



National
Marine Sanctuary
Foundation



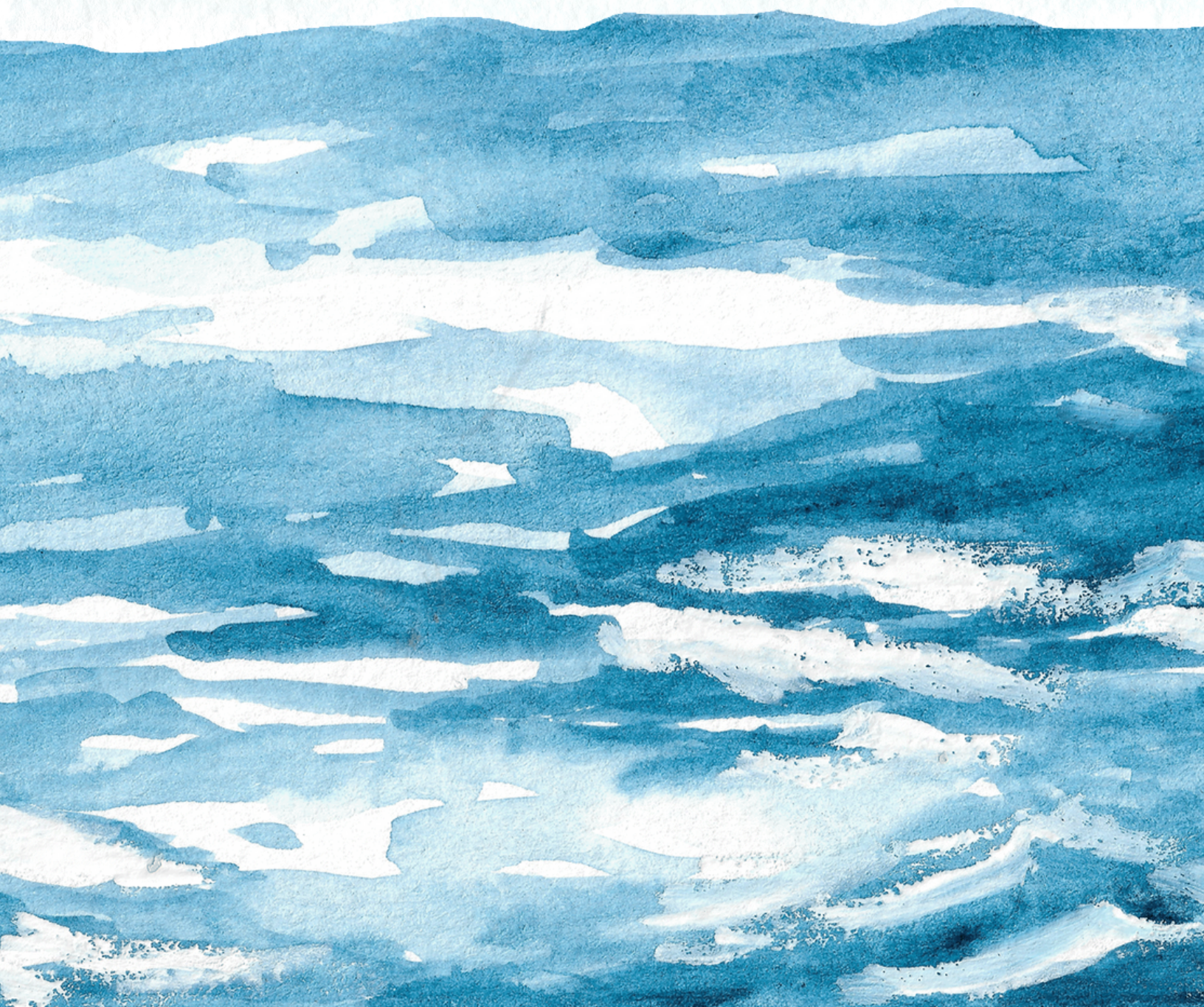
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2024 PACIFIC RISK MANAGEMENT 'OHANA

RESILIENCE IN ACTION

CROWNE PLAZA RESORT, SAIPAN

FEBRUARY 22-23, 2024



Planning for Coastal Hazards

8:00 AM -
12:00 PM

**AZUCENA
ROOM**

This course will focus on the planning aspect of coastal hazards, covering coastal hazards planning principles, coastal planning and management context, and planning strategies that can be employed to reduce hazard risk and increase resilience in coastal communities. This training is intended to provide decision-makers and planners with the information needed to create and align plans that reduce vulnerability to coastal hazards and climate change, incorporate climate information, integrate participatory planning processes, consider the socio-ecological interactions at the land-sea interface, and manage the uncertainty of climate impacts.

Trainer: Jeff Rubin (National Disaster Preparedness Training Center)

Social Science Basics

8:00 AM -
12:00 PM

**HIBISCUS
HALL**

MODULE 1 - UNDERSTANDING STAKEHOLDERS

The social sciences are a valuable but often overlooked element of coastal zone management. Issues from marsh restoration to flood mitigation all involve critical human elements— knowledge, values, and attitudes—of the people that live, work, and play in these areas. This training provides the basic knowledge and skills to help coastal managers understand their stakeholders. Module 1 will introduce the novice participant to prominent social science disciplines, important social science questions, and ways in which social science can be used to meaningfully and systematically engage stakeholders.

Trainer: Chris Ellis (National Oceanic and Atmospheric Administration, Office for Coastal Management)

12:00 PM

LUNCH

Hibiscuss Hall

Social Science Basics

MODULE 4 - WRITING EFFECTIVE SURVEY QUESTIONS

Module 4 will provide coastal managers with best practices to write more effective survey questions so they can understand their stakeholders and quickly assess large populations.

1:00 PM -
4:00 PM

**HIBISCUS
HALL**

Fostering Behavior Change

An interactive course that introduces participants to an effective approach for coastal management projects to influence the way people interact with their environment. Community-based social marketing uses a five-step approach and a set of tools to elicit behavior change in specific audiences in order to address environmental and social problems.

Trainer: Chris Ellis (National Oceanic and Atmospheric Administration, Office for Coastal Management)

Technical Assistance and Capacity Building for Planners

1:00 PM - This interactive talk story session is designed to empower future and current planners with the skills and knowledge needed to shape the future of urban and rural development.
3:00 PM Attendees will gain valuable tools to address contemporary challenges and create resilient, inclusive, and sustainable communities. This discussion welcomes participants, regardless of their professional background, to share insights and envision their role in shaping the planning narrative as a whole and in the Pacific region.

**AZUCENA
ROOM**

Panelists: Dr. Karl Kim (National Disaster Preparedness Training Center), Dr. Van Romero (New Mexico Tech), Nicole Boothman-Sheppard (AECOM)

Opening Protocol and Keynote Address

BLOWING OF THE CONCH

Petlas Marianas Micronesia

POSTING OF COLORS

Marianas High School JROTC Color Guard

US NATIONAL ANTHEM & CNMI ANTHEM

Augustin "Gus" Kaipat

CULTURAL PERFORMANCE

Simiyan Marianas & Petlas Marianas Micronesia

8:00 AM -
10:00 AM

INTRODUCTION

Richard Salas

Director, Division of Coastal Resources Management

WELCOMING REMARKS

Honorable Lt. Governor David M. Apatang

Commonwealth of the Northern Mariana Islands

Jean Tanimoto

PRiMO Navigator

KEYNOTE ADDRESS

Dr. Austin J. Shelton III

Associate Professor of Extension and Outreach

Interim Director, University of Guam Center of Island Sustainability and Sea Grant

10:00 AM

GROUP PHOTO

Please proceed to the courtyard

10:15 AM

BREAK

Building a Resilient and Sustainable Future in the Pacific

10:30 AM -
11:30 AM

As island economies that rely on tourism for economic growth and stability, development pressures abound in order to stay marketable to the industry while maintaining the picturesque ideal of a tropical island getaway. The green growth concept works to balance economic growth and environmental sustainability, an approach being applied in several Pacific jurisdiction. In this session, Green Growth representatives from Hawai'i, Guam, and the CNMI share their visions and successes towards building more sustainable, resilient island communities.

Panelists: Dr. Austin Shelton (University of Guam Sea Grant), Dr. Galvin Deleon Guerrero (Northern Marianas College), Erin Derrington (Local2030 Islands Network)

Moderator: David Cabrera (Division of Coastal Resources Management)

11:30 AM - 12:30 PM	<p>LUNCH</p> <p>Remarks from the Honorable Lt. Governor Joshua Tenorio, <i>Guam</i></p>
12:30 PM - 2:00 PM	<p>Multi-Hazard Disaster Planning</p> <p>This session brings together a panel of experts in the field of emergency management to discuss strategies on the development and implementation of multi-hazard disaster plans. The session covers pertinent topics such as the CNMI's Standard State Mitigation Plan update, improvements to communication tools regarding disasters, on-the-ground typhoon reparedness & response, and existing tsunami and earthquake plans. Panelists will present their agencies' roles, experiences on lessons learned, resources and best practices, and how to move forward with multi-hazard disaster planning. Panelists will then engage in meaningful conversation with the audience on planning toward resilient communities.</p> <p>Panelists: Marcus Landon Aydlott (National Weather Service Guam), Eileen Babauta (University Center for Excellence in Developmental Disabilities, Northern Marianas College) Franklin Babauta (CNMI Homeland Security and Emergency Management), Lena Schnell (CNMI Hazard Mitigation Grant Program)</p> <p>Moderators: Deveney Mafnas and Victoria Deleon Guerrero (CNMI Hazard Mitigation Grant Program)</p>
2:00 PM	<p>BREAK</p>
2:15 PM - 3:30 PM	<p>Incorporating Traditional Ecological Knowledge into Planning and Management</p> <p>During this session, traditional knowledge holders from the Pacific will converge to share their experiences integrating traditional ecological knowledge into various professional roles, such as natural resource management, cultural practice, and public service. The distinguished panelists will illuminate their advocacy efforts with their organizations, shedding light on the crucial role traditional ecological knowledge plays in shaping policies and practices. Through compelling storytelling, the panelists will underscore the importance of establishing connections with the natural environment and its people as a strategic approach to mitigating risks associated with hazards.</p> <p>The overarching aim of the panelists is to impart valuable insights to the audience, fostering a deeper understanding of how to effectively champion the incorporation of traditional ecological knowledge into planning and management. By doing so, the hope is to empower individuals to contribute meaningfully to enhancing community resilience in the Pacific region.</p> <p><i>Cont...</i></p>

Incorporating Traditional Ecological Knowledge into Planning and Management

Panelists: Milton Coleman, Jr. (500 Sails), Floyd Masga (Marine National Monument Advisory Committee), Dr. Sean Macduff (National Park Service), Kalani Quiocho (National Oceanic and Atmospheric Administration, Office of National Marine Sanctuaries)

Moderator: Dr. Kanoho Hosoda (National Oceanic and Atmospheric Administration, Office for Coastal Management)

Managing Risk and Promoting Resilience of Coral Reefs in the U.S. Pacific

3:30 PM -
4:30 PM

Coral reefs provide significant benefits to the people of the U.S. Pacific. From coastal protection to sustainable fisheries, coral reefs are an essential, shared natural resource with deep cultural and historical connections. Like many ecosystems, coral reefs are under threat. Impacts, both anthropogenic and natural, require adaptive management strategies and collaboration amongst partners. This panel brings together perspectives from Guam, Hawai'i, and the CNMI to discuss these challenges and solutions to better manage risk and promote resilience of these essential resources.

Panelists: Dr. Lyza Johnston (Johnston Applied Marine Sciences), Ashton Williams (Guam Coral Reef Initiative), Dr. Kanoho Hosoda (National Oceanic and Atmospheric Administration, Office for Coastal Management), David Benavente (Mariana Islands Nature Alliance)

Moderator: Matthew Warham (National Marine Sanctuary Foundation)

4:30 PM -
4:45 PM

ANNOUNCEMENTS

Opening and Keynote Address

RECAP OF CONFERENCE DAY 1

Dr. Karl Kim

PRiMO Navigator

8:30 AM -

9:30 AM

KEYNOTE ADDRESS

Dr. Galvin Deleon Guerrero

President

Northern Marianas College

9:30 AM -

9:45 AM

BREAK

Planning for Coastal Hazards with U.S. Geological Survey Products and Tools

Learn how new coastal flood hazard map products from the U.S. Geological Survey (e.g. Coastal Storm Modeling System, CoSMoS) can be used to plan for the increased risks of storm-induced coastal flooding due to climate change and sea-level rise to people, infrastructure, and resources for Hawai'i and Pacific Island Territories. We will demonstrate how you can access and use the data to guide future planning and adaptation efforts through presentations, case study examples, and an interactive activity with the web-based Hazard Exposure and Reporting Analytics (HERA) tool.

9:45 AM -

10:45 AM

Panelists: Maya Hayden and Nathan Wood (U.S. Geological Survey)

Moderator: David Helweg (U.S. Geological Survey)

Sea Level Rise and Inundation: What's Next?

This session will provide an overview of climatic factors that impact sea level rise and inundation and scale down to a local level. Existing sea level rise tools and coastal hazard information will be shared, including the National Oceanic and Atmospheric Administration, Office for Coastal Management's Sea Level Rise Viewer and the Bureau of Environmental and Coastal Quality's Public Permitting App, to practically guide development and adaptation. We will take a virtual tour of three compelling shoreline sites in Saipan and get an idea of how changes in sea level and multiple coastal hazards have taken center stage in both planning and adaptation efforts.

10:45 AM -

11:45 AM

Panelists: Tim Schierenbeck (National Oceanic and Atmospheric Administration, Office for Coastal Management), Dianne Pablo (Division of Coastal Resources Management), Robbie Greene (Pacific Coastal Resource and Planning)

Moderator: Mary Fem Urena (Division of Coastal Resources Management)

11:45 AM -
12:45 PM

LUNCH

Identifying Synergies and Leveraging Resources with Partners

12:45 PM -
2:15 PM

As the CNMI continues to incorporate more climate-smart components into its planning efforts, we find ourselves needing to step back as we encounter various challenges in our projects. However, the most successful work comes from strong, synergistic partnerships that leverage limited resources and produce quality results. This session will take a look at the efforts being taken locally to build such partnerships and address gaps in resiliency to support a more resilient CNMI.

Panelists: Jonathan I. Arriola (Northern Marianas Housing Corporation), Heather Stole (CNMI Public School System), Alley Reyes and Kennet Bernardo (Commonwealth Utilities Corporation), Zabrina Cruz (Division of Environmental Quality), Richard Salas (Division of Coastal Resources Management)

Moderator: Erin Derrington (Local2030 Islands Network)

2:15 PM -
2:30 PM

BREAK

Precovery

2:30 PM -
3:30 PM

Precovery is the process of developing a strategic framework to guide sensible and efficient post-disaster recovery, in consultation with the community. The disasters may include relatively rapid onset events like hurricanes and tsunamis to slow onset events like climate change. In this session we will discuss what goes into preparing for recovery before a disaster strikes so we can speed the return to normalcy and ensure that long-term recovery results in reduced risk, enhanced economic opportunity, and improved personal and ecological health.

Panelists: Franklin Babauta (Homeland Security and Emergency Management), Elizabeth Balajadia (Hazard Mitigation Grant Program), Patrick Guerrero (Public Assistance Office), Dr. Karl Kim (National Disaster Preparedness Training Center), Nicole Boothman-Sheppard (Architecture, Engineering, Construction, Operations, and Management, AECOM)

Moderator: Jean Tanimoto (NOAA, Office for Coastal Management)

Closing Protocol

3:30 PM -
4:30 PM

CLOSING REMARKS

Yolanda Joab-Mori

Special Assistant to the President on Public Information and Press Secretary of the Federated States of Micronesia

RETIRING OF COLORS

ABOUT OUR KEYNOTE SPEAKERS



Shelton, Austin J. III, Ph.D.

Associate Professor of Extension and Outreach

Interim Director, University of Guam Center for Island Sustainability and Sea Grant

Dr. Austin J. Shelton serves as an associate professor and the interim director of the University of Guam Center for Island Sustainability and Sea Grant. A native of Guam, Shelton grew up observing environmental degradation and was inspired to become a marine and environmental scientist. Shelton is an Obama Leader, BMW Guam Electrifying Leader, Micronesia Conservation Coalition Tide Changer Educator, and one of 50 under 40: Emerging Leaders in the Government of Guam. He led the team that earned the University of Guam its designation as a Sea Grant Institute in 2022. Shelton works to revive island ecosystems and advance the 17 United Nations Sustainable Development Goals. He is the steering committee co-chair of Guam Green Growth (G3), the island's most comprehensive public-private partnership ever created to achieve a sustainable and prosperous future. Shelton currently leads projects focused on watershed and coral reef restoration, circular economy, food security, aquaculture, renewable energy, and building STEM capacity in Pacific Islander communities. Since starting his career at the University of Guam in 2016, Shelton and his collaborators built a portfolio of grants exceeding \$54 Million, created more than 60 full-time jobs, provided over 260 paid workforce development experiences, and delivered thousands of community-focused impacts. Shelton earned a B.S. degree in marine biology from Hawai'i Pacific University and both an M.S. and Ph.D. in zoology with a specialization in marine biology from the University of Hawai'i at Mānoa.

ABOUT OUR KEYNOTE SPEAKERS



Deleon Guerrero, Galvin, Ed.D.

President, Northern Marianas College

Galvin Deleon Guerrero holds a Bachelors of Arts degree in English from the University of Puget Sound, a Masters of Arts degree in School Administration from the University of San Francisco, a certificate in digital filmmaking from New York University, and an education doctorate in organizational change leadership from the University of Southern California's Rossier School of Education. For over two decades, he has served in many educational policy positions, including the state Board of Education for the Northern Mariana Islands, the Board of Regents for Northern Marianas College, and as an education adviser for the Office of the Governor in the Commonwealth of the Northern Mariana Islands. He has also served in numerous educational leadership positions in K-12 and post-secondary institutions, including vice principal, principal, director of institutional development, director of institutional effectiveness, and accreditation liaison officer. Along the way, he has also continued to teach English and social studies at the secondary, post-secondary, and graduate levels and has presented at multiple conferences.

In 2021, Galvin was selected as the next president of Northern Marianas College. As a proud Chamorro, one of the indigenous Pacific Islander groups in the Northern Marianas, he has used his leadership to advocate for Pacific Islanders and Asian-Americans at the College and throughout the Micronesian region. Acutely aware of the trauma that islanders have endured through centuries of Western colonialism, geo-political and economic imperialism, and climate change, Galvin has refocused attention on the agency that they have demonstrated in countering such historical trauma. This includes helping develop the College's bold new mission to cultivate stewardship through scholarship with strategic priorities to take care of the College's people, resources, and community; securing more funding for the College's Asian American Native American Pacific Islander Institution (AANAPISI) programs that provide more wrap-around services and improve retention among Pacific Islanders; and recently launching a Green Growth Initiative with the Office of the Governor that will channel the resources of the Commonwealth of the Northern Mariana Islands to achieve the United Nations 17 Sustainable Development Goals by 2030.

Over the years, Galvin has also championed the voice and agency of indigenous Pacific Islanders and Asian-Americans by coaching and mentoring hundreds of students in theatre, film, speech, debate, and mock trial. He has produced over 50 stage and film productions ranging from plays by William Shakespeare, Disney musicals, to original scripts. These productions included award-winning films that have been featured in film festivals around the world, such as the "We Drank Our Tears" anthology that tells the stories of indigenous Chamorro and Carolinian civilians surviving the World War II battles on Saipan.

Galvin has been recognized with many awards, including distinction in the Who's Who organization, nominations for both the Rhodes and Marshall fellowships, three separate awards from the Northern Mariana Islands Humanities Council, Saipan Rotary Club's Citizen of the Year Award, and both the Best Made in the Marianas and Best of Festival awards at the Guam International Film Festival. Last but not least, Galvin is a devoted family man who is full of love and pride for his wife, Velma, and his three children, Victoria, William, and Mary Shelley

ABOUT OUR KEYNOTE SPEAKERS



Joan-Mori, Yolanda

Yolanda Joab-Mori is a daughter of the Lasialap clan and a mother of three of Pohnpei and Chuuk in the Federated States of Micronesia and has been engaged in climate action and building community resilience since 2011.

In 2011, Yolanda co-launched the first climate change focused education program in schools and communities across Micronesia, bringing climate change education to over 10,000 young Micronesian students and working with over 3,000 community members across the islands. Recognizing the undeniable interconnectedness of climate, environmental and social justice, and the need for an intersectional approach, Yolanda founded Island PRIDE in 2017, a grass-roots non-profit dedicated to empowering communities by center the most marginalized to take action, particularly women and girls.

More recently, she served as the Blue Prosperity Micronesia Coordinator, launching the FSM government's flagship initiative for sustainably developing its marine resources and protecting 30% of its over ocean that spans over 1 million square miles.

Through her advocacy work, Yolanda has spoken in several international platforms including as the keynote speaker at the IUCN World Conservation Congress, World Forum on Natural Capital, United Nations ECOSOC Youth Forum and the UN High Level Political Forum.

She is an alumnus of the Obama Foundation Leaders Program, East-West Center Pacific Islands Leadership Program and Young Pacific Leaders Program.

Yolanda is currently serving as Special Assistant to the President and Press Secretary of the Federated States of Micronesia, where she hopes to help change the narrative for her country to reflect the resilient perspectives of its own people.

ABOUT OUR TRAINERS



Ellis, Chris

Chris is a social scientist with NOAA's National Ocean Service, based in Charleston, SC. His training is in environmental sociology, survey design and implementation, recreation and tourism choice behavior, organizational behavioral networks, and social-psychological interaction with the coast. He has extensive experience in working with state and local municipalities to build capacity in coastal conservation, and community resilience. Working since 2005 for NOAA, and formerly for both the U.S. Fish and Wildlife Service and the National Park Service, he has gained unique perspectives of how the public and institutions understand, perceive, and use natural resources, particularly in coastal areas. He is an adjunct faculty member at the College of Charleston, where he works with students on an array of human dimensions-based research topics. Chris received his PhD in 2005 from East Carolina University.



Rubin, Jeff

Jeff Rubin has been teaching for University of Hawai'i's National Disaster Preparedness Training Center since 2012 and has been working in hazards, public safety, health preparedness, and science policy for more than 30 years. Jeff was the emergency manager for Oregon's largest fire district from 2001 to 2019; in a prior life, he was Hazardous Materials Captain and a rescue instructor for Austin/Travis County (Texas) Emergency Medical Services, working in hospital preparedness and mass casualty planning, training, and response. Jeff has a BS in Geology & Geophysics from Yale and an MA and PhD in Geological Sciences from the University of Texas at Austin. He served on the US National Academies of Science, Engineering, and Medicine's Board on Earth Sciences and Resources for six years and is a Fellow and former elected Councilor of the Geological Society of America.

ABOUT OUR PANELISTS

Arriola, Jonathan I.



Jonathan is currently serving as the Project Manager for the Community Development Block Grant- Disaster Recovery (CDBG-DR) under the Northern Marianas Housing Corporation. Overseeing and managing Disaster Recovery for New Construction Development and Rehabilitation for Housing projects. He also manages various Disaster Recovery Infrastructure projects on Saipan, Tinian, and Rota. Previously, Jonathan spent 17 years at the Bureau of Environmental and Coastal Quality, where he held the position of Director. During his time there, he played a pivotal role in environmental conservation and management, demonstrating his passion for protecting the natural resources of the Northern Mariana Islands. Jonathan's career reflects his deep understanding of the interconnectedness between the environment and the community well-being. He recognizes the importance of collaboration and believes in the power of communities coming together to build a more sustainable and resilient future.

Aydlett, Marcus Landon



Marcus "Landon" Aydlett is the Warning Coordination Meteorologist (WCM) at the National Weather Service Weather Forecast Office in Guam (WFO). There since June 2010 as a Journeyman Forecaster, he became the WCM in May 2020, serving as the WFO's liaison to its vast Area of Responsibility (AOR), which encompasses the western North Pacific island nations of the Republic of Palau, the Federated States of Micronesia and the Republic of the Marshall Islands. Also included is the Territory of Guam and the Commonwealth of the Northern Mariana Islands.

With a passion for communication and outreach, he engages the region through heavy weather briefs and early warning communications to regional homeland security partners, FEMA, three U.S. Embassies, USAID, and other territorial and national partners. He's also advanced weather communications on Guam by partnering with Guam's KUAM-TV to deliver a weekly weather segment on the Monday morning news broadcast and writing a bi-weekly weather column in the local Pacific Daily News.

Internationally, Aydlett represents the U.S. as part of the U.S. delegation to the U.N.'s Economic and Social Commission for Asia and the Pacific/World Meteorological Organization's 14-member nation Typhoon Committee, where he serves as Vice Chair of the Disaster Risk Reduction Working Group. Additionally, he is overseeing the establishment of the UNESCO/IOC Tsunami Ready Programme in its AOR with the International Tsunami Information Center (ITIC). Prior to his arrival on Guam, Aydlett was stationed at the U.S. Army's Kwajalein Atoll Reagan Test Site in the Marshall Islands. Aydlett served as a Launch Weather Officer for SpaceX launches and U.S. Military missile defense tests. He graduated from North Carolina State University in 2005 with a Bachelor of Science in Meteorology. *Cont...*

ABOUT OUR PANELISTS

Aydlett, Marcus Landon *Cont...*

Aydlett also keeps busy outside of the office with his involvement in the Guam Territorial Band, serving as a musician and as their Public Affairs Officer. He also serves as president of the Hagu Foundation, a non-profit he co-founded to engage the community of Guam on suicide prevention and awareness. His civic engagement reached new heights in 2022 when he and his twin brother broke two Guinness World Records for building the world's tallest and largest toy timber structure. They used this record attempt to raise \$20,000 for the Habitat for Humanity of Guam.

Babauta, Eileen



Eileen Alepuyo Babauta is the Program Director for the Northern Marianas College, University Center in Excellence on Developmental Disabilities. Eileen is an Alumni from the University of Guam with a Bachelors of Arts in Psychology. She continues to further her studies in the field of Micronesian Studies. Eileen is passionate about her work with individuals with developmental disabilities and is a strong advocate in her community. She works closely with the CNMI Developmental Disabilities Network (DD Network) and the Disability Network Partners (DNP) to create more accessible events for individuals with developmental disabilities to participate and enhance a fully engaged life in the CNMI. Growing up in the Marianas where constant weather changes occur, Eileen is also passionate about providing technical assistance to First Responders and emergency personnel to enhance and promote more disability integration in our response to emergencies and disasters.

Babauta, Franklin



Franklin Babauta Governor is the Special Assistant for the CNMI Office of Homeland Security and Emergency Management appointed by Governor Arnold I. Palacios and Lieutenant Governor David M. Apatang. He attended the University of Guam where he was commissioned as a Second Lieutenant in the United States Army Reserve and graduated with a Bachelor's Degree in Criminal Justice in 1991. Outside of the Army Reserve assignments, he was a Police Officer with the CNMI Department of Public Safety. During his Law Enforcement career, he was last appointed the Deputy Commissioner for Administration in 2003 and retired from the CNMI Police Department in 2006. He served 15 years with the Army Reserve as a Platoon Leader, Company Commander and participated in several Peace Keeping Missions in Malaysia and Australia before he transferred to the Guam Army National Guard in 2006.

After 25 years of services in the Army Reserve and Guam Army National Guard, he rose through the ranks and retired as a Lieutenant Colonel in June 2015. He *cont...*

ABOUT OUR PANELISTS

Babauta, Franklin *Cont...*

received numerous awards with his overseas deployments. Since his retirement from the Military, he is an active member with his former veteran's group of the 100 th Battalion 442nd Infantry. He served in the 21st CNMI Legislature as a Congressman representing Precinct 1 in 2020.

Balajadia, Elizabeth, P.E.

Elizabeth Salas Balajadia, P.E., better known as "Liz", is the CNMI Administrator for Capital Improvement Project with the Office of the Governor. In that capacity, her primary work is focused on managing hazardous mitigation projects funded by FEMA, and capital improvement projects funded by other federal grants – EPA, OIA, and EDA. After serving as Secretary for the CNMI Department of Public Works, she opened her engineering firm, ESB Consulting Engineers, in 1994. As a licensed professional engineer in the CNMI and Guam for many years, Liz did numerous projects for the Government of Guam such as the Guam Internship Airport, road designs of the YPAO Road and Route 14 for the Guam Department of Public Works. In 2019, Ms. Balajadia was the recipient of the Justice Award for her continuous and distinguished record of service for the restoration of the Judiciary "Guma Hustisia" building. Liza is affiliated with various organizations, serving as the former Chairperson of the Board of Directors for the CNMI's Board of Professional Licensing and Zoning Board. Liz holds a Bachelor of Science degree in Civil Engineering from Marquette University and Certification in Value Engineering and OSHA Construction Safety.

Benavente, David



David Benavente is a local Marine Biologist from Saipan who is currently a Mariana Islands Nature Alliance project manager. He has a Master's Degree in Marine Biology from the University of Guam-Marine Lab and was previously the Division of Coastal Resources Management's Lead Biologist. He has worked throughout Micronesia for over a decade, building local capacity and providing regional biological expertise. In addition to his work with MINA, he also supports the local community college, Northern Mariana College, as an adjunct professor. Most recently David has created a small consulting business where he employs NRM majors interested in building their technical and scientific diving capabilities. Aside from everything work-related, David enjoys spending his free time connecting to his roots through fishing and farming with his family.

ABOUT OUR PANELISTS

Bernardo, Kennet



Kennet Jann Bernardo, known as "Ken," is a Mechanical Engineer by profession. Ken has been an Engineer for the Water & Wastewater Engineering Division of the Commonwealth Utilities Corporation for the CNMI since 2020. Ken brings experience in water and wastewater treatment processes that helped him carry out his first projects at CUC. Ken has contributed to a couple of wastewater and water projects, highlighting the SR-2 Sewer Lift Station Rehabilitation, Lower Base Sewer Replacement, Island Wide Water Meter Installation, and the recent Sadog Tasi Wastewater Treatment Plant Primary Screen Installation and Secondary Clarifier Unit Replacement. These projects have been helping the CNMI community improve the quality of wastewater product and decrease the Non-Revenue Water. Ken continues to enhance his engineering skills through his experiences in the Water & Wastewater Utilities field. Outside public service, Ken loves biking, tennis, and bonding with his beautiful wife, Emily, and wonderful kids, Kalen and Kai.

Boothman-Sheppard, Nicole



Nicole Boothman-Shepard is AECOM's Vice President and Senior Director for Resilience + Recovery. Nicole is passionate about partnering with communities on strategic risk reduction for shocks and stresses and facilitating equitable and transformative community development. She is AECOM's global advisor on disaster risk reduction.

Nicole has facilitated the award of \$9B in federal disaster funding for post-disaster stabilization and resilient recovery for public sector clients. She spearheads program management on major and catastrophic recovery focusing on best-value building and infrastructure investments and all aspects of pre-disaster risk avoidance, resilience and mitigation. Sought out for her balance between innovation and risk, Nicole is a FEMA Vanguard Fellow (2024).

Nicole provides strategic advisement on sustainable and resilient building and infrastructure investment to leverage positive social, economic, and environmental co-benefits. She is Vice-Chair of the US Transportation Research Board's (TRB) Resilience Section which leads all emergency management and resilience committees for all modes. TRB is the transportation arm for the National Academies of Sciences. She is a contributing author of Climate Change and the Built Environment (ACEC 2022). Nicole is the principal investigator for TRB's, Contracting Strategies Guidebook for the Administration of Concurrent, Regional Emergencies and Disasters. She was appointed by 3 governors as Executive Director of the Rhode Island Service Alliance with a dual appointment as the State's Vulnerable Populations Coordinator for RI Emergency Management Agency for a 7-year term prior to joining the private sector.

ABOUT OUR PANELISTS

Coleman, Milton Jr.



Milton Coleman Jr. (aka "Jun") is the Executive Director of 500 Sails; a CNMI non-profit which is focused on the revitalization, promotion, and preservation of the Northern Mariana Islands' maritime traditions and cultural heritage. Jun was born on O'ahu, Hawai'i and is of Hawaiian, Samoan, Chamorro, and Refaluwasch descent. In the early 1990's he earned the trust of Kahuna Kālai Wa'a (Master Hawaiian canoe builder) Wright Bowman Jr. who asked him to be his apprentice. With the blessing of Bowman, he then spent six cherished years learning, building and sailing under the tutelage of beloved Dr. Pius Mau Pailug. Jun has had the honor of sailing on several long distance voyages with the Hōkūle'a, Makali'i, Hawai'loa, and Simion Hokulea. Since then he has led and participated in the building of various styles of sailing and voyaging canoes which are the tangible expressions of knowledge and passion for our seafaring heritage.

These experiences led him to teach and support canoe programs with Bishop Museum, Hawai'i Public Charter Schools, Kamehameha Schools' 'Āina-based Education Department, Kapiolani Community College's Summer Bridge program, Kūlaniakea, University of Hawai'i's Civic Engagement Program, Mālama Honua Public Charter School, Ke Kula Nui o Waimanalo, NMI Canoe Federation. The Northern Marianas Humanities Council's Board of Directors selected Jun to receive the 2023 Preservation of Traditional Cultural Practices award. Jun holds a USCG Master/Captain license and was initiated as a Navigator in the Pwo ceremony conducted on Satawal under the Weriyaeng Traditional School of Navigation.

Cruz, Zabrina Shai



Zabrina Mae Shai Cruz is the Director of the Division of Environmental Quality at the Bureau of Environmental & Coastal Quality, in the Commonwealth of the Northern Mariana Islands. She executes the programmatic, administrative, and regulatory goals for the division. She has been with the BECQ for approximately 8 years, where she was an Environmental Specialist and then the Pesticides Program Manager before being appointed Director. She graduated from the Northern Marianas Community College, with an Associate of Science degree in Natural Resource Management. During her time in college she was a volunteer for the local non-profit organization, Mariana Islands Nature Alliance, where she assisted in island beautification projects and public outreach. Her goal is to encourage the community to adapt to a sustainable, healthier and safer way of life. Zabrina enjoys spending quality time with her family and close friends.

ABOUT OUR PANELISTS



Derrington, Erin

Erin Derrington is the Local2030 Islands Network Global Energy and Water Communities of Practice Coordinator, furthering localized action towards the sustainable development goals with a focus on resilient infrastructure systems on islands worldwide. Previously, Ms. Derrington was a long-time resident of the CNMI who supported resiliency and recovery planning and project implementation in her past roles working with the Bureau of Environmental and Coastal Quality and the Office of Planning and Development through the Typhoon Soudelor and Super Typhoon Yutu disaster declarations. She is a co-author of the 2021 Pacific Islands Regional Climate Assessment report, *Climate Change in the Commonwealth of the Northern Mariana Islands: Indicators and Considerations for Key Sectors*, and has facilitated the creation of numerous data-driven resiliency-related plans and projects throughout the region at international, national, municipal, and resource-specific levels. With a professional background in sustainable development planning and action, and an academic background in environmental science and law, Erin is excited to join PRIMO2024 as a speaker and moderator to share highlights of these past experiences and align efforts to expand robust and collaborative peer-to-peer communities anchored in knowledge exchange and technical capacity building to achieve and amplify island-driven solutions to complex sustainable development challenges.



Greene, Robbie

Robbie is the Associate Director of Pacific Coastal Research and Planning, but shuns this title in favor of “Geographer”. He has lived and worked in the CNMI for the past 12 years, enjoying prior stints as CNMI’s NOAA Liaison and the CNMI Coastal Program’s Hazards and GIS Specialist. His professional interests include using geospatial tools to solve all the problems, and ground-truthing data from ocean observing platforms, especially wave buoys.



Guerrero, Patrick

Patrick Guerrero currently serves as the Governor’s Authorized Representative (GAR) for the CNMI and is responsible for the administration of FEMA disaster assistance programs in the CNMI. Guerrero started in disaster recovery work as a FEMA Project Specialist under the FEMA/CNMI Joint Field Office after Typhoon Soudelor in 2015 and later joined the CNMI Public Assistance Office in October 2016 to continue the recovery work for the Commonwealth. From 2019-2020, he served as the Public Assistance Officer for the CNMI and was designated the GAR in 2020. He is responsible for the administration of the Individual Assistance, Public Assistance, and Hazard Mitigation programs funded under FEMA for four separate major disaster declarations. During the COVID-19 Pandemic, Guerrero was a key member and advisor to the CNMI Governor’s COVID-19 Task Force and took the lead in the acquisition of resources from personal protective equipment to coronavirus test kits and medical equipment for the protection of the islands’ communities.

ABOUT OUR PANELISTS



Hayden, Maya

Maya Hayden is an Environmental Scientist and Director of Outreach and Engagement for the USGS Pacific Coastal and Marine Science Center in Santa Cruz, California. Her primary role is as a bridge between USGS coastal hazards science and decision-making applications. She develops and leads collaborative, interdisciplinary stakeholder engagement efforts to ensure that USGS coastal hazards science is actionable and centered on the needs of end-users. She has extensive experience building capacity to plan for and adapt to climate-driven coastal hazards. She holds a Ph.D. in Environmental Science, Policy, and Management from the University of California, Berkeley and an M.S. in Biology from Stanford University.



Hosoda, Kanoho, Ph.D.

Dr. Kanoho Hosoda is a Community Resilience Learning Specialist that supports the National Oceanic Atmospheric Administration's (NOAA) Office for Coastal Management. She has over 15 years of experience as a Native Hawaiian place-based science educator and is deeply invested in a paradigm shift towards the incorporation of Indigenous knowledge in conventional sciences. In her current role, Kanoho develops products and provides learning services geared towards empowering coastal managers in the Pacific region. Her expertise lies in facilitating three critical elements: the application of traditional ecological knowledge, the enhancement of risk communication strategies, and the implementation of nature-based solutions for inundation challenges.



Johnston, Lyza, Ph.D.

Dr. Lyza Johnston is a coral reef ecologist and the Founder and Executive Director of Johnston Applied Marine Sciences (JAMS), an independent marine conservation and research organization based in Saipan, CNMI. Before moving to the Mariana Islands over ten years ago, she received a Bachelor of Science degree from the University of Florida and a Ph.D. in Marine Biology and Fisheries from the University of Miami Rosenstiel School of Marine, Atmospheric, and Earth Sciences. Dr. Johnston and her team are working towards restoring more climate resilient coral populations and reef ecosystems in the CNMI, which will, in turn, support and improve the resilience of the island communities that rely on them. They are developing, testing, and implementing tools and interventions that will increase the thermal tolerance and adaptive capacity of restored coral populations. Current projects include identifying coral populations that are naturally thermally tolerant to use in restoration efforts, assisted breeding and the development of tools to support large-scale restoration using sexually produced corals, as well as more traditional coral culturing, outplanting, and monitoring.

ABOUT OUR PANELISTS



Kim, Karl, Ph.D.

Karl Kim is Professor of Urban and Regional Planning at the University of Hawaii and Director of the Graduate Program in Disaster Management and Humanitarian Assistance. He holds appointments in the School of Architecture and at the Center for Korean Studies. He is also Executive Director of the National Disaster Preparedness Training Center (NDPTC), authorized by the U.S. Congress to develop and deliver training courses for first responders, emergency managers and community leaders on disaster response and recovery. The NDPTC has trained more than 67,000 people across the nation and is a member of the National Domestic Preparedness Consortium. He has previously served as Vice Chancellor for Academic Affairs and as Chairman of the National Domestic Preparedness Consortium. Dr. Kim has led research and training projects on transport, disaster risk management, and urban planning throughout the world. He has received more than \$80 million in research and training grants from federal, state and international organization. He has published extensively on urban planning and risk management. He serves several committees of the Transportation Research Board and has served as a Navigator and Chair for the Pacific Risk Management Ohana (PRiMO). Educated at Brown University and the Massachusetts Institute of Technology, he has been a Fulbright Scholar to Korea and to Russian Far East. Dr. Kim is Editor of Transportation Research Interdisciplinary Perspectives (<https://www.sciencedirect.com/journal/transportation-research-interdisciplinary-perspectives>); he is Associate Editor for Transportation Research Part D (Transport and Environment) and Progress in Disaster Science. Dr. Kim is currently writing and editing a 10-volume series on Disaster Risk and Reduction for Routledge Press.



Macduff, Sean, Ph.D.

Dr. Sean Macduff is the superintendent for the Mariana Trench Marine National Monument. He leads Trench Monument program operations from the FWS offices and visitor contact station in Garapan, coordination with partners, and education and outreach activities. Superintendent Macduff is responsible for all supervisory and operational elements of the FWS conservation management of the MTMNM. Dr. Macduff was raised in the Mariana Islands where resource sustainability and environmental stewardship were a constant life lesson. Macduff started his conservation career in Hawai'i as a Graduate Research Fellow with the National Science Foundation from 2008 to 2013. He also studied coral reefs in Hawai'i and Saipan for the University of Hawai'i at Mānoa (UHM), where he earned his Bachelor of Science degree in marine biology and biological oceanography. He went on to earn his Doctorate in zoology from the UHM. Dr. Macduff has more than 15 years of experience in science and management of marine ecosystems, including working for the U.S. Environmental Protection Agency (EPA), Sea Grant in Seattle, the CNMI Division of Fish and Wildlife, and the U.S. Army Corps of Engineers.

ABOUT OUR PANELISTS

Masga, Floyd



Floyd has over 30 years of extensive work experience working in public safety, environmental conservation, sustainable fisheries, higher education, individuals with disabilities, and has extensive experience working with federal grants and project management. He is also a current Marianas Trench Marine National Monument Advisory Council (MTMAC) member. In his many roles, he has conducted consulting and training in a wide variety of topics. Floyd has a Master's in Education from Framingham State University and a Bachelor's in Criminal Justice and Criminology from the University of Texas at Arlington.

Pablo, Dianne



Dianne Pablo is currently the GIS Specialist for the CNMI Division of Coastal Resources Management. She provides technical expertise and support in the use of geospatial technologies in order to establish informed decision-making outcomes and foster collaborative relationships within the community. An alumna of the Northern Marianas College, she spent two years in Fairbanks, Alaska completing her undergraduate career in Natural Resources and the Environment and eventually moved to Salt Lake City, Utah where she obtained her graduate degree in GIS. As a recent graduate, she decided to come back home and work for the islands that initially sparked her interest in environmental preservation and coastal management. Outside of the office, she spends time with her family and friends either at the beach or at the soccer field.

Quiocho, Kalani



Kalani Quiocho was born in Hilo, Hawai'i and raised in part by his great-grandparents who were Hawaiian medicinal healers. Kalani was a fisherman before becoming a NOAA Longline Fishery Observer on tuna fishing vessels for several years. From 2016-2021, he served as the Native Hawaiian Program Specialist for Papahānaumokuākea Marine National Monument and currently serves as the Cultural Resources Coordinator for NOAA's Office of National Marine Sanctuaries (ONMS) Pacific Islands Region. Kalani is pursuing a doctorate degree at the University of Hawai'i (UH) at Mānoa within the Department of Natural Resources and Environmental Management. He is building upon an academic background in Hawaiian studies and language from the Hawai'i inuiākea School of Hawaiian Knowledge at UH Mānoa and marine science from UH Hilo. His collective work focuses on Indigenous forms of governance and environmental stewardship to understand how Indigenous Peoples' contributions can improve management, policies, and laws that govern ocean areas and marine resources. Kalani resides in Hilo on the island of Hawai'i with his wife, their three children, and his large extended 'ohana (family).

ABOUT OUR PANELISTS



Reyes, Alley

Alley Reyes is a Water and Wastewater Engineer for the Commonwealth Utilities Corporation. She has been involved in managing water and wastewater infrastructure projects since 2019. When she first started with CUC, she assisted Water Operations efforts in reducing the non-revenue water. In 2021, she led and assisted in collecting data for the Drinking Water and Clean Water Needs Survey. Information from those surveys was used to allocate federal funds to each state's Drinking Water and Clean Water State Revolving Fund program. Alley is committed to using her engineering skills to help provide the community with clean, potable, and palatable water.



Romero, Van, Ph.D.

Dr. Romero is currently the Vice President for Special Research Programs, Professor of Physics and serves as the Chief Operating Officer of New Mexico Institute of Mining and Technology (New Mexico Tech). As the Research Vice President, he is responsible for a diverse research portfolio with an annual budget of \$100M. While at New Mexico Tech, he has served as the Principal Investigator for projects that total over 1/2 of a billion dollars, which includes programs in astronomy, earth science, Homeland Security and energy. Dr. Romero obtained his B.S. and M.S. in Physics from New Mexico Tech where he studied natural radiation in the environment. He obtained his Ph.D. in Physics from the State University of New York at Albany, where his dissertation research focused on the strong force coupling constant that drives binding within the nucleus. Prior to joining New Mexico Tech, Dr. Romero worked at four DOE laboratories and spent 15 years working in the Naval Reactors program. Current research activities include the design, development, construction and commissioning of the Magdalena Ridge Observatory's optical interferometer and the production of Hydrogen from brackish water. In addition to his research, Dr. Romero is a member of numerous advisory boards, mentors students and teaches classes.



Salas, Richard

Richard currently serves as the Director of the Commonwealth of the Northern Mariana Islands' (CNMI) Division of Coastal Resources Management (DCRM). In his capacity as DCRM Director, his responsibilities include managing the day-to-day operations of the CNMI's Coastal Zone Management Program (CZMP) and the Coral Reef Conservation Program (CRCP); developing and executing strategic plans and actions that promote sustainable economic development and through effective planning and coordination; management of DCRM's financial and grants management systems, and tracking performance; and supervising and providing guidance to section managers in their duties. Lastly, Richard serves as the chairperson of the Coastal Resources Management Board of Agency Officials (CRM Board), where he leads and facilitates the decision-making process regarding permit applications during meetings.

ABOUT OUR PANELISTS

Schierenbeck, Tim



Tim Schierenbeck is a Geospatial Analyst with Lynker Technologies supporting the National Oceanic Atmospheric Administration's (NOAA) Office for Coastal Management. Located in Honolulu, Hawai'i, he provides technical assistance to the Pacific Region. Tim started his career in freshwater systems, with a graduate degree in Freshwater Science and Technology from the Great Lakes Research Facility in Milwaukee, Wisconsin on Lake Michigan. He researched water quality sensor development and automation before working as a GIS/ecological technician for Ozaukee County Planning Department, followed by work as survey data project manager for a local land survey firm in Portland, Oregon. His professional interests include watershed hydrology, cartography, and geodesy.

Schnell, Lena



Lena Schnell is a natural resources manager that has worked in Hawaii and the Pacific mitigating hazards to the natural and built environments for over 25 years. Since 2016 she has worked with Nimbus Environmental Services on environmental and regulatory projects in the CNMI, Palau, American Samoa, and the Federated States of Micronesia. In 2018, she worked with Nimbus to develop the Guidance Manual for Smart, Safe Growth for the CNMI and delivered workshops on Saipan to promote Smart, Safe Growth following Super Typhoon Yutu. Currently, she is working with Nimbus Environmental Services and the Hazard Grants Mitigation Program under the Office of the Governor to update CNMI's Standard State Mitigation Plan.

Stole, Heather



Heather Stole joins the Public School System as the Disaster Program Manager after several years of working under the Public Assistance Office, Office of the Governor. With a double major in Business Management and Marketing from Boise State University, Heather has formed relationships with both state and federal stakeholders with respect to disaster planning and recovery. Almost eight years in managing disasters, she has found a niche in ensuring our community builds with resiliency and flexibility while navigating the CNMI's many challenges and maintaining the PSS motto of 'Student's First'.

Williams, Ashton



Ashton Williams is the Program Manager of the Guam Coral Reef Initiative, a program of the Guam Department of Agriculture (DOAG). She has a master's degree in biology from the University of Guam, and she has been working in coral reef management on Guam for nine years. Her work is focused on coral reef restoration, water quality, and watershed management.

ABOUT OUR PANELISTS



Wood, Nathan

Nate Wood is a supervisory research geographer with the USGS Western Geographic Science Center and is located in Portland, Oregon. His research focuses on the use of geospatial analysis and modeling to characterize and communicate societal vulnerability to natural hazards, including sudden-onset and chronic hazards. He earned a Ph.D. in geography from Oregon State University, a M.S. in marine science from University of South Florida, and a B.S. in geology from Duke University.
