

CONFERENCE PROCEEDINGS
10th ASSEMBLY OF PLANNERS SYMPOSIUM



Theme:

GUAM'S COASTAL ZONE POLICIES:

EXAMINING THE VITAL ROLE OF CODES, ORDINANCES, AND ENFORCEMENT IN FOSTERING
ECONOMIC GROWTH, COMMUNITY EMPOWERMENT, AND MANAGING COASTAL
RESOURCES

AUGUST 19 & 20, 2025 | 8 AM - 5 PM | Hyatt Regency Guam



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Introduction

The 10th Assembly of Planners Symposium was held on August 19–20, 2025, at the Hyatt Regency Guam. The event convened more than a hundred planners, government agencies, regional partners, academics, professional associations, and community stakeholders. Anchored under the theme “Examining the Vital Role of Codes, Ordinances, and Enforcement in Fostering Economic Growth, Community Empowerment, and Managing Coastal Resources,” the symposium provided an important platform to reflect on Guam’s planning priorities and the policies that shape land, water, and coastal resource management.



The two-day program highlighted a wide range of pressing issues. A session on Comprehensive Development Planning examined progress on the Guåhan 2050 Sustainability Plan, sharing lessons from the completion of the draft plan while drawing from off-island examples to strengthen Guam’s long-term land use strategy. Wildland Arson was addressed through a panel exploring the cultural, social, and behavioral drivers of arson in the island’s watersheds, with emphasis on community engagement, public education, and policy reforms that can reduce risks to forest health and water resources.

The Northern Guam Lens Aquifer was the focus of a plenary on enforcement gaps, bringing attention to the disconnect between existing water regulations and their implementation, as well as the implications for water quality, public health, and infrastructure costs. Discussions stressed the need to close permitting and compliance loops, prioritize aquifer protection through capital improvement projects, and ensure long-term sustainable yield.

The Marine Planning plenary convened resource managers and community leaders to explore integrated approaches for managing competing ocean uses, building resilience, and safeguarding Guam’s coastal zone. Similarly, the Flood Policy and Stormwater Management plenary underscored the urgent challenges of climate change, increased rainfall, and inadequate stormwater infrastructure, drawing input from both regulatory agencies and private sector experts.



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The symposium also showcased innovation through GIS Data Integration, demonstrating practical applications of spatial data for hazard management, infrastructure planning, and resource optimization.

Finally, the panel on Stewarding Guam's Working Landscapes addressed the future of forest systems and agricultural lands through the Guam Forest System and Habitat Conservation Plan and highlighted the collaborative work of the Guåhan Sentinel Landscapes Partnership to protect open spaces and agricultural productivity.

The keynote address by Derek Brockbank, Executive Director of the Coastal States Organization, provided a critical update on the uncertain future of federal coastal funding, including the impacts of FY'25 and FY'26 budget processes, potential rescissions, and impoundments. He outlined the risks to critical funding sources such as annual appropriations, the Bipartisan Infrastructure Law, and the Inflation Reduction Act, all of which directly affect Guam's capacity to invest in coastal resilience and infrastructure.

The symposium's success reflected the active involvement of a diverse group of partners, including the Office of the Governor, Bureau of Statistics and Plans (BSP), Guam Coastal Management Program (GCMP), Department of Land Management, Department of Agriculture, Guam Environmental Protection Agency, Department of Public Works, Guam Fire Department, Guam Visitors Bureau, University of Guam, CIS/Sea Grant, WERI, the American Institute of Architects Guam Chapter, and off-island programs such as the Texas General Land Office, Washington Department of Ecology, Maryland Department of Natural Resources, and the Hawaii Coastal Zone Management Program. Their contributions enriched discussions with both local expertise and comparative regional perspectives.

Overall, the 10th Assembly of Planners Symposium advanced the mission of BSP and GCMP by strengthening interagency and inter-jurisdictional coordination, exchanging best practices, and reinforcing the importance of codes, ordinances, and enforcement as foundational tools for sustainable development. The event reaffirmed Guam's commitment to balancing economic growth with conservation, empowering communities through policy, and ensuring that coastal and working landscapes are managed for resilience and long-term sustainability.

Background

The purpose of the Assembly of Planners' Symposium is to address meaningful land and natural coastal resource issues or problems that could be resolved through the collective focus of Guam's planning, resource, and policy communities through a forum that:

- Works to improve management systems and advance effective policy;
- Discusses issues through the use of science, data, and research that serve as the foundation for decisions;
- Provides professionals with the opportunity for face-to-face discussion and sharing of information that is useful in identifying solutions, improving services, and avoiding or mitigating the adverse effects of poor planning, development, and natural hazards;
- Works to optimize and coordinate comprehensive planning



Symposium Remarks

The session commenced with Introductory Remarks from Edwin Reyes, Administrator, Guam Coastal Management Program, providing brief remarks and acknowledgments of distinguished guests and partners, including Director Lola Leon Guerrero, Deputy Director Matt Santos, GEPA Administrator Michelle Lastimoza, representatives from NOAA's Office for Coastal Management, and off-island delegates from the Coastal States Organization.

Welcome Remarks: Director Lola Leon Guerrero formally welcomed attendees, emphasizing the symposium's theme: the vital role of policies, ordinances, and enforcement in safeguarding Guam's coastal resources while fostering economic growth and community resilience. She outlined the importance of comprehensive development planning, the Guåhan 2050 Sustainability Plan, and the economic valuation of Guam's natural resources. The Director also recognized the critical support provided by NOAA's Coastal Zone Management grant.

Opening Remarks:

Acting Governor Joshua Tenorio delivered welcome remarks that set the tone for the symposium by addressing the unprecedented challenges and opportunities facing Guam. He spoke candidly about the impact of large-scale military construction projects and the unique geopolitical pressures that place a significant burden on the island. Tenorio emphasized the importance of regulatory officials understanding their statutory mandates and the need to balance resource protection with the practical needs of the community. He noted the recent, unprecedented investments in science, research, and technology, urging participants to leverage these advancements for more effective policymaking. The Acting Governor discussed the necessity of accurate information and robust policy implementation, stressing that strong policies must translate into real-world protection and improved quality of life for Guam's residents. He addressed the rising stakes posed by climate change, including sea level rise, stronger storms, and aquifer stress, as well as the ongoing pressures of housing shortages and infrastructure demands. Tenorio called for collaboration across agencies and sectors, warning against working in silos and advocating for policies that are both strong on paper and practical in application.

“We’re living in a time when the stakes have never been higher, the waters that surround us are rising, the storms that reach our shores are getting stronger, and our aquifers are under stress... We cannot afford to work in silos, and we cannot afford policies that are strong on paper, but weak in practice.”

- Acting Governor Joshua Tenorio

Acting Governor Tenorio outlined the symposium's agenda, which included reviewing the Guåhan 2050 Sustainability Plan, learning from external experts, addressing the root causes of wildland arson, examining regulatory and enforcement gaps, exploring marine planning, and focusing on innovation such as GIS data integration. He also highlighted the importance of regional coordination, particularly regarding the Coastal Zone Management Act's federal consistency provision, and the need to stay informed about the future of federal coastal funding. Tenorio concluded by urging participants to carry forward the insights gained from



the symposium, refine and strengthen codes and ordinances, and commit to concrete action to ensure a resilient and sustainable future for Guam. The session established a collaborative and forward-looking tone for the symposium, encouraging all participants to leverage new knowledge, partnerships, and innovative tools to address Guam’s most pressing environmental and development challenges. Action items for the event included refining regulatory frameworks, exploring new policy mechanisms for sustainable land management, enhancing regional coordination, and preparing for changes in federal funding that will impact the island’s capacity to implement critical initiatives. The Acting Governor’s welcome remarks underscored the shared mission to shape a resilient, sustainable, and vibrant future for Guam and its communities.

Plenary 1: Comprehensive Development Planning: Guahan 2050 Sustainability Plan

The Guahan 2050 Sustainability Plan (G50SP) seeks to transcend traditional zoning approaches by fostering integrated land use planning that reflects Guam’s unique environmental, cultural, and socioeconomic dynamics. This session covered the current state of the Guahan 2050 Sustainability plan, the progress that has been made, and the next steps after completing the first draft. This session also included speakers who have developed and implemented comprehensive development plans and covered insights and best practices that Guam could benefit from.

Facilitator: Edwin Reyes, Administrator, Guam Coastal Management Program

Panelists: Matthew Santos, Bureau of Statistics and Plans, **Jay R. Merrill**, MRD (Lynker) Highlights and Implementation Strategy of the Guahan 2050 Sustainability Plan (G50SP); **Celine Cruz**, Chief Planner, Department of Land Management; **Catherine McCall**, Office Director for Climate Adaptation and Stewardship, Maryland Department of Natural Resources; **Henry Bell**, Senior Coastal Planner, Washington Department of Ecology; **Renato “Tato” Martinez**, representing the American Institute of Architects (AIA).

Edwin Reyes, Administrator, Guam Coastal Management Program, opened the session, emphasizing the importance of leadership and collaboration in completing the Guahan 2050 Sustainability Plan. He introduced the session’s focus: transcending traditional zoning through integrated land use planning that reflects Guam’s unique environmental, cultural, social, and economic dynamics. The session format included presentations and a Q&A, with the first panelist, Jay Merrill, providing an overview.





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Jay Merrill provided a comprehensive overview of the Guåhan 2050 Sustainability Plan. He explained that the plan is the culmination of extensive work to create a unified land use framework for Guam, integrating the central and northern land use plans and setting the stage for a southern plan. Jay emphasized that the plan is more than a technical document; it is rooted in the values and aspirations of the people of Guam, as identified through a robust public outreach process. This process included over 40 interviews with subject matter experts, six focus groups with key stakeholders, and a survey of 700 residents, followed by village-level feedback sessions to ensure the plan reflected community input. Jay outlined the five core values guiding the plan: recognizing the island’s ecological and infrastructural limits, promoting balanced economic and environmental growth, preserving cultural identity, ensuring equity in development, and fostering ongoing community engagement. He stressed the importance of protecting Guam’s environment, not only as a resource for tourism but as central to the island’s identity and well-being. Jay also addressed the challenges facing Guam, such as climate change, economic pressures, population out-migration due to high living costs, and the erosion of cultural and family structures. The plan, he explained, is structured around four components: sustainable communities (with a focus on infrastructure and affordable housing), a prosperous economy (including tourism revitalization and economic diversification), environmental protection (with hazard mitigation and climate adaptation), and cultural vitality and village sustainability. He highlighted the need for clear spatial priorities, integration of hazard and climate data, and the linkage of development to infrastructure capacity. Jay concluded by emphasizing the plan’s implementation strategy, which centers on the Bureau of Statistics and Plans as the coordinating agency, and the need for transparency, inclusivity, and adaptability in governance.

“The plan has to be developed in a way that's going to help sustain and support continued development, evolution and growth and strengthening of the island's culture, and in doing so, it also has to address the challenges like climate change causing sea level rise.”

- Jay Merrill, MRD

Celine Cruz, Territorial Chief Planner, Department of Land Management, offered a historical perspective on planning in Guam. She reflected on the legacy of the original Guam Comprehensive Development Plan, introduced nearly 50 years ago by Governor Ricardo Bordallo. Celine recounted Bordallo’s vision of balancing growth with preservation and the responsibility of current generations to plan for the future. She noted that the comprehensive plan became foundational to land management in Guam, influencing every staff report and decision by the Guam Land Use Commission. Celine described the role of the Application Review Committee (ARC) as the bridge between vision and reality, ensuring that development proposals align with laws, protect resources, and serve long-term community needs. She detailed the ARC’s multidisciplinary approach, which brings together experts in environmental protection, infrastructure, public safety, and cultural preservation to review projects. Celine emphasized that the ARC’s work is where the sustainability plan becomes actionable, as each permit review is an opportunity to realize the plan’s vision. She acknowledged the challenges of balancing zoning, infrastructure, environmental resilience, cultural protection, and public engagement, and stressed that true progress requires buy-in from developers,



agencies, and the public. When all parties are aligned with the plan, she argued, the review process becomes more efficient, decisions are clearer, and trust in the system is strengthened.

“Complacency is not the same as resiliency. When you accept things the way they are, you know, you're not being resilient, right? Resiliency means action. Complacency is inaction.”

– Renato “Tato” Martinez, AIA

Renato “Tato” Martinez, representing the American Institute of Architects (AIA), brought a private sector and design perspective to the discussion. He began by sharing his personal journey as an immigrant to Guam and his experiences growing up in Manila, where he witnessed the challenges of urban flooding and the limitations of complacency in the face of recurring problems. Renato argued that complacency is not resilience; true resilience requires proactive action. He critiqued the traditional reliance on zoning as a one-dimensional land use tool, noting that it fails to address complex issues such as housing shortages, climate change, and the need to preserve environmental and cultural heritage. Renato advocated for

moving beyond zoning to a framework of “resilience by design,” where land use, housing, culture, and environment are integrated to create opportunities for all. He highlighted the unique role of architects in designing not just buildings, but community frameworks that foster connections and reflect local climate, culture, and environment. Renato called on the audience to view the Guåhan 2050 Sustainability Plan as a collective commitment to Guam’s future, urging inclusive discussion, input, and support to move past zoning and prioritize resilience and community.

Catherine McCall, Director for Climate Adaptation and Stewardship at the Maryland Department of Natural Resources, provided insights from Maryland’s experience with comprehensive planning and climate adaptation. She described Maryland’s long history of local comprehensive plans, hazard mitigation plans, and the evolution from “Smart Growth” to “Sustainable Growth” at the state level. McCall focused on Maryland’s adaptation framework, which brought together state agencies, public and non-governmental organizations, and local communities to address pressing climate impacts such as sea level rise, flooding, erosion, and heat. She emphasized the importance of making sustainability plans implementable by assigning clear responsibilities, setting short- and long-term goals, and aligning actions with budget and decision-making processes. McCall highlighted the need for resource readiness, technical expertise, and state-local partnerships to support community resilience. She discussed Maryland’s “critical area” law, which requires local plans to incorporate climate change and environmental justice, and described how project investments are prioritized in vulnerable communities. McCall shared examples of community-level adaptation projects, such as living shorelines and green infrastructure, and stressed the

“One of the things we started realizing was that it was a great framework, but what we wanted to do was... make sure that it was implementable. And we challenged every single partner to say, what are you going to do in the next year? What is your five-year goal and what does that look like?”

– Catherine McCall, Director, Maryland Department of Natural Resources



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importance of ongoing community engagement and dynamic feedback mechanisms, like the “My Coast” platform, to monitor and respond to changing conditions.

Henry Bell, Senior Coastal Planner for the Washington Department of Ecology, focused on the essential role of community engagement in long-term planning. He shared his personal motivation for working in coastal management, rooted in experiences in the Pacific region and a commitment to balancing development with conservation. Henry recounted his early work in Washington, where he was tasked with engaging directly with communities facing severe coastal erosion. He described the devastation experienced by the community of North Cove, where much of the town had eroded away, and the need for a coordinated planning process to address the crisis. Henry outlined his approach to community engagement, which reframes planning as a collaborative visioning process rather than a top-down imposition of restrictions. He highlighted participatory mapping and community science as tools for involving residents in identifying priorities and monitoring changes. Henry also shared examples of innovative engagement, such as providing disposable cameras to youth to document what matters to them, and commissioning local artists to encourage citizen science. He emphasized that community engagement is an ongoing cycle, not a one-time event, and that successful implementation requires continuous feedback, adaptation, and clear assignment of responsibilities. Henry concluded by sharing the success of a major dune restoration project in North Cove, which was made possible by sustained community involvement and partnership.

Together, these panelists provided a multifaceted exploration of the Guåhan 2050 Sustainability Plan, drawing on local experience, historical context, design thinking, and national best practices to highlight the challenges and opportunities of comprehensive, resilient, and inclusive planning for Guam’s future.

Audience questions and the corresponding responses from the session:

Barbara Burkhart asked why there has been no conservation funding or planning to offset the loss of 5,000 acres to power projects, and why recent developments don’t set aside money for green space or habitat, despite large project budgets. Panelists acknowledged her concerns, explained that some efforts like the Habitat Conservation Plan are underway but can’t recover already-developed land, and noted that legislative and resource limitations make immediate solutions difficult. They assured her that her input would be considered in the ongoing planning process.

A long-time planner questioned whether the Guåhan 2050 Sustainability Plan would finally update the island’s outdated 1966 zoning maps, or if legal action would be needed. Panelists clarified that the current plan suggests land use changes but does not directly rezone properties; actual zoning updates would require further legal steps after the plan’s adoption. Maps and suggested land uses will be made available for public review.



Plenary 2- Linking Ecosystem Services to Economic Vitality in Tumon Bay

This plenary brought together a multidisciplinary panel of experts, practitioners, and stakeholders to chart a path forward for the Tumon Bay Watershed Management Plan. Recognizing Tumon Bay’s critical role in Guam’s economic vitality and ecological health, the session explored strategies to balance responsible development with the conservation of natural resources. Key topics included the integration of best management practices (BMPs) for stormwater pollution prevention, the adoption of nature-based solutions, and the importance of inter-agency coordination and stakeholder engagement. The plenary also addressed the challenges of data collection, regulatory compliance, and infrastructure maintenance, drawing on local and external case studies. By fostering collaboration among architects, engineers, scientists, government agencies, and the tourism sector, the session aimed to develop actionable goals and innovative solutions that ensure the long-term sustainability and resilience of the Tumon Bay watershed.

Facilitator: James Pangelinan, Planner, Guam Coastal Management Program

Panelists: Chris (Myeong-Ho) Yeo, Ph.D., P.E., Associate Professor, Water & Environmental Research Institute of the Western Pacific; **Renato “Tato” Martinez**, representing Inna Wiese, American Institute of Architects (AIA). **Glenn San Nicolas**, Deputy Administrator, Guam Environmental Protection Agency (GEPA); **Margaret Aguilar**, Senior Program Coordinator, Guam Environmental Protection Agency (GEPA); **Shaylyn Salas**, Guam Department of Agriculture; **Lyann Dydasco**, representing the Guam Visitors Bureau; **Michael Friis**, Director, Resource Policy Bureau, Wisconsin Department of Administration.



The plenary session on the Tumon Bay watershed plan featured a series of in-depth presentations and discussions from a diverse panel of experts, each offering unique perspectives and detailed insights into watershed management, best management practices (BMPs), and sustainable development.

Dr. Chris Young, Professor at the University of Guam, began by emphasizing the multifaceted value of Tumon Bay—not only as a scenic and economic asset but also as a vital ecological and cultural resource. He introduced the importance of research and hydrologic modeling in understanding the bay’s challenges, drawing on his experience with the Apple Harbor research study. Dr. Young described the process of water quality monitoring, including the deployment of sensors and weekly sampling from multiple river sites over several years. He explained how data on parameters such as total suspended solids, nitrogen, and phosphorus were used to identify pollution sources, particularly sediment and nutrient loading from specific rivers. Dr. Young highlighted the need for site-specific BMPs, such as those targeting soil erosion and nutrient removal, and stressed the importance of modeling to predict future impacts from climate



change and land development. He concluded by advocating for an integrated, data-driven approach to watershed management, tailored to the unique characteristics of each watershed.

Renato “Tato” Martinez, representing AIA Marianas and presenting on behalf of Inna Weise, focused on the role of architects in stormwater management and the implementation of low-impact development (LID) strategies. He discussed the results of a survey revealing that many architects are not fully engaged in LID or stormwater management, often leaving these responsibilities to engineers. Martinez outlined the definition and goals of LID, emphasizing the need to manage stormwater at its source and to integrate these considerations early in the design process. He provided a detailed overview of LID strategies, including rain gardens, tree box filters, vegetated swales, permeable pavements, green roofs, and subsurface retention facilities. Martinez illustrated these concepts with real-world examples from school and hospital projects, showing how features like stormwater collection systems and green spaces can be both functional and aesthetically pleasing. He also discussed the economic and environmental benefits of LID, such as reduced life cycle costs, increased property values, and enhanced resilience.

Glenn San Nicolas, Deputy Administrator, Guam EPA, and **Margaret Aguilar**, Senior Program Coordinator, delivered a comprehensive overview of the regulatory and enforcement challenges associated with BMP implementation. Glenn described common issues observed during inspections, such as BMPs that are well-designed on paper but poorly executed in the field, often due to late installation or lack of maintenance. He stressed the necessity of daily oversight by trained personnel and the importance of installing BMPs before any ground disturbance occurs. Aguilar provided specific examples, including the Tsubaki Tower project, where delayed and inadequate erosion control measures led to multiple violations and direct impacts on water quality. She outlined the agency’s response, which included instituting mandatory pre-construction BMP walk-throughs, enhancing interagency coordination, and leveraging community reporting mechanisms. Both speakers detailed the permitting and inspection workflow, the establishment of joint inspection teams, and the use of digital tracking tools to improve accountability. They also highlighted the critical role of public involvement in reporting violations and supporting enforcement efforts.

“Effective BMPs are the frontline defense against pollution... these practices protect Guam’s land and water, especially in sensitive areas like Tumon Bay.”

- Glenn San Nicolas, Deputy Administrator, Guam EPA

Shaylin Salas, from the Department of Agriculture’s Forestry & Soil Division, presented a structured approach to urban forestry as a component of watershed management. She outlined four key strategies: maintaining existing trees and green spaces through inspections and workshops; engaging the community via outreach and citizen science programs; planning through initiatives like the urban tree canopy assessment in partnership with the University of Vermont; and strategic planting based on thorough planning and community input. Salas detailed the wide-ranging benefits of urban forestry, including economic development, improved stormwater management, public health, cultural preservation, and climate adaptation. She discussed the process of institutionalizing urban forestry as a BMP, either through established practice (de facto) or formal legislation (de jure), and described the need for stakeholder committees to develop and review BMPs. Salas also presented potential urban forestry projects for Tumon, such as transforming medians into bioswales and increasing green infrastructure in hardscape areas.



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Lyann Dydasco, from the Guam Visitors Bureau, addressed the importance of interagency communication and collaboration in managing environmental impacts from construction and development. She described the Bureau's efforts to coordinate with agencies such as Guam EPA and the Department of Public Works to ensure compliance with regulations and the implementation of BMPs. Dydasco highlighted persistent challenges, including under-maintenance, vandalism, illegal dumping, and the negative impacts of abandoned buildings on both the environment and the tourism industry. She emphasized the need for collaborative task forces to monitor sites, enforce corrective actions, and engage the community in maintaining a clean and attractive environment. Dydasco concluded by reiterating the Bureau's commitment to safeguarding Tumon Bay's ecosystem and upholding Guam's reputation as a premier tourism destination.

“Our approach is a balance between resource protection and sustainable community development, making our communities livable and attractive for visitors.”

- Mike Friis, Director with the Wisconsin Department of Administration's Coastal Management Program

Mike Friis, Bureau Director with the Wisconsin Department of Administration's Coastal Management Program, provided an external perspective by sharing success stories from Wisconsin. He described the transformation of Milwaukee's Menominee Valley from a post-industrial brownfield into a vibrant area featuring public open spaces and stormwater parks. Friis explained how these projects balanced resource protection with sustainable community development, improved water quality, and created new recreational and economic opportunities. He also discussed the East River collaborative, which addressed nutrient loading and flooding through cross-sector partnerships. Friis highlighted the development of green infrastructure code audits to encourage innovation and the establishment of communities of practice to share knowledge and best practices. He underscored the importance of regulatory flexibility, cross-sector collaboration, and learning from other communities' experiences.

The Q&A session provided further granularity, with panelists responding to questions about the cost-benefit analysis of LID and urban forestry, the feasibility of retroactive BMPs for already developed areas, shoreline erosion, and permitting for work in the water. Panelists discussed the use of permeable pavers and bioswales in retrofitting hardened areas, the need for comprehensive community and policy buy-in, and the importance of updating building codes and zoning regulations to institutionalize BMPs and LID practices. They also addressed the complexities of shoreline permitting, the involvement of federal agencies such as the Army Corps of Engineers, and the need for improved interagency communication to ensure all relevant stakeholders are engaged in permitting and enforcement processes.

Overall, the session provided a rich, detailed exploration of the scientific, technical, regulatory, and community dimensions of watershed management in Tumon Bay. Each panelist contributed specific expertise, practical examples, and actionable recommendations, offering a comprehensive roadmap for sustainable development and environmental stewardship in the region.



Plenary 3 - Addressing the Root Causes of Wildland Arson: A Shift in Societal Tolerance of Wildland Fires

This session analyzed how societal attitudes and perceptions of wildfires influence arson incidents and discussed strategies for cultural change. Emphasizing the importance of community engagement, education, and policy reforms, the panel aimed to identify foundational approaches to reduce arson rates. Ultimately, the discussion sought to foster a societal shift towards greater awareness and responsibility in wildfire prevention, promoting resilience and safety in vulnerable communities.

Facilitator:

Christine Fejeran, Guam Department of Agriculture, Forestry & Soil Resource Division Chief

Panelists: **Edward Artero**, Guam Fire Department, Fire Prevention Bureau Chief; **James Pangelinan**, Planner, Guam Coastal Management Program; **David Green**, Senior Deputy Director, Texas General Land Office; **Sgt Roy N. Henricksen**, Guam Police Department; **Millie Erguiza**, Senior Planner, Bureau of Statistics and Plans.

The plenary featured a panel of experts and community members who discussed the multifaceted challenges of wildland arson and fire management in Guam, drawing on both local and external perspectives.

James Pangelinan, Planner, Guam Coastal Management Program, opened the discussion by presenting a qualitative assessment of wildfires in Guam, referencing the Guam Watershed Plan. He emphasized that most wildfires in Guam are caused by human activity, which has significant impacts on the island's flora, fauna, ecosystems, and increases the risk of stormwater flooding due to the loss of vegetation. James shared data from the hazard mitigation plan, highlighting wildfires as a high-impact hazard for essential facilities, utilities, and transportation systems. He stressed the need for updated laws and regulations related to arson, greater enforcement capacity, and improved community outreach and engagement. He also noted the significance of Public Law 35-134, which updated Guam's arson law to include forest lands as a prosecutable offense.

“I think it’s no surprise that wildfires...are not created naturally, but more so, often times we find it that it happens through anthropogenic reasons.”

- James Pangelinan, Planner, Guam Coastal Management Program

David Green, Senior Deputy Director for Coastal Protection at the Texas General Land Office, provided an overview of the Texas approach to wildfire and disaster response. He described the historical development of the Texas Forestry Service and the Texas Department of Emergency Management, noting the integration of these agencies at Texas A&M University for coordinated response and investigation. Green pointed out that most fire departments in Texas are volunteer-based, which makes the expertise of professional investigators from the Forestry Service especially important. He outlined the Texas oil spill response infrastructure and the importance of inter-agency drills and community education. Green discussed the state's legal framework for arson, which includes strong penalties ranging from misdemeanors to capital murder, and emphasized the importance of deterrence through both enforcement



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and education. He advocated for statewide planning, resource support for local governments, and the use of technology such as drones in wildfire management.

Sergeant Roy Henrickson of the Guam Police Department explained Guam’s arson laws under Title 9, including the definitions of property, aggravated arson (a second-degree felony), arson (a third-degree felony), and negligent burning (a misdemeanor). He detailed the penalties for each offense, including mandatory prison terms and parole requirements, and emphasized the challenges of arson investigation, such as evidence destruction and the need for citizen vigilance, particularly in reporting incidents to authorities. Hendrickson described the process for fire and police investigations, the roles of the Guam Fire

Department and Police Department, and the importance of proper evidence handling to ensure successful prosecution.

“To prove an arson case, you need three things. You need to have willful intent, malicious intent, and significant damage to property or to a building.”

- Chief Edward Artero, Guam Fire

Chief Edward Artero of the Guam Fire Department discussed the operational response to wildland fires in Guam and the evolution of collaboration between the Fire Department and the Forestry Division. He highlighted the challenges posed by illegal dumping, which creates hazardous conditions and increases wildfire risk. Chief Artero stressed the need for enhanced capabilities and capacity-building in fire investigation, including credentialing and evidence collection. He outlined the department’s goal of achieving higher certification for fire investigators and the

importance of partnerships with other agencies and grant funding to support these efforts.

Millie Erguiza, Senior Planner with the Bureau of Statistics and Plans and a community member, shared a personal account of living in a wildfire-prone area in Malessos and described the financial and emotional toll of repeated wildfires on her family and neighbors. She explained the necessity of maintaining fire breaks at personal expense to protect property and enable emergency access. Mille advocated for stronger laws, increased fines, more training for investigators, and the deputizing of local volunteers as first responders. She called for more funding for personnel, equipment, and public education campaigns to change societal attitudes toward wildfires, and urged collective action from government, planners, and the community to protect Guam’s natural resources for future generations.

Throughout the meeting, the panel emphasized the need for planners to consider wildfire risk in development and infrastructure planning. The discussion also highlighted the existence of resources such as wildland fire mapping, fact sheets, and steering committees, and encouraged greater awareness and use of these tools. Key action items from the meeting included enhancing capabilities and building capacity for wildland fire investigation and arson response within the Guam Fire Department, pursuing federal funding for technology and equipment, increasing training and improving investigation and prosecution techniques, exploring the deputizing of community members, and developing robust public education campaigns. The meeting concluded with a call for meaningful decisions, policies, and actions to protect and sustain Guam’s natural resources for future generations.

In summary, the panel brought together diverse expertise to address the urgent issue of wildland arson in Guam. The discussion underscored the importance of updated legal frameworks, inter-agency

collaboration, community engagement, and investment in both technology and education. The meeting’s outcomes point toward a comprehensive, multi-pronged approach to wildfire prevention, response, and long-term resilience for the island.

Plenary 4 - Northern Guam Lens Aquifer- The Compliance Void: Challenges with Water Regulations and Enforcement

Water is fundamental to life, yet the frameworks that govern its management often fall short. Inconsistent regulations and laws, limited enforcement, access to data, rising cost of construction, and complex political realities. This panel addressed the gap between regulations and real-world implementation and the cost of the utilities. Issues covered included the following: (1) Closing the Loop: Integrating Application Review Committee Recommendations into the Building Permit Process; (2) Prioritizing aquifer protection through infrastructure projects and planning; (3) Protecting the Health and Sustainable Yield of Northern Guam’s Lens Aquifer.



Facilitator: Evangeline “Vangie” Lujan, Senior Regulatory Analyst, Guam Waterworks Authority
Panelists: Prudencio Aguon, Guam Waterworks Authority; **Jacob Miller**, Lead Engineer, New Area Development and Permitting, Guam Waterworks Authority; **George Watson**, Senior Engineer, Guam Waterworks Authority; **Joseph Calvo**, Civil Engineer, Guam Waterworks Authority; **Yong Sang (Barry) Kim, PhD**, Associate Professor of Water Engineering, Water and Environmental Research Institute (WERI); **Michael Friis**, Director, Resource Policy Bureau, Wisconsin Department of Administration; **Brett Railey**, Guam Waterworks Authority.

Jacob Miller, the senior regulatory analyst for the Guam Waterworks Authority (GWA), opened the panel by discussing the challenges and concerns related to development over the Northern Guam Lens Aquifer. He highlighted the disconnect between GWA’s recommended conditions and their enforcement during the building permit process, particularly noting that position statements and conditions set by the ARC (Application Review Committee) are not always implemented. Miller expressed concern about the proliferation of type two sewage facilities and underground flow storage tanks within groundwater protection zones, as well as the increasing density of accessory dwelling units (ADUs) and the exceptions granted for parental and decedent subdivisions, which allow for smaller lot sizes and thus higher density. He also pointed out issues with changes in occupational use of properties without proper review of water and sewer capacities, and the lack of proper zoning and utility easements for lands returned from the military. To address these issues, Miller advocated for better implementation of ARC conditions, improved inter-agency coordination, clearer enforcement responsibilities, and regular evaluation of legislative measures to ensure regulations remain current. He emphasized the need for transparency, data sharing, and



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improved records management to track development activities and ensure that conditions are enforced throughout the permitting process.

George Watson, the senior engineer for wastewater development at GWA, focused his presentation on the state of Guam's wastewater infrastructure and the challenges posed by aging systems and emerging contaminants. He explained that a significant portion of the island still relies on septic systems, which increases the risk of groundwater contamination, particularly with nitrates and legacy chemicals like Aldrin. Watson described the structure of the Northern Guam Lens Aquifer and the importance of its different regions for water supply. He detailed the problems caused by old infrastructure, such as clay and asbestos cement pipes, and the constraints imposed by a partial consent decree from the EPA, which mandates upgrades to the wastewater system. Watson discussed the presence of rising contaminants, especially PFAS (per- and polyfluoroalkyl substances) and Aldrin, and the technical and financial challenges of treating these chemicals. He outlined GWA's ongoing and planned projects to install sewers in high-risk areas like Adacao and Gilbert's subdivision, upgrade treatment plants, and replace aging pipes and pump stations. Watson also addressed the need for capacity assurance projects and the importance of inter-agency collaboration to protect the aquifer and ensure reliable water service.

Dr. Barry Kim, Associate Professor at the Water Environmental Research Institute and scientific advisor to GWA, provided a scientific perspective on the sustainability and management of the Northern Guam Lens Aquifer. He began by questioning whether Guam truly has sufficient water resources, noting that while desalination is technically possible, it is prohibitively expensive for most residents. Dr. Kim explained the concept of Guam's water budget, emphasizing the need to balance water quantity and quality within economic constraints. He described the methods used to estimate the aquifer's freshwater volume and recharge rates, noting that while the aquifer holds a substantial amount of water, increasing development and reduced recharge areas threaten its sustainability. Dr. Kim presented data showing rising chloride levels in production wells, indicating ongoing saltwater intrusion, and warned that continued well installation without careful site selection would exacerbate this problem. He also discussed the prevalence of PFAS and nitrates in the water supply, linking these contaminants to human activities and inadequate waste management. Dr. Kim advocated for drilling new wells in areas with lower chloride levels, using technical reports and data-driven site selection, and implementing strong public education and waste management policies to reduce pollution. He concluded by recommending the development of alternative water supply strategies, such as utilizing southern streams, considering desalination if costs become manageable, and investing in advanced water treatment technologies.

“The operation of 150 wells in northern Guam lens aquifer will drive a continuous increase in chloride level. And from my perspective, there are already more wells than the system can handle, causing salt water intrusion.”

- Dr. Barry Kim, WERI

Michael Friis, representing Wisconsin, shared insights from his state's experience managing groundwater threats, particularly nitrates and PFAS. He explained that Wisconsin's agricultural sector, especially dairy farming, is a major source of nitrate contamination, and described the state's regulatory approaches, including nutrient management, well testing, and restrictions on fertilizer application. Michael also discussed Wisconsin's response to PFAS contamination, which has involved the creation of a state



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committee, executive action, and a comprehensive action plan focused on reducing PFAS in the environment, identifying contamination sources, and developing remediation standards. He emphasized the importance of proactive measures to prevent contamination, the need for ongoing monitoring, and the challenges of addressing legacy pollution from industrial and military sources.

Brett Riley, the assistant general manager for engineering at GWA, provided concluding remarks that synthesized the panel’s discussions. He acknowledged the significant challenges posed by rising contaminants, aging infrastructure, and the need for sustainable water provision. Riley praised the scientific work being done to monitor and analyze trends in nitrates, chlorides, and PFAS, and stressed that while desalination is a technical option, it remains costly. He emphasized that the community must be prepared for increased costs if additional treatment processes become necessary, and that careful planning, data sharing, and inter-agency collaboration are essential to protect Guam’s water resources for the future.

“If we have to add treatment for nitrates, if we have to add all this treatment for PFAS, if we have to add desalination... then the cost is going to go up, and that cost would be borne by all of the ratepayers.”

- Brett Riley, Assistant General Manager for Engineering, GWA

Audience questions and the corresponding responses from the session:

Throughout the panel, there were also discussions and questions from the audience and other participants, focusing on the costs of sewer connections, the need for public education, enforcement of regulations, and the importance of transparent data management and planning to guide future development in a way that protects the aquifer.

One audience member, an architect, asked about the affordability of sewer connection fees for new homes, noting that when the cost exceeds \$20,000, many people opt for septic systems instead. The panel clarified that while GWA’s direct connection fee is about \$2,000, the total cost—including plumbing and installation can be much higher, sometimes reaching \$40,000. The panel acknowledged this affordability issue and mentioned that GWA is exploring low-interest loans and other financial assistance programs to help residents manage these costs.

A further question was raised about how GWA is communicating with residents in areas like Adacao about the upcoming requirement to connect to the new sewer system, and whether there is public education to help them prepare financially and logistically. The response from the panel was that GWA is actively working with local officials, such as the mayor, to keep residents informed as the project progresses. They are holding meetings and providing updates, but also noted that communication is sometimes limited by the availability of funding and the pace of infrastructure expansion. The panel emphasized the importance of ongoing outreach and education to ensure residents are aware of their responsibilities and available support as new systems are implemented.



Plenary 5- Integrated Marine Planning in the Pacific

This plenary highlighted collaborative approaches to marine planning and policy across the Pacific region. Hawaii's Ocean Resources Management Plan demonstrated a statewide, multi-agency framework to address coastal challenges through shared priorities and public engagement, focusing on coastal hazards, land-based pollution, and marine ecosystems. Guam's presentations examined key coral reef protection policies—both local and federal, and identified strengths and opportunities for improvement. In addition, an update on Guam's Fisheries Management Plan showcased progress in community-driven resource management, recent town halls, and next steps toward sustainable fisheries planning.

Facilitator: Camille Quichocho, Biologist, Guam Coastal Management Program

Panelists: Sarah Chang, Senior Project Analyst, Hawaii Coastal Zone Management Program, Office of Planning and Development; **Olivia Banez**, Coral Reef Policy and Communications Coordinator, Guam Coral Reef Initiative; **Michael Duenas**, Fisheries Supervisor, Department of Agriculture, Division of Aquatic and Wildlife Resources; **Brent Tibbatts**, Fisheries Biologist, Agency: Department of Agriculture, Division of Aquatic and Wildlife Resources; **Leilani Sablan Naden**, Biologist, University of Guam, Sea Grant.

The session began with **Camille Quichocho**, a biologist with the Guam Coastal Management Program, facilitating the panel and expressing gratitude to the National Oceanic and Atmospheric Administration Office for Coastal Management for funding the event. Camille introduced the first plenary, “Integrated Marine Planning in the Pacific,” and called up the panelists, starting with **Sarah Chang**, Senior Project Analyst at the Hawaii Coastal Zone Management Program Office of Planning and Development. Sarah provided an in-depth overview of Hawaii's Ocean Resources Management Plan (ORMP), describing it as a guiding document for the program and its network partners. She explained the structure of the Hawaii Coastal Zone Management (CZM) program, which operates as a network of federal, state, and county agencies, coordinated through various interagency groups. Sarah detailed the three levels of interagency

“Our ocean resources management plan is a collaborative effort, bringing together federal, state, and county agencies to address coastal issues that aren't covered by existing laws.”

- Sarah Chang, Hawaii Coastal Zone Management Program

coordination: the Council on Ocean Resources, the Coordinated Working Group, and specialized Action Teams, as well as the role of the Marine and Coastal Zone Advocacy Council, a public advisory board. She emphasized the collaborative nature of the ORMP, its statutory basis, and the process of identifying priority focus areas—coastal hazards, land-based pollution, and marine ecosystems—through public and partner input. Sarah highlighted

two projects: the Regional Shoreline Management Initiative, which seeks to define appropriate geographic scales for coastal management using both technical data and traditional ecological knowledge, and an initiative to build the capacity of state agencies to integrate sea level rise planning into their processes. She also discussed the ongoing midway evaluation of the 2020 plan, the need for improved project tracking, and the identification of emerging issues such as cesspool conversion, wetland management, and watershed coordination.



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Olivia Banez, Coral Reef Policy and Communications Coordinator at the Guam Coral Reef Initiative (housed within the Guam Department of Agriculture, Division of Aquatic and Wildlife Resources), presented on Guam’s reef-related policies. Olivia described the scope of the Guam Coral Reef Initiative, which includes management plans, community outreach, habitat management, and coral reef restoration. She emphasized the ecological and economic value of Guam’s coral reefs, noting their biodiversity and their role in coastal protection and tourism. Olivia reviewed four key policies: the Endangered Species Act (ESA), both local and federal, with a focus on the threatened coral species *Acropora globiceps* and the recent designation of critical habitat around Guam (excluding military bases); the 2024 resolution recognizing corals as essential infrastructure, which aims to formalize the benefits of reefs and open new funding opportunities; the 2025 reef-safe sunblock law, banning certain harmful chemicals to protect reefs; and the 1997 marine preserve law, which established five marine preserves with varying fishing restrictions. She discussed the benefits and drawbacks of each policy, enforcement challenges, and the importance of ongoing policy review and community engagement.

“Guam’s coral reefs are incredibly valuable, providing food, coastal protection, and tourism benefits, and it’s essential that we protect them through effective policies.”

-Olivia Banez, Guam Coral Reef Initiative

The session then transitioned to updates on the Guam Fisheries Management Plan, with presentations from **Leilani Saban Nadin**, a biologist with the University of Guam Sea Grant, **Michael Duenas**, Fisheries Supervisor at the Department of Agriculture, and **Brent Tibbetts**, Fisheries Biologist at the Department of Agriculture. Leilani outlined the critical need for the plan in light of declining fish stocks and the lack of comprehensive fishing regulations in Guam. Leilani described the collaborative process between the University of Guam and the Department of Agriculture, the use of scientific assessments and community input, and the lessons learned from other islands. Michael elaborated on the extensive community engagement process, including town hall meetings and surveys, to ensure the plan reflects the needs and concerns of all stakeholders, from commercial to subsistence fishers. He described the formation of subgroups focused on enforcement, data, education, and community outreach, and summarized the main feedback from the fishing community, such as the desire for size and bag limits, mandatory catch reporting, and distinctions between commercial and recreational fishing. Brent Tibbetts presented the proposed management measures, including minimum size limits for nine species, a total ban on harvesting the bumphead parrotfish (*Atuhm*), a licensing and catch reporting program, and a ban on commercial sales of six key species. He explained the rationale for these measures, the scientific data supporting them, and the community’s responses, noting strong support for most proposals but mixed views on restrictions for nighttime spear fishing. The panelists also addressed questions about generational perspectives in the fishing community, the legislative process for adopting the plan, and the definition of commercial fishing.

“The fisheries management plan comes at a critical time, as we’ve seen fish stocks decline, and we want to ensure sustainable fishing for future generations.”

- Leilani Saban Nadin, Biologist, Sea Grant

these measures, the scientific data supporting them, and the community’s responses, noting strong support for most proposals but mixed views on restrictions for nighttime spear fishing. The panelists also addressed questions about generational perspectives in the fishing community, the legislative process for adopting the plan, and the definition of commercial fishing.



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In closing, Camille provided an update on the development of the Guam Seashore Reserve Plan, explaining its statutory foundation in the Guam Territorial Seashore Protection Act of 1974 and its goal of providing permanent protection for Guam's coastal resources. She described the boundaries of the seashore reserve, the comprehensive and coordinated approach to planning, and the ongoing collaboration with partner agencies and stakeholders. Camille outlined the six elements being addressed in the plan: land use, conservation, public access, recreation, population, and education or scientific use, and expressed optimism about finalizing the plan and unlocking new funding opportunities.

“We’re working with partner agencies and soon the public to develop a comprehensive, coordinated, and enforceable seashore reserve plan that will affect everyone.”

- Camille Quichocho, Biologist, Guam Coastal Management Program

Audience questions and the corresponding responses from the session:

An audience member asked Sarah Chang about the challenges of including military base areas in coastal management policies, specifically referencing Guam's experience, where public access policies could not be applied to military bases, and the Endangered Species Act's critical habitat designations do not apply to those areas. The question was whether Hawaii faces similar issues with military bases and how they are addressed.

Sarah explained that the military is not one of their primary partners and that the relationship between the community, the state, and the military is delicate, with longstanding issues of trust. She noted that while the military is not a main participant in their network, there has been engagement through research collaborations, such as vulnerability assessments funded by the Department of Defense near military installations. She mentioned that the military has recently completed its first coastal hazard plan near the Marine Corps Base on the windward side, and it will be interesting to see how that plan is implemented and received.

Another audience member highlighted the importance of federal consistency in coastal management programs, noting that it is a tool for states to review and potentially influence federal activities, including those on military lands. This was acknowledged by the panel, emphasizing the role of federal consistency in coastal management.

An audience member asked about the presence of harmful sunscreen ingredients in daily facial moisturizers and whether these products, which often contain sunblock, are also a concern for reef safety. Olivia confirmed that many daily moisturizers do contain ingredients that are harmful to reefs. She advised that if someone plans to go into the ocean after applying such products, they should look for moisturizers with reef-safe ingredients, though she noted these are less common.

An audience member asked about management planning for ecosystem imbalances, specifically whether there are plans to address situations where certain species have more predators, such as the crown-of-thorns starfish, which threaten coral populations. Olivia responded that Guam has a Crown-of-Thorns Response



Plan, written around 2017 or 2018, which is still used to respond to outbreaks. She also mentioned that the Guam Reef Resilience Plan may address broader ecosystem management issues.

An audience member asked about generational trends in the input received at town hall meetings, specifically whether there were differences in the types of regulations different generations were willing to support and whether gear preferences varied by age. Michael Duenas shared a personal example, noting that both he and his father attended the meetings and sometimes had similar and sometimes differing views. He confirmed that there was significant generational participation and input at the meetings.

An audience member commended the Department of Agriculture for their work and asked two questions: (1) Will the adoption of the new fishing rules go through the AAA (Administrative Adjudication Act) process? (2) Has there been consideration of adopting the fisheries management plan as an element of other statutorily required plans, such as the seashore reserve plan? Michael confirmed that the rules would go through the AAA process. He also stated that, as the plan is finalized, they want to ensure alignment with federal partners, such as the Western Pacific Fisheries Management Plan, and that they are considering how to integrate the plan with other statutory planning products.

Another audience member asked about commercial fishing, noting that many locals rely on commercial fishers for their seafood, and wondered if there is a way to ensure continued access to fish for the community. Michael explained that defining a commercial fisherman is a key question being addressed. He suggested that having or applying for a business license to sell fish would make someone a commercial fisherman, while those who sell fish only to recover costs (to neighbors or friends, but not to vendors or restaurants) would be considered artisanal fishers. He emphasized that the definition is still being refined with community input.

Plenary 6- Flood Policy and Storm Water Management

This plenary session brought together key stakeholders from government agencies, the private sector, and regulatory bodies to address the pressing challenges of flood policy and stormwater management in Guam. The session explored integrated and actionable strategies for flood mitigation, focusing on scoping the best approach to ensure Municipal Separate Storm Sewer System (MS4) permit compliance, infrastructure improvements, and interagency collaboration. The session also examined the complexities of applying the CNMI and Guam Stormwater Drainage Manual and the Guam Transportation Stormwater Drainage Manual, enforcement of permit conditions, and the impact of illegal dumping on water quality and flooding. Through collaborative dialogue, the session aimed to identify practical solutions and policy innovations that promoted community resilience and sustainable development across Guam's watersheds.

Facilitator: James Pangelinan, Planner, Guam Coastal Management Program

Panelists: Benny San Nicolas, Flood Plain Manager, Department of Public Works; **Jose Quinata**, Federal Programs Administrator for Division of Highways, Department of Public Works; **Glenn San Nicolas**, Deputy Administrator, Guam EPA; **Maricar Quezon**, Engineer, Guam EPA; **Catherine McCall**, Director of Maryland's Coastal Management Program



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The plenary session on flood mitigation and stormwater management opened with an introduction that set the stage for a series of expert presentations and discussions. The session underscored the critical importance of protecting Guam’s aquifer and marine resources, emphasizing how stormwater management is a common denominator in safeguarding these assets. The panel featured representatives from the Department of Public Works (DPW), Guam Environmental Protection Agency (EPA), and Maryland’s Coastal Management Program, each bringing a unique perspective to the challenges and solutions surrounding stormwater and flood management.

Arnold Jose, from DPW’s Highway Maintenance and Construction Division, delivered a comprehensive overview of the legacy issues facing Guam’s stormwater infrastructure. He described how many properties were developed before the existence of stormwater regulations, resulting in inadequate controls and increased flooding risks. Jose detailed the specific case of the Harmon Industrial Park, where the lack of drainage infrastructure and the prevalence of impermeable surfaces have led to chronic flooding and damage, particularly on Rojas Street. He explained the regulatory limitations, noting that existing laws primarily address new construction and do not provide mechanisms for retrofitting older developments. The high costs and logistical challenges of upgrading infrastructure, such as acquiring easements and dealing with narrow rights-of-way, were highlighted as significant barriers. Jose advocated for expanded post-construction authority, enabling agencies to require retrofits in flood-prone areas, enforce best management practices, and incentivize green infrastructure. He stressed the need for public awareness and policy amendments to close regulatory gaps and build long-term resilience.

“Proactive stormwater management, supported by strong policies and field enforcement, is vital to preventing coastal flooding and protecting our sensitive ecosystems.”

- Peter Bautista, Guam EPA

The technical dimension of stormwater management was addressed by **Peter Bautista**, Chief Engineer at Guam EPA, who stepped in for the technical discussion. He compared the 2006 CNMI and Guam Stormwater Management Manual with the 2010 Guam Transportation Stormwater Drainage Manual, clarifying their respective scopes and the confusion that arises at jurisdictional boundaries. Bautista explained that the former applies to non-transportation projects and is led by the Guam EPA, while the latter is specific to transportation infrastructure and overseen by DPW. He noted that the coexistence of these manuals, each with different best management practice (BMP)

criteria, leads to inconsistencies and delays, especially where public and private projects intersect. Bautista recommended clarifying and aligning the criteria between the two manuals, formally adopting them into Guam law, and ultimately merging them into a unified document. He also emphasized the importance of incorporating updated climate data and rainfall projections into future revisions to ensure infrastructure resilience. Bautista highlighted the availability of Army Corps-developed tools to assist engineers and called for enforceable policies, interagency protocols, and public guidance to streamline stormwater management across sectors.

Glenn San Nicolas, Deputy Administrator of Guam EPA, contributed a focused discussion on the impacts of illegal dumping on stormwater systems and coastal flooding. He outlined the enforcement authorities and collaborative efforts among various agencies to address illegal dumping, which obstructs drainage



systems and introduces contaminants into the environment. San Nicolas described the regulatory framework, including the ability to issue citations and the use of a real-time dashboard to track complaints and enforcement actions. He discussed recent legislative efforts to modernize waste management, such as bills supporting small-scale composting, mandatory waste collection, and hotel property maintenance. San Nicolas also highlighted public education initiatives, including a recycling guide and free bulky waste collection services, aiming to reduce illegal dumping and promote responsible waste disposal. He concluded with a narrative illustrating the journey of a discarded plastic bottle, reinforcing the message

that every piece of litter has an environmental impact and that community engagement is essential for effective stormwater management.

Our coastal program has worked to develop areas where we can directly fund design or planning for storm water and flooding projects. The best thing to do to take advantage of funding uncertainty is to have that slate of projects ready.”

- Catherine McCall, Maryland’s Coastal Management Program

Catherine McCall, Director of Maryland’s Coastal Management Program, provided an external perspective by sharing Maryland’s experience in mapping aging infrastructure, assessing future flooding risks, and prioritizing stormwater projects. Catherine described how Maryland’s coastal communities are deeply invested in water quality and stormwater management due to their proximity to the Chesapeake Bay. She explained that stormwater projects in Maryland are closely tied to regulatory requirements for nutrient and sediment load reductions, with climate change impacts increasingly factored into planning and implementation. Cathrine detailed funding mechanisms that support local resilience

projects, such as risk assessments, master plans, and conceptual designs. She presented a case study from the city of Hyattsville, where mapping and assessment of stormwater infrastructure led to the identification of retrofit opportunities and the development of a prioritized project slate. This approach enabled the city to leverage multiple funding sources and engage the community in resilience efforts. Catherine also highlighted innovative solutions like solar-powered public trash interceptors, which help capture debris before it reaches waterways, demonstrating the value of integrated, community-driven approaches to stormwater management.

The session reflected a collaborative and multi-faceted approach to addressing Guam’s stormwater and flood management challenges, blending technical expertise, regulatory reform, enforcement, public engagement, and lessons learned from other jurisdictions.

Audience questions and the corresponding responses from the session:

During the session, an audience member inquired about whether there were any specific plans to remediate Rojas Street, expressing concern about the persistent flooding and referencing the earlier discussion on regulatory gaps. In response, Arnold Jose explained that there are indeed plans underway, involving collaboration with the Guam Water Works Authority and the securing of grant funding. However, he noted that the project faces significant budgetary challenges, with the estimated cost far exceeding the available funds, largely due to the need for extensive pre-treatment in the area, which is considered a pollution



hotspot. He also mentioned ongoing efforts to acquire land for improvements, but emphasized the complexity and high expense of the project.

Another question came from a farmer who described issues with a compromised bridge near his property, which had been damaged by runoff and poor construction practices. He asked what steps he should take next, given the safety and access problems for his family. **Arnold Jose** responded by assuring the farmer that there is an initiative in progress to address the bridge issue. He requested the farmer's contact information to follow up directly and acknowledged that while a solution is being planned, it is a complicated matter that will take time to resolve.

Another farmer raised concerns about the movement of soil and debris by heavy equipment, which was causing erosion and runoff in his farming area. He questioned the lack of visible enforcement or inspection by government agencies and described the negative impact of mulching operations, which were attracting pests and damaging crops. He asked whether there are regulations and enforcement for these activities, and how such problems could be prevented in the future. **Glenn San Nicolas** responded by clarifying that permits are indeed required for transporting and backfilling soil, and that composting facilities are regulated by the Guam EPA. While he was not familiar with the specific case mentioned, he encouraged the farmer to provide more details for further investigation and explained the process for permitting and enforcement, emphasizing the agency's commitment to compliance and environmental protection.

Plenary 7- GIS Data Integration: Mapping a Resilient Island Future

This plenary showcased practical applications of spatial data integration for managing natural hazards, optimizing resource use, and supporting sustainable development—providing actionable strategies that strengthen institutional capacity and support implementation of the Guåhan 2050 Sustainability Plan.

Facilitator: Matthew Santos, Deputy Director, Bureau of Statistics and Plans

Panelists: Nathan C. Habana, Ph.D., Water & Environmental Research Institute of the Western Pacific; **Rodney Toves**, GIS Manager, Guam Waterworks Authority; **Romina King**, Ph.D., Associate Professor, University of Guam; **Antonio Gumataotao**, Rights of Way Supervisor, Guam Power Authority

Mathew Santos introduced a new public portal designed to provide access to geospatial data. This portal was created last week and is intended to make publicly available data accessible to everyone, including competitors. The site features various maps for planning and real-world applications, such as layers for utilities, land boundaries, and administrative areas. A significant addition is the building footprint layer, which was updated with the assistance of the military's air extraction program and provides a much more accurate count of structures. This improved data can be used to assess housing needs and stormwater management plans. The presentation also highlighted hazard assessment maps, which can estimate the impact of disasters, quantify the number of affected structures, and determine potential financial loss. These maps are a product of a U.S. Army Corps study on shorelines and include historic sites and conservation areas. The maps can be viewed in 3D, which helps with development planning and identifying properties with access issues. Mathew also discussed a draft sustainability plan that shows proposed land uses and concluded by thanking their team for their hard work over the last six years in updating maps that were originally from the 1970s.



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Dr. Romina King, an associate professor of geography at the University of Guam, presented on the UOG Drone Corps' program. The program's core purpose is to increase the number of geospatial datasets for Guam and the region by empowering local pilots to collect data for local scientists and managers. Students from the University of Guam and Guam Community College are encouraged to join the program, which pays them to take a drone knowledge course and their FAA licensing test. Upon passing, students commit to 40 hours of flight time for a resource agency, nonprofit, or university research unit.

Since 2021, the program has graduated 55 FAA-licensed pilots who have flown over 100 missions and logged over 2,000 flight hours. The program's work includes 3D modeling, mangrove and agricultural mapping, and multispectral sensor use to assess plant health. A key accomplishment was the team's swift response after Typhoon Mocha, during which they partnered with the National Weather Service to conduct a damage assessment. They collected over 11,700 photographs that were stitched into high-precision mosaic maps, which helped validate models and provided photographic evidence for residents filing damage claims. The program has also partnered with the University of Hawaii at Manoa to develop an AI model to automatically detect the coconut rhinoceros beetle from aerial imagery. All collected datasets are published on the AO platform, where the students are credited as authors, which helps them build their resumes. Dr. King also mentioned a new professional internship program funded by a NASA grant that pays graduates to work with various agencies.

"This program isn't just about creating geospatial data that's useful for planners, for engineers, but it's also about building capacity, and investing in humans."

- Dr. Romina King, University of Guam

Dr. Nathan C. Habana, WERI (Water and Environmental Research Institute of the Western Pacific), presented a new, large-scale map of Guam's southern and central watersheds. The map, which measures six by eight feet, is the result of six months of work and is highly detailed, showing basins, field areas, watershed divides, and other hydrologic features. This project was based on an earlier 2022 project that analyzed depressions in the northern aquifer. The map is available as a layered PDF on the Guam Hydrologic Survey website and can be used to inform planning, conservation, or development efforts. Ron noted that he collaborated with the Commission on the Chamoru Language and Geographic Names Commission to name the watersheds, which helps to revive cultural and historical knowledge associated with the island's geography. In addition to the watershed map, Dr. Habana also discussed a flood study he created in collaboration with the National Weather Service. He explained how the study was able to replicate a real flood event, and a workshop is planned to share this information with the public. The workshop will cover topics such as aquifer bases and nitrate transport, and will be available to a limited number of attendees.

Rodney Toves, an expert in municipal planning, provided practical advice for individuals considering buying property and gave updates on the Guam Waterworks Authority (GWA). He advised that buying an existing house is often more cost-effective than building on remote land, as a new home would require the owner to pay for the expensive installation of water and sewer lines. Toves also stressed the importance of checking for fire hydrants in a neighborhood, as their presence indicates a larger, more reliable six-inch water line that is crucial for fire safety.



Toves detailed several GWA initiatives, including replacing older metal water tanks with new concrete ones that can better withstand high winds. He also mentioned a program to upgrade two-inch water lines to six-inch lines in certain areas to improve water pressure and fire hydrant access.

Toves also described how GWA uses drones and smoke testing to find breaks in sewer lines and ensure residents are properly connected to the sewer system. The harmless smoke is blown through manholes to reveal illegal sewer connections and breaks in the lines. He concluded by encouraging people to use the GWA website and request a "verification of utilities" to get all the necessary information about a property's connections.

Audience questions and the corresponding responses from the session:

One question was about illegal connections and how drones are being used to address them. Rodney Toves explained that GWA crews use smoke testing to find illegal sewer connections, and they use drones to fly over houses to look for smoke coming from drains, which indicates a connection to the GWA sewer line. He warned that if smoke is seen, they will come knocking to check if the homeowner is paying for sewer service.

"You better be paying for sewer rates because we'll come knocking at your door and find out."

- *Rodney Toves, GWA*

An audience member also raised a question about living in a neighborhood with no fire hydrants. Toves responded by advising people to check for fire hydrants before buying a house, explaining that a lack of hydrants means the main water line is likely only a two-inch line, not the six-inch line needed for adequate fire suppression. He then explained that GWA has a program to install six-inch lines and fire hydrants in such areas.

Toves also received calls from people asking about the nearest water line to their property. He directed them to the GWA website for a "verification of utilities" to get all the necessary information about their property's connections.

Plenary 8: Stewarding Guam's Working Landscapes: Forest Systems and Agriculture Land Features

The plenary session focused on conservation initiatives in Guam, particularly the Guam Forest System Plan, the Sentinel Landscape Program, and the Guam Habitat Conservation Plan (HCP).

Patrick Keeler, Guåhan Sentinel Landscape Program Coordinator, introduced the session and called up fellow panelists: **Christine Fejeran** (Department of Agriculture, Chief of Forestry and Soil Resources Division), **Jeffrey Quitigua** (Department of Agriculture, Acting Assistant Chief, Division of Aquatic and Wildlife Resources), and **Elsé Demeulenaere** (resident specialist for the HCP, affiliated with the Center for Island Sustainability and Sea Grant



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Christine Fejeran began the panel by introducing the Forest Legacy Program and the Guam Forest System Plan. She explained that the Forest Legacy Program is a federal initiative designed to acquire conservation easements on private lands, allowing landowners who are passionate about environmental preservation to protect their property for conservation purposes. Although Guam does not currently have this program in place, Christine outlined the steps being taken to establish it, emphasizing its potential to secure lands for conservation at fair market value, either through title transfer or easement sales. She then shifted focus to the Guam Forest System Plan, which serves as an inventory of lands designated for conservation under local law. Christine described the collaborative process with various government agencies to identify parcels for inclusion, highlighting the plan's role in augmenting the Department of Agriculture's authority to manage these lands without altering ownership. She provided an example of the Taguan Hutton parcel, which is protected for medicinal plants and biodiversity, and discussed ongoing efforts such as biological assessments and habitat restoration. Christine concluded by noting that the plan is in its final regulatory stages and invited stakeholders to a meeting on September 9, 2025, to further discuss conservation goals.

Patrick Keeler followed with a presentation on the Sentinel Landscape Program, a federal partnership involving the USDA, Department of the Interior, and Department of Defense. He explained that the

“These interests converge quite a bit throughout this island... to address the conservation land management and eco-restoration objectives defined for each landscape.”

- Patrick Keeler, Sentinel Landscape Program

program's goal is to support agricultural and forest productivity, conserve natural resources, and enhance military readiness, particularly in areas where these interests overlap. Patrick highlighted that Guam was officially designated as a Sentinel Landscape in February 2025, making the entire island eligible for program benefits due to its unique convergence of conservation and defense interests. He described the program's governance structure, which includes a steering committee composed of federal and local agencies and several working groups focused on stewardship, easement, access, and outreach. Patrick emphasized the collaborative nature of the

partnership, which includes a wide range of organizations and remains open to new members. He outlined the seven goals established by the partnership, such as land protection, habitat enhancement, support for working lands, community collaboration, and military readiness. Patrick concluded by discussing the next steps, which involve formalizing the program's structure, continuing project implementation, and encouraging broader participation from the community and partner organizations.

Else Demeulenaere, representing the Center for Island Sustainability and Sea Grant, presented on the development of the Guam Habitat Conservation Plan (HCP). She explained that the HCP is being designed to balance the needs of economic development with the imperative to protect Guam's unique species and habitats. Else described how the plan will streamline the permitting process for development on non-federal lands by shifting oversight to the Department of Agriculture, thereby reducing the complexity and unpredictability currently faced by developers and landowners. The HCP will cover 17 species, allowing for incidental take permits with strict mitigation requirements to ensure that conservation actions are permanent and effective. Else detailed the plan's approach to establishing a reserve network, which will protect critical habitats and ensure that conservation efforts stay ahead of development. She also discussed



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the extensive stakeholder engagement process, including public information fairs and community input, which has shaped the plan's development. Else concluded by outlining the next steps: finalizing the revised draft of the HCP, holding additional public information events, and moving toward public review and implementation, all with the goal of preserving Guam's biodiversity for future generations.

During the Q&A portion of the session, several audience members posed questions to the panel. One audience member asked about ways to enhance the availability of funding from the Department of Defense (DOD) for conservation efforts, specifically inquiring about additional resources and how to unify requests to the DOD. Derek Brockbank responded by highlighting the DOD's involvement in funding conservation projects, mentioning the DARPA program's investment in artificial coral reefs in Hawaii and the DOD's leading work on invasive species removal on military bases worldwide. He suggested that Guam could learn from these emerging technologies and management approaches for invasive species removal.

Another audience question focused on the partnership between the Sentinel Landscape group and the Habitat Conservation Plan, specifically asking how DOD lands could be included in conservation efforts, given that most of the island's land is non-federal. Patrick explained that the Sentinel Landscape program's work is primarily off-base, as most DOD funding (such as REPI) is designated for off-installation projects. He noted that while the program does not have jurisdiction on military bases, there is active collaboration with federal and local agencies through working groups, and DOD cooperators provide funding for off-base conservation.

A further response came from another audience member (Ben), who shared that there are ongoing discussions with DOD representatives about future conservation strategies, including the possibility of connecting conservation areas within and outside military lands. He described a vision for linking specific areas on Guam to create larger, contiguous conservation parcels, indicating that such collaborations are being actively explored.

Overall, the panelists' responses emphasized the importance of partnerships, the current limitations and opportunities for DOD involvement, and ongoing efforts to integrate conservation strategies across different land jurisdictions on Guam.

“The Guam HCP actually creates that balance... between sustainable economic development while actually protecting our natural resources and their species in perpetuity.”

- Else Demeulenaere, Guam Sea Grant



Plenary 9: Strengthening Regional Coordination: CZMA Federal Consistency Across the Marianas

This session explored the evolving role of the Coastal Zone Management Act's (CZMA) Federal Consistency provision in shaping regional federal activities across Guam and the Commonwealth of the Northern Mariana Islands (CNMI). Coastal Programs from both jurisdictions presented key case studies—such as the Mariana Islands Training and Testing (MITT/MIRC) and the Endangered Species Act Coral Critical Habitat Designation—which highlighted coordination challenges and successes. Panelists provided a comparative analysis of Guam and CNMI Coastal Zone Management Act (CZMA) coordination frameworks, offering insights into current practices and identifying areas for synergy. Looking ahead, the panel examined anticipated federal initiatives, including Bureau of Ocean Energy Management (BOEM) leasing and the prospect of seabed mining, and discussed proactive coordination strategies. An interactive Q&A session encouraged dialogue, fostering collaboration and alignment for future federal actions in the region.

Regional Facilitator: John Ryan-Henry, Senior Policy Analyst, Coastal States Organization

Panelists: Arthur Charfauros, Planner and Federal Consistency Coordinator, CNMI Division of Coastal Resources Management; **Augustine Diaz**, Permitting Manager, CNMI Division of Coastal Resources Management; **Louise Pascua**, Biologist, Guam Environmental Protection Agency (GEPA)

Jeffrey S. Quitugua, Acting Assistant Chief, Department of Agriculture, Division of Aquatic and Wildlife Resources; **Esther Taitague**, Federal Activities Planner, Guam Coastal Management Program, Bureau of Statistics and Plans.

Esther Taitague, GCMP Federal Consistency Planner and the panel's moderator, provided a foundational overview of the Guam Coastal Management Program (GCMP). She explained that the program's establishment in 1979 was a significant step, achieved through a cooperative agreement between the National Oceanic and Atmospheric Administration (NOAA) and the Bureau of Planning Office of the Governor. A unique and critical aspect of the GCMP is that the entire island of Guam is a single, unified coastal zone, simplifying jurisdictional concerns. She detailed the GCMP's legal framework, noting that its authority stems from the Coastal Zone Management Act (CZMA) of 1972 and Guam's own legal code. The program's enforceable policies, which number between 16 and 18 and were adopted by Guam Executive Order 78 Ash 37, are wide-ranging. They cover key areas such as shore development, transportation, and housing, as well as the protection of specific resources like wetlands and ocean ecosystems. She outlined the GCMP's engagement process, which involves a formal interagency intergovernmental memorandum to its network partners and regular quarterly coordination meetings held with federal consistency specialists from Washington, D.C. The latter meetings also include representatives from Hawaii, American Samoa, and the CNMI, fostering a broader regional dialogue.

John Ryan-Henry's Federal Consistency Overview

John Ryan-Henry, a policy analyst and attorney from the Coastal States Organization, provided an expert-level explanation of federal consistency. He defined it as a crucial mechanism that enables a cooperative relationship between the federal government and coastal states. He explained its core principle: any federal action, whether inside or outside the coastal zone, is subject to review if it has a "reasonably foreseeable effect" on coastal land, water, or resources as delineated in the state's program. This "term of art," as he



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called it, includes Guam and the Northern Mariana Islands among the eligible coastal states. He identified federal consistency and NOAA grants as the two primary incentives for states to voluntarily join the CZMA program. John broke down federal actions into three distinct categories, each with its own review process outlined in different subparts of NOAA's regulations:

1. **Federal Permits and Outer Continental Shelf Plans (Subparts D & E):** This applies to permits issued by federal agencies like the Army Corps of Engineers or the Interior Department. The **permit applicant** is responsible for securing the state's consistency review. Examples include dredging permits, exploration approvals, and permits for LNG terminals.
2. **Federal Financial Assistance (Subpart F):** This category covers federal grants or aid given to local communities. The process for reviewing this is distinct from permits and agency activities. An example he provided was federal assistance for housing and infrastructure.
3. **Federal Agency Activities (Subpart C):** This is a residual, or "catch-all," category for all other federal actions. In this case, the **federal agency itself** applies directly to the state for review. John cited examples such as military facility construction, training operations, and fisheries management decisions.

"Federal consistency compels federal agencies to come to the table to coordinate with coastal states on the activities that impact their shores. Fundamentally, federal consistency is the backbone of the coastal zone management."

- John Ryan-Henry, CSO

Review Outcomes and Enforcement

John explained the three possible outcomes of a state's review:

- **Concurrence:** The state agrees, and the activity can proceed as proposed.
- **Conditional Concurrence:** The state agrees, but only if specific conditions are met to ensure consistency. If the proponent accepts these conditions, the federal agency is obligated to enforce them.
- **Objection:** The state finds the action inconsistent.

A central point of his presentation was the standard of "**consistent to the maximum extent practicable.**" If a state objects to a federal agency activity, the agency can still proceed by documenting how its action meets this standard. John stressed that this is a strict requirement, meaning the agency cannot simply cite expense or difficulty. It must point to a specific legal or statutory limitation that prevents full consistency. For permits, an objection means the permit cannot be issued, though the applicant has the right to appeal to the Secretary of Commerce.

The CNMI's Coastal Management Process (Augustine Diaz and Arthur Charfauros). August and Arthur provided a detailed look into the CNMI's Division of Coastal Resources Management (DCRM). They explained that the DCRM is housed under the Bureau of Environment of Coastal Quality, and its legal foundation is Public Law 3-47 of 1983. Gus highlighted that their "enforceable policies" are derived from this law and its regulations, which are designed to protect "sensitive areas" such as mangroves,



shorelines, and conservation sites. Arthur then delved into the procedural aspects, stating that the agency's primary function is regulatory and that the core laws governing their permitting system also serve as the enforceable policies. For larger projects, an "agency board" with representatives from other resource agencies convenes to discuss and establish permit conditions. They then presented two compelling case studies:

1. **DOD Mariana Islands Training and Testing (MITT):** They explained that the vast geographic extent of this activity, covering both jurisdictions, made it a significant federal agency action. The CNMI's DCRM initially **objected** to the Navy's consistency determination, citing a lack of sufficient data and analysis. Through subsequent coordination, they negotiated a **conditional concurrence**, securing commitments from the Navy to conduct more detailed surveys and adhere to specific standard operating procedures.
2. **National Marine Fisheries Service Coral Critical Habitat Designation:** The CNMI received a "negative determination" from NMFS, which asserted that the designation would have "no foreseeable coastal effects." The DCRM promptly **objected**, arguing that the designation would indeed have significant coastal effects, primarily an economic and administrative burden on fishing, recreation, and local government. They noted that this objection, alongside a collective effort from other territories, ultimately led to a substantial revision of the designation.

"We're supposed to promote efficiency between government agencies, including the federal government and the local government."

- Augustine Diaz, CNMI Division of Coastal Resources Management

The Network Partner and Audience Discussion

The panel concluded with an interactive discussion that offered practical, on-the-ground perspectives from Guam's network partners. Jeff Quitigua from the Department of Agriculture shared his agency's review process, explaining that they immediately check the due date and then use GIS data to align the proposed project with their concerns, such as the Endangered Species Act. He stressed the importance of protecting Guam's west coast, which is a primary fishing zone, and incorporating comments related to public access and cultural preservation. Louise Pascua from the Guam Environmental Protection Agency (Guam EPA) described her agency's similar approach, focusing on a deep dive into erosion, sediment control, water pollution, and air pollution regulations. She highlighted the benefit of federal consistency reviews as a "preview" of future projects that will eventually require local permits. Catherine McCall, from Maryland, added a national perspective, describing how her state uses a "Maryland Defense Forum" to foster dialogue with military installations, which has helped create contacts and shared understanding beyond traditional enforcement mechanisms. The discussion collectively reinforced the challenges of tight timelines (e.g., the 30-day window) and the need for greater data transparency from federal agencies to facilitate efficient reviews.

Concluding Remarks and Future Initiatives

In the final moments of the panel, representatives from the Coastal States Organization expressed their thanks, characterizing the visit as an "inspiration" that provided new ideas for addressing common coastal management challenges. Edwin Reyes, Administrator, Guam Coastal Management Program, then concluded by announcing a new strategy for continued engagement: shifting away from the traditional



annual symposium to a series of "micro workshops." He outlined several concrete initiatives that are either underway or will begin soon:

- The **Guam 2050 Sustainability Plan** is in its final stages and will be rolling out in the coming weeks with an aggressive timeline for approval.
- Work is commencing on a **two-month watershed plan** to protect a special place.
- An education-focused initiative is being developed to address **wildland arson**.
- Workshops will be convened with the **Northern Guam Aquifer's regulatory members** to ensure the protection of this critical resource.
- A **Seashore Reserve Plan** is being developed to manage Guam's marine spatial areas.
- An update to the **flood manual** is in progress to clarify regulatory distinctions.
- The use of **GIS tools** will continue to be a priority for decision support.
- A workshop will be held next month to promulgate rules for forest systems.

Edwin concluded by thanking all the panelists, especially those from the visiting Coastal States Organization, and reiterated his team's commitment to strengthening regional coordination and achieving their mission.

Keynote Address: **Derek Brockbank, Executive Director, Coastal States Organization**



Derek Brockbank, Executive Director of the Coastal States Organization (CSO), provided an in-depth overview of the current federal funding landscape and its implications for coastal management in Guam and other U.S. territories. CSO is a nonprofit organization representing 34 states and territories with coastal zone management programs, advocating their interests in Washington, D.C., and facilitating peer-to-peer exchanges among states to share lessons learned and best practices. Brockbank emphasized the organization's role in maintaining relationships with federal agencies, including NOAA, FEMA, the Fish and Wildlife Service, EPA, BOEM, and the Army Corps of Engineers, to inform rulemakings,

policy guidance, and funding decisions.

“The past four years brought a big flush of cash through infrastructure and climate legislation, and that has been a game-changer for coastal programs.”

- Derek Brockbank, Executive Director, CSO

Brockbank provided a detailed explanation of the federal budget process, noting that while the White House proposes a budget, Congress holds the purse strings and ultimately determines funding allocations. The annual appropriations process, typically beginning with the president's budget proposal in February or March, involves 12 appropriations bills managed by subcommittees covering various agencies. In practice, most appropriations bills are not completed on time, leading to continuing resolutions or, occasionally,



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government shutdowns. Brockbank highlighted additional sources of federal funding, including supplemental appropriations for disasters or issue-specific priorities, as well as reconciliation bills, which allow Congress to pass major budget-related measures by a simple majority vote.

Over the past four years, coastal funding levels have generally been strong, particularly due to the Bipartisan Infrastructure Law (BIL) and the Inflation Reduction Act (IRA), which provided significant new resources beyond annual appropriations. These funds enabled states and territories, including Guam, to expand staffing and enhance coastal management programs. In FY25, funding for Guam's coastal programs, including the Coastal Zone Management program and Sea Grant, remains stable under a continuing resolution, although some supplemental funds have been partially rescinded. Looking ahead to FY26, Congress has proposed maintaining flat funding for coastal programs, which represents a positive

“Agencies are shifting priorities: aquaculture and industry support are in; climate and environmental justice are out.”

- Derek Brockbank, Executive Director, CSO

outcome given earlier administration proposals to reduce or eliminate certain programs. Brockbank noted ongoing concerns regarding potential rescissions, which could allow the administration to withhold funds authorized by Congress.

Changes within federal agencies also present challenges. NOAA has experienced significant staff reductions, particularly among probationary employees, and proposed organizational changes, including the potential elimination of the Office of Research, which could affect

climate research and Sea Grant administration. Grants and contracts over \$100,000 now require Secretary of Commerce review, slowing funding processes. FEMA has faced substantial cuts to mitigation programs, such as the Building Resilient Infrastructure Communities program, and there is ongoing discussion of shifting disaster response funding directly to states. Other agencies, including the Department of the Interior, Fish and Wildlife Service, and EPA, are experiencing similar transitions.

Brockbank also highlighted shifting federal priorities that affect grant eligibility. Programs and projects related to environmental justice, diversity, equity, inclusion, climate change, resilience, and nature-based solutions are currently deprioritized, whereas aquaculture, industry support, and job creation are receiving increased attention. He encouraged coastal managers to strategically frame projects in ways that align with these priorities to enhance the likelihood of federal support. In conclusion, Brockbank emphasized the importance of understanding the federal funding process, monitoring evolving agency priorities, and leveraging supplemental and one-time funding opportunities to strengthen coastal management efforts in Guam and across the states and territories.



Special Presentation: John Ryan-Henry, Senior Policy Analyst, Coastal States Organization



John Ryan-Henry provided a comprehensive briefing on recent and ongoing updates to the implementation of the National Environmental Policy Act (NEPA) and their implications for federal agency decision-making, particularly in the context of coastal management and planning in Guam. Henry emphasized that his role was to inform and facilitate discussion rather than provide legal advice or speak on behalf of federal agencies.

John began with a brief overview of NEPA, noting its dual purpose: first, to document the

environmental, social, and economic impacts of federal actions, and second, to ensure robust public engagement in federal decision-making. He highlighted that NEPA establishes procedural obligations rather than substantive environmental standards, contrasting it with laws such as the Clean Water Act or Endangered Species Act.

“NEPA requires agencies to document and justify decisions, account for impacts, and engage the public—a trade-off with efficiency and certainty.”

- John Ryan-Henry, Coastal States Organization

The presentation traced NEPA’s regulatory history from its 1970 enactment through the establishment of the Council on Environmental Quality (CEQ), and subsequent 1978 regulations under President Carter. For decades, NEPA implementation was largely stable, guided by case law and minor regulatory adjustments. Significant changes began during the first Trump administration, which introduced limits on timeframes, page lengths, and the scope of impacts considered, establishing CEQ regulations as a “ceiling” for compliance. The Biden administration later reversed some of these changes through a two-phase rulemaking, restoring requirements to consider cumulative and secondary impacts, fill data gaps, and treat CEQ regulations as a “floor” for compliance.

Recent developments under the second Trump administration and associated court decisions have again reshaped NEPA implementation. Key judicial cases—though not yet binding precedent- challenged the authority of CEQ regulations, opening a pathway for federal agencies to revise or eliminate reliance on these rules. In response, Executive Order 14154 directed agencies to remove CEQ regulations and adopt standalone NEPA procedures, supported by agency-specific guidance rather than binding regulations. Agencies, including Commerce, Interior, Transportation, Energy, Agriculture, and Defense, have since updated their NEPA procedures, often replacing formal regulations with flexible guidance manuals.

John provided a detailed example of the Department of Defense’s updated guidance, which rescinded prior agency-specific regulations and issued a 40-page guidance document. Key changes include discretionary release of draft environmental documents, variable public comment timelines, limitations on collaboration with state and local agencies, and prioritization of programmatic reviews, tiered analyses, and reliance on prior reviews. NEPA analyses are now limited to effects within the agency’s statutory authority, with



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“major federal action” defined primarily by federal investment size, and a narrower focus on causally related impacts. The guidance also limits new scientific research unless justified by essential need and cost reasonableness.

Additional developments include the 2025 One Big Beautiful Bill Act, which introduced an optional “fast-track” NEPA review process for external proponents willing to fund accelerated reviews, as well as several executive orders promoting interagency data sharing, standardization, and acceleration of projects related to energy and major investments. John stressed that while statutory obligations remain, the interpretation and flexibility in compliance have increased, meaning implementation will vary project by project and require careful early consultation.

John concluded by noting that these evolving NEPA procedures create both opportunities and uncertainties for coastal management. Agencies are incentivized to experiment with new approaches, rely on programmatic and categorical reviews, and adopt flexible, top-down directives. Coastal managers will need to closely monitor agency actions, engage in early consultation, and adapt planning processes to align with federal expectations under this rapidly changing regulatory landscape.



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Appendix I: Presentation Links and References

PLENARY 1

Comprehensive Development Planning: Guåhan 2050 Sustainability Plan

PRESENTATIONS (PDF):

- [Matt Santos, Deputy Director, Bureau of Statistics and Plans](#)
- [Jay R. Merrill, MRD \(Lynker\) Highlights and Implementation Strategy of the Guåhan 2050 Sustainability Plan \(G50SP\)](#)
- [Celine Cruz, Chief Planner, Guam Department of Land Management](#)
- [Catherine McCall, Maryland Department of Natural Resources](#)
- [Henry Bell, Senior Coastal Planner, Washington Department of Ecology](#)

PLENARY 2

Linking Ecosystem Services to Economic Vitality in Tumon Bay

PRESENTATIONS (PDF):

- [Chris \(Myeong-Ho\) Yeo, Ph.D., P.E., Water & Environmental Research Institute of the Western Pacific](#)
- [Renato Martinez, AIA, NCARB LEED BD+C](#)
- [Glenn San Nicolas, Deputy Administrator, Guam Environmental Protection Agency \(GEPA\)](#)
- [Shaylin Salas, Forestry and Soils Resource Division, Guam Department of Agriculture](#)
- [Michael Friis, Director, Resource Policy Bureau, Wisconsin Department of Administration](#)

PLENARY 3

Addressing the Root Causes of Wildland Arson- A Shift in Societal Tolerance of Wildland Fires

PRESENTATIONS (PDF)

- [Christine Fejeran, Guam Department of Agriculture, Forestry & Soil Resource Division Chief](#)
- [Edward Artero, Guam Fire Department, Fire Prevention Bureau Chief](#)
- [James Pangelinan, Planner, Guam Coastal Management Program](#)
- [David Green, Senior Deputy Director, Texas General Land Office](#)

PLENARY 4

Northern Guam Lens Aquifer: The Compliance Void: Challenges with Water Regulations and Enforcement

PRESENTATIONS (PDF)

- [Jacob Miller, Guam Waterworks Authority](#)
- [George Watson, Senior Engineer, Guam Waterworks Authority](#)
- [Yong Sang \(Barry\) Kim, PhD, Water and Environmental Research Institute \(WERI\)](#)
- [Michael Friis, Director, Resource Policy Bureau, Wisconsin Department of Administration](#)



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PLENARY 5

Integrated Marine Planning in the Pacific

PRESENTATIONS (PDF)

- [Camille Quichocho, Guam Coastal Management Program](#)
- [Sarah Chang, Hawaii Coastal Zone Management Program, Office of Planning and Development](#)
- [Olivia Banez, Guam Coral Reef Initiative](#)
- [Michael Duenas, Department of Agriculture, Division of Aquatic and Wildlife Resources](#)
- [Brent Tibbatts, Division of Aquatic and Wildlife Resources](#)
- [Leilani Sablan Naden, University of Guam, Sea Grant](#)

PLENARY 6

Flood Policy & Storm Water Management

PRESENTATIONS (PDF)

- [Arnold Jose, Department of Public Works](#)
- [Glenn San Nicolas, Guam EPA](#)
- [Maricar Quezon, Guam EPA](#)
- [Catherine McCall, Maryland Coastal Management Program](#)

PLENARY 8

Stewarding Guam's Working Landscapes: Forest Systems and Agricultural Land Futures

PRESENTATIONS (PDF)

- [Patrick Keeler, Guåhan Sentinel Landscape Program](#)
- [Christine Fejeran, Guam Department of Agriculture](#)
- [Else N. Demeulenaere, Ph.D., UOG CIS / Sea Grant](#)

PLENARY 9

Strengthening Regional Coordination: CZMA Federal Consistency Across the Marianas

PRESENTATIONS (PDF)

- [Joint presentation: John Ryan-Henry \(CSO\), Augustine Diaz \(CNMI\), Arthur Charfauros \(CNMI\), Esther Taitague \(GCMP\), Jeffrey Quitigua \(DOAG\), Louise Pascua \(Guam EPA\)](#)

KEYNOTE ADDRESS

What's Going on with Federal Funding?

PRESENTATION (PDF)

- [Derek Brockbank, Executive Director, Coastal States Organization](#)



SPECIAL PRESENTATION

Latest Changes to the National Environmental Policy Act (NEPA)

PRESENTATION (PDF)

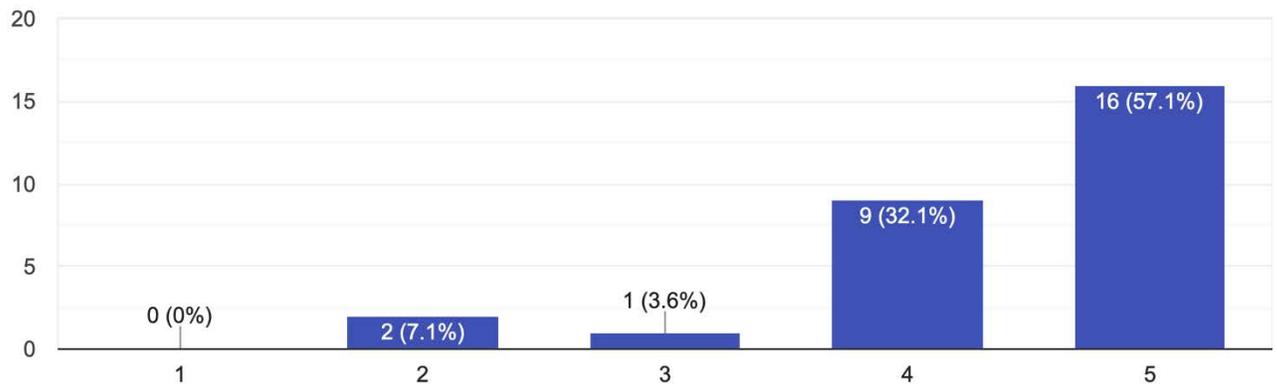
- [John Ryan-Henry, Senior Policy Analyst, Coastal States Organization](#)

Appendix II: Post-Conference Survey

A post-conference survey was conducted with a total of 28 respondents. The results of the survey are as follows:

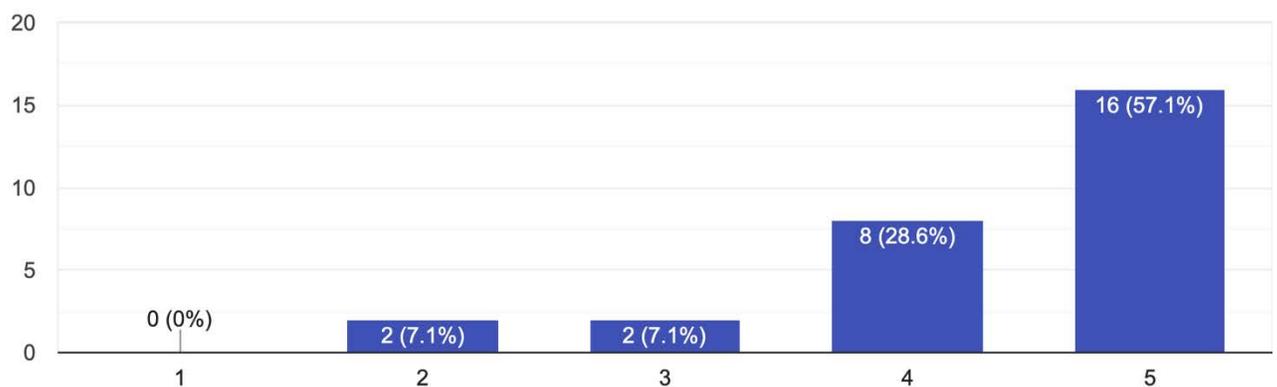
Overall, how satisfied were you with the Symposium?

28 responses



How relevant and helpful do you think it was for your job?

28 responses





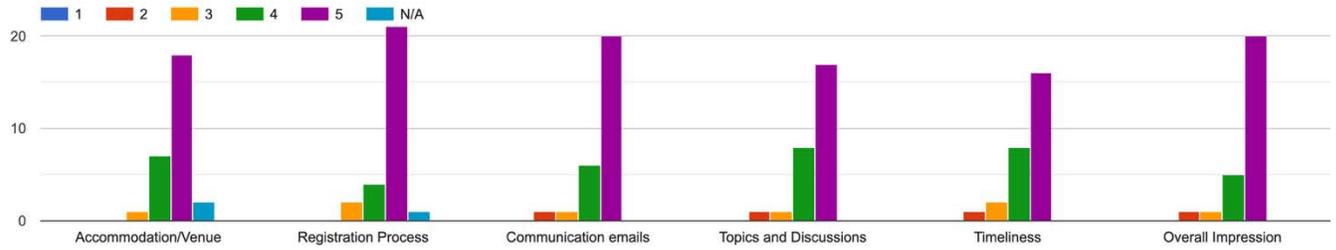
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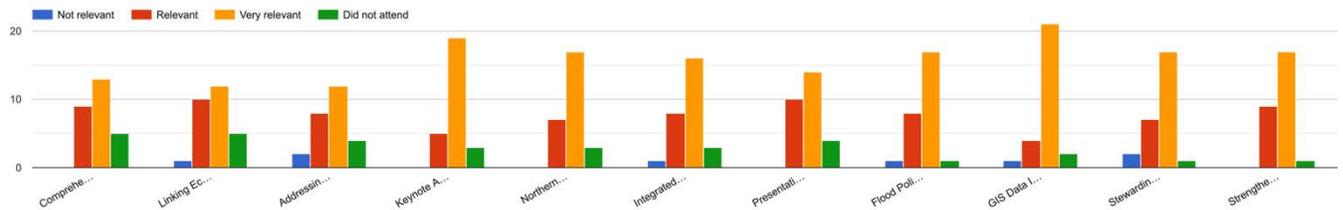
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How satisfied were you with the Symposium Logistics?

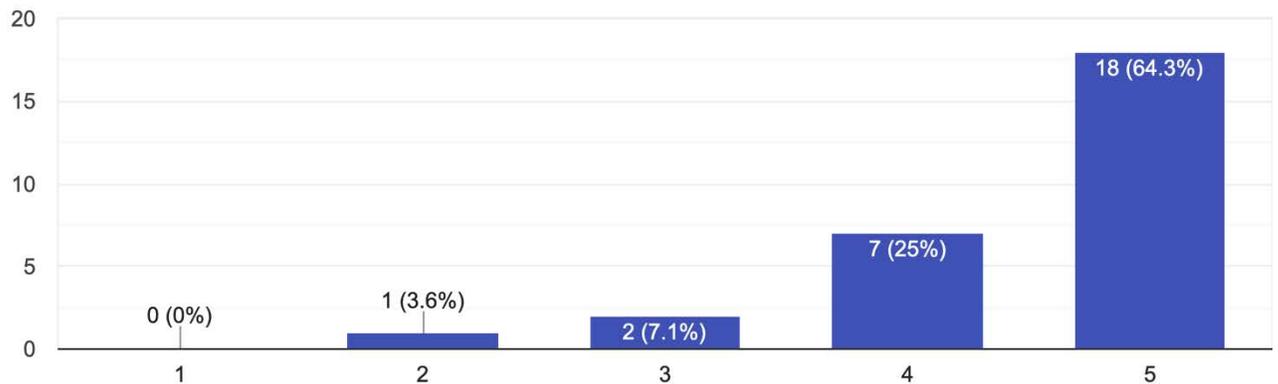


Which Sessions did you find most relevant?



How satisfied were you with the overall sessions content?

28 responses



We also asked the respondents:

Q: What were your key takeaways from this event?

- *A lot of the same problems that need to be addressed seem to be consistent from year to year.*
- *Managing the effects of water on our coasts and environment requires lots of planning and coordination.*



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- *I strongly believe next year's PS should invite the different related industries to build on their input. As such, the symposium's goals can be further expanded to link regulatory requirements to encourage good and proper development. The PS should also focus on the latest technology available to support government goals of protecting natural resources, esp. our NGLS. The PS seemed to be focused on a small pocket of the audience. Couldn't hear the speaker for the most part. Thank goodness for the PowerPoint.*
- *The mapping systems that were shared and discussed.*
- *Sentinel Landscapes Partnership*
- *There were a lot of plans for environmental agencies and sustainable practice, situating these aspects of GovGuam oversight as top priorities and exemplify BSP collaboration, but it was much less so clear on plans for the private sectors such as tourism and the integration of sustainable measures such as circular economy within those sectors, and there was no presence of GovGuam SHPO or DCA so we really don't know how the islands history and CHamoru culture figure into a lot of these plans. So plans from various sectors in the political economy on Guam still appear to be existing in too separate silos, yet there is evidence of greater cohesion from environmental agencies, which is a critical core of all planning considerations on Guam.*
- *Future government agency projects, eg, Gill Breeze infrastructure very informative and educational.*
- *Great networking opportunity with people you don't connect with regularly.*
- *Networking and awesome knowledge gained (food was good).*
- *CSO updates on NEPA. Failure of Planners to replace Guam's ancient zoning code and TLUC process.*
- *Great Slides to present and very informative on the concerning topics*
- *Awareness, Sodium chloride levels in our drinking water, arson, erosion, flooding & sewage issues, etc...*
- *Storm drainage design criteria have a lot of room for improvement. GIS Resources are continuously being developed*
- *I was only able to attend the second day. It was very good. Good to have updates on some of Guam's coastal recovery programs*
- *The need to continue to address concerns that are adversely affecting the island.*
- *Program integration and complementary work are vital to advancing the sustainability plan and addressing pressing issues.*
- *Interesting information from UOG WERI's study...*
- *DPW was able to answer my question. Hopefully, they will come out and give me the assistance needed*
- *Regulations require modernization to make them more relevant and enforceable; Agencies must communicate and coordinate to implement local laws effectively*
- *It was very educational and interesting topics that were being discussed.*
- *Planning and communication between all the networks and partners are key!*

Q: Any additional comments regarding the presentations, sessions, or overall agenda?

- *Some presentations could have been more polished. At times, presenters didn't seem to put much thought into making slides that efficiently convey main points. A lot of giant blocks of text.*



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- *The Q&A portion can probably be done better by having folks write questions on a card, and then have the moderator select however many are needed during that portion of the Q&A.*
- *The Government of Guam agencies' presentations were informative. Off-island speakers shared relatable topics with Guam.*
- *The Drone Club was great to learn about. Great content overall. The sessions need to be timely.*
- *Failure of Planners to address Guam's ancient zoning code and TLUC process. Needed more DoD participation, vs. Community development in Maryland*
- *Great time*
- *A bit more time for discussion would be great. Overall, appreciated the range of topics and variety of speakers.*
- *More farmers participating*
- *Lunch presentations do not allow the presenters full attention*

Q: Any overall feedback for the event?

- *The event was well-run, but a lot of the issues discussed seem to be fairly consistent over the years, i.e.,. Not enough seems to have been done to address those issues.*
- *Excellent*
- *Excellent with plenty of informal interaction*
- *My first time attending this symposium. Both days were very well organized.*
- *Keep sessions on time as scheduled on the agenda.*
- *Great job on everything, excited for next year's event*
- *I enjoyed the panel discussions the best*
- *More collaboration on island sustainability, Farmer /Livestock Producers*
- *Good event. Appreciated the attendance of the CSO members.*

Q: What subject matter or topic would you like to see presented in future Planners' Symposiums?

- *Logistics, organizational change, implementation. How to turn ideas and plans into policies and processes that make a meaningful, measurable impact on the problems that have proven consistent from year to year. If nothing else, at least have a discussion on the barriers to change in policy, processes, and implementation. Is it a matter of political will? Administrative inefficiency? Lack of government funding? Lack of private capital? Lack of buy-in from the private sector and the population in general? I think if we put energy into identifying and discussing ways to overcome these barriers, we can make a lot of progress toward addressing these issues that seem to persist through the years.*
- *Stormwater and groundwater*
- *If possible, perhaps create a 3 year agenda that participants can look forward to and see how to add other government agencies whose plans have not been seen much movement and need to be updated (e.g. DPR Statewide Comprehensive Outdoor Recreation Plan) while linking it to Coastal Management, the venue and stakeholders at the symposium can provide valuable input in getting those plans at least jumpstarted or finalized.*
- *Historic preservation*
- *There were a lot of plans for environmental agencies and sustainable practice, situating these aspects of GovGuam oversight as top priorities and exemplify BSP collaboration, but it was much less so clear on plans for the private sectors such as tourism and the integration of sustainable*



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measures such as circular economy within those sectors, and there was no presence of GovGuam SHPO or DCA so we really don't know how the islands history and CHamoru culture figure into a lot of these plans. So plans from various sectors in the political economy on Guam still appear to be existing in too separate silos, yet there is evidence of greater cohesion from environmental agencies, which is a critical core of all planning considerations on Guam.

- *Circular economy, aquaculture, and coastal issues.*
- *All*
- *1) Alternatives to replace Guam's ancient zoning code and TLUC process. 2) Regional involvement of Guam with SPC, SPREP, PI Forum, FAA, W&C Pacific Fisheries, and Western Pacific Fisheries Management Council. 3 Status of DOD plans and projects for Guam and the region. 4) Changes in federal programs and funding impacting Guam and the region 5) Climate Change impacts on natural resources and on island developments*
- *Hotel coastal build-up and beach access near Tumon*
- *Addressing the need to install power lines underground for resilience. The removal of the decommissioned power plants*
- *Implementation of the sustainability plan and how it integrates with other resource management initiatives.*
- *Emergency Management planning at all levels of Weather, Tsunamis, Earthquakes, Civil and Military Cohesiveness, and collaboration*



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Appendix III: Flyer and Detailed Agenda

The Bureau of Statistics and Plans, Guam Coastal Management Program Presents:

10th ASSEMBLY OF PLANNERS SYMPOSIUM

GUAM'S COASTAL ZONE POLICIES:

EXAMINING THE VITAL ROLE OF CODES, ORDINANCES, AND ENFORCEMENT IN FOSTERING ECONOMIC GROWTH, COMMUNITY EMPOWERMENT, AND MANAGING COASTAL RESOURCES.

Why this Focus

The theme for this year's symposium is built on GCMP's core objectives, which are to work toward the effective administration and enforcement of Guam's natural resource-related laws and regulations. The 10th Assembly of Planners Symposium reinforces the Guam Coastal Management Program's mission to protect coastal resources through sound governance by highlighting the importance of enforceable, well-designed laws. With growing challenges to our coasts and communities, shaping policies is essential to ensuring Guam remains vibrant, sustainable, and prepared for the future.

Plenary Topics

- Comprehensive Development Planning: Capacity, Authority, and Implementation of the Guahan 2050 Sustainability Plan
- Linking Ecosystems to Economic Vitality in Tumon Bay
- Addressing the Root Causes of Wildfire Arson: A Shift in Social Tolerance of Southern Watershed Wildland Fires
- Northern Guam Lens Aquifer
- Marine Planning
- GIS Data Integration for Developers, Home Owners and Natural Resource Managers
- Guam Forest System and Agriculture Lands
- Strengthening Regional Coordination: CZMA Federal Consistency Across the Marianas
- And More!

2-Day Symposium

AUGUST 19 & 20, 2025 | 8 AM - 5 PM
Venue: Hyatt Regency Guam

Keynote Speaker



Derek Brockbank
Executive Director,
Coastal States Organization to speak
on the outlook of Federal Funding

Special Presentation:



John Ryan-Henry
Senior Policy Analyst, Coastal States Organization to provide talks on implications on the White House Council on Environmental Quality (CEQ) issuance of an interim final rule rescinding government-wide procedural standards for NEPA



Register Now!

Visit: bsp.guam.gov/aop2025/
No cost to attend but space is limited.
For more information contact 671-475-9647
or email gcmp@bsp.guam.gov



Made possible with funding from NOAA CZM Grant #NA24NOSX419C0027



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10th ASSEMBLY OF PLANNERS SYMPOSIUM

Day 1 - August 19, 2025

7:30 am - 8:40 am

REGISTRATION / CHECK-IN

8:40 am - 9:00 am

OPENING REMARKS

Introductory Remarks:

Edwin Reyes, Administrator, Guam Coastal Management Program

Welcoming Remarks:

Lola Leon Guerrero, Director, Bureau of Statistics and Plans

Opening Remarks:

Lieutenant Governor Joshua Tenorio

9:00 am - 10:20 am

PLENARY 1

Comprehensive Development Planning: Guåhan 2050 Sustainability Plan

The Guåhan 2050 Sustainability Plan (G50SP) seeks to transcend traditional zoning approaches by fostering integrated land use planning that reflects Guam's unique environmental, cultural, and socioeconomic dynamics. This session will cover the current state of the Guåhan 2050 Sustainability plan, the progress that has been made, and the next steps after completing the 1st draft. This session will also include speakers who have developed and implemented comprehensive development plans and cover insights and best practices that Guam could benefit from.

Facilitator: **Matt Santos**, Deputy Director, Bureau of Statistics and Plans

Panelists:

Jay R. Merrill, MRD (Lynker) Highlights and Implementation Strategy of the Guåhan 2050 Sustainability Plan (G50SP)

Celine Cruz, Chief Planner, Department of Land Management

Catherine McCall, Office Director for Climate Adaptation and Stewardship, Maryland Department of Natural Resources

Henry Bell, Senior Coastal Planner, Washington Department of Ecology

Renato "Tato" Martinez, AIA Marianas: Resilience by Design: Aligning Land Use, Housing, and Community Development for Guam's Future

10:20 am - 10:40 am

BREAK

10:40 am - 12:00 pm

PLENARY 2

Linking Ecosystem Services to Economic Vitality in Tumon Bay

This plenary brings together a multidisciplinary panel of experts, practitioners, and stakeholders to chart a path forward for the Tumon Bay Watershed Management Plan. Recognizing Tumon Bay's critical role in Guam's economic vitality and ecological health, the session will explore strategies to balance responsible development with the conservation of natural resources. Key topics include the integration of best management practices (BMPs) for stormwater pollution prevention, the adoption of nature-based solutions, and the importance of inter-agency coordination and stakeholder engagement. The plenary will also address the challenges of data collection, regulatory compliance, and infrastructure maintenance, drawing on local and external case studies. By fostering collaboration among architects, engineers, scientists, government agencies, and the tourism sector, the session aims to develop actionable goals and innovative solutions that ensure the long-term sustainability and resilience of the Tumon Bay watershed.

Facilitator: **James Pangelinan**, Planner, Guam Coastal Management Program

Panelists:

Chris (Myeong-Ho) Yeo, Ph.D., P.E., Associate Professor, Water & Environmental Research Institute of the Western Pacific

Inna Wiese, Principal Architect and Senior Project Manager, GHD

Glenn San Nicolas, Deputy Administrator, Guam Environmental Protection Agency (GEPA)

Margaret Aguilar, Senior Program Coordinator, Guam Environmental Protection Agency (GEPA)

Christine Fejeran, Forestry and Soils Resource Division Chief, Guam Department of Agriculture

Régine Biscoe Lee, President & CEO, Guam Visitors Bureau

Michael Friis, Director, Resource Policy Bureau, Wisconsin Department of Administration

12:00 pm - 1:00 pm

NETWORKING LUNCH



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Day 1 - August 19, 2025 (Cont.)

1:00 pm - 2:00 pm

PLENARY 3

Addressing the Root Causes of Wildland Arson:

A Shift in Societal Tolerance of Wildland Fires

This session will analyze how societal attitudes and perceptions of wildfires influence arson incidents and discuss strategies for cultural change. Emphasizing the importance of community engagement, education, and policy reforms, the panel aims to identify foundational approaches to reduce arson rates. Ultimately, this discussion seeks to foster a societal shift towards greater awareness and responsibility in wildfire prevention, promoting resilience and safety in vulnerable communities.

Facilitator: **Christine Fejeran**, Guam Department of Agriculture, Forestry & Soil Resource Division Chief

Panelists:

Edward Artero, Guam Fire Department, Fire Prevention Bureau Chief

James Pangelinan, Planner, Guam Coastal Management Program

David Green, Senior Deputy Director, Texas General Land Office

Sgt Roy N. Henricksen, Guam Police Department

Millie Erguiza, Senior Planner, Bureau of Statistics and Plans

2:00 pm - 2:30 pm

KEYNOTE ADDRESS

Derek Brockbank, Executive Director, Coastal States Organization

What's going on with federal coastal funding? Following two years of abundant support, coastal programs now face major funding threats due to overlapping legislative actions, administrative decisions, and proposed budget cuts. Derek will provide a critical update on the uncertain future of federal coastal funding in 2025. His talk will explain how recent developments, including FY'25 and FY'26 budget processes, potential rescissions, and impoundments which are affecting key funding sources such as annual appropriations, Bipartisan Infrastructure Law, and Inflation Reduction Act funds. While focused on NOAA and the U.S. Army Corps of Engineers, the presentation will also look ahead at possible legislative actions and implications for the long-term sustainability of coastal resilience funding.

2:30 pm - 3:00 pm

BREAK

3:00 pm - 4:20 pm

PLENARY 4

Northern Guam Lens Aquifer

The Compliance Void: Challenges with Water Regulations and Enforcement

Water is fundamental to life, yet the frameworks that govern its management often fall short. Inconsistent regulations laws, limited enforcement, access to data, rising cost of construction and complex political realities. This panel addresses the gap between regulations and real-world implementation and the cost of the utilities. Issues to be covered include the following: (1) **Closing the Loop: Integrating Application Review Committee Recommendations into the Building Permit Process;** (2) **Prioritize aquifer protection through infrastructure projects and planning;** (3) **Protecting the Health and Sustainable Yield of Northern Guam's Lens Aquifer.**

Facilitator: **Evangeline "Vangie" Lujan**, Senior Regulatory Analyst, Guam Waterworks Authority

Panelists:

Prudencio Aguon, Guam Waterworks Authority

Jacob Miller, Lead Engineer, New Area Development and Permitting, Guam Waterworks Authority

George Watson, Senior Engineer, Guam Waterworks Authority

Joseph Calvo, Civil Engineer, Guam Waterworks Authority

Yong Sang (Barry) Kim, PhD, Associate Professor of Water Engineering, Water and Environmental Research Institute (WERI)

Michael Friis, Director, Resource Policy Bureau, Wisconsin Department of Administration

Brett Railey, Guam Waterworks Authority

4:20 pm - 5:00 pm

DAY ONE WRAP-UP AND NETWORKING



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10th ASSEMBLY OF PLANNERS SYMPOSIUM

Day 2- August 20, 2025

8:00 am - 9:00 am	REGISTRATION & CHECK-IN
9:00 am - 10:20 am	PLENARY 5
<p>Integrated Marine Planning in the Pacific</p> <p>This plenary highlights collaborative approaches to marine planning and policy across the Pacific region. Hawaii's Ocean Resources Management Plan demonstrates a statewide, multi-agency framework to address coastal challenges through shared priorities and public engagement, focusing on coastal hazards, land-based pollution, and marine ecosystems. Guam's presentations will examine key coral reef protection policies—both local and federal—identifying strengths and opportunities for improvement. In addition, an update on Guam's Fisheries Management Plan will showcase progress in community-driven resource management, recent town halls, and next steps toward sustainable fisheries planning.</p> <p>Facilitator: Camille Quichocho, Biologist, Guam Coastal Management Program</p> <p>Panelists: Sarah Chang, Senior Project Analyst, Hawaii Coastal Zone Management Program, Office of Planning and Development Olivia Banez, Coral Reef Policy and Communications Coordinator, Guam Coral Reef Initiative Michael Duenas, Fisheries Supervisor, Department of Agriculture, Division of Aquatic and Wildlife Resources Brent Tibbatts, Fisheries Biologist, Agency: Department of Agriculture, Division of Aquatic and Wildlife Resources Leilani Sablan Naden, Biologist, University of Guam, Sea Grant</p>	
10:20 am - 10:40 am	PRESENTATION
<p>John Ryan-Henry, Senior Policy Analyst, Coastal States Organization</p> <p>This presentation unpacks the latest changes to the National Environmental Policy Act (NEPA) procedures following Presidential Executive Order 14154 and new federal guidance issued in July 2025. It will focus on updated Defense Department policies, cross-agency shifts, and legislative amendments under the One Big Beautiful Bill Act, highlighting key implications for coastal management, permitting, and federal consistency review.</p>	
10:40 am - 11:00 am	BREAK
11:00 am - 12:00 pm	PLENARY 6
<p>Flood Policy & Storm Water Management</p> <p>This plenary session brings together key stakeholders from government agencies, the private sector, and regulatory bodies to address the pressing challenges of flood policy and stormwater management in Guam. The session will explore integrated and actionable strategies for flood mitigation, focusing on scoping the best approach to ensure Municipal Separate Storm Sewer System (MS4) permit compliance, infrastructure improvements, and interagency collaboration. The session will also examine the complexities of applying the CNMI and Guam Stormwater Drainage Manual and the Guam Transportation Stormwater Drainage Manual, enforcement of permit conditions, and the impact of illegal dumping on water quality and flooding. Through collaborative dialogue, the session aims to identify practical solutions and policy innovations that promote community resilience and sustainable development across Guam's watersheds.</p> <p>Facilitator: James Pangelinan, Planner, Guam Coastal Management Program</p> <p>Panelists: Benny San Nicolas, Flood Plain Manager, Department of Public Works Jose Quinata, Federal Programs Administrator for Division of Highways, Department of Public Works Glenn San Nicolas, Deputy Administrator, Guam EPA Maricar Quezon, Engineer, Guam EPA Catherine McCall, Director of Maryland's Coastal Management Program</p>	
12:00 pm - 1:00 pm	NETWORKING LUNCH



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10th ASSEMBLY OF PLANNERS SYMPOSIUM

Day 2- August 19, 2025 (Cont.)

1:00 pm - 2:00 pm

PLENARY 7

GIS Data Integration: Mapping a Resilient Island Future

This plenary will showcase practical applications of spatial data integration for managing natural hazards, optimizing resource use, and supporting sustainable development—providing actionable strategies that strengthen institutional capacity and support implementation of the Guåhan 2050 Sustainability Plan.

Facilitator: **Matthew Santos**, Deputy Director, Bureau of Statistics and Plans

Panelists:

Nathan C. Habana, Ph.D., Water & Environmental Research Institute of the Western Pacific

Rodney Toves, GIS Manager, Guam Waterworks Authority

Romina King, Ph.D., Associate Professor, University of Guam

Antonio Gumataotao, Rights of Way Supervisor, Guam Power Authority

2:00 pm - 3:00 pm

PLENARY 8

Stewarding Guam's Working Landscapes: Forest Systems and Agricultural Land Futures

Guam's natural and agricultural lands are under pressure from development and competing land uses. This panel will examine the status of these vital landscapes, focusing on key initiatives like the Guam Forest System and Habitat Conservation Plan, as well as the collaborative efforts of the Guåhan Sentinel Landscapes Partnership. The discussion aims to identify policy mechanisms and planning tools—such as conservation easements and public-private partnerships—to strengthen sustainable land management, support climate adaptation, and balance economic needs with ecosystem protection. The goal is to provide attendees with a clear understanding of how to enhance the long-term viability of Guam's resources through collaborative action.

Facilitator: **Patrick Keeler**, Coordinator, Guåhan Sentinel Landscape Program

Panelists:

Christine Fejeran, Forestry & Soil Resource Division Chief, Guam Department of Agriculture

Jeffrey Quitugua, Acting Assistant Chief, Department of Agriculture, Division of Aquatic and Wildlife Resources

Else N. Demeulenaere, Ph.D., Associate Director, UOG CIS / Sea Grant

3:00 pm - 3:30 pm

BREAK

3:30 pm - 4:30 pm

PLENARY 9

Strengthening Regional Coordination: CZMA Federal Consistency Across the Marianas

This session will explore the evolving role of the Coastal Zone Management Act's (CZMA) Federal Consistency provision in shaping regional federal activities across Guam and the Commonwealth of the Northern Mariana Islands (CNMI). Coastal Programs from both jurisdictions will present key case studies—such as the Mariana Islands Training and Testing (MITT/MIRC) and the Endangered Species Act Coral Critical Habitat Designation—highlighting coordination challenges and successes. Panelists will provide a comparative analysis of Guam and CNMI Coastal Zone Management Act (CZMA) coordination frameworks, offering insights into current practices and identifying areas for synergy. Looking ahead, the panel will examine anticipated federal initiatives, including Bureau of Ocean Energy Management (BOEM) leasing and the prospect of seabed mining, and discuss proactive coordination strategies. An interactive Q&A session will encourage dialogue, fostering collaboration and alignment for future federal actions in the region.

Regional Facilitator: **John Ryan-Henry**, Senior Policy Analyst, Coastal States Organization

Panelists:

Arthur Charfauros, Planner and Federal Consistency Coordinator, CNMI Division of Coastal Resources Management

Augustine Diaz, Permitting Manager, CNMI Division of Coastal Resources Management

Louise Pascua, Biologist, Guam Environmental Protection Agency (GEPA)

Jeffrey S. Quitugua, Acting Assistant Chief, Department of Agriculture, Division of Aquatic and Wildlife Resources

Esther Taitague, Federal Activities Planner, Guam Coastal Management Program, Bureau of Statistics and Plans

4:30 pm - 5:00 pm

DAY TWO WRAP-UP AND NETWORKING



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Appendix IV: 10th Assembly of Planners Symposium Booklet

The Bureau of Statistics and Plans, Guam Coastal Management Program Presents:

10th ASSEMBLY OF PLANNERS SYMPOSIUM



Theme:

**GUAM'S COASTAL ZONE POLICIES:
EXAMINING THE VITAL ROLE OF CODES, ORDINANCES, AND
ENFORCEMENT IN FOSTERING ECONOMIC GROWTH, COMMUNITY
EMPOWERMENT, AND MANAGING COASTAL RESOURCES**

AUGUST 19 & 20, 2025 | 8 AM - 5 PM | Hyatt Regency Guam



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AUGUST 19 & 20, 2025 | Hyatt Regency Guam



MESSAGE FROM THE GOVERNOR AND LIEUTENANT GOVERNOR

10TH ASSEMBLY OF PLANNERS SYMPOSIUM

Håfa Adai! We are honored to welcome you to the 10th Assembly of Planners Symposium, a gathering that continues to serve as a vital forum for addressing Guam’s most pressing land use and natural coastal resource challenges. The purpose of this symposium is to bring together our island’s planning, policy, and resource communities in a collaborative setting that seeks to improve management systems, strengthen policy, and explore solutions grounded in science, data, and shared experience.

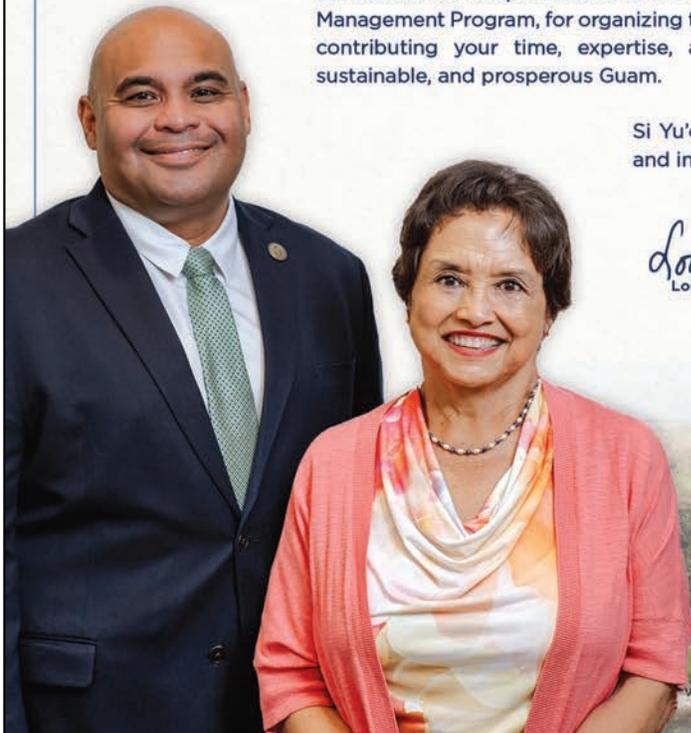
This year’s theme, “Guam’s Coastal Zone Policies: Examining the Vital Role of Codes, Ordinances, and Enforcement in Fostering Economic Growth, Community Empowerment, and Managing Coastal Resources,” reflects a growing recognition that our island’s resilience, and our ability to sustain both economic development and environmental health, relies heavily on the strength and enforcement of our policies.

As we face mounting pressures from climate change, development, and natural hazards, it becomes increasingly clear that coordinated planning and well-designed legal frameworks are essential to protecting our coastal ecosystems, supporting local livelihoods, and ensuring long-term sustainability. Resilient communities depend on healthy reefs, wetlands, and watersheds to reduce disaster risks, maintain water quality, and preserve cultural and economic resources. Likewise, a vibrant economy depends on stable, transparent permitting systems and thoughtful shoreline development that inspire investor confidence while safeguarding our environment.

This symposium allows professionals across sectors to come together, face-to-face, to exchange knowledge, build partnerships, and craft forward-thinking strategies that help us avoid costly planning mistakes and respond more effectively to emerging challenges.

We extend our deepest thanks to the Bureau of Statistics and Plans, Guam Coastal Management Program, for organizing this important event, and to all of you who are contributing your time, expertise, and leadership to build a more resilient, sustainable, and prosperous Guam.

Si Yu’os Ma’åse’ and best wishes for a productive and inspiring symposium.



Lourdes A. Leon Guerrero
Lourdes A. Leon Guerrero
Maga’åhagan Guåhan
Governor of Guam

Joshua F. Tenorio
Joshua F. Tenorio
Sigundo Maga’åhagan Guåhan
Lieutenant Governor of Guam





CONFERENCE PROCEEDINGS

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JAMES C. MOYLAN
AT-LARGE, GUAM

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HOUSE COMMITTEE ON
FOREIGN AFFAIRS
HOUSE COMMITTEE ON
ARMED SERVICES
HOUSE COMMITTEE ON
EDUCATION & WORKFORCE

August 5, 2025

To the Organizers and Participants of the 10th Assembly of Planners Symposium,

Håfa Adai, and congratulations on advancing one of the most important discussions shaping Guam’s future. I commend the Bureau of Statistics and Plans, Guam Coastal Management Program for organizing this year’s symposium and for their commitment to thoughtful, sustainable planning across our island.

This year’s theme—“Guam’s Coastal Zone Policies: Examining the Vital Role of Codes, Ordinances, and Enforcement in Fostering Economic Growth, Community Empowerment, and Managing Coastal Resources”—reflects the complex and essential work that underpins Guam’s future.

Our island’s coastal zones are more than natural assets, they are the foundation of our economy, culture, and resilience. As we balance development with conservation, it’s clear that smart, enforceable policies are key to managing that growth responsibly and equitably. The work of planners and policy experts is often behind the scenes, but it has a direct impact on how our communities live, grow, and thrive.

As your representative in Congress, I remain committed to supporting initiatives that strengthen Guam’s planning capacity, environmental protections, and local enforcement efforts. Whether it’s securing federal support, championing infrastructure improvements, or advancing hazard mitigation priorities, I will continue to advocate for the resources and flexibility Guam needs to lead its own future.

To all the participants in this year’s symposium—thank you for your expertise, your commitment to the island, and the work you do every day to shape a stronger, more resilient Guam.

Si Yu’os Ma’åse’ and best wishes for a meaningful and productive symposium.

Sincerely,

James C. Moylan
Member of Congress





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OFFICE OF THE SPEAKER
FRANK F. BLAS, JR.

38TH GUAM LEGISLATURE – *IMina'trentai Ocho Na Liheslaturan Guåhan*

Håfa Adai! It is with great pride and appreciation that I extend warm greetings to all participants of the 10th Assembly of Planners Symposium, hosted by the Bureau of Statistics and Plans through the Guam Coastal Management Program. Congratulations on reaching this significant milestone!

This year's theme – "*Guam Coastal Zone Policies: Examining the Vital Role of Codes, Ordinances, and Enforcement in Fostering Economic Growth, Community Empowerment, and Managing Coastal Resources*" – speaks directly to the challenges and opportunities facing our island today. It also underscores the essential connection between sound governance, development, and environmental stewardship.

Our coastal zones are among Guam's most valuable assets, supporting not only our economy through tourism and fisheries, but also through sustaining our cultural heritage. Ensuring that these resources are responsibly managed requires a collaborative and coordinated approach – one that aligns planning, legislative action, and community engagement.

As Speaker of the Thirty-Eighth Guam Legislature, I recognize the importance of strong, well-enforced regulations that reflect our goals for growth. By strengthening our land use policies and enforcement mechanisms, we can better safeguard our environment, empower our communities, and lay a foundation for lasting economic prosperity.

I commend the Bureau of Statistics and Plans, as well as all symposium participants, for your dedication and leadership. May your discussions be productive, your ideas bold, and your partnerships enduring.

Senseramente,

FRANK F. BLAS, JR.



BUREAU OF STATISTICS AND PLANS

MESSAGE FROM THE DIRECTOR

Håfa Adai,



It is my pleasure to welcome you to the 10th Assembly of Planners Symposium, hosted by the Bureau of Statistics and Plans, Guam Coastal Management Program.

This year's theme highlights the essential role that policies, ordinances, and enforcement play in protecting our coastal resources while also supporting economic growth and empowering our communities.

As Guam continues to face mounting pressures from climate change, development, and natural hazards, clear and enforceable policies and strong collaboration across sectors are powerful tools for building resilience.

We have designed this year's plenaries to reflect both the challenges we face and opportunities ahead. Sessions will explore the implementation of the Guåhan 2050 Sustainability Plan, the economic value of Tumon Bay's natural resources through its ecosystem services, and pressing issues such as wildland arson in southern Guam, protection of the Northern Guam Lens Aquifer, and improvements to our flood and stormwater policies. These discussions are grounded in science, policy, and local knowledge—all critical to effective planning.

This symposium is not just about exchanging ideas—it's about building solutions together. Thank you for your participation and continued commitment to shaping a sustainable and resilient future for our island.

Lola Leon Guerrero

Director, Bureau of Statistics and Plans



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Lieutenant Governor Joshua Tenorio

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Facilitator: **Matt Santos**, Deputy Director, Bureau of Statistics and Plans

Panelists:

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Celine Cruz, Chief Planner, Department of Land Management

Catherine McCall, Office Director for Climate Adaptation and Stewardship, Maryland Department of Natural Resources

Henry Bell, Senior Coastal Planner, Washington Department of Ecology

10:20 am - 10:40 am

BREAK

10:40 am - 12:00 pm

PLENARY 2

Linking Ecosystem Services to Economic Vitality in Tumon Bay

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Margaret Aguilar, Senior Program Coordinator, Guam Environmental Protection Agency (GEPA)

Christine Fejeran, Forestry and Soils Resource Division Chief, Guam Department of Agriculture

Régine Biscoe Lee, President & CEO, Guam Visitors Bureau

Michael Friis, Director, Resource Policy Bureau, Wisconsin Department of Administration

12:00 pm - 1:00 pm

NETWORKING LUNCH



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Day 1 - August 19, 2025 (Cont.)

1:00 pm - 2:00 pm

PLENARY 3

Addressing the Root Causes of Wildland Arson: A Shift in Societal Tolerance of Wildland Fires

This session will analyze how societal attitudes and perceptions of wildfires influence arson incidents and discuss strategies for cultural change. Emphasizing the importance of community engagement, education, and policy reforms, the panel aims to identify foundational approaches to reduce arson rates. Ultimately, this discussion seeks to foster a societal shift towards greater awareness and responsibility in wildfire prevention, promoting resilience and safety in vulnerable communities.

Facilitator: Christine Fejeran, Guam Department of Agriculture, Forestry & Soil Resource Division Chief

Panelists:

Edward Artero, Guam Fire Department, Fire Prevention Bureau Chief

James Pangelinan, Planner, Guam Coastal Management Program

David Green, Senior Deputy Director, Texas General Land Office

Sgt Roy N. Henricksen, Guam Police Department

Millie Erguiza, Senior Planner, Bureau of Statistics and Plans

2:00 pm - 2:30 pm

KEYNOTE ADDRESS

Derek Brockbank, Executive Director, Coastal States Organization

What's going on with federal coastal funding? Following two years of abundant support, coastal programs now face major funding threats due to overlapping legislative actions, administrative decisions, and proposed budget cuts. Derek will provide a critical update on the uncertain future of federal coastal funding in 2025. His talk will explain how recent developments, including FY'25 and FY'26 budget processes, potential rescissions, and impoundments which are affecting key funding sources such as annual appropriations, Bipartisan Infrastructure Law, and Inflation Reduction Act funds. While focused on NOAA and the U.S. Army Corps of Engineers, the presentation will also look ahead at possible legislative actions and implications for the long-term sustainability of coastal resilience funding.

2:30 pm - 3:00 pm

BREAK

3:00 pm - 4:20 pm

PLENARY 4

Northern Guam Lens Aquifer

The Compliance Void: Challenges with Water Regulations and Enforcement

Water is fundamental to life, yet the frameworks that govern its management often fall short. Inconsistent regulations laws, limited enforcement, access to data, rising cost of construction and complex political realities. This panel addresses the gap between regulations and real-world implementation and the cost of the utilities. Issues to be covered include the following: (1) **Closing the Loop: Integrating Application Review Committee Recommendations into the Building Permit Process;** (2) **Prioritize aquifer protection through infrastructure projects and planning;** (3) **Protecting the Health and Sustainable Yield of Northern Guam's Lens Aquifer.**

Facilitator: Evangeline "Vangie" Lujan, Senior Regulatory Analyst, Guam Waterworks Authority

Panelists:

Prudencio Aguon, Guam Waterworks Authority

Jacob Miller, Lead Engineer, New Area Development and Permitting, Guam Waterworks Authority

George Watson, Senior Engineer, Guam Waterworks Authority

Joseph Calvo, Civil Engineer, Guam Waterworks Authority

Yong Sang (Barry) Kim, PhD, Associate Professor of Water Engineering, Water and Environmental Research Institute (WERI)

Michael Friis, Director, Resource Policy Bureau, Wisconsin Department of Administration

Brett Railey, Guam Waterworks Authority

4:20 pm - 5:00 pm

DAY ONE WRAP-UP AND NETWORKING



CONFERENCE PROCEEDINGS

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10th ASSEMBLY OF PLANNERS SYMPOSIUM

Day 2- August 20, 2025

8:00 am - 9:00 am

REGISTRATION & CHECK-IN

9:00 am - 10:20 am

PLENARY 5

Integrated Marine Planning in the Pacific

This plenary highlights collaborative approaches to marine planning and policy across the Pacific region. Hawaii's Ocean Resources Management Plan demonstrates a statewide, multi-agency framework to address coastal challenges through shared priorities and public engagement, focusing on coastal hazards, land-based pollution, and marine ecosystems. Guam's presentations will examine key coral reef protection policies—both local and federal—identifying strengths and opportunities for improvement. In addition, an update on Guam's Fisheries Management Plan will showcase progress in community-driven resource management, recent town halls, and next steps toward sustainable fisheries planning.

Facilitator: **Camille Quichocho**, Biologist, Guam Coastal Management Program

Panelists:

Sarah Chang, Senior Project Analyst, Hawaii Coastal Zone Management Program, Office of Planning and Development

Olivia Banez, Coral Reef Policy and Communications Coordinator, Guam Coral Reef Initiative

Michael Duenas, Fisheries Supervisor, Department of Agriculture, Division of Aquatic and Wildlife Resources

Brent Tibbatts, Fisheries Biologist, Agency: Department of Agriculture, Division of Aquatic and Wildlife Resources

Leilani Sablan Naden, Biologist, University of Guam, Sea Grant

10:20 am - 10:40 am

PRESENTATION

John Ryan-Henry, Senior Policy Analyst, Coastal States Organization

This presentation unpacks the latest changes to the National Environmental Policy Act (NEPA) procedures following Presidential Executive Order 14154 and new federal guidance issued in July 2025. It will focus on updated Defense Department policies, cross-agency shifts, and legislative amendments under the One Big Beautiful Bill Act, highlighting key implications for coastal management, permitting, and federal consistency review.

10:40 am - 11:00 am

BREAK

11:00 am - 12:00 pm

PLENARY 6

Flood Policy & Storm Water Management

This plenary session brings together key stakeholders from government agencies, the private sector, and regulatory bodies to address the pressing challenges of flood policy and stormwater management in Guam. The session will explore integrated and actionable strategies for flood mitigation, focusing on scoping the best approach to ensure Municipal Separate Storm Sewer System (MS4) permit compliance, infrastructure improvements, and interagency collaboration. The session will also examine the complexities of applying the CNMI and Guam Stormwater Drainage Manual and the Guam Transportation Stormwater Drainage Manual, enforcement of permit conditions, and the impact of illegal dumping on water quality and flooding. Through collaborative dialogue, the session aims to identify practical solutions and policy innovations that promote community resilience and sustainable development across Guam's watersheds.

Facilitator: **James Pangelinan**, Planner, Guam Coastal Management Program

Panelists:

Benny San Nicolas, Flood Plain Manager, Department of Public Works

Jose Quinata, Federal Programs Administrator for Division of Highways, Department of Public Works

Glenn San Nicolas, Deputy Administrator, Guam EPA

Maricar Quezon, Engineer, Guam EPA

Catherine McCall, Director of Maryland's Coastal Management Program

12:00 pm - 1:00 pm

NETWORKING LUNCH



CONFERENCE PROCEEDINGS
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10th ASSEMBLY OF PLANNERS SYMPOSIUM

Day 2- August 19, 2025 (Cont.)

1:00 pm - 2:00 pm

PLENARY 7

GIS Data Integration: Mapping a Resilient Island Future

This plenary will showcase practical applications of spatial data integration for managing natural hazards, optimizing resource use, and supporting sustainable development—providing actionable strategies that strengthen institutional capacity and support implementation of the Guåhan 2050 Sustainability Plan.

Facilitator: **Matthew Santos**, Deputy Director, Bureau of Statistics and Plans

Panelists:

Nathan C. Habana, Ph.D., Water & Environmental Research Institute of the Western Pacific

Rodney Toves, GIS Manager, Guam Waterworks Authority

Romina King, Ph.D., Associate Professor, University of Guam

Antonio Gumataotao, Rights of Way Supervisor, Guam Power Authority

2:00 pm - 3:00 pm

PLENARY 8

Stewarding Guam’s Working Landscapes: Forest Systems and Agricultural Land Futures

Guam’s natural and agricultural lands are under pressure from development and competing land uses. This panel will examine the status of these vital landscapes, focusing on key initiatives like the Guam Forest System and Habitat Conservation Plan, as well as the collaborative efforts of the Guåhan Sentinel Landscapes Partnership. The discussion aims to identify policy mechanisms and planning tools—such as conservation easements and public-private partnerships—to strengthen sustainable land management, support climate adaptation, and balance economic needs with ecosystem protection. The goal is to provide attendees with a clear understanding of how to enhance the long-term viability of Guam’s resources through collaborative action.

Facilitator: **Patrick Keeler**, Coordinator, Guåhan Sentinel Landscape Program

Panelists:

Christine Fejeran, Forestry & Soil Resource Division Chief, Guam Department of Agriculture

Jeffrey Quitugua, Acting Assistant Chief, Department of Agriculture, Division of Aquatic and Wildlife Resources

Elsa N. Demeulenaere, Ph.D., Associate Director, UOG CIS / Sea Grant

3:00 pm - 3:30 pm

BREAK

3:30 pm - 4:30 pm

PLENARY 9

Strengthening Regional Coordination: CZMA Federal Consistency Across the Marianas

This session will explore the evolving role of the Coastal Zone Management Act’s (CZMA) Federal Consistency provision in shaping regional federal activities across Guam and the Commonwealth of the Northern Mariana Islands (CNMI). Coastal Programs from both jurisdictions will present key case studies—such as the Mariana Islands Training and Testing (MITT/MIRC) and the Endangered Species Act Coral Critical Habitat Designation—highlighting coordination challenges and successes. Panelists will provide a comparative analysis of Guam and CNMI Coastal Zone Management Act (CZMA) coordination frameworks, offering insights into current practices and identifying areas for synergy. Looking ahead, the panel will examine anticipated federal initiatives, including Bureau of Ocean Energy Management (BOEM) leasing and the prospect of seabed mining, and discuss proactive coordination strategies. An interactive Q&A session will encourage dialogue, fostering collaboration and alignment for future federal actions in the region.

Regional Facilitator: **John Ryan-Henry**, Senior Policy Analyst, Coastal States Organization

Panelists:

Arthur Charfauros, Planner and Federal Consistency Coordinator, CNMI Division of Coastal Resources Management

Augustine Diaz, Permitting Manager, CNMI Division of Coastal Resources Management

Louise Pascua, Biologist, Guam Environmental Protection Agency (GEPA)

Jeffrey S. Quitugua, Acting Assistant Chief, Department of Agriculture, Division of Aquatic and Wildlife Resources

Esther Taitague, Federal Activities Planner, Guam Coastal Management Program, Bureau of Statistics and Plans

4:30 pm - 5:00 pm

DAY TWO WRAP-UP AND NETWORKING



CONFERENCE PROCEEDINGS

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Keynote Speaker



Derek Brockbank

Executive Director, Coastal States Organization

Derek Brockbank is Executive Director of Coastal States Organization (CSO), which represents the nation's Coastal States, Territories, and Commonwealths on ocean, coastal, and Great Lakes issues. With two decades of experience in Washington DC on coastal adaptation policy and organizational development, Derek is connecting state coastal management programs with federal agencies and resources to address the greatest coastal challenges facing society.

Derek previously served as Executive Director for the American Shore & Beach Preservation Association (ASBPA), as campaign director for a coalition effort to restore the Mississippi River Delta, and worked on climate adaptation policy at National Wildlife Federation. He went to University of Chicago, and grew up in New York City, getting his coastal education on the beaches of Long Island, and kayaking and fishing in Peconic Bay.

Coastal States Organization



Catherine McCall

**Office Director for Climate Adaptation and Stewardship,
Maryland Department of Natural Resources**

Catherine McCall is the current Chair of the Coastal States Organization and the Director of Maryland's Coastal Management Program, working to address a variety of initiatives related to climate adaptation and resilient restoration, offshore energy, public access and education, and coastal policy. Through partnerships with state and local governments, she works to help communities align resources to understand vulnerability, identify risk reduction plans, and implement solutions. Catherine's interest in coastal management began along the shores of Lake Erie while attending Penn State and shifted to the estuarine environment while completing her master's degree at Georgetown University.



John Ryan-Henry

Senior Policy Analyst, Coastal States Organization

John Ryan-Henry is Senior Policy Analyst for CSO. He supports CSO's mission through legal and policy analysis of coastal issues including hazard resilience, climate adaptation, flood risk management, beneficial use of dredged materials, maritime commerce, and offshore development. He joined CSO in 2018 after working jointly with CSO and the U.S. Army Corps of Engineers Institute for Water Resources as a 2017 Knauss Coastal Policy Fellow.

A Rhode Island native, John has a J.D. from the Roger Williams University School of Law and a Master of Marine Affairs from the University of Rhode Island. As a law student, he worked on coastal zone management issues with the NOAA General Counsel's office and the Rhode Island Coastal Resources Management Council, and on regional ocean planning with SeaPlan in Boston. He is admitted to the bar in Massachusetts and Rhode Island.



Coastal States Delegation



David Green

Senior Deputy Director, Texas General Land Office

David Green is the Senior Deputy Director of Texas General Land Office Coastal Protection Division. At the GLO, he manages the state's oil spill prevention and response, coastal grants, leasing of structures on submerged lands, coastal management act, coastal planning and permitting, beach and dune regulatory, coastal water resources, Adopt-a-Beach, and the Natural Resources Damage Assessment programs. Prior to managing the Coastal Division, David represented the agency as an attorney in Office of General Counsel. Prior to his service at the GLO, David served as an Assistant Attorney General at the Texas Attorney General's Office in the Environmental Protection Division and was an associate attorney at Sutherland and Baron & Budd. David has a B.A. from the University of Texas at Austin and a J.D. from Baylor University.



Henry Bell

Senior Coastal Planner, Washington Department of Ecology

Henry Bell is the Washington State Department of Ecology's senior coastal planner. He coordinates Washington State's inter-agency coastal hazards community assistance team and serves in a leadership role for the state's Coastal Zone Management Program. Henry's work involves leading and supporting project partnerships that improve community resilience to coastal hazards and climate change. Henry earned his master's degree from the University of Washington School of Marine and Environmental Affairs and his bachelor's degree in geography and environmental studies from Middlebury College. Prior to his work at the Department of Ecology, Henry taught marine policy and conducted policy research with Sea Education Association.



Sarah Chang

Senior Project Analyst, Hawaii Coastal Zone Management Program, Office of Planning and Development

Sarah Chang is a Senior Project Analyst with the Hawaii Coastal Zone Management Program. She coordinates the Hawaii Ocean Resource Management Plan (ORMP), a statewide plan that seeks to resolve coastal problems and issues that are not adequately addressed by existing laws and rules. The 2020 ORMP highlights three areas of need within the coastal zone: (1) Development and Coastal Hazards, (2) Land-based Pollution, and (3) Marine Ecosystems. The ORMP relies on collaborative implementation and facilitates cross-agency projects with partners that include Federal, State, County, and community representation.



Mike Friis

Director, Resource Policy Bureau, Wisconsin Department of Administration

Mike Friis leads the Resource Policy Team at Wisconsin's Department of Administration, overseeing Coastal Management, Land Information, and Planning Programs. He is a past Chair of the Coastal States Organization and serves on multiple advisory boards including NOAA's Great Lakes Regional Team and WI DOT's Harbors Committee. Mike co-chairs the Great Lakes-St. Lawrence Maritime Initiative and is active in the Wisconsin Initiative on Climate Change Impacts. His leadership has advanced coastal protection programs and the designation of national marine and estuarine reserves. A UW-Madison graduate in Landscape Architecture, Mike also served in Bolivia with the Peace Corps on environmental and community development projects.



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Featured Panelists



Renato "Tato" Martinez

Renato Martinez is a licensed Senior Architect at HDR, where he brings over three decades of experience in delivering sustainable, culturally responsive design solutions across the Pacific region. As President of AIA Marianas and an NCARB Licensing Advisor, he plays a pivotal role in mentoring emerging professionals and upholding the highest standards of architectural practice. Renato also serves as a Municipal Planning Council Member for the district of Chalan Pago, where he actively contributes to shaping policies that promote resilient infrastructure and sustainable community development. A passionate advocate for island resilience, green architecture, and environmental stewardship, he integrates these principles into both his professional work and civic engagement. Deeply committed to community outreach and volunteerism, Renato champions initiatives that celebrate and preserve local culture and heritage. His work reflects a strong belief in the power of architecture to uplift communities and foster a more sustainable and inclusive future for the Marianas.



Chris (Myeong-Ho) Yeo, Ph.D., P.E.

Associate Professor of Water Engineering & Hydrology, Chair, Environmental Science Graduate Program Water and Environmental Research Institute of the Western Pacific, University of Guam

Dr. Chris Yeo is a tenured Associate Professor of Water Engineering & Hydrology and Chair of the Environmental Science Graduate Program at the University of Guam. He is affiliated with the Water and Environmental Research Institute of the Western Pacific (WERI) and specializes in water quality monitoring and modeling, climate change adaptation and mitigation, extreme rainfall analyses, stormwater and flood modeling, and the fate and transport of land-based pollutants. Dr. Yeo earned his Ph.D. in Civil Engineering and Applied Mechanics from McGill University, Canada, with prior degrees in Environmental Engineering from Chungnam National University, South Korea. His research integrates computational and statistical modeling approaches to address pressing water resource challenges in Pacific Island environments. Dr. Yeo has published extensively in peer-reviewed journals and serves as a technical contributor to national climate assessments. He is also a licensed Professional Engineer and has led numerous federally funded research projects across Guam, the CNMI, and the Federated States of Micronesia.



Olivia Bañez

Coral Reef Policy and Communications Coordinator, Guam Coral Reef Initiative

A marine biologist with a passion for science communication, Olivia graduated from Pepperdine University in 2019 with a B.S. in Biology. Since then, she has explored different avenues of science communication as an Aquarium Interpreter, Science Communication Coordinator, and Teacher/Program Manager for an outdoor marine biology class for kids. She currently serves as the Coral Reef Policy and Communications Coordinator for the Guam Coral Reef Initiative, where she develops coral reef educational resources, conducts community outreach, and provides guidance on local and federal reef-related policies.



Inna Jose Wiese

Principal Architect and Senior Project Manager, GHD

Inna Jose Wiese is a Principal Architect and Senior Project Manager at GHD. She is a registered architect in Guam and CNMI and a Leadership in Energy and Environmental Design accredited professional specializing in Building Design and Construction (LEED AP BD+C). She is the past President and current Board Member of the American Institute of Architects (AIA) Marianas Chapter. She received her Bachelor of Science degree in Architecture at the Mapua Institute of Technology in Manila, Philippines. She is an active member of the local community and the architectural industry. She is an advocate for good design and responsible development for island sustainability and resiliency.



Glenn San Nicolas

Acting Deputy Director, Guam Environmental Protection Agency (GEPA)

Glenn V. San Nicolas currently serves as the Acting Deputy Administrator and the Solid Waste Management Program (SWMP) Supervisor for the Guam Environmental Protection Agency. With over 25 years of environmental experience, he remains deeply committed to protecting human health and the environment. Glenn has a degree in Human Resources and Transportation.



Margaret Aguilar

Senior Program Coordinator, Permits and Watersheds Program, Environmental Monitoring and Analytical Services (EMAS) Division, Guam Environmental Protection Agency (GEPA)

Margaret Aguilar holds a BA in Biology from the University of Guam and manages the Permits and Watersheds Management Program at Guam EPA. She is a technical writer, implements Clean Water Act funded activities which assess surface and marine water quality, and collaborates with Agency partners to restore impaired waters and watersheds impacted by non-point source pollution.



Edward C. Artero II

Assistant Fire Chief, Guam Fire Department

Edward began his career in the Guam Fire Department in 1995 as part of the 17th Fire Cycle, with assignments spanning Fire Operations, EMS/Rescue, Special Operations, and serving as the Incident Commander for the Guam Fire Department Hazmat Team. He is currently assigned as the Bureau Chief for Fire Prevention and is the designated Fire Marshal. In pursuit of academic excellence, Edward earned an Associates Degree in Fire Science Technology from Guam Community College and a Bachelor's degree with honors in Business Administration, focusing on Finance/Economics, from the University of Guam under the Pedro Doc Sanchez Scholarship Program. His professional accolades include participating in the inaugural Hazardous Materials Technician Training and Certification program in 1996, attending the prestigious Naval Postgraduate School's Pacific Executive Leaders Program, and receiving numerous awards such as the Silver Star Award, Distinguished Service Award, Meritorious Service Award, Commendation Service Award, and the Life Saving Award. Edward's leadership philosophy is encapsulated by Ken Blanchard's words: "The key to successful leadership today is influence, not authority."



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Featured Panelists



Millie Erguiza
Senior Planner, Bureau of Statistics and Plans

Millie Erguiza is the Division Head of the Socio-Economic Planning Program with the Bureau of Statistics and Plans (BSP), serving close to 36 years of government service. She graduated from the University of Guam with a Business Administration Degree in Management and Marketing. She worked as an intern for Guam Duty Free Shoppers until she was hired as a Planner I at the Socio-Economic Planning Program to her present position as a Planner IV. As a planner for BSP, she was involved in numerous planning initiatives involving regional, international and federal affairs, and trade agreements. She currently is involved in various complex projects in socio, economic, and criminal justice and strategic planning activities. She also provides grant administrative oversight over several US Department of Justice Federal Grant Programs and several US Department of Interior projects in support of a law enforcement component.



Camille Quichocho
Biologist, Guam Coastal Management Program

Camille Quichocho is a Chamoru scientist with a passion for safeguarding Guam's natural resources, motivated by her deep love for the land and sea (tāno' y tāsi). As a biologist with the Guam Coastal Management Program, Camille works closely with various agencies, partner organizations, and the community to advocate for marine conservation and strike a balance between human activities and the natural environment.



James Pangelinan
Planner, Guam Coastal Management Program

James Pangelinan is a planner with the Bureau of Statistics and Plans – Guam Coastal Management Program (GCMP). His primary focus is on leading the Coastal Zone Enhancement Program (CZEP), a comprehensive five-year initiative that allows GCMP to evaluate and improve its strategies across nine national enhancement areas: coastal hazards, wetlands, public access, special area management planning, energy and government facility siting, aquaculture, marine debris, ocean and Great Lakes resources, and cumulative and secondary impacts. In addition to his work on CZEP, James actively contributes to the Guam Silver Jackets, a collaborative inter-agency team comprising local and federal partners. The group works to identify, coordinate, and implement solutions to reduce coastal hazard risks and build resilience across Guam's coastal communities.



Leilani Sablan Naden
Biologist, Sea Grant, University of Guam

Leilani Sablan Naden is an indigenous fisheries biologist from Guam dedicated to integrating traditional ecological knowledge with marine science. Her work focuses on sustainable fisheries, fish biology, and community engagement. She collaborates closely with local fishers to bridge cultural knowledge and scientific research.



Shaylin Salas
Guam Department of Agriculture's Forestry & Soil Resources Division, Urban & Community Forestry (UCF) Program

Shaylin Salas manages the Guam Department of Agriculture's Forestry & Soil Resources Division's Urban & Community Forestry (UCF) Program. For UCF, she oversees nursery projects, organizes volunteer and outreach events, coordinates urban tree inspections, develops educational resources, and supports the program's subgrant project (Fina'maolek).



Yong Sang (Barry) Kim, PhD
Associate Professor of Water Engineering
Water and Environmental Research Institute of the Western Pacific, University of Guam

Barry's research focuses on the fate, transport, and source attribution of emerging contaminants, particularly per- and polyfluoroalkyl substances (PFAS). He also works on water resource management using machine learning techniques and resilience-based approaches to address water pollution and sustainability challenges in island environments. At the University of Guam, Dr. Kim teaches courses in environmental engineering, water chemistry, open channel hydraulics, and remediation engineering. He is actively engaged in applied research projects that support regional water quality management. Before joining the University of Guam, Dr. Kim served as Director of the Samsung Institute of Safety & Environment at Samsung Global Research, and as Principal Consultant for the Environmental Consulting Team at Samsung SDS. He has led numerous environmental research and engineering consulting projects across the United States, China, Vietnam, and South Korea, contributing to water infrastructure development, environmental monitoring, and policy advisory work.



Patrick Keeler
Guåhan Sentinel Landscape Program Coordinator

Patrick Keeler is the Guåhan Sentinel Landscape Program Coordinator. A Guamanian by birth, Patrick has been working in the natural resource management field on the island since 2015, before transitioning to his current role in late 2023. He really aspires to the peaceful life of a forest service hermit—ideally stationed under a tree so remote even emails fear to tread. Until then, he continues facilitating coordination with a smile (and mild existential dread) amongst the many talented individuals and agencies working to protect Guam's natural resources, dreaming of the day he can trade meetings for moss.



Sergeant Roy N. Henricksen
Sergeant I, Guam Police Department

Sergeant I Roy N. Henricksen is a 1988 graduate of Father Duenas Memorial School and has proudly served with the Guam Police Department for 34 years. He began his law enforcement career in 1991 as a Police Recruit, completing his training at Guam Community College in Mangilao. Over the years, Sgt. Henricksen has held various assignments within the department, including the Forensic Science Division's Crime Scene Response Unit (CSI) and the Criminal Investigations Division's Property Crimes Unit. He has also completed multiple tours of duty with the Neighborhood Patrol Division, serving at the Central, Southern, and Tamuning/Tumon Precinct Commands—first as a Patrol Officer and later as a Patrol Supervisor. He is currently assigned to the Forensic Science Bureau, Forensic Science Division, where he serves as the Officer-in-Charge of the Evidence Control Section.



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Featured Panelists



Else Demeulenaere

Associate Director for Natural Resources, University of Guam, Center for Island Sustainability & Sea Grant

Else Demeulenaere is the Associate Director for Natural Resources, at the University of Guam's Center for Island Sustainability and Sea Grant, where she leads the Island Conservation Lab. The Island Conservation Lab consists of a team of biologists and conservation technicians who conduct research on endangered species, ethnobotany, forest and watershed restoration. The team also takes part in the development of policies and programs for rare and endangered species. Many of the lab's student interns work on ethnobotanical projects. Else holds a Master's in Botany (Ecology) from the University of Ghent and a PhD in Biogeography, Ethnobotany, and Policy (Interdisciplinary Studies) from the University of Alaska Fairbanks in a joint program with the University of Guam. She is an avid advocate for sustainable living and the protection of Guam's biocultural diversity. Her research focuses on the biogeography and traditional ecological knowledge of native plant species, social activism, and aims to find policies benefiting the protection of Guam's ecosystems and its people.



Christine Camacho Fejeran

Department of Agriculture, Forestry & Soil Resources Division Chief

Christine Camacho Fejeran received her B.S. in Wildlife and Fisheries Science from Pennsylvania State University; was a consultant for Marine Corps Base Hawaii's Environmental Department and Chevron's Oil Refinery in Kapolei, HI, monitoring endangered waterbird breeding and non breeding seasons and conducted Census seabird counts for the Marine Corps. While in Hawaii, Christine also wore the part-time hat of a Wildlife Technician for SWCA Environmental Consultants; Christine moved to South Carolina where she was a Beaufort County Deputy Sheriff, fulfilling yet another career goal in South Carolina; Upon returning home to Guam in 2011, Christine worked as a Terrestrial Biologist and Planner III for the Bureau of Statistics and Plans, Guam Coastal Management Program. In 2015, she transferred to the Guam Department of Agriculture, Forestry and Soil Resources Division to manage the Cooperative Fire Protection Program as a Forester. In 2019, she returned to school and received her Master of Public Administration, from the University of Guam under the Doc Sanchez Scholarship Program and achieved the "Overall Outstanding Scholar" award upon graduation in 2020. Today, Christine is the Guam Department of Agriculture, Forestry and Soil Resources Division Chief and one of Guam's Wildland Fire Arson Investigators. Christine encourages all community members to find that green space near you, and help your Guam Forestry team protect, enhance, and enjoy the growth and expansion of Guam's unique forests and ecosystems, one small green space at a time.



Jeffrey Quitugua

Acting Assistant Chief, Department of Agriculture, Division of Aquatic and Wildlife Resources

Jeffrey Quitugua is a dedicated public servant with nearly three decades of experience in the Government of Guam, currently serving as the Acting Assistant Chief at the Division of Aquatic and Wildlife Resources within the Department of Agriculture. Throughout his career, Mr. Quitugua has garnered extensive knowledge and expertise in managing and protecting the island's natural resources, working tirelessly to balance conservation efforts with development needs. As a biologist involved in the Technical Guidance project, he has conducted thorough reviews of development applications to ensure sustainable practices. Understanding the importance of preserving Guam's natural heritage for future generations, Mr. Quitugua has played an active role in the development of Guam's Habitat Conservation Plan. Beyond his primary responsibilities, he dedicates time to various programs aimed at safeguarding the island's resources.



Michael Duenas

Fisheries Supervisor, Department of Agriculture, Division of Aquatic and Wildlife Resources

Michael is a lifelong fisherman with over two decades of experience in fisheries leadership, including 21 years as Operations Manager for the Guam Fishermen's Cooperative Association and three terms as a Council Member with the Western Pacific Fishery Management Council. He currently serves as the Fisheries Supervisor for the Department of Agriculture's Division of Aquatic and Wildlife Resources and remains active with the Council as an Advisory Panel Member.



Louise Pascua

Biologist, Guam Environmental Protection Agency

Louise is a Biologist at Guam EPA in the Permits & Watershed Management Program (formerly known as the (Non-point Source Program) where she leads Guam EPA's review and development of federal consistency responses in collaboration with our Water Division. She graduated from the University of Guam in May 2023 with a Bachelor of Science in Biology and a Minor in Chemistry with research experience in water quality.



Arthur Charfauros

Coastal Resources Planner and Federal Consistency Coordinator, CNMI Division of Coastal Resources Management

Arthur Charfauros currently works as a Coastal Resources Planner and Federal Consistency Coordinator for the CNMI Division of Coastal Resources Management, since 2019. Born and raised in Guam, he has worked in California, Hawaii, and the Philippines throughout his natural resource management career and studies, before returning home to the Marianas.



Augustine Diaz

Permitting Manager, CNMI Division of Coastal Resources Management

Augustine Diaz, born in Saipan, is the Permitting Manager for the Division of Coastal Resources. A former Civilian Mariner with the Military Sealift Command, he brings maritime expertise and a lifelong commitment to protecting and preserving coastal environments.



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Régine Biscoe Lee
President and CEO, Guam Visitors Bureau

Régine Biscoe Lee serves as President and CEO of the Guam Visitors Bureau, where she leverages her experience as a former senator, policy advisor, and community leader to promote Guam as a premier travel destination. Her public and private sector work to strengthen the workforce, support small business, and protect the environment informs her vision for sustainable tourism that benefits residents and visitors alike. With a proven record in building alliances across government, business, and nonprofit sectors, Régine leads GVB in advancing Guam's global presence while honoring and celebrating the island's unique culture.



Esther Marie G. Taitague
Senior Coastal Resource Planner, Guam Coastal Management Program, Bureau of Statistics and Plans

Esther Taitague is a driving advocate for sustainable development, collaborating with engineers, developers, and national partners to integrate low impact design into Guam's built environment. Her leadership was pivotal in producing the Guam Erosion and Sediment Control Field Guide, now a cornerstone of environmental training at the Guam Trades Academy. In her current role, Esther oversees federal project compliance under the Coastal Zone Management Act, ensuring alignment with Guam's enforceable coastal policies and safeguarding the island's natural resources. Passionate for nature and its beauty, she promotes conservation through hands-on engagement—from beach cleanups to tree planting—guided by her belief that "Where there is water, there is life." A proud alumna of the University of Guam, Esther continues to serve as a role model for aspiring a new generation of environmental stewards across the Marianas.



Evangeline "Vangie" Lujan
Senior Regulatory Analyst, Guam Waterworks Authority

Vangie is currently the Senior Regulatory Analyst with the Guam Waterworks Authority. Her primary responsibility at GWA is to ensure compliance environmental regulations related to safe and clean water. Vangie has been appointed as the Chair for the Governor of Guam's Climate Change and Resiliency Commission, the Co-Chair for the Governor's Guam Green Growth Initiative-Thriving Natural Resources Working Group, Co-Chair for UOG's Sea Grant Board and is Guam's Focal Point for the Regional Environmental Initiative, the Micronesia Challenge. Vangie started her career in government service as the Geographic Information System Manager at the Bureau of Statistics and Plans and was the Administrator for the Guam Coastal Management Program. Vangie received her Bachelor of Arts in Mathematics from the University of Guam and a Master of Science in Engineering specializing in Industrial Engineering from the Arizona State University. She has completed her Certification in Public Management with Arizona State University. She is also Past President for the Western Pacific Subsection of American Water Works Association.



George Watson
Senior Regulatory Analyst, Guam Waterworks Authority

George Watson is a Senior Engineer at Guam Waterworks Authority's Wastewater Capital Improvement Program (CIP) Team, bringing over a decade of experience in wastewater engineering and project management. He has successfully led and supported projects involving gravity sewer line and force main repairs, replacements, and rehabilitations; sewer lift station upgrades; and wastewater treatment plant rehabilitations. In addition to his core wastewater expertise, George has contributed to flow modeling, data collection, and the rehabilitation of water lines and water wells.



Jacob Miller
Lead Engineer, New Area Development and Permitting, Guam Waterworks Authority

Jacob Miller is a US Air Force veteran with a BA in Mathematics from UOG and a Masters in Civil Engineering from Norwich University. Jacob worked in Information Technology, Retail, and Food-and-Beverage, then transitioned to Engineering in 2018. A licensed Civil Engineer with over 7 years of engineering experience within GWA and DoD, he currently holds the role as Lead Engineer in Charge of New Area Development and Permitting.



Joseph Calvo
Civil Engineer, Guam Waterworks Authority

Joseph Calvo is a Civil Engineer specializing in Environmental and Water Resources Engineering. With a Bachelor's degree from Santa Clara University, he joined Guam Waterworks Authority in May 2024 as a Project Engineer. He is working on critical infrastructure projects like the Adacao Water and Sewer Project to protect the Northern Guam Lens Aquifer, which supplies over 80% of Guam's drinking water, as well as various projects needed to meet the goals of the Partial Consent Decree.



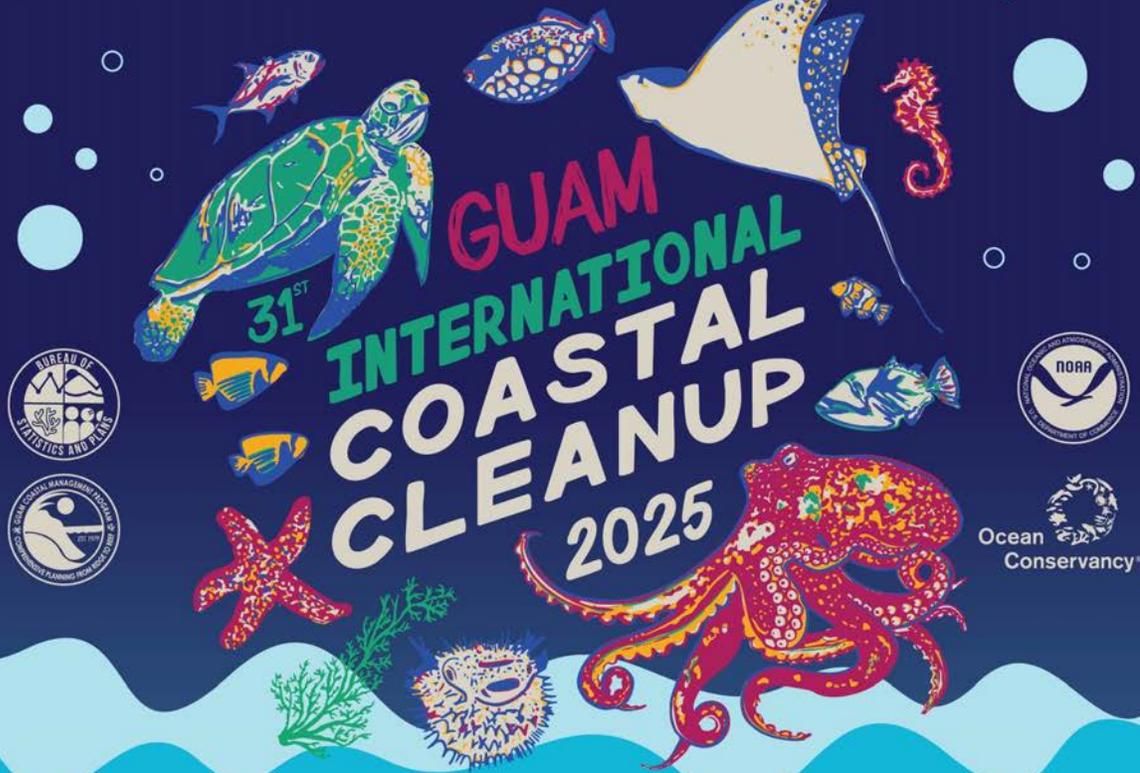
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AUGUST 19 & 20, 2025 | Hyatt Regency Guam



REGISTER NOW!



Over 23 cleanup locations across the Island to choose from!

SATURDAY, SEPTEMBER 20, 2025

ShowTime: 6:30am for most sites

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TO REGISTER

- Register Now at: <https://bsp.guam.gov/gicc2025/>
- Trash Bags and Gloves are provided.
- Free T-Shirts for Participants (While Supplies Last)
- Service Learning Credits Available for Students!

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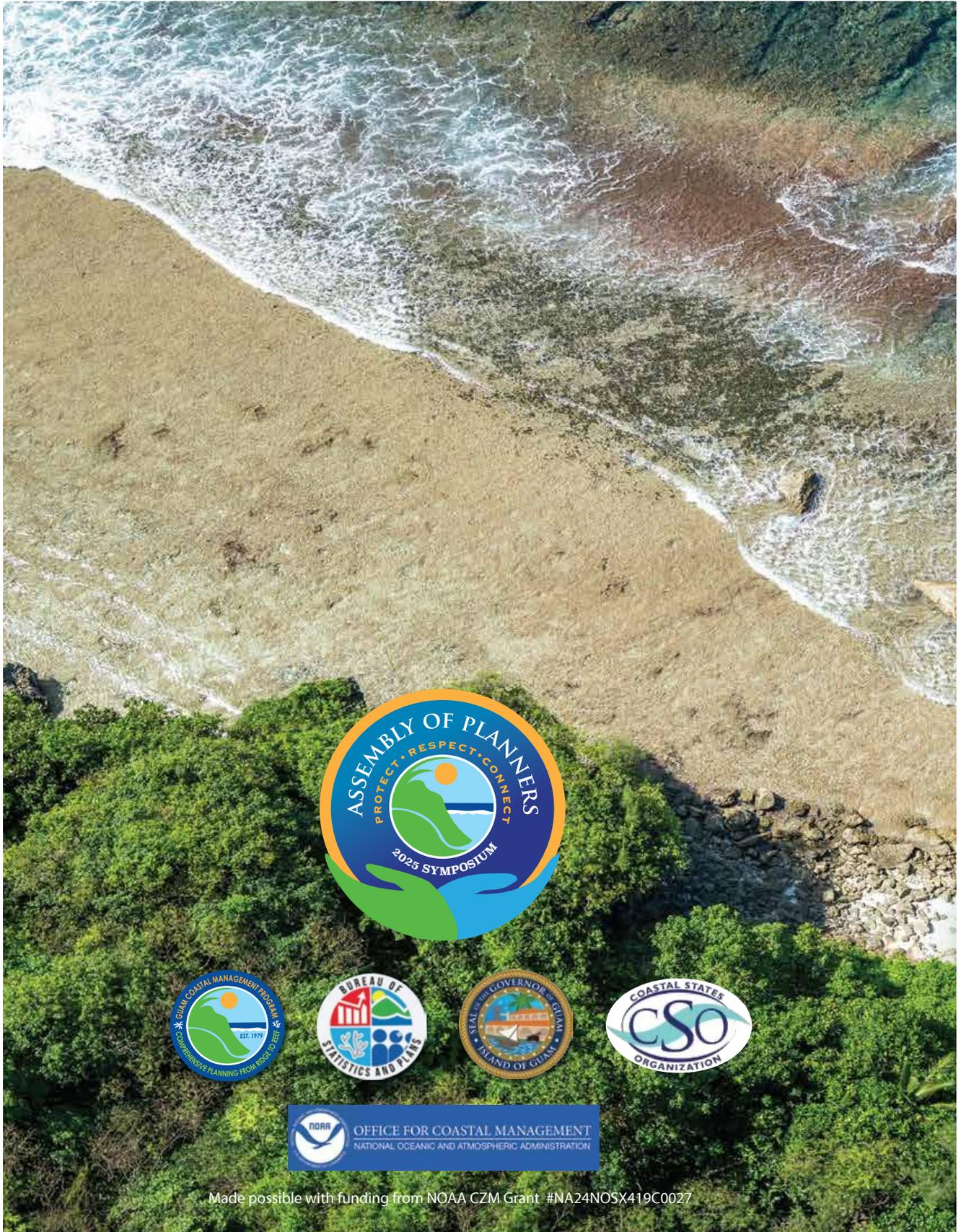
Contact Steven Dierking at the Guam Coastal Management Program:
671-475-9647 or email steven.dierking@bsp.guam.gov | bsp.guam.gov/gicc2025/



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Made possible with funding from NOAA CZM Grant #NA24NOSX419C0027



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Appendix V: Press Release



LOLAE. LEON GUERRERO
Director
MATTHEW C. SANTOS
Deputy Director

BUREAU OF STATISTICS AND PLANS

Sagan Planu Siha Yan Emfotmasion



LOURDES A. LEON GUERRERO
Governor of Guam
JOSHUA F. TENORIO
Lieutenant Governor

FOR IMMEDIATE RELEASE

August 13, 2025

Community, Policy, Action: Guam's 10th Assembly of Planners Symposium

Hagåtña, Guam - The Bureau of Statistics and Plans, Guam Coastal Management Program, is pleased to announce the 10th Assembly of Planners Symposium. The 2-Day symposium will be held at the Hyatt Regency Guam on August 19 & 20, 2025, from 8:00 am to 5 pm. The theme of this year's symposium is *"Guam's Coastal Zone Policies: Balancing Growth and Conservation: Strengthening Coastal Policy through Codes, Ordinances and Effective Enforcement."*

Topics and presentations for the symposium include:

- **Comprehensive Development Planning:** This session will cover the current state of the Guahan 2050 Sustainability plan, the progress that has been made, and the next steps after completing the 1st draft. This session will also include speakers who have developed and implemented comprehensive development plans and cover insights and best practices that Guam could benefit from.
- **Addressing the Root Causes of Wildland Arson.** This session examines societal attitudes toward wildland arson and explores community engagement, education, and policy reforms aimed at reducing arson incidents in the watershed.
- **Northern Guam Lens Aquifer: The Compliance Void: Challenges with Water Regulations and Enforcement:** This plenary addresses the gap between regulations and real-world implementation and the cost of utilities. Issues to be covered include: Closing the Loop: Integrating Application Review Committee Recommendations into the Building Permit Process; Prioritizing aquifer protection through infrastructure projects and planning; Protecting the Health and Sustainable Yield of Northern Guam's Lens Aquifer.
- **Marine Planning:** This plenary will convene planners, community leaders, and resource managers to explore integrated strategies for sustainable ocean use and coastal zone resilience.
- **Flood Policy and Stormwater Management** - This plenary session brings together key stakeholders from government agencies, the private sector, and regulatory bodies to address the pressing challenges of flood policy and stormwater management in Guam.
- **GIS Data Integration:** This plenary will showcase practical applications of spatial data integration for managing natural hazards, optimizing resource use, and supporting sustainable development, providing actionable strategies that strengthen institutional capacity and support implementation of the Guahan 2050 Sustainability Plan.
- **Stewarding Guam's Working Landscapes: Forest Systems and Agricultural Land Futures:** This panel will examine the status of these vital landscapes, focusing on key initiatives like the Guam Forest System and Habitat Conservation Plan, as well as the collaborative efforts of the Guahan Sentinel Landscapes Partnership.

BUREAU OF STATISTICS & PLANS - GOVERNMENT OF GUAM

Mail: P.O. Box 2950 Hagåtña, Guam 96932 Tel: (671) 472-4201/3 Fax: (671) 477-1812 Web: www.BSP.Guam.Gov



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Keynote Address:

Mr. Derek Brockbank, Executive Director, Coastal States Organization, will discuss: *What's unfolding with federal coastal funding?* He will provide a critical update on the uncertain future of federal coastal funding in 2025. His talk will explain how recent developments, including FY'25 and FY'26 budget processes, potential rescissions, and impoundments, are affecting key funding sources such as annual appropriations, the Bipartisan Infrastructure Law, and Inflation Reduction Act funds.

Partners and presenters include:

Office of the Governor, Bureau of Statistics and Plans (BSP); Guam Coastal Management Program (GCMP); Coastal States Organization (CSO), Guam Department of Land Management (DLM); Guam Department of Agriculture (DOAG); Guam Environmental Protection Agency (GEPA); Guam Visitors Bureau (GVB); Guam Fire Department; Department of Public Works (DPW); American Institute of Architects (AIA) Guam; Guam Waterworks Authority; University of Guam (UOG); Center for Island Sustainability (CIS) and Sea Grant; Water and Environmental Research Institute of the Western Pacific (WERI); Texas General Land Office; Washington Department of Ecology; Hawaii Coastal Zone Management Program; Maryland Department of Natural Resources; and Wisconsin Department of Administration.

There is no cost to attend this event, but seating is limited. To register, please visit <https://bsp.guam.gov/aop2025/>. The symposium will also be live-streamed on the Bureau of Statistics and Plans Facebook Page. This event is funded with federal funds from NOAA grant #NA24NOSX419C0027.

For more information, please contact Mr. Steven Dierking at 671-475-9647 or via email at steven.dierking@bsp.guam.gov or Mr. Edwin Reyes, Administrator, Guam Coastal Management Program, via email at edwin.reyes@bsp.guamgov.

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Appendix VI: Media Links and Grant Information

The 10th Assembly of Planners Symposium documents presented here, including the panelists' presentations, can be found on the Bureau of Statistics and Plans website at:

<https://bsp.guam.gov/aop2025/>.

The 10th Assembly of Planners Symposium is funded by a grant from the U.S. Department of Commerce, National Oceanic and Atmospheric Administration (NOAA) through the Coastal Zone Management Act of 1972, as amended, administered by the Office for Coastal Management and the Guam Coastal Management Program (GCMP) of the Bureau of Statistics and Plans, Government of Guam through Cooperative Agreement Award NA24NOSX419C0027.

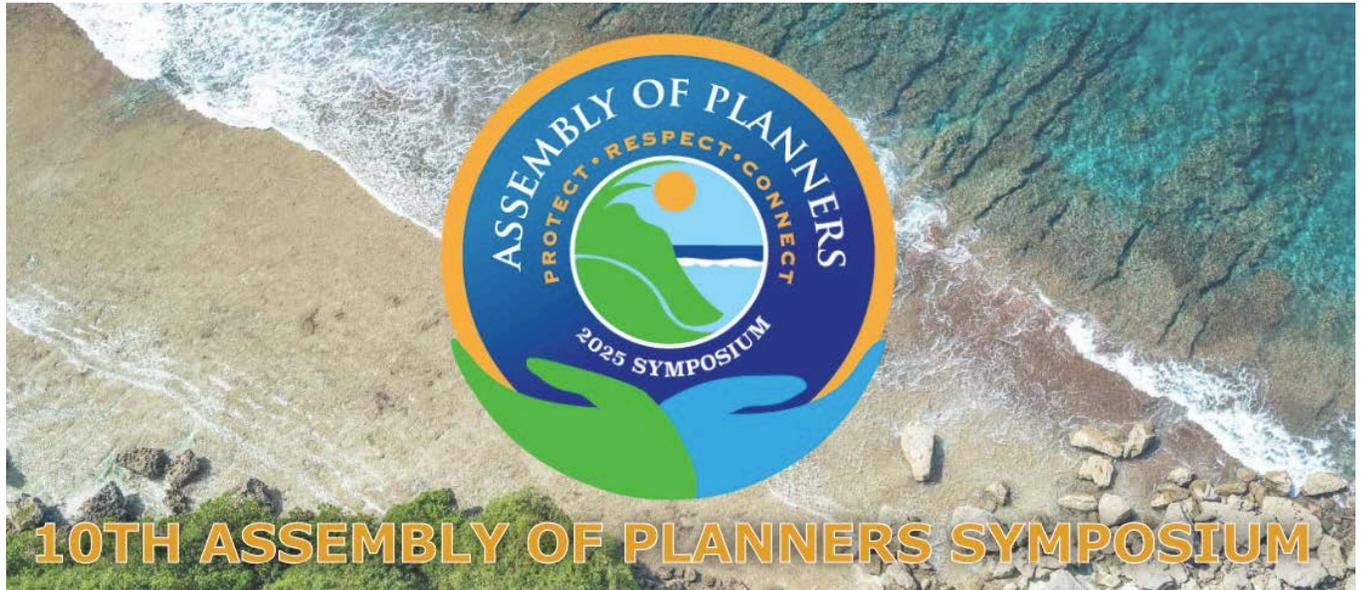
For more information on the Assembly of Planners Symposium, contact Steven Dierking at the Bureau of Statistics and Plans, Guam Coastal Management Program (GCMP): steven.dierkign@bsp.guam.gov or Edwin Reyes, Administrator, GCMP edwin.reyes@bsp.guam.gov or visit our website at bsp.guam.gov.



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10TH ASSEMBLY OF PLANNERS SYMPOSIUM

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