

TRI - REGIONAL JETS 2025





How to Truncate the Life Cycle of Emergency & Disaster Preparedness, Response & Recovery

SAME Tri-Regional JETS
22 October 2025





How to Truncate the Life Cycle of Emergency & Disaster Preparedness, Response & Recovery

Panelists:

- Angela Nocera, P.E., *National Market Lead - Army*, Michael Baker International
- Carlos J. Castillo, *DS/FEMA Market Lead*, Tidal Basin Group
- Joseph Williams, P.E., *Federal Program Manager*, Micheal Baker International



PANELIST

Angela Nocera P.E., F.SAME

Michael Baker International

Vice President | National Market Lead - Army

Michael Baker

I N T E R N A T I O N A L

- Professional Engineer (PE) with a career focused on Civil and Environmental Engineering consulting for government agencies.
- Extensive experience in evaluations, designs, and construction support for military facilities, flood control systems, roadways, and airfields
- Skilled in managing both traditional and rapid-response contracts.
- Currently serves as Vice President and Army National Market Lead at Michael Baker International, Inc. Leads strategic and technical initiatives to expand services to the U.S. Army.
- Recognized as a Fellow in the Society of American Military Engineers (SAME).



PANELIST

Carlos J. Castillo

Tidal Basin Group

DHS/FEMA Market Lead



- 40+ years of leadership experience in emergency and disaster management across county, national, federal, and international levels, as well as non-profit organizations.
- Retired from Miami-Dade County, FL after 26 years of service as Emergency Management Director and Assistant Fire Chief, having managed major disasters including wildfires, airplane crashes, and over a dozen hurricanes.
- Served as FEMA Assistant Administrator for Recovery and Deputy Administrator for Resilience.



PANELIST

Joseph Williams P.E., CQM-C

Michael Baker International

Federal Program Manager

Michael Baker

I N T E R N A T I O N A L

- 24+ years of experience as a senior civil engineer, project manager, and department manager
- Provides design expertise and leadership for projects related to disaster recovery
- Worked at NAVFAC SE for 10+ years prior to joining Michael Baker. Served on the NAVFAC SE Disaster Assessment Team at NSA Panama City following Hurricane Michael.



TIDAL BASIN®



Trusted experts in emergency management
& resilience



Partner-driven, results-focused program delivery



All-hazards mitigation & pre-event strategies



Scalable support for rapid response
& technical aid



Expertise in uniting federal/state funding (FEMA,
HUD, DoT, etc.)

Michael Baker
INTERNATIONAL



19+
Years in
Business

2000+
Full-Time and
Cadre Staff

250+
Clients

\$45B+
Total Federally
Funded Programs

**We believe that everyone has the right
to achieve their full potential.**

**With a team that cares passionately about
changing the world for the better.**

**Transforming and empowering
communities, making them stronger.**

**Looking beyond the obvious,
creating new opportunities.**

**Listening, understanding, never
giving up.**

Be Stronger Than Before.



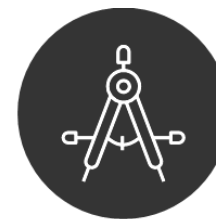
A leading innovator in engineering, consulting and technology services, including design, planning, architectural, environmental, construction and program management, addressing challenges to support infrastructure resilience—solving some of the world’s most complex challenges posed by our changing world.



5,100
Employees



90+
Office Locations



8,000+
Federal Projects



85
Years of
Project Innovation



#27
2025 ENR Top 500
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70+
Countries in Which
We’ve Worked



Learning Objectives

- Understand the four phases of disaster management: Mitigation, Preparedness, Response, and Recovery.
- Identify the roles of government agencies, the private sector, and nonprofit organizations in disaster management.
- Learn about key emergency management tools and strategies.
- Explore real-world examples of disaster recovery projects and key considerations for successful recovery.



Agenda

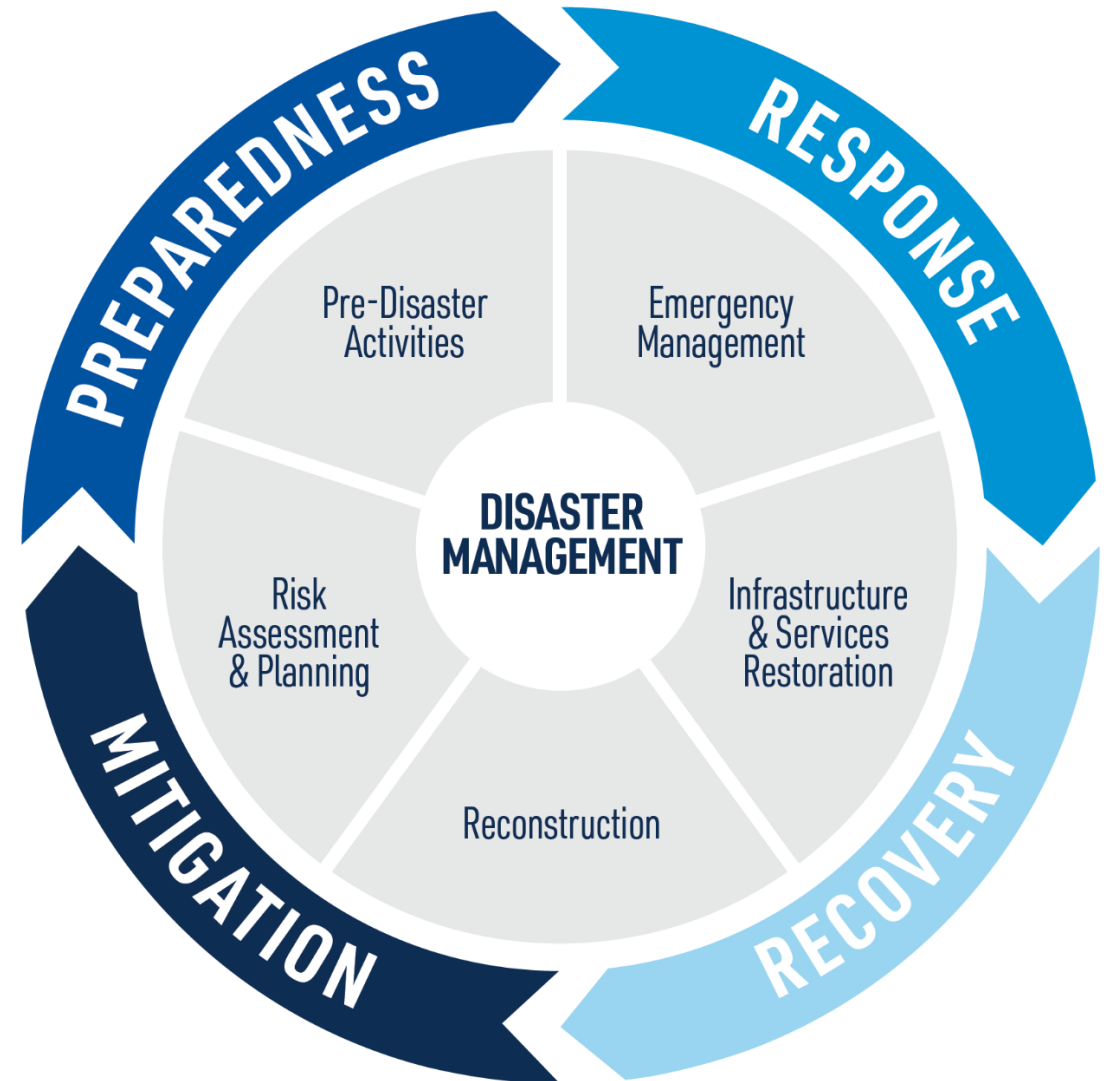
- Disaster Life Cycle
- Disaster Preparedness and Mitigation
- Disaster Response
- Disaster Recovery
- Q&A / Discussion

Disaster Life Cycle



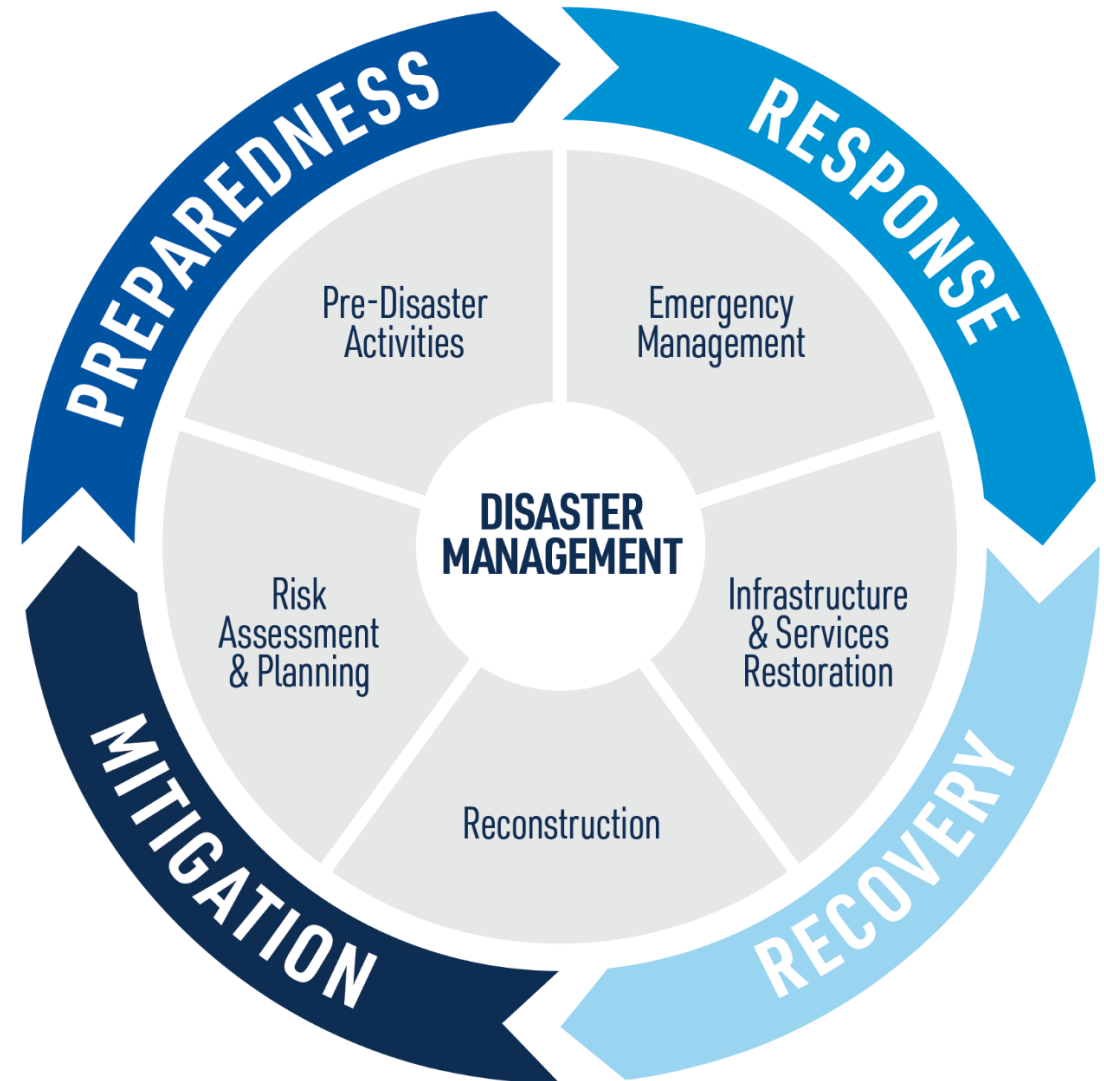
Disaster Life Cycle

- **Mitigation:** Avoid or mitigate disasters before they happen
- **Preparedness:** Get ready for a disaster before it happens
- **Response:** Act during and immediately after a disaster to save lives, protect property and meet basic human needs
- **Recovery:** Restore the community to its pre-disaster state



Who is Involved?

- **Government Agencies**
 - Develop policies, coordinate plans, lead response & recovery (e.g., FEMA, EPA, HHS)
 - Provide funding, training and disaster assistance programs
- **Private Sector**
 - Conduct risk assessments and business continuity planning
 - Supply critical goods, services and infrastructure support
 - Contribute to recovery through funding and logistics
- **Nonprofit Organizations**
 - Advocate for preparedness and policy change
 - Deliver emergency aid (e.g., Red Cross, VOAD)
 - Support long-term recovery and community rebuilding



Disaster Preparedness & Mitigation

*Without complex preparedness,
you will not have a complex response.*





Complexity & Impacts of Disasters

Response and Recovery Operations must address a multitude of demands.

Agent-generated demands

Response-generated demands by individuals, organizations, and communities

Normalcy-generated demands

Mitigation-generated demands

Preparedness-generated demands

Emergency Management Tools

Risk Assessments

Used to identify vulnerabilities to climate-related hazards such as floods, hurricanes, wildfires, and extreme heat. These assessments inform adaptation strategies.

Planning and Preparedness

Establish evacuation routes, shelters, early warning systems, and communication protocols. Establishing prepositioned response and recovery contracts.

Community Engagement

Emergency managers work with residents and visitors, businesses, and organizations to raise awareness about climate risks, promote preparedness measures, and foster community resilience.

Infrastructure Resilience

Emergency management agencies collaborate with government agencies, utilities, and infrastructure providers to enhance the resilience of critical infrastructure systems.

Response and Recovery

Emergency management professionals coordinate response and recovery efforts to save lives and protect property.

Policy Development

Advocating for policies that promote climate adaptation and resilience at the local, state, and national levels is imperative. Adoption of modern building codes & standards (IBC, ASCE 7, etc.) DRRA, BRIC



Emergency Management Tools

Installation Concentric

Risk Assessments

- Real Property Inventory
- Utility Capacity / Vulnerability
- What is High Value / Mission Critical?
- What is not needed?
- Strategic Supplies (PPE, Generators, Water, etc.)

Planning and Preparedness

- Prioritize Real Property; plan accordingly
- Regional planning (MIRR, etc)
- Black Start / Training Exercises
- Restocking / Vendor Supply Plans
- Business/Operations Continuity

Community Engagement

- Develop/Integrate Plans Regionally (MIRR, etc)
- Training Exercises
- Identify stakeholders, develop communications plans
- Identify contractual stakeholders (FEMA, IGSA, etc)

Infrastructure Resilience

- Design & Construction – Hardening, etc.
- Identify goals: build back, build to code, build to future?
- Consider pre-emptive demo – clear trees, remove unusable buildings, etc.

Response and Recovery

- Debris / Contaminant Removal
- Hazard Abatement
- Infrastructure Assessments
- Security
- Emergency Power
- Design & Construction
- Business /Operations Continuity

Policy Development

- Contract Vehicles – BPA/Schedules, MATOC, IGSA, OTA, etc.
- Building Codes / UFCs
- Permit Requirements
- Construction Means & Methods (PEMB, Modular, etc)



Enhancing Preparedness

Regional vs Installation preparedness plans

Wargaming approach

Digital modeling to drive Disaster-Informed Value Engineering (VE)

Pre-positioned response and recovery contracts

Preemptive selection for demolition of buildings that are past useful life, vacant, or pose a potential hazard during a severe weather event (Miami-Dade County Best Practice)



Disaster Strikes



Disaster Response

*Your response will be as complex
as your preparedness.*



FEMA Community Lifelines

Community Lifeline	Description
Safety and Security	Law enforcement, fire, SAR, emergency management
Food, water, shelter	Access to food, water, shelter, sanitation
Health and Medical	Medical care, EMS, disease control, patient transport
Energy (power & fuel)	Power grid, fuel, energy system continuity
Communications	911, alerts, Internet, radio, telecom
Transportation	Roads, air & seaports, transit for people & goods
Hazardous Materials	CBRN threats, hazmat containment & response



Disaster Response

1. Assess
 - Quantify damage
 - Usability for critical infrastructure
 - Condition of FEMA Community Lifelines
2. Immediate Response
 - Debris / Contaminant Removal
 - Stabilize Infrastructure / Mission
 - Security
 - Emergency Power
3. Public Assistance
 - Community Engagement
 - FEMA Hazard Mitigation Grants (404/406/SDE)
 - Individual Assistance (housing)



Disaster Preparedness & Response Example



Florida Division of Emergency Mgmt.

Multiple Statewide and Emergency Contracts

Under multiple State MSA and standby contracts with FDEM, the Tidal Basin Team has provided professional consulting and disaster management support in the following areas:

- Strategic Advisory Consulting
- Program & Policy Design (SHRC Pilot Program)
- Project Management Office
- Standard Operating Procedure Development
- Training & Tabletop Exercises
- Technical Assistance
- Damage Assessments
- EOC Staff Augmentation
- Outreach & Public Relations
- Disaster Response & Logistics
- Haul & Install Missions
- Contact Center Support
- Phoenix OneCase Tech
- Disaster Case Management
- Intake & Eligibility Reviews
- Cost Tracking & Recovery
- FEMA IA, PA, & HMGP
- Alternative Mitigation Opportunities
- Additional Eligible Damages Identification
- Long-Term Recovery Planning Guidance
- Appeals & Audits
- Construction Management
- Final Inspections
- Project Closeouts
- After Action Reports
- Reporting & Data Mgmt.

Project Highlights:

- **\$847M+** Combined Contract Value for the following projects:
 - COVID-19 Vaccine Program
 - Debris Management (MSA)
 - Hurricanes Ian, Idalia, Helene, and Milton Non-Congregate Sheltering (NCS) Programs, Sheltering & Temporary Housing, Starlink Satellite Communication Deployments, and Substantial Damage Program
- **237.7K+** Total Applicants Supported
- **218K+** Vaccine Appointments Scheduled through the Call Center
- **19.7K+** Total NCS & SHRC Applicants
- **9.2K+** Eligible NCS & SHRC Applications Confirmed
- **70K+** Damage Assessments Completed
- **20M+** Contact Center Calls Handled
- **800+** Mobile Satellite Communication Stations Deployed and Maintained

Sheltering and Public Assistance Example



Puerto Rico Department of Housing (PRDOH)

FEMA Sheltering and Temporary Essential Power (STEP) Pilot Program

Tidal Basin provided program management to PRDOH for the \$1.7B program which allowed homeowners to shelter-in-place while permanent repairs were made to their homes. The Tidal Basin team conducted outreach and intake to more than 215,000 residents, processed more than 122,000 applicants and repaired 108,000 homes. We implemented the program within nine months and successfully closed the project out within 15 months.

- Program design and policy development
- Rapid startup in a challenging environment
- Local, state, and federal compliance, including local environmental agencies
- Outreach and marketing in both English and Spanish
- Applicant intake, including determination of eligibility and duplication of benefits analysis
- Case management services
- Inspection services, including documenting structural damage
- Invoicing and program closeout
- Employee recruitment and training
- Call center management

Project Highlights:

- **\$1.7B+** Program affecting all **78** Municipios across Puerto Rico
- **700** Island residents interviewed, hired, and trained in a 72-hour period
- Processed **122K+** applicants
- **15K+** Home inspections in peak week
- **108K+** Homes repaired
- **215K+** Residents reached
- **98%** customer satisfaction
- **5 days** program startup, **15 Months** program closeout
- **Zero** DHS OIG Monitoring findings

Disaster Housing Response Example



FEMA LogHouse

2024 Iowa Floods and Severe Storms

Provided Iowa communities affected by the 2024 floods and severe storms with direct temporary housing assistance. MLU was tasked with constructing three group sites to accommodate the impacted disaster survivors. The following site land development, permitting, and construction services were performed in under 60 days for all three sites.

- Full site development including:
 - Surveys, planning, design/engineering, and permitting
- Full site construction including:
 - Underground utilities, roadways, mobile home pads, tornado shelters, and common areas
- Project and construction management

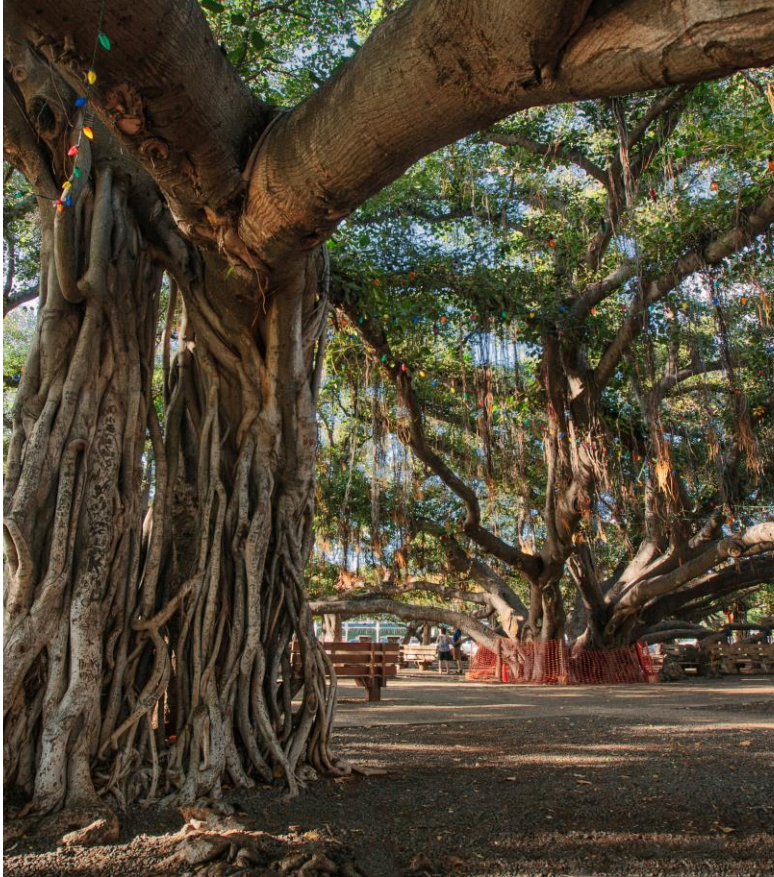


Group Site Project Highlights

- **16th Street Site, Hawarden, IA**
10 units completed in 35 days
- **North Y Site, Spencer, IA**
20 units completed in 47 days
- **Rock Ridge Site, Rock Valley, IA**
66 units completed in 57 days



Disaster Recovery Example



Hawaii Emergency Management Agency HI-EMA

Maui Wildfires

Supporting recovery efforts for the devastating 2023 Maui wildfire, which destroyed 2,200 structures, displaced nearly 12,000 residents, and left 7,000 in temporary shelters. The disaster also caused significant cultural and economic losses. We are providing the following services:

- Strategic Advisory Consulting
- State and County Emergency Operations Center (EOC) Staff Augmentation
- Mobile Satellite Communications
- Contact Center Support
- Phoenix OneCase Tech
- Disaster Case Management
- Applicant Intake & Eligibility Reviews
- Personal Property Debris Removal (PPDR) and Right of Entry (RoE) Services
- Non-Congregate Sheltering (NCS)
- FEMA IA, PA and HMGP Program Management
- Cost Tracking & Recovery
- Long-Term Recovery & Housing Guidance and Implementation
- Construction Management

Project Highlights:

- **\$23.9M+** Contract Value
- **11.1K+** Total Survivors Supported
- **4.3K+** Eligible Applicants Confirmed
- **3K+** Survivors Transitioned from Temporary to More Stable, Longer-Term Housing
- **2.1K+** Right-of-Entry (RoE) Applications Processed for Residential and Commercial Properties
- **400** Unit Interim Housing Development Construction Oversight (MBI + TB)
- **72** Mobile Satellite Communication Stations Deployed and Maintained

Disaster Recovery

*Long-term recovery sets the stage
for future preparedness.*



Disaster Recovery

Design & Construction

Who is recovering?

Replacing or upgrading?

Adding new facilities?

After-Action Reporting

How do you inform the next generation of Preparedness Plans?

DISASTER RECOVERY



Disaster Recovery Projects | Examples

NSB Kings Bay - Repairs Following Hurricane Elsa

- Tornado damage impacted three essential buildings
- Disrupted maintenance operations for nuclear submarines

NAWS China Lake –Post-Earthquake Recovery Initiatives

- Two significant earthquakes occurred in 2019
- Extensive damage to buildings, equipment, airfield, and overall infrastructure
- Several MILCON projects established to repair and restore laboratory and RDT&E capabilities

Tyndall AFB – Reconstruction After Hurricane Michael

- Struck by a Category 5 hurricane with 160-mph winds
- A comprehensive five-year, \$3B+ Reconstruction Program
- Michael Baker served as Program & Design Integrator for reconstruction effort



Disaster Recovery Projects | Considerations

NSB Kings Bay Hurricane Elsa Building Repairs

- Site situated within a controlled zone
- Restoring various building systems while ensuring that unaffected areas remain occupied

NAWS China Lake Earthquake Recovery Initiatives

- Adherence to explosive safety standards
- Strict seismic criteria
- Involvement of multiple stakeholders

Tyndall AFB Hurricane Michael Reconstruction Efforts

- Integration of design and construction for 120 new buildings and 34 renovation projects
- Utilizing BIM to create a 4D digital twin model
- Coordinating rebuilding activities with USAF mission requirements to avoid conflicts



Humanitarian Assistance Projects

- Executed by NAVFAC Southeast
- Strengthens regional partnerships
- Enhances U.S. military readiness
- Improves disaster preparedness and resilience
 - Disaster relief warehouses, shelters, and operational facilities
 - Helps to speed relief/recovery efforts during the next event
- Empowers local governments
- Promotes stability and security



Open Discussion

How do we truncate the life-cycle of preparedness, response, and recovery?



Contact Us



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Thank you.



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