



Minutes For Guam Silver Jackets Quarterly Meeting

I. Meeting Details:

Date: 1/10/2025

Time: 10:00 am – 12:00 pm

Location: Governor's Office, Small Conference Room, Agana, Guam

II. Participants:

Matthew Santos, Deputy Director for the Bureau of Statistics and Plans

Edwin C. Reyes, Coastal Zone Management Administrator for the Bureau of Statistics and Plans
– Guam Coastal Management Program

Micheal Terlaje, Program Manager for Civil Works for the United States Army Corps of
Engineers

Ronnie Chiguina, Fire Battalion Chief for the Guam Fire Department - Northern District
Command

Celine Cruz, Chief Planner for the Guam Department of Land Management

Christine C. Fejeran, Forestry and Soil Resources Division Chief for the Guam Department of
Agriculture

Landon Aydlett, Warning Coordination Meteorologist for the National Oceanic and Atmospheric
Administration - National Weather Service

Margaret Aguilar, Program Coordinator for the Guam Environmental Protection Agency

Natasha Taitague, Program Coordinator for the Bureau of Statistics and Plans Guam Coastal
Management Program

Camille Quichocho, Biologist for the Bureau of Statistics and Plans Guam Coastal Management
Program

Carly Champaco-Munoz, Special Projects Coordinator for the Bureau of Statistics and Plans
Guam Coastal Management Program

Esther Taitague, Planner for the Bureau of Statistics and Plans – Guam Coastal Management Program

Christian Benitez, Planner for the Bureau of Statistics and Plans – Guam Coastal Management Program

Lorena Willess, Mitigation Team Lead for the Federal Emergency Management Agency - Region 9

Patrick Bowsher, Forecast Meteorologist for the National Oceanic and Atmospheric Administration - National Weather Service

Joshua Schank, Meteorologist for the National Oceanic and Atmospheric Administration - National Weather Service

Maricar Quezon, Engineer for the Guam Environmental Protection Agency

James E. Pangelinan III, Planner for the Bureau of Statistics and Plans - Guam Coastal Management Program

III. Summary:

A. Opening Remarks and Introductions

- a. Mr. Reyes welcomed all sitting Guam Silver Jacket members as well as new attendees. Mr. Reyes briefly described the intent of the Guam Silver Jackets which is to bring together local and federal agencies in order to help augment the partnering agencies' ability to address hazards they are involved with addressing that may be in line with the other partnering agencies' mandates. Shortly after, Mr. Santos called for all attendees to introduce themselves and the agencies they are with.

B. Silver Jackets Members Involvement

- a. Mr. Reyes acknowledged and showed appreciation to the members for taking the time to attend the Silver Jackets meeting. Mr. Reyes emphasized to the members that the Guam Bureau of Statistics and Plans (GBSP) continues, and will continue, to be committed to bringing together the establishing Guam Silver Jackets membering agencies to future meetings.
- b. Mr. Santos shared with members information regarding the new Floodplain Administrator for the Guam Department of Public Works (GDPW), Mr. Benny San Nicolas. Mr. San Nicolas will be an essential source for management and relation efforts within the island's floodplains. Mr. Santos shared that there has been much progress made using Geographic Information Systems (GIS) to augment the work within Mr. San Nicolas' department, particularly providing a process to analyze a lot of concern if it is in a flood zone. The GIS support tool, in

addition, can reveal whether a lot of particular concern is in a flood zone during different return-period flooding events. Additionally, the GIS support tool also looks at other feature classes, such as whether or not a lot of particular concern is in a wetland, which would trigger regulatory processes and requirements for the associated lot.

- c. In regards to involvement with the National Resources Conservation Service (NRCS), Mr. Santos shared that there was an agreement made as it relates to projects funded under the Emergency Watershed Protection Grant. In total, there are 11 projects that the GBSP have co-sponsored with the Guam Department of Agriculture (GDoAg). Currently, those projects are in the discussion phase as it relates to cost-sharing. Six of the 11 projects lie within private property, which the grants would help landowners with mitigation assistance through NRCS with their flooding and erosion issues they face. Chief Fejeran shared that a citizen, Mr. Borja from Nama Falls, inquired about an update to one of the grant projects. Chief Fejeran reached out to Jay Daronila from NRCS in order to inform the community on updates for the grants directly affecting their areas. Mr. Reyes inquired if an action should be taken to follow up with Emergency Watershed Protection grant updates. Mr. Santos responded by mentioning that Mr. Jose Quinata, Federal Programs Administrator from the GDPW - Division of Highways, should be invited to the next meeting to provide updates, as he serves as the primary point of contact.
- d. Mr Santos shared that the Guam State Hazard Mitigation Officer for the Guam Homeland Security /Office of Civil Defense (GHS/OCD) is currently vacant. Ms. Willess shared that there is a potential candidate that would fill the position, who is currently going through the hiring process. Mr. Reyes inquired if there were any points of contact at GHS/OCD who could elaborate on the State Hazard Mitigation Plan's project funding or FEMA funding sources. Mr. Santos replied that there is at least \$50 million in funding under other federal funds of which the grant provides funding for projects to build resiliency from future disasters such as Typhoon Mawar.
- e. A discussion in folding in GDPW in the Forestry Division's mitigation efforts along roads, particularly on maintenance under power pole infrastructure along the roadways was brought to attention. These efforts would assist in providing adequate fire breaks along roadways as well as provide for more opportunity for the Forestry Division to focus on management areas. It was also brought to attention that folding in the municipality offices and private citizens could help with the effort.

C. Progress on Non-Structural Projects

- a. Table Top Exercise update - Mr. Pangelinan thanked the members from the NOAA-NWS, GDoAg - Forestry and Soils Resource Division (FSRD) and the Guam Fire Department (GFD) for agreeing to take part in the Silver Jackets Table

Top Exercise (TTX) on wildland fires. As elaborated on by Mr. Pangelinan, the purpose of the TTX is to provide the opportunity for partnering agencies to convene and discuss the current response and approach each partner takes in addressing wildland fires, in addition to their resiliency planning in the intermediary, and long-term timeframe. The partners will also address the needs/gaps/issues they currently face. The date for the TTX will tentatively be held in April 2025. Mr. Reyes supplemented Mr. Pangelinan's response by iterating the impetus for focusing on wildland fires as the hazard to address is from the understanding that the lack of vegetative forest in the uplands is also contributing to flood intensity down the watershed; thus keeping the watershed healthy would lessen flooding stresses downstream.

- b. Mean High Mark Campaign update - Mr. Terlaje stated that the 20 flood signs and the accompanying support poles have been received and secured for 10 flood prone locations along the island's roadways. Mr. Terlaje further stated that precise flooding locations have been identified and have been confirmed with the Municipal Offices on island. Mr. Pangelinan further elaborated that the confirmed flood sites have also been ranked by each municipal office in terms of level of priority. Mr. Pangelinan stated that 4 (Chalan Pago, Asan-Maina, Hagatna and Merizo) of the 8 municipalities confirmed and were able to respond to conducting the site visits, while the remaining 4 villages (Yona, Barrigada, Agat, and Santa Rita) have not after multiple and various communication attempts. The GBSP - GCMP will be looking towards GDPW - HMC's consultation for identifying the remaining villages' flood prone areas. Mr. Pangelinan mentioned that he is currently waiting for a response from GDPW - HMC to conduct the site visits. Mr. Santos recommended looking into WERI's surface hydrology maps, as they indicate the ponding and fill areas serving as rain catchments; these layers also indicate fill depth. Mr. Santos further stated to Mr. Pangelinan that this would give a good idea for where he would like to place the flood signs. Mr. Reyes inquired to Mr. Terlaje if the current indicated flood areas would suffice to begin consultation with the Guam State Historic Preservation Office (GSHPO), and Mr. Terlaje confirmed that we can begin the consultation. Mr. Pangelinan thanked and shared appreciation to the GBSP - GCMP for their efforts in conducting the site visits with the municipal offices.
- c. The Stormwater Drainage Manual Flood Tool Workshop training was completed on November 14, 2024. The workshop was attended by both public and private architects/engineers. Mr. Terlaje shared that the training workshop was prepared to inform and teach attendees how to use the flood calculation tool which is part of the updates to the 1980 Guam Stormwater Drainage Manual. The flood calculation tool would help permiters—Guam Environmental Protection Agency (GEPA) and GDPW—and permittees understand if a stormwater management system design can sustain water capacities and properly manage stormwater for different return-period storm events. Mr. Terlaje shared that a concurred comment from attendees was that additional training time was needed as the training workshop was quite comprehensive. Mr. Reyes inquired if the training that was provided can be incorporated into the 10th Guam Assembly of Planners to provide the venue and time for more comprehensive understanding in how to

utilize the flood calculation tool. Mr. Santos remarked that an overall agreement to familiarize, implement and utilize the flood calculation tool is needed by the GEPA, as the tool ties into GEPA's mandate to regulate stormwater and sediment control measures in future developments. Mr. Terlaje stated that the next training session should be more tailored to mimicking the permitting and review workflow processes for the permitting agencies and where and how to integrate the flood calculation tool within their workflow processes. Mr. Reyes added that a proposed action will be to update the GIS Soil Maps from the United States Department of Agriculture, as one of the variables considered in the flood calculation tool are types of soil within a proposed development site.

- d. Mr. Terlaje shared that the USACE has begun the hydraulic and hydrologic (H&H) modeling phase. Further information regarding the Finile River Project is forthcoming. Mr. Reyes shared with the new attendees that the Finile River is located in the village of Agat, and the project was created to help the citizens address flooding issues within the area by the river.
- D. Updates on FEMA FIRM and Other GIS Data - Ms. Willess mentioned, based on her correspondence with FEMA personnel, that the pace of the Guam Riverine and Coastal Study has slowed to accommodate the transition of the offshore modeling work to USACE. She further stated, from her correspondence, that there is an agreement to complete the work. However, the schedule for the flood risk review has changed to approximately March 2025, with preliminary production extended to early 2026. Mr. Reyes stated to Ms. Willess that if there is any information that the BSP - GCMP can provide that it would be willing to provide it.
- E. Updates on Structural Projects
- a. Manell River Project - Mr. Terlaje shared that Tentatively Selected Plans (TSPs) are being rendered, with the TSPs to be shared approximately in May 2025. The project was created to address and mitigate major flooding around the Barcinas Family living area in Merizo.
 - b. Agat Shoreline Project - Mr. Terlaje thanked everyone for public comments, alluding to the public hearing held at the Agat Mayor's office on October 16, 2024 to explain the TSP. Mr. Terlaje further mentioned that the project is moving along very well, and the USACE has selected the finalized plan, which consists of an open-cell vinyl piling seawall. Mr. Terlaje added that the project will have little to no disturbance to the environment, and does not utilize as much space as a typical rock revetment, while still maintaining protection for the Agat Mayor's Complex's needs. Mr. Reyes inquired about when the date for construction will be. Mr. Terlaje replied that a date for initial construction has not been finalized, but will inform of the date in the future, as it gets closer to official submission of the finalized project to USACE.
 - c. East Agana Shoreline Protection Project - Mr. Terlaje shared that the project is on hold as the USACE is seeking a policy waiver and an additional funding agreement with the Government of Guam. In regards to seeking the policy waiver, Mr. Santos mentioned that a notice was received and the policy waiver will be provided in the near future. Mr. Terlaje invited and encouraged public comments for the East Agana Shoreline Protection Project to construct a pre-cast concrete seawall to protect the shoreline area. Mr. Reyes responded that the BSP-GCMP

comments will be related to the issue of public access, which will be consistent with the program's review.

- d. Umatac River Stabilization project - Mr. Terlaje gave a brief introduction of the project, stating that the project sprouted from the request of GBSP to help stabilize the banks along the Umatac River. One of the proposed project solutions is to compile the cobblestones within the area into sandbag-like retainers and line the bank of the river. Mr. Terlaje further mentioned that there is a challenge with the solution in that the environmental cost is exceeding what was initially expected. Currently, the USACE is working with other resource-providing agencies to ascertain if the amount of effort USACE is looking to do within the project can be matched, with National Environmental Policy Act (NEPA) compliance. Mr. Reyes responded by stating that if there is any messaging that we can elevate to the USACE Honolulu Office to get a cost estimate, it can entertain that process.
 - e. Identification of any Lingering Issues or Roadblock - No response was made.
- F. Flood Policy Issues
- a. Mr. Reyes began the discussion of flood policy issues by mentioning that requirements for stormwater management systems within parental subdivisions less than one acre is one of a list of issues that we want to address. Mr. Santos responded that the 2050 Guahan Sustainability Plan currently being drafted would address some of the flood policy issues through its address of development requirements. Mr. Santos further stated that there will be the inevitable issue of regulating the development policies, citing affordable public housing as an example as it would give the impression that the creation of affordable public housing will be expensive. Mr. Reyes stated to the meeting members that if there were any flood policy issues they may know if in the future that they can bring it up for the next meeting agenda.
- G. Extension Disaster Education Network (EDEN), Asset Mapping (UOG) - As the University of Guam was not in attendance, there was no discussion on the topic.
- H. Projects and Proposals Updates - USACE SJ 2025-2026 Projects
- a. Mr. Reyes proposed that future brainstorming sessions could be done to create potential Silver Jackets project proposals. Mr. Terlaje concurred with the proposal, and suggested that brainstorming sessions be held in smaller focus groups to address issues more precisely. Mr. Reyes further requested that Mr. Pangelinan assist Mr. Terlaje in coordinating planning meetings for project ideas and to disseminate what was discussed with the members during the next Silver Jackets meeting. Mr. Pangelinan confirmed that he can assist.
- I. Establish Steering Committees to Lead Sub-Committee:
- a. Mr. Reyes shared with members the idea of potentially breaking down the Silver jackets members into smaller focused working groups. These groups include a:
 - i. Technology and Data Working Group

- ii. Flood Policy Working Group, and
- iii. Capital Improvement Project (CIP) and Finance Working Group

Mr. Santos, retorted in regards to the Technology and Data Working Group, that we first should address spatial data gaps, referencing rainfall data that is captured granularly throughout the island. In addition, an establishment of a data inventory should be rendered for future use regarding hazard mitigation and analysis. Chief Fejeran shared with the members that the GDoAg - FSRD has a remote automated weather station (RAWS) located in Dandan, along the NASA property, which can be used to attach sensors, if needed. Mr. Reyes mentioned that since there was an interest in creating the Technology and Data Working Group, that Mr. Pangelinan and himself would help to set up a planning meeting inviting pertinent individuals to share and discuss data and technology relevant to achieving Silver Jackets projects.

The Flood Policy Working Group, as Mr. Reyes mentioned, will be inactive until legal personnel is secured to provide an analysis and feedback on policy and regulations. Mr. Reyes further shared with the members that a project proposal has been sent out by the GBSP - GCMP under NOAA's Project of Special Merit (PSM) funding which would provide a natural resource attorney who can provide the specific capacity. Further updates will be given when received by the GBSP - GCMP

Mr. Reyes provided the inspiration for establishing the Capital Improvement Projects (CIP) and Finance Working Group, which was to sustain the work that Mr. Santos is, and continues to, doing in finding sources of funding for projects. This group, as Mr. Reyes further mentioned, will also look at what would be future project needs and would address them accordingly during identification of funds, both from local appropriation and external funding sources.

J. Final Thoughts Sharing From Attendees

- a. Mr. Santos shared a request to members in regards to a future process for updating the Guam Hazard Mitigation Plan (GHMP). The request is focused towards those who specifically deal with data related to the hazards that are profiled in the GHMP. Mr. Santos emphasized that as the GHMP is a working document, incremental proposed amendments would be an easier process to update the plan, as opposed to considering updates only right before the next 5-year cycle begins and attempting to track down needed information, e.g., updated maps or studies.
- b. Chief Fejeran shared that the GDoAg - FSRD will be conducting an urban tree canopy assessment between February - April 2025. Once the assessment is done, the information will be used to create a heat index which depicts areas where

green spaces need to be increased. Mr. Bowsher requested if the information gathered by the GDoAg - FSRD's assessment can be shared for better, potential fire awareness activities within his agency.

- c. Chief Fejeran mentioned a potential project idea along the Masso River, around the unpermitted bridge that was destroyed by Typhoon Mawar. Due to the typhoon the entire side slid off, causing the riverbank to drop quickly, quickly eroding out into the estuary. Chief Fejeran mentioned, it is causing point-source pollution into the river outlet where a Marine Preserve Area (MPA) is located, which necessitates the need for more trees and engineering to mitigate the issue. Currently, Mr. Santos replied, the area is federal land, but it is in the quick-claim deed process which would return the land back to the Government of Guam.

IV. Action Items:

1. Mr. Pangelinan will confirm the discussion points for the TTX with partnering agencies (GDoAg, NOAA-NWS, and GFD).
2. Mr. Pangelinan will assist Mr. Terlaje in coordinating planning meetings with partners to come up with potential future Silver Jackets project ideas, and will present the ideas at the next Silver Jackets meeting.
3. Mr. Terlaje will confirm the technical support from USACE that is needed to facilitate the TTX.
4. GBSP will invite Jay Dornila from NRCS to the next Silver Jackets meeting for project updates under NRCS funding.
5. GBSP - GCMP will coordinate with Mr. Terlaje and USACE in providing more training on the flood calculation tool, potentially during the 10th Assembly of Planners, through the instruction from instructors from the Center for Watershed Protection. The next training session will be more tailored to pertinent agencies' permitting and review workflow processes and where and how to integrate the flood calculation tool within.
6. BSP - GCMP will coordinate planning meetings with pertinent partners to share and discuss data and technology information to assist Silver Jackets projects.
7. GBSP will invite Mr. Jose Quinata, Federal Programs Administrator from the GDPW - Division of Highways, to the next Silver Jackets meeting to provide Emergency Watershed Protection grant updates.

V. Adjournment