# ADAPTING TO A CHANGING CLIMATE WORKSHOP REPORT

Saipan, CNMI March 4 – 8, 2013













#### **Background**

In 2010, The Micronesia Conservation Trust (MCT) supported the development of community based climate change adaptation tools for the Micronesia region. To design the most appropriate and useable products, consultants reviewed existing climate change (CC) adaptation materials, spoke with various climate experts, and held a regional workshop with natural resource managers, community members, and climate change experts. Based on input at this workshop, the following products were developed:

**Adapting to a Changing Climate Outreach Toolkit**<sup>1</sup> – which is designed to provide community members and stakeholders with an understanding of climate change concepts and adaptation strategies. The toolkit consists of:

- Large flipcharts visually depicting climate change concepts and actions that can be carried out to prepare and adapt to CC impacts.
- Facilitators guide to accompany the flipcharts, which include page-by-page notes on things to point out on the flipchart and concepts to explain.
- Booklets that provide the same visual content as the flipchart but offer more verbal description and explanations. These are to be used by community members and other stakeholders both during presentation of the flip chart material and afterward as they work on their adaptation projects.

**Revised PIMPAC management planning guidance**<sup>1</sup>, which now includes a climate change lens through:

- Revised steps that ensure important stakeholders are involved and key questions are answered to address climate change in the planning process
- New steps including historical timeline, seasonal calendar, strength/weakness analysis, and vulnerability assessment to help understand the social and biological resource vulnerability to the impacts of climate change.

This workshop focused on training a team of practitioners in Saipan CNMI on the use of these tools. Funding for the workshop was provided by the Pacific Islands Managed and Protected Area Community (PIMPAC), the Micronesia Conservation Trust, and the CNMI Climate Change Working Group through NOAA OCRM program funding.

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<sup>&</sup>lt;sup>1</sup> Since the completion of the first phase of this project, much of the outreach tool and the revised PIMPAC management planning guidance have been combined into one streamlined process and further revised in collaboration with Micronesia Conservation Trust and the US Coral Triangle Initiative and is now called the *Guidance for Vulnerability Assessment and Local Early Action Planning (VA-LEAP)*.

#### **Workshop Objectives**

- 1. To provide the CNMI Climate Change Working Group (CCWG) members with the necessary skills to effectively communicate climate change concepts and foster adaptation planning and implementation.
- 2. To draft a climate change communications plan for the CCWG members to use to foster awareness among target audiences.
- 3. To provide skills and tools to support the CCWG in facilitating participatory mapping, field based vulnerability assessments, and development of early adaptation actions.
- 4. To develop a timeline for participants to utilize the skills and tools from the workshop to carry out follow up activities of the CCWG

#### **Workshop Participation**

The training was attended by 37 people (participants and trainers). Trainees were present from various government agencies and non-governmental organizations within the CNMI. Participants included:

	Training Attendance
Name	Affiliation
Ana Agulto	CNMI Coastal Resources Management Office
Avra Heller	CNMI Division of Environmental Quality
Becky Furey	Mariana Islands Nature Alliance
Birhen Martinez	Commonwealth Utilities Corporation
Britta Baechler	NOAA Coral Fellowship Program
Brooke N.	Pacific Marine Resources Institute
Dana Okano	NOAA - CNMI Field Office
Doris Chong	CNMI Coastal Resources Management Office
Elizabeth Furey	Mariana Islands Nature Alliance
Eve DeLeon Guerrero	Cornerstone Consulting Services
Fran Castro	CNMI Division of Environmental Quality
Greg Moretti	Pacific Marine Resources Institute
James Fleming	CNMI Department of Public Lands
Jihan B.	CNMI Division of Environmental Quality
Joel Puyatt	Commonwealth Utilities Corporation
John Iguel	CNMI Division of Environmental Quality
Jolly Ann Cruz	Mariana Islands Nature Alliance
Jose Quann	CNMI Division of Environmental Quality
Kaity Mattos	CNMI Division of Environmental Quality
Kodep U.	Mariana Islands Nature Alliance

Lawrence Duponchel	Northern Marianas College - Extension
Maryann Arriola	Saipan Zoning Office
Nicole Shafer	CNMI Coastal Resources Management Office
Olivia Tebuteb	CNMI Division of Environmental Quality
Paul Plunkett	U.S. Coast Guard
Rebecca Skeele	NOAA Coral Fellowship Program
Robbie Greene	NOAA Coastal Fellowship Program
Ryan Okano	CNMI Division of Environmental Quality
Sean Macduff	CNMI Division of Fish and Wildlife
Simada Iramik	Commonwealth Utilities Corporation
Steve Johnson	CNMI Division of Environmental Quality
Vince Pangelinan	Commonwealth Utilities Corporation

PIMPAC advisors Wayne Andrew, Meghan Gombos, and Pacific Islands Climate Change Cooperative (PICCC) staff Katie Munkres led the training.

#### **Workshop Approach & Outputs**

The workshop utilized a variety of methods including lectures, group discussions, classroom exercises, and fieldwork to help participants understand climate change concepts and practice utilizing the toolkit to carry out vulnerability assessments and adaptation planning. This training was broken into two and a half day sessions to accommodate for different skills sets and interests by participants. Participants were able to attend one or both sessions, based on level of interest and skills needed for their position. The sessions included:

- 1. Session One: Outreach focused on understanding climate change, the potential impacts and communicating climate concepts as well as supporting the development of a draft communications plan by CCWG members.
- 2. Session Two: Vulnerability Assessment and Adaptation Planning focused on participatory mapping, vulnerability assessment processes, and development of actions to reduce vulnerabilities. Participants focused on the Garapan area to carry out the work in this session.

The rest of this report will capture the main activities and outputs from these sessions.

#### Session One: Outreach and Communications

The workshop began by focusing on using the new CC outreach materials including the flipchart illustrations and participatory exercises to understand climate change concepts and discuss ways to communicate key messages to communities. To support an understanding these key concepts, the group carried out several participatory exercises that would help them develop a "local climate story" which explains past, current and projected climate hazards, and impacts the community is most concerned about. To develop the story, participants completed several exercises described further below.

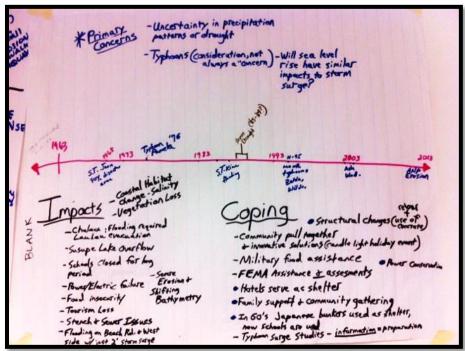
The group began by listing factors that contribute to a community being healthy or unhealthy. The focus of this discussion was to demonstrate how several existing local threats are impacting communities. The exercise also illustrates how the health of local natural and social resources will greatly influence how those resources and the broader community are impacted by climate change. Resources that face several existing local threats are more likely to be impacted by climate change. The group listed the following factors that contribute to healthy or unhealthy communities:

Factors that contribute to a	Factors that contribute to an
HEALTHY community	UNHEALTHY community
<ol> <li>Complete transparency among community</li> </ol>	31. Hidden agendas
2. Everyone's voices heard	32. Dis-unification
3. Community engagement	33. Prejudice
4. Safety	34. Tragedy of the commons
5. Good morals	35. Lack of communication and
6. Physically, spiritually, emotionally healthy	stewardship
7. Food – getting food from trees and ocean	36. No sewer systems, wastewater
8. Clean water	37. No proper place to dispose of
9. Can raise children in a healthy environment	waste
10. Equal access to basic needs – water, food, health	38. Don't have trees of ocean to get
11. Diverse work force	food from
12. Economic sector sustained by natural resources	39. Overuse of natural resources
13. Sustainable development	40. Lack of appropriate recreation
14. Connection to local culture	41. Lack of cultural identity
15. Civil organizations are active	42. Physically unhealthy population
16. Preparation for emergencies	43. Unstable government
17. Functioning ecosystems	44. Uncontrolled runoff
18. Smiling people	45. Ignorance
19. Access to fresh produce	46. No food and lack of resources
20. Native trees	47. unhealthy lifestyle
21. Law abiding citizens	48. lack of community engagement
22. Best practices within the village	49. polluted
23. No poaching	50. no attachment to environment
24. Adequate public services	51. no money
25. Educated community regarding the environment	52. high non-communicable diseases
26. Involved community	53. no opportunities for kids
27. Cultural diversity	54. too much technology
28. Resource protection	55. no human interaction
29. Places for farming	56. no fish, no birds
30. Sustainable lifestyle	57. brown tree snake

#### **Historical Timeline**

Next the group explored the difference between weather and climate and used a participatory exercise to explore historical natural/weather hazards that have occurred in the past 50 years. The historical timeline was used to identify the main types of events that happened, impacts those events had on the community and ways the community coped with those impacts. The group also looked at how some of the past climate events may have been due to natural climate variation, and specifically the influence of El Nino/La Nina impacts to weather patterns in the region. Outputs of this exercise are below.



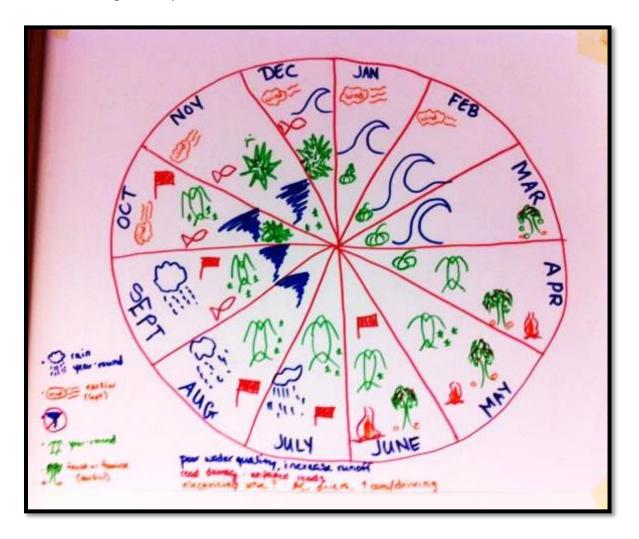


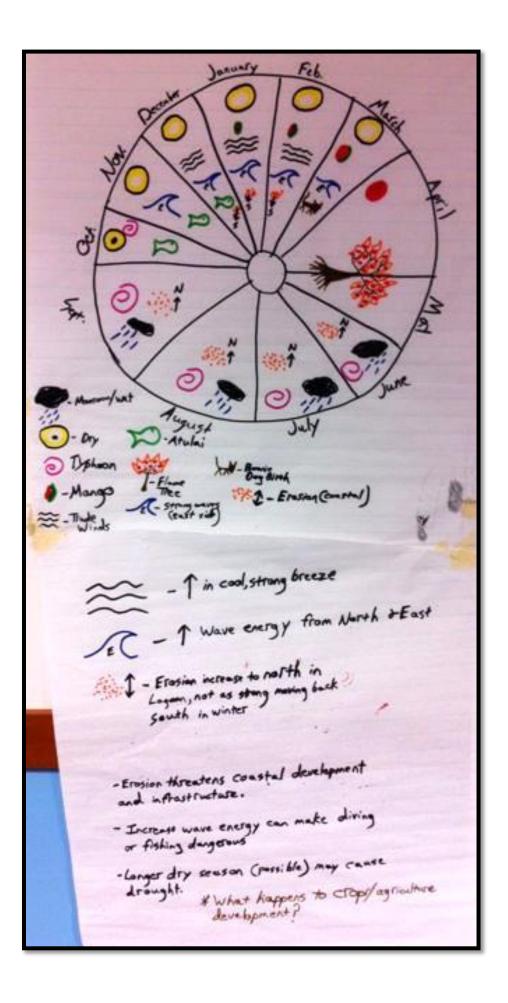
#### **Seasonal Calendar**

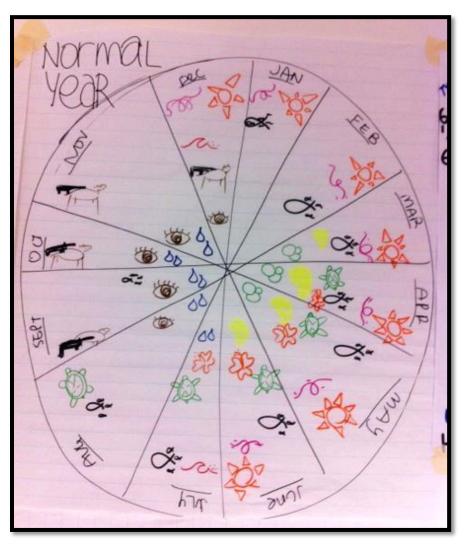
Next the group explored what climate change is, why it is happening, and the main projections for climate change in the region including:

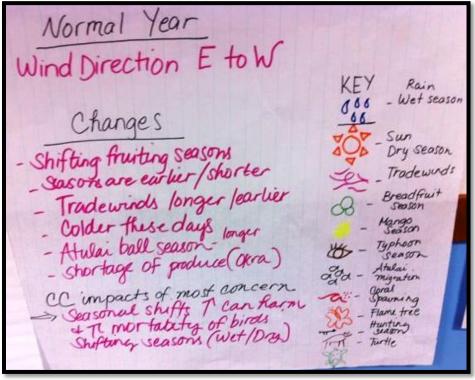
- 1) Increased sea level rise
- 2) Increased air temperature
- 3) Increased sea surface temperature
- 4) Change in weather patterns
- 5) Ocean acidification.

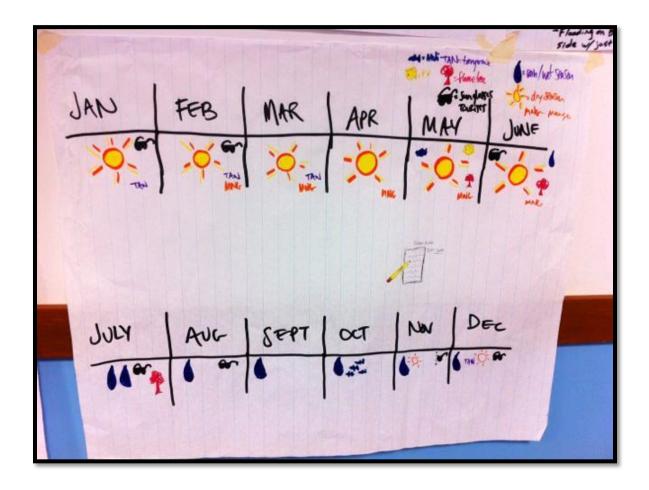
To better understand the local impacts of climate change, participants developed seasonal calendars to document the changes they are noticing around seasons and seasonal events. This exercise was used to capture the "normal" seasons and natural and social events that occur within them, as well as to identify how those seasons may be shifting due to climate change, and what the impacts may be as a result. The following are outputs from this exercise:











#### **Potential Future Impacts from Climate Change**

Next the group reviewed the climate change projections and explored how those projections might impact natural and social resources on the island. Upon completing and reviewing the list of potential impacts the group prioritized what they considered the most critical impacts of concern. The complete list and prioritized list are found below.

#### Sea Level Rise Impacts

- Saltwater intrusion
- Coastal erosion loss of recreational areas
- Economic impacts (i.e. tourism businesses)
- Property damage/ loss (residential) displacement from homes/schools
- Water-borne illnesses (sewage outfall)
- Public infrastructure damage (sewer, power, water, walkways, roads, docks, access to healthcare)
- Habitat Loss
- Loss of coastal vegetation
- Toxic waste from Puerto Rico Dump
- Algal blooms from nutrient loading
- Water quality degraded ("red flag" status)
- Cemetery flooding

#### Sea Surface Temperature Impacts

- Coral get stressed and bleaches
- · Changes in fish spawning
- Increase in macroalgae
- Loss of fish and invertebrate habitat
- Thermal expansion → sea level
- Decreased resilience → diseases, death, stress, loss of habitat
- Less food! (decrease in food security)
- Livelihood loss fishing, tourism
- Damage to coastal infrastructure
- Increased bacteria growth → red flag
- Stressed communities (violence, lack of safety)
- Less productive society

#### **Increased Air Temperature Impacts**

#### **Hotter and Drier**

- Fires
- Fresh water lens reduction
- Limited freshwater access
- Hard times for agriculture (subsistence)
- Coral bleaching secondary
- Heat related sicknesses
- Increase in electricity usage

#### **Hotter and Wetter**

- Good for agriculture
- Increased sedimentation
- Water-borne diseases
- Tourists
- Fluctuation illnesses
- Stress on stormwater infrastructure
- More red flags

#### Impacts from Changes in Weather Patterns

#### **Natural**

- Increased runoff & sedimentation
  - o Coral death, infrastructure, algal blooms, increased pollution (inland, sea)
- Intensified wet/dry season
  - Intensified sedimentation, decrease building, planting, replanting of ground water tanks, ruined crops, germination
- Change in animal life cycles
  - Harvesting, survival, pollution, migratory pattern changes
- Ocean temperatures and corals
  - Death, bleaching, decreased fish habitat, increased wave action

- Changes in fruiting time
  - o Ruined/no crops, angry people
- Crazier typhoons
  - o Infrastructure, removal of coastal vegetation, decreased tourism

#### Social

- Breach of freshwater lens
  - Not potable
- Farmer economics
  - Crop production, shorter/longer planting seasons
- Tourism and infrastructure issues/ flooding
  - o Decreased economy, increased construction costs
- Limitation of resources (water, food)
  - Starving and thirsty people

#### **Climate Change Impacts of Most Concern for Saipan**

IMPACT	Votes
Stress people	1
Decreased tourism	2
Coral bleaching	7
Changing crop season	3
Freshwater lens reduction	5
Coastal erosion/ loss of land	7
Damaged infrastructure	1
Economic impacts to business/ west side	5
Sedimentation	1
Lack of food security	5
Water quality	3
Crazier typhoons	1
Water-borne illness	1

## Top Five Climate Change Impacts of Concern for Saipan (non-prioritized)

- Coastal Erosion/ Loss of land
- Coral Bleaching
- Freshwater Lens Reduction
- Economic Impacts to Businesses and West Side
- Lack of Food Security

#### **Local Climate Story**

Based on the group's review of past, present, and possible future impacts, they were able to draft a "local climate story" to describe the climate hazards and impacts of most concern for Saipan. Three stories are presented below:

#### Saipan Community Climate Story (One)

The people of CNMI have experienced a variety of weather events that have resulted in our climate. Typhoons, crown-of-thorns outbreaks, droughts and heavy rains have all impacted our resources. These impacts included infrastructure damage, habitat loss, and human-related stressors. We have dealt with these impacts through familial support, federal and NGO-assistance and infrastructure adaptation.

Today changes are already being observed. These include shifting fishing and farming seasons, weather patterns, and produce availability. These shifts have social (family/community member reliance), natural (life cycle disruption) and economic (trade wind damage to crops) impacts.

Looking forward, there are a number of potential climate-related hazards and impacts. We are most concerned with coral bleaching, freshwater lens reduction, coastal erosion, food security and economic impacts to businesses in the CNMI.

#### Saipan Community Climate Story (Two)

There once was an island called Saipan. Saipan had a consistent tropical climate with predictable seasonal fluctuations. Sometimes it was dry, and sometimes, it was wet, and the people of Saipan knew to expect these dry and wet times. Saipan also had to deal with a regular bout of typhoons. The typhoons were destructive, but Saipan knew to expect them.

Today Saipan doesn't know when to expect typhoons. There haven't been many and the people of Saipan don't know if there will be many in the future. There have been changes in the length, onset and intensity of wet and dry seasons and on an island like Saipan, people notice this. Saipan has even started changing shape; its shoreline is changing due to erosion, in some places rapidly. Because these changes are creating stresses on natural resources, the people of Saipan have been forced to develop rules and regulations to manage their island.

The big challenge the people face is to manage and adapt their land, practices and resources in the context of an uncertain future. Maybe the weather will become more erratic? As sea surface temperature continues to rise, maybe all of Saipan's reefs will bleach? As sea levels continue to rise, maybe Saipan will speed up its shoreline makeover. If current climate models are accurate, maybe typhoons will being to generate further north than in the past.

If these things happen, what will Saipan's social, environmental, and economic future look like? The people of Saipan sat and chewed their betel nut as they pondered these questions. As they watched the sun set into the rising sea, they thought – we must adapt!

#### Saipan Community Climate Story (Three)

CNMI has experienced a large amount of typhoons in the past. Every time they came through they caused major damage, which lead communities to come together along with assistance from FEMA and American Red Cross. Residents adapted to wet and dry seasons, rough and smooth oceans, and hotter and cooler months. The weather is shifting and seasonal patterns are less predictable. These changes aren't consistent now so it's difficult to react. In the future, the community will be more concerned about food, water, land, and ocean resources. Conserving our natural resources would be a priority in the near future as well as the present.

#### **Communications**

To begin considering how to effectively share information about climate change, the group spent time on learning how to develop "sticky messages". They reviewed characteristics of effective messages that support behavior change. Such messages are:

- Simple
- Relevant
- Unexpected
- Concrete
- Credible
- Memorable
- Include stories

To practice their messaging skills, the group developed posters with key messages for three existing campaigns. Each poster targeted one key audience to communicate climate change messages. Theses campaigns include: 1) Homeowner sedimentation reduction campaign, 2) anti-litter campaign aimed at school children, 3) anti-poaching campaign aimed at fishermen, and 4) Sea-level rise awareness messaging aimed at the hotel association.









After developing sticky messages, the group focused on reviewing successful campaign case studies to consider for the CCWG communications strategy. A main emphasis of this session was reviewing a Behavior Change Model including the following steps:

- Select behavior
- ID barriers & ID Benefits
- Develop Strategy
- Pilot trial
- Implement and evaluate

To consider using this model, participants also reviewed social change tools that could be used to develop behavior change strategies. These tools included the use of:

- Commitments
- Prompts
- Norms
- Social diffusion
- Services/ products
- Communications
- Incentives/ disincentives
- Convenience

Upon completion of this session, the group began to put together a draft communications plan for the climate change working group. They began to identify existing channels and ways to bring their message to key audiences which included the following:

- Economic valuation
- TV
- Radio
- Festivals (flame tree, Thursday street market, Tuesday & Saturday farmers market) good to target kids or parents with free give-aways
- Career awareness week in school
- Environmental expo (April, 3 days for 4<sup>th</sup> and 5<sup>th</sup> graders)
- Educational curriculum PSS

- Animation for i-pad for kids
- Interactive website learn.cnmicoralreef.com

The group also identified concerns and objectives for the communications planning process.

Concerns about existing campaign efforts:

- Fragmented
- Short-lived
- Linked to funding sources (territoriality)

#### Communications Objectives:

- Education and outreach e.g. NPS, MINA, places to do presentations
- NOAA climate change education group funding
- CRM has on-going CC money
- Need to Analyze recent CC survey baseline of climate knowledge / climate literacy, and then fill in gaps through communications
- Promote CC (wider regional communications) working group
- Drive climate policy
- Community/Cultural Group
- Need more information on climate communications actions

## Session Two: Adaptation Planning (afternoon only of March 6, and full days of March 7, and 8)

Session Two focused on building on the existing efforts of the CCWG by practicing a participatory mapping process, completing a field-based vulnerability assessment, and developing adaptation strategies to address key vulnerabilities. To complete this session, the group focused on the Garapan area as a field site to complete the vulnerability assessment and prioritize adaptation actions.

To do this the group first began by developing a "community profile" for the Garapan area. The profile provides key information about natural resources and socio-economic characteristics of the site that can help support the vulnerability assessment and development of early actions to address vulnerabilities. For example, the main income generating activities are identified and can then be considered when deciding what targets to focus the vulnerability assessment on. For example if fishing or tourism are the main income generating activities, the threat and vulnerability assessment should include fish and/or coastlines/beaches. The Garapan community profile is below.

#### **Garapan Community Profile**

Garapan is a low lying coastal area on the western side of Saipan with seagrass, mangrove, and coral reef ecosystems. The resident population is about 3,500 people with approximately 3,000 additional tourists, business owners, military and school children visiting each day. The major occupations in Garapan are tourism related (hotels, restaurants, etc), public hospital staff, school staff, and fishermen. There are several stakeholder groups in Garapan including church groups, recreational public, fishermen, private business owners, hotel association, boaters, Mariana's Visitor Authority, and National Park

Service. Different agencies have decision making authority in Garapan which includes CUC for infrastructure, Department of Public Lands, Property owners, the Hotel Association, Business Associations, National Park Service, Precinct Leaders, and Zoning Department.

There are many social groups that are active in Garapan including hotels, church groups, PDM promoters focused on beautification projects, recreational users (specifically in American Memorial Park), Saipan Fishers Association, Thursday night markets, Farmers Market, Adopt a Place program, the United Philipino Association, the TSL Foundation which runs the Go Green program, and Rotary Club.

Strengths of this area include the economy, sidewalks that public can utilize, American Memorial Park, nice beaches, and lots of restaurants and gift shops. It provides a centralized place where visitors and community members come together. Businesses are doing well and there are some rain gardens under development

Threats to the Garapan area include stormwater runoff (large volume and poor quality of flooding water), depleted fish populations, solid waste management issues, and lack of 24 hour water sources. There are social threats as well, including crime (theft and robbery), overcrowding, failing infrastructure, insufficient health services specific to the hospital only, and zoning issues.

New initiatives underway in Garapan are the Garapan Conservation Action Plan in the final draft of development, a new tourism development council, wastewater line replacement, upgraded lift station, new Tasi Watch program for Garapan, and a Think Blue program to target business owners.

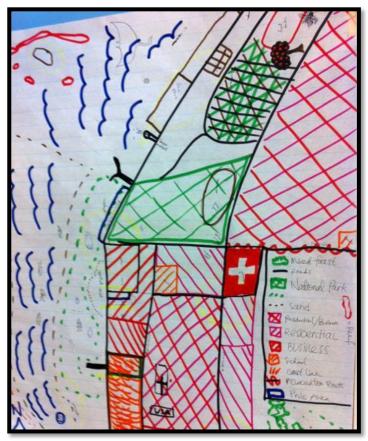
#### **Priority Targets/Assets for Vulnerability Assessment**

Next the group was asked to review the assets developed through the CCWG stakeholder/resource analysis and develop a list of 4-5 priority targets to complete the vulnerability assessment. The targets where chosen based on 1) importance to Garapan and, 2) availability of experts in the room to complete the assessment. Based on this, the group decided to focus on the following targets:

- 1. Water Resources
- 2. Fish
- 3. Coastlines/Beaches
- 4. Infrastructure (with a focus on stormwater and wastewater)

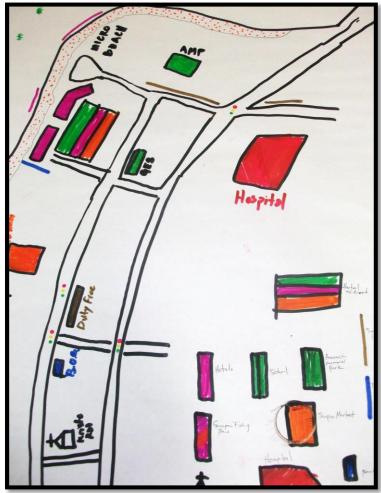
#### **Mapping the Site**

To prepare for the vulnerability assessment the group developed perception maps of the Garapan area to identify where key targets were located, where important social activities took place, and areas that were impacted by past climate events. These maps were used to help inform vulnerability assessment planning and discussion. The following are pictures of these maps:









Next the group focused on understanding climate impacts and concepts that are being used globally to discuss climate change adaptation. These concepts are critical for community facilitators to complete a vulnerability assessment, write reports, and draft grant proposals regarding climate adaptation. These terms include Vulnerability, Sensitivity, Exposure, Potential Impact, Adaptive Capacity, and Resilience.

As part of this exercise in understanding these terms, workshop participants were asked to describe what exposure, sensitivity, adaptive, resilient, and vulnerable meant in an everyday situations rather than climate change. Although these words may not have the "same" meaning as the climate change term, they can be helpful when used to explain the concept behind the term, develop analogies, or consider for translation into local language. The following are some of the terms the group came up with:

#### Vulnerable:

- 1. some sort of exposure
- 2. target
- 3. prone to
- 4. more apt to
- 5. helpless
- 6. weak
- 7. susceptible

#### Sensitive:

- Fragile
- 2. Cry-baby
- 3. Delicate
- 4. Easily hurt

#### Exposure:

- 1. Near something
- 2. Close with
- 3. Come in contact
- 4. No defenses
- 5. Bare/raw

#### Adapt:

- 1. Change
- 2. Adjust to fit in
- 3. Flexible
- 4. Accept

Next the group carried out a vulnerability assessment for the four priority targets: 1) Water Resources, 2) Fish, 3) Coastlines/Beaches, and 4) Infrastructure (with a focus on stormwater and wastewater). Small groups carried out field visit to Garapan to view their target where possible and discuss the following:

- 1. Current condition of the target
- 2. Non-climate threats and root causes of those threats on the target
- 3. Existing and potential climate hazards that could impact the target
- 4. Exposure, Sensitivity, Potential Impact, Adaptive Capacity and Vulnerability of the target to climate hazards
- 5. Vulnerability of the community to potential changes in the resource (particularly highly vulnerable resources)
- 6. Actions that could be taken to reduce vulnerability or prevent future vulnerability of the resource target or community

The field trip helped participants relate climate change concepts to real examples and gain a better understanding of ways to understand vulnerability and therefore meaningful actions that could be taken to reduce vulnerability. Vulnerability Assessment Matrix is available in an accompanying document.

The last day of the workshop focused on reviewing the results of the vulnerability assessments, discussing actions and reviewing how best to approach implementation of some of the actions. Many of the actions included a need to change behaviors of various stakeholder groups. The following key audiences were identified to engage around adaptation strategies: homeowners, fishermen, schools, and businesses.

From this list, the group began to develop behavior changes strategies that could be used for Homeowners to increase their likelihood of carrying out the desired action. Small groups chose specific actions from the list below and focused on developing objectives and strategies for behavior changes.

Homeowners: List of actions for them to take

- Increase ground cover use stabilizing plants
- Install rain gardens in some areas
- Conserve water
- Install rain water tanks
- Don't illegally tap into water lines
- No illegal dumping use landfill
- Legally top into sewers
- Recycle
- Proper chemical/ nitrate disposals
- Understand water and septic
- Dispose properly of FOG
- Maintain plumbing infrastructure sewer/water
- Proper installation of septic correct pipe size
- Purchasing decisions
- Good fishing decisions (size matters)
- Set backs
- Report water violations

#### Taking the Workshop to the Next Level

To conclude the workshop, participants were asked to develop a timeline and activities to move the CNMI Climate Change Working Group forward through the use of the skills and tools gained in the workshop. The following are actions and needs the CCWG identified to continue using the skills and tools learned at the workshop:

- 1. Identify and list targets that will be used for GIS-based vulnerability mapping
- 2. Continue to encourage and enable various agencies to work together
- 3. Develop top level support for further engagement
  - a. Determine support needed to move forward
  - b. Use CCWG planning committee to move process forward
- 4. Develop GIS based map to illustrate various vulnerabilities of different targets
- 5. Integrate CCWG results with existing Conservation Action Plans
- 6. Complete analysis of Becky's climate literacy survey
- 7. Use Becky's survey results and Rare survey results to inform strategy development (especially behavior change)

#### **Contact Information of Facilitators**

The facilitators can be contacted with any questions about the tools, process, or any general support needed.

- Meghan Gombos <u>Meghan.Gombos@gmail.com</u>
- Wayne Andrew <u>tpacmte@palaunet.com</u>
- Katie Munkres katie.munkres@piccc.net
- Robbie Greene <u>robert.greene.crm@gmail.com</u>

#### **APPENDIX A**

### **Overview Agenda**

March 4	Session One
	<ul> <li>Background and Overview of Agenda and Tools</li> <li>Telling Your Climate Story – Objective of this communications session</li> <li>Reviewing Factors that Make a Community Healthy or Unhealthy</li> <li>Understanding weather and climate</li> <li>Historical Timeline Exercise</li> <li>El Nino/ La Nina</li> <li>Understanding Climate Change</li> <li>Causes of CC</li> <li>Possible and Existing Impacts</li> <li>Seasonal Calendar Exercise</li> </ul>
March 5	Session One
	<ul> <li>Telling Your Climate Story continued:         <ul> <li>What does Climate Change mean for the community?</li> <li>How will these changes impact a healthy Community?</li> <li>How these change impact a threatened community –Cumulative Impacts</li> </ul> </li> <li>Is there anything we can do?         <ul> <li>What are other communities doing</li> <li>Drafting a Climate Story</li> </ul> </li> <li>Behavior Change Strategies and Examples</li> </ul>
March 6 - Morning	Session One
	<ul> <li>Drafting an Awareness and Communications Plan for Climate Change Adaptation</li> <li>Drafting Sticky Messages</li> <li>Target Audiences</li> <li>Communications Approaches/Channels</li> </ul>
March 6 - Afternoon	Session Two
Attention	<ul> <li>Background and Overview of Agenda and Tools</li> <li>Developing a Community Profile</li> <li>Community Background</li> <li>Review priority assets from CCWG</li> <li>Participatory Mapping of Garapan and its Assets</li> <li>Collecting key information to inform the Assessment</li> </ul>
March 7	Session Two
	2. Threat and Vulnerability Assessment Field Work Preparation

	<ul> <li>Review Climate Change Concepts and Vocabulary</li> <li>Review worksheets – VA matrix and questions</li> <li>Review climate Story (from Session One)</li> <li>FIELD WORK - Completing the Field Based Threat and Vulnerability Assessment for Garapan</li> </ul>
March 8	Session Two
	<ul> <li>Reviewing vulnerability of assets and people and developing actions to address root causes of vulnerability</li> <li>Prioritizing actions</li> <li>Integrating actions into existing plans and programs</li> </ul>