

NIPAS MPA Training Workshop: Damage Assessment, Response, Restoration and Monitoring of Natural Resources

Cluster	Schedule (excluding travel time)	
	Facilitation Training	Training Proper
Cluster 2 (Sorsogon, Region 5)	August 11-13, 2023	August 14-19, 2023
Cluster 3 (General Santos, Region 12)	September 9-11, 2023	September 12-17, 2023
Cluster 1 (Pangasinan, Region 1)	October 13 -15, 2023	October 16 -21, 2023

Provisional Program (Training Proper)

DAY 1 _ COASTAL AND MARINE ECOSYSTEM SERVICES, DAMAGE ASSESSMENT

TIME	ACTIVITY	MATERIALS	LEAD
8:00 – 9:00	<u>OPENING SESSION</u> <ul style="list-style-type: none"> Opening Program: Welcome and message from Regional Executive Director Introductions and icebreaker Group photo 	Margolis wheel icebreaker - sharing in 1 minute on	BMB (Introduction)
9:00 – 9:30 (30 mins)	<u>WEEK AHEAD OVERVIEW</u> <ul style="list-style-type: none"> Framework <ul style="list-style-type: none"> Process Each participant works on own MPA Ground rules Connection to previous trainings Overview of Philippines context of natural resource damage assessment and response <ul style="list-style-type: none"> ad hoc, standardized protocols only for oil spills, reliance on university partners, move towards developing national protocols for coastal and marine ecosystems and resources Training Overview <ul style="list-style-type: none"> Overview of NRDA planning process Importance of monitoring to assess damage Focusing response for 2 acute, single responsible part and acute natural disaster Resilience and preparation 	Process poster	National Mentors

	<ul style="list-style-type: none"> ○ Importance of communications planning 		
9:30 - 10:00	<p><u>PRESENTATION 1.1 Review on CME, Ecosystem Services</u></p> <ul style="list-style-type: none"> ● Quick review on Coastal and Marine Ecosystems, Processes and Indicator Species ● Quick review on Ecosystems Services and applied valuation of natural resources ● Review on tools for habitat assessment and monitoring (BAMS) <p><i>Objectives: To briefly review marine ecosystems, ecosystem services, and ocean processes concepts, including BAMS as a "pre-assessment" or baseline tool for monitoring these aspects within NIPAS MPAs.</i></p>		National Mentor
10:00- 10:45 AM (45 mins)	<p><u>EXERCISE 1.1. ECOSYSTEMS SERVICES IN YOUR MPA</u></p> <ul style="list-style-type: none"> ● Participants will assess ecosystem services in their NIPAS MPAs ● Discuss within your group the common ecosystem services that you share with other MPAs within your table. ● What are is unique to your MPA <p><i>Objectives: To distinguish between comparable currencies for ecosystem services in NIPAS MPAS.</i></p>	Worksheet 1.2 Handout 1.1	Cluster Mentor
10:45-11:00A M (15 mins)	<p><u>PRESENTATION 1.2. CASE STUDY – CORAL ECOSYSTEM SERVICES ASSESSMENT TOOL (ICRI)</u></p> <ul style="list-style-type: none"> ● Tools review ● Overview of how ecosystem service valuation can be used in the damage assessment process using ICRI Coral Ecological Services Assessment Tool ● Background knowledge suggested as precursor for the exercise <p><i>Objective: Review the concepts of assessing the market and non-market value of natural resources and the ecosystem services they provide.</i></p>		NOAA/ National Mentor
11:00 - 11:30 (30 mins)	<p><u>EXERCISE/DISCUSSION 1.2: DEVELOPING YOUR MPA CASE STUDY</u></p> <p><u>Objective:</u> Share lessons learned and experiences addressing damages/injuries within</p>	Worksheet 2.1: Developing your MPA Case Study	Cluster Mentor/ Exercise Mentor

	your MPA and discuss the challenges addressing them.	(review) Flip charts Sticky notes	
11:30 - 12:00 (30 mins)	PRESENTATION 1.3: INTRODUCTION TO DAMAGE ASSESSMENT <ul style="list-style-type: none"> Overview of damage assessment processes regionally and globally (pre-asses, asses and plan, restore) Types of damage, chronic vs. acute, natural vs human caused Principles of assessment techniques Importance of distinction between mobile species and sessile invertebrates, plants and seaweeds Step-by-step process of assessment Scaling restoration to an injury: introduction to the concepts of interim service losses and the role of HEA/REA <u>Objective:</u> <ul style="list-style-type: none"> <i>Understand the use of damage assessments and the linkages between threats and damage assessments</i> <i>Explore the step-by-step process, tools, and resources to assess the damages to habitats and ecosystems</i> 	Handout 2.1 Tubbataha grounding assessment	
12:00-1:00 PM LUNCH			
1:00 -1:15	ENERGIZER		Cluster Mentor/
1:15 - 1:55 PM (40 mins)	EXERCISE 1.3: DAMAGE ASSESSMENT CASE STUDIES Using coral,mangrove, and seagrass case studies, review ship grounding and oil spills in different scenarios and fill out worksheet 2.2.	Worksheet 2.2: Damage Assessment Case Study Table Handouts Ex 2.2: Case Studies	National Mentor
1:55 - 2:15 PM (20 mins)	PRESENTATION 1.4: PRINCIPLES OF ASSESSMENT TECHNIQUES Understand the concepts of the damage pre-assessment and assessment processes <ul style="list-style-type: none"> Establishing a baseline Scientific information needed Mapping Data and sample collection Collecting evidence Protocols for how to collect samples, worksheets and forms, how to assess 	E-handout: <i>Survey Methods</i>	RP/ National Mentor

	marine mammals and turtle health <ul style="list-style-type: none"> • Site access if wanted to do photography or transect counts • Plan to measure the recreational use • Acute vs. chronic 		
2:15-3:00 PM (1 hr)	<u>EXERCISE 1.4. ASSESSMENT TECHNIQUES, DOCUMENTING AND QUANTIFYING DAMAGE</u> <ul style="list-style-type: none"> • Photography • Transects and quadrats • Determining percent cover • Preparing in advance • Interview techniques to understand how the damage has affected use of the area <p><i>Objective: Identify five different sampling techniques/ approaches useful in the NRDA context</i></p>	Transect tapes & quadrats samples of different materials Field notebooks Laptops or ipads (for photography station)	Cluster mentor
HEALTH BREAK and ENERGIZER			
3:00 - 3:30 (30 mins)	<u>CASE STUDY PRESENTATION: RAPID ASSESSMENT AND CASE STUDIES</u> Share the experience of the BMB team during the Mindoro oil spill and how an improvise assessment was conducted	PPT presentation	BMB-CMD RP Criselda Castor/ Alternate
3:30-4:00 (30 mins)	PRESENTATION 1.5: OVERVIEW OF RAPID ASSESSMENT TECHNIQUE FOR SPECIES DAMAGE [from storm, grounding, scarring, water quality] <ul style="list-style-type: none"> • Marine mammal health assessment • Sea turtle assessments • Coastal and marine bird assessments • Types of damage in a species-specific context • Handling dead wildlife • Rapid assessment for mobile species 	E-handout : NOAA OAR Sea turtles and oil spills	National Mentor
4:00-4:45 Pm (45 mins)	<u>EXERCISE 1.5: ENVIRONMENTAL SENSITIVITY INDEX MAPS</u> Using Environmental Sensitivity Index (ESI) mapping techniques, refer to table handouts and Handout 3.1: Developing an ESI Map handout to create ESI maps for your MPAs. Gallery walk to share each other's ESI maps.	Table handout: Environmental Sensitivity map example (2 per table) Handout 3.1: Developing an ESI map	National and Cluster Mentor Colored pencils Flip chart paper

4:45-5:15 PM (30 mins)	<u>PRESENTATION 1.6: COLLECTING EVIDENCE FOR DAMAGE ASSESSMENT, RESPONSE, RESTORATION AND MONITORING</u> Use of photos and images from kites, drones and Google Earth Case studies of actual use in damage Objective: Present different techniques and tools for collecting evidence on DARRM		
	WRAP-UP, PREP FOR DAY 2		
	IMPLEMENTATION PLAN WRITING AND REVIEW		
	FEEDBACK REPORTING (MENTORS AND TABLE REPRESENTATIVES)		

Day 2- INCIDENCE RESPONSE, ASSESSMENT, REHABILITATION AND MONITORING: OIL SPILL

TIME	ACTIVITY	MATERIALS	LEAD
8:10-8:25	Ice breaker/Energizer RECAP DAY 1		
8:25-8:35 (10 mins)	Overview of the Course: -Overview -tools and methods -case study presentation -damage assessment and response plan		
8:35-9:20 (45 mins)	<u>PRESENTATION 2.1: OIL SPILLS</u> <ul style="list-style-type: none"> Fate and behavior of oil spilled in the environment Introduction to oil chemistry and toxicity Overview of how oil impacts habitats and species (toxicity) <i>Objective:</i> Understand behavior of different types of oils and impacts of each.		National Mentor
9:20-10:00 (40 mins)	<u>EXPERT PRESENTATION NATIONAL OIL SPILL CONTINGENCY PLAN</u> <ul style="list-style-type: none"> Mandate of the Philippines Tool and techniques used Communications Experiences of oil spill response in the Philippines 		Invited PCG Resource Speaker
10:00-10:20	<u>Open Forum</u>		

10:20-11:05 (45 mins)	EXERCISE 2.1: APPLYING ESI MAPPING AND PROTECTION STRATEGIES Using your ESI maps from the previous exercise, discuss information that is needed to set priorities for protecting different resources along the shoreline from potential scenarios.	E-handout: Using Maps to Evaluate Environmental Tradeoffs	Cluster Mentor
11:05-11:35 (30 mins)	PRESENTATION 2.2: OVERVIEW OF INCIDENT RESPONSE FOR OILSPILL <ul style="list-style-type: none"> Principles, Concepts, Processes, Toolkits Specific Incidents/Damage Seagrass (Florida keys example: replant seagrasses quickly) Corals - rapid emergency restoration after storm or ship grounding Oil spills Hazardous waste spills Other types of incidents/damages Communications - feed science into response system with limited capacity How to assess and respond with limited staff Keeping yourself and your co-workers safe <p>Objective: Review the process, tools, and resources to respond to incidents</p>		NOAA/ National Mentor
11:35-12:05 (30 mins)	EXERCISE 2.2: RAPID ASSESMENT FOR OILS SPILL INCIDENCE TOOLS FOR FIRST RESPONSE AND COMMUNICATION Developing a list of actions for first response to an reported injury such as an oil spill. The goal is to have this on hand at your site as a response guide when an injury occurs.	Worksheet 3.2: First Responder Guidelines Handout 3.2: First Responder Guidelines	
12:05-1:00 LUNCH			
1:00-2:00	CASE STUDY PRESENTATION: CASE STUDY ON MANGROVE DAMAGE ASSESSMENT, RESTORATION AND MONITORING IN GUIMARAS Objective: To present the damage assessment undertaken, mangrove rehabilitation and recovery in Guimaras Oil Spill Incident and Other Oil Spill Incidents in the Philippines		Invited Speaker Dr. Resurrecion B. Sadaba

2:00-2:40 (40 mins)	EXERCISE 2.3: SPECIES RAPID ASSESSMENT IN ACTION 3 minute introduction, Four stations, 8 minutes at each station, 8 minute discussion <ul style="list-style-type: none"> • Dead bird count • Fish survey techniques (coral) • Fish survey techniques (seagrass) • Turtles <p><i>Objective: Learn different rapid assessments of mobile species, practice those assessments</i></p> <p><i>Discussion- How do these species assessments compare to the current monitoring program at your MPA?</i></p>	Table handout: Coral Assessment Techniques Laminated cards for fish ID books inverts, marine mammals, seabirds Field notebooks	Cluster mentor/ National Mentors
2:40-3:00 (20 mins)	<u>PRESENTATION 2.3: COLLECTING EVIDENCE FOR DAMAGE ASSESSMENT, RESPONSE, RESTORATION AND MONITORING FOR OILSPILL</u> Use of photos and images from kites, drones and Google Earth Case studies of actual use in damage <i>Objective: Present different techniques and tools for collecting evidence on DARRM</i>	E-handout: Using Maps to Evaluate Environmental Tradeoffs	
3:00-4:15 PM (1 hr 15 mins)	<u>EXERCISE 2.4: COLLECTING EVIDENCE</u> <ul style="list-style-type: none"> • Brief overview and discussions • Emphasis on how to use the data/pictures gathered to support management efforts • Reference sites • Using the CSI toolkit <p>Practical exercises for the following:pros/cons of each</p> <ul style="list-style-type: none"> • MACRO LEVEL: (15 min per station, 3 stations) Drones - uses, considerations, flight planning for the fieldtrip (rules for drone use in the Philippines), different groups will have different flight plans - seagrass or mangrove • Drone- actual flight • Underwater towing- Photography to classify drone data • MICRO LEVEL (2 stations, 15 min 		

	each): <ul style="list-style-type: none"> • Mangrove survey methodology • Seagrass survey methodology 		
4:15-4:40 (15 mins)	PRESENTATION 2.4: ASSESSING IMPACTS ON RECREATIONAL USE Uses and methods for applying counting and interview techniques to assess damage to recreational use.		NOAA/ National Mentor
4:40-5:15	OPEN DISCUSSION: DRAFT RESPONSE PLAN GUIDELINES AND ASSESSMENT OF EXISTING RESPONSE PLAN		
5:15-5:35	WRAP-UP & IMPLEMENTATION AGREEMENTS		
5:35-6:00	FEEDBACK REPORTING (MENTORS AND TABLE REPRESENTATIVES)		

**Day 3-INCIDENCE RESPONSE, ASSESSMENT, REHABILITATION AND MONITORING: SHIP
GROUNDING**

TIME	ACTIVITY	MATERIALS	LEAD
8:00 – 8:10	RECAP DAY 2		
8:10-8:25	Ice breaker		
8:25-8:35 (10 mins)	Overview of the Course: -Overview -tools and methods -case study presentation -damage assessment and response plan		
8:35-9:05 (30 mins)	PRESENTATION 3.1: INTRODUCTION TO DAMAGE ASSESSMENT: SHIP GROUNDING <ul style="list-style-type: none"> • Overview grounding related damages • Coral grounding and emergency restoration assessing damage for rapid response • Prop scar damage to seagrass beds - determining clean-up vs. no clean up, planting vs. leaving it - what has been harmed and how not to harm more by trampling wetland plants, etc. • Ship grounding • Ship strikes • Prop scarring • Fate of coral reefs and associated species and other habitats in ship grounding incidences - short and long term <u>Objective:</u> Understand impacts of ship grounding.		NOAA/ National Mentor

9:05-9:45 (30 mins exercise, 10 mins presentation)	<u>EXERCISE 3.1: DAMAGE ASSESSMENT CASE STUDIES</u> Using coral and mangrove case studies, review incident reports in different scenarios and fill out worksheet 2.2.	<u>Worksheet 2.2:</u> Damage Assessment Case Study <u>Table Handouts Ex 2.2:</u> Case Studies Scenarios 1-4	Cluster Mentor
	<u>EXERCISE 3.2: ECOLOGICAL RAPID ASSESSMENT IN ACTION</u> <ul style="list-style-type: none"> • Work through an acute and chronic event and apply the type of damage assessment techniques best suited (each group works on a different chronic and acute, oil spill, boat grounding on reef, typhoon or storm) • Discuss difference between acute and chronic events 	Table Handout Ex 3.2: Coral Assessment Techniques Transect tapes & quadrats Cameras & photo-grids Field notebooks ID cards Flip charts & colored construction paper Flip charts & markers	
9:45-10:30 (40 mins)	<u>PRESENTATION 3.2: OVERVIEW OF RESPONDING TO AN INCIDENT</u> <ul style="list-style-type: none"> • Principles, Concepts, Processes, Toolkits Specific Incidents/Damage • Seagrass (Florida keys example: replant seagrasses quickly) • Corals - rapid emergency restoration after storm or ship grounding • Communications - feed science into response system with limited capacity • How to assess and respond with limited staff • Keeping yourself and your co-workers safe <p><i>Objective: Review the process, tools, and resources to respond to incidents</i></p>		
10:30-11:00 AM	<u>CASE STUDY PRESENTATION: SHIP GROUNDING EXPERIENCE :(Per CLUSTER PA example)</u> Cluster I: Masinloc Oyon Bay Ship Grounding Incident (w/ EV) (R3- Jong) Cluster II:	PPT Presentation	Invited Local Speaker

	<p>Ticao-Burias Grounding Incident (w/ EV) (R5- BFAR)</p> <p>Cluster III: Saranggani Ship Grounding Incident (w/ EV) (R12-PASu Joy)</p> <p><i>Objective: To present the damage assessment undertaken, response provided and rehabilitation and recovery strategies on Ship Grounding incidence in the Philippines.</i></p> <p>Open forum</p>		
11:00-11:30	<p><u>PRESENTATION 3.3: COLLECTING EVIDENCE FOR DAMAGE ASSESSMENT, RESPONSE, RESTORATION AND MONITORING FOR OILSPILL</u></p> <p>Use of photos and images from kites, drones and Google Earth</p> <p>Case studies of actual use in damage</p> <p><i>Objective: Present different techniques and tools for collecting evidence on DARRM</i></p>	E-handout: Using Maps to Evaluate Environmental Tradeoffs	National mentor
11:30-12:00	<p><u>EXERCISE 3.3: COLLECTING EVIDENCE</u></p> <ul style="list-style-type: none"> Brief overview and discussions Emphasis on how to use the data/pictures gathered to support management efforts Reference sites 		
12:00-1:00 LUNCH			
1:00-1:15 PM	Iceb breaker		
1:15-2:15 PM (1 hr)	<p><u>CASE STUDY PRESENTATION: SHIP GROUNDING EXPERIENCE OF TUBBATAHA REEF NATURAL PARK</u></p> <p><i>Objective: To share the experience of TRNP during the ship grounding experience of the PA from coordination, assessment, valuation and damage fee collection including monitoring of affected area rehabilitation and its present status.</i></p> <p><u>OPEN FORUM</u></p>	PPT Presentation	Invited Speaker from TRNP
2:15-2:45 PM	<u>EXERCISE 3.4: RAPID CORAL REEF RESPONSE</u>	Worksheet 4.1 Coral Injuries and	Cluster Mentor

(30 mins)	With your group, fill in the Coral Injuries and Appropriate techniques worksheet	Appropriate Techniques	
2:45-3:15 PM (30 mins)	<p><u>PRESENTATION 3.4: FROM RESPONSE TO RESTORATION: FOCUS ON WHAT IS NEEDED FOR SUCCESS</u></p> <ul style="list-style-type: none"> • Focus on resilience, damage prevention and preparedness • Each incident is unique as is response and restoration options for each unique site and incident • HEA example: focusing on the type of damage restoration needed • Case study: Vogue Trader grounding • Philippines storm damage and mangrove restoration • Developing restoration and mitigation plans • Integrating citizen science into plan 	Vogue Trader grounding video	NOAA/ National Meteor
3:15-3:45 PM (30 mins)	<p><u>PRESENTATION 3.5: MANDATES OF NGAS RE DAMAGE ASSESSMENT/RESPONSE, COMMUNICATIONS</u></p> <p><i>Objective: Using the actual experiences from each representative per cluster, Present on the mandates and institutional arrangements for coastal and marine ecosystems and resource damage assessment and response as well as communications</i></p>	PPT Presentation	DENR BMB
3:45-4:15 PM (30 mins)	<p><u>EXERCISE 3.5: CORAL REEF RESTORATION DECISION MATRIX</u></p> <p>After reviewing the decision matrix with team, each participant considers the provided scenarios and how it applies to their site individually (5 min), then teams of two share outcomes (5 min each - 10 min total for discussion)</p> <p><i>Objective:</i> understand a general set of guidelines to assess feasibility of a restoration project prior to undertaking it.</p>	Handout 4.1: Coral Reef Restoration Decision Matrix	
3:45-4:15 PM (30 mins)	<p><u>PRESENTATION 5.1 MONITORING RESTORATION PROJECTS</u></p> <ul style="list-style-type: none"> • Overview: Principles, Concepts, Processes, Tools • Specific Incidents/Damage • How to evaluate the process and 	<p><u>E-reference:</u> Apo Island Marine Sanctuary: Steps to Recovery</p>	NOAA

	<p>incorporate lessons learned into future efforts</p> <p><i>Objective:</i> To provide an overview on monitoring restoration efforts, including sharing the Apo Island/Siquijor Experience</p>	from Storm Damage	
<p>4:15- 5:30PM</p> <p>(1 hr 15 mins)</p>	<p>EXERCISE 5.1: MONITORING RESTORATION PROJECTS</p> <ul style="list-style-type: none"> Identify fish species that can be included in their monitoring program in their specific location/MPA and discuss with group to compare notes and discuss different choices. Understand the role that randomized controlled trials play in evaluating data, particularly from many sources. Understand the role that replicate study sites play in data reproducibility, dealing with confounding factors, scientific uncertainty, and assessing the quality of outcomes from quality or level of intervention. <p>Objectives:</p> <ul style="list-style-type: none"> Part I: Identify indicator species that would be fit to include in their monitoring program and provide reasoning. Part II: Understand tools used in the evaluation of restoration and conservation intervention outcomes 	<p>Worksheet 5.1: Choosing control sites for monitoring programs</p> <p>Refer to Module 5 Manual: Monitoring Ship grounding case study</p>	
5:30-5:45 PM	PRESENTATION: DRAFT RESPONSE PLAN GUIDELINES AND ASSESSMENT OF EXISTING RESPONSE PLAN		
5:45-6:00	WRAP-UP & IMPLEMENTATION AGREEMENTS FIEL WORK ANNOUNCEMENT		
6:00-6:15 PM	FEEDBACK REPORTING (MENTORS AND TABLE REPRESENTATIVES)		

Day 4 FIELD SESSION AND/OR SIMULATION EXERCISES

DAY 5 _TYPHOON DAMAGE AND INTRODUCTION TO ECOSYSTEMS VALUATION

TIME	ACTIVITY	MATERIALS	LEAD
8:00-8:15	REVIEW OF DAY 5		

8:15-8:30 (15 mins)	AND OVERVIEW OF DAY 6 <ul style="list-style-type: none"> • Overview • tools and methods • case study presentation • damage assessment and response plan 		National Mentor
8:30-8:45 AM (15 mins)	PRESENTATION 5.1 INTRODUCTION TO TYPHOON DAMAGES <ul style="list-style-type: none"> • Fate of the coastal and marine habitats and associated species in typhoon incidences • Damage assessment and response • Dealing with remote situations in responseTyphoon Haiyan disaster preparedness <p><u>Objective:</u> Understand impacts of typhoon incidences</p>		
8:45-9:00 AM (15 mins)	PRESENTATION 5.2 DEALING WITH REMOTE SITUATIONS IN RESPONSE <ul style="list-style-type: none"> • Overview of response for remote locations • Community incident response and communications • documentation, communicating the information • Typhoon Haiyan disaster preparedness <p><u>Objective:</u> Understand impacts of typhoon incidences</p>		
9:00-9:45 AM (45 mins)	EXERCISE 5.1: DAMAGE ASSESSMENT CASE STUDIES Using coral and mangrove case studies, review incident reports in different scenarios and fill out worksheet 2.2.	Worksheet 2.2: Damage Assessment Case Study <u>Table</u> <u>Handouts Ex 2.2:</u> Case Studies Scenarios 1-4	Cluster Mentor
9:45-10:45 AM (1 hr)	CASE STUDY PRESENTATION: TYPHOON DAMAGE ASSESSMENT APO ISLAND OPEN FORUM		Invited Speaker Dr. Aileen Maypa
10:45-11:30 AM	EXERCISE AND DISCUSSION 5.2: MATERIALS AND TOOLKITS	Handout 5.1 Boaters guide to	

(45 mins)	<ul style="list-style-type: none"> Develop inventory of current materials and resources on hand at MPAs for preparedness toolkit, what's missing, challenges to filling gaps, and steps to share information and resources across NIPAS network to support assessment, response, and restoration. Develop community response/communication plan summary write a one pager and who's on your call sheet <p><i>Objective: Review some key resources, materials, and toolkits MPA Managers can put together to be prepared.</i></p>	<p>being prepared on boats</p> <p>Preparedness list in logbook</p>	
11:30-12:00	<p><u>PRESENTATION 5.3: MARINE DEBRIS</u></p> <ul style="list-style-type: none"> Ghost net study from NW Hawaiian Islands Tools and resources on marine debris Blackbird mine in Idaho (15-20 years) looking at impacts to anadromous fish Heal the Bay water quality ratings for the beaches 	<p>E-handout: Marine Debris Shoreline Survey Field Guide</p>	
12:00-1:00 LUNCH			
1:00-1:30 PM	<p><u>PRESENTATION 5.4. INTRODUCTION TO COASTAL AND MARINE ECOSYSTEMS VALUATION</u></p> <ul style="list-style-type: none"> Ecosystem Services Valuation Approaches Framework 		BMB Speaker/ Maria Katrina Apaya
1:30-2:15	<p><u>EXERCISE 5.1: ECOSYSTEM SERVICE APPLIED VALUATION</u></p> <p>(I) Assess ecosystem services in NIPAS MPAs and (II) hands-on practice for two ecosystem service valuation techniques, the Market Price method and Contingent Valuation Method.</p> <p><u>Objective:</u></p> <ul style="list-style-type: none"> To distinguish between comparable currencies for ecosystem services in their MPAs Learn the differences between local, 	<p>Worksheet 1.2, 1.3. , Handout 1.1</p>	

	<p>regional and global ecosystem services</p> <ul style="list-style-type: none"> • Learn the use value versus option value or intrinsic value of ecosystem services • Practice two ecosystem service valuation techniques: Market Price Method and Contingent Valuation Method 		
2:15-2:45PM (30 mins)	<u>PRESENTATION 5.5</u> CURRENT POLICIES AND FUTURE INITIATIVES ON ASSESSING THE VALUE OF ECOSYSTEMS		BMB
2:45-3:45 PM (1 hr)	<p>DAMAGE VALUATION (CASE STUDY)</p> <p>1. Oil spill</p> <ul style="list-style-type: none"> • Computation of damage during the MV Princes Empress oil spill experience in Mindoro <p>2. Ship Grounding</p> <ul style="list-style-type: none"> • Cluster 1: MOBPL • Cluster 2: TCPLS • Cluster 3:SBPS 		<p>BMB</p> <p>BFAR</p>
3:45-4:00 PM- (15 mins)	<u>PRESENTATION 3.4:</u> DRAFT RESPONSE PLAN GUIDELINES AND ASSESSMENT OF EXISTING RESPONSE PLAN		
4:00-4:30 PM (30 mins)	<p>FINAL REFLECTIONS AND PROGRAM WRAP UP</p> <ul style="list-style-type: none"> • What are the ten most inspiring and important aspects of the entire capacity building program? • How can you take those to inspire others? • What can we do at the program summit to support you bringing these inspirations to fruition? • 		

4:30-5:00 PM (30 mins)	WRAP-UP & IMPLEMENTATION AGREEMENTS <ul style="list-style-type: none"> • Training wrap up • Inspirations to stay engaged • Course evaluation • DEBRIEFING • (MENTORS AND TABLE REPRESENTATIVES) 		
5:00-6:00 PM	Jeopardy Game		National Mentors
6:00 PM-onwards	<u>CONGRATULATIONS!</u> <ul style="list-style-type: none"> • Dinner • Certificate • Celebrations 		All

Day 6- Travel Time to office station