

Watershed Working Group
March 21, 2018
8:30 – 10:30 am
BECQ Main Conference Room

Meeting Minutes

Attendees:

Emily Northrop, Rich Salas (DCRM Planning); Tomas Camacho, Julius Reyes, Atdao Rosario, Richard Brooks (DCRM Enforcement) Lyza Johnston (BECQ), Rodney Camacho (DCRM GIS), Katie Graziano (DCRM), Kathy Yuknavage (Sphere, Inc.) Robbie Greene, Steve McKagan (NOAA) Roberta Guerrero, Wayne Dawe, Daniel Kaipat (MINA) Diana Gabaldon (SWCD) Victoria Matsunaga (Micronesia Challenge Young Champion) Manuel Bernal (NMC Student) Alfred De Torres (NRM/NMC Program Coordinator)

Presentations and Discussion

Garapan Field Surveillance Project

Micronesia Islands Nature Alliance (MINA)
Wayne Dawe (waynedawe.mina@gmail.com) and Dan Kaipat (sokaipat12@gmail.com)

See presentation PDF attached

Questions and Discussion:

What are your evening hours ?

6-9 pm or from 5-8pm (when there's a lot of people so we can do outreach as well). Starting to do more evening time with enforcement – can set up a partnership with DCRM Enforcement, on a regular schedule type thing.

Did you catch any DFW violations? Illegal fishing gear etc?

No – just a lot of fishing line and batteries thrown into the water.

Did you find any violations or activities that would trigger action from government agencies other than CRM?

Yes, Reef report directs to different agencies– a lot of it gets shared with public works. 30% of reef reports have been responded to/remedied.

What could make more effective outreach?

Brochures – in mandarin, different languages. Someone who speaks mandarin.

Signage.

Make a short PSA that is translated, show a video on the phone.

Roberta (MINA Exec director)- We recently received a small grant from DLNR focused on Tasi watch program, submitting TAP grant to build capacity. Tasi watch is the area that's needed the most.

How many women are Tasi Watch Rangers?

Only 1.

It would be less intimidating/approachable with more women.

Laolao Bay; Status and Function

Dave Benavente, CRM Marine Monitoring Team

Dbenavente@dcrm.gov.mp

Notes (see PDF of presentation for more details):

The Marine Monitoring Team has been collecting data in Laolao Bay for 15 years.

Fish that we like to eat are important for the environment, coral health (herbivorous fish).

Water quality as a secondary driver – lots of groundwater intrusion (limestone rock) on the east side. On the south side- volcanic sediment (in the middle) – lots of surface runoff into the bay. Geology affects Laolao Bay, plays out in coral cover.

2 marine monitoring sites –

2001-2003 big crown of thorns disturbance

Some recovery at LL1, at LL2 (divesite) it has remained stable over time

Why? Difference in geology and wave exposure – LL2 is not as exposed to waves.

Bleaching - 2017 there was bleaching, so in 2018 there will be less percent cover in coral (not on graph yet).

1992 environmental assessment at Laolao Bay - contracted out University of Guam

2010 – revisited the sites.

- More nutrients, differences in wave exposure (implications for fishing).
- Shift to smaller size classes – from large coral heads, to smaller colonies.

Economic value? Done in 2006, will be updated in 2018.

\$3 million per km² (not even taking fisheries into account).

Next steps for management –

- Focus on water quality
- Maintain current restoration/infrastructure

Questions/Discussion

Economic value was based on tourism – social surveys, biological data, intrinsic value.

Has there been any progress with getting the dive site paved?

Private owner (Kramer) owns that land. Too big of an obstacle - ** this is a conversation that needs to be had***

Round-table Updates

Diane Gabaldon, Soil and Water Conservation District:

Kagman watershed project – phase 8

\$2.4 million was passed but not committed, not included in the local budget. Federal money has been committed, just a matter of getting the local commitment (half). To finish the chute into the quarry. \$1.2 million to build the sediment basin and the chute spillway.

Rich Salas, BECQ-CRM Planning:

2017 SLUMP – one of the recommendations is to minimize impacts in the northern lagoon.

DPL is updating comprehensive land use plan for CNMI. Draft is out, and we are submitting comments. Welcoming people to public meeting in the week of May 7th, there will be a series of public meetings – an opportunity to get our recommendations included in the land use plan.

Objective – identify and reserve lands for critical resources, springs and aquifers, etc.

Rod Camacho, BECQ GIS Specialist

Using Lidar Data new watershed delineations for Saipan, some watersheds have shifted, Lao Lao boundaries changed and so did Talakhaya.

Robbie Greene, NOAA Affiliate

NOAA's coral program is consulting with all the program managers and All Islands Committee on selecting local priority watersheds for years moving forward. Site selection process is underway. (Our current local priorities are Laolao, Garapan, Talakhaya – Maybe we would have different local priorities?)

Land cover data – Rota has complete (2014) land cover data update, not up on NOAA Digital Coast yet but should be soon.

Tinian Land Cover Data - under review. Published in July approx.

Saipan Review – Some time in May, will be looking for reviewers for 2016 landcover update.

Northern islands? Anatahan, FDM, Pagan (?)

What NOAA trainings does CRM want in the coming years? Green infrastructure, coastal community resiliency,

Lyza Johnston, BECQ -

Continuing to work on lagoon seagrass resilience assessments. Hoping for results by the next meeting. Ties in land cover and watershed characteristics on ecosystem health and resilience. Tie into microbial source tracking as well.

Richard Brooks, CRM Enforcement

Enforcement team has been following data collection, to help direct enforcement effort towards the priority issues, backed up by data. Collecting some aerial shots of the fire on Wireless using UAV.

Jeffries Beach – Road has gotten bigger and bigger, large parking area, more and more vehicles, large SUVs. build an elevated boardwalk walkway, so growth can come back underneath, have signs about native plants and wildlife, follow the trailside to a platform (ADA compliant), with view of the beach. From there you can walk down to the beach. Trash receptacles, space for a pull cart.

James Benavente – helping with engineering rough design. Permeable parking along the roadside area.

May be able to expand to other sites (Tank beach) , Old Man, Hidden, etc.
306A public access enhancement funding.

Dave Benavente, CRM

Reef resilience study that started in 2012 will be continuing. In 2012, it helped generate theoretic values to see how we *think* the reefs will respond to stress. Going to hit the same 35 sites to see what ACTUALLY happened (after bleaching, typhoons, etc) to better find out the real drivers of resilience, and will have watershed management recommendations based on all these layers (water quality, watershed boundaries, QPCR,). Whole month of May will be surveying– just the 25 sites around Saipan. 2 or 3 dives a day, depending on weather.
May be a class on coral taxonomy from visiting scientist (Doug).

Kathy Yuknavage – Sphere Inc Contractor for BECQ

Working on 305B report. Focusing more information on a watershed basis, if anyone wants to review a piece of it, your 'favorite' watershed – email Kathy.

Microbial Source Tracking – visiting scientists conducted another round of water sampling and DNA analysis to determine sources of 'red flags.'

Most markers are bird and dog, cows and pigs!

Some preliminary results:

Daichi Hotel Drainage Outfall WB16 (human marker) –

Jeffries and Old man – Bird, low levels of human

Bird Island - Bird

WB7 – Tanapag, very high levels of dog.

AMP – Dog

Lali Beach – Dog

Dean (Lab Manager) will have all the results soon to be shared.

Another study was done to track Radon, which acts as an indicator showing groundwater connections - Has implications for the 'Nexus of connection' between isolated water bodies and the ocean. Shows connections between Susupe and sugar dock.

Stream Visual Assessment Protocol is being finalized by Erin and Emily. It will be used to do rapid assessments of stream health and quality.

From EPA side – there is NPS money, for \$200,000 a year, talking about compost toilet. (Could be incorporated into the Jeffrie's Beach idea?)

MINA

Grant from DLNR – outreach and surveillance in Kagman, Garapan, and Sugar Dock. Recruit more Tasi Watch Rangers. Will be out more. High school age.

Katie Graziano, BECQ

Recently attended the US Coral Reef Task Force, met with other Watershed Coordinators and discussed transitioning to a comprehensive Watershed Management Plan (WMP) that is compliant with EPA standards and meets the targets of the Coral Reef Conservation Program. Different from CAPs in that it is still informed by stakeholders, but is more science-based in developing goals in pollution reduction.

The Fellow on Rota is leading the process of developing a WMP, and will be coming to Saipan at some point to get input from stakeholders here.

Rain Barrel Art Contest for Environmental Awareness Month/International Year of the Reef – Rain barrels will be displayed at Flame Tree Art Festival on April 28.

Mike Gawel, National Park Service (update via email)

We continue to have concerns for cleaning up the urban stormwaters from Garapan being discharged into the national park and improving the condition of the created wetland that receives those waters.

News for Heavy Metal fans: In the Garapan watershed, the NPS funded a study by Dr. Gary Denton titled *Heavy Metal Assessment of Sediments and Selected Biota from*

American Memorial Park Nearshore Waters, Saipan, CNMI. It will soon be available online as WERI Technical Report No. 162, found at the UoG WERI Website.

Former NPS Superintendent Barbara Alberti has returned as Superintendent after being away a few years.

Next Meeting: May 16th, 2018

Potential Presentations:

Robbie – bunch of things. Coastal hazard model, Rota and Tinian,
DPL – land use plan. (?)
Kodep (?) – talk about new Planning agency

On deck for following meetings:

Lyza – Sea grass (July?)

Steve McKagan – Coral Resilience (September?)

CRM Enforcement – show outflows, sediment plumes from UAV footage.