives:

- To provide assistance in the proper identification and disposition of the remains in a sanitary manner with caution to prevent negative psychological and social impact on the bereaved and the community.

Specific objectives:

- The recovery and retrieval of dead bodies will be done through the different Search and Rescue Units (SARs) and will be coordinated with the SRR Cluster. The MDM Cluster will handle the body and transfer to proper authorities for proper processing and management.
- The concerned dive operator/TMO shall inform the bereaved family.

Four Major Activities of MDM Cluster:

- Identification of the dead
- Final Arrangement for the dead
- Management of the missing persons
- Management of the bereaved families

(a) Identification of the Dead

- The dive operator or his/her representative or the MPR/TMO will lead the activities needed for proper identification of declared dead body. A Death Certificate shall be secured from the Local Health Officer.

(b) Final Arrangement for the Dead

- The dive operator or his/her representative or the MPR/TMO shall report such death to the concerned Local Health Officer
- The dive operator or his/her representative or the MPR/TMO shall coordinate the final arrangement for the dead with the legitimate claimants.

(c) Management of the Missing Persons

- The dive operator or his/her representative or the MPR/TMO shall provide psychosocial support to the families of the missing persons

(d) Management of the Bereaved Families

- The concerned dive operator/TMO shall inform the bereaved family of the client/guest.

Protocols

- The concerned dive operator or his/her representative or the MPR/TMO should take the effort to identify the body at the site where it is found.
- All items of property that are on the body should remain on it. On the other hand, items associated with a body should be collected as property and tagged with the body.
- Care must be taken not to lose, contaminate or switch the body, body parts, or property to be removed and transported. All dead bodies and body parts retrieved onsite should be placed in cadaver bags (note: place one retrieved body per bag or one retrieved body part per bag, as one body part is considered one dead body). Put a bag around the head if there is a potential loss of teeth (e.g. badly burned or crushed remains). If body bags are not available, use plastic sheets, bed sheets, or other locally available materials (ADPC, 2012).
- When transporting a dead body from Tubbataha to Puerto Princesa, it is advisable to use a vessel, preferably closed, with floors that are either waterproof or covered with plastic.
- When transporting on land, it is advisable to use a truck or van, preferably closed, with floors that are either waterproof or covered with plastic.
- Never use an ambulance to transport dead bodies because such is for the living. If there is no other choice, disinfect the ambulance after use.

Duties and Responsibilities

- All dead bodies and body parts should be placed in cadaver bags.
- For deaths caused by natural disasters, the unidentified bodies shall be turned over to the National Bureau of Investigation (NBI) for proper identification of all declared dead bodies.
- For deaths due to human-induced disasters, the Philippine National Police (PNP) is tasked to identify the bodies. Both will issue Certificate of Identification for all examined/processed and identified bodies. The City/Municipal Health Officer shall issue the Death Certificate based on the Certificate of Identification issued by the NBI/PNP.

d) Logistics

Lead Agency: Marine Park Rangers/Tubbataha Management Office/Dive Operator

Implementing partners: Philippine Coast Guard – Coast Guard District Palawan, Western Command, Naval Forces West

Specific Objectives:

- To provide an efficient and effective logistics coordination within TRNP
- The Logistics Cluster thru coordination, monitoring, identification and deployment cover the following:

- Transportation (land, sea, and air) this also includes provision of equipment and machines (and its required fuel) to provide the needed access and mobility for all cluster operations
- Inventories (consolidation of resources available among partners and cluster members) and;
- Tracking of deployed resources

Duties and Responsibilities

i. Dive Operator

- Contain fire.
- Activate fire evacuation plan, if needed.
- Provide watercraft and other supplies/equipment to other dive boats/MPR in case of fire, if necessary.

ii. Marine Park Ranger/Tubbataha Management Office

- Contain fire.
- Evacuate ranger station or patrol boat on fire, if necessary.
- Deploy watercraft and personnel to assist in response operations.

e) Emergency Telecommunication

Lead Agency: Marine Park Rangers/Tubbataha Management Office/Dive Operator

Implementing Partners: Coast Guard District Palawan, Naval Forces West, Western Command, Dive Operators, Palawan Rapid Emergency Telecommunications Team, Marine Park Rangers

Specific Objectives:

- To facilitate communications, collaboration, and cooperation among MPRs and dive operators in case of fire

Duties and Responsibilities

i. Marine Park Ranger/Tubbataha Management Office

- Maintain communications, collaboration, and cooperation with dive operators, TMO, PCG, and NFW
- Submit incident report

ii. Dive Operator

- Maintain communication with TMO/MPR
- Submit incident report

D. Needs and Activities Inventory

a) Health

QUANTITY	UNIT	RESOURCE	AGENCY/OFFICE	RESOURCE LOCATION	REMARKS
2		30 ft speed boats	TMO	TRNP	
1		17 ft dinghy	TMO	TRNP	
1	set	OIWR Equipment	TMO	TRNP	
1	Tank	Medical Oxygen	TMO	TRNP	
18	tank	Medical Oxygen	All Dive Boats	TRNP	
18	set	First Aid Kits	All Dive Boats	TRNP	
2	set	First Aid Kits	TMO	TRNP	
	person	BLS trained	All Dive boats	TRNP	
18	Set	Spine Board	All dive boats	TRNP	
	person	Emergency Medical Technician	Dive boats (?)	TRNP	
	set	Automated External Defibrillator	Dive boats: DP/DA, Atlantis,	TRNP	
1		Hyperbaric chamber	ONP	PPC	

b) Search, Rescue and Retrieval

QUANTITY	UNIT	RESOURCE	AGENCY/OFFICE	RESOURCE LOCATION	REMARKS
2		30 ft speed boats	TMO	TRNP	
1		17 ft dinghy	TMO	TRNP	
		SOLAS Trained	Dive boats (?)	TRNP	Availability varies
		WASAR trained	Dive boats (?)	TRNP	Availability varies
		BLS trained	Dive boats (?)	TRNP	Availability varies
18		Spine Board	All dive boats	TRNP	Availability varies
		Emergency Medical Technician	Dive boats (?)	TRNP	Availability varies
		Automated External Defibrillator	Dive boats: DP/DA, Atlantis,	TRNP	Availability varies
2		Life ring	TMO	TRNP	
		Life ring	All dive boats		Availability varies
1		Life raft	TMO	TRNP	
18		Life raft	All dive boats	PPC	Availability varies
36		Speed boats	All dive boats	TRNP	Availability varies
4		GPS	TMO	TRNP	
18		GPS	All dive boats	TRNP	Availability varies

1		AIS	TMO	TRNP	
18		AIS	All dive boats	TRNP	Availability varies
2		Emergency Position Indicating Radio Beacon (EPIRB)	TMO	TRNP	
		Emergency Position Indicating Radio Beacon (EPIRB)	All dive boats	TRNP	Availability varies
10		Life Vest	TMO	TRNP	
500		Life Vest	All dive boats	TRNP	Availability varies
2	sets	Scuba gears	TMO	TRNP	
6	sets	Scuba gears	TMO	PPC	
300	sets	Scuba gears	All dive boats	TRNP	Availability varies

c) Management of the Dead and Missing

QUANTITY	UNIT	RESOURCE	AGENCY/OFFICE	RESOURCE LOCATION	REMARKS
1	box	Gloves	TMO	TRNP/PPC	

d) Logistics

QUANTITY	UNIT	RESOURCE	AGENCY/OFFICE	RESOURCE LOCATION	REMARKS
2		30 ft speed boats	TMO	TRNP	
1		17 ft dinghy	TMO	TRNP	
36		Speed boats	All dive boats	TRNP	Availability varies
18		First Aid Kits	All Dive Boats	TRNP	
2		First Aid Kits	TMO	TRNP	
1200	li	Fuel	TMO	TRNP	Availability varies
18		Dive boats		TRNP/PPC	Availability varies
1		Gen set	TMO	TRNP	
18		Gen set	All dive boats	TRNP	Availability varies

e) Emergency Communication

QUANTITY	UNIT	RESOURCE	AGENCY/OFFICE	RESOURCE LOCATION	REMARKS
1		Satphone	TMO	TRNP	
18		Satphone	All dive boats	TRNP	Availability varies
2		SSB	TMO	TRNP/PPC	

18		SSB	All dive boats	TRNP	Availability varies
3		Marine band	TMO	TRNP	
		Marine band	All dive boats	TRNP	Availability varies
1		Internet	TMO	TRNP	
6		Internet	Dive boats: Atlantis, DP, Resolute, Stella, Infiniti, Solitude	TRNP	Availability varies
1		Handheld radio	TMO	TRNP	
54		Handheld radio	All dive boats	TRNP	Availability varies

SECTION 8. COVID-19

Coronavirus disease-19 (COVID19) is an infection of a new strain of highly contagious coronavirus (SARS-CoV-2) first identified in 2019 in Wuhan, China. Transmission in the Philippines was identified in late January. Since then, stringent measures to mitigate the spread of infection has been in place and observed. The Inter-Agency Task Force for the Management of Emerging Infectious Diseases has set forth public health standards that must be strictly followed, including the wearing of face masks/shields and physical distancing.

The PDRRMO and CDRRMO of Palawan and Puerto Princesa City also instituted their protocols for travelers which are strictly implemented for people coming from outside the province. Furthermore, MARINA also established its protocol on the passenger capacity of the marine vessels. The DOT-PCSSD also released its protocol for diving activities and operations of liveaboard. These protocols are subject to changes depending on the development of the situation in the country. The TMO and dive operators shall strictly comply with these protocols whichever and whenever applicable.

A. Anatomy of the Hazard

ROOT CAUSES	EARLY WARNING SIGNS	TRIGGERING FACTORS	EXISTING MITIGATING MEASURES
Coronavirus infection	Flu-like symptoms such as cough, shortness of breath or difficulty breathing, fever, chills, muscle pain, sore throat, or loss of taste or smell; close contact with COVID-19 infected person	Exposure to COVID-19 infected person or transmission via high touched surfaces	Maintaining minimum public health standards: wearing of face mask and face shield, physical distancing, avoiding large gatherings, frequent disinfection and washing of hands

B. Scenario Generation

SITUATIONS	MOST LIKELY (Normal Activities)	BEST (with countermeasures)	WORST
Tested positive for COVID-19 during Rapid Diagnostic test	Negative result	Immediate isolation and safe evacuation to the quarantine facility (Puerto Princesa) Immediate disinfection of ranger station, TMO, and/or	Asymptomatic; not isolated immediately; infected other people

		dive boats; direct contacts; contact tracing	
Exposure to COVID-19 positive person	Negative result	Immediate isolation and safe evacuation to the quarantine facility (Puerto Princesa City); contract tracing	
Third-degree contact with COVID-19 positive person	Negative result	Immediate isolation and quarantine while waiting for results of close contact patient	
Person with COVID-19-like symptoms in the ranger station/dive boats		Immediately isolate the person in the designated room in the ranger station/dive operators	

C. Coordination, Command and Control

1) Cluster Identification

CLUSTER	OFFICES/AGENCIES INVOLVED						LEAD OFFICE/AGENCY
Health	PDRRMO	CDRRMO	ONP	Coop Hospital	TMO	DO	PDRRMO/CDRRMO
International Humanitarian Assistance	DFA	DO					PDRRMO/CDRRMO

2) Summary of Cluster Members

CLUSTER	LEAD AGENCY/OFFICE	MEMBER AGENCIES/OFFICES
Health	Provincial Disaster Risk Reduction and Management Office, City Risk Reduction and Management Office	Ospital ng Palawan, Palawan MMG Cooperative Hospital, Tubbataha Management Office, Dive Operators
International Humanitarian Assistance	Provincial Disaster Risk Reduction and Management Office, City Risk Reduction and Management Office	Tubbataha Management Office, Dive Operators

a) Health

Lead Agency: Provincial Disaster Risk Reduction Management Office/City Disaster Risk Reduction Management Office

Implementing partners: Tubbataha Management Office, Dive Operators, Ospital ng Palawan, Palawan MMG Cooperative Hospital

Specific Objectives:

- Immediately facilitate isolation of the COVID-19 infected person to halt the spread of the virus.

Protocol:

- Once the COVID-19 infection is confirmed, the cluster will be activated.
- TMO and Dive Operators shall strictly follow and comply with the protocols set forth by the IATF, PDRRMO/CDRRMO, DOT-PCSSD, MARINA, and other concerned agencies, whichever are applicable, to prevent the transmission of COVID-19. This will apply to tourists, boat crew, marine park rangers, TMO staff, and their volunteers.

Roles and Responsibilities

- In case of confirmed COVID-19 infection, the concerned dive operators or his/her representative or the TMO shall immediately coordinate with the PDRRMO or CDRRMO for proper action such as transporting and isolating the infected person, contact tracing, and testing of direct contacts.
- TMO shall be responsible for the coordination of immediate isolation and contact tracing with PDRRMO/CDRRMO in case the confirmed COVID-19 patient is a TMO staff, marine park rangers, or TMO volunteers. Likewise, the concerned dive operators shall be responsible for the coordination with the said agencies if the infected person is a tourist. TMO may assist, if necessary and if such assistance will not affect the safety of its personnel.

b) International Humanitarian Assistance

Lead Agency: Department of Foreign Affairs

Duties and Responsibilities:

- Establish Information Desk for information and coordination with other countries in case the infected person is foreign.

D. Needs and Activities Inventory

a) Health

QUANTITY	UNIT	RESOURCE	AGENCY/OFFICE	RESOURCE LOCATION	REMARKS
		Disinfectant	TMO	TRNP	
	set	First Aid Kits with Thermometer, Sanitizers	All Dive Boats	TRNP	
	set	First Aid Kits with Thermometer, Sanitizers	TMO	TRNP	
	Set	Personal Protective Equipment	All Dive Boats/TMO		

CHAPTER III. EOC AND IMT

Emergency Operations Center (EOC)

The Emergency Operations Center (EOC) is the central command and control facility responsible for carrying out the principles of emergency preparedness and emergency management, or disaster management. It functions at a strategic level during an emergency and ensures the continuity of operations of the different organizations involved. It is composed of six (6) clusters that focus on distinct concerns in any incident. Below are the six clusters, which are headed by relevant agencies reporting to the EOC head.

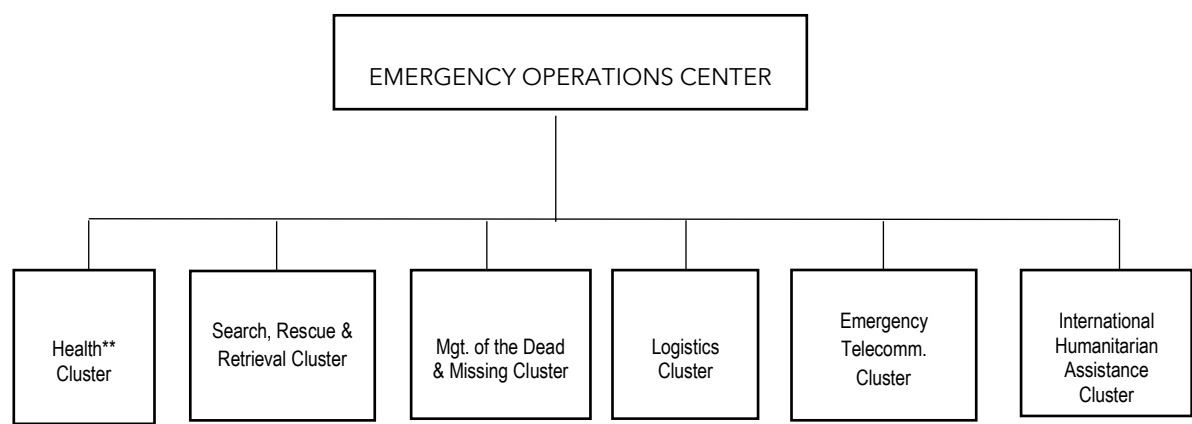


Figure 3. Emergency Operations Center for TRNP. **Health only applicable to Medical Emergencies.

The EOC is responsible for the strategic direction and operational decisions and does not normally directly control field assets, instead leaving tactical decisions to lower commands. The common functions of EOC are to:

- 1. collect, gather and analyze data,
- 2. make decisions that protect life and property,
- 3. maintain continuity of the organization, within the scope of applicable laws; and,
- 4. disseminate those decisions to all concerned agencies and individuals.

The EOC shall be activated upon the issuance of alert level by the PDRRMO. The TPAMB/TMO will recommend the activation of the EOC to the PDRRMO based on the Rapid Damage and Needs Assessment conducted by MPR.

Incident Command System (ICS) and Incident Management Team (IMT)

Defined in the NDRRMC Memo Circular 04, s. 2012, Incident Command System (ICS) is a standardized, on-scene, all hazard incident management concept which can be used by agencies and its response clusters. The ICS allows its users to adopt an integrated organizational structure to match the complexities and demands of a single or multiple incidents without being hindered by jurisdictional boundaries. Further, it maximizes effective logistical and administrative support to operational staff by avoiding duplication of efforts and providing accountability and planning process. The purpose of the ICS is to ensure:

- Safety of responders
- Achievement of response objectives
- Efficient use of resources

The Incident Management Team (IMT), on the other hand, is a team composed of Incident Commander (IC) and Command Staff and General Staff who will take the lead in ICS implementation. The IC has overall authority and responsibility for conducting and managing all hazard operations in Tubbataha, including the development of strategies on mobilization of resources. This single command shall be used in managing all identified incidents/hazards in the Park.

The IC has a Command Staff composed of the following:

1. Public Information Officer, who interacts with the media and the public;
2. Safety Officer who assesses all operational safety concerns;
3. Liaison Officer being the point of contact for other agencies.

There is also a General Staff composed of the following:

1. Operations Section Chief responsible for tactical activities implementation;
2. Planning Section Chief who collects information and prepares reports;
3. Logistics Section chief who provides facilities and services support; and
4. Finance and Administration Section Chiefs who monitors and approves expenditures.

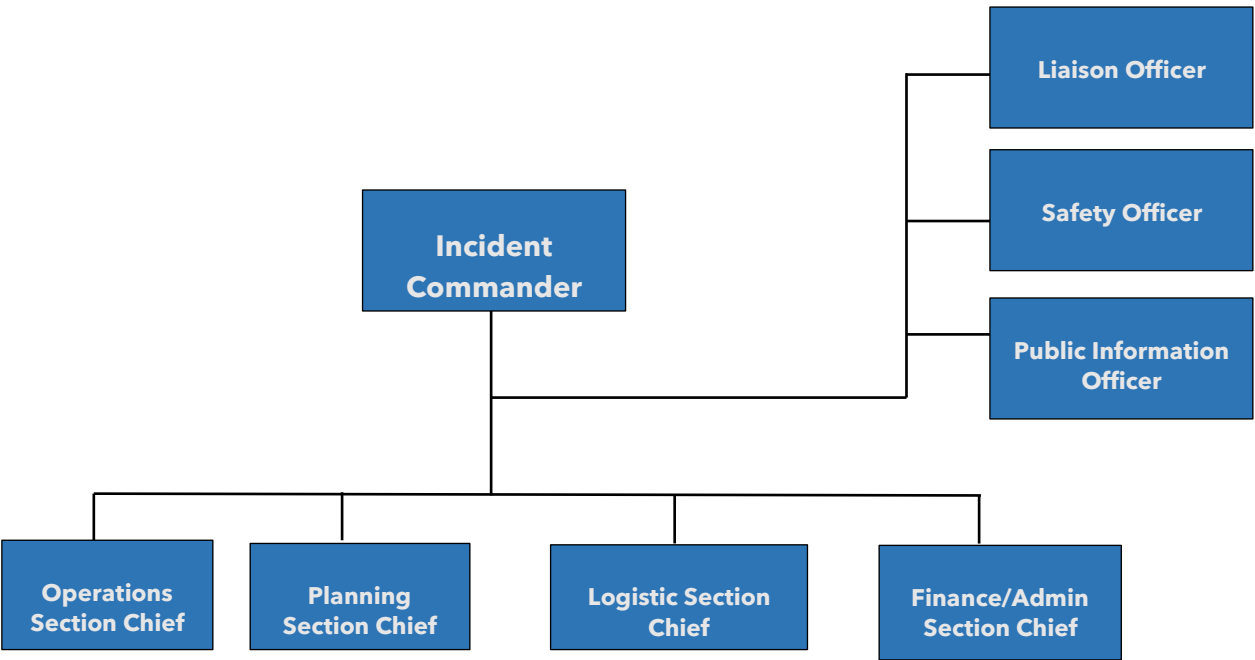


Figure 4. Basic organization of IMT.

The ICT is a non-permanent organization and is activated only in response to disasters and emergencies.

Interoperability

In Tubbataha, the Chairperson of the TPAMB who is situated at the EOC shall supervise the coordination activities and strategic decisions of the clusters. These decisions shall then be communicated to the IC. The IC on the other hand, shall report the tactical activities to the EOC, which informs the clusters. The IC reports back to the EOC about situation updates on the ground. The clusters will continue to coordinate with the Incident Management Team (IMT) via the EOC to provide assistance especially in terms of resource mobilization.

At ground level, Response Cluster Teams with their respective resources shall operate as units under the Operations and Plans Sections. These teams shall be managed by the IMT for proper placement and efficiency.

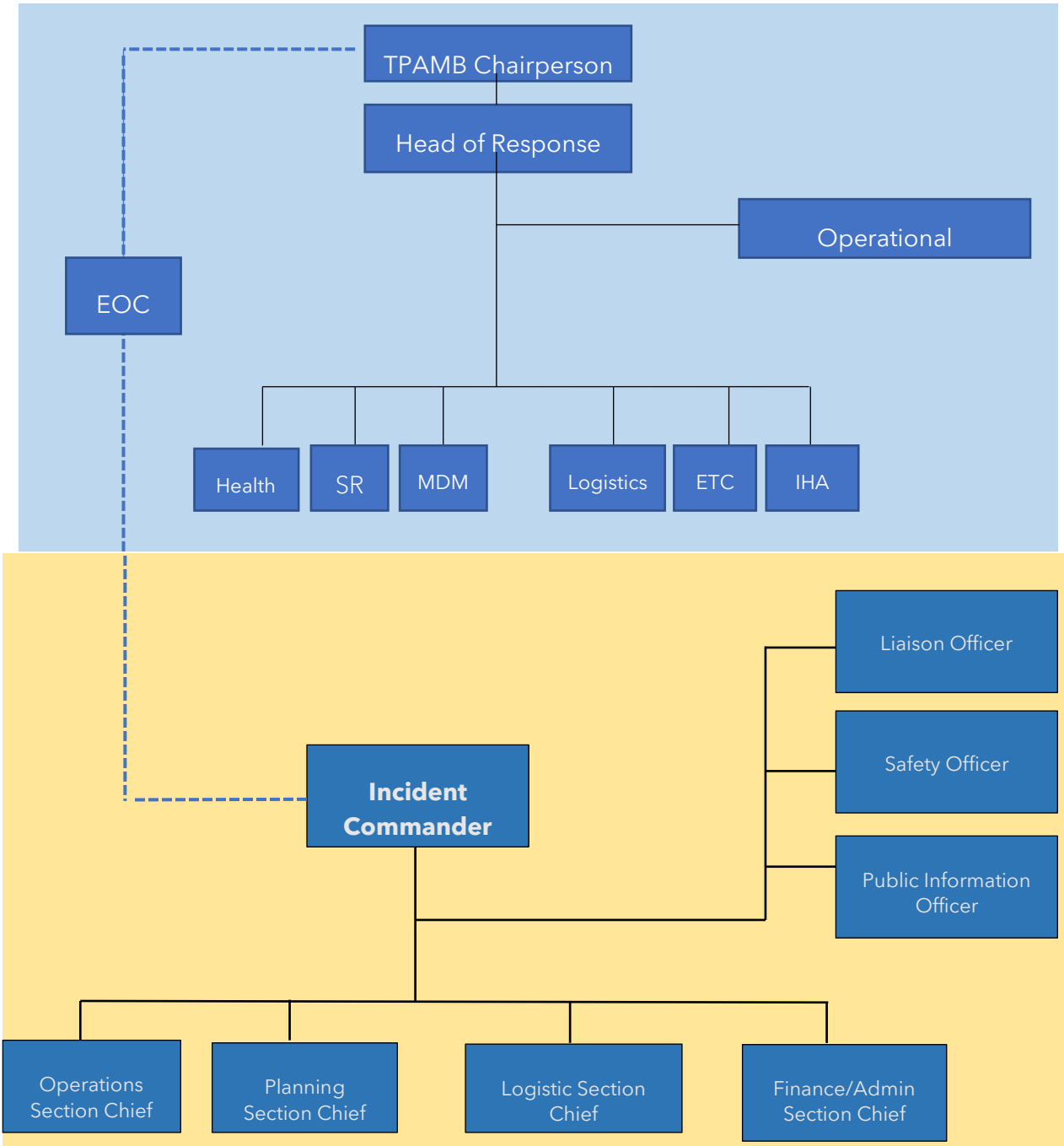


Figure 5. Upper section in blue comprises the EOC. Lower section in yellow box comprises the Incident Management Team.

1. Activation and Deactivation

a). Activation

The Procedures for activating the contingency plan shall adhere to the flow chart in Figure 7. Alert Levels are defined in a three (3) step color code: WHITE, BLUE, and RED as depicted in (Figure 6).

WHITE - refers to regular or normal operations, monitoring and reporting.

BLUE - pertains to a condition of stand-by readiness in preparation for a full-scale response operation. This is commonly done in situations of slow-onset incidents. In this condition, at least 50% of human and material resources are made available for duty or deployment. The detection, tracking, monitoring, and result of pre-disaster risk assessment triggers this status; and,

RED - signifies the highest level of readiness in anticipation of an imminent emergency situation, or in response to a sudden onset of incidents. In this condition, all human and material resources are made available for duty and deployment. This may result to the activation of the Response Cluster and IMT including the escalation of the highest level of response. As such, inter-cluster action planning is done during this status.

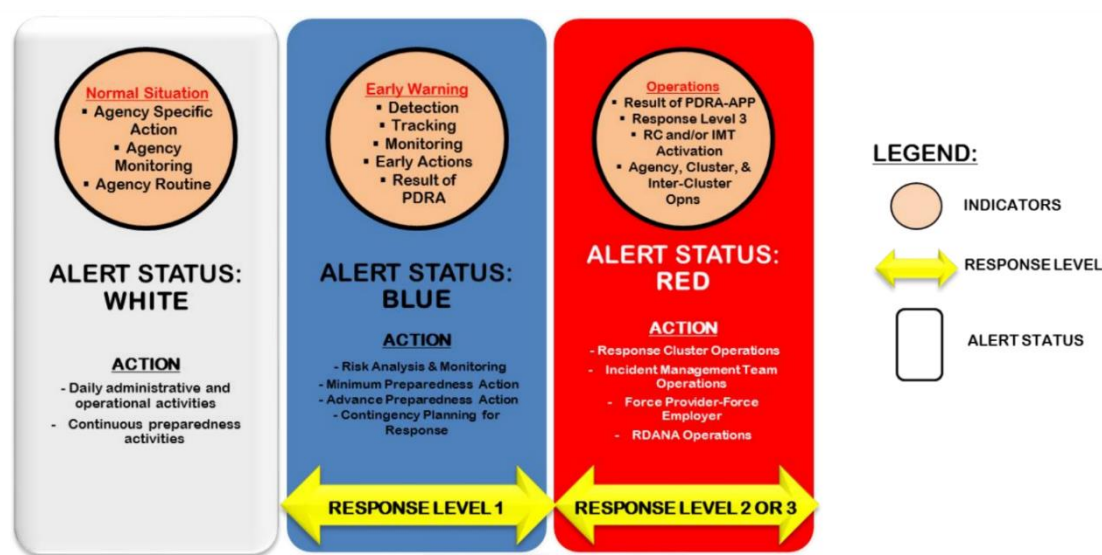


Figure 6. Alert Levels with Indicators and Response Level utilize by the Response Cluster

To determine which alert and response levels shall be utilized in case of incidents, the marine park rangers/dive operators shall immediately utilize **Rapid Damage Assessment and Needs Analysis (RDANA)** in the early state of an incident and during the critical state. RDANA is a disaster response mechanism that is used immediately in the early emergency phase to determine the extent of impacts and assess the priority needs of those affected by the incident. It is composed of two components:

Damage Assessment which depicts the general situation of an incident by providing a picture of the disaster's magnitude and impact to life and property;

Needs Analysis to determine the level and type of immediate assistance required.

Per NDRRMC Memorandum Circular No. 25, s. 2014 which describe the guidelines in the Conduct of Rapid Damage Assessment and Needs Analysis (RDANA), it aims to identify the following:

1. General overview of the damage in terms of:

- nature of a hazard;
- extent of damage and the secondary threats;
- impact to availability of resources and local response capacity; and
- the level of continuing or emerging threats

2. Assessment of the situation and recommendation on the following:

- most urgent relief needs;
- potential methods for delivery or priorities for action;
- utilization of resources for immediate response;
- options for relief assistance;
- need for detailed assessment of specific geographical areas or sectors; and
- need for international assistance

This contingency plan shall be activated based on the findings of Rapid Damage and Needs Assessment of the MPR/DO, leading to the activation of the EOC. The head of the EOC shall officially activate ICS and delegate authority to the Incident Commander. The Incident Commander shall organize the IMT and implement tactical activities based on the strategic decisions of the clusters.

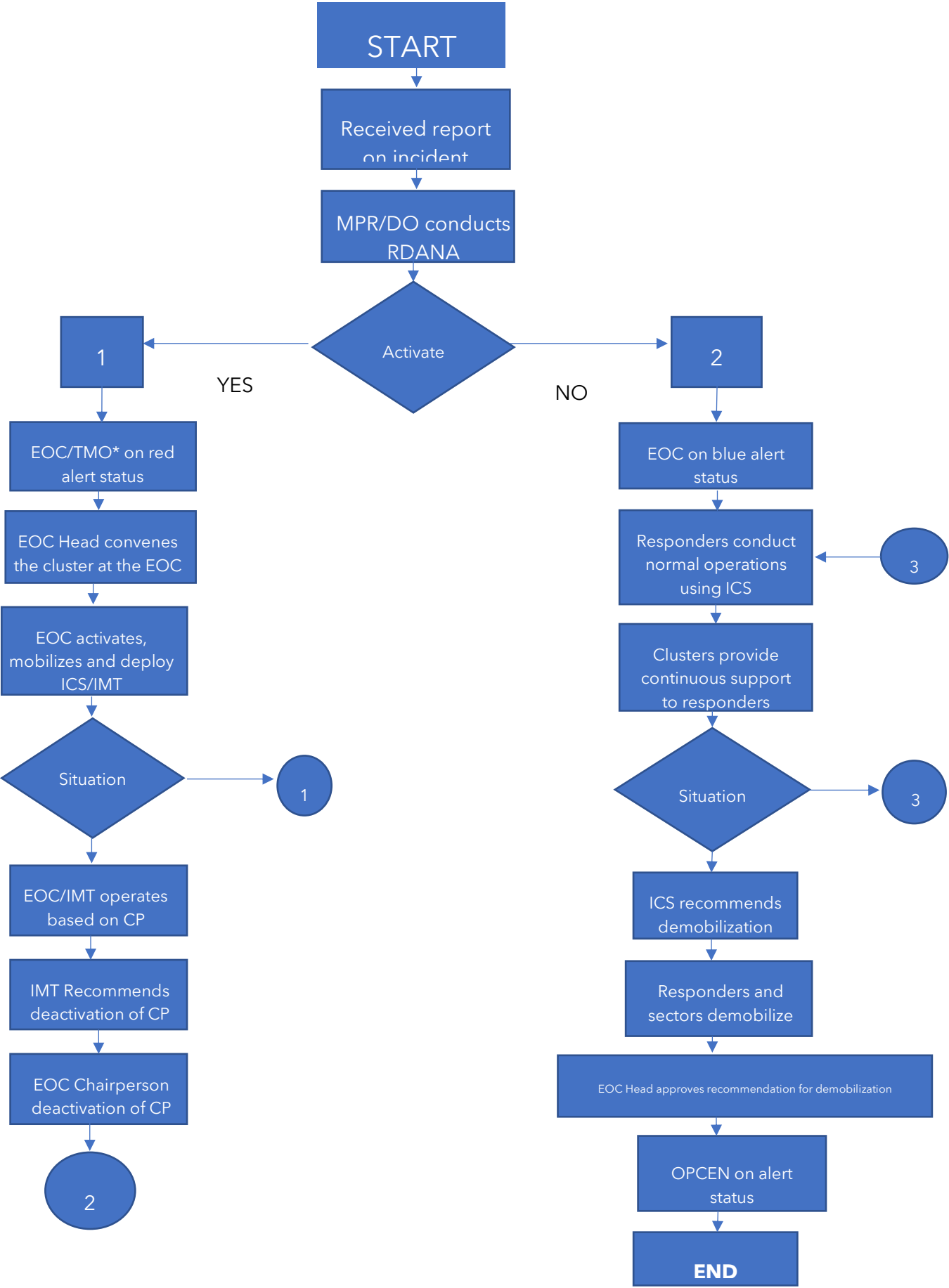


Figure 7. The Procedures for activating and de-activating the contingency Plan.

b. Deactivation

The contingency plan shall be deactivated once the situation has improved and when 'red alert' is no longer required. The IC shall recommend deactivation to the head of the EOC. The order to deactivate shall emanate from the EOC Chairperson. At this point, 'white alert' will be declared, and the operation terminated.

2. Non-Activation

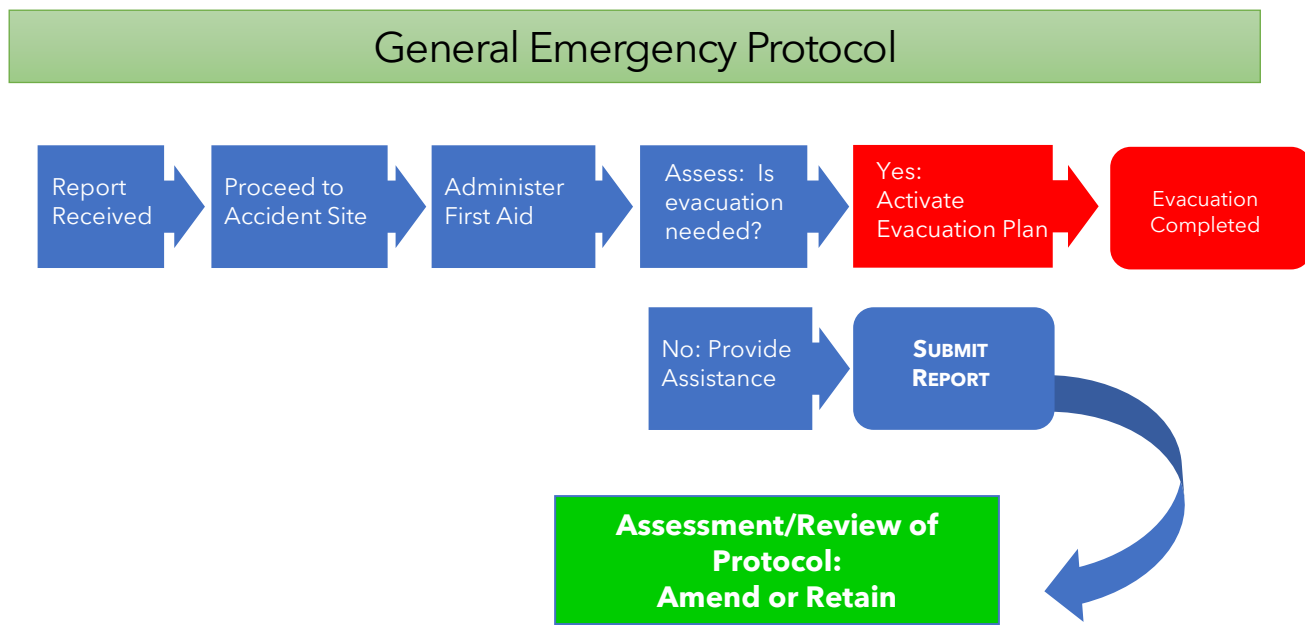
The decision not to recommend the activation of the CP shall be made by the Protected Area Superintendent based upon the findings of the Rapid Damage and Needs Assessment (RDANA) and the recommendations of MPR/Dive Operators.

CHAPTER IV. FLOWCHART OF CONTINGENCY MEASURES

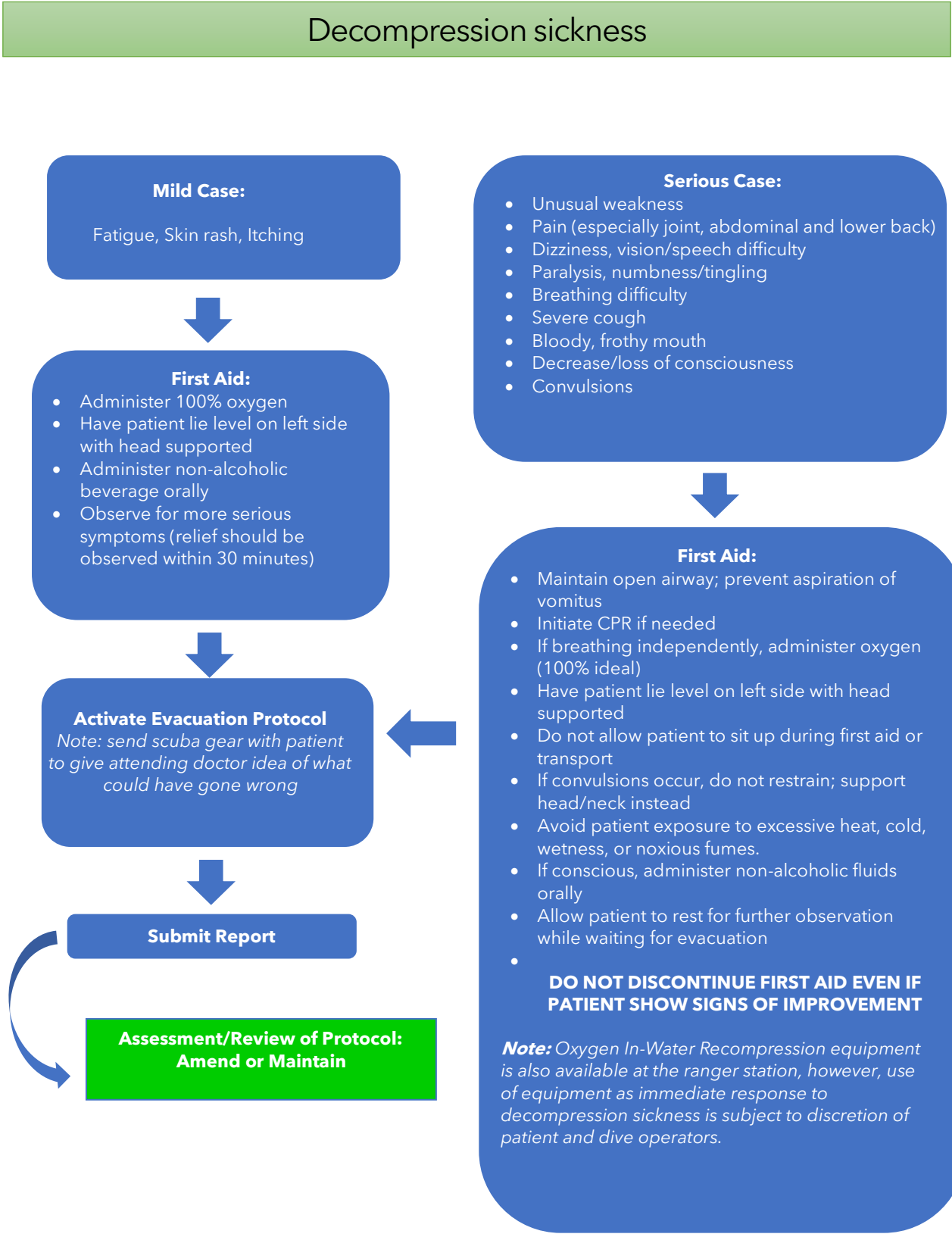
These flowcharts aim to show the sequence and progression of activities or step-by-step approach in the event of emergency situations. Some of these protocols provide contact details which need regular validation and updating. Furthermore, the contingency measures are merely part of a bigger cycle which includes prevention and post-contingency protocols. A debriefing should formally close all emergency situations and response. Contingency protocols found unsuitable for any emergency situation must be amended.

In view of the remoteness of the TRNP, evacuation is a challenge but must be undertaken, if warranted, especially in life and death situations. In the various charts, evacuation of personnel or visitors may be required. Evacuation by sea using a fast seacraft has been the norm although fraught with inherent risks such as engine malfunction or loss at sea. With the current situation in TRNP, airlifting the victim or patient may not be the most practical option despite being the fastest. Unless a boat with a helipad is available in the area or the new ranger station with a helipad has been built, airlift can only be a secondary option for evacuation for TRNP personnel or visitors.

General Emergency Protocol

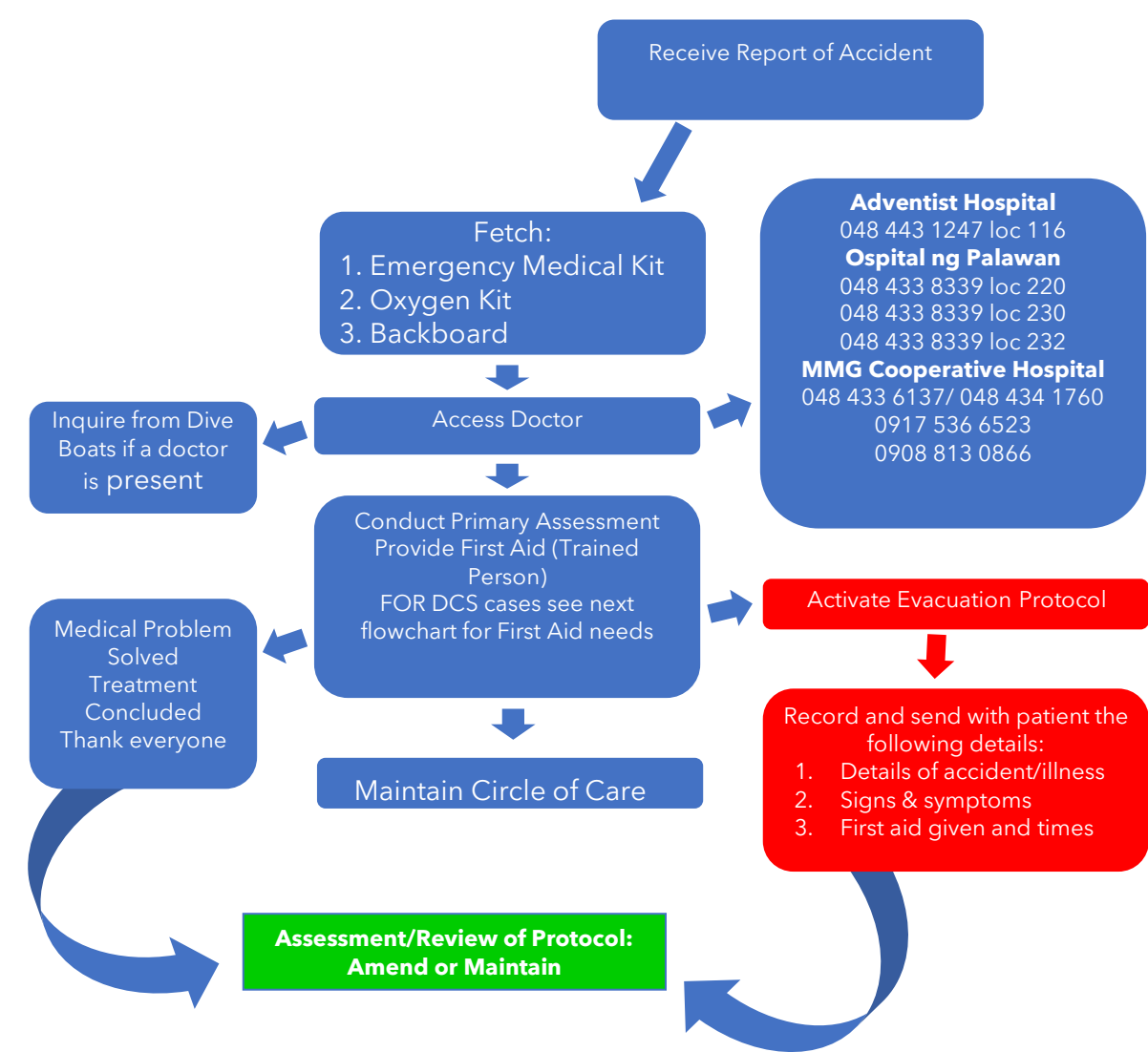




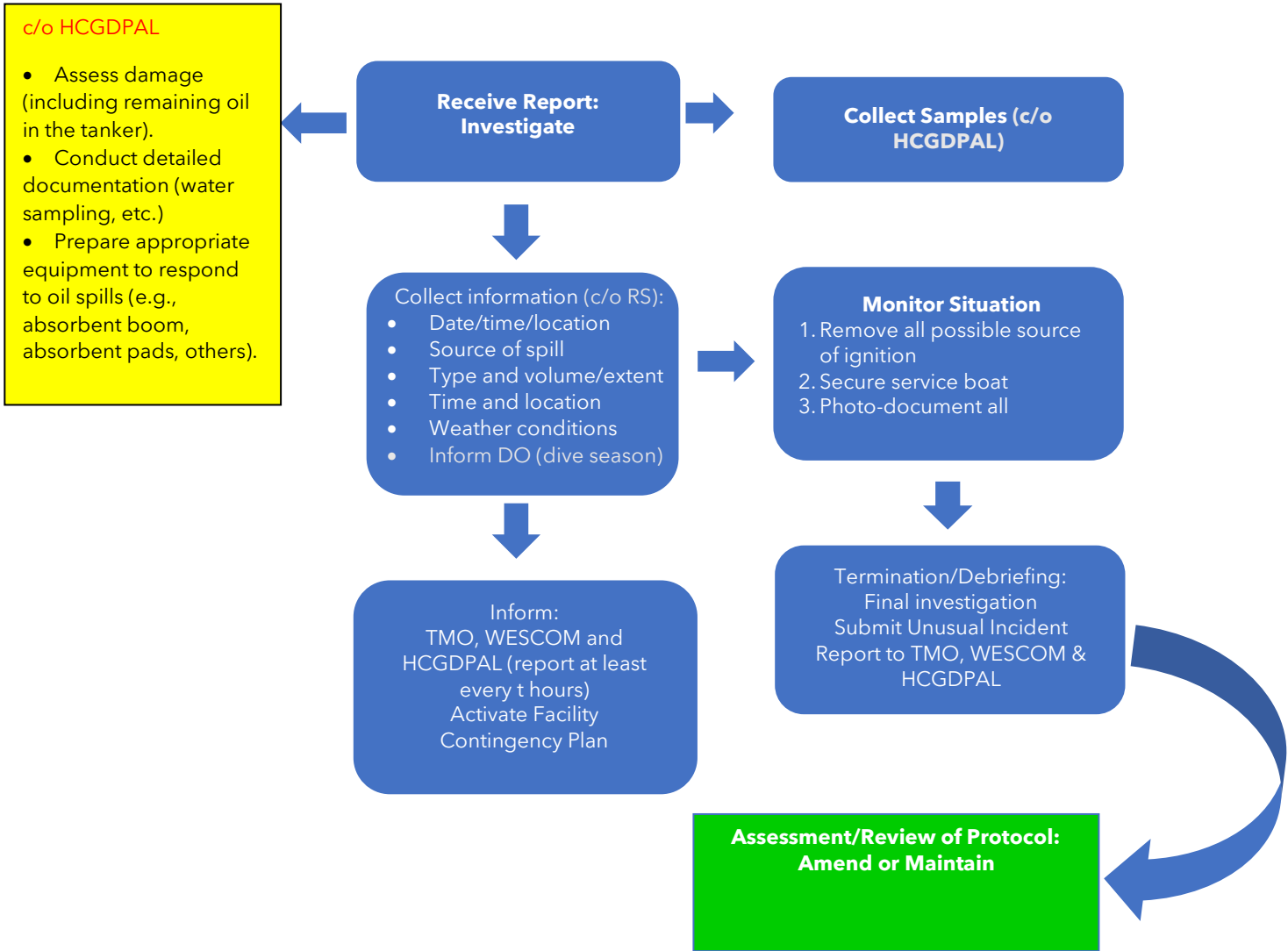


Medical Emergencies: Others (accidents, human animal contact, underlying medical condition)

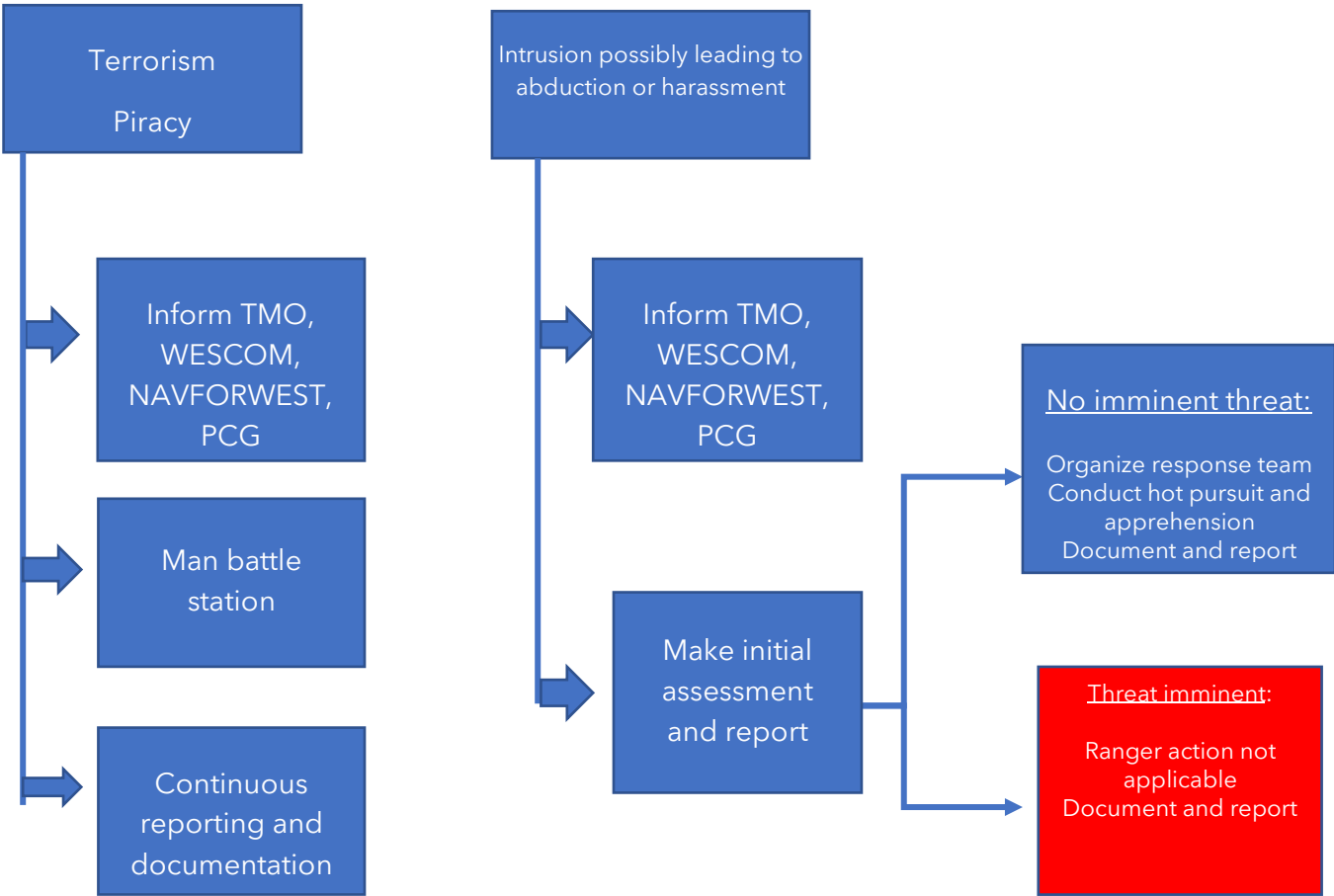
Medical Emergencies



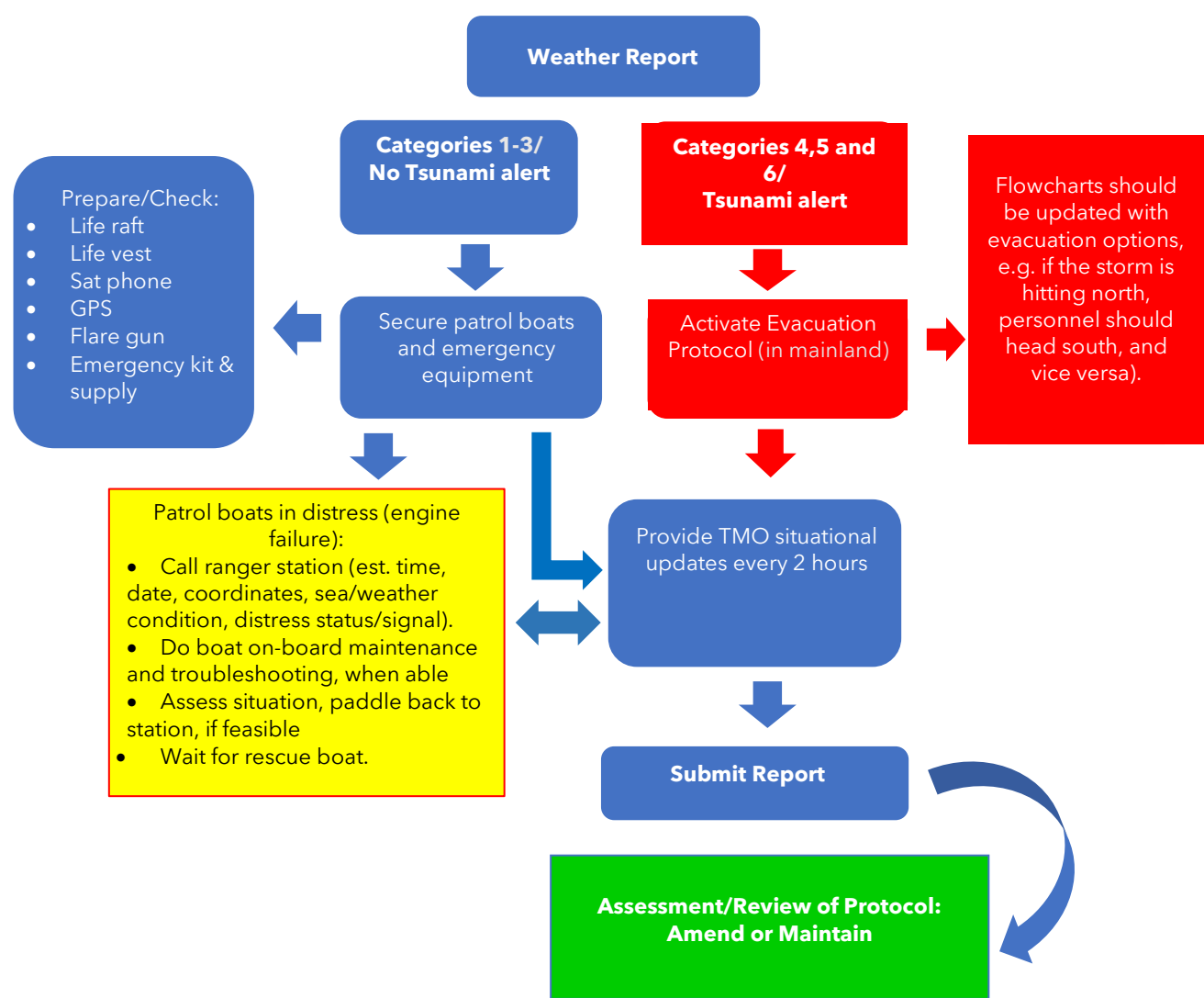
Oil and Chemical Spills

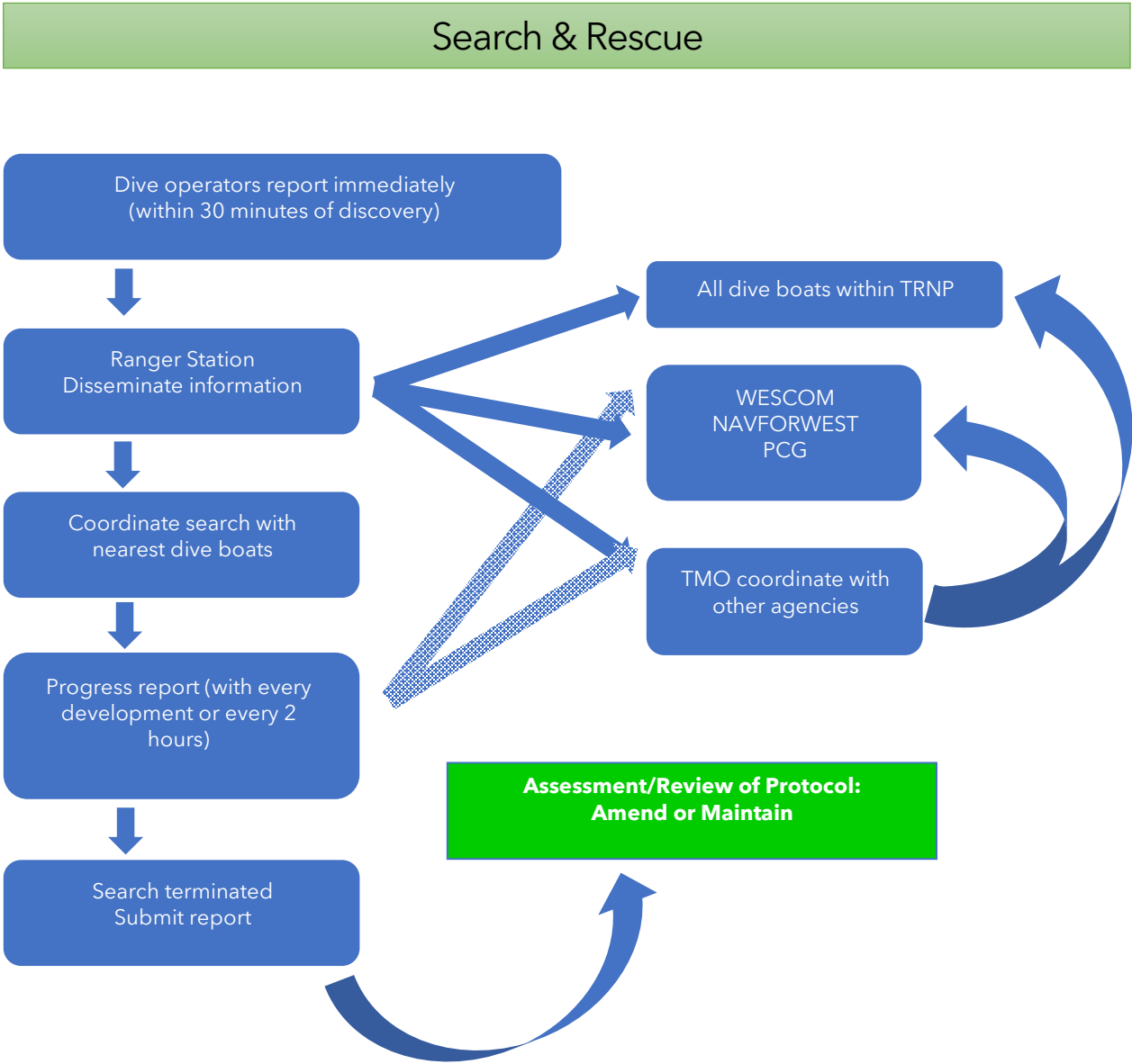


Terrorism and Piracy



Tsunami, Storm Surge, and Super Typhoon

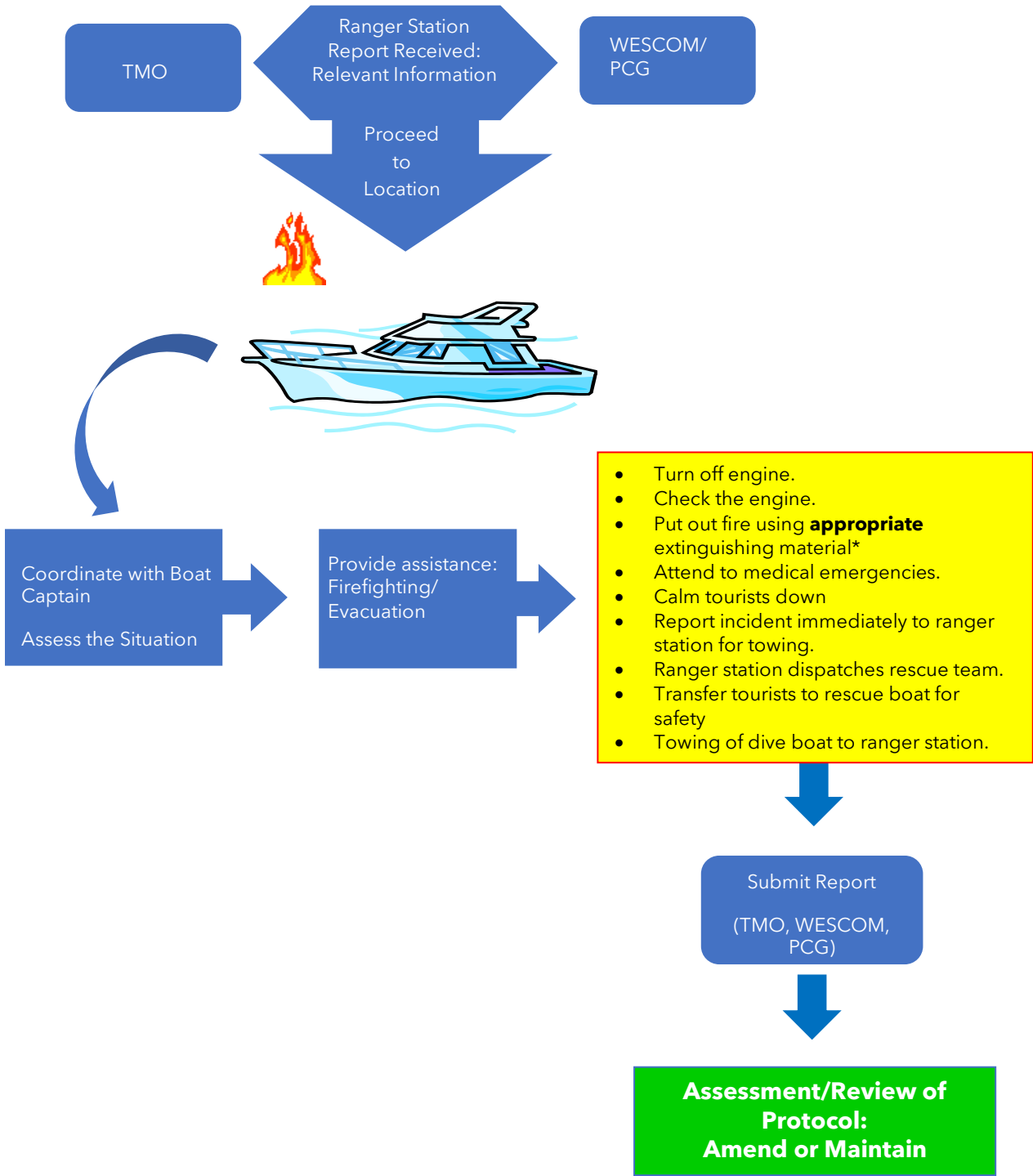




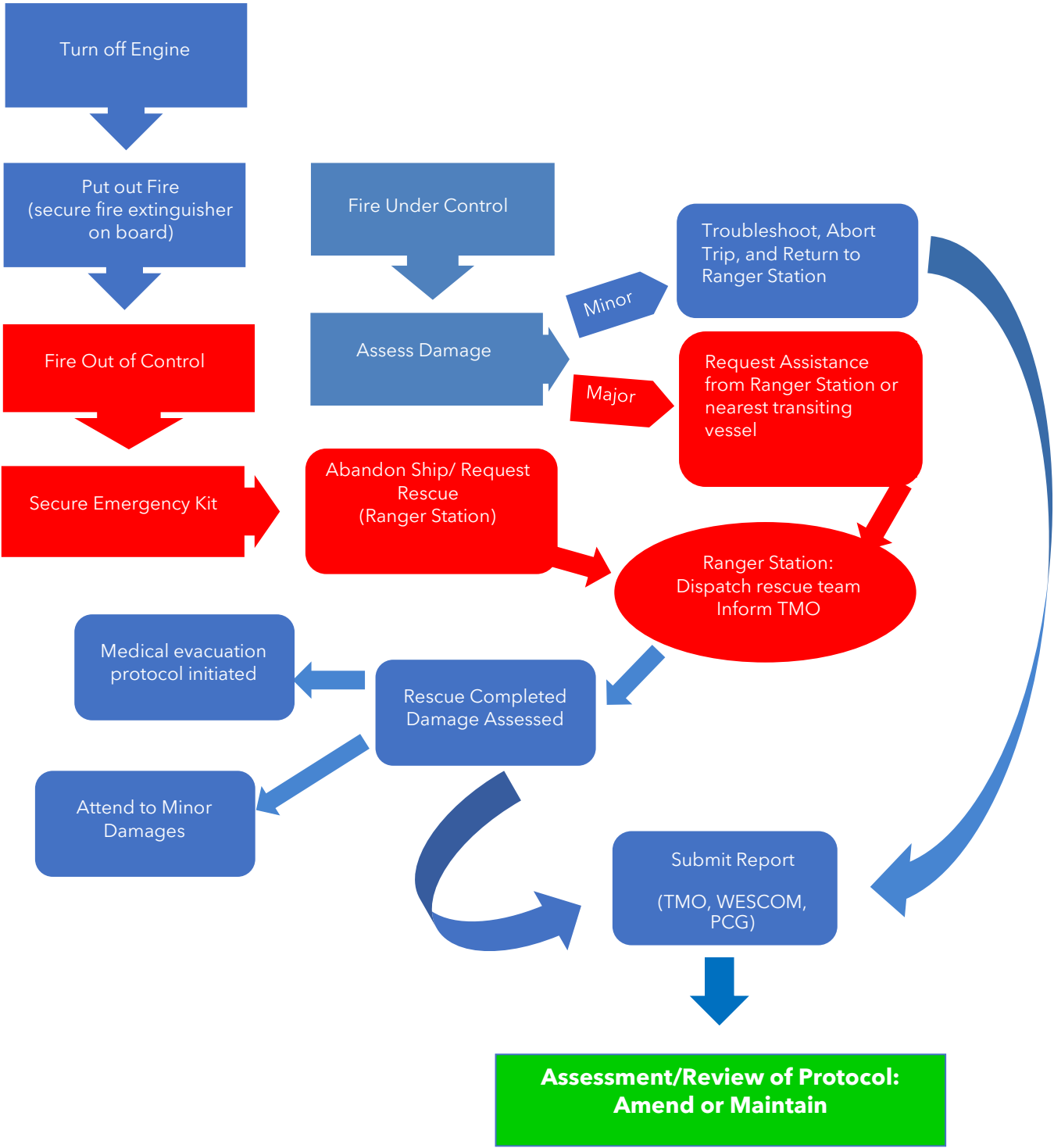
Fire in the Ranger Station



Fire on Board Dive Boat



Fire on Board Patrol Boat



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