

Watershed Working Group

January 18, 2017

BECQ Main Conference Room

8:30am – 10:30 am

Attendees:

NOAA: Dana Okano **NRCS:** Pamela Sablan Aguon, Tim Brasuell **BECQ:** Rodney Camacho, Richard Brooks, Lyza Johnston, Rachel Bouchillon, Derek Chambers, Robbie Greene, Kathy Yuknavage, Katie Graziano (Plus many more from BECQ for Rod's presentation...) **DLNR:** Gus Kaipat **DLNR Forestry:** Frank Ada **Furey and Associates:** Andre Kozij

Presentations and Major Updates:

- Rodney Camacho presented his master's thesis from University of Guam: "***Drivers of macroalgal dynamics within halodule seagrass beds in Saipan Lagoon.***" The study links science to management implications, showing that two watershed characteristics (size and developed land) predicted the persistence of macroalgal canopies. Please see Powerpoint presentation attached. Contact rodneycamacho@becq.gov.mp with any questions.
- Tim Brasuell (NRCS Engineer) timbrasuell@pb.usda.gov gave an informative presentation about the history, plans and current status of the **Kagman Watershed Project**. Kathy Yuknavage (BECQ Water Quality) noted that progress on this project may be linked to the observed decrease in turbidity at Tank Beach. The main barrier to project completion is funding. See attached powerpoint for details.
- EPA consultants are coming in February to develop TMDL (total maximum daily load) for impaired watersheds in CNMI. We will call for a special sub-Watershed Working Group meeting with them to discuss the project and share relevant information. Contact Kathy Yuknavage (kathyuknavage@becq.gov.mp) for more information.

Upcoming Dates

- Watershed Working Group: **March 15, 2017 8:30 am**
- Paradigm contractors gather info for TMDL : tbd end of Feb., early March

Potential presentation topics for next meeting:

- BECQ Engineers/ Best Sunshine – upcoming stormwater engineering projects in Garapan
- Drones and imagery - Robbie Greene
- Paradigm – coming end of feb, first week in march for TMDL

Round-Table Updates

Robbie Greene, BECQ GIS:

- We have high resolution imagery for CNMI. Right now coordinating with NOAA to get update to high res LU/LC – land use / land cover - for watershed dynamics. It's going to be crucial for watershed modeling/ projects. In the process, we are also looking to transform/align satellite imagery with elevation data, so anytime we look at watershed data we can look at flow and elevation data, so once we do that we can align all these data sets and make the GIS data all around more accurate.
- USGS Conservation Innovation Grant - Drones- we will classify imagery and run watershed modeling tools. Running model now with old land cover data, and will compare with revised landcover data from drone to see how much development impacts runoff scenarios.

Kathy Yuknavage, BECQ Water Quality:

- Currently gathering data from different agencies to make 305b report more detailed/accurate, like incorporating success stories that involve information from different agencies. Will need data from NRCS etc. to supplement the report.
- EPA had leftover money – Region 9 will do TMDLs for CNMI in impaired watersheds. Consulting group called Paradigm – John Craig and Ryan Murphy – are coming in late February/early March to gather data. They did a similar thing in USVI along with an implementation plan, a way to address the TMDLs, and see whether we are diminishing load by projects/actions we take. In February we will convene a group to meet with them, to supply relevant information (flow rates, GIS layers, etc.).

Gus Kaipat, DLNR: No update

Pamela Aguon, USDA-NRCS :

- EQUIP program has the second cut off/ranking deadline on Jan 20th, the third one will be in April. This year, only have 15 applications that have come in throughout CNMI, and about 6 or 7 are piggery operations. A lot of 1st round apps were moved to 2nd round because of issues, cannot move forward yet on those. Main focus piggeries. Eligibility issues with public land and land ownership, working with DPL to get individuals eligible, on a case by case basis. DPL also increased fees, livestock operations pay more fees than vegetable farming.

Lyza Johnston, BECQ Marine Monitoring:

- Started water quality sampling for seagrass resilience projects in the lagoon. Taking biological samples next month.
- Communicating with researchers that have submitted a proposal to look at nitrogen source tracking in the lagoon to identify major routes of nutrient pollution in the lagoon.

- NOAA biogeography researchers are finishing their updated habitat maps for the lagoon. Would be really cool to link habitat changes to land use changes.

Richard Brooks, BECQ Enforcement: No update

Frank Ada, DLNR CNMI Forestry

- Working with CRM /DFW and Best Sunshine for landscaping the beach area. Makaka beach area, need DPL and DPW to come to these meetings. Some setbacks because BSI has changed their landscaping plans.