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This Month in Disaster History

1989 Loma Prieta Earthquake

The 1989 Loma Prieta earthquake struck on October 17, 1989, at 5:04 p.m. Pacific Daylight Time, registering a moment magnitude of 6.9 and lasting approximately 8 to 15 seconds. Centered in the Santa Cruz Mountains near Loma Prieta Peak, about 10 miles northeast of Santa Cruz, California, the quake originated at a depth of 19 kilometers on an oblique-slip reverse fault adjacent to the San Andreas Fault system. This segment of the San Andreas had been relatively quiet since the 1906 San Francisco earthquake, creating a seismic gap that seismologists had forecasted as prone to rupture. The event was preceded by two notable foreshocks in 1988 and 1989, both around magnitude 5, which caused minor damage but signaled building stress along the fault. Scientifically, the quake resulted from the ongoing tectonic collision between the Pacific and North American plates, where the Pacific Plate moves northwest relative to the North American Plate at about 46 millimeters per year. No surface rupture occurred, but the subsurface rupture extended bilaterally for about 24 miles, generating intense ground shaking with peak accelerations up to 0.65g near the epicenter and Modified Mercalli intensities reaching IX (Violent) in the hardest-hit areas. Effects like liquefaction, landslides (estimated at 1,000 to 4,000), and amplified shaking due to local geology exacerbated the impacts, particularly in areas with soft soils or artificial fill.

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Elevate Hazard Risk Analysis

Incorporating Community Vulnerabilities in Hazard Risk Assessments

Past disaster events, both natural and manmade, seem to indicate that disasters are not problems that can be viewed or solved as isolated instances, but instead stem from the complexity of disasters and the intricate relationships society shares with both its natural and constructed environments. In other words, disasters are social constructs and that large-scale hazard events exacerbate the preexisting conditions of the community. This understanding provides clarity that a community's threat and hazard risks is a function not only of a community's core capabilities and potential hazard impacts but also...

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Elevating Hazard Risk Analysis

Continued...

Elevating HIRA by Incorporating Community Vulnerabilities

Continued

provides support that consideration must be made to evaluate the community's pre-disaster conditions that either heighten or reduce its vulnerability to disaster. When disasters do happen, they have a cascading impact on a community and its residents, essential services, and critical assets. These direct and cascading impacts from disaster are increasing because our communities are becoming increasingly complex and interconnected. This fundamental finding of community risk was described by Dr. Denis Mileti in 1999 and illustrated in the following diagram.

Disasters are symptoms of broader and more basic problems. Many disaster losses – rather than stemming from unexpected events – are the predictable result of interactions among three major systems: the physical environment, which includes hazardous events; the social and demographic characteristics of the communities that experience them; and the buildings, roads, bridges, and other components of the constructed environment.
(Mileti, 1999).



It is commonly recognized throughout the field of emergency management that the THIRA provides a core foundation of a comprehensive emergency management program and a framework to guide and inform preparedness, response, recovery and mitigation efforts for all hazard threats. It should be noted, however, that a THIRA that is supported by a thorough risk assessment and vulnerability analysis has much greater usefulness than a simple output of hazard risk prioritization and projected capability needs. The information and data that informs the risk analysis process should be used to support, serve as a reference, or even validate program and operational considerations; and, should ultimately improve the decision making of those involved in comprehensive emergency management activities. Additionally, a comprehensive risk assessment and vulnerability analysis should offer efficiency by providing a strategy that is scalable, flexible, and compliant with state and federal grant, administrative programs, or legal requirements that guide program measures and activities.

Case Study: The CVR2

Miami-Dade County embarked on a project to develop a countywide, comprehensive and objective, all hazard risk assessment and vulnerability analysis to serve as a solid baseline understanding of the vulnerabilities and hazard risks faced throughout the County and complement the DHS CPG 201 THIRA process.

The Miami-Dade THIRA utilized ISC's Community Vulnerability Risk, & Resiliency (CVR2) tool to methodologically analyze over 4,500 evidence-based indicators and measurement of community vulnerabilities, capabilities, and hazard risks. This endeavor not only resulted in world's most comprehensive THIRA, but also led to ISC's development of the CVR2 software. The CVR2 goes beyond FEMA's National Risk Map and provides context for accurate and relevant comprehensive EM strategies.



[Learn More About the CVR2](#)

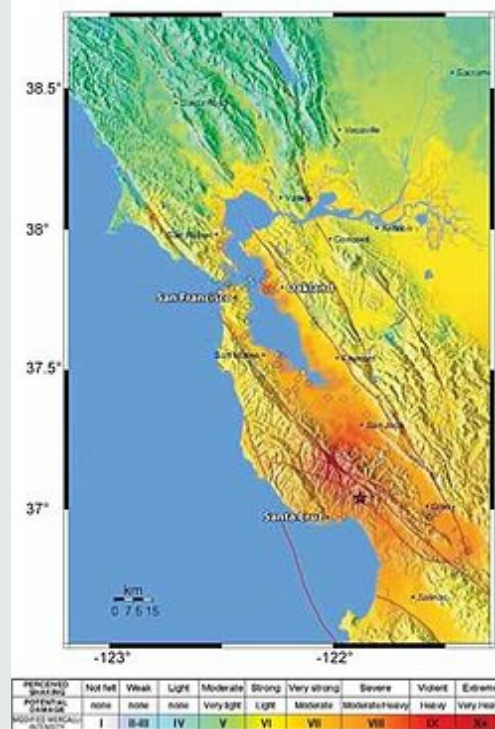
Disaster History

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The 1989 Loma Prieta Earthquake

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The immediate response to the Loma Prieta earthquake was marked by both successes and challenges, influenced by the event's timing during rush hour and the live broadcast of the 1989 World Series, which ironically reduced traffic congestion and potential casualties. Emergency services were hampered by power outages affecting 1.4 million people, communication disruptions, and initial reliance on media reports for damage assessments rather than real-time seismic data. In Oakland, civilians and public works teams used improvised tools like ladders and forklifts to rescue survivors from the collapsed Cypress Street Viaduct for days, while in San Francisco's Marina District, firefighters employed a historic fireboat to combat blazes sparked by ruptured gas lines when hydrants failed due to liquefaction. Federal aid arrived via a \$1.1 billion relief package signed by President George H.W. Bush, but coordination issues arose, including language barriers in diverse communities and rushed building inspections that led to unnecessary demolitions. The Bay Area Rapid Transit (BART) system adapted by running 24-hour service, and ferry operations were revived to bridge transportation gaps. Overall, the response highlighted the value of pre-planned scenarios but exposed gaps in real-time monitoring and inter-agency coordination, with volunteers playing a crucial role in filling voids left by overwhelmed official efforts.



1989 Loma Prieta Earthquake
ShakeMap - USGS

Damages from the earthquake were extensive, totaling an estimated \$5.6 to \$10 billion (equivalent to \$14.2 to \$25.3 billion today), displacing over 12,000 people and affecting six counties. Residents suffered 63 fatalities—mostly from structural collapses like the Cypress Viaduct (42 deaths) and Marina District buildings—and 3,757 injuries, with many in low-income areas facing prolonged homelessness due to destroyed or condemned housing. Businesses endured widespread interruptions, with 2,575 damaged and 147 destroyed, particularly in Santa Cruz's Pacific Garden Mall, where historic unreinforced masonry structures collapsed, leading to demolitions and economic ripple effects like reduced rail freight in Monterey County. Infrastructure bore the brunt: the San Francisco-Oakland Bay Bridge's upper deck section failed, closing it for a month; the Cypress Viaduct's collapse necessitated a full rebuild; highways like State Route 17 were blocked by landslides for weeks; and airports, including Oakland International, sustained runway cracks costing \$30 million to repair. Liquefaction in areas like San Francisco's Marina District, built on unstable landfill, caused buildings to sink or catch fire, while landslides and ground cracks disrupted utilities and roads across the Santa Cruz Mountains and coastal areas.

If a similar magnitude 6.9 to 7.0 earthquake occurred in the Bay Area today, damages could escalate dramatically to around \$80 billion—ten times the 1989 losses—due to population growth, denser development, and higher property values over the past 35 years. While retrofitted infrastructure like the new eastern span of the Bay Bridge (completed in 2013) might hold better, vulnerabilities persist in older buildings, where broken utilities could render even code-compliant structures unusable for months, displacing lower-income residents and straining emergency shelters. Modern early warning systems could provide seconds of notice to brace or halt trains, potentially saving lives, but amplified risks from sea-level rise along the Embarcadero could compound flooding and liquefaction. Transportation disruptions might be mitigated by improved BART resilience, but economic fallout from business closures and supply chain interruptions could prolong recovery, especially if aftershocks exacerbate initial damage in a more interconnected urban landscape.

Disaster History

Continued...

The 1985 Loma Prieta Earthquake

Continued

Contemporary lessons from Loma Prieta underscore the need to apply existing seismic knowledge proactively, as known vulnerabilities like unreinforced masonry and soft-story buildings were not fully addressed beforehand, leading to preventable losses. The event revealed that investments in preparedness yield high returns, with simple retrofits like bolting homes to foundations drastically reducing residential damage, while also highlighting social inequities, as pre-existing issues like homelessness intensified post-quake burdens. For the emergency management community, key considerations include bridging gaps between scientific forecasts and policy action, integrating cultural and linguistic diversity into response plans, and avoiding complacency in "seismic gaps" by regularly updating hazard maps and conducting realistic drills. Public education remains vital, as fading memories of the event diminish awareness; initiatives like the annual Great California ShakeOut drill millions in preparedness exercises to foster intergenerational resilience.

Today, mitigation efforts focus on systemic upgrades, including California's Seismic Hazards Zoning Program, established post-Loma Prieta to map and regulate liquefaction and landslide-prone areas. Over \$80 billion has been invested regionally since 1989, retrofitting more than 2,200 state bridges, mandating soft-story building upgrades in cities like San Francisco (over 90% compliance by 2023), and enhancing utilities with smart valves and cable slack. The USGS ShakeAlert early warning system automates protective actions, while programs like San Francisco's \$425 million Embarcadero seawall bond address combined seismic and climate risks. State incentives for multifamily retrofits and functional recovery standards in building codes aim to ensure quicker post-quake operability, though budget constraints and vetoed legislation highlight the need for sustained funding and local adoption to minimize future impacts.

References

- California Department of Conservation. (n.d.). *The 1989 Loma Prieta Earthquake*. Retrieved October 28, 2025
- National Research Council. (1994). *Practical lessons from the Loma Prieta Earthquake*. The National Academies Press. Retrieved October 28, 2025
- SPUR. (2024, October 17). *The Loma Prieta Earthquake inspired major resilience efforts. Today, the need to invest continues*. Retrieved October 28, 2025
- Wikipedia. (n.d.). *1989 Loma Prieta earthquake*. Retrieved October 28, 2025



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EM365

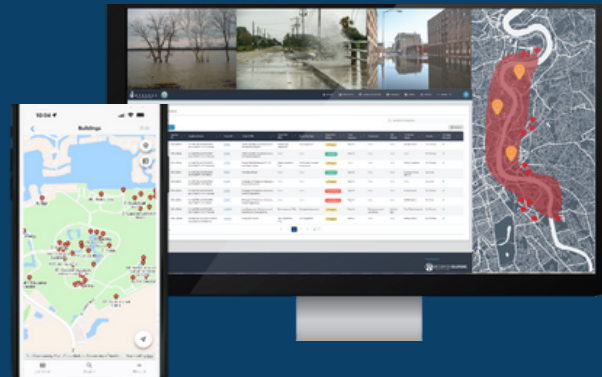
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Best Practices Library

Industry Best Practices

Don't Let Disaster Strike Twice: Navigating the Complex World of Post-Disaster Funding



In the wake of a disaster, the road to recovery can be long and arduous. Applicants are often left to navigate a complex maze of requirements, deadlines, and paperwork, all while trying to rebuild their lives and communities. The consequences of not following proper protocol can be severe, leading to denied or de-obligated funds, leaving applicants without the resources they need to recover.



Written by [Name]

On-Call Expert Support



H.R. 4669: FEMA Reform Act

Federal Shake-Up: How H.R. 4669 Could Reshape FEMA's Future

A bold proposal to streamline disaster recovery, empower states, and modernize FEMA operations

Integrated Solutions Consulting (ISC) will continue to monitor this legislation and provide strategic guidance to our partners. With decades of experience and our proprietary Odysseus Enterprise System (EM365), ISC is ready to help sub-recipients navigate change, optimize funding, and strengthen resilience.

Legislative Update – September 2025

Congress is advancing H.R. 4669 – The FEMA Act of 2025, a landmark bill that proposes elevating FEMA to cabinet-level status and streamlining federal disaster recovery programs. If passed, this legislation could reshape how states and sub-recipients engage with FEMA—making recovery faster, more transparent, and locally driven. H.R. 4669 represents a pivotal shift in federal disaster policy—one that could empower communities to lead more agile and accountable recovery efforts.

Purpose and Goals of H.R. 4669

- Elevate FEMA to report directly to the President
- Simplify disaster recovery processes and reduce delays
- Reward state and local preparedness with greater autonomy
- Improve oversight and reduce wasteful spending
- Ensure equitable and unbiased relief distribution

Key Reform Areas

- **Program Consolidation:** Reduces duplication across FEMA programs
- **State Flexibility:** Empowers local leadership in recovery efforts
- **Accountability Measures:** Enhances transparency and performance tracking
- **Stakeholder Input:** Reflects feedback from emergency managers nationwide

Strategic Implications for States and Sub-Recipients

If enacted, H.R. 4669 could significantly impact on how recovery is managed at the state and local level:

- More control over project selection and execution
- Faster access to federal funds and reduced administrative burden
- Simplified compliance pathways across FEMA programs
- Incentives for jurisdictions with strong preparedness plans
- Greater responsibility for equitable aid distribution
- Opportunities to modernize recovery systems and reporting tools

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The Science of Vulnerable Populations Continued...

Disaster Sociological Research and Preparedness Tools for EM

Continued

effective emergency management, as misaligned strategies can undermine trust and compliance and where cultural attributes can enhance preparedness and response.

Socio-economic status is a critical determinant of disaster vulnerability, as wealth and resources directly impact a community's ability to absorb losses and recover. A study by Fothergill and Peek (2004) in Natural Hazards Review demonstrates that low-income households often lack access to insurance, savings, or social networks that facilitate recovery, prolonging their vulnerability post-disaster. Conversely, wealthier communities can leverage financial reserves and social capital to rebuild quickly. Socio-economic disparities can also affect access to lifelines, such as healthcare or transportation, which are crucial during crises. For example, low-income families may be unable to evacuate due to limited access to vehicles or funds, increasing their exposure to harm.

The interplay of these factors—functional needs, cultural conditions, and socio-economic status—creates compounding effects that exacerbate vulnerability. Research by Cutter et al. (2003) quantifies how demographic and

socio-economic variables interact to heighten disaster risk. For instance, elderly populations in low-income areas with limited English proficiency face multiple layers of vulnerability, as they may lack both resources and access to culturally appropriate information. Addressing these intersecting vulnerabilities requires comprehensive emergency planning that prioritizes equity, ensuring that resources and communication are accessible to all community members.

Sociological research underscores that disaster vulnerability is not solely a function of physical exposure but is deeply rooted in social and demographic inequalities and are interconnected with other community conditions (i.e., infrastructure conditions, environmental issues, community capabilities, etc.) which elevates the overall hazard risk of a community. ISC's CVR2 model provides a comprehensive tool that builds upon past evidence-based research, to include disaster sociological research, to allow emergency managers to better address the diverse needs of their community. Understanding these dynamics is essential for building resilience and ensuring equitable disaster preparedness, response, and recovery. Tailored interventions that account for functional needs, cultural diversity, and socio-economic disparities can significantly reduce vulnerability and enhance community sustainability in the face of disasters.

References:

- Cutter, S. L., Boruff, B. J., & Shirley, W. L. (2003). Social vulnerability to environmental hazards. *Social Science Quarterly*, 84(2), 242–261.
- Fothergill, A., & Peek, L. A. (2004). Poverty and disasters in the United States: A review of recent sociological findings. *Natural Hazards Review*, 32(1), 89–110.
- Gaillard, J. C., Clavé, E., Vibert, O., Azis, A., Dedi, M., & Efendi, Y. (2010). Ethnic groups' response to the 26 December 2004 earthquake and tsunami in Aceh, Indonesia. *Journal of Volcanology and Geothermal Research*, 189(1–2), 116–124.
- Martin, D. and Kemp, M. (2012). Integrated THIRA & CIKR assessment.
- Peek, L., & Stough, L. M. (2010). Children with disabilities in the context of disaster: A social vulnerability perspective. *Disability & Society*, 25(6), 671–684.

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Preparedness Best Practices

Elevate Community Participation: Tap Into the Orbits of Organizational Networks

Benefits of Public Outreach & Education

Public participation helps drive decision-making in a community and informs the public, government representatives, and elected officials on important issues. Outreach and education engage the whole community and establish a participation process that is inclusive of all groups and reflect a representative sample of a community. The benefits of effective public outreach and education should not be underestimated.

- Build consensus and support
- Increase awareness & understanding
- Anticipate public concerns & attitudes
- Improve quality of decisions
- Minimize cost and delay
- Engage groups that are underrepresented
- Improve the ease of implementation
- Maintain credibility and legitimacy
- Avoid confrontation

The Importance of Understanding Organizational Networks in a Community

The inclusion of important community organizational networks in preparedness campaigns will result in more informed community stakeholders, increase credibility and legitimacy of the message, and involve critical partners in the decision-making process.

Innovations in Public Engagement

In today's digital age, holding public workshops and meetings is not enough to effectively engage community stakeholders and generate the necessary reach. Accessibility to information has increased the need to ensure information is reliable and accurately reflects the community's unique attributes.

Community Outreach & Engagement

Community Workshops and Fairs
Focus Group Facilitation
Stakeholder Interviews and Data Analysis
Community Preparedness Surveys
Community Preparedness Campaigns
Social Media Campaigns

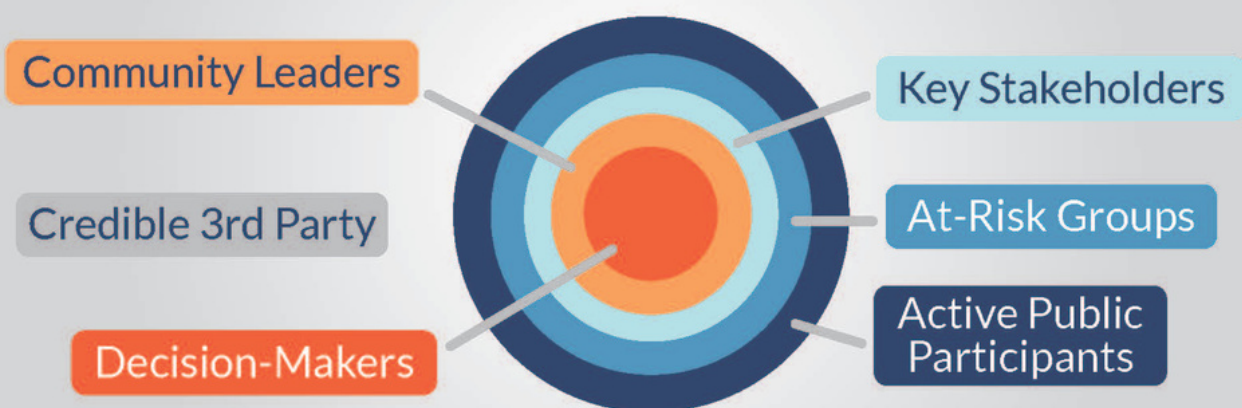
Public Education & Development

Curriculum Development
Course Development
Competency-Based Curriculum Mapping
Public Service Announcements
Traditional Classroom Based Training & Drills
Tabletop, Functional, Full-Scale Exercises

Outreach & Education Technologies

Website Development
Social Media Monitoring
Learning Management Systems
Computer-Based Trainings
Special Effects & Video Production
Virtual Reality Simulations
Interactive Community Displays

Orbits of Organizational Networks for Community Participation



Disaster Policy & Research

September 2025

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Response Best Practices



Elevate Preparedness with Systematic AAR/IP Methods

Some of the most significant changes to how we prepare for, respond to, recover from, and mitigate for disasters have occurred as a result of thoughtful and critical post-incident reviews. The After-Action Review (AAR) and Improvement Plan (IP) is a vital instrument to document the successes, gaps, and areas of improvement needed to strengthen comprehensive strategies for future incidents and disasters.

The value of the AAR/IP is directly proportionate to the thoroughness, analysis, and synthesis of the information obtained throughout the AAR/IP process. Using tested and validated systematic methods and techniques we can control for the quality of the data gathering and analysis and thus ensure more substantial and reliable findings. At ISC we developed a method to developing AARs and IPs that is consistent with industry standards while incorporating scientific methods to ensure rigor, accuracy, and validity throughout the AAR/IP process. By applying a scientific method to the AAR/IP process, ISC can create results that are as much as 97.5% accurate and reliable. The following highlights our five step process:



An AAR/IP can vary in a myriad of ways. Establishing a shared understanding on the purpose and scope, defining the objectives, and identifying areas of concern and focus will ensure the success of the outcomes.



Incidents are complex with numerous layers of cause-and-effects and involving multiple stakeholders. Thoroughly compiling and objectively analyzing the data will ensure the appropriate rigor in the AAR/IP process.

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How Research Can Improve EM

Despite the progress we have made in professionalizing emergency management over the years, the development and application of research continues to remain a low priority for our emergency management system. There are multiple reasons why ranging from a belief that research is simply an “academic exercise” to a lack of understanding and appreciation of the value research offers the profession. The reality is research is fundamental for today’s emergency management system and a core function of the modern emergency manager.

Although many do not realize it, the emergency management community utilize research every day, albeit it may not meet the rigor to produce accurate and valid results. For example, conducting community resiliency surveys is an example of basic research that allows us to create a baseline understanding of our community and how things work. Applied research is the application of theory (which is derived from basic research) to practical situations. Developing a hazard risk assessment is an example of applied research.

With the escalating increase in the number of disasters and the need for organizations to be accountable to the public for their actions, emergency management agencies are increasingly obliged to consider seriously the role of research in establishing best practice, creating more effective policies, increasing capabilities, and improving all phases of disaster management.

Research is a critical component of modernizing the emergency management profession. First, it provides a professional knowledge base that is continuously tested, validated and improved upon. Research challenges taken-for-granted knowledge and understandings, thereby undermining the very sense of certainty that is an important feature of emergency...

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Response Best Practices: Continued...

Elevate Preparedness with Systematic AAR/IP Methods (Continued)



The AAR/IP development process must ascertain the varying perspectives of stakeholders through an array of modes (interviews, surveys, focus groups, etc.). By using tested and proven methodological techniques, the review team can comprehensively examine the issues while controlling for quality and accuracy.



Analyzing the data and information occurs throughout the AAR/IP development process. However, after engaging the stakeholders, the review team should immerse themselves in the data that has been obtained to ensure nothing has left to be undiscovered. The review team must assess for areas of bias or agenda-setting to ensure accuracy of the After-Action Report.



Identifying and incorporating improvements is a vital component of the AAR process and helps to ensure a more resilient and prepared future. Too often this is where the AAR/IP process falls short. The IP should include actionable steps and time frames to implement improvements. It is important that leadership is well informed of these improvements and supports their implementation. Once there is agreement, there must be a strategy to execute and monitor the progress.

How Research Can Improve EM (Continued)

management practice. It helps solve the “wet-noodle approach” to the policy making and practice in emergency management by providing evidence-based answers, solutions, innovations, and decisions that are routinely challenged and validated. Most importantly, it elevates the competency and esteem of the profession by legitimizing what we do and how we do it.

Research is not a practice that is only done by ivory tower academics. One does not have to possess a doctorate degree to conduct great research. Conversely, poor research can be done by accomplished researchers. Quality research is systematic, controlled, objective, generalizable, and constantly examined, tested, and improved.

Perhaps with a new perception and recognition of the value of research, the emergency management community can not only further enhance the capabilities of our emergency management system but also the esteem of the profession.

Case Study: Community Resiliency Study

ISC was commissioned by San Diego and Miami-Dade counties to conduct a research-based study of the disaster resiliency of residents. The study was representative of the whole community and achieved a 95% confidence level with less than a 3% margin of error. The survey instrument was translated into multiple languages and distributed in multiple formats to ensure a representative sample of the community participated. The survey instrument was designed to using proven scientific indicators that measure individual and community disaster resiliency. The results of this community study would provide both counties with reliable and accurate quantifiable data to help direct the future of their emergency management programs. .

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Recovery Best Practices



Community Disaster Recovery Success Series *Part 1 of 11: Establish a Transparent Community Recovery Governance that Expands the Window of Opportunities*



Like so many other disasters before it, Hurricanes Helene and Milton have destroyed the social, political, and economic fabric of communities across the southeastern United States. After a catastrophic event such as a hurricane, it often takes years for a community to resume to normalcy and decades, if ever, to return to pre-disaster conditions.

Although unfortunate, disasters do provide the unique opportunity to improve a community's pre-disaster conditions. However, a community's future is intimately dependent upon the ability to champion the recovery process, sustain social unity, and maintaining an open decision-making process built upon transparency and democracy. These conditions are important elements in a community's recovery momentum and offer conditions that serve as a foundation for successful long-term community recovery and improvement.

In this eleven-part series, I will present evidence-based attributes that contribute to a community's disaster recovery success. These findings are based on over a decade of research and case study analysis of over one hundred presidentially declared disasters.

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Written By: Dr. Daniel Martin, CEM

Dan has more than 25 years of experience working with local, state, and federal governments, and has been involved in all aspects of emergency management. Dr. Martin has been recognized for his ability to successfully execute the most difficult projects and knowledge of policy and research in the field of emergency management.

Recovery Best Practices

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Community Disaster Recovery Success Series

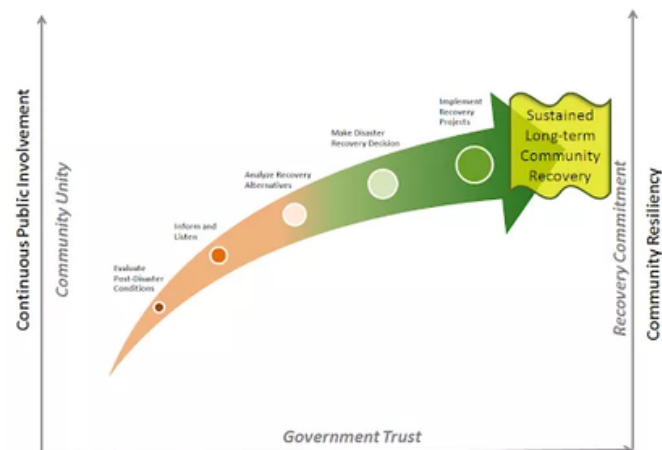
Part 1 of 11: Establish Recovery Governance that Expands the Window of Opportunities

(continued)

Our everyday decisions are governed by processes and routines that assist us in identifying the problem, determining strategies to resolve the problem, evaluating these alternatives, choosing the best alternative, and then implementing the resolution. These procedures and routines are carried out by organizations that offer consistency, commitment, and confidence in the decision-making process. After disaster, these processes and routines may be disrupted or may not be set up to adequately handle the litany of complex post-disaster recovery issues. A defined and shared pre-disaster process for managing disaster recovery activities and coordinating with local, regional, state and federal partners is paramount to community recovery success.

Unlike the tactical incident strategies that are paramount to managing information and resources during the response phase, community disaster recovery is an organic and inductive process that fosters community unity and an open autonomy that promotes effective decision-making that benefits the majority. The disaster process goes through a period called 'Communitas' where disaster-stricken communities take on a shared identity of "disaster victim" and establish a sense of equality between community groups that otherwise take opposing views. During this period, conditions are optimal for community unity, empowerment, and agreement. Research has shown that social trust in government becomes a symbolic token to a community, can extend the period of 'Communitas', and facilitate an effective community recovery decision-making process.

A united community will strengthen the potential for agreement on difficult disaster recovery issues and facilitate a sustained commitment between otherwise divergent parties. Building a mutual understanding between conflicted parties will reduce controversial engagements and increase efforts to resolve issues collaboratively with a shared understanding and respect. A community that maintains a sense of unity will enable community recovery decision-makers to be increasingly sensitized to the public concerns. A united community will begin to see the long-term recovery organization as a trusted and focal agent, elevating its status and maintaining its credibility and legitimacy within the community.



The net result will be an organization that can assist communities with the immediate evaluation of post-disaster conditions and needs; outreach efforts that will inform, listen to, and resolve potential conflict with the community; thorough and unbiased analysis of the benefits and challenges recovery alternatives; processes that will facilitate accurate disaster recovery decisions; and track the implementation of recovery projects and offer corrective actions if necessary.

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Recovery Best Practices

Continued...



Community Disaster Recovery Success Series

Part 1: Establish Recovery Governance that Expands the Window of Opportunities (continued)

Committed and structured governance would result in a rational system for efficient and effective long-term community recovery. A defined and open decision-making process will provide organizational legitimacy and improve the quality of decisions being made. Decisions will be made in a timely manner and based on a well-informed organization and public. Independent decisions may appear quick and easy, but often they meet public resistance causing increased cost and project implementation delays, if not project termination. A committed and structured long-term community recovery structure will prevent uninformed and unilateral decisions and provide an open forum to discuss potential regulatory and budgetary challenges to implementing a project. The organization, as well as the public, take ownership in the decision and ultimately increase the ease of implementing the project.

Read more on the Community Disaster Recovery Success Series.

[Part 1: Establish a Recovery Governance](#)

[Part 3: Disaster Recovery Committee Coordination](#)

[Part 4: Thoroughly Assess Impacts & Needs](#)

[Part 5: Importance of Community Outreach](#)

[Part 6: Be Prepared for Disaster Recovery](#)

[Part 7: Take Advantage of Grant Opportunities](#)

[Part 8: Disaster Recovery Funding Strategy](#)

[Part 9: Autonomous & Inclusive Decision-Making](#)

[Part 10: Track and Report Recovery Success](#)

[Part 11: Measure Betterment & Resiliency](#)



D Y S S E U S

EM365

[Schedule a Demo](#)

Maximize Vital Community Disaster Recovery Funds



Odysseus Features for Disaster Grant Management Solutions



Disaster News

Current FEMA Disaster Declarations: September 2025

The United States' 2025 hurricane season has been quiet as the Presidential Disaster Declarations for the month of September. In September 2025, President Trump has declared six (6) Disaster Declarations and three (3) Fire Management Assistance Declarations. These declarations include:



FEMA

Fire Management Assistance Declarations

- California 2-7 Fire (FM-5612-CA). Incident period September 2, 2025 and continuing; declared August 3, 2025
- Hawaii Holomua Fire (FM-5613-HI). Incident period September 23, 2025; declared September 23, 2025
- Washington Lower Sugarloaf Fire (FM-5614-WA). Incident period September 25, 2025; declared September 26, 2025

Disaster Assistance Declarations

- Wisconsin Severe Storms, Straight-line Winds, Flooding and Mudslides (DR-4892-WI). Incident period August 9-12; declared September 11, 2025
- Sisseton-Wahpeton Oyate Severe Storms and Flooding (DR-4890). Incident period June 12-16; declared September 11, 2025
- North Dakota Severe Storms, Tornadoes, and Straight-lined Winds (DR-4888-ND). Incident period June 20-21; declared September 11, 2025
- Kansas Severe Storms, Straight-line Winds, Flooding (DR-4891-KS). Incident period June 3-7; declared September 11, 2025
- North Carolina Tropical Depression Chantal (DR-4889-NC). Incident period July 6-7; declared September 11, 2025
- Crow Tribe of Montana Severe Storms, Straight-line Winds, Flooding (DR-4887). Incident period May 18-22, 2025; declared September 11, 2025

**Emergency
Management and
Disaster Recovery:
Building a More
Resilient Future**

[Learn More](#)



Mitigation Best Practices



Creating and Maintaining a Sustainable Hazard Mitigation Program

There is a growing challenge for communities of all sizes to regularly update, maintain, and implement their hazard mitigation plans. However, according to FEMA, over half of the nation's municipal and county mitigation plans have fallen out of compliance and many communities struggle to implement key mitigation initiatives. As a result, communities have wasted the initial investment to develop mitigation plans and find themselves spending the same effort, if not more, in developing a new, compliant plan and be eligible for pre- and post-disaster funding.

ISC's core preparedness philosophy takes a holistic approach to crisis management, prevention, and recovery. We craft an interconnected strategy of planning, training, and crisis response to ensure a community's needs are met in totality.

Our comprehensive and programmatic solutions are executed by knowledgeable staff who have developed plans for some of our Nation's largest communities. We are a team of experts who have implemented billions of dollars in pre- and post-disaster mitigation projects. Our innovations focus on meaningful mitigation processes and outcomes while easing the burden in developing, maintaining, and implementing your community's mitigation investments.



Click below to watch a video on ISC's hazard mitigation program management strategies.



[Learn More About Our Work](#)

▶ MITIGATION CORE CAPABILITIES:

- Program Management and Support
- Risk and Disaster Resilience Assessment
- Community Resilience
- Long-Term Vulnerability Reduction
- Threats and Hazards Identification
- Comprehensive Emergency Preparedness and Planning Development
- Hazard Mitigation and Disaster Recovery
- Technical Support
- Committee and Workgroup Governance Development
- Community Outreach
- Grant Management and Procurement Support
- Community Technical Surveys & Analysis
- Mapping and Geospatial Analysis

Industry Innovations



D Y S S E U STM EM365

672%

INCREASE IN
PROGRAM EFFICIENCY

300^x

STAKEHOLDER
COLLABORATION

99%

REGULATORY &
PROGRAM COMPLIANCE

54^x

RETURN ON
INVESTMENT

97%

PERFORMANCE
RATING

The Industry's First Comprehensive Emergency and Disaster Program Management Software

OdysseusTM offers a suite of tools and systems designed, dedicated to the efficient management of comprehensive disaster and emergency management programs. The union of technological and programmatic features offers organizations an efficient and effective method to systematically design, develop, maintain, and continually improve all elements of a comprehensive emergency management program.



Click Here to
Learn More About Our
Innovative Technology

EM Innovations in Work

Odysseus™ EM-365

Statewide Comprehensive EM Program Management

State Emergency Management Agencies

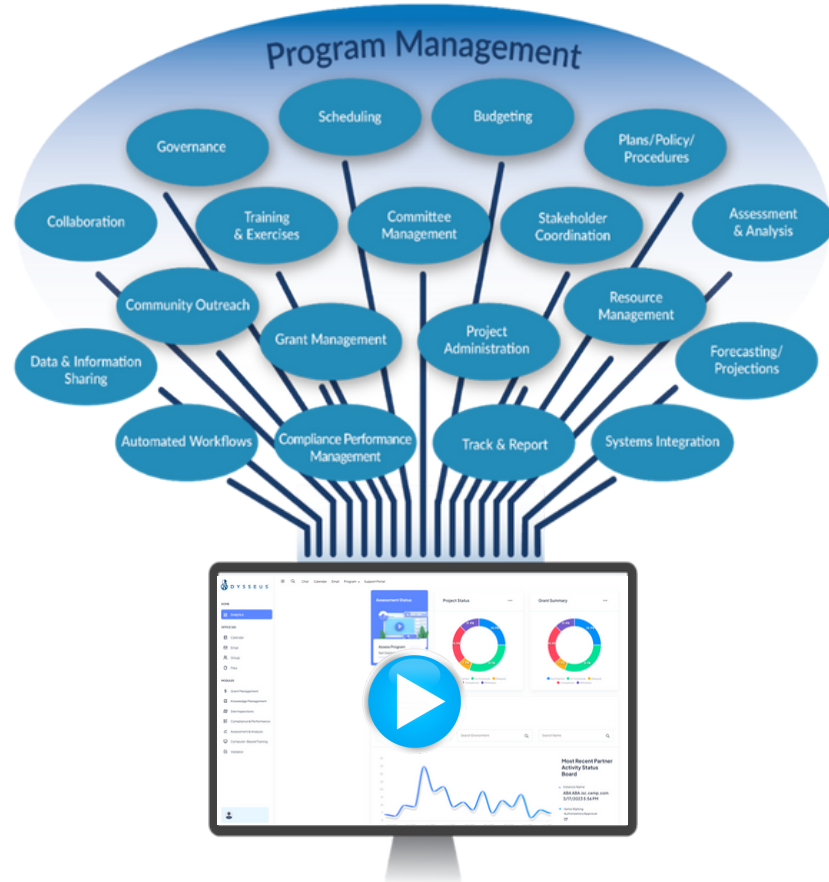
Although they provide much needed resources and capabilities during the time of a crisis or disaster, a State emergency management agency's (EMA) operational focus extends far beyond the response phase of an incident. The reality is that the success of a State EMA's response operation is intimately related to its ability to systematically track, guide, direct, monitor, manage, and administer all aspects of a comprehensive emergency management program across all state agency, county and municipal government partners, regional authorities, and other stakeholders.



Although the value is unmeasurable, many states think that coordinating a statewide comprehensive emergency management program would be a formidable task that would require significant resources. That's not true anymore.

Odysseus™ offers state emergency management agencies a software solution for managing a unified statewide comprehensive emergency management program. Odysseus™ "system-of-systems" architecture gives state EMA's a force multiplier to manage EMA program requirements statewide.

Designed by our team of leading emergency managers and software technicians, Odysseus™ offers a unique State EMA program management platform. It is a program management tool and allows for the full integration of other incident management software programs.



EM Innovations in Work

Odysseus™ EM-365

Statewide Comprehensive EM Program Management

Comprehensive EM Features

Preparedness Programs

- Planning Management
- Training Management
- Exercise Management
- Continuity of Operations
- Community Outreach
- Program Evaluation
- Program Compliance
- Project Reporting & Tracking
- Grant Management

Response Programs

- Incident Action Planning
- Situational Awareness Sharing
- Ops & Incident Reporting
- After-Action Review Analysis
- Preliminary Damage Assessments
- Cost & Expense Tracking
- Information Sharing

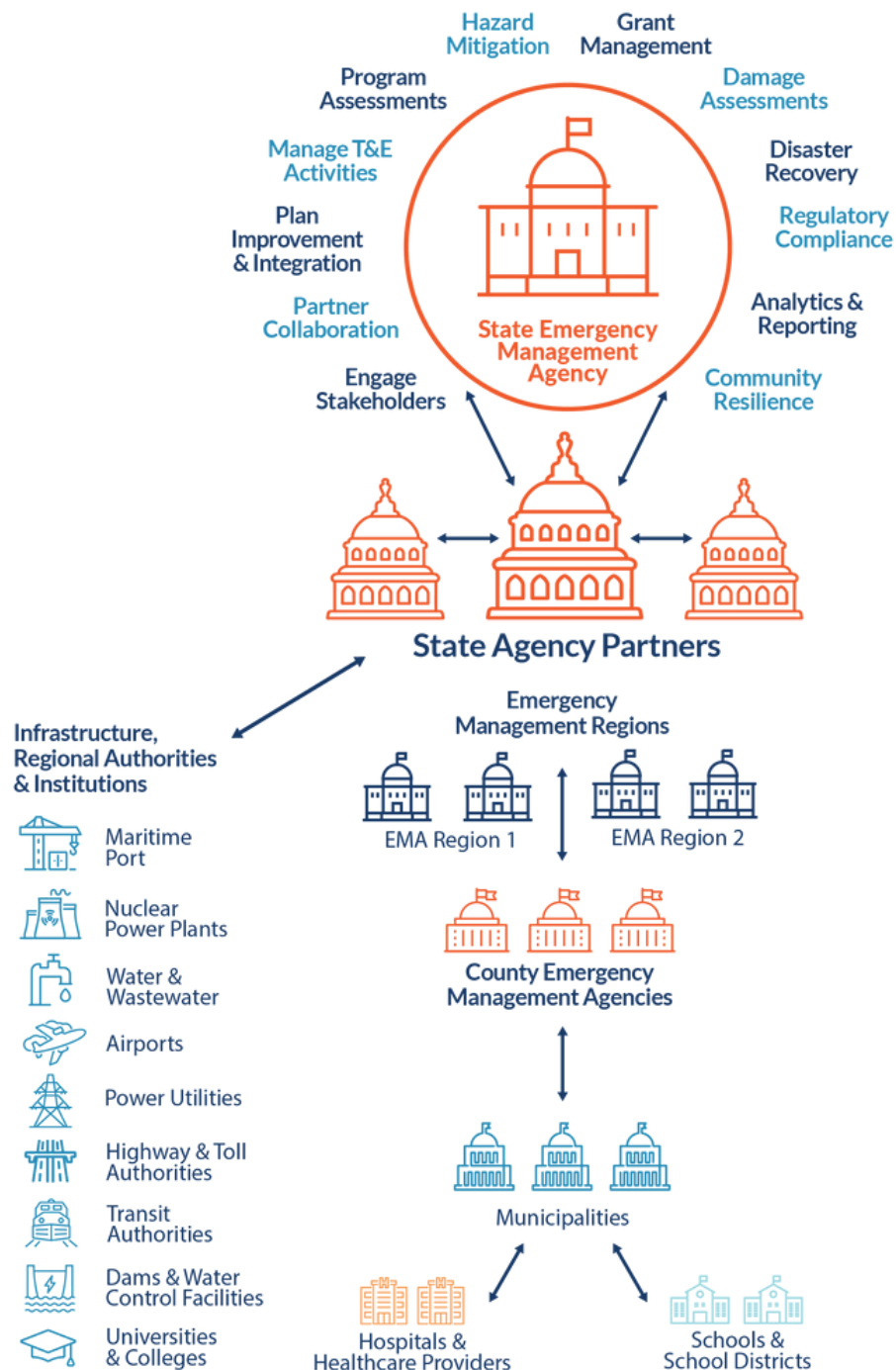
Recovery Programs

- Damage Assessments
- Debris Monitoring
- FEMA Public Assistance
- FEMA Individual Assistance
- HUD CDBG-DR
- Recovery Project Tracking
- Closeout & Audits

Mitigation Programs

- Mitigation Planning
- Risk Assessments
- Federal Cost Share Tracking
- Grant & Project Management

System-of-Systems Comprehensive EM Network



[Click Here to Learn More](#)

Building a More Resilient Future



INTEGRATED SOLUTIONS
CONSULTING

**Click Below to Learn How We
Build a More Resilient Future**



ABOUT US

Integrated Solutions Consulting is a professional services firm focused on developing and implementing comprehensive crisis and consequence management solutions. We are a team of innovative problem-solvers that combine experience and evidence-based knowledge to deliver practical, best practice results across multiple industries to make communities safer and more resilient

Top Supplier
Performance Rating
dun & bradstreet
97.1%
Successful
Performance

We help our clients by providing comprehensive emergency management consulting services that use data-driven research, sophisticated crisis modeling and seasoned consultants to help our clients manage unexpected emergency and disaster situations.



Expertise: Disaster Recovery

ISC's Knowledge, Expertise, & Performance

Over the past three decades, ISC has worked with FEMA, state, and municipal clients to mobilize thousands of highly qualified technical staff to the most significant disasters in U.S. history, to EOCs and JFOs across the country. Under our contracts to provide professional technical disaster recovery services and navigating the statutory authorities of the Robert T. Stafford Disaster Relief and Emergency Assistance Act, we have been instrumental in assisting our clients with identifying, administering, and managing tens of billions of dollars in federal disaster assistance funding.

▶ OUR PROGRAM & KNOWLEDGE CAPABILITIES:

- FEMA Public Assistance Program Management
- FEMA Hazard Mitigation Grant Program
- FEMA Individual Assistance Program Support
- FEMA Fire Management Assistance Grants
- FEMA Community Disaster Loans
- FEMA Section 428 Alternative Public Assistance Program
- HUD Community Development Block Grant Program Management
- Federal Highway Administration Emergency Relief (FHWA)
- National Flood Insurance Program
- State Managed Catastrophic Relief Fund Programs
- US Small Business Administration Disaster Assistance Loan Program
- USDA Farm Service Agency Disaster Assistance Program

ISC offers our clients a unique blend of emergency management professionals with expertise in disaster recovery operations and disaster assistance programs. Our team has supported local governments, states, tribal nations, and non-government organizations on a litany of disaster recovery operations, disaster assistance programs, community disaster recovery planning, and other special disaster recovery projects around the nation.



[Learn More About Our
Disaster Recovery Services](#)



Although disasters are devastating and disruptive, it is important to recognize that every disaster brings about opportunity for communities to improve their conditions and to build a more resilient future. The better communities prepare for disaster, the better they can capitalize on the opportunity to break the disaster cycle.

Contracting Made Easy!

ISC offers numerous competitively procured - and federally compliant - contract vehicles across the Nation. Contracting with ISC takes only minutes.

[Learn More About Our
Contract Vehicles](#)

Building Resilient Futures for Ports

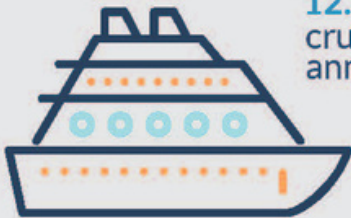
Port Vulnerabilities and Cascading Impacts

Since Sept. 11, 2001, much of the national focus on ports' preparedness has been on preventing potential acts of terror and the multitude of active hurricane seasons. The COVID-19 pandemic renewed focus on how to protect ports from a diversity of threats, including natural disasters and infectious disease outbreaks. Our airport and maritime port infrastructure are an intricate system supported by waterway, road, and rail systems to create a network of inland and coastal ports. Any disruption of this system will have cascading impacts to the local, regional, national, and possibly international economy as well as a multitude of sectors, critical infrastructure, and community lifelines.

Today, U.S. maritime ports & waterways handle more than **2 billion tons** of domestic import/export cargo

&

12.7 million cruise passengers annually.

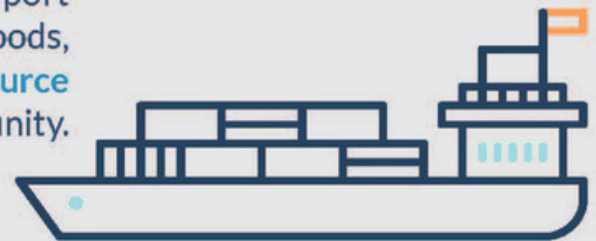


U.S. airports handle more than **1 billion passengers** & **22.5 million tons** of domestic freight annually.

Although the core functionality of a port is to transport passengers and goods, ports also serve as a **primary source** of **revenue and jobs** for a community.



The market economy for airport and maritime ports is expected to exceed **\$110 billion** in the coming decade.



ABOUT US

Integrated Solutions Consulting is a professional services firm focused on developing and implementing comprehensive crisis and consequence management solutions. We are a team of innovative problem-solvers that combine experience and evidence-based knowledge to deliver practical, best practice results across multiple industries to make communities safer and more resilient.



Building Resilient Futures for Ports

Continued...

Ports -A Critical Community Lifeline

Airports and seaports are gateways to commercial travel as well as domestic and international trade, connecting the United States to the world.

ISC Responds to Maritime Ports After Disaster



After Hurricane Laura, ISC conducted damage assessments and assisted port clients through the FEMA disaster assistance process to recover hundreds of millions in damages.

ISC Conducts Assessments to Develop Plans

ISC conducted vulnerability and risk assessments with Miami International Airport and Port Miami. These assessments were integrated into comprehensive emergency response plans.



Our Approach to Comprehensive Emergency Management Programs for Ports

For even the most resilient ports, the possibility of an incident occurring that impacts vital business operations is a real and constant threat. Emergency management programs for ports is more than being able to rapidly respond to an incident. It is an ongoing process of protection/prevention, preparedness, response, recovery, and mitigation that adheres to regulatory requirements and begins well before a crisis or disaster hits.

Our approach to Port emergency management is comprehensive, coordinated, and integrated, and supported by a team of port engineers and emergency management specialists that deliver decades of experience. Our expertise is unmatched.

