

Watershed Working Group

February 11th, 2015 8:30-10:00am

Attendees: **BECQ** – Jihan Buniag, Ryan Okano, Robbie Greene, Dean Palacios, Clarissa Bearden, Steven Johnson, Lyza Johnston, Gus Camacho; **Zoning** – Maryann Arriola; **MINA** – Brooke Nevitt; **NOAA** – Dana Okano, Steve McKagan; **USDA-NRCS** – Kendal Hicks; **NMC** – Alfredo DeTorres; **CNMI Forestry** – Frank Ada

Dates to Remember:

- **March 10-11, 2015: Garapan CAP Revision**
- **May 19-22, 2015: Pacific Islands Watershed Institute**

Watershed Working Group Meetings: 8:30-10am at BECQ

- **May 13th, 2015**
- **August 12th, 2015**
- **November 18th, 2015**

Meeting Notes:

- I. Opening and introductions
- II. Laolao Bay CAP Review
 - a. Download 2009 Laolao CAP and 2012 Addendum at <http://cnmicoralreef.com/our-work/Watersheds/laolao-bay.htm>
 - b. CAP Summary – See attached powerpoint slides
 - c. Discussion:
 - i. Data analysis (see attached slides) – a preliminary analysis of some data was done to review the progress on several 2009 objectives.
 1. Ryan Okano presented on some turbidity data comparing 1991 UoG study and 2010-2012 ARRA study. Overall turbidity has increased significantly by an average of 315%. One site, C2 (by Tenorio private property in the middle of the bay), has shown the least increase.
 2. Robbie Greene did some preliminary GIS analysis on watershed land use changes during part of that period. Nothing upland explains the lack of change at C2. Other possible factors may be increased flushing because the site is between two rock outcroppings, that the subwatershed is smaller than the other subwatersheds, or that something man-made has changed watershed hydrology (such as the Isa Dr. road improvements), among other possibilities.
 3. Ryan Okano presented BECQ 2011-2014 beach monitoring data at two sites in Laolao showing an overall increase at the north site and a

decrease at the south site. South site is where most road improvements and stream crossings were implemented.

4. Lyza Johnston presented MMT data on corals, fish and invertebrates. Large amount of variation has been shown over time, so longer term datasets will be needed to understand overall trends. May need to re-examine some metrics to ensure that data can answer meaningful questions.
5. One burn has been observed in Laolao since 2008 – in 2014: 5.8 acres

ii. Activities:

1. Tasi-Watch funding had dried up but activities are on-going and new funding sources are currently being received. Truck was also down, which decreased activity intermittently over the past few years. (Brooke)
2. RARE funding is now available to continue Tasi-Watch program, maintaining plants and cleaning the sediment chambers (Jihan)
3. Recommendation (Steve McKagan): Address boat ramp use
4. Recommendation (Brooke): Move CUC parking “blocks” that were washed into the lagoon during the typhoon to prevent beach driving

iii. Measurements/Monitoring

1. Add amount of sediment cleaned from ARRA road chambers as a metric (Jihan/Ryan)
2. Reflect fish diversity in KEAs (Lyza)
3. Include RARE terrestrial and marine data from PMRI contract (Jihan)
4. SEM survey done by MINA can contribute to understanding of unsustainable beach activities
5. For turtle data: contact Guam NOAA staff about federal prosecutions (Dana)
6. NOAA CRED may have data from Taturam Beach (3rd marine monitoring site in Laolao). MMT has not started monitoring this site yet.
7. Begin collecting/analyzing TSS data in Laolao to add to turbidity information (Clarissa/Ryan)

iv. 2015 CAP Review:

1. There was a consensus that a CAP review for Laolao Bay is necessary this year, sooner than later. End of the year was suggested to avoid conflict with the Garapan CAP review (March) and the Talakhaya CAP review (April), but summer may be a better goal.
2. Activities have been continuing in the watershed, but not at the same high level as a few years ago. Brooke suggested that it is okay that things continue and that we do not necessarily need another big push right now since many of us are occupied with other projects in other watersheds.

3. Steve McKagan said that there are still big goals to go after in Laolao, such as the Gaggap Rd improvements and DFW involvement in fisheries regulations and enforcement.
 4. Dana suggested that the focus be turned to how we are packaging our successes so far to grantors and the community. Find better ways to get the information out and show others what has been done to make them continue to feel good about supporting watershed initiatives in Laolao Bay. (E.g. created a "Since 2009..." one-page fact sheet)
 5. Kaity suggested that a general approach for Laolao be to continue base activities (such as Tasi-watch, monitoring) and continue to look for ways to move big projects forward (such as Gaggap Rd). Evaluate the CAP this year and recommit/remind ourselves to keep things slowly moving forward.
- d. Laolao CAP Review – one-day in summer 2015 (recommendation from Clarissa to move this date up to the summer so that we do not let it slide at the end of the year).
- III. Garapan CAP – Meeting March 10-11
- a. Invitations are being sent to agency heads requesting their presence in the morning on 3/10 and in the afternoon on 3/11 to ensure their commitment and involvement in the process. Staff representatives who have been involved in the CAP are being asked to represent for the entire two days of workshops to review the CAP, integrate climate change adaptations and determine activities to prioritize in coming years.
 - b. This is a pilot for integrating climate adaptation data into the CAP workplans
 - c. Dr. DeTorres recommends finding more ways to get the community involved in the CAP
- IV. Project updates:
- a. Nat'l Park Service: Coordination with CNMI offices on the Five Star proposal; funding a study this year by WERI's Dr. Denton and the UoG Marine Lab's Dr. Malay on the presence of lead, mercury and selenium in fauna at park shore area in the Garapan Watershed
 - b. NMC (Dr. DeTorres): Would like the ENRO club to be involved in future CAP efforts and as many activities as possible. Invites WWG members to become faculty at the college to join the "core staff" for the NRM program.
 - c. NRCS (Kendal): Almost have 1st Tanapag participant in the EQIP program. Conservation innovation grant collaboration with NOAA (Steve McKagan) to leverage NRCS resources for terrestrial and marine conservation (going towards a workshop for coral methods w/ UoG)
 - d. Wastewater/Erosion Control (Gus): more than 15 pigs from Navy Hill have been moved to Obyan (Manny Villagomez's farm). Will attempt to connect him with NRCS for waste management
 - e. NOAA (Dana): funding for water quality sampling in lagoon has finally come through and they are starting to monitor background nutrient levels at nine sites from Paupau to Kiliili for one year. Talakhaya stream monitoring funding for UoG has been extended one

year with a small gap. (Dana will put Clarissa in contact with Dr. Golabi to get sampling data).

- f. Water Quality (Clarissa): working on completing stream inventories in Talofoto (feral pigs observed)
- g. E&O (Jihan): phase 2 funding received from RARE to replicate Laolao Bay erosion control campaign efforts in the Garapan area. Currently a pre-campaign survey is being designed to inform activity choices and events to conduct.
- h. Coastal Hazards (Robbie): Climate change assessments are being done on Rota and Tinian. Robbie is working on revising watershed delineations based on GIS data.

V. Next meeting: May 13th, 2015

- a. Speaker recommendations:
 - i. Socioeconomic data from Laolao and Rota (MINA)
 - ii. Tim Brasuell: Garapan Project (c. 2000)
 - iii. NMC Creees
 - iv. DPW: sand getting into pipe
 - v. CUC: once FOG program is up and running