

REQUEST FOR PROPOSALS For GRANT MANAGEMENT & CONSULTING SERVICES RFP # 2023-028

Sealed proposals will be accepted until 2:00 PM CT, Thursday, June 22, 2023, and then publicly opened and read aloud thereafter.

Tetra Tech, Inc.										
Legal Name of Proposing Firm										
Jonathan Burgiel	Business Unit President									
Contact Person	Title									
(321) 441-8500	TDR.contracts@tetratech.com									
Telephone Number	E-Mail Address									
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Street Address of Principal Place of Business	City/State	Zip								
2301 Lucien Way, Ste. 120	Maitland, FL	32751								
Complete Mailing Address	City/State	Zip								
Acknowledgment of Addenda: #1_6/13/23_ #2	#3 #4 #5									

By signing below, you hereby certify that the information contained in this proposal and any attachments is true and correct, and may be viewed as an accurate representation of proposed services to be provided by this organization. You agree that failure to submit all requested information may result in rejection of your company's proposal as non-responsive. You certify that no employee, board member, or agent of the North Central Texas Council of Governments has assisted in the preparation of this proposal. You acknowledge that you have read and understand the requirements and provisions of this solicitation and that the organization will comply with the regulations and other applicable local, state, and federal regulations and directives in the implementation of this contract. And furthermore that I certify that I am legally authorized to sign this offer and to submit it to the North Central Texas Council of Governments, on behalf of said offeror by authority of its governing body.

Authorized Signature

TAB A. Cover Sheet

Tetra Tech is pleased to submit the following proposal to the North Central Texas Council of Governments for Grant Management and Consulting Services (RFP #2023-028). Tetra Tech is a leading provider of specialized management consulting and technical engineering services. Our clients include a diverse base of public and private-sector organizations located throughout the United States and internationally.

Throughout this proposal, we have detailed our depth of experience and approach for numerous federally funded grant programs. Our team has supported clients through each stage of disaster recovery, from pre-planning through closeout, and managed over \$12 billion in reimbursement funds.

We understand that the NCTCOG's scope of work for this RFP is to establish contracts for Grant Management & Consulting Services under the TXShare Cooperative Purchasing Program. NCTCOG is seeking a firm that will provide services such as grant and program administration, development of funding agency required documents, implementation of programmatic activities, data collection, performance reporting, program evaluation planning, and subrecipient monitoring.

Tetra Tech is the ideal partner for NCTOG to support these objectives, based on the firm experience, staff qualifications, and technical methodologies introduced in this proposal. We are grateful for the opportunity to partner with NCTOG, and look forward to supporting participating jurisdictions through the disaster recovery process.



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TAB B. Executive Summary

North Central Texas Council of Governments 616 Six Flags Drive Arlington, TX 76011 June 21, 2023

Subject: Response to RFP 2023-028 for Grant Management and Consulting Services

Dear Charlie Oberrender and Members of the Evaluation Committee,

Tetra Tech, Inc. (Tetra Tech) is honored to submit the enclosed proposal to provide Grant Management and Consulting Services for the North Central Texas Council of Governments (NCTCOG). Tetra Tech is a leading provider of environmental, solid waste, engineering, and disaster management services worldwide, and supports government and commercial clients by providing innovative solutions to complex problems. Our team of emergency management and disaster recovery experts offers a unique integration of mitigation, emergency preparedness and planning, and disaster response and recovery management services, and are well suited to assist the NCTCOG for the following reasons:

- Nationally Recognized Leader in Disaster Recovery. Our team has successfully assisted over 300 local and state government clients across the nation with disaster debris operations and has extensive experience successfully managing multiple disaster response and recovery operations across the United States simultaneously. Our team has overseen and managed the recovery of over 172 million cubic yards (CYs) of debris, resulting in excess of \$10 billion in reimbursable costs. We have served as the ground-zero debris monitoring consultant for many clients affected by our nation's most catastrophic natural disasters, including communities in Texas (2021 Winter Storm, Hurricane Harvey, 2012 Drought and Wildfires, Hurricane Ike).
- Expertise in All-Hazards Emergency Preparedness Planning. Tetra Tech employs many of the nation's leading experts in topics ranging from continuity of operations planning to public health preparedness to regional catastrophic planning. Tetra Tech is skilled in designing and implementing emergency preparedness plans and is considered a leader in developing, facilitating, controlling, and evaluating all types of training and exercises. Tetra Tech is at the forefront of creating programs and new technology to help our nation improve its overall prevention, response, and recovery capabilities.
- Unmatched Experience Throughout the State of Texas. Since 2008, our firm has assisted more than 100 communities in Texas with response and recovery efforts after Hurricanes Rita, Dolly, Ike, Harvey, and most recently, Hurricane Hanna. In addition, our team has assisted communities after a variety of other disasters, including tropical storms, winter storms droughts, floods, and the COVID-19 pandemic. Our diverse experience in the state gives us an in-depth understanding of the challenges faced by Texas communities. Additionally, Tetra Tech has eight offices in Texas, allowing us to quickly respond to the NCTCOG's needs, as our team did following the severe winter storm in 2021 in the City of Austin. As proven by our extensive past performance in Texas and throughout the country, the NCTCOG can rely on Tetra Tech to execute this effort successfully.
- **Full-Service Disaster Recovery Firm.** Tetra Tech is the only firm in the country that can provide FEMA reimbursement and emergency management support combined with engineering capabilities to offer full-service disaster support solutions. Whether it is helping the NCTCOG obtain reimbursement from FEMA for its disaster-related costs, obtaining additional disaster grants to pay for mitigation projects that will come available in coming months, or developing cost estimates and bid specs for damaged assets, Tetra Tech is ready and able to support the NCTCOG in any of its disaster-related needs.
- Immediate Response Capability to Meet the NCTCOG's Needs. Our team understands the importance of rapid
 mobilization of qualified staff. We are committed to providing a project team that meets the technical requirements
 of the RFP and maximizes use of local personnel. With most of our key staff residing within Texas, local offices

throughout the State of Texas, and disaster response and emergency management experts located throughout the state, Tetra Tech can stage a full-scale mobilization in the NCTCOG.

Our Philosophy: Emergency Management and Disaster Recovery

- It's Not What You Get, It's What You Keep: All federal funds come with strings attached. We are experts at
 developing strategies, action plans, policy, and processes to achieve program success and mitigate risk of funding
 clawbacks.
- **Efficiencies to Maximize Benefits**: We will help the NCTCOG receive maximum benefits from federal disaster programs while minimizing the out-of-pocket costs by implementing Standard Operating Procedures, integrating technology and aligned with current federal policy/regulation.
- **Bringing in the Right People at the Right Time:** Every incident is different, so our team is scalable to meet the needs of NCTCOG. Our staffing and resource plans, task orders and readiness plans will be constantly evaluated and revised as the needs of the NCTCOG evolve.
- One Team to meet the NCTCOG's Needs: This engagement will draw upon the full breadth of Tetra Tech's team, whether it is in an EOC response, an individual assistance mission or long-term recovery through HUD and FEMA. We are able to deliver.

Ability to Meet Requirements

We are one team with countless services. Tetra Tech's team offers the NCTCOG broad capabilities across the spectrum of disaster response and recovery services to swiftly, and effectively, customize our approach to any disaster. This includes every service outlined in the scope of work. Tetra Tech will utilize its varied experience with the NCTCOG and clients nationwide to step into this active workload at full speed, providing the NCTCOG with professional support from the moment of activation to the contract's conclusion.

Contact Information									
Technical Representative Contractual Representative:									
Mr. John Buri, Director of Disaster Recovery	Ms. Betty Kamara, Contracts Representative								
(713) 737-5763 John.Buri@tetratech.com	(321) 441-8500 TDR.Contracts@tetratech.com								

Tetra Tech would be honored to serve the NCTCOG in this important effort to improve the lives of NCTCOG communities. We trust this proposal meets your present requirements. If you have any questions or comments regarding this response, please do not hesitate to contact the representatives listed above.

Sincerely,

Jonathan Burgiel Business Unit President

TAB C. Experience & Key Personnel

1. History of the Firm

Tetra Tech is a leading provider of consulting, engineering, environmental, and technical services worldwide. Founded in 1966, Tetra Tech is one of the leading firms in the nation in the field of disaster management and homeland security, with millions of dollars in revenue coming from contracts in such diverse areas as infrastructure hardening and protection; disaster recovery; emergency management, planning, and preparedness; community resilience; environmental services, and grant management. Tetra Tech supports government and commercial clients by providing innovative solutions to complex problems focused on water, environment, energy, infrastructure, and natural resources. We are a global company with over 27,000 employees that is *Leading with Science*® to provide innovative solutions to complex problems for our public and private clients.

90+

MAJOR DISASTERS
RESPONSES

25
YEARS IN
DISASTER RECOVERY

172M

CUBIC YARDS OF DEBRIS MONITORED

\$12B

WORKS IN

100+



Publicly traded on NASDAQ as



\$4.5 billion

ANNUAL REVENUE

WORKS ON 100,000 PROJECTS

550
OFFICES
WORLDWIDE

ENR RANKINGS

#1 Environmental Management

#2 Solid Waste

#1 Water

#1 Water Treatment/Desalination

20,000

CLIENTS

27,000 ASSOCIATES 1.

Dedicated to helping state and local governments plan for and recover from natural and human-caused disasters, our staff members offer a field-tested and proven methodology for emergency readiness, continuity planning, and disaster recovery. Our team is recognized for its ability to quickly respond to a broad range of emergencies, allowing our clients to return to the business of running their day-to-day operations.

Likewise, our team's understanding of the Federal Emergency Management Agency (FEMA), the Department of Housing and Urban Development (HUD), the American Rescue Plan Act of 2021 (ARPA), the Federal Highway Administration

(FHWA) (including recent changes), and other reimbursement agencies' requirements for eligibility, documentation, and reimbursement helps clients receive the maximum reimbursement allowed. Our team has obtained over \$12 billion in reimbursement funds for our clients from federal agencies such as FEMA, FHWA, ARPA and the Natural Resources Conservation Service (NRCS) and we have managed more than \$5 billion of HUD funded programs. In total, our team has successfully managed the removal of and reimbursement for over 172 million cubic yards (CYs) of debris as well as the demolition of over 22,000 uninhabitable residential and commercial structures.

In addition to disaster recovery, Tetra Tech offers a diverse suite of solutions to complex problems in water, environment, infrastructure, resource management, energy, advanced data analytics, and more. In all, Tetra Tech has dedicated problem solvers and innovators from 60 disciplines collaborating on innovative projects worldwide.



2. Texas and Other State Registrations

Tetra Tech has provided its Certificate of Fact and Lead Certificate for the State of Texas immediately following this page.



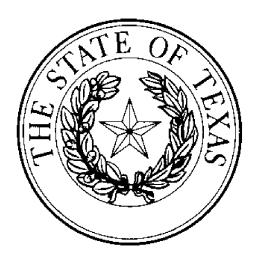
Office of the Secretary of State

Certificate of Fact

The undersigned, as Secretary of State of Texas, does hereby certify that the document, Application For Certificate Of Authority for TETRA TECH, INC. (file number 9223306), a DELAWARE, USA, Foreign For-Profit Corporation, was filed in this office on July 31, 1992.

It is further certified that the entity status in Texas is in existence.

In testimony whereof, I have hereunto signed my name officially and caused to be impressed hereon the Seal of State at my office in Austin, Texas on April 28, 2023.



Phone: (512) 463-5555

Prepared by: SOS-WEB

Jane Nelson Secretary of State

Fax: (512) 463-5709 Dial: 7-1-1 for Relay Services TID: 10264 Document: 1242217010002



Texas Department of State Health Services

BE IT KNOWN THAT

TETRA TECH

is certified to perform as a

Lead Firm

in the State of Texas and is hereby governed by the rights, privileges and responsibilities set forth in Texas Occupations Code, Chapter 1955 and Title 25, Texas Administrative Code, Chapter 295 relating to Texas Environmental Lead Reduction, as long as this license is not suspended or revoked.



Expiration Date: 01/10/2025

Certification Number: 2110670

Jennifer Shuford, MD,

MPH, Commissioner of

Health

(Void After Expiration Date)

Control Number: 7438

VOID IF ALTERED NON TRANSFERABLE

SEE BACK

3. Services Provided in the Past 5 Years

Tetra Tech, Inc. (Tetra Tech) was founded in 1966 as an environmental engineering and technical services firm and has grown to be a worldwide leader whose 27,000 employees innovate solutions to complex problems focused on water, environment, energy, infrastructure, and natural resources. Since its founding, Tetra Tech became a publicly traded company (NASDAQ-TTEK) in 1991 and now generates annual revenues of \$4.5 billion. Each year, Tetra Tech earns top rankings from industry trade journal Engineering News Records and is ranked #1 for the 17th year in a row.

Tetra Tech supplemented this proud history with the addition of Disaster Recovery and Emergency Management Operating Units and quickly developed into a national leader in the field of pre- and post-disaster recovery management. Our contracts with federal agencies and state and local governments are in diverse areas such as disaster recovery consulting and technical assistance; disaster debris program management; staff augmentation; community resilience; grant management; and emergency management planning and preparedness.

Our team offers deep understanding of the Federal Emergency Management Agency (FEMA), U.S. Housing and Urban Development (HUD), Federal Highway

Tetra Tech Snapshot

- **Stability:** 55+ years in business (founded 1966)
- Transparency: Publicly traded (NASDAQ: TTEK)
- **Strength:** \$4.5 B annual revenue (FY22)

Since the founding of our company in 1966, Tetra Tech has substantially increased the size and scope of its business and expanded its service offerings. Today, Tetra Tech is a leading provider of consulting and engineering services with 27,000 associates located in 450 offices worldwide, including 8 in Texas.

Administration (FHWA), and other regulatory agencies' policies and procedures. Our understanding of these reimbursement agencies' requirements for eligibility, documentation, and reimbursement has helped our clients obtain **over \$12 billion in reimbursement funds.**

We have worked closely with these agencies, recipients, and subrecipients on billions of dollars' worth of projects to determine project eligibility and to provide technical assistance, detailed damage inspection reports, cost estimates, validation and testing, audit documentation, and process reimbursements. Our team also maintains strong relationships with many of the lead federal officers, state agency leadership, local governments, and other staff.

Tetra Tech has been activated for over 90 disasters, including:



Tetra Tech offers unmatched experience and resources.

With 27,000 associates in more than 450 offices in more than 120 countries on 7 continents, Tetra Tech has the resources of a multi-billion-dollar company and can move at the speed of a 20-person office. We've been the chosen partner for dozens of communities in Texas, from Hurricane Ike in 2008 to Hurricane Hanna, because of our ability to put Texas first.

Tetra Tech has the most diverse and sophisticated experience in disaster response and recovery, with specialized experience in FEMA program compliance. Tetra Tech has never failed to respond to a client, no matter the scale of disaster.

- ✓ Global resources with a local footprint
- ✓ Unmatched experience in disaster response and recovery services
- ✓ Prepared for any complexity the County may face
- ✓ Strategy to maximize federal grant funding
- ✓ Reliability and resources of \$4.5 billion company
- ✓ Ability to respond to multiple simultaneous contract commitments

WORKS IN

100+

COUNTRIES

CONTINENTS

Publicly traded on NASDAQ as

TTEK

Nasdaq

ANNUAL REVENUE

WORKS ON 100,000 PROJECTS WORLDWIDE

ENR RANKINGS

#1 Environmental Management

#1 Hydro Plants

#1 Water

#1 Water Treatment/Desalination

20,000 CLIENTS

27,000 ASSOCIATES LA

Tetra Tech offers comprehensive services...

- ✓ Construction Management
- ✓ Hazard Mitigation Planning
- √ Floodplain Management
- ✓ Coastal Planning and Design
- ✓ Disaster Debris Program Management
- ✓ National Flood Insurance Program (NFIP)

 Compliance Issue Resolution/Training
- ✓ Preliminary Damage Requests
- ✓ Develop Requests for Public Assistance
- ✓ Applicant Briefings and Kickoff Meetings
- ✓ Site Visits/Inspections
- ✓ Project Cost Estimation & Documentation
- ✓ Architecture and Civil Engineering
- ✓ Geotechnical Engineering
- ✓ Structural Engineering
- ✓ Water/Wastewater Design/Build
- ✓ PW/Application Development
- ✓ Alternate/Improved/Pilot Projects
- ✓ Project Cost Reconciliation
- √ Funding Disbursement
- ✓ Grant Closeout

- ✓ U.S. Treasury Emergency Rental Assistance (ERA)
- ✓ Coronavirus Relief Fund (CRF)
- ✓ Coronavirus Aid, Relief, and Economic Security (CARES)

 Act
- ✓ American Rescue Plan Act (ARPA)
- ✓ HUD CDBG-CV
- ✓ HUD CDBG-DR
- ✓ FEMA PA Program (including Section 406 mitigation and Section 428 alternative procedures)
- ✓ FEMA Hazard Mitigation Grant Program (HMGP) (Section 404 mitigation)
- ✓ FEMA Flood Mitigation Assistance Program (FMA)
- ✓ Pre-Disaster Mitigation (PDM)
- ✓ FHWA-ER Program
- ✓ FHWA Transportation Investment Generating Economic Recovery Grant
- ✓ Natural Resources Conservation Service (NRCS) Emergency Watershed Protection

...across a multitude of **federal grants.**

We support our clients in every stage of disaster recovery.



Disaster Preparedness

- Recovery planning
- Capacity building
- Public education

Short-term Recovery

- Disaster debris
- Mass sheltering
- Infrastructure systems

Intermediate Recovery

- Public information
- Housing solutions
- Natural and cultural resources

Long-term Recovery

- Mitigation strategies
- Disaster cost reimbursement
- Infrastructure repair

Federal Grant Compliance

- FEMA (PA, HMGP, IA)
- HUD CDBG (MIT, DR)
- · CARES (CRF, ARPA)

What do our clients say?

"Tetra Tech has been instrumental in addressing some of the key areas needed to complete project closeout for our prioritized disasters. Tetra Tech has been an asset and expert partner in our disaster recovery efforts."

--Lynne Browning, Assistant Deputy Director - Public Assistance Louisiana Governor's Office of Homeland Security and Emergency Preparedness

Financial Recovery and Reimbursement

Overview of Experience

Tetra Tech is one of the leading program management and emergency management consulting firms in the U.S. We have led hundreds of major programs for federal, state, and local agencies ranging from the U.S. Environmental Protection Agency (EPA) to the largest municipalities in the United States. **Tetra Tech has managed over \$12 billion in disaster funding.**

Our team offers experienced disaster management professionals who are adept at helping organizations recover quickly by applying proven methodologies in disaster management. Along with disaster management, we have expertise in insurance claims as well as how Public Assistance (PA), Hazard Mitigation Grant Program (HMGP), insurance, and U.S. Department of Housing and Urban Development (HUD) claims/grants interplay with one another. Our top priority is to facilitate the process, orchestrating a rapid and effective recovery.

Our team has extensive experience managing and documenting projects that are eligible for federal funding through federal programs, including multiple, large programs for the Commonwealth of Puerto Rico, Vermont, Texas, Virginia, South Dakota, and Connecticut as well as PA Programs for the City of Houston, Texas; Boulder County, Colorado; and Volusia County, Florida. The following provides a brief selection of our experience providing financial recovery and grant management services to large local and state governments.



State of Louisiana

Supporting legacy and future disasters, totaling \$139M in approved costs to-date



Commonwealth of Puerto Rico

Managing \$5.6B in federally awarded funds



City of Philadelphia, PA

Since 2020, managed funding totaling \$276M CRF, \$248M ERAP, \$1.4B ARPA, and \$75M FEMA PA



State of Missouri

Supporting FEMA PA Programs for 10 years over 14 disasters totaling \$756M



City of Houston, TX

Multiple programs including \$2.3B in HUD CDBG, \$15M PA COVID-19 Funding, \$405M CRF, and \$607M ARPA



State of Connecticut

Managed \$405M in FEMA PA and \$20M in HMGP



Harris County, TX

Supporting multiple recent disasters, totaling \$6.5M FEMA PA, \$426M CRF, and \$266M in FEMA COVID-19 funding



State of California

Supporting the State's multi-billion dollar debris missions since 2017

Focus On

FEMA Programs

\$12 billion+ Managed

Experience Summary

Our team holds comprehensive qualifications in working both for and with State/Recipient agencies and FEMA. Tetra Tech maintains six work with FEMA Recipients and Subrecipients as part of state and local projects seeking reimbursement.

Our experience supporting clients with FEMA programs includes:

- FEMA PA Program
- Section 406 mitigation and Section 428 alternative procedures
- Section 404 mitigation
- FEMA Individual Assistance (IA) Program
- FEMA Flood Mitigation Assistance Program (FMA)
- FEMA Building Resilient Infrastructure and Communities (BRIC)

Recent Sample Projects

Year	Client	Program	Preliminary Damage Request	Develop Request for Public Assistance	Applicant Briefing	Applicant Kickoff Meeting	Site Visits/Inspections	Project Scoping	Project Cost Estimation & Documentation	PW/Application Development	Alternate/Improved/Pilot Program Projects	Project Cost Reconciliation
2022	City of Fort Myers, FL	PA	=	•	•	=	•	•	•	•	=	•
2022	City of South Daytona, FL	PA			-	-	-	•	-	-	-	•
2022	City of Philadelphia, PA	PA	•	•	•	•	•	•	•	•		•
2020	Hamilton County, TN	PA	•	•	-	•	•	•	•	-	•	•
2020	Commonwealth of Massachusetts	PA		•	•		•	•	•		•	•
2020	Harris County, TX	PA	-	•	-	-	-	•	•	-	-	•
2020	City of Houston, TX	PA	-		-	•	•	•	•	-	•	•
2020	LA GOHSEP SAL	PA		•	•	-	•	•	•	-		
2020	State of Connecticut	PA		•	-			•	•	-		•
2020	City of Dunedin, FL	PA	-		-	-	-	•	-	-		•
2019	State of Missouri	PA							-			•
2019	Commonwealth of Puerto Rico	PA		•	-	-	-	•	-	-	-	•
2018	City of Callaway, FL	PA	•	•	-	•	•		•	-	•	•
2018	City of Lynn Haven, FL	PA	-	•	•	-	•		•		-	•
2018	Dougherty County, GA	PA	-	•								
2018	City of Albany, GA	PA	•	-								

FEMA Focus Areas



Tailored Procedures

Our procedures are tailored to facilitate Our management team and field staff fully FEMA review and generation of Project Worksheet versions. Tetra Guidance, and Hazard Mitigation Assistance Guidance into our procedures.



Understanding of FEMA Regulations

understand rules and regulations across Tech FEMA programs. This allows us to monitor incorporates changes and/or updates to contracts in detail while managing and the PAPPG, IAPPG, FEMA IHP Unified documenting the operation using proven methodologies maximize reimbursement.



Relationships Regional Reps

Our team maintains strong relationships with many of the lead federal coordinating officers, PA/IA officers, and other staff. Regular interface and communication with FEMA at the headquarters, regional, and local levels allow our team to obtain FEMA closeout officers to obtain millions quick responses on quidance and issues.



Audits and Appeals

Our grant management experts have assisted clients with applying for and retaining grant funds, even after closeout and audit processes. Our FEMA appeals and funding specialists have worked with of previously deobligated dollars.

Focus On HUD Programs

Experience Summary

Our team members have decades of experience working within HUD's CDBG program eligibility framework and have successfully leveraged public funds for our clients. We work with jurisdictions to develop action plans, complete applications, and identify, evaluate, and prioritize recovery projects, ensuring eligibility with HUD requirements. The Tetra Tech team has worked with dozens of communities across the nation to ensure that recovery planning efforts are launched and implemented with long-term sustainability, risk reduction and elimination, and community economic and safety resiliency in mind.

From Hurricane Sandy to Hurricane Maria, along with countless other disasters across the U.S. and territories, our team of experts has supported recovery efforts throughout the country.

Year	Client	Program	Preliminary Damage Request	Applicant Briefing/ Kickoff	Site Visits/Inspections	Project Scoping	Project Cost Estimation & Documentation	Action Plan Development	Environmental Reviews	Project Cost Reconciliation	Interim Inspections	Funding Disbursement
2020	U.S. Virgin Islands	CDBG-MIT				•		-				
2020	Lexington County, SC	CDBG-MIT	-	•	-	-	-	-		-	-	
2019	Harris County, TX	CDBG-DR, CDBG-MIT			-	•				•	•	•
2019	Commonwealth of Puerto Rico	CDBG-DR	•	•	•	-	•		•	-	-	•
2018	State of Florida DEO	CDBG-DR			-						-	
2017	State of Louisiana OCD	CDBG-DR			-						-	
2016	St. John's County, FL	CDBG-DR		•	•	•	•			•	-	•
2015	Richland County, SC	CDBG-DR	-	-	-	•	-	-	-	-	-	•
2015	City of Houston, TX	CDBG-DR			-	•		-				
2013	NY/NJ DEP	CDBG-DR			-		•				-	

HUD Focus Areas



Action Plan Alignment

Annual action plans guide the actions and activities to be carried out each year to address each jurisdiction's priority needs and goals. In addition to carefully aligning our project activities with these stated goals, we have also helped multiple Statelevel clients develop their action plans.



Whole Community Recovery

HUD provides flexible funding to help communities recover. Tetra Tech engages local partners with deep roots in the communities we serve to help expand the impact of programming with equitable access for disproportionately impacted communities



Hyperlocal Focus

We have helped our clients administer HUD programming at the State and local level. In all activities, we focus on engaging local partners, building local capacity, and returning positive impact to the community through both program activities and project outputs.



Long-term Solutions

Tetra Tech helps its partners design and deliver solutions that last. From resilient infrastructure to reducing repetitive losses, we help leverage HUD funding to shape long-term approaches to mitigate the immediate and future impacts of disasters.

Experience with Government Entities and Programs

Our program is designed to maximize federal grant reimbursement.

Over the course of working with hundreds of local and state governments on disaster debris management projects, our team has developed a deep understanding of FEMA, FHWA, NRCS, and other reimbursement and regulatory agencies' policies and procedures. Our efforts allow clients to maintain their focus on continuing daily operations while relying on us to oversee the management of debris removal operations in compliance with programmatic guidelines and procedures. Our understanding of requirements for eligibility, documentation, and reimbursement has helped our clients obtain **over \$12 billion in reimbursed costs.**

Our team has direct experience with federal grant programs, including:

- FEMA PA Program (including Section 406 mitigation and Section 428 alternative procedures program)
- FEMA Hazard Mitigation Grant Program (HMGP, Section 404 mitigation)
- FEMA Hazard Mitigation Assistance (HMA)
- FEMA Individual Assistance (IA) Program
- FHWA-Emergency Relief (FHWA-ER) Program
- FHWA Transportation Investment Generating Economic Recovery Grant
- Natural Resources Conservation Service (NRCS) Emergency Watershed Protection
- U.S. Department of Housing and Urban Development (HUD) Community Development Block Grant Program (CDBG)
- U.S. Treasury Coronavirus Aid, Relief, and Economic Security (CARES) Act and COVID-related funds

For this engagement, Tetra Tech anticipates that majority of reimbursement will be pursued through FEMA Programs. Our team holds comprehensive qualifications in working both for and with FEMA. Tetra Tech maintains six current contracts directly supporting FEMA, in addition to our routine work with FEMA as part of state and local projects seeking FEMA reimbursement.

Tetra Tech is able to maximize FEMA PA disaster debris reimbursement funding for the NCTCOG based on the following:

- **Procedures Tailored to FEMA:** Our data management and document storage procedures are tailored to facilitate FEMA review and the generation of project worksheet versions throughout the entire project. We incorporate changes or updates to the FEMA PA Program and Policy Guide (PAPPG) into our procedures for field documentation and data management as they occur. Our software systems, *RecoveryTrac*™ and *RecoveryTrac*™ Grants Management were designed with FEMA programs in mind and were built to interface with FEMA Grants Portal/Grants Manager.
- Comprehensive Understanding of FEMA Regulations: Our management team and field staff fully understand FEMA rules and regulations. We monitor contracts to the smallest detail, while concurrently managing and documenting the operation using proven methodologies that maximize FEMA reimbursement.
- **Direct Relationships with FEMA Regional Representatives:** Our team maintains strong relationships with many of the lead Federal Coordinating Officers (FCOs), regional leadership, debris specialists, Public Assistance (PA) coordinators and officers, and other staff. Regular interface and communication with FEMA at the headquarters, regional, and local levels allow our team to obtain quick responses on disaster-specific guidance and issues. Having been former State and Federal officials, our employees know how to successfully navigate FEMA PA and should issues arise, who to call upon to get quick remedies.
- Team of Grant Experts to Assist with Funding and Audits: Our grant management experts have assisted clients
 with applying for and retaining grant funds, even after closeout and audit processes. Our FEMA appeals and
 funding specialists have worked with FEMA closeout officers to obtain millions of previously deobligated dollars
 for communities. While the best course of action is to avoid audits or appeals, there are sometimes unavoidable

disagreements with program administrators. We have a bench of accountants, attorneys, and program experts to draw upon to try and come to a resolution outside of the audit or appeals process, or when all else fails, appeal or arbitrate certain unacceptable decisions.

Overview of Federal Grant Funding Experience in the Past 5 Years

Year Client Event Program Valu	ue (\$)	Preliminary Damage Request	Develop Request for Public Assistance	Applicant Briefing	Applicant Kickoff Meeting	Site Visits/Inspections	Project Scoping	Project Cost Estimation & Documentation	PW/Application Development	Alternate/Improved/Pilot Program Projects	Project Cost Reconciliation	Interim Inspections	Funding Disbursement	Grant Closeout	Audit/Appeals Support
2022 Fort Myers, City of, FL DR-4673 PA	45,000,000	•	•	•		•	•	•	•	•	•	•		•	•
2022 South Daytona, City of FL DR-4673 PA	3,490,481		•	•	•	•	•	•	•	•	•				
2022 Cape Coral, City of, FL DR-4673 Grant	8,271,500	•				•	•								
2022 Collier County, FL DR-4673 PA	TBD		•		•										
2022 Pinellas County, FL DR-4673 PA	5,000,000														
2022 Volusia County, FL DR-4673 PA	33,918,834				•	•	•	•							
2022 Holly Hill, City of, FL DR-4673 PA	3,050,000		•	•	•	•	•	•		•	•				
2022 Orange City, City of, FL DR-4673 PA	598,323				•	•	•	•	•						
2022 Iowa, State of CV19 CCS	227,500,000						•	•			•		•		
2022 Lexington County, SC DR 4241 CDBG-MIT	15,000,000	•	-	•	•	•	•	•	•	•	•	•	•	•	
2022 City of Philadelphia, PA DR 4618 PA	10,000,000	•	•	•	•	•	•	•	•		•			•	
2021 Texas, State of CV19 ERAP 1,	,308,000,000						•	•			•		-		
2021 Richland County SC CV19 ERAP	12,500,000						•	•			•		•		
2021 Broward County, FL CV19 ERAP	58,965,000						•	•			•		•		
2021 Charleston County, SC CV19 ERAP	22,200,000						-	-			•		-		
2021 Pinellas County, FL CV19 ERAP	21,400,000						•	•			•		•		
2021 St. Petersburg, FL CV19 ERAP	8,000,000						-	•			•		•		
2021 Leon County, FL CV19 ERAP	19,600,000						•	•			•		•		
2021 Mobile County, AL CV19 ERAP	12,300,000						•	•			•		•		
2021 Winston-Salem/Forsyth City, NC CV19 ERAP	11,500,000						•	•			•		•		
2021 Greenville County, SC CV19 ERAP	15,800,000						•	•			•		•		
2021 Orlando, FL CV19 ERAP	8,600,000		_	_		_	-	•			•	_	-		
2021 Lexington County, SC DR-4241 CDBG-MIT	15,000,000		-	-		-	-			-	-		-		
2021 Monroe County, FL DR-4337 CDBG-DR 2021 Walton County, FL CV19 COVID PA	15,000,000		•	-			•	-	-		-	-	•	-	
2021 Walton County, FL CV19 COVID PA 2021 Frisco, TX DR 4586 FEMA PA	131,470 700,000	•	_					•							
2021 Frisco, TX CV19 FEMA PA	500,000								-	_	-	_	-	_	
2021 Frisco, TX CV19 CRF	3,700,000														
2021 Harris County, TX DR 4586 PA	12,300,000							-	-	-	-		-	-	
2021 Philadelphia, PA DR 4618 PA	10,000,000		-	•	•			•			•			•	

Year	Client	Event	Program	Value (\$)	Preliminary Damage Request	Develop Request for Public Assistance	Applicant Briefing	Applicant Kickoff Meeting	Site Visits/Inspections	Project Scoping	Project Cost Estimation & Documentation	PW/Application Development	Alternate/Improved/Pilot Program Projects	Project Cost Reconciliation	Interim Inspections	Funding Disbursement	Grant Closeout	Audit/Appeals Support
2021	Ft. Myers, FL	DR 4486	PA, CRF	2,748,000						Ē	•	Ē		•			Ŭ	
2020	Hamilton County, TN	DR-4514 CV19	FEMA PA	1,000,000	•	•	-	-	•	-	-	-	-	-	•	-	•	
2020	Commonwealth of Massachusetts	DR 4496	FEMA PA	200,000,000			•	•		-	•	•		•	•	•	•	
2020	Harris County, TX	DR 4855	FEMA PA	200,000,000	•	-	-	-	•	-	-	•	•	•	•	•	•	
2020	Houston, TX	DR 4855	FEMA PA	10,000,000	•	-	•	-	•	-	•	•	•	•	•	•	•	
2020	Miami, FL	DR-4337	Appeals	17,000,000														•
2020	Houston, TX	CV19	CRF	404,000,000							•							
2020	Philadelphia, PA	CV19	CRF	276,400,000							•							
2020	Palm Beach County, FL	CV19	CRF	261,000,000							•							
2020	Brevard County, FL	CV19	CRF	105,000,000							•							
2020	U.S. Virgin Islands Housing	DR 4335-VI DR 4340-VI	CDBG-MIT	2,000,000,000						•	-							
2020	LA GOHSEP Vernon-Parish	DR 4559	PA	13,000,000							•	•						
2020	LA GOHSEP Lafayette Delta	DR 4570	PA	14,488,000														
2020	LA GOHSEP Abbeville Laura	DR 4559	PA	376,000							•	•						
2020	LA GOHSEP Lafayette Laura	DR 4559	PA	3,757,000														
2020	LA GOHSEP Abbeville Delta	DR 4570	PA	222,000							-	=						
2020	Houston, TX	DR 4586	PA	10,000,000	•	•		•			•				•		•	
2020	Long Beach, CA	DR 4482	PA, CRF	150,753,000						•	•	•		•		•	•	
2020	Iowa Department of Human Services	DR 4482	CRF	7,800,000						•	-	•						
2020	LA GOHSEP SAL	DR 4570, DR 4559	PA	312,600,000		•		•		•								
2020	LA GOHSEP COVID19 TO 8.2	DR 4484	PA	87,048,000							•							
2020	State of Connecticut	DR 4500	PA	450,000,000						•	•	•		•		•	•	
2020	Philadelphia, PA	DR 4506	PA, CRF, HMGP	375,000,000					•	•	-	•		-		•		-
2020	Dunedin, FL	DR 4486	PA	38,000	•	•	•	-	•	•	•	•		•				
2020	Harris County, TX	DR 4485	PA, CRF	200,000,000 426,000,000	•	-	•	-	•	•	-	•		-				
2020	Houston, TX		CRF	404,000,000										-			•	
2020	Houston, TX	DR 4332	PA	575,000,000	-	-	-	-	-	-	-	•	-	-	•	•	•	
2019	Harris County, TX	DR 4332	CDBG	1,200,000,000					-	-				-	•	•		
2019	Missouri, State of	DR 4451	PA	2,947,200							-			-		•	•	
2019	Missouri, State of	DR 4435	PA	5,664,229							-			-		•	•	
2019	Commonwealth of Puerto Rico	DR 4339	PA, HMGP	60,000,000,000		-	-	-	•	-	-	-	-	-				
2019	Barnwell County, SC	DR 4479	HMGP	4,800,000														

Year	Client	Event	Program	Value (\$)	Preliminary Damage Request	Develop Request for Public Assistance	Applicant Briefing	Applicant Kickoff Meeting	Site Visits/Inspections	Project Scoping	Project Cost Estimation & Documentation	PW/Application Development	Alternate/Improved/Pilot Program Projects	Project Cost Reconciliation	Interim Inspections	Funding Disbursement	Grant Closeout	Audit/Appeals Support
2018	State of Florida DEO	DR 4337	CDBG-DR	616,000,000	•	-	•	-	-	-	-	•	-	-	•	-		
2018	Callaway, FL	DR 4399	PA	50,000,000	•	•	•	•	•	•	•	•	•	•				
2018	Lynn Haven, FL	DR 4399	PA	50,000,000	•	•	•	•	•	•	•	•	•	•				
2018	Dougherty County, GA	DR 4400	PA	10,000,000	•	•												
2018	Albany, GA	DR 4400	PA	10,000,000	•	-												
2018	Ventura County, CA	DR 4353	PA	100,000,000						•	•	•		•				
2018	Callaway, FL	DR 4399	PA	27,098,000	-	-	•	-	-	-	-	•	-	-		-		
2018	Lynn Haven, FL	DR 4399	PA	54,810,000	•	•	•	•	•	•	•	•	•	•		•	•	
2018	Albany, GA	DR 4400	PA	17,773,000	-	-	•	-	-	-	-	•				-		
2018	Anchorage, AK	DR 4413	PA	11,936,000					•	•	•	•	•	•		•	•	
2018	Lake County, CA	DR 5262	PA	21,531,000							-							
2018	Ventura County, CA	DR 4407	PA	76,755,681							•							
2018	Lake County, CA	DR 4399	PA	1,990,433,000							-							
2018	Walton County, TX		FMA	1,500,000							•							
2018	Houston, TX	DR 4485	PA	12,500,000	-	-	•	•	-	•	•	•		•				
2017	State of Louisiana OCD	DR 4277	CDBG-DR	1,600,000,000	•				•						•			
2017	Houston, TX	DR 4332	PA	2,400,000,000	•	-	•	-	-	•	•	•	•	-				
2017	South Daytona, FL	DR 4337	PA	6,000,000			•	-	-	=	•	=	•	-				
2017	Fort Bend County, TX	DR 4332	PA	50,000,000	•	-	•	-	-	•	•	•	•	-				
2017	Albany, GA	DR 4294 DR 4297	PA	14,000,000	•	-	-	-	•	-	-	•	-	-				
2017	Dougherty County, GA	DR 4297	PA	12,500,000	-	-	•	-	-	•	•	•	•	-				
2017	Port of Corpus Christi, TX	DR 4332	PA	10,000,000					-	•	•	•	•	•	•	•	•	
2017	Butte County, CA	DR 4407	PA	1,500,000,000							-							

4. Pending Judgements

In the normal course of business, Tetra Tech, Inc. is subject to certain claims and lawsuits typically filed against the engineering and consulting professions, including workers' compensation, personal injury and other similar lawsuits. Tetra Tech maintains insurance coverage for its business and operations, subject to certain deductibles and policy limits against such claims. As described in Tetra Tech's most recent quarterly and annual reports filed with the U.S. Securities and Exchange Commission, Tetra Tech believes that the resolution of any such claims will not have a material effect on its financial position or results of operations. Tetra Tech is not currently a party to, and has not been a party to, any claim, controversy, legal dispute litigation, or other related legal matter where the basis of the claim involves the same or similar services as those referenced in this Request for Proposal. In addition, Tetra Tech is not barred from performing any FEMA related work.

As such, Tetra Tech certifies that Tetra Tech has:

- i. no current claims, arbitrations, administrative hearings, mediations and lawsuits related to grant management and consulting services; and
- ii. no pending lawsuits related to grant management and consulting services; and
- iii. no judgements from lawsuits related to grant management and consulting services within the last five (5) years.

5. Claims in the Past 2 Years

Not applicable to Tetra Tech.

6. Proposed Personnel

Tetra Tech has assembled a team of emergency management and disaster recovery experts with direct experience responding to recent disasters. Our dedicated project management team is deeply familiar with the policies, procedures, and requirements associated with delivering successful emergency management and disaster response services.

Our record of success includes serving over 300 state and local government clients in response to over 90 presidential disaster declarations over the last decade. Our team has obtained **over \$12 billion in reimbursement funds** for our clients from federal agencies.

Tetra Tech is committed to providing the NCTCOG an experienced project manager and consistent project management team that will expedite recovery efforts by establishing a coordinated and organized approach to debris removal. Our dedicated team is available to the NCTCOG 365 days per year.

Proposed Team

Tetra Tech has assembled a project team with the qualifications and expertise necessary to support the NCTCOG following a disaster. The individuals selected for this project not only have national expertise from having worked on every major disaster in the past decade, but also have **hands-on experience working on prior (or current) Texas-based projects.** As a result, our staff has an in-depth understanding of how disaster response and recovery works in Texas.

Senior Management and Advisory Team

Our senior management and advisory team will provide expert oversight and assistance at critical junctures. This team is prepared to provide both tactical and strategic guidance for the duration of any disaster recovery operation. These individuals bring decades of disaster debris monitoring and reimbursement expertise. **Resumes for project management and advisory staff have been provided at the end of Tab G. Required Attachments.**



Mr. John Buri, Senior Advisor for Disaster Grants Programs will provide subject matter expertise and guidance for the NCTCOG based on experience supporting clients across more than \$5 billion in disaster-related grants. Mr. Buri is Texas-based and a versatile disaster mitigation, response, and recovery and grant management professional. Mr. Buri has provided senior management oversight on 22 major disasters declarations for over 100 clients since 2007, representing over \$5 billion in disaster-related grants. He has responded to numerous large-scale activations and engages with FEMA and state regulatory agencies and debris contractors in addition to providing FEMA PA consulting for tasks and activities associated with each disaster recovery operation.



Ms. Brenna Minor is an accomplished planner and grant expert with 15 years of experience leading teams in grant program administration. She is an innovative team leader and motivator, focused on client satisfaction. Ms. Minor is a key leader in the development and implementation of business strategies during rapid growth and is an avid interpreter of policies and data used to develop procedures, meet program goals, and maximize efficiency across functional areas. Ms. Minor has served as program manager for the preparation and implementation of over \$5 billion in disaster recovery and community development projects, including with the Texas General Land Office's (GLO) Hurricane Harvey Community Development Block Grant-Disaster Recovery (CDBG-DR) programs and the Puerto Rico Department of Housing Hurricanes Maria and Irma CDBG-DR and MIT programs. She provides subject matter expertise, policy review and analysis, SOP development, and hires specialized personnel for key project management positions.



Ms. Caitlin Kelly, MSEM, MEP is an all-hazards emergency manager with expertise in all phases of emergency management. Ms. Kelly oversees the corporate Emergency Management Initiative and serves as the National Director of the Emergency Management and Community Resilience. In this capacity, Ms. Kelly has directed contracts with state and local governments, as well as private industry often managing project teams of a dozen or more internal staff. She has successfully managed as many as 20 concurrent projects and contract values of more than \$5M per year. Through her tenure at Tetra Tech, Ms. Kelly has designed, executed, and evaluated 100+ discussion and operation-based exercise programs, including leading exercise projects for local, regional, state, and federal government entities. Ms. Kelly is well versed in HSEEP and as a result of her exercise track record, was recognized by the FEMA with acceptance into the Master Exercise Practitioner Program (MEPP) and certification as a Master Exercise Practitioner (MEP).



Ms. Christina Hendrick is a seasoned grant manager with more than 14 years of experience. She has overseen more than \$4 billion of FEMA and HUD grant funding under FEMA PA, FEMA HMGP, COVID-19, CDBG programs. In her current role as a Deputy Director for financial recovery services, Ms. Hendrick has maintained oversight of Tetra Tech's most critical PA and CDBG recovery projects across 7 FEMA regions, as well as multiple COVID-19 recovery projects utilizing PA, CARES Act and other grant funding. She has served as a business management expert, strategic planner, and business planning leader for clients such as the City of Houston and Harris County, Texas; City of Philadelphia, Pennsylvania; Palm Beach County, Florida; Barnwell County,

Proposed Project Staff

Tetra Tech has identified a team of program staff to support the NCTCOG. We have selected team members who have previous experience in similar operations. Brief summaries of each team member's experience are provided below. Resumes for program operations staff have been provided at the end of Tab G. Required Attachments.

Proposed Staff Summary of Qualifications Emergency Management and Preparedness

Brian Rutherford

Project Manager, Emergency Management | Risk & Resilience Mr. Brian Rutherford has over 20 years of emergency management experience. His areas of expertise include disaster debris management, continuity of operations, emergency planning, mitigation, and recovery.

Mr. Rutherford has been involved in a wide range of emergency management planning and response projects. Some of these include disaster debris management planning and response, public health emergency plan development, continuity of operations planning, infectious disease planning, plan assessments, public information plan development, hazard mitigation planning, hurricane planning and response, wildfire response, flooding response, training design and meeting facilitation. Mr. Rutherford is also experienced in the design and evaluation of exercises following Homeland Security Exercise and Evaluation Program principles.

Treemonisha Smith, M.S.

Planner, Emergency Management | Risk & Resilience Ms. Treemonisha Smith is a Senior Emergency Management Planner with Tetra Tech, who brings over a decade of emergency management and public safety expertise with experience in municipal, higher education and technology sectors. Her areas of expertise are all-hazards planning, training, exercises, and large-scale special event emergency planning.

Liz Sullivan, MEP, MPA

Senior Planner, Emergency Management | Risk & Resilience MS. Sullivan is a skilled emergency manager with 9 years of experience in the field. She has held various roles in all-hazards and public health emergency management at local, regional, and state levels. Her areas of expertise are the development and evaluation of training and exercise programs and all-hazards planning. She has held the role of Exercise Director for multiple operations-based large-scale exercises including a 4-day full-scale exercise with the activation of multiple jurisdictional Emergency Operations Centers, Department Operations Centers, and Points of Dispensing across the Washington National Capital Region. Additionally, Ms. Sullivan has supported local and regional incident responses in Planning and Logistics Section roles during national-level events including Operations Allies Welcome, the January 6th U.S. Capitol Civil Unrest, and COVID-19.

Aaron M. Sines Senior FEMA

BCA Analyst,
Emergency
Management |
Risk & Resilience

Mr. Sines is a seasoned hazard mitigation specialist with over 17 years of experience in the emergency management field. As part of Tetra Tech's Disaster Recovery Team, he specializes in the development of benefit-cost analyses (BCAs) incorporating state of the art strategies to include quantifiable benefits to demonstrate economic feasibility of federally and locally funded projects. He also specializes in data management and web-based application development projects that

Key Areas of Expertise

- Emergency Planning,
 Response and
 Recovery
- Continuity of Operations Planning
- Debris Management
- Hazard Mitigation
- Regional Coordination
- Training and Exercises
- Public HealthPreparedness
- Meeting Facilitation
- Public Information
- All-Hazards Planning
- Large-Scale Special Event Emergency Planning
- EOC Operations
- Policy Writing
- Training and Exercise
- After-Action/Improvement Planning
- All-Hazards Planning
- Public Health Emergency Management
- Program and Project
 Management
- HMA SME
- FEMA BCA SME
- Mitigation Planning

help simplify and streamline the collection and analysis of • information required for grant application development.

Federal Procurement Standards

- Project Scoping
- State and Local Hazard Mitigation Planning
- Public Outreach
- Grant Development and Administration

Heather Apgar, CFM

FEMA Hazard Mitigation Assistance Grant Writer

Ms. Heather Apgar is a project manager and hazard mitigation planner for Tetra Tech. She holds a bachelor's degree in Environmental Science and is a Certified Floodplain Manager. Ms. Apgar has been directly involved with various projects, including public and stakeholder outreach; hazard mitigation planning; disaster management; and grant support and administration. Ms. Apgar provides support to numerous private and local, state and federal government sector clients. She is currently a part of the hazard mitigation team for state and local hazard mitigation planning projects. She supports all aspects of the DMA 2000 process and has gained proficiency in the planning process for New Jersey, New York, Pennsylvania, Massachusetts, Hawaii, Puerto Rico, California, Colorado, Oklahoma, Texas, and Illinois. Ms. Apgar provides grant administration for property acquisitions and elevations in New Jersey, Ohio, and Washington. Ms. Apgar currently is an ASFPM Certified Floodplain Manager, 40-hour HAZWOPER trained, and a certified provider for the Massachusetts Municipal Vulnerability Preparedness (MVP) grant program.

Rob Flaner, CFM

FEMA HMA Subject Matter Expert Rob Flaner has spent over 30 years developing a comprehensive background in all aspects of floodplain management while administering the Community Rating System (CRS) under contract with the Federal Emergency Management Agency (FEMA). The CRS is a FEMA program that provides incentive to communities to exceed the minimum requirements of the National Flood Insurance Program. The CRS program recognizes a comprehensive range of non-structural flood hazard mitigation activities that include public information, mapping and regulations, flood damage reduction, planning and flood warning. Rob was responsible for coordinating all CRS objectives between State, Local, and Federal entities in a 9-state territory that spanned three FEMA Regions. During his tenure with the CRS program, Rob was able to develop strong working relationships with his Federal, State, and Local partners. The CRS since its inception has developed into a template for sustainable floodplain management that can be used at the local level to support multiple facets of community programs. Rob's detailed understanding of the CRS program and floodplain management helped him to develop a diverse floodplain management background that has been utilized by FEMA as a Disaster Assistance Employee.

Alison Miskiman, GISP, CFM BRIC Subject Matter Expert Alison Miskiman has 20 years of experience and leads Tetra Tech's Mitigation/Risk & Resilience services as part of our Emergency Management Risk & Resilience program. She specializes in risk-informed planning; working in partnership with clients to maximize funding and increase resilience to natural hazard events and the changing climate. Ms. Miskiman leads our FEMA Hazard Mitigation Assistance (HMA) grant services team aligning funding sources with competitive projects to achieve implementation. Ms. Miskiman has extensive technical experience in the development of benefit cost analyses (BCAs) incorporating state-of-the-art strategies to include quantifiable benefits to demonstrate economic feasibility of federally and locally funded projects. She also manages large-scale

- Hazard MitigationPlanning
- Community Resilience Planning
- Urban Planning
- Risk Assessment
- Floodplain
 Management
- Community Rating
 System
- FEMA Grant Programs
- FEMA Benefit/Costs Analysis
- Program Management
- Planning Adaptation
- Resilience
- Mitigation
- Natural Hazard and Climate Change Risk
- Loss Estimation Using Hazus
- FEMA BCA
- Geospatial Analysis

Geographic Information Systems (GIS), data management, and webbased application development projects to simplify and streamline the collection and analysis of information for environmental, emergency management and economic development projects and utilizes the software to support data visualization and technical analyses required for FEMA grant applications and BCAs.

Case Management

Steve Sims

Program Manager, CDBG Mr. Sims is a hands-on senior project manager with extensive experience in the development, implementation, and operation of federal grant programs and quality assurance management. He has a broad understanding of federal processes and years of direct experience working with local, state, and federal agencies.

In his current role, Mr. Sims utilizes his knowledge and experience to lead case management personnel, develop quality policy and procedures, and provides direct support to clients. He has assisted process improvement and efficiency and fulfilled numerous contract deliverables.

Sarah Roque Parker

Deputy Program Manager, CDBG

Ms. Roque has managed multiple HUD grants where she specializes in program oversight, process improvement, data management, and large-scale data analytics. Ms. Roque is a key leader in the development and implementation of process and production management tools and utilizes available data to generate reports for business needs, reach program goals, and increase efficiency across various teams.

In her current role as HUD Deputy Practice Manager for Tetra Tech, Ms. Roque provides guidance to teams on the management of CDBG-DR and CDBG-MIT programs to ensure constituents recovering from disasters are served in the most impactful ways. She has provided policy review, subject matter expertise, key reporting metrics to the client, and streamlined processes.

Nick J. Russo III Environmental Subject Matter Expert, Case Management

Mr. Russo is an environmental services expert with over 20 years of experience in disaster recovery, environmental resources, and water management. He joined Tetra Tech in early 2022 after spending 19 years with the Harris County, TX Engineering Department. He has vast experience in coordinating environmental, sustainability, and regulatory programs at the local, state, and federal levels. Mr. Russo worked on numerous federally declared disasters including Hurricane Ike, the Tax Day Flood, Hurricane Harvey, Tropical Storm Imelda, and the COVID-19 Pandemic where he conducted damage assessments, debris removal, and program management in coordination with FEMA and other regulatory agencies.

David Venables Subject Matter Expert, Housing

Programs

Mr. David Venables is a Disaster Recovery and Housing Professional as well as a U.S. Marine Corps Veteran who has accumulated over 15 years of leadership experience in partnership development and project management. David's diverse background has equipped him with the ability to effectively navigate complex situations while maintaining a high level of efficiency. In his most recent role as a National Account Manager for Lowe's, a Fortune 50 corporation, David demonstrated his exceptional leadership skills by founding and leading a new business vertical targeting the disaster recovery sector. This new business vertical focused on non-profit organizations, for-profit disaster contractors, and emergency management agencies at all levels of government. David was able to

- Project Management
- **FEMA Public** Assistance
- Case Management
- Grant Administration
- **HUD Grant** Management
- Software Development
- CDBG and CDBG-DR Regulations
- CDBG Housing Activities
- FEMA Direct Housing
- Policy Interpretation
- Procedure Development
- Program Operations & Administration
- Program Management
 - Technical Assistance
- Resiliency Planning
- Sustainability
- Storm Water Management
- Wetlands & Natural Resources
- Green Infrastructure
- Environmental Planning
- Project Management
- **Budget Oversight**
- Team Development
- Partnership Development
- Relationship Management
- Consulting Services
- Strategic Planning
- Cost Estimating

leverage his extensive experience in business management and corporate ownership to build strong relationships with key stakeholders in the disaster recovery sector.

• Salesforce

Susan Elkins Subject Matter Expert, CDBG Ms. Elkins has worked with state and federal programs for more than 40 years. She was responsible for Louisiana's state and local governments receiving billions of dollars of federal grant funds. For 30+ years, she has had a good working relationship with the HUD staff in Washington, D.C. Ms. Elkins managed the Louisiana Office of Community Development, which includes three divisions: Community Development Office, State Grants Management Office, and the Disaster Recovery Office.

Ms. Elkins oversaw the largest supplemental appropriation in the history of disaster recovery. Louisiana received one supplemental appropriation for Hurricane Andrew and three supplemental appropriations for Hurricanes Rita and Katrina. Ms. Elkins' responsibilities included administering and ensuring compliance with HUD, state, and program regulations for over 25 disaster programs for activities such as housing, infrastructure, and economic development programs. She also assisted in the development of the Action Plans for over \$1 billion; wrote memorandums of agreement for data sharing for SBA, FEMA, etc.; wrote waiver letters; and developed a model agreement with banks after coordinating with the National Mortgage Lending Association and the Louisiana Bankers Association for escrowing housing compensation funding. Of the \$13 billion, approximately \$322,555,660 was utilized for economic development programs to assist businesses impacted by the disaster.

- Community
 Development
 Programs
 - Federal Grant Management
- Housing, Infrastructure, and Economic
 Development

FEMA Public Assistance

Francis James Cipriani

Project Manager, Public Assistance Mr. Cipriani is a seasoned project manager with 26+ years of handson experience in all areas of project management, federal
documentation, and COVID-19 recovery. Mr. Cipriani has exceptional
interpersonal and communications skills and expertise with ARPA
program management, change order negotiations; schedule
building; value engineering; federal program cost justifications;
federal grant program policy; procurement, and site inspections.
Currently, Mr. Cipriani works as a program delivery manager
supporting CARES Act and ARPA programs for the City of Houston.
Mr. Cipriani has worked in all phases of grant management, including
initial damage assessment, scoping, project management, and
closeout.

Donn OlsonSubject Matter Expert, Public Assistance

Mr. Donn Olson is a member of Tetra Tech's disaster recovery operations. In this role, Mr. Olson assists Tetra Tech clients in navigating federal grant programs for financial recovery from disasters. His knowledge of the Federal Emergency Management Agency (FEMA) Public Assistance (PA) Program assists the applicant with maximizing eligible reimbursements. Mr. Olson is a cross-cutting disaster recovery expert and has worked extensively in Project Worksheet (PW) formulation in areas such as debris removal, emergency protective measures, force account labor and equipment, and permanent work. During the PA process, he specializes in document analysis, eligibility requirements, audit preparation, and closeout assistance, which allows the client to maximize reimbursement. Mr. Olson is intimately familiar with FEMA

- Grant Application
 Developments
- WESTLAW & LEXIS-NEXIS Legal Research
- FEMA Change order negotiations
- FEMA Document review/conflict identification
- FEMA Government Cost Justifications
- FEMA Public
 Assistance Consulting
- Cost Analysis
- Project Worksheet Formulation
- Audit Preparation

policies, expectations, and technology, including the FEMA GrantsPortal. Due to his extensive experience working directly with clients and subgrantees, Mr. Olson has excellent soft skills when interfacing with stakeholders.

Bruce Firmin Jr.Grant Management Specialist, Public Assistance

Mr. Firmin has over 10 years of experience in project management, logistics, disaster recovery consulting, and human resources. He also maintains a strong background in accounting processes, finance, logistics, and insurance. As a FEMA Public Assistance expert, Mr. Firmin is proficient in reporting utilizing the FEMA Grants Portal, as well as state-specific grant portals, including the States of Texas (TDEM) and Louisiana (LAPA).

- Disaster Recovery
 Program Management
- Procurement
- Federal Compliance
- Project Closeout
- Data Management

FEMA Public Assistance Guidelines and Compliance

- Public Assistance Appeals
- Disaster Cost Recovery
- Policy Development
- Risk Management
- Financial Reporting

Meridith Sanders Legal/Appeals Specialist

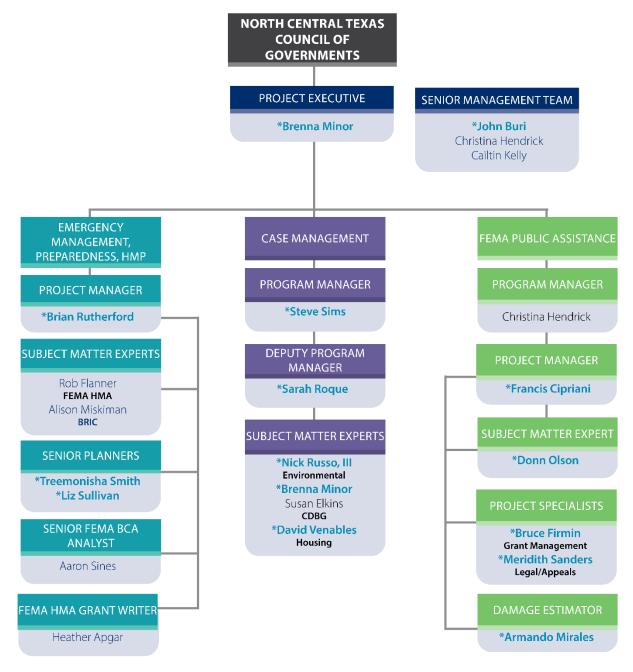
Ms. Meridith Sanders is a financial recovery and management professional with a wide range of experience throughout her 10-year career. She evaluates existing contracts for FEMA Public Assistance 2 CFR 200 compliance and advises accordingly to reduce the risk of deobligation. Ms. Sanders successfully advocates for clients, through the draft and submission of both first and second appeals. She monitors new guidance related to disaster cost recovery and disseminates guidance to clients. She also conducts applicant timesheet reviews and the creation of force account labor, material, and equipment summaries. Most recently, she assisted clients from Miami to Anchorage with completing FEMA Public Assistance (PA) Project Worksheets for categories A-G in response to hurricanes, earthquakes, and COVID-19. Ms. Sanders has a background in business management, with experience in process management, finance, and risk management.

Armando Mireles

Damage Estimator As a Program Delivery Manager, Mr. Armando Mireles is responsible for ensuring that program initiatives are met and communicated amongst the client and other stakeholders. Mr. Mireles has a wide range of skills and expertise. He performs data analysis, research, and regulatory reviews to support project management functions. He leads analysis for client deliverables and performs timesheet compliance reviews. With established partnerships with FEMA, state, and applicant agencies, he is able to provide efficient program oversight and expert technical assistance. He performs technical work of a high degree of difficulty requiring originality, initiative, and practical judgment.

- Vendor Communication
- Construction
- Reporting
- Employee supervision
- Blueprints
- Bilingual in Spanish and English

Organizational Chart



*Texas Resident

Qualifications for Each Class of Employee

Title	Position Description
Principal	The Principal is in charge of Tetra Tech Disaster Recovery operations and provides operational, financial and subject matter guidance in all disaster recovery matters. The Principal is available to participate in meetings with key officials and staff as needed.
Senior Project Manager	The Senior Project Manager (SPM) is the manager on site and point of contact for ODR. They will manage the delivery of grant projects as well as scope, schedule, budgets, and the quality of projects. The SPM will be the applicant primary contact while managing technical staff, preparing and amending scope of work, schedules, and cost estimates. They will design and implement the Project Management Plan developed for a specific project and coordinate the Project Management Team including Consultants. They will review and recommend approval of project applications, site visits, scope development, cost overruns, modifications, and extensions. They will be responsible for satisfying project requirements by ensuring that quality standards and deadlines are met.
FEMA/Federal Grant Subject Matter Expert	Serves as a subject matter expert or deliverable leader on programs or projects related to an area of relevant management consulting such as risk management, program/portfolio management, financial strategy and operations including public/private partnerships, financial management, or a related disaster recovery field. Assists the Senior Project Manager with engagement duties, by providing recovery management direction and advice related to their area of expertise.
FHWA Subject Matter Expert	Serves as a subject matter expert or deliverable leader on programs or projects related to FHWA management consulting, financial strategy, and operations including public/private partnerships, financial management, or a related disaster recovery field. Assists the Senior Project Manager and Project Manager with engagement duties, by providing recovery management direction and advice related to their area of expertise.
HUD Subject Matter Expert	Serves as a subject matter expert or deliverable leader on programs or projects related to CDBG-DR/MIT management consulting, financial strategy and operations including public/private partnerships, financial management, and HUD compliance. Assists the Senior Project Manager and Project Manager with engagement duties, by providing recovery management direction and advice related to their area of expertise.
Engineer Subject Matter Expert	Serves as a subject matter expert or deliverable leader on programs or projects related to engineering and infrastructure activities and operations. Guides the evaluation disaster impacts to assist with multi-hazard planning; evaluation of project cost proposals; and evaluation for technical viability, feasibility and mitigation effectiveness. Assists the Senior Project Manager with engagement duties, by providing recovery management direction and advice related to engineering functions.
Infrastructure Specialist	Serves as a subject matter expert or deliverable leader on programs or projects related to infrastructure and energy activities and operations. Assists the Senior Project Manager with engagement duties by providing recovery management direction and advice related to infrastructure projects and programs.
Project Manager	The Project Manager (PM) is responsible for the daily coordination of the consulting team and may specialize in a particular grant program. They arrange and attend meetings with local, state and federal agencies as needed regarding project development, application processing, site visits, scope development and closeout such as scope alignment, revision, and confirm obligation. He/she reports to the SPM, and coordinates all aspects of the closeout program including issue resolution. He/she is responsible for reporting weekly, monthly and as needed internally and externally.
HUD/CDBG Compliance Officer	This individual has experience in CDBG-DR and CDBG-MIT for a grant management program in the USVI. The Compliance officer with provide technical assistance related to CDBG-DR and CDBG-MIT requirements and regulations, including procurement reviews, developing policies and procedures, and training.

Title

Position Description

Recovery Consultant/ Engineer I-IV

Responsible for providing knowledge in specific area of expertise related to the disaster recovery lifecycle. Tasks may include:

- Coordinating between specialties
- Managing a team
- Interfacing with relevant points of contact, and providing oversight of technical deliverables
- Participating in and lead teams for mitigation analysis of specific projects
- Develop a range of consistent project alternatives for client review
- Develop cost estimates for the mitigation measures
- Prepare and present recommendations to USVI
- Finalize the mitigation elements of projects including narrative, drawings, calculations, and cost estimates
- Lead planning projects including participating in planning meetings as necessary
- Gathering data, conducting research, and writing the initial draft of USVI deliverables.
- Supervises and reviews the work of lesser experienced staff and contributes to the engagement planning.
- Performs testing and analysis, drafts reports and findings, supervises and reviews the work of lesser experienced staff and contributes to the engagement planning.
- Levels I-III perform testing and analysis, drafts reports and findings, and relevant recovery deliverable related duties under the direct supervision of a more experienced professional.

Consultant I-IV

Responsible for providing a wide array of routine basic planning, analytical or scientific tasks to Supervisory staff. The Consultant will focus on the technical aspects of the project for support and will perform tasks under the direct supervision of a more experienced Recovery Consultant, or member of the Project Management team. Level I and II may perform tasks under the direct supervision of a more experienced Consultant. Examples of this technical support include, but are not limited to:

- database management
- presentation or graphics modifications and development
- technical deliverable support
- other relevant duties required to support the recovery team.

Documentation Specialist I-IV

Responsible for providing a wide array of repeatable tasks necessary for large scale documentation review and management procedures. Will perform tasks under the direct supervision of a more experienced Recovery Consultant. Examples of tasks may include, but are not limited to, data entry, cost reconciliations, data testing, invoice reviews, and documentation organization and management.

Planning Specialist I-IV

Responsible for providing a wide array of routine basic planning, analytical or scientific tasks to supervisory staff. The Consulting Aide will focus on the technical aspects of the project for support. Examples of this type of support include, but are not limited to, database management, presentation or graphics modifications and development, technical deliverable support, and other relevant duties required to support the planning/recovery team. Performs tasks under the direct supervision of a more experienced Recovery Consultant, or member of the Project Management team.

Eligibility/Case Management Specialist I-IV

Responsible for direct intake and assists applicants in completing their files for eligibility by actively ensure quality case files and client interactions. The Specialist will maintain Applicant data for all programs, review and quality control of incoming data and produce and present weekly reports for client review. The individual prepares a written eligibility review for applications, coordinates with local agencies and non-profit groups for information used to verify case files and conducts eligibility calculations and duplication of benefits reviews while maintaining final Applicant folders and Applicant data. The individual will meet with prospective applicants to describe the programs,

Title

Position Description

review applicable required materials, and provide technical assistance including site visits if needed. The Specialist maintains knowledge of federal grant programs to interact with clients (grantees and sub-grantees), federal agency representatives, peers, managers, and project staff. Specialists level I-III may perform their duties under the direct supervision of a more experienced Specialist IV.

Finance Specialist I-IV

Performs various analytical and administrative functions in support of overall project execution. Responsibilities include collection, review, and audit of project documents to verify the completeness of the documentation using established processes and procedures. The individual will be trained on the project requirements and will work with the established financial team to complete each task. Centralize budget management and implement standardized budget, accrual, and performance templates. Assist in the development of dashboard to highlight individual project budgets, invoiced actuals, in-period accruals, and a forecast of the invoice at period close. Develop models for forecasting activities and future proposals and streamline invoice preparation and quality review processes. This individual may also monitor and report on weekly budget to actuals, support Project Managers in development of action plans to address variances, review and prepare responses to third party audit requests, direct team reviewing weekly payroll audits, analyze time entry data, levels III and IV mentor junior staff at various project locations. Level III and IV supervises and reviews the work of lesser experienced staff and contributes to the engagement planning. Performs testing and analysis, drafts reports and findings, and relevant recovery deliverable related duties.

Administrative Specialist I-IV

Provides administrative support services in accordance with established and/or emergency induced priorities and procedures, to include assisting in the coordination of daily workflow and the resolution of complex, highly sensitive and confidential matters. Maintains a variety of fiscal, administrative, and academic records; responds to internal and external inquiries regarding programs; coordinates meetings, seminars, and other special events; coordinates travel arrangements and prepares itineraries. Coordinates the preparation, review, editing, processing and distribution of correspondence, reports, studies, forms, brochures, manuals, white papers and other documents related to the program. Compiles and edits data for charts, graphs, and databases, and prepares summaries or reports. Researches and analyzes administrative requirements for specific agency programs or projects. Coordinates general office duties such as ordering supplies, performing basic bookkeeping work, and assisting with general administrative work. Level III and IV supervises and reviews the work of lesser experienced staff and contributes to the engagement planning. Performs testing and analysis, drafts reports and findings, and relevant recovery deliverable related duties.

Legal Specialist

This individual will be responsible for addressing any case that has been denied or deemed ineligible by the funding authority by performing the following:

- Review all relevant data and create a response.
- Review denial letter and original project worksheet to validate the reason for denial or appeal for payment.
- Coordinate and formulate with project team members to gather additional
- Documentation/information about the project.
- Provide a rebuttal to the denial.
- Research and review relevant regulations and policies that support eligibility or denial. Interact with the regulatory and technical team as necessary for the outcome.
- Maintain and track caseload and track in the management information system.
- Keep project leads informed on issues, problems & resolutions.
- Performs tasks under the direct supervision of a more experienced Legal Specialist

Title

Position Description

Senior Legal Specialist

This individual role will be responsible for addressing any case that has been denied or deemed ineligible by the funding authority by performing the following:

- Review all relevant data and create a response.
- Review denial letter and original project worksheet to validate the reason for denial or appeal for payment.
- Coordinate and formulate with project team members to gather additional documentation/information about the project.
- Provide a rebuttal to the denial.
- Research and review relevant regulations and policies that support eligibility or denial. Interact with the regulatory and technical team as necessary for the outcome.
- Maintain and track caseload and track in the management information system.
- Keep project leads informed on issues, problems & resolutions.
- Supervises and reviews the work of lesser experienced staff and contributes to the engagement planning.
- Performs testing and analysis, drafts reports and findings, and relevant recovery deliverable related duties under the direct supervision of a more experienced professional.

Principal Legal Specialist

This individual role will be responsible for addressing any case that has been denied or deemed ineligible by the funding authority by performing the following:

- Review all relevant data and create a response.
- Review denial letter and original project worksheet to validate the reason for denial or appeal for payment.
- Coordinate and formulate with project team members to gather additional documentation/information about the project.
- Provide a rebuttal to the denial.
- Research and review relevant regulations and policies that support eligibility or denial. Interact with the regulatory and technical team as necessary for the outcome.
- Maintain and track caseload and track in the management information system.
- Keep project leads informed on issues, problems & resolutions.
- Supervises and reviews the work of lesser experienced staff and contributes to the engagement planning.
- Performs testing and analysis, drafts reports and findings, and relevant recovery deliverable related duties under the direct supervision of a more experienced professional.

TAB D. Technical Proposal

1. Description of Services

Our firm is committed to fulfilling the primary mission to help the NCTCOG recover from disasters and other emergency incidents. We are prepared to lead the NCTCOG's effort by leveraging federal funds to deliver a comprehensive disaster recovery program.

Our approach takes input from the community and applies best practices from across the nation. This approach is based on more than \$10 billion of disaster grant funding experience and decades of individual staff experience working within the State of Texas and across the U.S. to maximize reimbursement and obtain available disaster-related funding from federal funding sources, including the FEMA, FHWA, USACE, HUD, and the U.S. Department of Agriculture (USDA) NRCS. Our services will include:

- Program Design
- Technical Assistance
- Grant Application Development, Implementation, and Administration
- Documentation Support
- Compliance
- Eligibility assessments

- Financial Management
- Pre-Audit and Audit Support
- Subrecipient Grant Management
- Communications
- Reporting
- Executive Briefings
- Inter-Departmental Coordination

In addition, Tetra Tech offers the NCTCOG the most comprehensive set of additional services of any firm in the emergency response industry. Included below is a summary of the services offered by Tetra Tech and teaming partners that may be needed in the event of a disaster response.

- Strategic planning/action planning
- Community resilience and economic redevelopment
- Program management
- Emergency response planning
- Emergency Operations Center (EOC) staff augmentation
- Floodplain management

- Call center, logistic, and communication support
- Field data collection and reporting (dashboards)
- Air quality evaluation and testing
- Construction management services
- Continuity of operations staffing for critical infrastructure
- CDBD-DR Action Plan development and updates

Grant Management Assistance Focus Areas



Tailored Procedures

Tetra Tech incorporates changes and/or updates to the PAPPG, IAPPG, FEMA IHP Unified Guidance, and Hazard Mitigation Assistance Guidance into our procedures.



Understanding of Regulations

Our management team and field staff fully understand FEMA & HUD rules and regulations across all programs. This allows us to monitor contracts using proven methodologies that maximize reimbursement.



Regional Relationships

Our team maintains strong relationships with many of the lead federal coordinating officers, PA/IA officers, and other staff, allowing our team to obtain quick responses on guidance and issues.

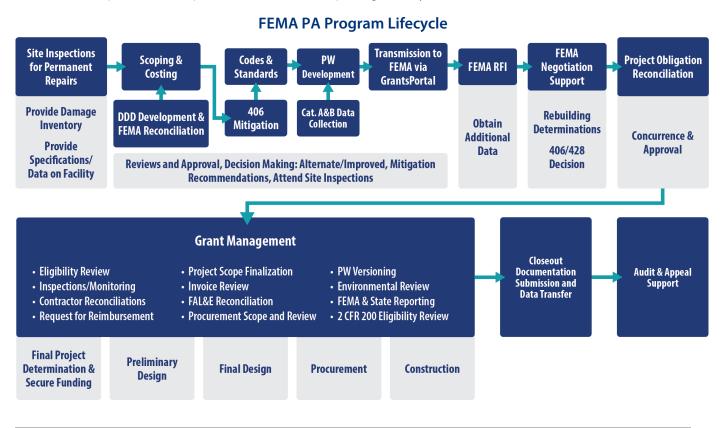


Audits and Appeals

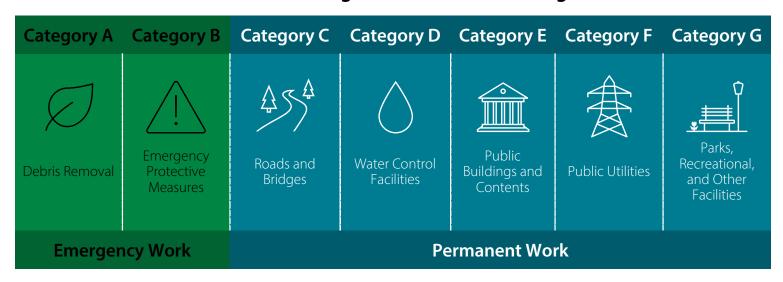
Our appeals and funding specialists have worked with FEMA closeout officers to obtain millions of previously de-obligated dollars.

2. Description of Process

The flowchart below illustrates Tetra Tech's approach to the FEMA grant management lifecycle. Our team has developed documentation processes to capture the data at each step along the way.



Tetra Tech has supported clients in processing FEMA PA grant funding across all categories of work, including:



3. Automated Systems

RecoveryTrac[™] is a web-based application that provides the NCTCOG with a real-time portal to the Tetra Tech team's project work. Tetra Tech will customize RecoveryTrac[™] reports to meet the NCTCOG's specific needs for both force account labor and contractor invoice records Regulatory and auditing agencies can efficiently search and review electronic project files as required, and the RecoveryTrac[™] system data is exportable and allows for importation into other applications such as the FEMA GrantsPortal.

Because Tetra Tech has managed FEMA PA grant programs for clients across the country, we can anticipate the information the State and FEMA will request to review throughout the entire grant lifecycle. We have built these requirements into our SOPs and our automated system for tracking and controlling costs. We provide transparent, concise, accurate, and routine information to state and federal agencies in aggregate and disaggregate formats as requested and needed. Our proprietary software allows us to run reports in real time that show a summary of costs to present to FEMA. We can generate these reports in various formats depending on what information is being requested. Our professional and knowledgeable staff can facilitate a presentation of summaries and reports that will provide the State and FEMA the information they need to support the NCTCOG.

Sample Progress Report Dashboard





Weekly Reports

The Tetra Tech team will prepare and submit a written report in electronic format to the NCTCOG. The report will include information related to the key performance indicators (KPIs) agreed to with the NCTCOG Project Management Staff during the kickoff meeting including numbers of applications, number of awards, denials, status, and the number of projects monitored and closed out.

Weekly Status Meetings

Tetra Tech's program manager will meet each week with the NCTCOG to review the weekly status report and discuss any issues, concerns, or problems.

Monthly and Quarterly Progress Reports

Tetra Tech tailors our data management tool so that the review and analysis of the data and preparation of tables and graphs is as automated as possible. This approach will provide consistency and accuracy to our reporting and give the NCTCOG staff the opportunity to review the data and provide their insights to make the reports more meaningful from a project delivery viewpoint. In the development of our reports, the Tetra Tech team will apply proven principles, including:

- Focus on the core essentials of the program; avoid trying to discuss all aspects
- Maintain a future orientation; concentrate on where the program is going
- Be concise; limit the total number of pages
- Present information in graphs and tables as opposed to narrative
- Provide well-written and engaging narratives
- Employ standard milestones throughout for consistency in reporting
- Avoid unnecessary details; references can be provided for supporting documentation
- Issue the report in a timely manner
- Fully validate and cross-check all data

Annual Performance Reports

We understand that the purpose of the Annual Performance Report is to provide a concise and insightful summary of progress that is suitable for executive-level review and potentially wider dissemination. The format will be provided to the NCTCOG for early review and comment.

Final Report

As the final deliverable provided by the Tetra Tech team, the Final Report will capture the lessons learned and serve as a final accounting of the performance in program delivery. The Tetra Tech team will begin the process of Final Report documentation before the end of the contract period to deliver a well-organized and insightful document that could serve as a roadmap for future successful projects. This approach is consistent with our "deliver with the end in mind" approach to program management.



The RecoveryTrac™ grant management system was specifically designed for the management and maintenance of documents, data, and information related to grant administration and case management. The result is a networked and highly functional framework for collecting, managing, and leveraging the flood of incoming data to visualize project projection and recovery in real time using customized dashboard reporting.



Key Features

Information is a critical ally when supporting a major community to stabalize in the wake of a disaster. Funding agencies require highly granular data to support grant application and reimbursement. Tetra Tech has configured the RecoveryTrac™ grant management system to organize and manage data and documentation associated with each grant program in mind.

Real Time Statistics

Audit-Ready Data

Exporting Capabilities



Efficiency

Regulatory agencies can quickly search and review electronic project data files.



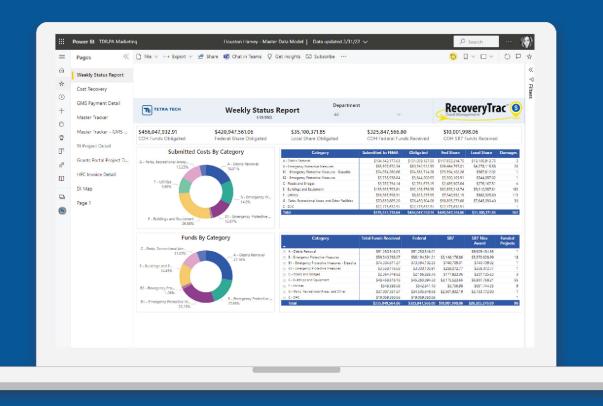
Enhanced Reporting

Fully customizable data control facilitates custom reporting for all recipients.

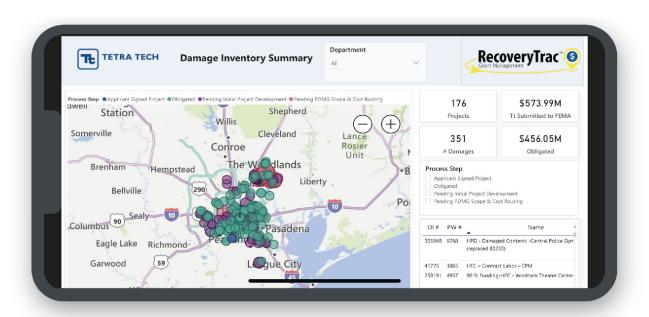


Fully Transparent

Access to a real-time portal to review project analytics and progress as it happens.



Customizable dashboards are designed to expand with your needs. The *RecoveryTrac™* system provides aggregate data management and chain-of-custody tracking of changes. Dashboards are web-accessible with cloud storage, and flexible and expandable to encompass project and portfolio lifecycle tracking.



Geospatial project tracking powered by Microsoft PowerBI. Tetra Tech has leveraged emerging technologies and the use of proprietary geospatial GIS software into all phases of emergency management. This software tracks key data against program objectives and key performance indicators, building the highest level of transparency for grant expenditure.

4. Project Understanding and Approach

Project Understanding

The North Central Texas Council of Governments (NCTCOG) is a regional planning and coordinating agency serving the North Central Texas region. Established in 1966, NCTCOG consists of 16 counties, 235 cities, and numerous special districts within the Dallas-Fort Worth Metroplex. NCTCOG's primary objective is to enhance the quality of life in the region by promoting regional cooperation and addressing common challenges such as transportation, air quality, economic development, emergency preparedness, and community development. Through collaborative efforts, NCTCOG facilitates coordination among its member governments, provides data-driven research and analysis, and offers innovative planning and technical assistance to support sustainable growth and development in the region. As a trusted partner and advocate for the North Central Texas community, NCTCOG plays a vital role in shaping the region's future and fostering a vibrant and resilient environment for its residents.

The NCTCOG wishes to establish contracts for Grant Management & Consulting Services under the TXShare Cooperative Purchasing Program. The NCTCOG seeks qualified respondents who can provide Grant Management & Consulting Services and propose a percentage discount from the list price for the services they offer. The TXShare program allows any public entity or non-profit to utilize the TXShare contract and its selected vendors and pricing for their own projects.

Overall Grant Management Approach

Our team will deliver a program that can guide the NCTCOG through the financial reimbursement cycle. Tetra Tech will employ its time-tested, 4-step CASE Management Approach to the federal grant program.

Step 1 - Collect the Data.

The biggest challenge we face is obtaining necessary data quickly and completely. We have found time and time again that our ability to work together to collect the data upfront will lead to success as we monitor the NCTCOG's program spending and build the FEMA reimbursement documentation. We employ a number of methods to collect, store, and report data, including rapid and detailed program assessments, one-on-one meetings with departments to collect and secure data, a robust SQL server database to store data offsite, and Microsoft PowerBI to report the NCTCOG on the status of the project.



Result: We have the most robust data management capabilities in the industry. The NCTCOG can trust our team to collect and manage the most critical data throughout each phase of the NCTCOG's FEMA PA or other grant programs.

Step 2 - Analyze the Projects.

Whether it is analyzing thousands of labor records, assessing the plans to make emergency purchases, identifying mitigation measures to protect damaged assets, or designing a multi-billion-dollar COVID-19 economic recovery program, the Tetra Tech team has unparalleled expertise the NCTCOG may need to support its recovery efforts.

Tetra Tech will work closely with the NCTCOG from the beginning of our engagement to understand the project status, scope, and goals to determine the best course of action.

Result: We are committed to delivering national experts with a local perspective to deliver solutions for the NCTCOG. There is no problem too big for our team to solve.

Step 3 – Submit to FEMA.

We understand the need for the NCTCOG to expedite the recovery process and keep pace program timelines. We have found that the best way to do this under FEMA's New Delivery Model for PA is actively working within the construct of FEMA's GrantsPortal side-by-side with Tetra Tech's proprietary *RecoveryTrac™* Data Management Tool. Aligning these systems will result in the NCTCOG's ability to transmit data more quickly to FEMA and the State of Texas (State), maintain visibility in the status of its programs, and quickly illustrate when funds have been obligated. Our ability to integrate these programs has been a transformative tool that has led to a more streamlined and transparent process.

Since first working in GrantsPortal under FEMA's beta-test in Albany, GA in 2017, we have worked with over 100 projects in GrantsPortal and know the system "inside and out".

Result: We are committed to supporting the NCTCOG to provide a rapid and compliant FEMA PA program that meets FEMA requirements for program administration, spending, and reporting.

Step 4 – Expedite the Requests.

When a project is submitted to FEMA or the State for review, Tetra Tech is with the NCTCOG each step of the way. Within each of the steps, FEMA or State personnel must review the submission. This often results in one or more RFIs or specialized requests or meetings. These requests must be dealt with timely and with the appropriate amount of information to maintain that the Project Worksheet (PW) does not stall in the process or get moved to a previous step.

Our team has responded to tens of thousands of RFIs and submissions of Essential Elements of Information as well as multiple Damages Under Review for Detailed Damage Descriptions since 2017.

Applicant Briefing, Request for Public Assistance, and Recovery Scoping Meeting

Once a declaration is in place Tetra Tech will support the NCTCOG in completing the required documentation for filing the Request for Public Assistance (RPA) and leading the development of the first draft of the Damage Inventory (DI) prior to the Recovery Scoping Meeting (RSM) and attend the Applicant Briefing, Exploratory Calls (ECs) and RSM. Due to the individualized needs of departments and partner agencies, we will work with the NCTCOG and FEMA to schedule and execute individual RSMs with each department.

Requests for Reimbursement

To facilitate the request for reimbursement (RFR) process and reduce the reconciliation backlog, it is important for supporting documentation to be collected, maintained, and updated throughout the duration of the recovery process. We will constantly monitor grant applications, project progress, requests for reimbursement, and reimbursements received.

The Tetra Tech team has an extensive history of implementing, reconciling, and monitoring the RFR process internally and on behalf of our state and local clients spanning the FEMA PA Program. While many agencies and subgrantees still wait for reimbursement from previous disasters our goal is to expedite economic recovery through strategies such as:

- Work with departments to collect data necessary for RFR claim
- Issue RFR to the State within twenty-four (24) hours of notification of award/submission of data from the NCTCOG
- Respond to RFIs within forty-eight (48) Hours
- Develop and Issue Weekly RFR Report/Tracker

Tetra Tech will track all supported cost information for labor, materials, and equipment associated with the project and all documentation submitted where the project costs may be estimated by unit price, time and materials, or contracts in which labor, equipment, and materials are provided by an outside source. Tetra Tech will follow-up on any missing or inadequate cost information associated with the project to ensure all expenditures are submitted for reimbursement.

Obtaining and Analyzing Documentation

Tetra Tech maintains orderly files for correspondence, reports of job conferences, and reproductions of original contract documents, including change orders, field orders, work change directives, addenda, additional drawings issued after the execution of the contract, clarifications and interpretations of the contract documents, progress reports, shop drawing and sample submittals received from and delivered to contractor, and other project-related documents. Our team has directly worked with over seventy-five (75) state and local clients after twenty (20) disasters in the Grants Portal system. We understand the importance of ensuring that:

- DIs are completed on time and updated for latent damages
- EEIs are completed with the most accurate information available
- Damages Under Review (DUR) are responded to within three (3) business days
- Supplemental information for the CRC is provided within three (3) business days as the PW passes through each of the review queues.

Damage Assessments

Tetra Tech performs damage assessments and site inspections using *RecoveryTrac*™ software, our scalable and fully featured disaster management suite. *RecoveryTrac*™ software allows all site inspection data to be electronically captured and submitted to a cloud-based storage system and delivers a document that is formatted to be immediately imported into FEMA's GrantsPortal System. Our teams will work in concert with asset owner departments to collect the required data for insurance or FEMA purposes.

- Impending Disaster: Deploy RecoveryTrac™ software enabled tablets to Departmental Project Managers (DPMs).
- Windshield Survey: Review and Report *RecoveryTrac*™ software Damage Assessment data that is collected by DPMs daily.
- **Detailed Damage Assessment:** Attend Initial Site Inspections with DPMs to collect *RecoveryTrac*™ software Site Inspection. In addition, we will utilize the *RecoveryTrac*™ software Matterport to collect photo/video damages at sites.

Site Inspections

In today's technology-driven society, paper-based systems are quickly becoming obsolete. Recognizing the migration to electronic-based systems, our team has spent years researching and developing our methodology for documenting sites. RecoveryTrac™ Grant Management software is the result of these efforts. RecoveryTrac™ software is a scalable and fully featured disaster management application designed specifically to address the operational challenges faced during a disaster recovery project, including Site Inspection, Interim Project Reports, and Final Inspection Reports.

Project Support Documentation

Tetra Tech will tailor the *RecoveryTrac™* Project Workflow Case Management System (CMS) to the NCTCOG's needs. *RecoveryTrac™* software is a web-based application that provides the NCTCOG with a real-time portal to the Tetra Tech team's project work. Tetra Tech will customize *RecoveryTrac™* software reports to meet the NCTCOG's specific needs for both Force Account Labor and Contractor invoice records.



RecoveryTrac™ software will document and report on project progress in the field during damage assessments through Site Inspections

Regulatory and auditing agencies can efficiently search and review electronic project files as required, and the *RecoveryTrac*™ system data is exportable and allows for importation into other applications such as the FEMA Grants Portal and State software tools.

In order to properly categorize and document the overall site conditions, the site inspector records capture the site-specific unique identifiers such as the site name and FEMA Damage Inventory Number, as well as, overall site damage information such as a facility description, address, GPS coordinates, environmental or historical concerns, and age. As the site inspection progresses, the inspector then describes and documents the individual damage components. This includes capturing disaster-related and non-disaster related damage for each component to include a description and cause of damage, its physical dimensions, photographic evidence of the damage, and captures any possible recommended mitigation actions.

Once the site visit has been complete, the inspector finalizes the site inspection report. *RecoveryTrac™* software is designed to work without internet connectivity so the site inspection reports are held on the smart device until an internet connection is available. Once an internet connection is available, the site inspection reports are transmitted into the *RecoveryTrac™* cloud-based server. Immediately, *RecoveryTrac™* software aggregates the site inspection data into two separate components: Grants Manager Component Import Template and a Site Inspection Photo Page, which can be delivered via e-mail or directly stored in any commercially available storage system. The Grants Manager Component Import Template is an Excel based document which has had great success in increasing efficiency as it is compatible with FEMA's Grant Manager Component Import function.



RecoveryTrac[™] software shows damage sites, documents, and photographs in a geospatial environment.

The Template may be presented to FEMA for their review and then the Template can be uploaded into Grants Manager to automatically populate damage components. The Site Inspection Photo Page provides all the photographs taken during the site visits in FEMA's photo template with the associated damage component.

Monitoring and Controlling

25,000 Damage Sites in *RecoveryTrac*™ Technology

Tetra Tech's *RecoveryTrac*™ system has seamlessly created detailed Site Inspections Forms, Photo Logs, and Damage Dimensions and Descriptions for over 25,000 damaged sites.

Our team is committed to the shepherding the NCTCOG's projects at each phase throughout the grant life cycle to mitigate the risk of funds being unspent. To achieve these goals, Tetra Tech's approach to managing, controlling, and supervising our team will revolve around (1) providing Tetra Tech's Project Manager with appropriate responsibilities and

authority; (2) tracking and reporting progress and costs; (3) implementing a tested and reliable quality assurance methodology; and (4) training project staff on tools and techniques that help improve the operational efficiency of the project team and the drive project toward completion.

- Seasoned Management Team: Our management team is empowered to access and direct the necessary company resources.
- Tracking and Reporting Data Utilizing Tetra Tech's RecoveryTrac™ Data Management System: Tetra Tech will provide the NCTCOG with standard and customized reports in a web environment using its cloud-based RecoveryTrac™ software integrated data management system.

Our team has worked with FEMA to integrate 20+ improvements into FEMA's GrantsPortal system.

We have delivered over 2,000 cost estimate reports under FEMA's New Delivery Model across Texas, Florida, and Puerto Rico over the last 2 years.

In 2020, our team met with FEMA PA leadership multiple times on issues related to COVID-19 that has led to policy changes to the betterment of subgrantees across the U.S.

- 3. **Time-Tested SOPs:** Our team's policies and procedures for this type of work have been tested thousands of times as we have helped grantees and subgrantees execute FEMA PA projects.
- 4. Trained Staff: The staff assigned to this project will be trained on the systems, technology, processes, and guidance documents.

Schedule Management

During the program initiation phase, the master schedule and budget baseline define projects to a common level through the definition of the project work plan. As projects advance through the delivery lifecycle, the master schedule will be updated to reflect the additional scope and schedule details or adjusted when unforeseen obstacles arise.

The Tetra Tech team will control the master schedule with input from all stakeholders and will analyze impacts from individual projects or activities programmatically. Our project controls professionals bring decades of scheduling experience to this contract and are fluent in a full range of software applications. The master schedule will:

- Provide a logical, structured, and feasible timeline for completing the program within the specified time highlighting compliance requirement
- Identify the critical path from kickoff through final completion and closeout emphasizing dates for key deliverables
- Assist the project team in monitoring and measuring the project's progress, focusing on early identification and mitigation of variances

The program master schedule progress and budget performance will be updated on a regular basis throughout the life of the project. Monthly, the Tetra Tech Project Manager will perform the following reviews:

- **Program Schedule Review:** As part of the monitoring and control processes, the Tetra Tech Project Manager will review all projects included in the master schedule monthly and provide any updates or adjustments to the NCTCOG Project Management Team.
- Budget Performance Review: The program budget will be monitored and provided to the NCTCOG Project Manager, including approved Task Order amounts, actual costs, forecasted costs, and average spend by task. Any trending above or below benchmarks will be brought to the attention of the NCTCOG Program Manager and remedy or redirection will be discussed.
- **Disbursement Tracking:** Tetra Tech will track, review, verify, and approve funds distributed as requested by the NCTCOG. The Tetra Tech team will be responsible for the steps of verification of costs and reconciliation.
- Monitor and Report Overall Program Costs: A key role of the Tetra Tech Project Manager is that of financial management. Accurate and timely reporting on actual costs, forecasting of accrued costs, and comparison to percentage of work completed and schedule are integral to effective program management.

Deadline Management: The Tetra Tech team will maintain awareness of all deadlines and, in advance of any upcoming deadlines, and assist the NCTCOG in requesting extensions as necessary. This includes the following deadlines:

- Six (6) months for Emergency Work (Category A and B) Extensions to RFIs
- Additional six (6) months for Emergency Work Extensions to Appeal Responses (Category A and B)
- - Twelve (12) months for Section 428 opt in

In addition, our team will work with the NCTCOG to submit accurate quarterly reports for each project throughout the life of the grant. In our RecoveryTrac™ system, we will implement push notifications to alert two (2) weeks in advance of quarterly reporting deadlines.

Cost Tracking

Tetra Tech has time tested cost tracking SOPs used to evaluate the NCTCOG's cost documentation, including document management integration and associated digitization. This approach represents a comprehensive end-to-end solution for

the NCTCOG that will be web-enabled so that reviewers have real-time access to the most up to date cost and supporting data.

Project Cost Documentation

The Tetra Tech team is highly experienced in performing forensic cost reasonable analyses when procurement issues arise when a PW is challenged by FEMA. As an engineering firm with over 21,000 technical professionals and staff, we have all the resources needed to defend a cost challenge by FEMA, from the simplest road repair to a billion-dollar levee repair or wastewater system plant relocation. No matter the PW, Tetra Tech has the internal staff resources to assist the NCTCOG defend its PWs successfully.

Reasonable Cost Analysis

In addition to eligible purchase review, Tetra Tech will prepare, on behalf of the NCTCOG, completed packages for submission through Grants Portal and Requests for Reimbursement (RFR), including audits of claimed costs by comparing documentation and dates with the project scope of work and period of performance for contract labor, material/supplies/ force account equipment, force account labor. This includes special issues like exempt employees, benefits/policies in place, and 40-hour

Tetra Tech maintains strict adherence to 2 CFR 200 procurement regulations at all levels.

threshold issues. Tetra Tech will ensure all work complies with the federal procurement requirements and environmental and historic preservation rules and regulations. Tetra Tech will reconcile force account labor, equipment and material data, avoiding possible duplication of benefit issues in projects which may have insurance coverage or be the responsibility of other federal agencies.

Regulatory and auditing agencies can efficiently search and review electronic project files as required, and the $RecoveryTrac^{TM}$ system data is exportable and allows for importation into other applications such as the FEMA GrantsPortal.

Review of Contracts and Procurement

The Tetra Tech team utilizes a procurement checklist contained in Tetra Tech's Public Assistance Services Program Standard Operating Procedures (PA SOPs) in the review process of disaster procurements and contracts. The checklists contain requirements from the Uniform Administrative Requirements for Grants and Cooperative Agreements to State and Local Governments (44 CFR 13.36-FEMA's purchasing regulation) as well as requirements from FHWA such as Form FHWA-1273 and associated requirements identified in the Contract Administration Core Curriculum Participant's Manual and Reference Guide of 2006, and 2 CFR 200.

Tetra Tech has built a business around understanding federal grant programs and appropriations and then building SOPs, staffing, and software tools around those programs to achieve success for our clients. We are uniquely familiar with the procurement and documentation requirements that these federal programs require. Tetra Tech has standard SOPs, trained staff, and custom software applications that have been refined to capture, track, and report on expenditures in accordance with state and federal guidelines. Our staff understands the timelines that they are required to provide documentation, and conversely, the timelines that state and federal agencies are required to respond as well.

Project Worksheet (PW) Development and Review

Tetra Tech will complete the EEIs based on the information provided the NCTCOG staff. We will prepare a PW Summary Sheet for submission to the NCTCOG to include a damage description and dimensions (DDD), cost summary, scope of work, and other relevant documents to the Finance Liaison and Finance Project Manager for upload to Grants Portal submission. Throughout the DUR reconciliation and Request for Information (RFI), our teams will closely coordinate with the NCTCOG to collect the appropriate documentation and submit to FEMA PDMG staff or FEMA CRC. Through this process, we will work diligently to maximize reimbursement for the NCTCOG and identify risks for deobligation or non-reimbursement.

Project Reconciliation and Closeout

Tetra Tech will conduct final inspection activities alongside FEMA and the NCTCOG to document that work was completed according to the PW scope of work and that all regulatory clearances have been satisfied. Tetra Tech will assist with writing closeout versions to large project PWs and any final project accounting. Once approval to proceed with submittal to FEMA is granted by the NCTCOG.

Grant Closeout Process

To close out large projects and receive remaining funds, the NCTCOG must request a final inspection and submit a closeout form through the State. Tetra Tech will conduct final inspection activities alongside the NCTCOG and the State. In addition to physically conducting the final inspections for projects, Tetra Tech will assist with writing closeout versions to large project PWs and any final project accounting.

As the NCTCOG prepares to submit documentation to the State, the closeout packets will be created by Tetra Tech. Once all documentation is collected, final inspection is complete, and approval to proceed with submittal to FEMA is granted by the State, Tetra Tech will extract all required documentation to generate closeout packets that fully and concisely present FEMA with all documentation required for grant closeout.

Assistance During the Audit Process

Tetra Tech brings a wealth of experience in audit support for Single Audit, OMB and DHS OIG audits. To this end, Tetra Tech will provide experienced professionals with extensive experience in large-scale disaster management and related audit services. Specifically, we will help to institute processes that validate that projects are fully supported and "audit ready," based on the cost types claimed. We will confirm that the process includes a checklist/program guide to make grant and applicants aware of all required documentation for the major different cost types incurred.

Critical review points include documentation demonstrating proper procurement and contracting, as well as supporting documentation is used given contracting type (e.g., lump sum, unit price, force account). Other areas of consideration include review of submitted charges for duplicate billings, compliance to state and federal labor requirements and other areas where overcharges typically occur, such as overhead & profit markups, labor burden claimed on force account, or duplicate billings.

Support During the Appeal Process

Tetra Tech will work through the first and second appeal process on the spectrum of issues the NCTCOG may face during future disasters. In the event the NCTCOG elects to pursue FEMA's arbitration process, our team can provide support through this, having recently been successful in arbitrations for Monroe County, FL and the Commonwealth of Virginia on deobligations following Hurricanes Irma (2017) and Dorian (2018).

Appeal and Audit Actions

Our team, which includes the former general counsel of FEMA, has a deep understanding of the many challenges that impact survivors of these events. We frequently advise clients on issues of eligibility, duplication of benefits, private insurance rules, practices related to disaster and mitigation claims, environmental and historic preservation, and resolution of compliance and audit issues through negotiation, mediation, and administrative appeal.

While Tetra Tech will work with FEMA, the State, and the NCTCOG to proactively resolve funding challenges through our collaborative approach, applicants have the legal right to appeal decisions and judgments made by the federal government if resolution cannot be reached. Tetra Tech has been retained to assist clients with first and second appeals. In the event that we would be engaged by the NCTCOG to assist in an appeal, we will collaborate with the NCTCOG on the legal/FEMA policy-related components of the appeal. Our team's legal professionals have filed over 150 appeals on behalf of applicants/subrecipients under programs managed by FEMA under the Stafford Act (Public Assistance, HMGP,

and Fire Management Assistance Grant Programs). The total funding obtained or restored in the appeals handled by members of our team is more than \$150 million.

Disaster Recovery Information Technology

Our team has spent years on research and development to streamline reimbursement documentation and data management functions, with a focus on minimizing the cost to our clients while improving the visibility of project operations. *RecoveryTrac™* technology is the result of these efforts. The *RecoveryTrac™* system is a scalable and fully featured disaster management application designed to address the operational challenges faced during a disaster recovery project. The system provides real-time collection of data and offers multiple solutions to financial management, data management, reporting, and project controls. We have also worked with our clients to implement outsourced technologies based on individual needs.

Tetra Tech has successfully managed the filing, retention, and retrieval of documents in a secure environment of disaster programs. Our audit preparation begins with organized and accessible documents, keeping the desired compliance goal in mind. We have utilized the latest technologies to maintain the highest quality records through secure, cloud-based document management tools to image and index program records. A user-friendly interface is critical to managing the document standards set for the program. We propose to work with the NCTCOG to design and implement robust document managing tools and techniques based on our proven experience with previous successful programs.

Document Management is a support function of Operations and is the crucial point for several tasks including receipt and processing of incoming mail, identification, and uploading of documents in the systems of record, proper disposal of hard copy documents according to policy, as well as production and processing outgoing applicant mail communication. Storing applicant documents digitally in the cloud allows program staff to quickly locate, view, and supply critical program information directly from their computers or hand-held devices. This approach further assists governing bodies with document accessibility to review progress and inventory files.

Data Security

Tetra Tech fully understands the responsibility of providing secure data storage and transmission and follows state and federal record retention policies. Document naming conventions and system organization for program record storage will be provided within days of program start. Our data capture of online web-applications, inbound mail processing (via website, fax servers, and email), outbound mail processing (via USPS and FedEx), as well as program management and reporting documentation will be securely stored in compliance and accessible real time to the NCTCOG.

Document management ties the entire program to a rigid process and our staff will be thoroughly trained with knowledge of the programs systems, policies and agreed upon approach. We manage data using Microsoft SharePoint and other applications utilizing cloud-based storage. Project data is stored on the cloud with up-to-date electronic security safeguards. These sites are only accessible by Tetra Tech employees and select NCTCOG employees with a need for access to this sensitive information. We manage privileges in real-time therefore once the need for access is no longer required for a certain individual, their access will be removed. Further, all Tetra Tech employees must comply with our internal acceptable use and confidentiality requirements which can be made available to the NCTCOG. Tetra Tech can provide quick and easy applicant facing website allows for real-time progress updates.

HUD Community Development Block Group Disaster Recovery (CDBG-DR) Support Services

The Tetra Tech team has comprehensive experience working with the HUD CDBG-DR and CDBG-MIT programs and has a successful record of helping communities across the region bolster recovery efforts and long-term resilience. Tetra Tech has applied our expertise with these programs to help numerous communities navigate complex program requirements, including the development of Action Plans, Consolidated Plans, grant management, application procedures, and compliance review among other services. The Tetra Tech Project Team has assisted our clients in obtaining and managing over \$3 billion of HUD CDBG-DR and CDBG-MIT grant funds over the past decade.

Tetra Tech has administered the largest CDBG-DR and PA programs in the nation.

- Louisiana after the 2016 Floods
- Commonwealth of Puerto Rico after Hurricane Maria
- New York City after Hurricane Sandy

We will apply the same principles that led to speed of delivery reduce cost from previous programs in these successful recovery programs.

Tetra Tech offers the NCTCOG the advantage of a full-service, integrated team with both the technical expertise and staff capacity to provide expert guidance in navigating all facets of the CDBG-DR and CDBG-MIT program and its requirements.

Planning, Administration, and Implementation of Eligible CDBG Activities

Tetra Tech will leverage our considerable experience working with the CDBG-DR and MIT program to provide the NCTCOG with ongoing technical guidance and compliance monitoring during the planning and implementation of all CDBG-DR related activities. This will include expert guidance in the following areas as they relate to the program:

- **Funding Technical Assistance:** Provide expert guidance on the most appropriate, allowable, and effective uses of the CDBG-DR and CDBG-MIT funds.
- Policies and Procedures: Conduct a comprehensive review of all existing systems, policies, and procedures for CDBG-DR and CDBG-MIT grant management and compliance. As needed, assist staff with policy and/or program changes, development and updating of Policy and Procedures Manual.
- **Project and Program Eligibility Review:** Verify individual project or program eligibility and conformance with all program requirements. Document all required eligibility requirements for each use of funding, including but not limited to national objectives, duplication of benefit calculations, connection to the federally declared disaster, timely expenditure of funds, prevention of waste fraud and abuse, compliance with Davis Bacon and Section 3 requirements, among others.
- **Program and Project Tracking:** Assist with continuous tracking of all projects and programs utilizing CDBG-DR and CDBG-MIT funds. Develop internal project documentation and tracking procedures that successfully interface with HUD's required Disaster Recovery Grant Reporting (DRGR) system.
- Quarterly Reporting: Prepare and submit required quarterly performance reporting to HUD.

Unmet Needs Assessment

Tetra Tech will conduct a comprehensive Unmet Needs Assessment that will allow the NCTCOG to understand the breadth of remaining community needs more fully to maximize the benefits of the limited CDBG-DR and CDBG-MIT resources. Tetra Tech will identify and document damages and impacts from the federally declared disaster and assess existing recovery resources to determine the remaining recovery gap for which CDBG-DR and CDBG-MIT funds can be used. This process will support all subsequent duplication of benefit calculations for individual projects by ensuring that CDBG-DR or CDBG-MIT funding is only used for those projects in which other funding is not available.

Tetra Tech has the resources and expertise to provide the NCTCOG with CDBG administrative consulting services.

Tetra Tech can provide the NCTCOG with CDBG-related on-site project management, project-based or as-needed consulting, planning, subrecipient monitoring, compliance review, and planning tasks.

To complete the Unmet Needs Assessment, our team will undertake a multi-pronged process that incorporates a range of both quantitative and qualitative analyses to identify and document unmet needs in the NCTCOG. At a minimum, Tetra Tech will evaluate three core aspects of recovery: housing, infrastructure, and the economy at the lowest geographic level practicable, with a focus on any unaddressed special needs.

The following sub-tasks will be included in the Unmet Needs Analysis:

- Community and Stakeholder Engagement: Conduct three to five meetings with local stakeholders to discuss the impacts from the storm event, unmet needs, impacted populations, actions taken to date, and clarification of long-term needs and resilience opportunities. These open and engaging forum meetings will also help facilitate connectivity with local organizations who may be involved in recovery efforts and/or have access to unique information to support the identification of unmet needs. Additionally, a survey will be distributed to appropriate community stakeholders to identify additional impacts and unmet recovery needs.
- Evaluation of Existing Plans and Documents: Perform an evaluation of existing plans, documents, and information sources to help further understand the depth and breadth of issues and unmet needs. Tetra Tech will collect and review a variety of information to determine the location and extent of damage associated with the storm event as well as funding assistance received or anticipated from alternate sources. These documents may include but not be limited to FEMA Verified Loss data, FEMA PA subrecipients, FEMA Individual Assistance survivor data, SBA recipients, NFIP data, relevant Hazard Mitigation Plans (HMP), Flood Insurance Studies (FIS), Flood Insurance Rate Maps (FIRM), and any local/municipal post flood reports.
- Meetings with Government Officials: Conduct focused meetings with local officials to complement data gathering
 efforts. These meetings will help provide additional flood damage data and a greater understanding of existing and
 needed resources for recovery and resilience.

Action Plans

Our team of CDBG experts have worked across the country assisting communities with identifying eligible activities for their DR programs that will also meet a HUD National Objective. Once the collection of the data/information is complete, our team will prepare the required Action Plan with associated strategies and programs to guide the appropriate expenditure of CDBG-DR and CDBG-MIT funds. Our team will work collaboratively with local points of contact throughout the development of the draft Action Plan to develop an overarching direction for the plan's development and all specific strategies, actions, and programs for implementation. The Action Plan will identify impacts, community status, needs, potential duplication of benefits, funding gaps, and impacts to vulnerable populations and low to moderate income (LMI) households. When complete, Tetra Tech will provide the draft Action Plan to the NCTCOG for review and comment. Once we receive any comments, our team will prepare a final analysis for submission and approval by HUD.

Environmental Reviews

If requested by the NCTCOG, Tetra Tech can use its vast experience performing Part 58 compliant environmental reviews to support the implementation

Tetra Tech has extensive CDBG-DR and MIT experience.

- Recently developed the draft Nashville-Davidson County, Tennessee CDBG-DR Action Plan for their 2021 CDBG-DR allocation due to severe flooding.
- Assisted Richland County, SC with the preparation of their CDBG-DR Action Plan that was approved by HUD in 5 working days. Tetra Tech recently assisted the County with the development of their \$21M CDBG-MIT action plan.
- Developed the City of Houston infrastructure section of their 2015 CDBG-DR Action Plan for use of \$66M in CDBG-DR funds. Tetra Tech was responsible for plan writing, analyzing flood data and project identification of infrastructure projects that support impacted neighborhoods in low to moderate areas.
- Developed the HUD-approved U.S. Virgin Islands CDBG-MIT Action Plan.
- Developed CDBG-DR Community Reconstruction Plans for 11 New York communities devastated by impacts of Superstorm Sandy, Hurricane Irene, and Tropical Storm Lee under the State of New York's NY Rising Reconstruction Planning program for the use of more than \$33 million of CDBG-DR funding.

of programs and projects proposed for CDBG-DR funding. Tetra Tech's environmental reviews may include environmental assessments, categorical exclusions, and historic preservation reviews. Our team reviews project descriptions to determine the level of environmental review required and prepares and submits all required HUD forms and documentation supporting environmental findings. Supporting documentation includes information gathered during on-site field visits, GIS mapping and analysis, and web-based research. Our team is experienced in procuring and working with archaeologists, biologists, historians, permit engineers, and other consultants whose special services may be needed to secure environmental clearance.

Given the fact that the number and complexity of the reviews will be determined by the number of projects, the number of reviews will be assigned by the client, and Tetra Tech will provide a budget for completion of the reviews.

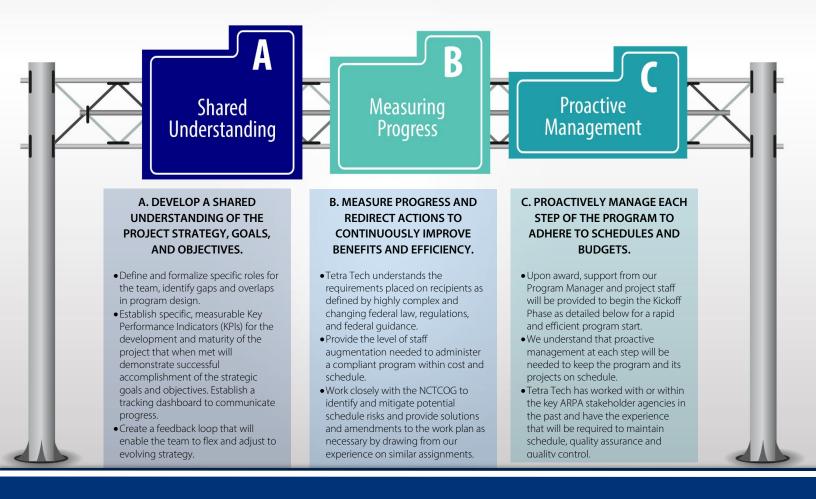
Program Management and Implementation

Following HUD approval of the Action Plan, Tetra Tech will assist the NCTCOG with the implementation of all CDBG programs and projects, including CDBG-DR, CDBG-MIT, and CDBG-CV. This will include a comprehensive set of services to ensure compliance with all programmatic requirements while also maximizing efficiency and the full recovery benefits of the CDBG funding. Specifically, Tetra Tech will provide the following core services during implementation of the programs and projects:

Project Meetings: During the first six months after the Action Plan is approved, our team will meet with representatives of the NCTCOG on a weekly basis to review drafts of the programs and policies, address any issue that have been identified by both the client and HUD, and provide technical assistance related to specific proposed projects.

- **Program and Application Procedures:** Develop program and application procedures, materials, and evaluation criteria for consideration of projects. A draft set will be provided for review and then a final draft provided.
- **Project Prioritization:** Assist with the review of submissions for program eligibility and relation to national objective(s) and assess effectiveness for recovery and resilience. Assist with project prioritization and develop implementation strategies for the identified projects.
- Compliance Monitoring: Provide ongoing compliance monitoring and guidance during project
 implementation including but not limited to procurement procedures found in 24 CFR Part 85.36, federal labor
 standards, fair housing, accessibility requirements, eligible costs, funding drawdown, and construction schedule,
 among others.
- **Housing Program Assistance:** Assist in ensuring that any housing programs or projects meet the eligibility criteria of 24 CFR Part 570 Subpart C Eligible Activities. All eligible activities and projects will be monitored and implemented to comply with all subsequent federal requirements regarding buyouts, acquisitions, relocation, and any necessary rental assistance under fair housing requirements.
- **Economic Development Program Assistance:** Assist on any economic development projects to ensure that they meet the requirements of 24 CFR Part 570.209 including job creation, employment information, review of activities for eligibility, ongoing monitoring, and records maintenance.
- **Construction Oversight:** Assist with contractor oversight and management, which would begin with assistance in identifying contractors that may meet Section 3 and MBE/WBE requirements. Other services would include guidance on contractor pre-bid meetings, bid reviews, pre-construction meetings, labor compliance, and construction progress tracking.
- **Funding Strategies:** Assist with identification of alternate funding sources for priority projects. Review all federal programs (disaster recovery and general assistance) and identify best practices for leveraging funds to promote resilient sustainable communities.
- **DRGR Data Management System:** Assist the NCTCOG with using the DRGR system to set up the Action Plan components, processing expenditures of funds and preparation of the quarterly reports. Our team will meet on a regular basis during the first two quarters of the program implementation to provide hands-on assistance with the system and respond to any issues and/or concerns. Our team will also participate in meetings and teleconferences with US HUD staff.
- **CDBG-DR/MIT Training:** Provide educational and technical assistance training programs on recovery and the CDBG-DR/MIT programs for local officials.
- Labor Standards Compliance: Provide the NCTCOG with Labor Standards Compliance services for new, existing, and past projects including review of contractor documentation and adherence to Davis Bacon requirements.
- **Policy and Procedures Review:** Review policies and procedures and recommend amendments in order to be in compliance with Federal guidelines and to provide consistency across program documents.
- **Procurement and Contract Management:** Provide the NCTCOG with direct consulting services regarding procurement strategies for CDBG-funded projects. Review new and existing contracts for compliance with Federal rules and regulations.
- Reporting support for IDIS, DRGR, CAPERs, and Related Requirements: Provide the NCTCOG with
 consulting services to review data submission requirements for Federal reports, including documentation of
 performance data and tie back to data sources and grant agreements.
- **Section 3 Compliance:** Assist the NCTCOG with documenting efforts to comply with Section 3 provisions.
- **Subrecipient Reporting and Compliance:** Provide consulting services to the client to support subrecipient compliance, including monitoring and compliance issues.

Given the complexity and expansive nature of ARPA programs, it is critical to map out the road ahead with a well-developed program management approach in place from the outset. Our proposed approach to optimize NCTCOG ARPA programs consists of the following steps:

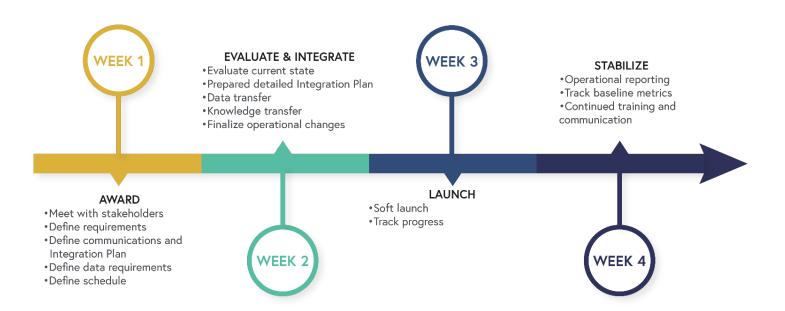


Throughout our work, our program management system enables us to identify and leverage efficiencies learned from one task to all other similar tasks, resulting in continuous improvement through the phases and options.

We will focus on completion of tasks and analysis that are on the **critical path to sound decision-making** regarding the risks and opportunities associated with each phase to result in the most cost-effective use of the Management Cost dollars and ARPA funds that may be applied.

Program Kickoff

Tetra Tech will work with NCTCOG staff to establish an Integration Plan for ARPA grant and project management. An Integration Plan is Tetra Tech's innovative program to quickly embed our project management team into the NCTCOG's staff structure to maximize cooperation and coordination within the first few weeks of support. Our integration with NCTCOG staff includes establishing contact with stakeholders, defining programmatic requirements and milestones, and data transfer between the NCTCOG and our project management team. Below outlines how our team will integrate with the NCTCOG within one month of project start:



Our project management team understands the unique long-term requirements associated with the use of ARPA funds. Once integrated with the NCTCOG's staff, our team will assist in the standup and execution of a Steering Committee/Program Center and the establishment of a grant application process, and project and grant monitoring processes. In addition, Tetra Tech will assist the NCTCOG in managing both grants and projects for each project's lifetime as most recipients received State and Local Fiscal Recovery Fund (SLFRF) funds in the spring and summer of 2021, meaning that they have over three years to obligate and over five years to expend funds.

Tetra Tech is prepared to begin work immediately upon Notice to Proceed from the NCTCOG. Tetra Tech has an established project team that is prepared to engage with the NCTCOG in a combination of settings, either on-site or through remote platforms such as Microsoft Teams, Cisco WebEx, Zoom, etc.

As an initial step upon Notice to Proceed, we will host a kickoff meeting between the Tetra Tech team (composed of senior Tetra Tech staff), project personnel from partnering agencies, and NCTCOG staff. Following the kickoff meeting, a project initiation meeting will be conducted where the Tetra Tech team will review the project's goals, objectives, timeline, and deliverables. Understanding that continuous and coordinated communication with NCTCOG staff is essential for the success of this project, our project management team will establish a communication protocol with the NCTCOG at the project initiation meeting to develop a proactive working relationship and promote frequent information exchange. We understand the importance of a clear and timely feedback loop at every level of stakeholder.

Topics to be discussed in the kickoff meeting and memorialized in a project work plan will include the following:

Program administration requirements and processes

- Review of potential programs and program prioritization
- Organizational reporting among staff from Tetra Tech and the NCTCOG
- Timeline of key events (e.g., assignment of Tetra Tech staff, timing for initial meetings, reporting schedules, etc.)
- Contact information for key Tetra Tech, NCTCOG, and other agency staff
- Reporting and information requirements of Tetra Tech's work efforts and progress to the NCTCOG
- Templates of critical forms to provide consistency across the program
- Process flow and approvals of documents between Tetra Tech and the NCTCOG
- Identifying protocols to track and resolve issues or problems
- Information to be included in Tetra Tech's status reports to the NCTCOG regarding recent project activity
- Maintenance of the status reports in an easy-to-access location for the parties to review
- Other information as specified by the NCTCOG

After the programs have been identified and agreed, the Tetra Tech team will develop a project work plan detailing the following:

- Project method breakdown, sequence, and plan
- Project tasks and deliverables
- Project timeline and deliverable dates
- Responsibilities and organizational and reporting relationships of the Tetra Tech team to the NCTCOG

Tetra Tech will submit the project work plan to the NCTCOG for review and approval. The program kickoff meeting will be the beginning of ARPA program management.

Implementation Plan for Procedures and Compliance

Following the assessment of the NCTCOG's needs, Tetra Tech will work with NCTCOG stakeholders to establish an Implementation Plan along with SOPs for critical program elements, including financial procedures and compliance.

We have combed the ARPA guidance and have developed template SOPs to be rapidly updated and implemented for our clients across a range of program types. We can quickly customize our templates to meet the NCTCOG's program and meet ARPA documentation requirements. These documents will be published, shared, and made available via online collaboration spaces to keep team members aligned throughout project execution.

Financial Procedures

We anticipate that ARPA will evolve, and program requirements will change as supplemental guidance is released. Our team is prepared for



this scenario and is building our systems to quickly adapt to financial and documentation requirements.

SOP Updates

As the program evolves and new program requirements and guidance are released, we will modify programmatic SOPs and other procedures to mitigate risk of noncompliance. We anticipate that subsequent guidance document(s) will be issued to further clarify the program.

Examples of supplemental requirements include GrantSolutions requirements for quarterly reporting, interim reports, and the U.S. Treasury Office of Inspector General (OIG) auditor reviews. Our team will coordinate with the NCTCOG to adequately track and monitor the financial recording, disbursement, and reporting procedures.

Principles of Compliance

Tetra Tech's compliance program is built around four primary principles. Our strict adherence to these principles results in projects progressing smoothly, on schedule, and on budget.

- **Staffing, Training, and Development.** We staff the project with personnel who are well qualified and trained to perform the work at hand, including a strong mix of senior and junior personnel (depending on the task requested).
- **Standard Operating Procedures.** SOPs are the foundation of Tetra Tech's compliance activities. We have developed our processes to allow consistent grant management activities and allow for new staff to quickly be integrated into a program.
- Quality Audits. Quality audits are performed by an objective senior quality control manager who is not directly
 associated with the project. Elements of the audit include confirming that the proper staff are assigned to the project,
 key risk items are identified and mitigated, and SOPs have been implemented for consistency and quality.
- **Senior Management Oversight.** As part of this process, our senior personnel will review and report on project activity to the NCTCOG to confirm that work is progressing according to the agreed standards and timelines.

Program Management

Tetra Tech will work side by side with the NCTCOG program management team throughout the project management lifecycle to direct the project team and deliver the intended level of service. Tetra Tech will not only make available the firm's resources, but also its project management processes and tools to monitor and control the project.

As Tetra Tech executes the Project Management Plan, Tetra Tech will set up tracking systems, conduct status meetings, and update the project schedules as deliverables are submitted or delays from the process are presented. At each step, Tetra Tech will ensure that the NCTCOG is informed and provided the information and options available to proceed in the most advantageous and expeditious means available.

Performance and Data-Driven Decision-Making

The power of using KPIs is that they provide a simple means of quantifying goals and objectives in a few simple terms that can then be used to make decisions. However, it is critical that the reporting of the KPIs is consistent and accurate. The KPIs must be reliable and consistently updated in order to make effective decisions. We collectively work with our clients to identify the most appropriate KPIs for each project.

Once the KPIs are established, then the sources of data must be identified. Ideally and as a goal, the datasets should be integrated such that the collection, validation, cleansing, and analytics can become as automated as possible. In the beginning, the process can be performed manually with layers of quality assurance/quality control (QA/QC) to ensure that the data analysis can be relied upon for decision-making.

Quality Management

Tetra Tech has an outstanding record of responsive, timely, high-quality deliverables exceeding our clients' expectations. Tetra Tech will customize and implement a robust QA/QC program for the NCTCOG across all of the services areas to identify any issues with compliance in real time and work collaboratively with our NCTCOG partners to resolve them.

All members of our staff are responsible for quality and are expected to follow available guidance (e.g., regulatory requirements, review guidance) to ensure the quality of their work products.

Deliverable-based QA/QC. Each deliverable produced by Tetra Tech undergoes a rigorous technical review and approval by qualified professional(s) other than the originator(s) to ensure concepts, assumptions, features, methods, analyses, and details are appropriate, complete, fully coordinated, and correct; results and recommendations are reasonable, within policy guidelines, and supported in the deliverable; and deliverables are in compliance with plans, policy, guidance, and standards with deviations appropriately identified and properly approved.

Holistic QA/QC. Tetra Tech's overarching QA/QC process will complement and enhance our deliverables-based procedures. To accomplish this, Tetra Tech's Quality Control Monitor will provide direction and guidance to the Program Manager, coordinators, ARPA technical assistance liaisons, technical reviewers, and the other personnel who are completing the work assignments.

Establishing Expectations. Tetra Tech will work with the NCTCOG in the program design phase to establish mutually acceptable quality requirements. Tetra Tech will also verify the NCTCOG's needs, expectations, and quality requirements as work progresses. When appropriate, the Quality Control Monitor may develop program-specific quality plans to help meet the NCTCOG's requirements for a particular service area. Additional QA/QC activities may include conducting quality audits and assessments of our activities with NCTCOG staff and identifying quality improvement opportunities.

These strategies are performed throughout the duration of the project and ensure the appropriate quality standards and operational definitions are used to facilitate the continual improvement of quality processes. Our quality system applies the fundamental principles of the Plan-Do-Check-Act model of continuous improvement.



Although projects rarely go exactly as planned, by identifying the important activities and major milestones, we are better prepared so that projects will be successfully executed even when schedule changes occur.

Acceptance of Deliverables

Tetra Tech will work with the NCTCOG to confirm that criteria for project deliverables established in advance as well as the standard of performance identified in the Kickoff Phase has been met and full acceptance of the project deliverables is possible. Tetra Tech understands that it is imperative that deliverables be accepted and compliant to support ARPA compliance.

Monitoring/Controlling

Tetra Tech dashboards allow for access and transparency in monitoring and controlling the project work, including constant validation of the scope, adherence to the schedule and associated costs, progress and effectiveness of quality control measures, and overall project team performance and activities. We continually monitor our operation to mitigate risks to the project.

Progress Report Dashboard. The Tetra Tech team will develop executive-level project status reports according to the requirements collected from the NCTCOG, providing a dashboard summary of work performed and real-time performance metrics. Use of these executive-level status reports is important to keep all parties informed of ongoing work efforts in the field and to address any issues that may arise so they can be resolved quickly rather than becoming a systemic problem. We are strong believers in regular and frequent communication to achieve superior project results and to keep disaster management projects on track.

Communication is especially important if staff turnover occurs by our federal partners assigned to the NCTCOG over the course of the program life cycle. The Tetra Tech team will document the work that is completed weekly and provide minutes on all funding agency and NCTCOG meetings and other work activities. This documentation is vitally important in establishing a clear record of approvals and signoffs as staff changes occur over the duration of the project. The Tetra Tech team will submit the weekly project status reports of these data, as well as a snapshot of the executive-level project status report to the NCTCOG.

Tetra Tech diligently measures project progression and performance to ensure scope tasks are conducted in accordance with the Project Management Plan. The Tetra Tech Project Manager will continue to monitor KPIs as described to determine if the project is on track. Tetra Tech will continually monitor project objectives to confirm that the quality of deliverables, effort, and cost are in alignment and to verify that project performance is tracking appropriately. If there are any issues identified, the Tetra Tech Program Manager will adjust the schedule and resources to ensure the project remains on track, seeking approval from the NCTCOG where necessary.

Financial and Schedule Management

During the program initiation phase, the master schedule and budget baseline define projects to a common level through the definition of the work breakdown structure (WBS). As projects advance through the delivery lifecycle, the master schedule will be updated to reflect the additional scope and schedule details when unforeseen obstacles arise.

The Tetra Tech team will control the master schedule with input from all stakeholders and will analyze impacts from individual projects or activities programmatically. We have extensive experience in all aspects of project scheduling for many different project delivery methodologies. Our project controls professionals bring decades of scheduling experience to this contract and are fluent in a full range of software applications. The master schedule will:

- Provide a logical, structured, and feasible timeline for completing the program within the specified time highlighting compliance requirement.
- Identify the critical path from kickoff through final completion and closeout emphasizing dates for key deliverables submittal
- Assist the program team in monitoring and measuring the program's progress, focusing on early identification, and mitigation of variances.

The program master schedule progress and budget performance will be updated on a regular basis throughout the life of the project. Monthly, the Tetra Tech Project Manager will perform the following reviews:

- Program Schedule Review: As part of the monitoring and control processes, the Tetra Tech Program Manager will review all projects included in the master schedule monthly and provide any updates or adjustments to the NCTCOG program management team.
- Budget Performance Review: The program budget will be monitored and provided to the NCTCOG Project Manager, including approved task order amounts, actual costs, forecasted costs, and average spend by task. Any trending above or below benchmarks will be brought to the attention of the NCTCOG Program Manager and remedy or redirection will be discussed.
- **Disbursement Tracking:** Tetra Tech will track, review, verify, and approve funds distributed as requested by the NCTCOG. The Tetra Tech team will be responsible for the steps of verification of costs and reconciliation.
- Monitor and Report Overall Program Costs: A key role of the Tetra Tech
 Program Manager is financial management. Accurate and timely reporting on
 actual costs, forecasting of accrued costs, and comparison to percentage of
 work completed and schedule are integral to effective program management.

Public Information

With the high-profile and high-priority nature of ARPA programs, public information campaigns are a critical element of the NCTCOG's ARPA approach. Tetra Tech will provide template press releases for the NCTCOG to share transparent, informative, and helpful details with the community. This information will include program overviews, important dates, and contact information for additional information.

Program Launch Press Coverage

Program launch is a critical time to broadcast progress. In mobilizing similar outreach strategies, Tetra Tech has found press releases, news coverage, and communications by elected officials to be invaluable in educating a broad audience. At this early stage, promoting the program through traditional news media kick-starts awareness about ARPA programs and priorities.

- **Press Releases.** Tetra Tech crafts press releases to be published across news outlets, including general information about the program such as launch date and highlights of deliverables or impacts.
- News Coverage. Local news outlets have been critical partners to provide updates to the public at program outset. Whether through televised coverage via digital media, local news outlets share program details with their existing, vast audiences and can help inform communities about upcoming programs.
- **Elected Officials.** We target press conferences and announcements from the highest levels of NCTCOG leadership.



Spotlight on HOME ARP

Tetra Tech has partnered with Lexington County, SC to assist with the implementation of the County's HOME and HOME-ARP programs. Tetra Tech has crafted allocation plans and policy and procedures and worked with the County to partner with local Continuums of Care and identified qualified projects. Tetra Tech is currently managing the environmental review, land acquisition, and development of Noncongregate Transitional Housing and Affordable Housing for the County's HOME and HOME-ARP Programs. Tetra Tech's team of knowledgeable consultants work with the County and local stakeholders to ensure all projects are aligned with federal requirements and accurate reporting is recorded on HUD's IDIS.

Current Funding Allocated to Project: \$2,619,353.00

Grant Writing Services

Our team will work with NCTCOG to provide expertise to deliver grant writing services as outlined below.

Grant Development

Preplanning

To support NCTCOG with preplanning, our Program Leader and Project Manager will participate in meetings with NCTCOG staff and departments to review and interpret grant application guidelines and prepare a timeline for the preparation and submission of each application requested. We will set up a schedule to ensure complete and timely submissions of the draft, final draft, and complete grant package prior to grant submission deadline. We typically use Microsoft Teams or a similar platform and set up a dashboard to manage tasks and subtasks and assign task/subtask leads with associated deadlines for visibility and accountability to ensure we remain on schedule.

Grant Writing

Our grant writers will work in partnership with NCTCOG and community and other stakeholder partners to ensure the development and submission of a complete grant application and supporting documents as outlined in the RFP under B – Grant Writing Services. We will work together with the Principal Investigator and other identified partners to review, make recommendations, and secure required documentation, including letters of support and required forms throughout the grant development process. We leverage checklists and our Microsoft Teams platform to share files, update draft documents, and ensure we remain on schedule. Further, our grant writers will independently evaluate the project against the available grant funding evaluation criteria and continually assess and make recommendations to support a competitive submittal. This will be populated and provided to the NCTCOG lead as part of the draft grant application deliverable. The final grant application package, complete with all documentation, will be packaged for the NCTCOG lead to submit. If needed our grant leads may assist with any funding program portals that require grant submissions.

Grant Writing Activities/Deliverables

Deliverable	Description
Application Timeline/Workplan	A detailed workplan with associated application requirements and deadlines.
List Of Partners and Subapplicant(s)	A list of partners, subapplicants, and additional stakeholder to involve to ensure a robust submittal will be assembled and will be utilized to support required outreach for their grant application components.
Meeting Summaries	Meeting summaries with discussion topics and action items will be developed and distributed after each meeting where Tetra Tech is in attendance.

Draft Grant Application	A draft grant application, inclusive of all required components, will be shared with the Principal Investigator and additional partners for review and comment. If grant evaluation criteria are known, a scoring or qualitative evaluation will be completed to provide to the grantor to streamline their review and serve as a guide to evaluating the application.
Final Grant Application	A final grant application will be developed addressing Principal Investigator and partner comments and packaged in the format required by the funding entity.
Charts/Maps/Visuals/Supporting Documentation	Charts, maps, visuals, and supporting documentation we can generate for the environmental and historic preservation (EHP) evaluation or other sections can be developed as part of the draft application submittal and final package to further support the applicant/subapplicant.

General Grant Application Process and NCTCOG Involvement

Depending on the requirements of the individual funding agencies/programs and the complexity of the project, NCTCOG staff may be required to (with the assistance of Tetra Tech):

- Provide supporting documentation on the scope of the project necessary to support grant program requirements.
 This documentation may include detailed reports or studies, financial documents, plans, photographs, maps, or other required supporting documents.
- Partake in regularly scheduled meetings.
- Provide grant program relevant details about municipal infrastructure, equipment, and operations.
- Coordinate with other local, state, or federal organizations.
- Communicate with the public as required by the grant programs being pursued.
- Provide shared access to available resources like engineers, planners, or technical experts. If these experts are needed,
 Tetra Tech can help identify our internal experts to provide this additional support.
- Provide signature authority for applications.

General State or Federal Funding Application Steps

- Initial project scoping call to identify the project and develop a list of deliverables required to complete a competitive application.
- Deadlines are identified, and a plan is made to ensure that the application and all deliverables are submitted on time.
- If the project requires a BCA or a detailed Environmental Review, those activities begin immediately.
- Communication line with the funding agency is established to help identify any areas of concern and answer any questions.
- Once the project has been identified, a scope of work, detailed budget, and work schedule are created.
 - o In many cases, technical experts or project engineers are required to assist in this effort.
 - o The schedule should map to each task and/or deliverable identified in the scope of work.
- While the major application elements are being developed, any other required documentation is also prepared.
- Throughout the development of the application, regular meetings with Tetra Tech and NCTCOG leadership will take place to ensure that all deliverables are met on time.
- As the application is developed, Tetra Tech will also prepare corresponding narrative reports to help explain to program reviewers the methodology used to prepare the application and describe the supporting documentation provided.
- Once the application and all requirements are complete, a quality assurance check is completed to ensure that all program requirements meet expectations.
- Finally, required signature forms are signed and dated, and the application along with all required supporting documentation is submitted to the funding agency.

5. Quality Assurance/Quality Control

Our team is committed to shepherding the NCTCOG's projects at each phase throughout the grant life cycle to mitigate the risk of funds being unspent. To achieve these goals, Tetra Tech's approach to managing, controlling, and supervising our team will revolve around (1) providing Tetra Tech's Project Manager with appropriate responsibilities and authority; (2) tracking and reporting progress and costs; (3) implementing a tested and reliable quality assurance methodology; and (4) training project staff on tools and techniques that help improve the operational efficiency of the project team and the drive project toward completion.

- Seasoned Management Team: Our management team is empowered to access and direct the necessary company resources.
- Tracking and Reporting Data Utilizing Tetra Tech's RecoveryTrac[™] Data Management System: Tetra Tech will
 provide the NCTCOG with standard and customized reports in a web environment using its cloud-based
 RecoveryTrac[™] integrated data management system.
- 3. **Time-Tested SOPs:** Our team's policies and procedures for this type of work have been tested thousands of times as we have helped grantees and subgrantees execute FEMA PA projects.
- 4. **Trained Staff:** The staff assigned to this project will be trained on the systems, technology, processes, and guidance documents.

Schedule Management

During the program initiation phase, the master schedule and budget baseline define projects to a common level through the definition of the project work plan. As projects advance through the delivery lifecycle, the master schedule will be updated to reflect the additional scope and schedule details or adjusted when unforeseen obstacles arise.

The Tetra Tech team will control the master schedule with input from all stakeholders and will analyze impacts from individual projects or activities programmatically. We have extensive experience in all aspects of project scheduling for many different project delivery methodologies. Our project controls professionals bring decades of scheduling experience and are fluent in a full range of software applications. The master schedule will:

- Provide a logical, structured, and feasible timeline for completing the program within the specified time highlighting compliance requirement.
- Identify the critical path from kickoff through final completion and closeout emphasizing dates for key deliverables submittal.
- Assist the project team in monitoring and measuring the project's progress, focusing on early identification and mitigation of variances.
- The program master schedule progress and budget performance will be updated on a regular basis throughout the life of the project. Monthly, the Tetra Tech Project Manager will perform the following reviews:
- **Program Schedule Review:** As part of the monitoring and control processes, the Tetra Tech Project Manager will review all projects included in the master schedule on a monthly basis and provide any updates or adjustments to the NCTCOG Project Management Team.
- Budget Performance Review: The program budget will be monitored and provided to the NCTCOG Project
 Manager, including approved Task Order amounts, actual costs, forecasted costs, and average spend by task. Any
 trending above or below benchmarks will be brought to the attention of the NCTCOG Program Manager and remedy
 or redirection will be discussed.
- **Disbursement Tracking:** Tetra Tech will track, review, verify, and approve funds distributed as requested by the NCTCOG. The Tetra Tech team will be responsible for the steps of verification of costs and reconciliation.
- Monitor and Report Overall Program Costs: A key role of the Tetra Tech Project Manager is that of financial management. Accurate and timely reporting on actual costs, forecasting of accrued costs, and comparison to percentage of work completed and schedule are integral to effective program management.

Monitor/Report on Subcontractor Costs: Tetra Tech will monitor and report on subcontractor costs to ensure they
are in alignment with the overall approved cost approved by the NCTCOG Project Manager and that they remain the
best value to the project management team.

Deadline Management

The Tetra Tech team will maintain awareness of all deadlines and, in advance of any upcoming deadlines, assist the NCTCOG in requesting extensions as necessary. This includes the following deadlines:

- 6 months for Emergency Work (Category A and B)
- Additional 6 months for Emergency Work (Category A and B)
- 12 months for Section 428 opt in

- Additional 18 months for Permanent Work (Category C-G) after 36 months
- Extensions to RFIs
- Extensions to Appeal Responses

In addition, our team will work with the NCTCOG to submit accurate quarterly reports for each project throughout the life of the grant. In our $RecoveryTrac^{m}$ system, we will implement push notifications to alert two (2) weeks in advance of quarterly reporting deadlines.

Tetra Tech has worked with countless communities following disasters like Hurricane Charley, Jeanne, Francis, Ivan, Ike, Gustav, Harvey, Irma, Maria, and most recently lan to meet every extension request whether it be debris, emergency protective measures, or permanent repairs for both State and FEMA deadlines.

Internal Controls

The Tetra Tech team helps clients identify, understand, and manage risks. Our team will apply our extensive experience in internal controls, risk management, regulatory compliance, and technology to provide a full range of control and risk advisory services. Our team will assist in evaluating processes and controls, perform testing, and recommend control enhancements to mitigate overall program risk.

Fraud, Waste, and Abuse

Our team's approach is focused on fraud prevention and deterrence, continuous improvement of current anti-fraud controls and fraud detection and monitoring with data analytics. We employ a flexible, case-sensitive approach to each fraud investigation. We will implement procedures including review, approval, and the related controls to detect potential duplicate payment requests during claims processing. We will use various data analytics tools to identify anomalies in claims, including data extraction techniques to prevent and detect duplicate payments.

When we identify an expense or claim that requires further analysis, we will request additional information from the vendor to supplement any claims that we deem deficient. We will design specific templates, including types of costs and the support that will be needed to adequately support the claims. The goal of requesting additional information will be to reimburse the costs, not deny payments. Therefore, we will work with the NCTCOG to address all avenues before we deny any costs submitted for reimbursement.

Spotlight on: FEMA PA Small Project Threshold Revisions

On August 3, 2022, FEMA's small project threshold significantly increased from \$139,800 to \$1 million. On January 6, 2023, FEMA announced the Public Assistance Simplified Procedures Policy # FP-104-23-001. Specifically, the policy reduces the documentation burden for eligible facilities, work, and costs for small projects.

According to the new policy, FEMA will now accept Applicants' certified estimates and summary information for costs under simplified procedures. FEMA will also accept the Applicants' certifications for damage and work rather than requiring detailed documentation. This policy does not necessarily mean that projects will be paid and closed out quicker in all States, Tribes and Territories, unless changes to the Administrative Plan occur (FEMA requires annual updates to the Admin Plans) and will likely result in increased administrative costs for recipients and subrecipients depending on who pays the non-federal cost share.

It is our understanding that the goals of this policy are to reduce administrative burdens and costs, and to accelerate the reimbursement process and the closeout procedures, however, there are increased responsibilities and administrative burdens regarding project documentation reviews, and project closeout requirements upon the Recipients. In addition, if a project cost estimate is underwritten, many small subrecipients may not have the funds to complete the recovery project and run the risk of paying for a higher cost share. All recipients will now assume greater risk when advancing FEMA project funds. De-obligation risk is also higher now for all subrecipients. **Tetra Tech will focus on formulating accurate cost estimates quickly while reducing the risk for potential cost overruns on all small projects.**

6. Assumptions Regarding Requirements

Tetra Tech will provide the NCTCOG with a detail of the specific scope, timeline, and operating assumptions on a task order basis.

7. Exceptions to Requirements

Tetra Tech confirms that it does not take any exceptions to the NCTCOG's terms and conditions.

8. Special Features and Services

Tetra Tech has access to the full range of personnel with key expertise in relevant topic areas across the disaster recovery continuum. Our team offers services in all areas of security, disaster preparedness, and emergency response and recovery. The following pages review our additional service offerings, including:

Emergency Management Consulting

Debris Program Management Consulting Services

Grant Administration and Disaster Recovery Management Services

Long-term Recovery Planning and Economic Development

Vulnerability/Hazard Identification/Risk Assessment Services

Environmental Services

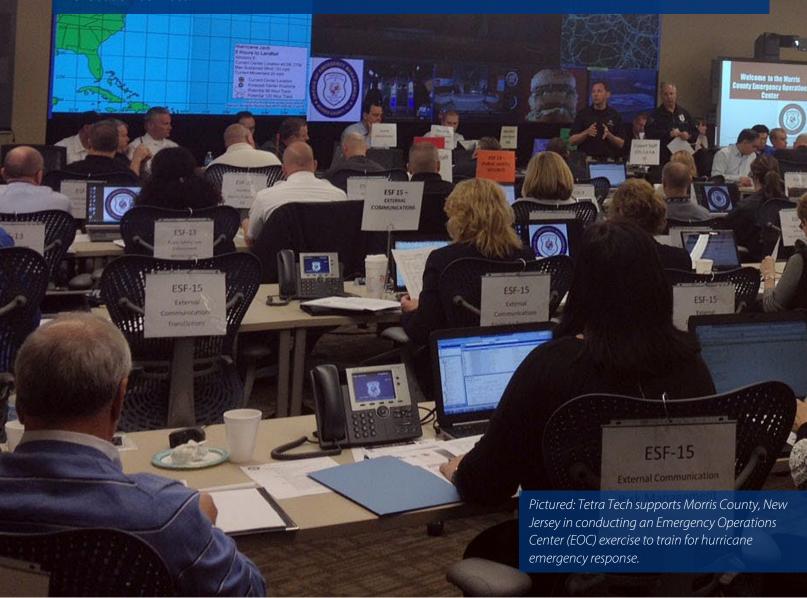
Emergency Management Consulting

Unlike many emergency management firms that focus on planning, Tetra Tech is a full-service emergency management firm that works in all phases of emergency management.

When a major incident occurs, the impact sends shockwaves around the globe. All eyes are on the incident and the level of scrutiny is overwhelming. As an experienced leader in the emergency management industry, Tetra Tech knows what it takes to respond effectively and to initiate recovery activities almost simultaneously, while maintaining transparency for the public and elected officials.

We are better planners because of our active involvement in response and recovery efforts. We develop realistic plans that can be effectively implemented during a response.

Tetra Tech works with organizations across the country in jurisdictions that face a variety of threats and hazards, from dense urban areas susceptible to security threats to coastal communities prone to hurricanes. For that reason, Tetra Tech maintains a multidisciplinary staff with backgrounds and experience in emergency management, hazardous materials (HAZMAT) response and recovery, public health and healthcare planning, transportation and evacuation, all-hazards mitigation, disaster resiliency and readiness planning, and response and recovery, among other fields. The breadth and depth of our expertise distinguishes Tetra Tech from other firms and allows us to provide the full range of planning and program execution services.



Emergency Management Consulting Services

Service Offering	Description
Hazard Mitigation Planning	Tetra Tech provides hazard mitigation plan development for clients to establish mitigation goals and objectives, and to identify projects that enable the jurisdiction to prepare for and reduce the impacts of a disaster in a Federal Emergency Management Agency (FEMA)-compliant format.
Emergency Operations Planning	Tetra Tech provides our clients with emergency operations planning consisting of a basic plan, emergency support functions (ESFs) annexes, and incident-specific appendices that address direction and control, communications, public warning, emergency public information, evacuation, mass care, health and medical, resource management, etc.
Continuity of Operations (COOP) Planning	Tetra Tech develops COOP plans for our clients, so they are prepared to provide mission essential functions across a wide range of emergencies. A COOP plan is designed to plan for denial of access to a facility, denial of service due to equipment or systems failure, and denial of service due to a reduced workforce.
Continuity of Government (COG) Planning	Tetra Tech provides COG planning to our client to ensure continued leadership, authorities, direction and control, and preservation of records to maintain a viable system of government.
Emergency Support Function (ESF) Planning	Tetra Tech provides ESF planning to assign roles and responsibilities of supporting agencies as either a stand-alone planning effort or part of an EOP. ESFs provide a structure for managing response efforts that involve multiple agencies at the local, state, and/or regional level.
Departmental Emergency Response Planning	Tetra Tech assists department-level clients within a larger organization with primary or secondary support roles under the ESFs to develop specific emergency plans. Departmental emergency response planning is the effort used to develop standard operating guides and/or standard operating procedures for departments with primary or support responsibilities.
	Tetra Tech provides evacuation planning support to our clients, including the development of:
Evacuation Planning	Clear agency roles/responsibilities for small- and large-scale and point source evacuation scenarios
	Effective situational awareness communication protocols to determine evacuation areas and evacuation participation rates
	 Development of consistent and effective warning order evacuation/shelter-in-place terminology designed to motivate citizens and tourists to evacuate with a sense of urgency and along advocated routes or to shelter in place if they are outside the impact zone
	 Tailored time-phased protective action measures (such as staging and mutual aid activation) to ensure that populations at risk can be effectively and efficiently moved out of harm's way and sheltered as needed
	 Identification of vulnerable special needs populations, transportation- dependent communities, large animal and pet considerations, additional behavioral assumptions, critical traffic control points, and available intelligent traffic monitoring systems
	Easily defined evacuation zones coupled with a public awareness strategy

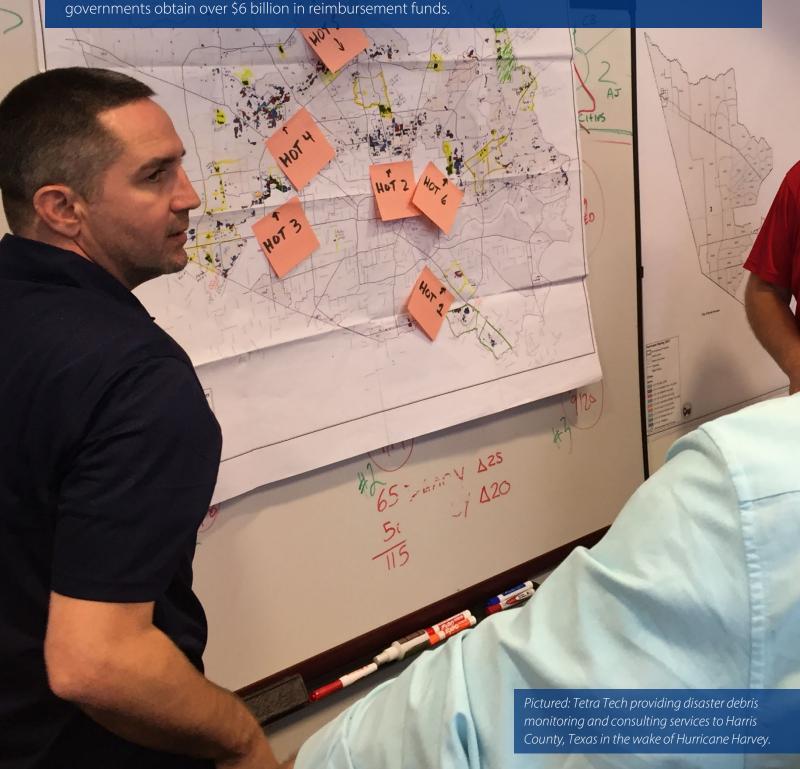
	 Zonal evacuation clearance times and/or shelter-in-place guidance designed for a range of possible point source, no-notice, and terrorist phased approach
Regional Catastrophic Planning	Tetra Tech provides regional catastrophic planning services designed to promote regional coordination and communications between multiple jurisdictions to help them prepare and respond to an incident effectively as a region, and to initiate recovery activities almost simultaneously, while maintaining transparency for the public and elected officials.
Mass Care/Surge Capacity Planning	Using a worst-case scenario, Tetra Tech provides mass care/surge capacity planning services to identify a client's strategy and current capabilities for mass evacuation and sheltering. The evacuation strategy is designed to take a phased approach, emphasizing special needs groups in hospitals and nursing homes and residents without access to transportation.
Metropolitan Medical Response System (MMRS) Planning	Tetra Tech provides MMRS planning for clients designed to support the local jurisdiction in enhancing and maintaining its all-hazards response capabilities to mass casualty incidents. MMRS planning is intended for use during the early hours critical to life-saving and population protection during terrorist acts using weapons of mass destruction; chemical, biological, nuclear, radiological, and/or explosive (CBRNE) weapons; large-scale HAZMAT incidents; epidemic disease outbreaks; and/or natural disasters.
Volunteer Management Planning	Working closely with a lead volunteer agency for this effort, Tetra Tech develops volunteer management plans for client to be used to document the volunteer programs, training strategies, and available resources already defined under the Community Emergency Response Team (CERT) through its Citizen Corps.
Family Assistance Center (FAC) and Reunification Planning	Tetra Tech provides FAC and reunification planning to support displaced families in locating and reuniting with their loved ones following a crisis. It also serves to prevent confusion and disorder by ensuring the delivery of a single, concise message to the community and the media.
Emergency Management Accreditation Program (EMAP) Accreditation Support	Tetra Tech provides EMAP accreditation support to clients interested in becoming accredited in the program. This involves assessing a jurisdiction's emergency management program against the 64 EMAP standards to identify potential gaps and deficiencies. This allows the jurisdiction to remedy gaps in preparation for an assessment by an EMAP accreditation team.
Strategic Planning	Tetra Tech provides emergency management organizations with strategic planning to set the course and direction of a jurisdiction or agency. It defines the vision, mission, and long-term goals, objectives, and milestones of the jurisdiction.
Disaster Debris Management Planning	Tetra Tech provides comprehensive disaster debris management planning services to organizations inclusive of developing the jurisdictional structure, guidance, and standardized procedures for the clearance, removal, and disposal of debris caused by a major debris-generating event in the most cost-effective and efficient manner.
Information Technology Disaster Recovery (ITDR) Planning	Tetra Tech provides ITDR planning involving a systematic inventory and prioritization of communications systems, including telephones, voicemail, facsimile, data lines, network access, Internet access, wireless communications and PDAs, and application software and hardware.
Crisis Communication/Public Information Planning	Tetra Tech provides crisis communication/public information planning to media relations groups or organizations, through the establishment of the

	joint information center, to develop templates for public information and to
	create a public information guide.
HAZMAT Commodity Flow Studies and Local Emergency Planning Committee (LEPC)	Tetra Tech provides HAZMAT commodity flow studies and develops LEPCs, which involves a risk assessment of the types and amounts of hazardous materials being transported in and through a jurisdiction via highway and rail corridors and fixed facilities located within a jurisdiction.
Crisis Planning for Higher Education	Tetra Tech provides crisis planning for colleges and universities to assess risk, set priorities, and develop an actionable plan that can be readily executed in the event of an emergency in order to protect a school's students, faculty, facilities, and research, which form the backbone of the institution.
Training, Testing, and Exercise Planning	Tetra Tech assists clients with training, testing, and exercise planning for emergency management scenarios and topics. This involves a systematic approach to train, test, and exercise a jurisdiction's emergency management program and response capabilities in a non-threatening environment, and to identify the work that needs to be done to comply with FEMA, Homeland Security Exercise and Evaluation Program (HSEEP), and other regulatory guidelines.
Integrated Planning and Management System	Tetra Tech provides Integrated Planning and Management System (IPMS) for clients to include developing baseline, scheduling, risk management, cost estimating, funds and financial management, performance analysis and monthly reports, and what-if analyses.
Internet/Computer-Based Training (IBT/CBT)	Tetra Tech prepares stand-alone computer-based training for individual client's needs and Internet-based training to meet the needs of on-demand and geographically diverse training requirements.
Asset Management	Tetra Tech's asset management solutions help clients integrate planning, scheduling, and tracking of maintenance requirements, enterprise resource planning, supply chain management, inventory management, procurement, Radio Frequency Identification (RFID)/Unique Identification (UID) execution, reference management, and training management. Our customized solutions integrate external financial and resource management systems.
Operations Center Services	Tetra Tech provides emergency operations center support services for local, regional, and state organizations. These services include 24/7/365 support, C4I and situational awareness, custom emergency management system, and classified environments.
Shared/Integrated Digital Environments (SDEs/IDEs)	Tetra Tech develops a range of customizable SDEs/IDEs to provide portals to our project/program teams that are web-accessible and managed to provide authorized users access to all relevant materials/data in a user-friendly environment. In addition to being a knowledge base of programmatic information, these tools often provide configuration data, task order management, action tracking, user forums, deliverable tracking, financial management, asset information, etc., in support of the program requirements.
Occupational Health and Safety (OHS) Planning	Tetra Tech's OHS planning services include conducting worker risk assessments, identifying appropriate methods for worker protection, developing written health and safety programs, conducting training needs assessments, and developing instructor-led and computer-based training programs.
Ebola and Other Special Emerging Pathogens (SEPATH) Planning	Tetra Tech's Ebola and SEPATH planning services include community partners across the healthcare continuum to work together to develop strategies for managing and caring for individuals who are known or suspected to be infected with a SEPATH. This includes planning for isolation and quarantine,

	transportation of persons under investigation (PUIs), worker protection, infectious waste management, and decedent handling.
Mass Fatality Planning	Our team's mass fatality planning services involve working with coroners, emergency medical services, funeral directors, public health departments and other partners to assess a jurisdiction's ability to handle mass casualty incidents and developing strategies for strengthening this capability.
Responder and Disaster Worker Health and Safety	To help ensure the safety of first responders and disaster workers, Tetra Tech provides worker risk assessments, activity hazard analysis, and just-in-time health and safety training, including Hazardous Waste Operations and Emergency Response (HAZWOPER) training. Tetra Tech provides field operations safety monitoring, air monitoring and sampling support, and fit testing. We can also serve as site safety officers and provide safety staff support services.
Community Rating System (CRS) Assessment	Tetra Tech assists clients with conducting baseline assessments for communities interested in obtaining or improving their CRS rating. A programmatic baseline assessment looks at a community's floodplain management program prior to a Community Assistance Visit (CAV) to identify issues that may render a community out of compliance under the National Flood Insurance Program (NFIP).
CRS Application	Tetra Tech assists clients with compiling the appropriate documentation for submitting an application to the CRS program. This may include interface with FEMA's Insurance Services Office (ISO) and meeting with NFIP or FEMA during CAVs.
Repetitive Loss Area Analysis	Tetra Tech assists clients with developing a Repetitive Loss Area Analysis (RLAA) as a systematic approach to analyzing the causes of repetitive flooding, structures impacted, and possible mitigation solutions by using the FEMA-identified RL properties as geographic locator for the issue.

Debris Program Management Consulting Services

Tetra Tech has helped over 300 clients recover from the damaging effects of hurricanes, tropical storms, floods, and ice storms across the country. Tetra Tech has successfully managed all phases of debris removal and associated reimbursement efforts, including the removal of and reimbursement for over 137 million cubic yards of debris, as well as the demolition of uninhabitable residential structures. We have helped local governments obtain over \$6 billion in reimbursement funds.



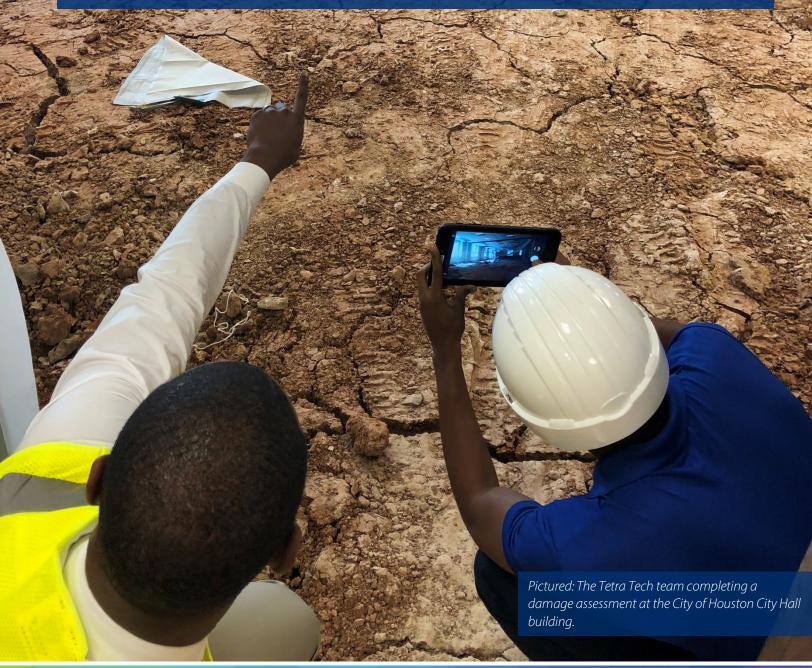
Debris Program Management Consulting Services

	Sylam Management Consulting Services
Service Offering	Description
Comprehensive Program Management	Tetra Tech's comprehensive program management involves providing the resources, personnel, and experience to manage all aspects of a disaster recovery project, including post-event reconstruction and demolition field services.
Disaster Debris Removal Procurement and Negotiations	Our services include assisting clients with disaster debris removal procurement and negotiations involves helping communities to develop the procurement process and contract documents to retain debris and construction contractors, and to negotiate terms and conditions to put enforceable agreements in place.
Collection Monitoring	Tetra Tech provides clients with staff to conduct collection monitoring involving the oversight of the debris collection process, including truck certification, route development, ticket preparation and documentation for FEMA-reimbursable loads. This service has the option of utilizing our Automated Debris Management System (ADMS) RecoveryTrac™.
Disposal Monitoring	Tetra Tech provides disposal monitoring involving the oversight of debris disposal operations, including providing the volumetric measurement of incoming loads, authorizing tickets, and completing the documentation required for FEMA-reimbursable loads. This service has the option of utilizing our ADMS RecoveryTrac™.
Hazardous Waste Collection, Disposal, and Monitoring	Tetra Tech provides hazardous waste collection, disposal, and monitoring, which involves designing hazardous waste removal programs that efficiently address specific emergencies, including animal carcass removal, asbestosladen building material removal, Freon unit removal, and paint and chemical segregation and removal. This service has the option of utilizing our ADMS RecoveryTrac™.
Leaner/Hanger/Stump Removal Monitoring	Tetra Tech provides leaner/hanger/stump removal monitoring involving surveying, documenting, and monitoring the removal of leaning trees, hanging limbs, and stumps. This service has the option of utilizing our ADMS RecoveryTrac™.
Debris Management Site (DMS) Environmental Support	After disasters, Tetra Tech's team provides DMS environmental support to clients for obtaining documentation and assisting in the performance of all required testing by federal, state, and local agencies to support the establishment of DMS locations.
Beach Remediation/Restoration	Tetra Tech provides beach remediation/restoration monitoring services for work associated with sand screening, sand recovery, beach reconstruction, and dredging operations to restore natural beaches.
Private Property Debris Removal (PPDR) Program Administration	Tetra Tech's PPDR program administration services for clients involves reviewing ordinances and laws to ensure that the proper steps are taken and documented in removing debris from private property. This includes eligibility reviews, property surveys, monitoring, and providing public information.
Waterway Debris Removal Monitoring	Tetra Tech provides waterway debris removal monitoring and documentation for debris removed from navigable and other inland waterways.
Field Data Collection/ Management/Billing/Invoicing	Tetra Tech can augment our client staff tasked with data collection and management as well as billing and invoicing. This service includes developing and maintaining databases to document all field operations to ensure proper

	contractor payment, maximum reimbursement, and proper purchase order management.
Data Management	Tetra Tech's web-enabled data management systems provide cradle-to-grave life cycle data management for a program or specific disaster. Designed to meet all industry standards for relational databases, our systems enable users to easily find the right data in real time for our clients.
Customer Information/Citizen Hotline/Community Relations	Tetra Tech provides customer information/citizen hotline/community relations for clients after a disaster. This includes advising the public about important information regarding procedures associated with debris collection and removal and providing updates about the operational progress being made to restore the community.
Emergency Responder Website Services	Our local information technology (IT) services within Tetra Tech supports our client's full IT life cycle and content management needs. This includes content on many FEMA emergency responder websites, such as the Responder Knowledge Base (RKB), System Assessment and Validation for Emergency Responders (SAVER), and the Lessons Learned Information Sharing (LLIS).
Data Collection	Tetra Tech has a proven track record in data acquisition from systems and sensors and the ability to present this data in a well-defined manner through a host of application types and architectures. Once the data is acquired and housed in a relational database, Tetra Tech provides the analysis and trending capabilities that often accompany the federal grant requirements for our clients.

Grant Administration and Disaster Recovery Management Services

Tetra Tech's team of grant administration and disaster recovery management services was established to provide grant funding consultation before and after a disaster. With a keen understanding of Office of Management and Budget (OMB) regulations, this team seeks to establish accounting systems and internal controls for its clients to minimize the instance of fraud, waste, abuse, and mismanagement of grant funds. We offer a staff of experts, with advanced degrees in business, administration, economics, and finance, as well as hands-on experience in the field. Funding sources include the FEMA Public Assistance (PA) Program, Individual Assistance (IA) Program, Hazard Mitigation Grant Program (HMGP, U.S. Department of Housing and Urban Development (HUD) Community Development Block Grant Program (CDBG), U.S. Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS); and many others. We guide our clients through the complexities of program procedures and requirements, which often are not consistently interpreted by local, state, and federal government agencies.



Grant Administration and Management Services

Service Offering	Description
FEMA Reimbursement Technical Assistance Consulting	Tetra Tech's FEMA reimbursement technical assistance consulting services involve providing guidance and technical assistance for project applications and programs for disaster reimbursement related to response and recovery efforts on behalf of our clients.
FEMA Compliance Monitoring and Audit Oversight	Tetra Tech's grant administrators document eligible work in the field and organize such documentation in an audit-ready format for future review. This includes OMB, FEMA and HUD guidance requiring that grantees or subgrantees monitor the expenditure of funds and document such expenditures in a manner that will satisfy regulatory audits in the future. This includes Section 3, Fair Housing, 2 CFR 200, and other Federal grant requirements.
IA Services	Tetra Tech assists clients with application intake, case management, grant administration, staffing at Disaster Recovery Centers, expenditure monitoring, and other programmatic needs associated with the IA declaration.
PA Services	Tetra Tech's team of PA consultants assists our clients with documenting and accounting for such costs on project worksheets. This includes providing technical assistance on FEMA's rules, practices, and procedures covering reimbursement for temporary and permanent work in eligible FEMA categories.
Grant Application Development and Administration (CDBG, HMGP, FHWA, NRCS, FTA, FEMA PA, and FEMA IA)	Tetra Tech provides grant application development and administration involves providing grant program specialists to assist with the time-consuming process of gathering data and information required to develop grant applications to various agencies and programs.
HUD CDGB-DR Services	Tetra Tech provides knowledge, experience, and technical competence in the planning, administration, and implementation of eligible CDBG activities as identified at 24 CFR 570 and modified or waived under the Federal Register allocation of the CDBG-DR funds.
Unmet Needs Assessment	Tetra Tech assists clients with developing unmet needs assessments that identify type and location of the community's disaster recovery needs especially in the three core aspects of recovery: housing, infrastructure, and economic recovery.
Policies and Procedures Manual Development	Tetra Tech assists client's Project Management and Operations including the ability to develop policies and procedures for implementing all CDBG-DR funded programs and activities, including contractor, subcontractor, and subrecipient oversight and monitoring.
Damage Assessment	Tetra Tech assists clients with damage assessment activities involving deploying a team of experienced staff to document damage sustained during a disaster in a format that is acceptable for requesting FEMA PA funds.
Substantial Damage Estimation	Our teams of estimators perform residential substantial damage estimation on behalf of our clients after floods. These services include GIS-based evaluation and visual inspections of impacted properties using FEMA's SDE 2.0 software.
Eligibility Consultation	Tetra Tech provides eligibility consultation involves providing grant recipients with an understanding of funding options and preferences for repairs as they relate to various grant program eligibility considerations.
Environmental Review Records (ERRs)	Tetra Tech provides ERR services as they relate to projects proposed for funding under the CDBG-DR program funding.

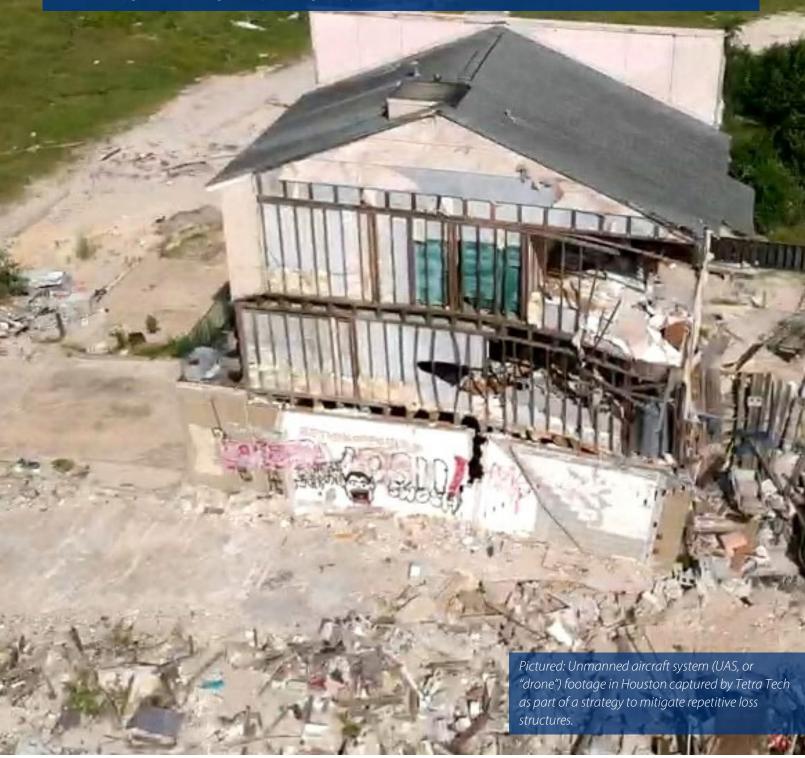
Project Ranking	Tetra Tech assists clients with ranking potential projects for future consideration through federal grants. This includes providing grant recipient constituents with a prioritized plan of action for reconstruction and mitigation projects to achieve recovery objectives.
Financial Advisory	Tetra Tech provides financial advisory services involving the development of program budgets to provide transparency to grant recipients relating to the local cost share, the financial burden, and obligations for program participation.
Cash Flow Management	Tetra Tech provides financial departments within an organization with cash flow management associated with the disbursement of federal grants. This includes developing program budgets to allow grant recipients to meet current obligations with minimum reliance upon bridge financing.
Procurement Assistance	Tetra Tech provides procurement assistance to our client's including providing procurement experts to provide disaster contracting guidance to review scopes, adherence to grant funding requirements and 2 CFR 200, and satisfactory project completion.
Benefit Cost Analysis	Tetra Tech develops benefit cost analysis involving a formalized schedule of anticipated project costs to projected future benefits to establish a quantifiable means for understanding project value.
Feasibility and Effectiveness Studies	Tetra Tech provides feasibility and effectiveness studies involving the documentation of projects being considered are financially sound, reasonable to implement, and effective at mitigating future damage. This includes alternate projects, improved projects, or 406 mitigation proposals to include hydrological and hydraulic (H&H) feasibility studies, cost estimating and conceptual project designs. This may include engineering and architectural services.
Floodplain Feasibility Modeling	Tetra Tech can provide clients with modeling of natural or manmade above ground waterways is used to determine where to place critical facilities including roads, bridges, and emergency operations centers. Readily applicable models such as HEC-RAS (FEMA standard flood modeling) provide quick answers to what if scenarios. This may include basic modeling using spreadsheets or software program or more in-depth modeling utilizing GIS tools. This may also include assistance with FEMA's Letter of Map Amendment (LOMA) and Letter of Map Revisions (LOMAR).
Floodplain Management Support	Tetra Tech can support Floodplain Management offices that are overwhelmed after disasters. These services include staff support, substantial damage estimation appeals support, Community Assistance Visit (CAV) audits, and case management for impacted individuals.
Advanced Feasibility Modeling	Tetra Tech can provide clients with advanced modeling is typically used to answer challenging questions that involve complex flooding, erosion, scour and debris. 2-D and 3-D hydrodynamic and water quality models for rivers, streams, lakes, and estuaries help to determine permitting approaches that meet project time frames and guide the project path around pitfalls.
Site Survey and Legal Description Review	Tetra Tech provides site survey and legal description review to clients by providing grant recipients with assurances that private property access is carried out legally without exposing it to unnecessary liability.
Owners Representative Services	For projects in the construction phase, Tetra Tech provides Owner's Representative advising services to our clients. These tasks may include projects interface with federal and state officials, PW versioning, and providing

	oversight to the construction firm. This may include engineering and architectural services.
Appraisal and Valuation Services	Our team can assist clients with appraisal and valuation services utilizing industry best practices to develop property appraisal and valuation documentation for acquisition programs.
Title Due Diligence	Tetra Tech's title due diligence services for our clients involves ensuring that only the legal property owner is consulted for program acquisition program participation.
Public Outreach Program	Tetra Tech provides public outreach programs that provides citizens with an outlet to ask questions, state concerns, and apply for program participation without burdening grant recipient staff and facilities.
Public Meeting Facilitation	Tetra Tech provides public meeting facilitation services including documenting meeting notices, fostering public participation, facilitating discussions with stakeholders in order to obtain relevant information/data and obtain consensus on priorities and projects, and communicating the message of our clients.
Homeowner Consultation	Tetra Tech's homeowner consultation involves providing a high level of service to citizens without burdening grant recipient staff with after-hours and weekend meetings for programs involving acquisition/demolition, relocation, elevations or small repairs after disasters.
Relocation Assistance	Tetra Tech provides relocation assistance associated with acquisition or relocation programs. This includes engaging participants by providing relocation assistance conforming to Uniform Relocation Act (URA) rules and regulations.
Property Management	Tetra Tech provides property management services to clients who are grant recipients following disasters. This service includes program management to ensure that properties do not degrade to cause blight during the interim purpose phase.
Negotiations	Tetra Tech provides negotiation services in systematic, third-party approach for reaching amicable terms between citizens and the grant recipient.
Closing	Tetra Tech provides closing involving dedicating consultant resources to ensure a timely and efficient closing process during a buyout program.
Data & Documentation Management	Tetra Tech provides data and documentation management by storing grant- related data in a manner that provides efficient recall and review during closeout and auditing.
Hazard Mitigation Proposals	Tetra Tech develops of 406 Hazard Mitigation proposal associated with a written Project Worksheet after disasters to those entities participating in the FEMA PA program.
Contractor Invoice Reconciliation	Tetra Tech assists clients' with contractor invoice reconciliation involves ensuring accurate payment to contractors and assigning incurred costs to funding sources to minimize local cost share.
Regulatory Compliance Monitoring	Tetra Tech provides regulatory compliance monitoring by documenting proper regulatory compliance to ensure maximum reimbursement and to avoid fines and site shutdowns, which slow the recovery process.
Project Scoping	Tetra Tech's grant reimbursement team can create scoping documents that involve developing scopes of work for grant funding projects, using key terminology, and highlighting awareness of historical precedence, which maximizes grant funding opportunity.

Insurance Adjusting/Subrogation	Tetra Tech provides insurance adjusting/subrogation to clients to proactively resolve insurance issues prior to a grant de-obligation.
Eligibility Appeals	Tetra Tech assists clients with eligibility appeals involve assisting clients with developing strategies and documentation to overturn a de-obligation ruling during first or second appeals.
Grant Closeout	Tetra Tech assists client's years after a disaster by providing closeout services to a grant recipient. This includes developing a closeout package that is organized to satisfy grant closeout and auditing.
HUD Action Plan Development	Tetra Tech assists clients with the development and submission of HUD required Action Plan for Disaster Recovery grant. These tasks may include the development of Action Plan amendments or waivers that may be required.
Unmet Needs Analysis	Tetra Tech develops unmet funding needs analysis to document the need for CDBG-DR funding and to form the basis of program design for the use of CDBG-DR funds.
Emergency Operations Center Staff Augmentation	Tetra Tech can support our client's needs upon activation of a EOC by providing staff trained in incident management system (ICS) as section chiefs or operational staff.

Long-Term Recovery Planning and Economic Development

As part of or in addition to CDBG-DR funded recovery, communities, businesses, counties, states, and regions may engage in long-term recovery planning and economic development to rebuild but also to foster growth from the "new norm" following an economic downturn. Tetra Tech planners, economic development professionals, financial and budget analysts, and funding strategists can conduct this planning and implementation. These staff also assist communities in the long-term planning for their economic growth through the planning and prioritization process.



Long-Term Recovery Planning and Economic Development

LOTI	g-Term Recovery Planning and Economic Development
Service Offering	Description
Long-Term Recovery Planning	Tetra Tech prepares a long-term recovery plan that strategically defines the magnitude of the disaster, identifies both recovery and resiliency projects, involves the public, creates a process for prioritizing the projects, and defines an implementation strategy for projects. This multi-year strategic plan will be used by the community to attract financial assistance to implement their recovery efforts and will be focused on the recovery from an existing disaster. Tetra Tech also prepares pre-disaster recovery plans. These plans involve the pre-planning for a community, county, or state. These plans identify and put into place the necessary steps that should be taken during the transition from disaster response to disaster recovery. These plans focus on internal steps and policies with the public sector entity as well as engagement with external stakeholders such as NGOs, chambers of commerce, businesses, and other key stakeholders.
Economic Development	Tetra Tech assists clients with all aspects of economic development including the planning at the municipal or regional level to focusing on one or more specific sites. The broader municipal/regional plans would focus on obtaining both qualitative and quantitate data and information from the public, key stakeholders and reputable data sources. The data sources will include data related to the economy in order to perform a market analysis and economic analysis. All of this data and information will allow our team to work with the client to define goals and objectives, identify and prioritize projects, and define the necessary implementation steps for success. In regard to one or more sites, our team can assist with developing a concept for the development of the site(s) for its highest and best uses and then define the necessary steps for successfully implementing the plan.
	Projects offered to Tetra Tech under this arena include:
	 Comprehensive Planning/Master Plans – Tetra Tech assists communities with the preparation of communitywide or neighborhood-wide plans that are all- encompassing and integrate all components of a community. This may include economic development, housing, natural and cultural resources, infrastructure, hazard mitigation, and community facilities.
	 Sustainable/Resilience Community Plans – Tetra Tech assists communities with the preparation of plans to integrate resilience into a community in order to wither prevent or lessen the damages and loss of life from a disaster.
General Planning	 Urban Reinvestment and Redevelopment – Tetra Tech assists with developing plans focused on the redevelopment of a property or a series of properties with the result of strengthening the community's economy.
	 Sustainable Development Tools – Tetra Tech focuses on creating different types of tools (policy, ordinances, and/or regulations) that will make a community more resilient
	CDBG Consolidated Plans – Tetra Tech assists entities that received CDBG funds with the preparation of their required Consolidated Plans.
	 U.S. HUD Fair Housing Analysis - Tetra Tech assists entities with the preparation of the analysis of fair housing and the preparation of the required plan.

Vulnerability/Hazard Identification/ Risk Assessment Services

Tetra Tech has a multidisciplinary team of toxicologists, chemists, ecologists, biologists, geologists, modelers, data managers, and environmental scientists that provide environmental risk expertise to the public and private sectors. Many of our scientists have graduate-level degrees and contribute to the scientific community by publishing in peer-reviewed journals and participating in presentations at national conferences of technical and professional organizations.



Table K-5. Vulnerability/Hazard Identification/Risk Assessment Services

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Service Offering	Description
Hazardous Identification and Incident Response	Tetra Tech provides turnkey planning, design, construction interface, and training for infrastructure security enhancement projects. Initiating the security solution is an objective VAs against industry and government standards, incorporating threat assessment, facility prioritization, consequence determination, systems effectiveness, risk reduction and mitigation, and limitations.
Ecological Risk Assessments	Tetra Tech provides risk assessment staff to conduct retrospective and predictive ecological risk assessments (ERAs) for commercial clients in aquatic and terrestrial environments. These ERAs span the range of desktop screening-level evaluations versus baseline ERAs that incorporate site-specific biological data.
Comprehensive Environmental Response, Compensation & Liability Act of 1980 (CERCLA) and Resource Conservation and Recovery Act (RCRA) Evaluations	In addition, Tetra Tech provides CERCLA risk assessments and RCRA Tier 2 and 3 risk-based evaluations to support contaminant characterization and cleanup efforts. This includes conducted risk assessments to evaluate chemical and radiological exposures to humans and to various aquatic and terrestrial species of fauna and flora. Tasks would include statistical analysis, development of conceptual site models, risk calculations, modeling, and derivation of site-specific cleanup objectives for soil, groundwater, air, surface water, and sediment.
Vulnerability Assessments (VAs)	Tetra Tech has completed municipal water system VAs that utilize a pair-wise comparison approach to identify critical facilities and critical assets needed to maintain safe drinking water supplies. Tetra Tech also has implemented security enhancements that reduce the likelihood that a water system could be severely compromised as a result of a malevolent act. The terrorist response scenarios developed during VAs can be incorporated into the emergency contingency plan for incident response using a "rip and run" philosophy for easy use.

Environmental Services

Tetra Tech is passionate about mitigating global climate change. Customers seek our deep domain expertise in subjects as diverse as environmental, solid waste, water resources and atmospheric sciences, policy analysis, IT, and energy-efficient design-build services.



Environmental Services

	Environmental services
Service Offering	Description
HUD/FEMA Environmental Reviews	Tetra Tech supports our clients of the wide range of disaster recovery, hazard mitigation, and other types of projects funded by HUD and FEMA, Tetra Tech provides comprehensive environmental and historic preservation review support. In addition to preparation of documents under the National Environmental Policy Act (NEPA), we assist in compliance with related laws, regulations, and Executive Orders.
Decontamination	Tetra Tech's also provides field services for clients facing decontamination projects throughout the nation. Tasks under this category include: Technical oversight, characterization and disposal of radioactive residues, radiation safety program management, documentation of site conditions, Radiological surveys, and internal dose assessment calculations to document the risk and dose to personnel from the contamination
	Tetra Tech provides climate change adaptation study services to reduce risk and vulnerabilities for our clients. This includes:
	Development of climate action plans and sustainability strategies
Climate Change Adaptation	General reporting and verification
	Comprehensive climate change response
•	 Technical guidelines on transportation emissions, industrial process emissions, and indirect emissions
	Tetra Tech assists clients with a variety of restoration and remediation professional services prior to or after disasters, including:
	Environmental site investigations
	Risk assessment
	Fate and transport modeling
	Performance-based remediation
	Radiological decontamination and decommissioning
	Ecosystem restoration
	Geographic information systems (GIS)
	Site restoration and remediation
Restoration and Remediation	Due diligence assessments
	Remedial system design/construction
	Remedial process optimization
	Construction management
	Environmental compliance
	Chemical/fuels and waste management
	Regulatory support/expert witness services
	Liability transfer model
•	Third-party review – remedial strategies
	Geophysical services

TAB E. References

The following projects are a representative sample of our recent experience and accomplishments in performing services that are similar in scope, complexity, and magnitude to the NCTCOG.



Cost Recovery Services

On May 10, 2021, the U.S. Department of the Treasury announced the launch of the Coronavirus State and Local Fiscal Recovery Funds, established by the American Rescue Plan Act of 2021, to provide \$350 billion in emergency funding for eligible state, local, territorial, and Tribal governments. The City of Frisco, Texas, is eligible for receipt of funds under programs established by the American Rescue Plan.

Tetra Tech is supporting the City via consulting services to the City in response to this emergency regarding current and future available funding sources from state and federal agencies. Our support focuses on two main initiatives:

Support to the City via technical assistance. This assistance includes high level cost recovery support and consulting assistance to the City regarding aspects of the American Rescue Plan. This support includes planning assistance to maximize the use of funds in accordance with Treasury guidance, the identification of eligible use of funds via ARPA, and facilitating communications between local, state, and federal stakeholders on behalf of the City.

Support to the City via program administrative support. Tetra Tech assigned senior program staff to attend weekly meetings with awarded contractors to

Client

City of Frisco

Location

Texas

Period of Performance

2021-Ongoing

Project Cost

\$140,000

Reference Contact

Kim Sinclar, CGFO, Director of Financial Services 6101 Frisco Square Blvd, 4th Floor, Frisco, TX 7504 972-292-5513 KSinclair@friscotexas.gov

oversee project scopes, schedules, and milestones to monitor for issues of non-compliance with Treasury guidelines and policies related to the program. If issues are identified, Tetra Tech program management staff will notify necessary stakeholders with recommended plan for remediation. In addition, Tetra Tech provides consulting staff to review and reconcile invoice or payment application documents monthly for awarded contractors. Our program management staff will provide reporting support to the City with submission of cycle reports required by the program through this contract's period of performance. Tetra Tech's staff provides support to the City with responding to any questions stemming from progress reports asked of the City.



Full Scope of Services for Fort Bend County, TX

We are our proud of our long-term relationship with Fort Bend County (County), whom we have assisted since 2007 in a variety of capacities, including debris management after Hurricane lke in 2008, plan writing, and exercises, debris management in response to the 2016 flood event, and Hurricane Harvey. We continue to stand "at the ready" in the event the County needs our service in the future. The following summary describes our projects with the County.

COVID-19

Financial Recovery and Reimbursement and Operational Consulting Services: Since July of 2021, Tetra Tech has administered the appeals program for Fort Bend County, Texas' COVID relief programs. Fort Bend County operates three programs for COVID impacted residents:

- Small Business Assistance and Employee Incentive Program,
- Emergency Rental Assistance Program, and
- Mortgage Assistance Program.

Client

Fort Bend County

Location

Texas

Period of Performance

2008 - Ongoing

Project Cost

\$413,001.28

Reference Contact

Doug Barnes, Deputy Chief Fort Bend County (832) 361-9994 Douglas.barnes@fortbendcou ntytx.gov oem@co-fort-bend.tx.us

Tetra Tech works in conjunction with Fort Bend County government and its contractors to process appeals for all three programs. We receive the appeals via automated email, determine the basis for the appeals, research the case files, discuss the appeals with the applicants and reach decisions on whether the appeals have merit or not. As of September of 2022, we have processed 250 appeals, of which 28 percent were approved for assistance. In addition to appeals resolved, we also monitor over 100 appeals in varying states of readiness, maintaining contact with the appellant and working to resolve outstanding issues. The majority of appeals, over 200, are from the Small Business Assistance Program.

Tetra Tech is able to successfully integrate our team and technology with Fort Fend County's grant tracking systems to review cases, upload documents, and provide updates to cases as we determine the merits of the appeals. We provide daily contact with the client and applicants. The appeals program provides applicants with an impartial intermediary between the County and their COVID grant consultant to provide fair and timely appeals decisions.

Hurricane Harvey

On August 26, 2017, Hurricane Harvey made landfall as a Category 4 storm near Rockport, TX. After making landfall, Harvey's winds rapidly weakened, but its speed also greatly slowed and the storm stalled just inland from coastal Texas, resulting in several days of very heavy rain and massive flooding. Many locations in the area saw anywhere from 30 to 60 inches of rain. Multiple flash flood warnings were issued, and many areas were evacuated. More than 48,000 homes across the state had damage and an estimated 30,000 residents were displaced.

Support Site Planning and Design, Temporary Emergency Staff and Resource Augmentation, and Debris Monitoring Services: Tetra Tech staff were in close communication with County officials throughout the event and quickly mobilized resources once it was safe to enter the area. Tetra Tech helped the County to complete damage assessments and come up with debris estimates and then transitioned into complete program management of the debris removal mission. To date Tetra Tech has monitored the removal of over 13,500 loads totaling over 338, 277 cubic yards of debris. Tetra Tech assisted the County to document and submit \$4 Million in force account labor expenses for the County's emergency response to the flood.

Operational Consulting and Financial Recovery and Reimbursement Services: The rainfall especially impacted Fort Bend County, causing extensive flooding and severely damaging hundreds of homes. Due to our history of successful implementation of previous mitigation projects, Fort Bend County requested our team's assistance in making substantial damage determinations on affected properties. We provided a dedicated team that safely conducted site assessments at 600 properties in 8 weeks, and provided onsite staff support during, and months following, to address questions from residents on the recent flooding and to provide technical assistance.

2016 Floods

Debris Monitoring Services: On May 30, 2016, a devastating flood impacted the County, causing damage and debris across the area. Tetra Tech was tasked by the County to provide program management and monitoring services. The Tetra Tech field team certified 28 hauling units that removed over 48,000 cubic yards of flood debris within the County. *RecoveryTrac*TM automated debris management system (ADMS) was used to monitor and document debris removal activities within the County and three other municipalities that requested the County's assistance through an interlocal government agreement.

Financial Recovery and Reimbursement Services: Additionally, with an estimated \$15 million in damage, the County requested that our team assist with applying for, administering, and managing FEMA PA funding for categories A-G. Tetra Tech deployed a team of financial recovery consultants to assist the County in preparing project worksheets and maximizing grant funding for disaster response and recovery efforts. Our assistance after the flood however, has gone beyond FEMA PA consulting to assisting the County with the Hazard Mitigation Grants Program applications, identification of substantially damaged properties, staff augmentation for permits departments, and Emergency Operations Center staff support.

HMGP Applications, Communication Support, and Operational Consulting Services: Tetra Tech collaborated with Fort Bend County to plan for submission of applications for grant funding to buyout properties in the Special Flood Hazard Area (SHFA) floodway and to elevate or buyout properties in the SFHA floodplain to mitigate and reduce the risk of flooding in Fort Bend County. Fort Bend County, after already having Tetra Tech contract to perform Substantial Damage Determinations immediately preceding the flood, contracted with Tetra Tech to assist with the creation of the Hazard Mitigation Grant Program applications. To attempt this, Fort Bend County invited municipalities to participate by providing a list of the properties that were identified as being damaged during the 2016 floods.

Tetra Tech reached out to over 600 homeowners and invited them to participate in the grant programs for buyout or elevation. Tetra Tech provided a Hotline phone number and email address for homeowners to contact the program

and interacted with all the homeowners who chose to participate in the program. The team worked with all the owners to obtain all of the application information needed for entry into the programs.

After evaluation of the properties that submitted documentation into the program, Tetra Tech and the County chose to submit three different applications to the State of Texas for consideration for funding. This included Voluntary Buyouts in the Special Flood Hazard Area, Voluntary Buyouts in the FEMA Designated Floodway and Elevations in the Special Flood Hazard Area. Tetra Tech completed the applications and submitted them to the State of Texas for review and approval. FEMA has approved the applications for Voluntary Buyouts in the Special Flood Hazard Area and Voluntary Buyouts in the FEMA Designated Floodway, the County is still waiting on approval for the application for Elevations in the Special Flood Hazard Area. As a result of the applications Tetra Tech submitted, Fort Bend County was awarded over \$10 million in funding.

Operational Consulting and Temporary Emergency Staff and Resource Augmentation Services, Communication Support, and Development of mid-incident reviews, after-action reports, & corrective action plans: Fort Bend County requested that our team provide staff augmentation services to the Flood Recovery Permit and Information Center (FRPIC). Our team assisted with outreach efforts, community recovery meetings, staffing the recovery center, and other consulting support related to the FEMA Individual Assistance program.

Our efforts also included:

- 1. Development of an individual assistance long-term recovery plan
- 2. Presentations to Long Term Recovery groups and public meetings
- 3. Staffing at the Floodplain Managers Office on substantial damage claims and FRPIC

Mass Fatality Management Plan (2011)

Operational Consulting Services: The Tetra Tech team developed a countywide mass fatality management plan using an all-hazards approach for the County. The plan enhances Fort Bend County's capability to facilitate the performance of effective fatality management services during an emergency, regardless of scope and size.

Tetra Tech staff worked with Fort Bend County to assess the capabilities and needs for achieving a state of readiness for a mass fatality incident. Tetra Tech helped Fort Bend County prioritize identified needs and establish planning priorities. Using scenario-based planning, Tetra Tech staff assessed Fort Bend County's capabilities and needs given a worst-case scenario mass fatality management incident. Tetra Tech staff also worked with Fort Bend County to assess current capabilities and needs for dealing with a pandemic influenza outbreak that could affect up to 40 percent of Fort Bend County's population at a given time.

Tetra Tech staff conducted on-site consultations with Fort Bend County stakeholders from selected departments and support agencies to determine responsibilities and requirements of Fort Bend County's overarching mass fatality management plan. Tetra Tech developed a mass fatality management capability and needs assessment report that highlighted Fort Bend County's current fatality management processes, resources, and personnel, and provided recommendations to improve current capabilities at the county level.

Following the completion of the mass fatality management capabilities and needs assessment report, the Tetra Tech team developed the Fort Bend County Mass Fatality Management Plan and a Field Operations Guide (FOG). Upon completion of the documents, Tetra Tech staff conducted two meetings with Fort Bend County to review the documents and clarify the responsibilities of the various agencies with a role in response. Members of a local planning committee comprised of representatives from emergency management, public health, mental health, public transportation, road and bridge, justices of the peace, local hospitals, fire departments, American Red Cross, Galveston County Medical Examiner's Office, and local funeral homes participated in the plan and FOG development process.

Hurricane Ike

On September 12, 2008, Hurricane Ike impacted Fort Bend County with hurricane force winds and heavy rain causing damage and debris across the County. Tetra Tech's pre-positioned contract with the County was activated and Tetra Tech mobilized a project management team to provide comprehensive disaster debris program management services.

Debris Monitoring and Financial Recovery and Reimbursement Services: Prior to Hurricane Ike, Tetra Tech worked with the County to develop a FEMA approved Disaster Debris Management Plan (DDMP). Over the next three months, our team worked closely with the County to executive procedures and directives outlined in County's DDMP. Our team monitored and documented the removal of over 490,000 cubic yards of debris, 8,300 hazardous hangers, and 590 hazardous trees representing over \$8.5 million in reimbursable debris removal costs.

Operational Consulting Services and Support Site Planning and Design: In 2012, the County tasked our team with updating the County DDMP. The purpose of the 2012 DDMP update was to incorporate new guidance from FEMA, lessons learned from Hurricane Ike, and update other information as needed to help the County prepare for the next disaster event.

Countywide Continuity of Operations Plan (2008-2009)

Operational Consulting Services: Tetra Tech was retained by Fort Bend County to develop a continuity of operations plan (COOP) for county departments serving emergency, administrative, and public health-related functions. Designed to work within the broader context of the County COOP Program, the COOP identifies the mission essential functions, facilities, equipment, vital records, and other resources required to perform the mission essential functions of the county, as well as the procedures to facilitate a timely and orderly recovery from an event. Essential functions of the County's Department of Health and Human Services COOP included administration, epidemiology and surveillance, health authority functions, medical special needs coordination, public information/risk communications, and the Strategic National Stockpile. These essential functions were in concert with their obligations under Texas statutes and county procedures. The plan components also addressed alert and notification, orders of succession, delegation of authority, and continuity location sites.

Multiyear Training and Exercise Plan (2008-2009)

Development of mid-incident reviews, after-action reports, and corrective action plans: Tetra Tech staff were retained by Fort Bend County to develop a multiyear training and exercise plan (MTEP). The purpose of the MTEP was to identify the top priorities for improving Fort Bend County's emergency management capabilities and to define the cycle of training and exercise activities that provide the most value in strengthening those capabilities over the succeeding three years. The project brought together participants from various disciplines within the county (including emergency management, health and human services, fire operations, law enforcement, hazardous materials, emergency medical services, administration, and public works) to identify unmet training and exercise needs, capture initiatives Fort Bend County desired to undertake, and place those initiatives on a working calendar.

Tetra Tech developed a Homeland Security Exercise and Evaluation Program (HSEEP)-compliant MTEP that was progressive in nature, building from simple, individual tasks to complex, multi-organizational interactions. The plan was designed to include activities that build on training and that improve capabilities to meet program objectives. Specifically, the MTEP linked each exercise and training objective and priority to a corresponding National Priority using the Universal Task List (UTL) and Target Capabilities List (TCL) provided by DHS, each of which have been built upon the foundation of the National Preparedness Goal. In addition, based upon a thorough review of Fort Bend County's existing after-action reports, any identified improvement plan actions were linked to newly defined exercise initiatives and to the associated target capabilities that would facilitate accomplishment of the priority.



Emergency Management, Debris Monitoring, and Financial Recovery Services

the four largest counties in the United States and the largest to have been hit by a hurricane. In fact, over the past few years, the County has been affected by three hurricanes: lke in 2008, Harvey in 2017, and Nicholas in 2021. Following each of those incidents, Tetra Tech responded by providing emergency management, debris monitoring, and financial recovery services, to enable the County recover from each of those disasters.

COVID-19

Financial Recovery and Reimbursement, Operational Consulting, and Logistics and Support Services: Tetra Tech has supported the County recently with processing COVID-19 FEMA claims and CRF claims, operations of COVID-19 mask and field hospitals and COVID-19 sheltering for homeless COVID-19 patients and maintaining vaccine operations as a subconsultant to Ashbritt.

Client

Harris County

Location

Harris County, Texas

Period of Performance

2008-Present

Project Cost

Varies by year; total > \$53M

Reference Contact

Craig Atkins, CPA 8410 Lantern Point Dr Houston, TX 77054 (832) 927-4741 craig.atkins@csd.hctx.net

Hurricane Harvey

Debris Monitoring Services, Support Site Planning and Design, Temporary Emergency Staff and Resource Augmentation, and Development of mid-incident reviews, after-action reports, & corrective action plans: On August 25, 2017, Hurricane Harvey made landfall as a category 4 hurricane near Port Aransas, Texas. It then slowed to a crawl as it moved back into the Gulf of Mexico and dumped over 50 inches of rain in Harris County and other jurisdictions in Southeast Texas. The flooding was historic. The County again reached out to Tetra Tech for assistance. Tetra Tech worked with the County to provide debris monitoring services, program management and reimbursement assistance in the removal of over 1,200,000 cubic yards of flood related debris. Tetra Tech also provided the County with support on implementation of FEMA directives on private property and commercial debris removal. Tetra Tech also assisted the County in the development of an after-action report to capture the lessons learned from the response efforts.

Tetra Tech led the After-Action Report/Improvement Plan (AAR/IP) development process for Harris County. Tetra Tech staff worked closely with Harris County and their partners to identify strengths and areas of improvement for the response and recovery from Hurricane Harvey. Tetra Tech developed an interview tool to aid in collecting information from County

departments and other agencies with a role in response to Hurricane Harvey. By using the interview tool to guide discussions, the Tetra Tech team conducted 40 interviews with Harris County departments/agencies as well as external partners/stakeholders. Following the after-action interviews and documentation review, Tetra Tech team members facilitated a 6 hour after action meeting with County personnel and agency representatives involved in response to Hurricane Harvey. The purpose of the after-action meeting was to gather input regarding the issues identified, the corrective actions needed to address the issues, the identification of departments and agencies to be tasked with the corrective actions, and the establishment of timelines for accomplishing the corrective actions. The Tetra Tech team is currently in the process of finalizing the AAR/IP with Harris County and anticipate the finalization of the AAR/IP to be at the end of March 2018.

Communication Support, Staff Augmentation, Operational Consulting, and Logistics Services and Support: Tetra Tech has been retained by Harris County, Texas to rapidly assist with program redesign and implementation for the County's \$1.2B CDBG-DR allocation because of Hurricane Harvey. The program began intake in April 2019 but had limited results. Tetra Tech was contracted in October 2019 to serve as overall program manager to improve program performance.

Following Hurricane Harvey in 2017, Harris County received two (2) tranches of funds for long term housing and infrastructure programs within the community for over \$1.2B. This allocation was 10 times the allocation it received following Hurricane lke in 2008. The County was responsible for developing an action plan, policies and procedures, and management of its own disaster recovery program to deliver the following programs:

- Homeowner Reimbursement: \$25M
- Homeowner Repair or Reconstruction: \$270M
- Residential Buyout: \$217M
- Commercial Buyout: \$12M
- Affordable Rental Program: \$224M
- Single Family New Construction: \$119M
- Infrastructure (\$196M)

The County expects to service over 5,000 applicants and transform the whole community over the 6-year period of performance. Tetra Tech's contract with Harris County includes the following scope of work to assist the County with delivering it's \$1.2B program:

- Program Conceptualization, Planning and Development to include program design, assistance with programmatic waivers, assist with public outreach and program marketing efforts, technical assistance associated with programmatic elements
- Overall Program Administration, Program Management, Oversight and Regulatory Compliance to include coordination with County staff and contractors for outreach, intake, case management and damage assessment/cost estimating, inspections and construction activities, staff augmentation for eligibility reviews, designing and implementing internal controls, conducting risk assessments to mitigate programmatic risks, and providing subject matter expertise for program implementation.
- Financial Assistance to include the formulation of processes to confirm federal funds have been accounted for in accordance with grant requirements and assist with the audits and monitoring

METRO Terrorism Awareness Training and Full-Scale Exercise (2015-2016)

Operational Consulting and Logistics Services and Support: With 75 local bus routes, 32 commuter bus routes, 3 light rail lines and METROLift services operating throughout the City of Houston, Harris County, and Fort Bend County, the Metropolitan Transit Authority of Harris County Texas (METRO) is a critical component of the regional transit system.

Impacts to the METRO system that result in service disruptions have cascading impacts not just on METRO's other modes of transportation but on the region's roadways, other transit providers, the emergency response community, and the regional economy. METRO and its partners must be prepared to respond to emergencies and recover the transit system as quickly as possible after an emergency to keep the region moving. As a result, METRO contracted with Tetra Tech to provide training and exercises based on a terrorism scenario.

The purpose of this project was to support METRO to provide terrorism training and to design, develop, and conduct a full-scale exercise (FSE) to test the interoperability of internal departments of METRO in the event of a terrorist attack. Tetra Tech delivered the training in a classroom setting multiple times over the course of several weeks. The full-scale exercise involved the participation of several departments at multiple locations. The exercise tested critical response functions including tactical communications, resource coordination, operational coordination and public information.

Emergency Support Function and Standard Operating Guideline Planning (2010-2011)

Operational Consulting and Support Site Planning and Design Services: The Tetra Tech team coordinated with the Harris County Office of Homeland Security and Emergency Management (OHSEM) to reformat Harris County's emergency management plan annexes into Emergency Support Function (ESF) annexes. This conversion aligned the OHSEM Basic Plan and annexes with federal plans and supporting county agencies plans. Better alignment promotes a more efficient and effective response by clarifying roles and responsibilities and increasing understanding of emergency response capabilities. In reformatting the plan and annexes, Leidos identified gaps in planning and made recommendations for improvement. Some planning gaps were able to be resolved immediately during the reformatting process with cooperation with OHSEM.

In addition, Tetra Tech staff also used Harris County's standard operating guidelines (SOG) template to develop OHSEM SOGs for each of the 15 National Planning Scenarios. The SOGs were designed to be in alignment with the new ESF annexes and provide hazard-specific guidance to OHSEM on pre-event, event, post-event, and recovery actions to be taken by OHSEM in response to the threat. The SOGs also identified partner agencies in response to each scenario and ESF annexes that might be affected. The new ESF annexes and SOGs strengthen the overall preparedness of the county.

Hurricane Ike

Debris Monitoring and Temporary Emergency Staff and Resource Augmentation Services and Development of mid-incident reviews, after-action reports, and corrective action plans: On the evening of September 12, 2008, Hurricane lke made landfall in Texas leaving in its wake massive amounts of debris from high winds, inland flooding, and storm surge. Our team assisted Harris County (County), Texas with the monitoring and cost reimbursement for over 2.5 million yards of debris from the public right-of-way in response to Hurricane lke.

As part of the recovery effort, our team also assisted the County with the monitoring of the removal of over 60,000 dangerous limbs and leaning trees from the unincorporated areas of the County. In addition, our team managed 13 temporary debris sites as well as 7 public debris drop-off sites located throughout the unincorporated County. Our team also provided FEMA reimbursement assistance associated with all categories of FEMA financial grant assistance (Categories A-G) associated with the County Facilities and Property Maintenance Department of over 75 individual properties County-wide. Our firm also provided debris hauler contract management and contract amendment assistance - negotiating one of the most cost-effective debris hauling contracts in response to Hurricane Ike on behalf of the County.

Financial Recovery and Reimbursement Services: On Sept. 13, 2008, Hurricane lke made landfall resulting in severe buildups of debris in the canals and waterways overseen by Harris Co. Flood Control District (FCD). The FCD generated a tremendous amount of force account equip and labor to minimize flooding. Governor Rick Perry declared a state of emergency and requested a disaster declaration from President Obama. With estimated damages of more than \$1.8 million the FCD requested that SAIC assist with applying for, administering, and managing FEMA Public Assistance (PA) funding for categories B. Within hours of being issued a notice to proceed, SAIC deployed a team of financial recovery consultants to assist the FCD to maximize available grant funds for disaster response and recovery efforts.

A team of financial consultants were assembled to reconcile records from the 2 districts. The team worked as auditors reconciling all time ledgers and labor ledgers to ensure that time and equipment used was reimbursable and reconciled. This time period included pre and post storm, accompanying the maintenance records for the canals/waterways in order for a full reimbursement.



FEMA PA Consulting Services Following Hurricane Harvey

The Port of Corpus Christi Authority is the largest crude exporter in the United States. When Hurricane Harvey made landfall in late August of 2017 in nearby Rockport, TX, the Port of Corpus Christi (POCCA) sustained significant damages due to storm surge, winds, and wind driven rain. As a critical part of the local and national economy, a quick recovery was vital to the area.

Tetra Tech was engaged in early 2018 and immediately began compiling documentation for the Category A and B projects. For permanent work, POCCA integrated strategic planning efforts for the Port's widening and deepening projects to align with the Harvey recovery. Due to the change in future use for some sites, POCCA elected to designate nearly half of their permanent work projects as Alternate Projects. With the funding from these Alternate Projects, Tetra Tech has assisted in furthering POCCA's plans to mitigate problem areas and increase emergency readiness equipment, such as generators.

The Tetra Tech team of consultants assisted in bringing the knowledge and expertise to not only put the Port back to it's original operating status, but also by

utilizing additional FEMA alternative project programs we were able to keep POCCA's trajectory and schedule for expansion. The team also assisted in navigating FEMA's complex regulatory requirements, ensuring that the unique features of POCCA's assets and facilities were recognized as critical infrastructure.

To ensure future recovery for storms and other disasters, the Tetra Tech team has led training sessions for Federal Procurement Compliance, Force Account Labor documentation, and executive sessions for management on the FEMA Recovery Process. Tetra Tech is also assisting in COVID-19 recovery and the preliminary damage assessment for Hurricane Hanna.

Client

Port of Corpus Christi

Location

Texas

Period of Performance

January 2018 – December 2020

Project Cost

\$484,698

Reference Contact

Mrs. Danielle Hale Manager of Emergency Management Port of Corpus Christi Authority (361) 885-6612 dhale@pocca.com

TAB F. Proposal Pricing

To the extent that NCTCOG or any of its end users request Tetra Tech's assistance, the following positions and hourly rates shall apply. The fees for these services can be provided on a fixed fee or time and materials basis plus reasonable non-labor expenses. Such non-labor expenses shall be invoiced as follows: (1) travel expenses including airfare and car rental shall be invoiced at cost without mark-up; (2) lodging shall be invoiced up to the per diem rate according to the General Services Administration (GSA) rates established at www.gsa.gov (3) meals and incidentals shall be invoiced at the GSA per diem rate (no receipts are required); (4) mileage shall be invoiced at the federally published rate; (5) field documents and other equipment/supplies shall be invoiced at cost without mark-up; and (6) other required non-labor expenses as may be applicable to the project and pre-approved by Tetra Tech and the Client shall be invoiced at cost without mark-up.

Table F-1: Homeland Security and Emergency Management Consulting/Planning Hourly Rates

Category	Hourly Rates
Administrative Specialist I	\$48.00
Administrative Specialist II	\$57.60
Research Assistant	\$61.20
Proposal Coordinator	\$63.60
Comm. Technician	\$68.40
Help Desk Operator	\$74.40
Administrative Specialist III	\$76.80
Research Assistant II	\$79.20
Service Center/Logistics Specialist	\$81.60
Analytical Aide	\$90.00
Planning Aide	\$96.00
Project Control Specialist	\$99.60
Oracle Database Administrator	\$102.00
Consulting Aide	\$102.00
Assistant Planner/ Scientist/Assessor/Analyst/ Environmental Specialist	\$114.00
Program Planner/ Scientist/Assessor/Analyst/ Environmental Specialist	\$120.00
System Administrator	\$126.00
Law Enforcement Subject Matter Expert/Trainer	\$132.00
Consultant/Planner/ Scientist/Assessor/Analyst/Environmental Specialist I	\$132.00
Public Assistance/Grant Management Consultant	\$138.00
Fire/HAZMAT Subject Matter Expert/Trainer	\$146.40
Consultant/Planner/ Scientist/Assessor/Analyst/Environmental Specialist II	\$150.00
Consultant/Planner/ Scientist/Assessor/ Environmental Specialist Analyst III	\$162.00
Senior Public Assistance/Grant Management Consultant	\$162.00

Senior Oracle DBA	\$165.60
Supervising Public Assistance Consultant	\$174.00
Senior Consultant/Planner/ Scientist/Assessor/Analyst/	\$180.00
Environmental Specialist	
Supervising Consultant/Planner/	\$180.00
Scientist/Assessor/Analyst/Environmental Specialist	
Program Manager	\$189.60
Senior Program Manager	\$198.00
Principal Consultant/Planner/	\$210.00
Scientist/Assessor/Analyst	
Principal in Charge/Executive	\$234.00
Consultant/Planner/Scientist/Assessor	
Subject Matter Expert	\$270.00
FEMA Appeals Legal Specialist	\$292.80
Senior FEMA Appeals Legal Specialist	\$420.00
Principal FEMA Appeals Legal Specialist	\$510.00

The hourly rates shall remain firm for the first year of the initial term. Hourly rates for subsequent years and any extension term years shall be subject to an annual adjustment based on the latest yearly percentage increase of the Consumer Price Index for All Urban Consumers (CPI- U)(All Items) as published by the Bureau of Labor Statistics, U.S. Department of Labor.

TAB G. Required Attachments

Tetra Tech has provided the requested attachments immediately following this page.

ATTACHMENT I: INSTRUCTIONS FOR PROPOSALS COMPLIANCE AND SUBMITTAL

Compliance with the Solicitation

Submissions must be in strict compliance with this solicitation. Failure to comply with all provisions of the solicitation may result in disqualification.

Acknowledgment of Insurance Requirements

By signing its submission, Offeror acknowledges that it has read and understands the insurance requirements for the submission. Offeror also understands that the evidence of required insurance may be requested to be submitted within ten (10) working days following notification of its offer being accepted; otherwise, NCTCOG may rescind its acceptance of the Offeror's proposals. The insurance requirements are outlined in Section 6.04.

Name of Organization/Contractor(s):	
Tetra Tech, Inc.	
Signature of Authorized Representative:	
Date: 6/21/2023	

ATTACHMENT III: CERTIFICATION REGARDING DEBARMENT, SUSPENSION AND OTHER RESPONSIBILITY MATTERS

This certification is required by the Federal Regulations Implementing Executive Order 12549, Debarment and Suspension, 45 CFR Part 93, Government-wide Debarment and Suspension, for the Department of Agriculture (7 CFR Part 3017), Department of Labor (29 CFR Part 98), Department of Education (34 CFR Parts 85, 668, 682), Department of Health and Human Services (45 CFR Part 76).

The undersigned certifies, to the best of his or her knowledge and belief, that both it and its principals:

- 1. Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any federal department or agency;
- 2. Have not within a three-year period preceding this contract been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State, or Local) transaction or contract under a public transaction, violation of federal or State antitrust statues or commission of embezzlement, theft, forgery, bribery, falsification, or destruction of records, making false Proposals, or receiving stolen property;
- 3. Are not presently indicated for or otherwise criminally or civilly charged by a government entity with commission of any of the offense enumerated in Paragraph (2) of this certification; and,
- 4. Have not within a three-year period preceding this contract had one or more public transactions terminated for cause or default.

Where the prospective recipient of federal assistance funds is unable to certify to any of the qualifications in this certification, such prospective recipient shall attach an explanation to this certification form.

Name of Organization/Contractor(s):

Tetra Tech, Inc.

Signature of Authorized Representative:

Date: 6/21/2023

ATTACHMENT IV: RESTRICTIONS ON LOBBYING

Section 319 of Public Law 101-121 prohibits recipients of federal contracts, grants, and loans exceeding \$100,000 at any tier under a federal contract from using appropriated funds for lobbying the Executive or Legislative Branches of the federal government in connection with a specific contract, grant, or loan. Section 319 also requires each person who requests or receives a federal contract or grant in excess of \$100,000 to disclose lobbying.

No appropriated funds may be expended by the recipient of a federal contract, loan, or cooperative agreement to pay any person for influencing or attempting to influence an officer or employee of any federal executive department or agency as well as any independent regulatory commission or government corporation, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with any of the following covered federal actions: the awarding of any federal contract, the making of any federal grant, the making of any federal loan the entering into of any cooperative agreement and the extension, continuation, renewal, amendment, or modification of any federal contract, grant, loan, or cooperative agreement.

As a recipient of a federal grant exceeding \$100,000, NCTCOG requires its subcontractors of that grant to file a certification, set forth in Appendix B.1, that neither the agency nor its employees have made, or will make, any payment prohibited by the preceding paragraph.

Subcontractors are also required to file with NCTCOG a disclosure form, set forth in Appendix B.2, if the subcontractor or its employees have made or have agreed to make any payment using non-appropriated funds (to include profits from any federal action), which would be prohibited if paid for with appropriated funds.

LOBBYING CERTIFICATION FOR CONTRACTS, GRANTS, LOANS, AND COOPERATIVE AGREEMENTS

The undersigned certifies, to the best of his or her knowledge or belief, that:

- No federal appropriated funds have been paid or will be paid to any person for influencing or attempting to
 influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress,
 or an officer or employee of a Member of Congress in connection with the awarding of any federal contract,
 the making of any federal loan, the entering into of any cooperative Contract, and the extension,
 continuation, renewal, amendment, or modification or any federal contract, grant, loan, or cooperative
 contract; and
- 2. If any funds other than federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this federal contract, grant, loan, and or cooperative contract, the undersigned shall complete and submit Standard Form LLL, "Disclosure Form to Report Lobbying", in accordance with the instructions.
- 3. The undersigned shall require that the language of this certification be included in the award documents for all sub-awards at all tiers and that all sub-recipients shall certify accordingly.

Name of Organization/Contractor(s):
Tetra Tech, Inc.
Signature of Authorized Representative:

Date: 6/21/2023

ATTACHMENT V: DRUG-FREE WORKPLACE CERTIFICATION

Take Take Inc.
The (company name) will provide a Drug Free Work Place is compliance with the Drug Free Work Place Act of 1988. The unlawful manufacture, distribution, dispensing possession or use of a controlled substance is prohibited on the premises of the (company name) or any of its facilities. Any employee who violate this prohibition will be subject to disciplinary action up to and including termination. All employees, as a condition of employment, will comply with this policy.
CERTIFICATION REGARDING DRUG-FREE WORKPLACE
This certification is required by the Federal Regulations Implementing Sections 5151-5160 of the Drug-Fre-Workplace Act, 41 U.S.C. 701, for the Department of Agriculture (7 CFR Part 3017), Department of Labor (29 CFR Part 98), Department of Education (34 CFR Parts 85, 668 and 682), Department of Health and Human Service (45 CFR Part 76).
The undersigned subcontractor certifies it will provide a drug-free workplace by:
Publishing a policy Proposal notifying employees that the unlawful manufacture, distribution, dispensing possession or use of a controlled substance is prohibited in the workplace and specifying the consequences of any such action by an employee;
Establishing an ongoing drug-free awareness program to inform employees of the dangers of drug abuse in the workplace, the subcontractor's policy of maintaining a drug-free workplace, the availability of counseling rehabilitation and employee assistance programs, and the penalties that may be imposed on employees for drug violations in the workplace;
Providing each employee with a copy of the subcontractor's policy Proposal;
Notifying the employees in the subcontractor's policy Proposal that as a condition of employment under this subcontract, employees shall abide by the terms of the policy Proposal and notifying the subcontractor in writing within five days after any conviction for a violation by the employee of a criminal drug abuse statue in the workplace;
Notifying the Board within ten (10) days of the subcontractor's receipt of a notice of a conviction of any employee and,
Taking appropriate personnel action against an employee convicted of violating a criminal drug statue or require such employee to participate in a drug abuse assistance or rehabilitation program.
Name of Organization/Contractor(s):
Tetra Tech, Inc.
Signature of Authorized Representative:

Date: 6/21/2023

ATTACHMENT VI: CERTIFICATION REGARDING DISCLOSURE OF CONFLICT OF INTEREST

The undersigned certifies that, to the best of his or her knowledge or belief, that:

"No employee of the contractor, no member of the contractor's governing board or body, and no person who exercises any functions or responsibilities in the review or approval of the undertaking or carrying out of this contract shall participate in any decision relating to this contract which affects his/her personal pecuniary interest.

Executives and employees of contractor shall be particularly aware of the varying degrees of influence that can be exerted by personal friends and associates and, in administering the contract, shall exercise due diligence to avoid situations which give rise to an assertion that favorable treatment is being granted to friends and associates. When it is in the public interest for the contractor to conduct business with a friend or associate of an executive or employee of the contractor, an elected official in the area or a member of the North Central Texas Council of Governments, a permanent record of the transaction shall be retained.

Any executive or employee of the contractor, an elected official in the area or a member of the NCTCOG, shall not solicit or accept money or any other consideration from a third person, for the performance of an act reimbursed in whole or part by contractor or Department. Supplies, tools, materials, equipment or services purchased with contract funds shall be used solely for purposes allowed under this contract. No member of the NCTCOG shall cast a vote on the provision of services by that member (or any organization which that member represents) or vote on any matter which would provide a direct or indirect financial benefit to the member or any business or organization which the member directly represents".

No officer, employee or paid consultant of the contractor is a member of the NCTCOG.

No officer, manager or paid consultant of the contractor is married to a member of the NCTCOG.

No member of NCTCOG directly owns, controls or has interest in the contractor.

The contractor has disclosed any interest, fact, or circumstance that does or may present a potential conflict of interest.

No member of the NCTCOG receives compensation from the contractor for lobbying activities as defined in Chapter 305 of the Texas Government Code.

Should the contractor fail to abide by the foregoing covenants and affirmations regarding conflict of interest, the contractor shall not be entitled to the recovery of any costs or expenses incurred in relation to the contract and shall immediately refund to the North Central Texas Council of Governments any fees or expenses that may have been paid under this contract and shall further be liable for any other costs incurred or damages sustained by the NCTCOG as it relates to this contract.

Name of Organization/Contractor(s):
Tetra Tech, Inc.
Signature of Authorized Representative:
Date: 6/21/2023

CONFLICT OF INTEREST QUESTIONNAIRE

FORM CIQ

For vendor doing business with local governmental entity				
This questionnaire reflects changes made to the law by H.B. 23, 84th Leg., Regular Session.	OFFICE USE ONLY			
This questionnaire is being flied in accordance with Chapter 176, Local Government Code, by a vendor who has a business relationship as defined by Section 176.001(1-a) with a local governmental entity and the vendor meets requirements under Section 176.006(a).	Date Received			
By law this questionnaire must be filed with the records administrator of the local governmental entity not later than the 7th business day after the date the vendor becomes aware of facts that require the statement to be filed. See Section 176.006(a-1), Local Government Code.				
A vendor commits an offense if the vendor knowingly violates Section 176.006, Local Government Code. An offense under this section is a misdemeanor.				
Name of vendor who has a business relationship with local governmental entity.				
Check this box if you are filing an update to a previously filed questionnaire. (The law recompleted questionnaire with the appropriate filing authority not later than the 7th business you became aware that the originally filed questionnaire was incomplete or inaccurate.) Name of local government officer about whom the information is being disclosed.				
Name of Officer				
Describe each employment or other business relationship with the local government officer, or a family member of the officer, as described by Section 176.003(a)(2)(A). Also describe any family relationship with the local government officer. Complete subparts A and B for each employment or business relationship described. Attach additional pages to this Form CIQ as necessary. A. Is the local government officer or a family member of the officer receiving or likely to receive taxable income, other than investment income, from the vendor? Yes No B. Is the vendor receiving or likely to receive taxable income, other than investment income, from or at the direction of the local government officer or a family member of the officer AND the taxable income is not received from the local governmental entity? Yes No				
Describe each employment or business relationship that the vendor named in Section 1 mother business entity with respect to which the local government officer serves as an of ownership interest of one percent or more.				
Check this box if the vendor has given the local government officer or a family member of as described in Section 176.003(a)(2)(B), excluding gifts described in Section 176.0				
Signature of vendor doing business with the governmental entity	ate			

CONFLICT OF INTEREST QUESTIONNAIRE For vendor doing business with local governmental entity

A complete copy of Chapter 176 of the Local Government Code may be found at http://www.statutes.legis.state.tx.us/ Docs/LG/htm/LG.176.htm. For easy reference, below are some of the sections cited on this form.

Local Government Code § 176.001(1-a): "Business relationship" means a connection between two or more parties based on commercial activity of one of the parties. The term does not include a connection based on:

- (A) a transaction that is subject to rate or fee regulation by a federal, state, or local governmental entity or an agency of a federal, state, or local governmental entity;
- (B) a transaction conducted at a price and subject to terms available to the public; or
- (C) a purchase or lease of goods or services from a person that is chartered by a state or federal agency and that is subject to regular examination by, and reporting to, that agency.

Local Government Code § 176.003(a)(2)(A) and (B):

- (a) A local government officer shall file a conflicts disclosure statement with respect to a vendor if:
 - (2) the vendor:
 - (A) has an employment or other business relationship with the local government officer or a family member of the officer that results in the officer or family member receiving taxable income, other than investment income, that exceeds \$2,500 during the 12-month period preceding the date that the officer becomes aware that
 - a contract between the local governmental entity and vendor has been executed;
 - (ii) the local governmental entity is considering entering into a contract with the vendor:
 - (B) has given to the local government officer or a family member of the officer one or more gifts that have an aggregate value of more than \$100 in the 12-month period preceding the date the officer becomes aware that:
 - (i) a contract between the local governmental entity and vendor has been executed; or
 - (ii) the local governmental entity is considering entering into a contract with the vendor.

Local Government Code § 176.006(a) and (a-1)

- (a) Avendor shall file a completed conflict of interest questionnaire if the vendor has a business relationship with a local governmental entity and:
 - has an employment or other business relationship with a local government officer of that local governmental entity, or a family member of the officer, described by Section 176.003(a)(2)(A);
 - (2) has given a local government officer of that local governmental entity, or a family member of the officer, one or more gifts with the aggregate value specified by Section 176.003(a)(2)(B), excluding any gift described by Section 176.003(a-1); or
 - (3) has a family relationship with a local government officer of that local governmental entity.
- (a-1) The completed conflict of interest questionnaire must be filed with the appropriate records administrator not later than the seventh business day after the later of:
 - (1) the date that the vendor:
 - (A) begins discussions or negotiations to enter into a contract with the local governmental entity; or
 - (B) submits to the local governmental entity an application, response to a request for proposals
 or bids, correspondence, or another writing related to a potential contract with the local
 governmental entity; or
 - (2) the date the vendor becomes aware:
 - (A) of an employment or other business relationship with a local government officer, or a family member of the officer, described by Subsection (a);
 - (B) that the vendor has given one or more gifts described by Subsection (a); or
 - (C) of a family relationship with a local government officer.

ATTACHMENT VII: CERTIFICATION OF FAIR BUSINESS PRACTICES

That the submitter has not been found guilty of unfair business practices in a judicial or state agency administrative proceeding during the preceding year. The submitter further affirms that no officer of the submitter has served as an officer of any company found guilty of unfair business practices in a judicial or state agency administrative during the preceding year.

Name of Organization/Contractor(s):
Tetra Tech, Inc.
Signature of Authorized Representative:
Date: 6/21/2023

ATTACHMENT VIII: CERTIFICATION OF GOOD STANDING TEXAS CORPORATE FRANCHISE TAX CERTIFICATION

Pursuant to Article 2.45, Texas Business Corporation Act, state agencies may not contract with for profit corporations that are delinquent in making state franchise tax payments. The following certification that the corporation entering into this offer is current in its franchise taxes must be signed by the individual authorized on Form 2031, Corporate Board of Directors Resolution, to sign the contract for the corporation.

The undersigned authorized representative of the corporation making the offer herein certified that the following indicated Proposal is true and correct and that the undersigned understands that making a false Proposal is a material breach of contract and is grounds for contract cancellation.

Indicate the certification	ation that applies to yo	ur corpor	ation:	
	The Corporation is a for-profit corporation and certifies that it is not delinquent in its franchise tax payments to the State of Texas.			
	The Corporation is franchise taxes to	•	rofit corporation or is otherwise not subject to payment of of Texas.	
Type of Business (if not corporation):			Sole Proprietor	
			Partnership	
			Other	
	•	•	tion Act, the North Central Texas Council of Governments state franchise tax payments.	
Tetra Tech, Inc.				
(Printed/Typed Nan	ne and Title of Authori	zed Repre	esentative)	
Souther By				
(Signature C				
Data: 6/21/2023				

Not applicable to Tetra Tech. We have attached proof of our Good Faith Effort immediately after this form.

ATTACHMENT IX:

HISTORICALLY UNDERUTILIZED BUSINESSES, MINORITY OR WOMEN-OWNED OR DISADVANTAGED BUSINESS ENTERPRISES

Historically Underutilized Businesses (HUBs), minority or women-owned or disadvantaged businesses enterprises (M/W/DBE) are encouraged to participate in the solicitation process. Representatives from HUB companies should identify themselves and submit a copy of their certification.

NCTCOG recognizes the certifications of both the State of Texas Program and the North Central Texas Regional Certification Agency. Companies seeking information concerning HUB certification are urged to contact:

State of Texas HUB Program
Texas Comptroller of Public Accounts
Lyndon B. Johnson State Office Building
111 East 17th Street
Austin, Texas 78774
(512) 463-6958
http://www.window.state.tx.us/procurement/prog/hub/

Local businesses seeking M/W/DBE certification should contact:

North Central Texas Regional Certification Agency 624 Six Flags Drive, Suite 100 Arlington, TX 76011 (817) 640-0606 http://www.nctrca.org/certification.html

Indianta all that amply

Submitter must include a copy of its minority certification documentation as part of this solicitation. If your company is already certified, attach a copy of your certification to this form and return with your proposal.

indicate all that apply:		ned Business Enter	·		
	Disadvantaç	ged Business Enterp	orise		
ATTEST TO Attachments	of Certification	n:			
Authorized Signature					
Typed Name	Date				
Subscribed and sworn to bef	ore me this	day of	(month), 2	20 in	
((city),	(county),	(state).		
Notary Public in and for		(County),		SEAL	
State of	_ Commission e	expires:			

From: <u>Mauriello, Caroline</u>
To: <u>Mauriello, Caroline</u>

Bcc: noel@noshconsulting.com; alex.omeke@secureoperatingsolutions.com; vbwechie@hotmail.com; james@ethan-

solutions.com; frank.sama@fncareservices.org; joseph@laredotechnical.com; lisa@sagespeaking.com;

<u>irroberts@aophillips.com</u>; <u>solanrewaju@desharksolutions.com</u>; <u>lisa.williams@dce-corp.com</u>;

elitetax42@gmail.com; info@fosteraccountingfirm.com; rose@galacevacctg.com; nazw@globalforce-us.com;

ben@gomezandco.com; cgbalque@insi-net.com; lamelinc@gmail.com; mdporterpllc@yahoo.com;

mdporterpllc@yahoo.com; peter.kiilu@nicheconsult.net; info@pattersontaxfirm.com; info@pattersontaxfirm.com; info@pattersontaxfirm.com;

adotson@peopleworks.org; vladimirnaranjo@pmgunited.com; rpatrick@tcbservices.com; robert@theallencpafirm.com; ads@access-data.com; ads@access-data.com; info@snapstaff.net; info@snapstaff.net; deepali.loney@aigtechnical.com; brittany@bestaffingsolutions.net;

rachel@bickhamservicesultd.com; info@columbiapersonnel.com; info@crowderhrconsultingfirm.com;

thessleblanc@delmetservices.com; lisa.williams@dce-corp.com; irma@etchouston.com;

mmartin@fronzafrancis.com; gwasadrives@gmail.com; nazw@globalforce-us.com; skelly@kstaffing.net; clane@lanestaff.com; lloyd@lmgtechnology.com; patricia.alexander@oncestaffingservices.com; adotson@peopleworks.org; phdresources1@gmail.com; information@ptg.com; information@ptg.com; tjones@searchandstaff.com; nicolebellow@smarterhrsolutions.com; nicolebellow@smarterhrsolutions.com; jdean@deansprofessionalservices.com; kasi-sri@srigl.com; sylvia@thinkcava.com; sylvia@thinkcava.com; tracy.smith@taylorsmithconsulting.com; fchevalier@chevalierlaw.com; fchevalier@chevalierlaw.com;

lavaille2@aol.com; lavaille2@aol.com; certifications@tlceng.com; dcjones8160@gmail.com;

cindy.nguyen@smartview-solutions.biz; kyoung@workhorsetemps.com; kyoung@workhorsetemps.com
 Subject: EXPEDITED Request for Bid- North Central Texas Council of Governments- Grant Management & Consulting

Services

Date: Thursday, June 15, 2023 12:31:00 PM

Attachments: North Central Texas Council of Governments NCTCOG-RFP - Grant Management and Consulting Services.pdf

image001.png

Standard Subcontract Ts&Cs.pdf

Importance: High

GOOD AFTERNOON-

Tetra Tech, Inc. (Tetra Tech) is currently working on preparing a proposal in response to the North Central Texas Council of Governments- Grant Management & Consulting Services RFP (attached). Tetra Tech officially invites you to provide a Statement of Qualifications for services relevant to your organization, as described in the attached RFQ, including <u>staff augmentation services and accounting</u> <u>services</u>, as well administrative services local to the Dallas/Ft. Worth area.

The specific requirements for these services can be found in the attached file.

This solicitation does not commit Tetra Tech or the North Central Texas Council of Governments to pay any costs incurred in the preparation and submission of an offer in any form, or to subcontract for said services or supplies. It is also brought to each offeror's attention that the Tetra Tech procurement representative or designee is the only individual who can commit Tetra Tech into expenditure of funds in connection with any subcontract resulting from this solicitation.

If you intend to respond to this invitation to bid, the following instructions are required:

- 1. Please submit a brief company overview and any past history/experience with the North Central Texas Council of Governments
- 2. Please submit resumes for the key positions that apply to your company's service capabilities -- see the RFP for Staffing Requirements and the description of the key personnel and required qualifications.
- 3. If your company is DBE, WBE, MBE, etc. please provide relevant vendor identification number(s) and certificates.
- 4. CAREFULLY review the Terms and Conditions contained in the entirety of the RFP and Tetra Tech's General Conditions (Example attached) which would be incorporated into any subcontract/master agreement or purchase order awarded as a result of the solicitation. Tetra Tech will require you to adhere to the terms and conditions described therein, in addition to entering into a standard Teaming Agreement during the submission of proposal and award period.

If you are interested in submitting a proposal, it would be helpful for you to please provide your Key

Personnel References and Statement of Qualifications as soon as possible!

All bids must be received no later than June 21, 2023 at 5:00 PM.

Offeror must e-mail its proposal submission to:

TDR.Contracts@tetratech.com

For your bid to be considered, please send it ONLY to the above email address and include the following subject line in your email submission

"YOUR COMPANY NAME – Bid Submission re: North Central Texas Council of Governments- Grant Management & Consulting Services"

Award of a Subcontractor/Master Agreement as a result of this solicitation is governed by the terms and conditions of an executed teaming agreement with Tetra Tech and is contingent upon Tetra Tech award of a contract by the North Central Texas Council of Governments. Tetra Tech may or may not issue Subcontracts/Masters Agreements as a result of this solicitation.

Offeror agrees and acknowledges that any subcontract awarded shall contain Tetra Tech terms, insurance requirements, health and safety requirements, and any applicable flow-down provision of Tetra Tech's prime contract with the North Central Texas Council of Governments. Questions regarding this solicitation shall be directed to (TDR.Contracts@tetratech.com).

Tetra Tech, Inc. | <u>Leading with Science</u> | Tetra Tech Disaster Recovery



This message, including any attachments, may include privileged, confidential and/or inside information. Any distribution or use of this communication by anyone other than the intended recipient is strictly prohibited and may be unlawful. If you are not the intended recipient, please notify the sender by replying to this message and then delete it from your system.

ATTACHMENT X ATTESTATION OF CONTRACTS NULLIFYING ACTIVITY

The following provisions are mandated by Federal and/or State of Texas law. Failure to certify to the following will result in disqualification of consideration for contract. Entities or agencies that are not able to comply with the following will be ineligible for consideration of contract award.

PROHIBITED TELECOMMUNICATIONS AND VIDEO SURVEILLANCE SERVICES OR EQUIPMENT CERTIFICATION

This Contract is subject to the Public Law 115-232, Section 889, and 2 Code of Federal Regulations (CFR) Part 200, including §200.216 and §200.471, for prohibition on certain telecommunications and video surveillance or equipment.

Public Law 115-232, Section 889, identifies that restricted telecommunications and video surveillance equipment or services (e.g. phones, internet, video surveillance, cloud servers) include the following:

- A) Telecommunications equipment that is produced by Huawei Technologies Company or ZTE Corporation (or any subsidiary or affiliates of such entities).
- B) Video surveillance and telecommunications equipment produced by Hytera Communications Corporations, Hangzhou Hikvision Digital Technology Company, or Dahua Technology Company (or any subsidiary or affiliates of such entities).
- C) Telecommunications or video surveillance services used by such entities or using such equipment.
- D) Telecommunications or video surveillance equipment or services produced or provided by an entity that the Secretary of Defense, Director of the National Intelligence, or the Director of the Federal Bureau of Investigation reasonably believes to be an entity owned or controlled by the government of a covered foreign country.

The entity identified below, through its authorized representative, hereby certifies that no funds under this Contract will be obligated or expended to procure or obtain telecommunication or video surveillance services or equipment or systems that use covered telecommunications equipment or services as a substantial or essential component of any system, or as a critical technology as part of any system prohibited by 2 CFR §200.216 and §200.471, or applicable provisions in Public Law 115-232 Section 889.

☑ The Contractor or Subrecipient hereby certifies that it does comply with the requirements of 2 CFR §200.216 and §200.471, or applicable regulations in Public Law 115-232 Section 889.

SIGNATURE OF AUTHORIZED PERSON:	Jonethe Bezo
NAME OF AUTHORIZED PERSON:	Jonathan Burgiel
NAME OF COMPANY:	Tetra Tech, Inc.
DATE:	6/21/2023

☐ The Contractor or Subrecipient hereby certifies that it cannot comply with the requirements of 2 Cl §200.216 and §200.471, or applicable regulations in Public Law 115-232 Section 889.	FR
SIGNATURE OF AUTHORIZED PERSON:	
NAME OF AUTHORIZED PERSON:	
NAME OF COMPANY:	
DATE:	

DISCRIMINATION AGAINST FIREARMS ENTITIES OR FIREARMS TRADE ASSOCIATIONS

This contract is subject to the Texas Local Government Code chapter 2274, Subtitle F, Title 10, prohibiting contracts with companies who discriminate against firearm and ammunition industries.

TLGC chapter 2274, Subtitle F, Title 10, identifies that "discrimination against a firearm entity or firearm trade association" includes the following:

- A) means, with respect to the entity or association, to:
 - I. refuse to engage in the trade of any goods or services with the entity or association based solely on its status as a firearm entity or firearm trade association; and
 - II. refrain from continuing an existing business relationship with the entity or association based solely on its status as a firearm entity or firearm trade association; or
 - III. terminate an existing business relationship with the entity or association based solely on its status as a firearm entity or firearm trade association.
- B) An exception to this provision excludes the following:
 - I. contracts with a sole-source provider; or

SIGNATURE OF AUTHORIZED

II. the government entity does not receive bids from companies who can provide written verification.

The entity identified below, through its authorized representative, hereby certifies that they have no practice, policy, guidance, or directive that discriminates against a firearm entity or firearm trade association; and that they will not discriminate during the term of the contract against a firearm entity or firearm trade association as prohibited by Chapter 2274, Subtitle F, Title 10 of the Texas Local Government Code.

☑ The Contractor or Subrecipient hereby certifies that it does comply with the requirements of Chapter 2274, Subtitle F, Title 10.

PERSON:	(Lutte Buy)	
NAME OF AUTHORIZED PERSON:	Jonathan Burgiel	
NAME OF COMPANY:	Tetra Tech, Inc.	
DATE:	6/21/2023	
·OR-		
□ The Contractor or Subrecipient hereby of Subtitle F, Title 10.	certifies that it cannot comply with the requirements of C	Chapter 2274
SIGNATURE OF AUTHORIZED PERSON	N:	
NAME OF AUTHORIZED PERSON:		_
NAME OF COMPANY:		_
DATE:		_

BOYCOTTING OF CERTAIN ENERGY COMPANIES

This contract is subject to the Texas Local Government Code chapter 809, Subtitle A, Title 8, prohibiting contracts with companies who boycott certain energy companies.

TLGC chapter Code chapter 809, Subtitle A, Title 8, identifies that "boycott energy company" means, without an ordinary business purpose, refusing to deal with, terminating business activities with, or otherwise taking any action that is intended to penalize, inflict economic harm on, or limit commercial relations with a company because the company:

- engages in the exploration, production, utilization, transportation, sale, or manufacturing of fossil fuel-based energy and does not commit or pledge to meet environmental standards beyond applicable federal and state law; and
- II. does business with a company described by paragraph (I).

The entity identified below, through its authorized representative, hereby certifies that they do not boycott energy companies, and that they will not boycott energy companies during the term of the contract as prohibited by Chapter 809, Subtitle A, Title 8 of the Texas Local Government Code.

☑ The Contractor or Subrecipient hereby certifies that it does comply with the requirements of Chapter 809, Subtitle A, Title 8.

PERSON:	1 11 12)	
NAME OF AUTHORIZED PERSON:	Jonathan Burgiel	
NAME OF COMPANY:	Tetra Tech, Inc.	
DATE:	6/21/2023	
-OR-		
□ The Contractor or Subrecipient hereby Subtitle A, Title 8.	certifies that it cannot comply with the requirements of	Chapter 809,
SIGNATURE OF AUTHORIZED PERSOI	N:	
NAME OF AUTHORIZED PERSON:		_
NAME OF COMPANY:		_
DATE:		_
		<u>—</u>

EXHIBIT A Service Area Designation Forms

	Texa	as Service Area Designation or Identifi	cation				
Respondent							
Name:	Tetra Tech, Inc.						
Notes:	Indicate in the appropriate be	ox whether you are proposing to service	the entire State of Texas				
	Will service the entire State or	f Texas Will not service the er	Il not service the entire State of Texas				
	Yes						
	If you are not proposing to service the entire State of Texas, designate on the form below the regions that you are proposing to provide goods and/or services to. By designating a region or regions, you are certifying that you are willing and able to provide the proposed goods and services.						
Item	Region	Metropolitan Statistical Areas	Will You Serve This Designated Service Area?				
1.	North Central Texas	16 counties in the Dallas-Fort Worth Metropolitan area	-				
2.	High Plains	Amarillo Lubbock					
3.	Northwest	Abilene Wichita Falls					
4.	Upper East	Longview Texarkana, TX-AR Metro Area Tyler					
5.	Southeast	Beaumont-Port Arthur					
6.	Gulf Coast	Houston-The Woodlands- Sugar Land					
7.	Central Texas	College Station-Bryan Killeen-Temple Waco					
8.	Capital Texas	Austin-Round Rock					
9.	Alamo	San Antonio-New Braunfels Victoria					
10.	South Texas	Brownsville-Harlingen Corpus Christi Laredo McAllen-Edinburg-Mission					
11.	West Texas	Midland Odessa San Angelo					
12.	Upper Rio Grande	El Paso					

	Nat	ionwide Service Area D	esignation or Identification Forn	1
Respondent Name:	Tetra Tech, Inc.			
Notes:	Indicate in the appropriate box whether you are proposing to provide service to all Fifty (!			(50) States.
	Will service all Fift		Will not service Fifty (50) States	(00) 000000
	Yes			
	States that you ware willing and ab	ill provide service to. By designle to provide the proposed go	50) States, then designate on the form be mating a State or States, you are certifying ods and services in those States. Region, metropolitan statistical area (MSA) column box.	g that you
Item	State	Re	gion/MSA/City	Designated
				as a Service
				Area
1.	Alabama			1.1.50
2.	Alaska			
3.	Arizona			
4.	Arkansas			
5.	California			
6.	Colorado			
7.	Connecticut			
8.	Delaware			
9.	Florida			
10.	Georgia			
11.	Hawaii			
12.	Idaho			
13.	Illinois			
14.	Indiana			
15.	lowa			
16.	Kansas			
17.	Kentucky			
18.	Louisiana			
19.	Maine			

20.	Maryland	
21.	Massachusetts	
22.	Michigan	
23.	Minnesota	
24.	Mississippi	
25.	Missouri	
26.	Montana	
27.	Nebraska	
28.	Nevada	
29.	New Hampshire	
30.	New Jersey	
31.	New Mexico	
32.	New York	
33.	North Carolina	
34.	North Dakota	
35.	Ohio	
36.	Oregon	
37.	Oklahoma	
38.	Pennsylvania	
39.	Rhode Island	
40.	South Carolina	
41.	South Dakota	
42.	Tennessee	
43.	Texas	
44.	Utah	
45.	Vermont	
46.	Virginia	
47.	Washington	
48.	West Virginia	
49.	Wisconsin	
50.	Wyoming	

EXHIBIT C Service Questionnaire

Respondents are encouraged to consider that cooperative contracts are able to be offered to any public-sector agency that can benefit from them, anywhere in the nation.

In Exhibit B, you provided your standard rates for services. For any or all of these services, you may therefore provide a percentage discount off of this standard pricelist. A 0% discount must still be denoted on the line item(s) with the number zero. Respondents are <u>not</u> required to propose a discount.

Indicate the services you are able to offer, as well as any Proposed % Discount from the pricing offered on Exhibit B. If you are not proposing a percentage-discount, please mark that field as "0".

Ca	tegory #	Description	Yes	No	Proposed % Discount
	1	Grant Management & Consulting Services	✓		0%

Respondents should address the following items in Tab D: Technical Proposal if they are applicable for the service(s) being proposed.

- Respondents are asked to identify services that they are able to provide.
- Respondents are not required to be able to respond to all services in order to provide a proposal to this RFP.
- Those Respondents that are capable of providing more than a single service, indicate which in the table above, and provide an individual narrative relating to the needs of each Service Category as described in Exhibit B.
- Responses should consist of detailed descriptions of what a Respondent's firm is capable of
 providing to the TXShare Public Purchasing Cooperative. The numbered activities in each Service
 Category must be addressed, but Respondents are encouraged to provide additional detail about
 their operation and capabilities.
- Respondents who wish to propose additional services or pavement analysis services are
 encouraged to do so by attaching additional (as many as necessary) to describe said products or
 services and their associated pricing structures.

Note: Respondent is not required to complete any questions that are not applicable to the services you are bidding.

CERTIFICATE OF INTERESTED PARTIES

FORM **1295**

1 of 1

	Complete Nos. 1 - 4 and 6 if there are interested parties. Complete Nos. 1, 2, 3, 5, and 6 if there are no interested parties.			OFFICE USE ONLY CERTIFICATION OF FILING		
1	Name of business entity filing form, and the city, state and country of the business entity's place of business.			Certificate Number: 2023-1035535		
	TETRA TECH, INC.				Filed:	
2	Houston, TX United States Name of governmental entity or state agency that is a party to th	e contract for which	the form is		6/2023	
	being filed.			Date	Acknowledged:	
	North Central Texas Council of Governments			Date	Acknowledged.	
3	Provide the identification number used by the governmental enti			the c	ontract, and pro	vide a
	description of the services, goods, or other property to be provided RFP # 2023-028	ded under the contrac	CI.			
	GRANT MANAGEMENT & CONSULTING SERVICES					
_					Nature o	f interest
4	Name of Interested Party	City, State, Country	(place of busin	ess)	ess) (check applicable)	
					Controlling	Intermediary
5	Check only if there is NO Interested Party.					
6	UNSWORN DECLARATION					
	My name is Jonathan Burgiel, Business Unit President, and my date			birth is	05/02/1962	·
	My address is 2301 Lucien Way, Suite 120	Maitland	FL		32751	USA
	My address is 2301 Lucien Way, Suite 120 (street)	(city)	,,	ate)	32751 (zip code)	(country)
	I declare under panelty of periusy that the ferencing is true and serve	* †				
	I declare under penalty of perjury that the foregoing is true and correct			16	li ne e	00
	Executed in Orange County	y, State of Florida	, on the	010	day of June	, 20
		7			(month)	(year)
		Com the	Bur			
		Signature of author	zed agent of con (Declarant)	tracting	g business entity	
			/			

TE TETRA TECH

John Buri

Senior Management Team



16 YEARS OF EXPERIENCE

41 DISASTER DECLARATIONS

\$3B DISASTER RELATED GRANTS

Areas of Expertise

- DAMAGE ASSESSMENT
- POLICY AND PROCUREMENT
- DEBRIS MANAGEMENT
- DISASTER HOUSING
- GRANT APPLICATION DEVELOPMENT
- GRANT ACCOUNTING SYSTEMS
- AUDIT PROCESS
- CLOSEOUT PROCEDURES

Disasters

4245 TX FLOOD

4241 SC FLOOD

4240 CA WILDFIRE

4223 TX FLOOD

4222 OK FLOOD

4193 NAPA EARTHQUAKE

& SEVERAL MORE

Grant Experience

- FHWA-ER PROGRAM
- HUD CDBG-DR
- FEMA PA
- FEMA 404 HMGP
- FEMA HMA

Education

Texas State University Master of Arts, Public Administration, 2002

The University of Texas Bachelor of Arts, Government, 2000

EXPERIENCE SUMMARY

Mr. John Buri is a director of post-disaster programs for Tetra Tech, Inc., and a member of our senior management team. Mr. Buri has a thorough understanding and practical application of industry best practices and federal guidance governing such efforts including the Federal Emergency Management Agency (FEMA), Hazard Mitigation Assistance (HMA), FEMA Public Assistance (PA) Program, 2 CFR 200, HUD CDBG-DR and disaster funding strategies for local and state governments. Key highlights of Mr. Buri's career include:

- **16 years of experience:** Working with mitigation, emergency management planning, response, and recovery operations
- \$3 billion: His work has represented over \$3B in disaster related grants.
- **22 Disaster Declarations:** Performed in roles of project manager or principal-in-charge
- \$142 million: Served as program manager for \$142M in buyout /elevations
- **41 Total Disaster Declarations:** Worked on projects in either a project manager, principal in charge or support role.
- 17 States: Worked in 17 states across 8 FEMA Regions
- **100 clients**: Mr. Buri has worked for over 100 state and local governments clients since 2004
- 39 national and state-level conference speaking engagements: He is a
 nationally recognized speaker on disaster recovery and preparedness topics,
 presenting at the National Hurricane Conference, National Hazardous Materials
 Management Association Annual Conference, Solid Waste Association of North
 America Annual Conference (WasteCon), Maryland Emergency Management
 Association Conference, Government Finance Officers Association Conference,
 Texas Homeland Security Conference, North Carolina Emergency Management
 Conference, and the National Forum for Black Public Administrators Conference.

RELEVANT EXPERIENCE

Program Manager (2008, 2015, 2017)

City of Houston, Texas | Multi-Year Emergency Management and Disaster Recovery Services

- Managed emergency responses to major disasters including Hurricane lke in 2008 (DR-1791), Memorial Day flood in 2015 (DR-4223), Tax Day flood in 2016 (DR-4269); and Hurricane Harvey 2017
- Following each disaster, coordinated with FEMA, Texas Division of Emergency Management (TDEM), USACE, Texas Commission on Environmental Quality (TCEQ), city departments, elected officials, congressional offices and volunteer groups to coordinate field activities, damage site inspections, eligibility reviews, and audits
- Managed planning team for 5 task orders under the DHS' Regional Catastrophic Planning Initiative Grant and Urban Area Security Initiative grant allocated to the City of Houston Office of Homeland Security

 Program manager for the City's flood resilience initiative in supporting the City's Flood Czar conducting damage analysis, mitigation project identification and identification of grant opportunities.

Performance and Task Manager

Various Clients - US | Hazard Mitigation Grant Program

- Overall responsibility for the management and performance of task orders supporting \$90+ in HMGP Grant applications across Texas, Georgia, Florida, South Carolina and North Carolina.
- Developed processes and implementation strategies for outreach, intake and verification for 100 elevations and 200 acquisition/demolitions.

Program Manager (2008-2016)

Montgomery County, Texas | Multi-Year Emergency Management and Disaster Recovery Services

Mr. Buri managed emergency responses to multiple major disasters including Hurricane lke in 2008 (DR-1791) and two floods in 2016 (DR-4269 and DR-4272). He directed various task orders following disasters including project formulation, technical assistance on the PA grant program, conducting substantial damage estimation of 250 flooded properties, data collection for PA grant program and grant application for FEMA FMA grant program. He served as the client point of contact, prepared cost and technical task order proposals, assigned resources, reviewed deliverables, and tracked costs and schedules to ensure compliance with statements of work and approved budgets

Subject Matter Expert/Senior Management Oversight (October 2015 to Ongoing)

Richland County, South Carolina | Public Assistance Consulting

Mr. Buri has been an integral part of Tetra Tech's Richland County disaster recovery team assisting the Project Manager and consultants with obtain data, policy interpretation and general grant consulting. Mr. Buri has focused his time assisting with navigating the on-going challenges associated with dam reconstruction, road damage restoration and long term recovery.

Program Manager (May 2015 – 2016)

Hays County, Texas | Full Services Disaster Grant Management Consulting and Debris Management | May 2015 (DR 4223) and October 2015 Floods (DR-4245)

Mr. Buri is currently leading the Tetra Tech team supporting Hays County following two (2) major disaster declarations in 2015 including the May Memorial Day Flood and October All-Saints Day Flood that. This includes providing technical assistance to County leadership regarding FEMA PA, HMGP and CDBG-DR grant programs.

Subject Matter Expert/Senior Management Oversight (May 2015-Ongoing)

City of Houston, Texas | Disaster Debris Monitoring and Public Assistance Consulting

Following the May 2015 Memorial Day Flood in Houston, Mr. Buri worked closely with the City of Houston's Disaster Recovery team on debris and FEMA reimbursement related issues. Mr. Buri developed operational plans, press releases, USACE/FEMA coordination, and daily progress reports along with contractor and force account labor documentation for submission to FEMA.

Senior Management Oversight (February 2014-May 2014)

Counties of Barnwell; Colleton; Dorchester; Hampton; Sumter, South Carolina; City of Sumter, South Carolina; City of Augusta, Georgia | Winter Storm Pax Disaster Debris Program Management

Following the destructive effects of Winter Storm Pax in February 2014, our team was tasked with providing disaster debris program management to numerous communities in the States of South Carolina and Georgia. Mr. Buri was instrumental in the immediate deployment of our team and is currently overseeing all disaster recovery operations, including leaner and hanger removal. In addition, Mr. Buri is currently working with each community to ensure that all eligible reimbursement is captured and documented.

Program Manager (2013)

Boulder County, Colorado | Disaster Grant Management Consulting

- Overall responsibility for the management and performance of our task order for \$8M in consulting services associated with the administration and documentation to support disaster grants
- Managed the grant administration of \$300M in FEMA PA, FEMA HMGP, FHWA-ER, NRCS-EWP and HUD CDGB-DR recovery
 grants following the front-range floods.

- Coordinated recovery efforts between the County, USACE, NRCS, FEMA, Colorado Department of Local Affairs (DOLA), Colorado Division of Homeland Security and Emergency Management (DHSEM), Colorado Department of Transportation, Town of Lyons and Jamestown, internal county departments and elected officials.
- Facilitated strategic planning meetings with community stakeholders to identify long term recovery initiatives.

Subject Matter Expert/Senior Management Oversight (February 2013-January 2014)

New Jersey Department of Environmental Protection | Hurricane Sandy Waterway Debris Removal Project

Mr. Buri provided subject matter expertise in the development and implementation of numerous protocols and procedures to effectively manage the New Jersey Department of Environmental Protection's (NJDEP) waterways debris removal program. Mr. Buri oversaw the implementation of our automated debris management system (ADMS) technology, which increased NJDEP's visibility to the day-to-day operations and provided real-time reporting of debris quantities. Due to the excellent senior and project management provided by our team, NJDEP then tasked our team with monitoring the sediment removal process in the northern and southern region.

Senior Management Oversight (March 2013-January 2014)

New Jersey Department of Environmental Protection – Liberty State Park | Hurricane Sandy FEMA PA Program Management

Hurricane Sandy's effect on the NJDEP's Liberty State Park was epic, covering the entire park in several feet of seawater and affected nearly all of the park's facilities and infrastructure, which included the Central Railroad of New Jersey Terminal Building. Mr. Buri managed a team of senior consultants that were immediately deployed to assist with the park's federal grant management. Mr. Buri oversaw all catalogued eligible damage, established relationships with FEMA and state officials, and oversaw the submission of project worksheets (PWs). Mr. Buri also was instrumental in working with NJDEP's engineers to develop comprehensive hazard mitigation proposals to protect the facilities against future similar storms, including a \$2 million hazard mitigation plan for the Terminal Building.

Senior Management Oversight (September 2012-December 2012)

City of New Orleans, Jefferson Parish, St. John the Baptist Parish, Louisiana | Hurricane Isaac Disaster Debris Program Management

Mr. Buri provided senior management oversight and operational and client support for the debris monitoring efforts following Hurricane Isaac to numerous communities in the State of Louisiana following Hurricane Isaac. During this effort, our team monitored the collection and disposal of over 670,000 cubic yards of debris.

Program Manager (July 2010-September 2012)

Port of Galveston, Texas | Hurricane Ike Federal Grant Administration

Mr. Buri provided senior management oversight in assisting the Port of Galveston on a number of reimbursement-related issues. With Mr. Buri's management and guidance, the Port of Galveston received more than \$40 million in additional federal funding associated with permanent repairs to several of the port's piers following damage from Hurricane lke in 2008.

Senior Management Oversight (October 2011-April 2012)

State of Connecticut | Winter Storm Alfred Disaster Debris Program Management

Mr. Buri provided senior management oversight to the State of Connecticut as a member of the Interagency Debris Management Task Force (IDMTF) at the state EOC for Winter Storm Alfred. He worked closely every day with members from Connecticut Division of Emergency Management and Homeland Security, the Connecticut National Guard, Department of Energy and Environmental Protection, and Connecticut Department of Transportation. This involved advising the State of Connecticut on all debris-related issues during response and recovery from the storms and providing operational and client support. In addition, Mr. Buri assisted in the management of12 individual local governments and 45 communities to collect more than 1.5 million cubic yards of vegetative debris and remove over 100,000 hazardous trees.

Senior Management Oversight/Client Liaison (September 2011–August 2013)

Bastrop County, Texas | Wildfire Disaster Program Management

Mr. Buri provided senior management oversight to Bastrop County's disaster recovery operations following the most devastating wildfires in Texas history. With 1,700 structures destroyed, Mr. Buri was vital in obtaining expedited PWs, coordinating directly

with FEMA to develop disaster-specific documentation protocols, and orchestrating interlocal coordination with county municipalities, electrical co-ops, and regulatory agencies.

Senior Management Oversight (January 2012-October 2013)

State of Vermont | Hurricane Irene FEMA HMGP Application, Administration, and Implementation

In the wake of Hurricane Irene, the State of Vermont Emergency Management Department engaged our team to assist with its mitigation process. This included consulting services to evaluate the feasibility of submitting an application for the buyout of substantially damaged or destroyed structures and the elevation of less damaged structures under the FEMA HMGP. Within 48 hours, our team deployed a team of experts to the State of Vermont EOC to manage all aspects of these processes. Beginning with applicant outreach and program setup, the project team collected, reviewed, and offered technical assistance to applicants on their HMGP applications to ensure that applications are completed per program timelines and stand a good chance of being awarded through the \$23 million HMGP grant. As a result of the quality and timeliness of our team's work on the HMGP applications, the State sought our team's assistance with a number of FEMA PA-related issues, including grant management of the State's Waterbury Office Complex, which was severely flooded.

Senior Management Oversight (August-December 2011)

State of North Carolina | Hurricane Irene Disaster Debris Program Management

Mr. Buri provided senior management oversight to the State of North Carolina following the impact of Hurricane Irene and was instrumental in all disaster recovery operations. Mr. Buri oversaw a variety of projects for all 16 of our North Carolina clients, including right-of-way debris removal and disposal, removal of dangerous hanging limbs and leaning trees, residential debris disposal, Federal Highway Administration (FHWA) debris segregation, and FEMA reimbursement.

Statewide Trainer (January–September 2011)

Texas Department of Transportation | FHWA-ER Training Manual and Workshop

Mr. Buri is the statewide trainer for the FHWA-ER workshops being held throughout the state of Texas. Mr. Buri developed the guidebook and coordinated with state officials and the FHWA-ER coordinator for the state to deliver over 20 workshops and provide training to over 500 individuals.

Regional Program Manager (September 2008–September 2010)

State of Texas – 78 Total Clients | Hurricane Ike Comprehensive Debris Management Operations and FEMA PA Administration and Management

Following Hurricane Ike, Mr. Buri served as regional program manager and provided senior management for approximately 78 clients in the state of Texas. Mr. Buri was instrumental in the immediate mobilization of our team and provided a full range of services and client support to each client. Mr. Buri also provided management and guidance to each client to ensure they received FEMA reimbursement.

Project Manager (September 2008-September 2011)

City of Houston, Texas | Hurricane Ike Disaster Debris Program Management

Mr. Buri served as a project manager to the City of Houston following Hurricane Ike, where Mr. Buri worked closely with the City of Houston Solid Waste and Finance Department to reconcile and provide detailed information of over \$110 million in invoices and over \$3 million in FHWA funds. In total, our team's response to the City of Houston included the collection of over 5.5 million cubic yards of debris in 256 zones throughout the City. This included 300 parks and open spaces and the removal of over 214,000 hazardous trees accompanied by 630,000 photographs to document eligibility.

Senior Management Oversight (September 2008–Ongoing)

Galveston County, Texas | FEMA HMGP, Severe Repetitive Loss (SRL), and CDBG Application, Administration, and Implementation

Following Hurricane Ike, Galveston County faced the daunting task of maintaining critical operations. Galveston County engaged our team to assist with its overall recovery process. This included consulting services for the FEMA PA program and evaluating the feasibility of submitting an application for the buyout of substantially damaged or destroyed structures and the elevation of less damaged structures under the FEMA HMGP. Within 48 hours, our team deployed a team of experts to Galveston County to manage all aspects of these processes. Beginning with public outreach and program setup, our staff began collecting applications from property owners and compiling an HMGP application for the buyout of up to 1,000 properties and the

elevation of 12 others through a \$102 million HMGP grant, which our team secured, implemented, and is in the process of closing out. In addition, Galveston County also engaged our team to assist with its extensive PA process and to act as a standby PA consultant for future disasters. Finally, on behalf of Galveston County, our team applied for a FEMA SRL grant to elevate many more flood-prone homes throughout Galveston County. The resulting \$31 million SRL grant award will be used to elevate as many eligible homes as possible and is being implemented by our team to closeout.

Project Manager (September 2005–August 2006)

Jefferson County, Texas | Hurricane Rita Disaster Management

Served as project manager to mobilize and deploy a full emergency response team in Jefferson County, Texas to assist with staging operations, project staffing and scheduling, and contracting and negotiations with the County's two debris removal contractors: Crowder Gulf and DRC. Services included temporary debris storage and recovery sites (TDSRS) selection and management, monitoring services, data management and call center operations.

Project Manager (September 2004-October 2007)

Escambia County, Florida | Hurricane Ivan Comprehensive Disaster Program Management

Our team provided comprehensive disaster debris program management services to Escambia County following one of the worst disasters in the Florida panhandle (Hurricane Ivan). Mr. Buri managed the collection and processing of approximately 10 million cubic yards of vegetative and construction and demolition debris, including 1.5 million cubic yards of contaminated sand. Mr. Buri was also instrumental in assisting the County to obtain approval from FEMA to remove debris from private property (as a reimbursable expense).

Client Liaison and Project Manager (December 2007–May 2008)

City of Norman, Oklahoma | Winter Storm Disaster Debris Program Management

Mr. Buri served as the client liaison and project manager following the severe winter storms that impacted the City of Norman in December 2007. Mr. Buri assisted with debris contractor procurement, overall program management and overseeing the debris removal monitoring for the collection and disposal of approximately 750,000 cubic yards of debris.

Project Manager (July 2007–March 2008)

Escambia County, Florida | Escambia County Disaster Debris Management Plan

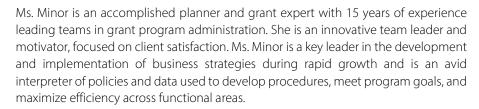
Mr. Buri assisted with the preparation of a disaster debris management plan for the County that identified responsibilities of key County staff and individuals from other participating jurisdictions. Pivotal to defining roles and responsibilities were two key workshops with all County and non-County stakeholders. Mr. Buri facilitated two half-day workshops, compiled the input and used the information for final plan development. The workshops were the basis for establishing a spirit of cooperation between, the County, participating municipalities, the Florida Department of Transportation, the Santa Rosa Island Authority and the Perdido Key Chamber of Commerce. The specific roles for each group in the event of a disaster were resolved and defined during the course of the meetings.



Brenna G. Minor, AICP

Senior Management Team / CDBG Subject Matter Expert

EXPERIENCE SUMMARY



In her current role, Ms. Minor provides guidance to state and local governments on housing and other programs funded by CDBG-DR, CDBG-MIT and COVID-19 programs as communities seek to assist residents recovering from disasters. She also leads teams in the implementation and management of disaster recovery housing programs.

Ms. Minor has served as program manager for the preparation and implementation of over \$5 billion in disaster recovery and community development projects, including with the Texas General Land Office's (GLO) Hurricane Harvey Community Development Block Grant-Disaster Recovery (CDBG-DR) programs and the Puerto Rico Department of Housing Hurricanes Maria and Irma CDBG-DR and MIT programs. She provides subject matter expertise, policy review and analysis, SOP development, and hires specialized personnel for key project management positions.

RELEVANT EXPERIENCE

Practice Lead (May 2020 – Present)

Tetra Tech, Inc. | Austin, TX

As the HUD practice lead for Tetra Tech Disaster Recovery, Ms. Minor leads teams and provides subject matter expertise to government clients implementing federal grant programs. She currently works with CDBG-DR, CDBG-MIT, CDBG-CV, FEMA, ARPA, and Coronavirus Relief Fund (CRF) projects. Her duties include researching and providing guidance on policies, implementing project management systems, developing action plans and applications, and communicating regularly with clients.

Project Executive (October 2022 – Present)

Puerto Rico Department of Housing | CDBG-DR Housing Program

Ms. Minor oversees Tetra Tech's implementation of the Home Repair, Reconstruction or Relocation program which affected residents with housing recovery following the devastation of hurricanes Maria and Irma.

Puerto Rico Department of Housing | CDBG-DR City Revitalization ProgramMs. Minor led the startup of the multi-sector City Revitalization Program which assists

local municipalities in Puerto Rico with spending housing, infrastructure and economic development funding post-hurricane.

Virgin Islands Housing Finance Authority | CDBG-DR Electrical Grid Action PlanAssisted the Virgin Islands Housing Finance Authority with developing programs and projects in for their \$64 million CDBG-DR allocation from HUD.

Metropolitan Development & Housing Authority | CDBG-DR/MIT Housing Action Plan

Oversaw a team developing the Metropolitan Development & Housing Authority programs and projects for their \$10 million CDBG-DR/MIT allocation from HUD.



15 YEARS OF EXPERIENCE

Areas of Expertise

Program Operations & Administration Housing Applicant Intake

CDBG and CDBG-DR Regulations

CDBG-MIT

Coronavirus Relief – FEMA, CRF and CDBG-CV

Davis-Bacon Compliance

Document Management

Eligibility Review

Hiring, Training and Development

Policy Analysis and Interpretation

Regulatory Interaction

Reporting

Technical Assistance

Key Training/Certifications

American Institute of Certified Planners (AICP) Certification

State and federal trainings including: Fair Housing, Uniform Relocation Act, Environmental and Procurement regulations

Education

Tufts University, Master of Arts in Urban and Environmental Policy and Planning, 2007

Boston University, Bachelor of Arts in Political Science, 2005

Senior Program Manager (March 2021 – January 2022)

Various Clients | Emergency Rental Assistance Program

Develop policies and procedures, interpret Treasury guidance and lead project management teams in the implementation of ERA programs totaling more than \$1 billion in assistance.

- State of Texas ERA program management over 20,000 applicant files reviewed to-date
- City of Philadelphia ERA technical assistance
- Fort Bend County, Texas COVID-19 relief appeals processing
- Leon County, Florida ERA program management
- Broward County, Florida ERA program management

Senior Advisor (June 2020 – June 2021)

U.S. Virgin Islands | CDBG-MIT Action Plan

Assisted the Virgin Islands Housing Finance Authority with developing programs and projects in the areas of housing, infrastructure, economic development, and public services for their \$774 million CDBG-MIT allocation from HUD. Led a team drafting the CDBG-MIT Action Plan which was submitted to HUD and approved.

ADDITIONAL EXPERIENCE

Senior Vice President and Vice President (January 2011 – October 2019)

GrantWorks, Inc.

Ms. Minor formulated and implemented the firm's strategies and policies as a member of executive team, including strategies for maintaining success during rapid growth from 60+ employees to 160+ employees in a 1-year period. Ms. Minor established relationships, developed proposals, and negotiated and managed contracts.

As Vice President, Ms. Minor led the functions of the largest department in the company implementing federal and state grant programs for local governments, the majority of which were CDBG and CDBG-DR funded. She developed organizational tools and strategies to ensure projects were completed on time; conducted employee reviews and made staffing decisions; and interpreted government publications and regulations as they pertain to project implementation and disseminated new information to a team of 20+ project managers that later grew to more than 50. Ms. Minor also developed internal policies and procedures and grew teams in new areas of grant management, such as FEMA programs.

Director of Community Development (December 2009 – July 2011)

GrantWorks, Inc.

Ms. Minor provided technical assistance in preparing hundreds of Community Development applications for CDBG and CDBG-DR infrastructure projects. She developed processes and forms to streamline project management and incorporate staff comments and coached project managers on maintaining productive relationships with clients, engineers, and state agencies. She provided continuous support, technical assistance, and training for project management staff and served as company liaison with clients and key stakeholders. Ms. Minor also attended trainings and webinars with project managers in order to hone program knowledge and maintain certifications.

Project Manager (August 2007 – December 2009)

GrantWorks, Inc.

Ms. Minor managed 50+ Community Development Block Grant (CDBG) infrastructure projects for Texas communities. She worked directly with local government officials, project engineers, and staff members of state agencies and managed financial and technical project requirements to meet strict state and federal thresholds. Ms. Minor conducted public hearings and presented comments to local governments. She also prepared and submitted project paperwork, such as contract amendments, Davis-Bacon compliance documents, environmental studies, invoices, budget modifications and project completion reports.

GIS Specialist and Graduate Assistant (August 2005-May 2007)

Tufts University

Ms. Minor was a graduate assistant to the Urban and Environemntal Policy and Planning program at Tufts University. She also served as a GIS specialist for the Tufts GIS Labaratory.



Christina R. Hendrick, MPA, PMP

Program Manager, Public Assistance



14+

YEARS OF EXPERIENCE

77

DISASTERS

\$6B

JRAN I UNDING

Areas of Expertise

Program Design / Implementation

Grant Administration

Business Planning

Project Budgeting & Accountability

Reimbursement Maximization

Process Engineering

State and Federal Regulations/Policies

Process Improvement

Resource Management

Grant Experience

FEMA PA AND FEMA HMGP

CDBG

CARES Act

Key Training/Certifications

Project Management Professional (PMP)

Education

Louisiana State University Master of Public Administration, 2011

Louisiana Tech University Bachelor of Liberal Arts, Political Science/Pre-Law and English, 2006

EXPERIENCE SUMMARY

Christina Hendrick is a seasoned grant manager with more than 14 years of experience. She has overseen more than **\$4 billion** of Federal Emergency Management Agency (FEMA) and U.S. Department of Housing and Urban Development (HUD) grant funding under FEMA Public Assistance (PA), FEMA Hazard Mitigation Grant Program (HMGP), COVID-19, and Community Development Block Grant (CDBG) programs.

In her current role as a Deputy Director for financial recovery services, Ms. Hendrick has maintained oversight of Tetra Tech's most critical PA and CDBG recovery projects across **7 FEMA regions**, as well as multiple COVID-19 recovery projects utilizing PA, CARES Act and other grant funding. She has served as a business management expert, strategic planner, and business planning leader for clients such as the City of Houston and Harris County, Texas; City of Philadelphia, Pennsylvania; Palm Beach County, Florida; Barnwell County, South Carolina; Dougherty County, Georgia; Richland County, South Carolina; Hamilton County, Tennessee; and states such as Louisiana and Massachusetts.

Ms. Hendrick specializes in the technical intricacies of grant management – from budgeting and quality control to finance planning and staffing – and excels in clear communication and reporting to deliver client satisfaction.

RELEVANT EXPERIENCE

Tetra Tech, August 2017 – Current

Deputy Director of Financial Recovery Services

- Directly manages program managers spanning 7 FEMA regions, providing guidance and direction on PA, Individual Assistance, HGMP, CDBG, 404, 406 and 428 mitigation programs from Alaska to Puerto Rico.
- Maintains oversight of project operations across financial recovery practice nationwide, including management of budget, contracts, task orders, staffing, implementation, and compliance.
- Create Standard Operating Procedures and process improvements for all projects across the practice.
- Management and oversight of approximately 50 projects from small recovery operations to \$35 million budget operations.
- Ensure adherence to project accountability and revenue recognition as well as verifying the audit process.
- Maintain expert knowledge of state and federal regulations to provide feedback and improvement suggestions to governing entities, such as FEMA, HUD, U.S. Treasury, and other grant funding agencies.
- Create and foster long-term client relationships.

Disaster Recovery Management Consultant – City of Houston, Texas

- Oversaw the technical team completing project worksheets (PWs) for estimated expenditures associated with Categories A and B totaling \$360 million.
- Created standard operating procedures for site inspection, project formulation, grant management, and closeout processes.
- Oversaw technical teams conducting site inspections for infrastructure projects.

- Managed and tracked federal funds and activities through the New Delivery Model to submit up to \$2.1 billion in infrastructure funds.
- Oversaw day-to-day operations, subcontractor staff, and subject matter experts, implementing the program and interpreting rules and guidelines for the best remedy in place for each situation.
- Led project teams responsible for collecting data from City of Houston departments in the project formulation process for the recovery project.
- Ensured adherence to project accountability and revenue recognition as well as verified the audit process.
- Led financial tracking of all project activities to remain in compliance with Federal and contractual requirements.

Program Manager (CRF-Treasury and FEMA Grant Management) - City of Philadelphia, Pennsylvania

- Provides consulting services to the City in response to the COVID-19 emergency regarding current and future available funding and cost recovery sources from state and federal agencies.
- Reviews investment justifications and Scopes of Work for projects requested by City of Philadelphia departments for inclusion in the COVID-19 Spend Plan.
- Provides procurement support to the City for active and future COVID-19 related procurements by reviewing applicable documentation for compliance with Federal, State, and Local requirements specific to the Grant/Fund selected for the project.
- Liaises with City leadership to collect and review COVID-19 costs and relevant documentation submitted by departments and review/reconcile relevant project documentation for compliance with selected Grant/Fund source and submit Compliance Memorandum deliverables outlining potential reimbursement pitfalls and corrective action.
- Oversees auditing of cost data (time sheets, project specific costs, outgoing payments to funding recipients (residents, businesses) to ensure all activities have been performed to follow City project SOPs and guidelines to avoid fraud, waste and abuse of funds.

Deputy Director, Governor's Office of Homeland Security and Emergency Preparedness (GOHSEP) | Multiple Disasters – Baton Rouge, Louisiana

- Disaster Recovery Program Management consultant leading PA Recovery for multiple Disasters declared within the state of Louisiana.
- Direct and manage project team, providing guidance and direction on PA, performing cost analysis determinations for completed work, insurance review and reconciliation as well as eligibility reviews for management cost associated with implementing approved projects.

Deepwater Horizon Economic and Property Damages Settlement Program, August 2012 - August 2017

Federally appointed Senior Executive in charge of the Subsistence Program and Program Manager of IT Vendors for the Deepwater Horizon Economic and Property Damages Settlement Agreement, the largest class action settlement of its type in history.

Director of Subsistence Programs (Economic and Property Damage Claims), New Orleans, LA

- Created and Implemented Subsistence Program across 7 states (Alabama, Florida, Louisiana, Mississippi, New York and Virginia), 9 vendors, 70 managers (attorneys and analysts) facilitating the compensation of over \$460 million dollars to fisherman and hunters for their losses resulting from the oil spill in April of 2010.
- Negotiated policies at Panel Hearings with the parties, vendors, and Claims Administrator staff.
- Administered and monitored awards, as well as monitoring and evaluating program participants. Eliminated inefficiencies among claimant submissions and program processes with all pro se claimants and law firms within the program.
- Appointed to the Court Approved Data Retention Team to interpret and executed court ordered data retention policies and processes.

Program Manager of IT Vendors, New Orleans, LA

Directed all IT vendors within the Deepwater Horizon Economic and Property Damages Settlement Agreement implementing best practices for change management, cost control, IT asset management and IT vendor management within \$66.2 million budget. Negotiated agreements and manage contacts for continued support planning (staff, infrastructure, services, software, etc.). Managed the wind down and closeout of all IT related systems as required by program closeout policy and data retention order.

CDM Smith, March 2011 - August 2012

Economic Development Program Administrator, CDBG Disaster Recovery Program, Springfield, IL

- Administered and monitored grants in CDBG/Economic Development programs; monitored and evaluated program participants; developed and compiled reports.
- Prepared scopes of work and RFPs to assist program participants in hiring contractors to complete project components.
- Tracked project costs, including reviewing pay requests from program participants to assure compliance with grant agreements, program requirements, and applicable regulations.
- Monitored project performance, created and shared status reports, monitored KPIs, and forecasted staffing/resource needs.
- Business management, strategic planning, business plan preparation, assistance tailored specifically toward microenterprises and start-ups, loan application and preparation services, and other technical assistance, such as accounting, insurance, marketing and legal.

Community Stabilization Program (CSP) Administrator, CDBG Disaster Recovery Program, Springfield, IL

- Administered and monitored grants in CDBG/Economic Development programs; monitored and evaluated program participants.
- Monitored project performance, created and shared status reports, monitored KPIs, and forecasted staffing/resource needs.
- Reviewed programs and policies and prepared scopes of work/RFPs to assist in hiring contractors to complete project components.
- Completed site visits to review documentation and meet with program participants. Addressed local needs in the postflood revitalization efforts to assure positive changes to support the short and long-term stabilization and revitalization of affected communities.

Affordable Housing Program (AHP) Administrator, CDBG Disaster Recovery Program, Springfield, Illinois

Administered and monitored grants in CDBG/Economic Development programs; monitored and evaluated program participants. Completed site visits to review documentation and met with program participants.

Special Projects Administrator, Tioga County, New York, April 2012

Tioga County Damage Assessment-Hurricane Irene and Tropical Storm Lee.

Louisiana Department of Wildlife and Fisheries, March 2007 - March 2011

State Recovery Specialist/Outreach Coordinator (Federal Block Grant Programs) (September 2009 – March 2011)

- Managed 4 projects within CDBG-funded federal fishery recovery program, including:
 - o Writing program charter and guidelines
 - o Managing program operations, including scope, budget, and deliverables
 - o Developing and implementing objectives and policies for applications
 - o Tracking and reporting project status, KPIs, performance, and costs
 - o Directly managing project team
 - o Conducting outreach, training, and technical assistance for potential disaster recovery grantees
- Designed and implemented application tracking system including user training and system oversight and permit and landing tracking system including user training and system oversight.
- Designed and delivered public presentations regarding recovery needs and activities to a variety of audiences including elected officials, media representatives, and other interested parties across Louisiana.

Disaster Recovery and Emergency Operations Assistant (March 2007 – September 2009)

Coordinated cabinet-level discussion among various state and federal agencies regarding combined efforts for recovery from Hurricanes Gustav and Ike. Lead contact person for LDWF Emergency Operations Center during Hurricanes Gustav and Ike under the direction of the Enforcement division. Managed web-based emergency operation center where field reports of oil and affected wildlife sightings are documented and assigned to local, state and federal officials for action.

Louisiana Office of Community Development-Disaster Recovery Unit, May 2006–March 2007

Disaster Recovery Specialist/Paralegal

Prepared a variety of CDBG disaster recovery-related legal documents, including contracts, cooperative agreements, grant agreements, property covenants, affidavits, statements of assurance, and MOUs. Coordinated research efforts for ensuring all federal and state statutory and regulatory requirements were met in legal documents. Primary liaison to the Road Home Corporation in its CDBG disaster recovery activities associated with the Homeowners Assistance Program.



Caitlin Kelly, MSEM, MEP

Senior Management Team, Preparedness

16 YEARS OF EXPERIENCE

Areas of Expertise

Emergency Management

Emergency Response

Emergency Planning

Hazard Mitigation Planning

HSEEP Exercises

EOC Operations

Meteorology – Weather Related Events

Registrations/Affiliations

International Association of Emergency Managers

Key Training/Certifications

Master Exercise Practitioner, 2012

Homeland Security Exercise & Evaluation Program, 2010

FEMA Professional Development Series

ICS - 100, 200, 300, 400, 700, 800

Education

M.S., Emergency Management, Millersville University, Millersville, PA, 2010

B.S., Meteorology, Millersville University, Millersville, PA, 2007

Office

Newark, DE

Contact

215-605-4748

caitlin.kelly@tetratech.com

EXPERIENCE SUMMARY

Ms. Caitlin Kelly, MSEM, MEP is an all-hazards emergency manager with expertise in all phases of emergency management. At Tetra Tech, Ms. Kelly oversees the corporate Emergency Management Initiative and serves as the National Director of the Emergency Management and Community Resilience. In this capacity, Ms. Kelly has directed contracts with state and local governments, as well as private industry often managing project teams of a dozen or more internal staff. She has successfully managed as many as 20 concurrent projects and contract values of more than \$5M per year. Through her tenure at Tetra Tech, Ms. Kelly has designed, executed, and evaluated 100+ discussion and operation-based exercise programs, including leading exercise projects for local, regional, state, and federal government entities. Ms. Kelly is well versed in HSEEP and as a result of her exercise track record, was recognized by the FEMA with acceptance into the Master Exercise Practitioner Program (MEPP) and certification as a Master Exercise Practitioner (MEP).

Ms. Kelly started her career as a meteorologist before transitioning into emergency management for the City of Philadelphia Office of Emergency Management. At Philadelphia OEM, Ms. Kelly participated in several Philadelphia emergency operation center activations, mobile command post deployments, and field responses. Ms. Kelly has a wide variety of specialized planning and response experience, including severe weather, hazard mitigation, mass casualty/fatality response, evacuation and shelter operations, hazardous materials, and disaster recovery. Ms. Kelly is well versed in the Homeland Security Exercise Evaluation Program (HSEEP) and has completed ICS 100, 200, 300, 400, 700 and 800 and has participated in a number of field responses and recovery efforts for federally declared disasters.

RELEVANT EXPERIENCE

Program Management

Multi-Year Exercise Program, New York University Langone Health

Ms. Kelly has served as the Program Manager for NYU Langone Health since 2017. In this position, Ms. Kelly has managed the design, delivery, and evaluation of 10-15 exercises per year. Under this program, she has managed over 20 Tetra Tech staff members to execute exercises and is also responsible for the design oversight of the NYULH Multi-Year Training and Exercise Plan. In addition to exercise focused responsibilities, Ms. Kelly has overseen the development of the enterprise-wide Mass Decontamination Program, the Network Integration Program, the COVID-19 Family Preparedness Guide, and the COVID-19 AAR.

Multi-Year Exercise Program, Delaware Emergency Management Agency

Ms. Kelly currently serves as the Program Manager for the Multi-Year Statewide Exercise Contract for the Delaware Emergency Management Agency (DEMA). She manages the planning, design, conduct and evaluation for all DEMA exercises, including leading planning meetings, developing exercise materials, coordinating staffing for conduct and evaluation of exercises, and ensuring that project deadlines

are met. Ms. Kelly has supported the design and conduct of exercises addressing both natural disasters and acts of terrorism and has managed Tetra Tech staff to serve as exercise designers, controllers, and evaluators.

Preparedness Planning, Program Management, Administrative and Training & Exercise Services, Metropolitan Washington Council of Governments

Since 2016 Tetra Tech has held this master service agreement with MWCOG and its partners. Ms. Kelly has served as the program manager of this contract since 2020. In that time, she has overseen the quality control of all projects including DC Health Pandemic and Medical Countermeasures Plan, the WMATA OEM Training Program for Law Enforcement Officer Response, Fredrick County, MD April 6th Progress Drive Active Shooter AAR/IP, Arlington County, VA Continuity of Operations Plan and the Northern Virginia Emergency Response System (NVERS) Family Assistance Operations Training.

Multi-Year Exercise Program, New York Power Authority

Since 2019 Ms. Kelly has served as the Project Principal on the NPYA 5-year multiple award contract focusing on exercises for the New York State Canals Corporation. In this role, Ms. Kelly ensures that Tetra Tech's quality assurance process is followed for all project deliverables. She also provides overall program guidance and team mentorship as needed.

Homeland Security Exercise and Evaluation Program & Planning Support, Delaware Health and Social Services (DHSS) Division of Public Health (DPH) Offices of Emergency Medical Services; Preparedness; and Health Crisis Response

Ms. Kelly has served as the Program Manager under this comprehensive services agreement since 2021. In the time, Ms. Kelly provided oversight and quality assurance to the development of a first responder training, a family assistance center training, a crisis communications annex and a standard operating procedure for an individual assistance playbook.

Emergency Management Program, Warren County, NY Office of Emergency Services

Tetra Tech under a Master Services Agreement supported Warren County, NY; the Adirondack HazMat Consortium; the Adirondack Interoperable Communications Consortium and other upstate New York Counties with their emergency management programs. From 2015-2021, Ms. Kelly served as the Project Manager overseeing numerous planning, training, and exercise tasks for multiple different clients. In this role, Ms. Kelly managed over 10 exercises of varying complexity; developed numerous planning documents focused on hazmat response, interoperable communications, continuity of operations, predisaster recovery, and active shooter response; and designed supplemental trainings based on plans. For each task, Ms. Kelly managed 3-15 Tetra Tech staff members from project inception through completion.

Arlington County, COVID-19 EOC Staff Augmentation

Since April 2020, Tetra Tech has provided staff augmentation for virtual EOC Operations and on-site vaccine site support to Arlington County, VA in response to COVID-19. The virtual staff provided were matched according to skill sets and experience of the team with the positions requested by Arlington County. Throughout this contract, Ms. Kelly has been responsible for financial management, client satisfaction and oversight of the deployed Tetra Tech team. Positions filled in response to COVID-19 have included: EOC Manager, Operations Section Chief, Logistics Section Chief, Deputy Logistics Section Chief, Planning Section Chief, Finance/Admin Section Chief, Safety Officer, Situation Unit Leader, Resource Unit Leader, and Supply Unit Leader. The county's response and recovery efforts are anticipated to continue for the next few months.

Arlington County Department of Human Services, Planning and Response Operations

Since 2021, Tetra Tech has provided staff augmentation to assist Arlington County DHS's with Emergency Support Function (ESF #6) planning and response operations. Examples of tasks include meeting/conference call notetaking; development/update of plans, checklists, guidance documents and other job aids; action item tracking; development of reports; and capturing best practices and after action items. In addition to our on-site support services, on-call support can be deployed within 24 hours of notice. Throughout this contract, Ms. Kelly has been responsible for financial management, client satisfaction and oversight of the deployed Tetra Tech team.

Real-World Incident After Action Reports

Ms. Kelly has served as the Project Principal on the following real-world AARs, Quick Look Reports, and Improvement Plans. In this role, Ms. Kelly managed financial accountability and ensured that Tetra Tech's quality assurance process was followed for all project deliverables.

COVID-19 After Action Review and Quick Look Reports, Northeast Pennsylvania Regional Counter-Terrorism Task Force

Tetra Tech assisted the Task Force with conducting an after-action review to identify Task Force-level strengths and areas for improvement resulting from the COVID-19 response. The project also synthesized member county findings into county-specific Quick Look Reports.

COVID-19 After Action Review, Bucks County, Pennsylvania

Tetra Tech is supporting Bucks County Emergency Management Agency in conducting an After-Action Review of the County's initial response to COVID-19. The projects consist of a documentation review, online stakeholder response survey, 12 focus group interviews, Quick Look Report synthesizing immediate areas for improvement, After Action Report development and presentation to County officials.

COVID-19 Emergency Management Incident Report, New York University Langone Health, NYC

This report synthesizes the Emergency Management + Enterprise Resilience (EM+ER) department's response to COVID-19 and highlights operational workflows. EMIR content was derived from a stakeholder survey, 34 one-on-one interviews department leadership, and a review of incident documentation. The final EMIR was developed in InDesign to more visually share EM+ER's process workflows, incorporate images from the response and illustrate strengths and key areas for improvement.

COVID-19 After Action Report/Improvement Plan | New York City Health and Hospitals Corporation

Working with H+H Emergency Management, Tetra Tech facilitated all meetings and developed the AAR within 60 days. As part of this engagement, Tetra Tech conducted a documentation review of response related materials, distributed a web-based survey to capture about 125 responses, facilitated 27 group function-based hotwashes, five executive-level interviews, and two open discussions with representatives from across H+H operations. Findings from the documentation review, survey, focus group meetings, and interviews were synthesized into an AAR/IP that highlights response strengths and areas for improvement. Tetra Tech hosted two After Action Review workshops to develop the IP.

Hurricane Isaias AAR/IP, Virginia Department of Emergency Management

Tetra Tech was hired to support VDEM through the development of a comprehensive AAR/IP in response to Hurricane Isaias while concurrently responding to COVID-19. The project included documentation review and analysis of current VDEM plans, procedures and policies and to conduct follow up one-on-one interviews and focus group calls via a virtual format.

Colonial Pipeline Incident AAR/IP | Delaware Emergency Management Agency

Tetra Tech development of an AAR/IP investigating the State of Delaware's response to the Colonial Pipeline cyber-disruption incident. The attack halted all of the pipeline's operations including the delivery of petroleum products to the State of Delaware. Tetra Tech developed an online survey via Survey Monkey to capture feedback and quantitative data on response activities. Subsequently, Tetra Tech facilitated a series of interviews the State's energy assurance stakeholders including the Delaware Emergency Management Agency, Delaware Department of Natural Resources and Environmental Control, National Association of State Energy Officials, and Mid-Atlantic Petroleum Distributors Association. Combined, the survey and interviews provided the content for the AAR/IP. Findings will be validated during an After Action Meeting.

Progress Drive Active Shooter Incident | Fredrick County, MD

Tetra Tech assisted the Fredrick County Division of Emergency Management with the develop of an AAR/IP following an active shooter event on April 6, 2021. Tetra Tech evaluated the real-world response and emergency coordination actions against the County's formalized processes. Tetra Tech also gathered stakeholder and community feedback through a data collection process using survey tools and conducting one-on-one and functionally focused group interviews. Findings were validated during an After Action Meeting and the AAR/IP was submitted in October 2021.

Training and Exercises

Southeast Pennsylvania Regional Taskforce, Emergency Response Working Group (SEPA RTF ERWG) Exercise Series, 2019-2022

Ms. Kelly served as the project manager responsible for oversight of design, execution and evaluation and the exercise series. The exercise series was designed to validate the ability of SEPA counties and municipalities to mobilize resources and respond to and recover from a large-scale incident involving a fire suppression, EMS, HazMat, and USAR response. Planning

considerations associated with the transfer of command, interoperable communications, and implementation of the Incident Command System (ICS) will be tested. The TTX portion is intended to establish a collaborative learning environment for participants to exercise the response to a large-scale incident that involves multiple agencies within the region, and the Full-Scale Exercise (FSE) that will follow, will be used to further refine plans and identify improvement opportunities in how SEPA RTF ERWG stakeholders plan for, respond to, and recover from large-scale incidents.

Southeast Pennsylvania Regional Taskforce, Disaster Debris Management TTX, 2020

Tetra Tech designed a TTX to validate the ability of SEPA counties and municipalities to mobilize resources and respond to and recover from a debris generating incident. A diverse group of 44 planning and response representatives from every SEPA county and external agencies participated in the TTX. The TTX consisted of a plenary session on debris management and public assistance considerations, followed by a 2-module hurricane scenario examining debris management operations during initial response and recovery. The TTX concluded with a presentation on debris operations best practices. During each module, participants were seated by county, provided the scenario or update, and discussed their county's response to key issues. Each County then reported their main takeaways to the larger group. Ms. Kelly served as the project manager responsible for oversight of design, execution and evaluation and the TTX.

Delaware Emergency Management Agency, Continuity of Operations Tabletop Exercise Toolkit, 2019

Tetra Tech designed a customizable TTX Toolkit for Delaware State Organizations to validate their Continuity of Operations Plan. The TTX Toolkit with be inclusive of three interchangeable scenarios; customizable exercise documentation (Situation Manual, Exercise Evaluation Guide, Facilitator Guide, Participant Feedback Form), exercise slide decks, and After-Action Report; and an Implementation Guide to assist State Organizations in organizing their TTX. The TTX Toolkit materials were designed to maximize ease-of-use and standardize evaluation so that the State can readily compile exercise findings. Tetra Tech also provided two tutorial webinars to introduce the COOP TTX Toolkit materials to State Organization COOP Coordinators, and answer questions. As the project manager, Ms. Kelly provided oversight to all phases of this project including exercise design, customizable exercise documentation development, and tutorial facilitation.

Delaware Emergency Management Agency, Hazardous Materials Functional Exercise, 2019

As project manager, Ms. Kelly is leading all exercise design, control, and evaluation. The FE will engage State and county-level hazmat teams, and response partners in a large-scale hazmat emergency, with focus on notification, response coordination between agencies, and strategic decision-making between Unified Command and activated Emergency Operations Centers (EOCs).

Adirondack Regional HazMat Consortium, HazMat Rail Functional Exercise, 2019

As the project manager, Ms. Kelly provides oversight on the development of this FE. The purpose of the exercise is to validate response coordination for Clinton, Essex, Franklin, Hamilton, St. Lawrence, Warren and Washington Counties in response to a large-scale hazmat rail emergency. The exercise will test operational coordination, information sharing, and situational assessment between on-scene hazmat responders, Unified Command (UC), and Emergency Operations Center (EOC) personnel. The exercise was designed to enhance participant engagement and strengthen long-term strategic planning capabilities.

NYU Langone Health Patient Evacuation (CARF) FSE, 2018

Ms. Kelly served as the project manager, responsible for overall management of the Tetra Tech team. She also served as an exercise controller/evaluator for the multiple patient evacuation full-scale exercises conducted by NYU Langone Health. After the exercises, Ms. Kelly oversaw the development of the AAR/IP.

New York University Langone Health System, NY, 2018 Annual Disaster Exercise, New York, NY

For this project, Ms. Kelly served as the project manager overseeing the design, conduct, and evaluation of a mass casualty FSE at NYULH Brooklyn Hospital. This exercise validated emergency department and hospital capabilities for handling a patient surge resulting from an active shooter incident.

Cayuga County, NY, 2018 Tactical Interoperable Communications Full-Scale Exercise

As project manager, Ms. Kelly oversaw the development of all exercise documentation for an FSE to validate communication procedures and interoperable equipment for Cayuga, Cortland, Madison, Onondaga, Oswego and Seneca Counties. Ms. Kelly also supported day-of exercise control, logistics, and evaluation.

Adirondack Regional HazMat Consortium 2018 Interoperable Communications Functional Exercise

As the exercise director and project manager, Ms. Kelly supported the development of a functional exercise to validate communication procedures and interoperable equipment for Clinton, Essex, Franklin, Hamilton, St. Lawrence, Warren and Washington Counties. Ms. Kelly coordinated exercise logistics, assisted with exercise control, and developed the After-Action Report incorporating evaluator and participant feedback.

Broome County, NY, Greater Binghamton Airport Triennial Exercise Series, 2017 - 2018

Ms. Kelly assisted Broome County with the evaluation of the Triennial Greater Binghamton Airport exercise series, which included validating response, mass care, and communication plans through a tabletop and full-scale exercise. Ms. Kelly supported this project by providing exercise control and providing feedback for the AAR.

Philadelphia Office of Emergency Management Disaster Recovery Workshop Series, 2017 - 2018

Ms. Kelly served as the project manager and workshop design lead responsible for developing all documents and facilitating all meetings for tasks and deliverables associated with the workshop series. This workshop engaged Recovery Support Function (RSF) stakeholder agencies in reviewing the city's Recovery Framework and provided an opportunity for partners to discuss recovery challenges. Participants were led through facilitated break-out discussions based on RSF; and examined localized, large-scale, and catastrophic scenarios. Guest speakers from across the country presented on recent recovery events and shared best practices with participants.

National Exercises Program, Federal Emergency Management Agency, Rhode Island Disaster Recovery Exercise Series, 2017 – 2018

Ms. Kelly was tasked to provide direct exercise support as a subcontractor on the National Exercise Program to deliver a disaster recovery workshop and TTX for the State of Rhode Island Emergency Management Agency. Ms. Kelly was responsible for developing all exercise materials in accordance with HSEEP requirements.

NYU Langone Health Patient Evacuation (CARF) FSE, 2017

Ms. Kelly served as the project manager, responsible for overall management of the Tetra Tech team. She also served as an exercise controller/evaluator for the multiple patient evacuation full-scale exercises conducted by NYU Langone Health. After the exercises, Ms. Kelly oversaw the development of the AAR/IP.

NYU Langone Health 2017 Enterprise-Wide FSE

In August 2017 Tetra Tech was contracted by NYU Langone Health to provide critical resources and expertise to conduct an executive-level tabletop exercise (TTX) and four full-scale mass casualty incident response (MCI) and decontamination exercises. Ms. Kelly served as the project manager responsible for overseeing the development of all exercise documents and facilitating all deliverables associated with the exercises.

Cayuga County, NY Active Shooter TTX, 2017

Ms. Kelly served as the project manager responsible for overseeing the development of all exercise documents and facilitating all meetings for tasks and deliverables associated with the tabletop exercise, delivered in July 2017. The exercise was developed for compliance and consistency with the federal Homeland Security Exercise and Evaluation Program (HSEEP). Ms. Kelly worked with various law enforcement and emergency management agencies to develop exercise documentation including the SitMan, facilitator guide, and EEGs. At the end of exercise play, Ms. Kelly initiated the coordination of the After-Action Report/Improvement Plan process.

Adirondack Regional HazMat Consortium Rail Incident FSE, 2017

Ms. Kelly was the project manager for this HazMat/rail incident full-scale exercise conducted in cooperation with the 7 counties that comprise the ARHC. Ms. Kelly oversaw the development of all exercise material including the master scenario events list, exercise evaluation guides, victim's tags, exercise plan, etc. On the date of the exercise, Ms. Kelly was the lead controller overseeing exercise play and control management. As a controller, Ms. Kelly managed control staff, delivered exercise injects, addressed player questions and concerns, and noted operational successes and areas for improvements.

Cayuga County, NY Bakken Crude Oil/Rail Incident TTX, July 2016. – February 2017

Ms. Kelly was the project manager and lead planner responsible for developing a TTX focused on a regional response to a rail incident involving Bakken crude oil. Ms. Kelly worked with representatives from Cayuga, Cortland, Tompkins and Seneca counties

to develop HSEEP-compliant exercise documentation such as the situation manual (SitMan), facilitator guide and exercise evaluation guides (EEGs). Following the TTX, Ms. Kelly led the after action and improvement process to capture best practices and areas for improvement.

Onondaga County Health Department, Syracuse N.Y., Isolation and Quarantine Tabletop Exercise, 2016

Ms. Kelly served as the project manager responsible for overseeing the development of all exercise documents and facilitating all deliverables associated with the tabletop exercise, delivered in September 2016. The exercise was developed for compliance and consistency with the federal Homeland Security Exercise and Evaluation Program (HSEEP). For this project, Ms. Kelly worked in close coordination with the exercise planning team to develop a comprehensive situation manual (SitMan) for participants, a facilitator guide, exercise evaluation guides (EEG), and a primer on the Onondaga County Isolation and Quarantine Plan.

Albany County, NY Bakken Crude Oil/Rail Incident TTX, 2016

Ms. Kelly was the project manager, lead planner and lead facilitator responsible for developing the ACSO 2016 Rail Incident TTX. The TTX was based on a rail car derailment involving Bakken crude oil in Voorheesville, N.Y. Ms. Kelly designed, conducted and evaluated the exercise in accordance with FEMA's Homeland Security Exercise and Evaluation Program. Ms. Kelly worked with the Albany County Sheriff's Office (ASCO) and various exercise planning team members to develop exercise documentation including the SitMan, facilitator guide, and EEGs. During the exercise, Ms. Kelly served as the lead facilitator. At the conclusion of exercise play, Ms. Kelly initiated the coordination of the After-Action Report/Improvement Plan process.

Washington Metropolitan Area Transit Authority (WMATA), 2016

Ms. Kelly supported WMATA's full-scale exercise (FSE), functioning as the incident-scene lead-controller. The FSE involved a Metro train crossing the Potomac River derailing as it approached a bend on an elevated bridge just on the Virginia side. The train fire and mass casualty incident focused on incident coordination between VA and Washington DC response organizations and evacuation of victims from the train back across the bridge to the District of Columbia side.

Niagara County Department of Health, Isolation and Quarantine Tabletop Exercise, 2016

Ms. Kelly served as the project manager responsible for overseeing the development of all exercise documents and facilitating all meetings for tasks and deliverables associated with the tabletop exercise, delivered in April 2016. The exercise was developed for compliance and consistency with the federal Homeland Security Exercise and Evaluation Program (HSEEP). For this project, Ms. Kelly worked in close coordination with the exercise planning team to develop a three-part situation manual (SitMan) for participants, an evaluator handbook, a facilitator guide, exercise evaluation guides (EEG), and informational handouts for the West Africa EVD epidemic overview, CDC EVD handout, and an overview of high consequence diseases (HCD).

Albany County, NY, Active Shooter Full Scale Exercise, 2016

Ms. Kelly was the project manager for the active shooter full-scale exercise conducted in cooperation with the Albany County Sheriff's Office (ACSO) and the Voorheesville Central School District (VCSD). Ms. Kelly oversaw the development of all exercise material including the master scenario events list, exercise evaluation guides, victim's tags, victim scrips, exercise plan, etc. On the date of the exercise, Ms. Kelly was the lead controller overseeing exercise play and control management. As a controller, Ms. Kelly managed control staff, delivered exercise injects, addressed player questions and concerns, and noted operational successes and areas for improvements. The successes and improvement recommendations were documented in the afteraction report, developed in concert with the ACSO and VCSD.

Saratoga County, NY Interoperable Communications Facilitated Discussion, 2016

Ms. Kelly was the project manager and lead planner responsible for developing an interoperable communication facilitated exercise. Ms. Kelly developed a communications blackout scenario that tested the county's plans, policies and procedures to response to and recovery from a lack of internal communications. Ms. Kelly was responsible for developing all proper documentation (SitMan, EEGs, AAR, etc.) and conducting the appropriate planning and after-action meetings.

Texas Department of State Health Services, 2015 Strategic National Stockpile Full-Scale Exercise, 2015

Ms. Kelly performed duties as a controller/evaluator for two separate counties in the 2015 Strategic National Stockpile Full-Scale Exercise for the Texas Department of State Health Services. She also led group discussion during the post-exercise hot wash, coordinated the efforts of local evaluators, and support the development of the After-Action Report.

Adirondack Regional HazMat Consortium, Bakken Crude Oil Exercise, 2015



Ms. Kelly was the project manager to plan, develop and conduct a regional exercise for a rail incident involving a Bakken Crude Oil spill within the Adirondack region of New York State. The project involved a regional response, involving the seven counties that comprise the Adirondack Regional HazMat Consortium, and other local, state and federal response agencies. The exercise was developed for compliance and consistency with the federal Homeland Security Exercise and Evaluation Program (HSEEP).

Port of San Francisco Earthquake Functional Exercise, 2015

Ms. Kelly served as the exercise design lead responsible for developing all documents and facilitating all meetings for tasks and deliverables associated with the exercise, delivered in June 2015. The exercise was developed for compliance and consistency with the federal Homeland Security Exercise and Evaluation Program (HSEEP). For this project, Ms. Kelly oversaw the exercise design team and the development of exercise materials such as Exercise Evaluation Guides (EEG), Master Scenario Events List (MSEL) injects, the Exercise Plan and more.

Finger Lake Regional Consortium, Interoperable Exercise Program, 2014 –2015

Ms. Kelly served as the lead planner for the regional interoperable communications exercise program. This multi-phased exercise project started with the delivery of 12 educational seminars throughout the 16-county region, followed by the planning and delivery of 6 tabletop exercise programs designed to facilitate cross-border planning and communications. The final phase of the project will incorporate all 16 counties into a single location for a regional interoperable functional exercise that allows for the practical use of local, regional, and statewide interoperable equipment in a single scenario.

NY-NJ-CT-PA Regional Catastrophic Planning Team, Emergency Management Catastrophic Exercise Program (RCPT-EMCEP), 2013 – 2015

Ms. Kelly is part of the Tetra Tech planning team to develop an innovative Emergency Management Catastrophic Exercise in a Box (EIB) Program to reinforce the planning and toolsets developed by the RCPT and the region over the last several years. The EIB is a three-state exercise planning program that provides any jurisdiction with an 85% exercise solution built around three scenarios with three functional delivery options. This template exercise was developed with input from a multi-state steering committee and has been developed to facilitate play in the smallest through the largest within the Northeast region. Ms. Kelly responsibilities include developing exercise materials for three different scenario and anticipated audiences including evaluation tools, controller guides, player handbooks, MSEL injects, etc.

New Jersey Office of Homeland Security and Preparedness – Operation Mall Defender Active Shooter Tabletop Exercise, 2013

Ms. Kelly was a senior planning consultant to develop an active shooter-based tabletop exercise for the Outlet Collection: Jersey Gardens Mall in Elizabeth, NJ. In consultation with the planning team, Ms. Kelly developed an active shooter scenario that tested the mall's plans, policies and procedures to response to and recovery from an active shooter event. This exercise was developed and conducted in accordance with the guidelines provided by the U.S. Department of Homeland Security (DHS), under their Homeland Security Exercise Evaluation Program (HSEEP). Ms. Kelly was responsible for developing all proper HSEEP compliant documentation (SitMan, EEGs, AAR, etc.) and conducting the appropriate planning and after-action meetings.

New Jersey Office of Homeland Security and Preparedness – Operation Slap Shot Tabletop Exercise, 2013 –2014

Ms. Kelly was tasked to develop a terrorism-based tabletop exercise with an active shooter component for the Prudential Center in Newark, NJ. In consultation with the planning team, Ms. Kelly developed a terrorism-based scenario that tested the Prudential Center's plans, policies and procedures to respond to and recovery from a terrorism-based event. In addition, the developed exercise tested the capabilities of local, state and federal agencies to respond to and recover from a delicate scenario affecting a large portion of downtown Newark, NJ. This exercise was developed and conducted in accordance with the guidelines provided by the U.S. Department of Homeland Security (DHS), under their Homeland Security Exercise Evaluation Program (HSEEP). Ms. Kelly was responsible for developing all proper HSEEP compliant documentation (SitMan, EEGs, AAR, etc.) and conducting the appropriate planning and after-action meetings.

New Jersey Office of Homeland Security and Preparedness (NJ OHSP) – Communications and Energy Sector Exercise Services, 2014

Tetra Tech is part of the Exercise Services contract with the NJ OHSP and has been awarded three discussion-based exercises since August of 2013. Ms. Kelly has been the lead planner for each, overseeing the design, development, and delivery, of the

exercise documents. Tetra Tech worked with the NJ OHSP to deliver a discussion-based exercise for the communications and energy sectors.

NY/NJ/CT/PA Regional Mass Fatality Full Scale Exercise 2013

Ms. Kelly was contracted by Bergen County, NJ the host for the 2013 Regional Mass Fatality excise to ensure HSEEP compliance and exercise logistics. As Tetra Tech's lead planner for this project, Ms. Kelly maintained compliance with HSEEP methodology and ensured that logistical needs were met.

Vermont Department of Health Full Scale Radiological Exercise 2013

Ms. Kelly served as a planner and controller responsible for developing documents and facilitating meetings for tasks and deliverables associated with the exercise, delivered in October 2012. The exercise was developed for compliance and consistency with the federal Homeland Security Exercise and Evaluation Program (HSEEP). For the exercise, Ms. Kelly was responsible for ensuring the proper progression of the exercise by injecting event implementer messages into exercise play at schedule times. In order to achieve exercise objectives, Ms. Kelly also developed ad hoc messages to enhance exercise play and acted as a simulator for unanticipated actions, as necessary.

Ironshore Business Continuity Services, Ironshore Insurance Services, LLC, 2013

Ms. Kelly served as the exercise design lead to validate a Business Continuity Plan (BCP) for Ironshore Insurance Services, LLC's Manhattan office, which had been affected by Hurricane Sandy in 2012. Ms. Kelly worked with points of contact in each department to develop the exercise scenario, objectives and facilitated questions for the tabletop exercise (TTX). The TTX validated the critical functions performed at the Manhattan office, along with those functions' critical personnel, records, systems, and equipment.

Emergency Planning

Harris County, TX | Unified and Uniform Program for Preparedness, Response and Recovery

Ms. Kelly served as the Project Principal for Harris County's effort to coordinate efforts between government, non-profit and faith-based organizations in preparedness, response, and recovery operations. The project sought to identify groups who are traditionally underserved, to include, low-moderate populations, non-English speaking communities, and other vulnerable populations. The goal was to create a uniform and unified program for addressing the needs of the identified populations; coordinating efforts with non-profit and faith-based communities; diversifying partners throughout the disaster continuum and engaging communities in preparedness, response, and recovery efforts. Ms. Kelly ensured Tetra Tech's quality assurance process was followed for all project deliverables including a strategic framework, community outreach toolkit, County Judge Advisory Council Charter, and assessment of the Ready Harris website.

Lendlease | Project Community Resilience Planning

Ms. Kelly served as the Project Manager assisting Lendlease with develop a suite of resilience plans to support their on-base housing Public-Private Partnership with the US Military. Ms. Kelly worked closely with the onsite project staff at Marine Corps Base Camp LeJeune to develop a Business Continuity Plan, Disaster Recovery Framework, Destructive Weather/Hurricane Plan. The plans focused on how the Lendlease personnel would interact with their local, State, and military stakeholders to support their residents and build towards more resilient communities.

United States Virgin Islands and CDC Foundation, Department of Health Planning and Training Support

Tetra Tech worked with the CDC Foundation and USVI DOH to enhance the readiness of the USVI DOH Emergency Preparedness and Response Program by conducting a series of planning and EOC training tasks. Serving as the project manager, Ms. Kelly oversaw the completion of the following tasks: review and assessment of existing DOH and partner agency emergency response plans and supporting documentation, accompanied by a prioritized Recommendation Report to strengthen plans; planning updates to the ESF-8 Plan, Continuity of Operations Plan, and Pandemic Flu Plan and a training workshop and exercise to review command staff position-specific roles and responsibilities within the Department Emergency Operations Center (DEOC).

Hazard Identification Risk Assessment, New York University, New York, NY

Ms. Kelly oversaw the development of hazard profiles and associated vulnerability assessments for 16 hazards unique to NYU's urban, international campus. Using both qualitative and quantitative methods, Tetra Tech developed a document that was used for identification of ongoing improvements to mitigation and resilience practices in and around the NYU community. The final

HIRA was consistent with EMAP requirements and was presented to NYU's Emergency Management Advisory Council to inform decision-making about the novel coronavirus.

Warren County, NY, Disaster Recovery Plan and Workshop, 2019

In this two-part project, Ms. Kelly is the project manager overseeing the development of a county Disaster Recovery Plan. Following the creation of a draft Plan, a Disaster Recovery Workshop was held to validate plan elements and gather additional information to inform the Recovery Support Function Annexes.

New York University Langone Health System, NY, Mass Decontamination Planning - 2018

As part of this project, Ms. Kelly serves as the project manager and oversaw the development of a Best Practice Memo to guide leadership in the creation of a hospital-based Mass Decontamination Plan. The memo was inclusive of a literature and plan review, identified best practices, and identified recommendations. Additionally, Ms. Kelly is currently managing the development of a Mass Decontamination Plan for the entire NYU Langone enterprise.

Cayuga County, NY, 911 Incident Specific Dispatch Guide, 2018

Working closely with Cayuga County 911, Ms. Kelly developed their incident specific 911 Dispatch Guide. The guide identified 32 of the most common or potential incident types and then defined the respective actions to be taken by dispatchers. Actions were listed in an easy-to-follow checklist format.

Cayuga County, NY, Central New York Interoperable Communications Consortium Technical Committee – TLMR Governance Framework, 2018

Under this task, Ms. Kelly developed the CNYICC Technical Committee Governance Framework. This governance document provides the structure for the Technical Committee to provide recommendations on the adoption, interoperability, and operationalization of existing and emerging technologies and resources. The framework development process consisted of research, drafting a framework, soliciting stakeholder feedback, and tailoring the framework to meet CNYICC objectives and prepare the governance document for adoption.

City of Philadelphia Evacuation Analysis and Planning, 2017 – 2018

Served as the Principal-in-Charge, Ms. Kelly was responsible for providing frequent review and oversight of deliverable development and overseeing project management, human resources and financial management of the project.

MBHSR Evacuation Planning for CTN Populations, 2018

Ms. Kelly served as the project manager responsible for all deliverables developed for the Metro Boston Homeland Security Region (MBHSR) Evacuation Planning for Critical Transportation Needs (CTN) transportation evacuation planning analysis. Under this project tasks included completing a comprehensive programmatic assessment and gap analysis of transportation evacuation resources and developing associated plans for nine jurisdictions within the Metro Boston area.

Oahu Coastal Communities Evacuation Plan, 2017 – 2018

Ms. Kelly was the Evacuation Analysis and Planning Support Group task lead. Under this role, Ms. Kelly was responsible for providing support and expertise for the Population Activity study; assisting in the identification of potential safe area, shelters and expedient evacuation routes; supporting public outreach materials; coordinating and documenting interactions with people with disabilities to ensure compliance with the ADA and drafting final project report and signage plan.

Amtrak, June 2015 – September 2017

Ms. Kelly was part of the planning support team assisting Amtrak to develop facility emergency plans (FEP). Amtrak identified several critical facilities across the country to develop continuity of operations plans and FEPs as pilot locations. The FEP is an all-hazards document containing the concepts and general guidance that would apply regardless of the nature or origin of the emergency or disaster. The FEP exceeds requirements of OSHA's emergency action plans and helps employees understand what to do during natural and manmade disasters, as well as other threats to the visitors, occupants, and personnel at Amtrak facilities and stations.

Warren County, New York Continuity of Operations/Continuity of Government (COOP/COG) Planning Project, September 2016 – June 2017

Ms. Kelly served as the project manager to develop the Warren County, New York COOP/COG Plan. Ms. Kelly worked with an interdisciplinary steering committee comprised of representatives of several County departments to examine the County's operations and document how they would continue during and following an emergency that makes the County's facilities, personnel, and/or records unavailable. The final draft of the Warren County, NY COOP/COG was then validated at the Warren County COOP Tabletop Exercise. The exercise focused on validating the plan activation and notification processes as well as the necessary decision making associated with a continuity event that impacts a critical county facility and department offices, as well as longer term continuity considerations. Nearly 30 participants attended representing each of the county departments and offices. Ms. Kelly is responsible for the design, execution and evaluation of this capstone TTX.

Albany County, NY, Tactical Interoperable Communications Plan, March 2016 – August 2016

Ms. Kelly was the project manager responsible for the development of the Albany County Tactical Interoperable Communications Plan (TICP). Ms. Kelly was responsible for developing the project plan and managing staff who interviewed representatives from the County Sheriff's Office and key municipalities to develop information critical for responders to have access to during an emergency requiring communications between jurisdictions and disciplines.

Adirondack Regional HazMat Consortium (ARHC) Hazardous Materials Commodity Flow Study, February 2016. – June 2016

Ms. Kelly was the project manager and lead planner responsible for developing a hazardous materials commodity flow study (CFS) for the 7-county region of the ARHC. Ms. Kelly was responsible for gathering information from various sources including waybill hazardous materials information from railroad carriers, Tier II reports, interviews with first responders, interviews with fixed facilities storing hazardous materials, and field observations. The information collected was then analyzed and the results were presented in a report to the ARHC.

Saratoga County, NY Comprehensive Emergency Management Plan Review, November 2015 – January 2016

Ms. Kelly was the project manager responsible for reviewing the Saratoga County, NY Comprehensive Emergency Management Plan (CEMP) against the National Incident Management System (NIMS), the Federal Emergency Management Agency's (FEMA) Comprehensive Preparedness Guide (CPG) 101, and the laws of New York State. She developed and presented a gap analysis report summarizing the findings and providing recommendations for improving the CEMP.

Saratoga County, NY, Tactical Interoperable Communications Plan, November 2015 – January 2016

Ms. Kelly was the project manager responsible for the development of the Saratoga County Tactical Interoperable Communications Plan (TICP). Ms. Kelly was responsible for developing the project plan and managing staff who interviewed representatives from the County Sheriff's Department, Office of Emergency Services, and key municipalities to develop information critical for responders to have access to during an emergency requiring communications between jurisdictions and disciplines.

Bay Area Cities Emergency Operations Plan Development, February 2015 – July 2015

Ms. Kelly led Tetra Tech's team of emergency management professionals in the development of emergency operations plans (EOP) for 4 jurisdictions in Santa Clara County, including Palo Alto, Mountain View, Sunnyvale, and Los Altos. Ms. Kelly assisted the project manager in facilitating plenary project meetings, discipline specific meetings, and meetings with each individual jurisdiction.

Honolulu Regional Catastrophic Preparedness Program, Honolulu Regional Catastrophic Planning Team, September 2013–2015

Served as a planner for the design and development of several plans for the Honolulu Regional Catastrophic Planning Team (RCPT), including the Hurricane Response Frameworks, Training and Evaluation Plan, Citizen Preparedness Report, and the Comprehensive Strategic Plan. Ms. Kelly collaborated closely with the disaster coordinators from the City and County of Honolulu, Maui County, Kauai County, and Hawaii County to highlight the past, current, and future regional catastrophic planning efforts of the Honolulu RCPT.

New Jersey Urban Area Security Initiative – County Animal Response Team (CART) Standardization, May 2012 – April 2013

As the deputy project manager, Ms. Kelly played an integral part on an initiative to standardize, statewide, the organization, positions, and responsibilities of the New Jersey County Animal Response Team (CART) program. In this position Ms. Kelly was responsible for researching national, state and local best practices regarding animal response. Subsequently, Ms. Kelly incorporated these best practices and developed a CART Basic Framework, County Animal Response Plan, CART Shelter Standard Operating Procedures, and a core training curriculum. In addition, Ms. Kelly developed a recruitment and retention guide for volunteers, to assist with the activation and sustainability of a CART program.

Tri-State Animal Response Plan, Illinois/Indiana/Wisconsin (IL/IN/WI) Statistical Area, 2013

Building upon best practices research performed for previous planning projects on companion and domestic animals (livestock), Ms. Kelly gathered plans, policies and standard operating procedures from across the nation to assemble a set of consistent best management practices and options where divergent philosophies existed. To bolster the current information associated with animal services, Ms. Kelly was tasked to engage regional and national animal services providers and non-governmental organizations to catalog their resources and capabilities and develop a regional animal resource database.

Delaware River Regional Public Private Partnership (PPP) Development, March 2014 – March 2015

Tetra Tech was engaged by the Burlington County Office of Emergency Management (OEM) to expand upon the 2012 Burlington County PPP strategic plan and develop a regional strategic plan to increase the resiliency of the Delaware River Region's business community in times of emergencies and disasters. To achieve this goal, Ms. Kelly is tasked with collecting the data gathered through the community outreach phase of the project and incorporating that data into the development of the comprehensive regional plan.

Hawaii Regional Catastrophic Planning Team (RCPT) – Hawaii Population Redistribution Analysis

November 2014 – February 2015. Ms. Kelly served as the lead planner to develop the Hawaii Population Redistribution Analysis Report. In this role Ms. Kelly researched and developed city and county profiles for likely redistribution areas based on their geographic and cultural connection to the State of Hawaii. Ms. Kelly also managed the project team in identifying challenges the State of Hawaii will face in the aftermath of a catastrophic, category 4 hurricane. Storm sheltering, short term housing and mass evacuation were highlighted and identified as major logistical concerns in the aftermath of a category 4 hurricane

Comprehensive Emergency Management Plan (CEMP) and Hazard Vulnerability Assessment (HVA), Dutchess County, NY, 2012 – 2014

Ms. Kelly was the lead planner for this endeavor. She was responsible for developing a new iteration of the County's CEMP including a new format and expanded annexes including Emergency Management, Communications, Transportation, Resource Management, Mass Care, and Public Information. The effort also included an update of the county's Hazard Vulnerability Assessment.

Massachusetts Statewide Evacuation Coordination Planning, Massachusetts Emergency Management Agency, 2013-2014

Ms. Kelly served as part of the planning team to conduct evacuation coordination planning in the Commonwealth of Massachusetts. Ms. Kelly coordinated with internal and subcontractor evacuation planning experts to determine the state of evacuation planning within Massachusetts' cities and towns, and their experience in conducting evacuation operations. Ms. Kelly used this information and team members' collective expertise to help develop the statewide Evacuation Coordination Plan, working with the Massachusetts Emergency Management Agency (MEMA) planners to refine the plan.

Pennsylvania Threat and Hazard Identification and Risk Assessment (THIRA), October 2012 - January 2013

As a planning analyst for the 2012 Pennsylvania THIRA report, Ms. Kelly in collaboration with numerous state and regional agencies, identified the primary hazards of concern for Pennsylvania, developed realistic scenarios for those identified hazards, and established estimated impacts to those scenarios.

Massachusetts Threat and Hazard Identification and Risk Assessment (THIRA)/Capabilities Assessment/State Hazard Mitigation Plan Update, Massachusetts Emergency Management Agency, 2012-2013

As part of the development of the Massachusetts THIRA, Ms. Kelly assessed the Commonwealth of Massachusetts' homeland security enterprise's capabilities to prevent, protect against, mitigate, respond to, and recover from all hazards. Ms. Kelly led interviews with each homeland security advisory council region and Commonwealth-level Core Capability Workgroup, to

determine capabilities at the local- and Commonwealth-levels. Ms. Kelly then analyzed the results of the capabilities assessment and compiled it with risk analysis into the Commonwealth's THIRA document.

Catastrophic Hurricane Response Planning Project, Hawaii RCPG, 2012 – 2014

As part of the planning and seminar design team, Ms. Kelly designed and delivered discussion-based seminars to review the hurricane response frameworks and procure local level feedback. Ms. Kelly updated the hurricane response frameworks by incorporating the local level feedback.

Ada / Boise Emergency Operations Plan Development, April 2013 – February 2014

Ms. Kelly provided planning support for the Ada City- County Emergency Operations Plan update. This project worked to develop individual emergency operations plans for each of the 8 jurisdictions that make up Ada County, Idaho. In addition, the process provided the county with an emergency operations plan targeting the activation of a countywide emergency operations center to support any of the local jurisdictions.

Community Resilience and Hazard Mitigation Planning

San Mateo Multi-Jurisdictional Hazard Mitigation Plan Update, November 2015 – July 2016

Ms. Kelly served as the project manager to update the San Mateo County, CA Multi-Jurisdictional Hazard Mitigation Plan. Ms. Kelly worked with the County's Steering Committee, consisting of representatives of County, City and private organizations within San Mateo County to analyze the risks faced by the County and its planning partners, assess County capabilities, and update the County's mitigation strategy. Throughout this update, Ms. Kelly administered the CRS-10 step planning process prescribed under section 510 of the CRS program. This enables San Mateo County to collect CRS credits and potentially lower flood insurance premiums for its citizens.

Post Sandy Strategic Recovery Planning; Brick Township New Jersey, May 2015-December 2015

Ms. Kelly participated as the lead planner in the development of the Flood Warning and Response Plan (FWRP), for Brick Township, NJ, due to the impact of severe storms, riverine flooding, and coastal flooding in this community. As part of this project, Ms. Kelly drafted the FWRP so that it met all required Community Rating System (CRS) Activity 610 components, and she conducted an analysis of flood policies in the Township to determine trends and areas of greater vulnerability.

New York Rising Community Reconstruction Program, Catskill and Hudson Valley Region, NYS GOSR, 2013-2014

Ms. Kelly was part of the planning team for two communities undertaking resiliency planning and project implementation through the NYRCR program. Ms. Kelly worked with local officials in the Town of Blooming Grove, NY and the Town of Wallkill, NY, to assist in the local recovery from Hurricane Irene and Tropical Storm Lee in 2011. Her responsibilities included working with community members and emergency services personnel to identify and develop emergency services focused shovel-ready projects for submission into the Final Reconstruction Plans. The Final Reconstruction Plans proposed a list of shovel-ready high priority projects totaling at least \$3 million for each participating community, to be implemented within a 2-year timeframe.

Maui County Hazard Mitigation Plan Update, December 2014 - Jul 2015

Ms. Kelly served as the project manager to update the Maui County, HI Hazard Mitigation Plan. Ms. Kelly worked with the County's Steering Committee, consisting of representatives of County and private organizations within Maui County to analyze the risks faced by the County, assess County capabilities, and update the County's mitigation strategy. Throughout this update, Ms. Kelly is administering the CRS-10 step planning process prescribed under section 510 of the CRS program. This enables Maui County to collect CRS credits and potentially lower flood insurance premiums for its citizens.

Westmoreland County Hazard Mitigation Plan Update, August 2013 – January 2015

Ms. Kelly managed the update of the Westmoreland County, PA HMP. Ms. Kelly profiled natural and human-caused hazards to which the County and its municipalities are vulnerable, worked with staff to form and meet with the County Hazard Mitigation Working Group, solicit municipal and public participation in the planning process, profile hazards, assist in developing a mitigation strategy and projects, assess the county's and municipalities' capabilities, and draft the HMP itself.

Somerset County Hazard Mitigation Plan Update, November 2012 - January 2014

Ms. Kelly was part of the Tetra Tech planning team to update the Hazard Mitigation Plan for Somerset County. In this role, Ms. Kelly's responsibilities included the research and development of the hazard identification and analysis, the risk assessment profiles and the development of mitigation strategies for Somerset County and its associated municipalities.

Montgomery County Hazard Mitigation Plan Update, 2013

Ms. Kelly was part of the Tetra Tech planning team to update the Hazard Mitigation Plan for Montgomery County. In this role, Ms. Kelly's responsibilities included the research and development of the hazard identification and analysis, the risk assessment profiles and the development of mitigation strategies for Montgomery County and its associated municipalities.

Town of Blooming Grove Hazard Mitigation Plan, 2013

Ms. Kelly was part of the Tetra Tech planning team to develop the Hazard Mitigation Plan for the Town of Blooming Grove. In this role, Ms. Kelly's responsibilities included the research and development of the hazard identification and analysis, the risk assessment profiles and the development of mitigation strategies for the Town of Blooming Grove and its associated municipalities.

Hazard Migration Coordinator/Training and Exercise Coordinator, Philadelphia Office of Emergency Management (OEM). January 2010 – May 2012

Ms. Kelly served the City of Philadelphia Office of Emergency Management in two separate positions during her tenure. Ms. Kelly was hired as the Training and Exercise Coordinator where she was responsible for overseeing the Training and Exercise Program for the Philadelphia OEM. In this position Ms. Kelly collaborated with numerous federal, state, regional and local partners in the design, development, execution and evaluation of trainings and exercises. Ms. Kelly was also responsible for ensuring Philadelphia and its response agencies were in compliance with NIMS and numerous other grant specifics.

After serving in the Training and Exercise Coordinator role, Ms. Kelly transferred to the planning department where she was responsible for developing Philadelphia's first Hazard Mitigation Plan. Ms. Kelly was Chair of the Philadelphia Hazard Mitigation Planning Committee and worked closely with Federal Emergency Management Agency (FEMA) and PA Emergency Management Agency's (PEMA) Hazard Mitigation Offices. In this role, Ms. Kelly's responsibilities included the research and development of the hazard identification and analysis, the risk assessment, the hazard vulnerability assessment and mitigation strategies for Philadelphia.

In this position, Ms. Kelly also collaborated with federal, state, county and non-governmental stakeholders to develop and implement Philadelphia Hazard Specific Response Plans. Ms. Kelly was the lead planner for the Philadelphia Emergency Flood Response Plan, the Citywide Emergency Heat Plan, and the Citywide Severe Winter Weather Plan. In this role, Ms. Kelly identified and developed operational strategies for the mitigation, response and recovery phases for each hazard specific emergency.

In the wake of the Presidential Declarations of Hurricane Irene and Tropical Storm Lee, Ms. Kelly undertook the role as Lead Project Manager of Philadelphia's Hazard Mitigation Assistance (HMA) Education Program. In this role Ms. Kelly educated City agencies on eligible mitigation projects, which could be funded through the Hazard Mitigation Grant Program (HMGP) and worked with those agencies to develop and submit eligible projects. Ms. Kelly worked closely with PA Emergency Management Agency's (PEMA) Hazard Mitigation Office to submit Philadelphia's HMGP projects. In addition, Ms. Kelly, along with numerous state and federal agencies (FEMA, PEMA, U.S. SBA, etc.) staffed one of two Disaster Recovery Centers established in Philadelphia. Ms. Kelly assisted FEMA and PEMA with the overall management of the DRC, which was designed to assist Philadelphia residents and business owners with their recovery needs from Irene and Lee.

Ms. Kelly is also a former emergency field responder for the Philadelphia Office of Emergency Management. In this position Ms. Kelly was a Shelter/Reception Center manager during numerous extended shelter operations during hazardous weather events, multi-alarm fires, etc. As a Shelter/Reception Manager, Ms. Kelly, in collaboration with the American Red Cross, was responsible for the well-being and provision of services to both people and their pets.

Public Outreach and Education

Community Soil Kitchen Pilot Outreach Events, ATSDR, Kensington, Philadelphia, PA, 2013

Ms. Kelly participated on a consultant team in collaboration with the Agency for Toxic Substances and Disease Registry (ATSDR) to host free soil kitchen events in the Kensington Community of Northeast Philadelphia in 2013. The events focused on providing free soil screening for lead in samples provided voluntarily by local residents, as well as providing attendees with an explanation of the screening process, results, and information to additional resources. Ms. Kelly also participated in critical outreach activities in Environmental Justice target communities to advertise for the event. In-person outreach was conducted in both English and

Spanish and was successful in reaching a variety of community organizations, businesses, and local leaders with information about the Soil Kitchen events and other lead health and awareness resources.

Philadelphia Office of Emergency Management – Public Outreach and Education Agency Representative, January 2010 – 2012

In order to serve as a Philadelphia public outreach and education agency representative, Ms. Kelly received extensive training in the arena of public speaking. As a Public Outreach and Education Agency Representative for the Philadelphia Office of Emergency Management, Ms. Kelly conducted numerous Personal and Family Preparedness Workshops, Pet Preparedness Workshops, Business Continuity Workshops and presentations on general agency operations. Through Personal and Family Preparedness Workshops and Pet Preparedness Workshops Ms. Kelly provided Philadelphia residents with easy to follow steps on how to prepare their homes, family and pets for any type of emergency. Information included: how to develop a household emergency plan, checklists of needed emergency supplies for both people and pets, when and how to shelter in place, evacuation routes for Philadelphia neighborhoods, and how to stay informed during emergencies.

SCIENTIFIC/TECHNICAL PUBLICATIONS

None

ADDITIONAL TRAINING/CERTIFICATIONS

IS-001 Emergency Program Manager: Orientation	IS-324 Community Hurricane Preparedness
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IS-007 A Citizen's Guide to Preparedness IS-393 Introduction to Hazard Mitigation

IS-010 Animals in Disaster: Awareness and Preparedness IS-546 Continuity of Operations (COOP) Awareness

IS-011 Animals in Disaster: Community Planning IS-547 Continuity of Operations (COOP) Intro

IS-022 Citizen Preparedness IS-701 NIMS Multiagency Coordination System

IS-029 Public Information Officer Awareness IS-702 NIMS Public Information Systems

IS-120 Introduction to Exercises IS-703 NIMS Resource Management

IS-130 Exercise Evaluation and Improvement IS-704 NIMS Communications and Information

IS-139 Exercise Design Management

IS-230 Principles of Emergency Management IS-706 NIMS Interstate Mutual Aid

IS-235 Emergency Planning IS-775 EOC Management and Operations IS-240 Leadership and Influence IS-805 ESF #5 Emergency Management

IS-241 Decision Making and Problem Solving IS-836 Nuclear/Radiological Incident Annex

IS-242 Effective Communication E-132 Discussion-Based Exercise Design and Evaluation

2 122 Electric Communication

IS-244 Developing and Managing Volunteers E-133 Operations-Based Exercise Design and Evaluation

IS-271 Anticipating Hazardous Weather & Community Risk E-136 Operations-Based Exercise Development



Brian Rutherford

Project Manager, Emergency Management | Risk & Resilience

20+ YEARS OF EXPERIENCE

Areas of Expertise

Emergency Planning, Response and Recovery

Continuity of Operations Planning

Debris Management

Hazard Mitigation

Regional Coordination

Training and Exercises

Public Health Preparedness

Infectious Disease Planning

Meeting Facilitation

Public Information

Key Training/Certifications

Professional Continuity Practitioner

FEMA Public Assistance Program and Eligibility

FEMA Emergency Management Institute: Personal Development Series

Homeland Security Exercise Evaluation Program

National Incident Management System 700

Incident Command System 100, 200, 300, 400

National Response Plan 800

Debris Management

Fatalities Management

40 Hour HAZWOPER and refresher

Public Information

Hazard Mitigation

Education

Bachelor of Business Administration, University of Houston-Downtown, 2002

EXPERIENCE SUMMARY

Mr. Brian Rutherford has over 20 years of emergency management experience. His areas of expertise include disaster debris management, continuity of operations, emergency planning, mitigation, and recovery.

Mr. Rutherford has been involved in a wide range of emergency management planning and response projects. Some of these include disaster debris management planning and response, public health emergency plan development, continuity of operations planning, infectious disease planning, plan assessments, public information plan development, hazard mitigation planning, hurricane planning and response, wildfire response, flooding response, training design and meeting facilitation. Mr. Rutherford is also experienced in the design and evaluation of exercises following Homeland Security Exercise and Evaluation Program principles.

Prior to joining our team, Mr. Rutherford served as a public health planner for the Galveston County Health District in Texas. His responsibilities included coordinating public health preparedness activities, overseeing the county's Strategic National Stockpile program, developing emergency plans, coordinating exercises, conducting training, and organizing conferences. While there, he also helped coordinate the public health response to several emergencies, including Hurricane Rita, Hurricane Humberto, and the BP explosion in Texas City.

Mr. Rutherford also held a position as an information specialist for the Texas Department of State Health Services, where he was responsible for coordinating responses to media inquiries, public health preparedness planning, and response to public health emergencies.

RELEVANT EXPERIENCE

Project Manager (February 2022 – April 2022)

Sarasota County, Florida | Disaster Debris Management Training

Mr. Rutherford was the project manager and trainer in a project to train Sarasota County staff in planning, operations, public information, and continuity of operations in response to a debris generating disaster.

Project Manager (August 2020 – Present)

Marin County, California | Disaster Debris Management Planning

Mr. Rutherford is managing a project to develop disaster debris management plans for Marin County, California, develop a disaster debris plan template for other counties in the region, conduct training and exercises.

Project Manager (July 2020 – Present)

Burleson, Texas | Disaster Debris Management Planning

Mr. Rutherford is managing a project to develop a disaster debris management plan and provide analysis of debris management sites for Burleson, Texas.

Project Manager (March 2020 – Present)

Brazoria County, Texas | Disaster Debris Management Planning

Mr. Rutherford is managing a project to update the disaster debris management plan and provide analysis of debris management sites for Brazoria County.

Project Manager (February 2020 – Present)

City of Culver City, California | Disaster Debris Management Planning

Mr. Rutherford is managing a project to develop disaster debris management plans for the City of Culver City, California

Project Manager (February 2020 – September 2020)

Walton County, Florida | Hazard Mitigation Plan Update Planning

Mr. Rutherford managed a project to update the hazard mitigation plan for Walton County, Florida.

Planner (November 2019 – August 2020)

San Mateo County, California | Disaster Debris Management Planning

Mr. Rutherford was the lead planner in a project to develop a disaster debris management plan for San Mateo County, California.

Consultant (October 2019)

Harris County, Texas | Disaster Recovery Housing Program

Mr. Rutherford assisted in a project to assess the Community Development Block Grant – Disaster Recovery (CDBG-DR) housing program for Harris County, Texas in response to Hurricane Harvey.

Project Manager (March 2018 – Ongoing)

City of Bellevue, Washington | Disaster Debris Management Planning

Mr. Rutherford is coordinating with Perteet, Inc. to develop disaster debris management plans and evaluate debris management sites to speed recovery from a debris generating incident for the City of Bellevue, Washington.

Planner (April 2018 – November 2018)

City of Miami, Florida | Disaster Debris Management Planning

Mr. Rutherford assisted in a project to update the disaster debris management plan for the city of Miami, Florida. In addition to updating the plan, Mr. Rutherford was also involved in developing a scope of work for debris removal contractors that will be procured to by the city following a disaster.

Planner and Facilitator (September 2019 – February 2020)

Southeast Pennsylvania Regional Task Force | Tabletop Exercise

Mr. Rutherford coordinated with Bucks County, Chester County, Delaware County, Montgomery County, and the City of Philadelphia, to develop and conduct a debris management tabletop exercise.

Trainer and Exercise Facilitator (September 2019 – December 2019)

Metro Boston Homeland Security Region | Training and Tabletop Exercise

Mr. Rutherford coordinated with the cities of Boston, Brookline, Chelsea, Cambridge, Everett, Quincy, Revere, Somerville, and Winthrop, to develop and facilitate training and conduct exercises in disaster debris management.

Planner (August 2019 – Ongoing)

City of Sugar Land, Texas | Hazard Mitigation Plan Update Planning

Mr. Rutherford assisted in a project to update the hazard mitigation plan for the City of Sugar Land, Texas.

Project Manager (April 2019 – October 2019)

Debris Management Webinars and Workshop

Mr. Rutherford managed a project to develop two webinars and a workshop for the Houston – Galveston Area Council jurisdictions. The webinars and workshop provide guidance in response to wildfires, tornadoes, and terrorism incidents. They also provided updates in Federal guidance, laws, and best practices in debris management. In addition, Mr. Rutherford prepared a report highlighting disaster debris and its effect on the lifespan of area landfills.

Project Manager (November 2018 – March 2019)

City of Livermore, California | Disaster Debris Management Planning

Mr. Rutherford managed a project to develop disaster debris management plans for the City of Livermore, California.





Treemonisha Smith, M.S.

Planner, Emergency Management | Risk & Resilience

12 YEARS OF EXPERIENCE

Areas of Expertise

Emergency Management

Higher Education Campus Safety

Public Education and Outreach

All-Hazards Planning

Large-Scale Special Event Emergency Planning

EOC Operations

Policy Writing

Training and Exercise Development

Key Training/Certifications

Incident Command System (ICS) 100, 200, 300, 400, 700, 800

Homeland Security Exercise and Evaluation Program (HSEEP)

Georgia POST General Instructor

Education

Saint Louis University, Master of Science, Biosecurity and Disaster Preparedness

University of Southern Mississippi, Bachelor of Science, Community Health Science

EXPERIENCE SUMMARY

Ms. Treemonisha Smith is a Senior Emergency Management Planner with Tetra Tech, who brings over a decade of emergency management and public safety expertise with experience in municipal, higher education and technology sectors. Her areas of expertise are all-hazards planning, training, exercises, and large-scale special event emergency planning.

Ms. Smith held various roles in higher education emergency management. In these roles, she directed emergency planning and training and exercise programs, and preparedness outreach initiatives. She has planned and facilitated several drills, tabletop, functional and full-scale exercises. Followed by after-action reports, improvement plans, and multi-year training and exercise plans to expand organizational resilience. Ms. Smith formerly oversaw the expansion of a GIS-based crisis and event management platform that transformed coordination and information sharing in the greater Los Angeles region.

RELEVANT EXPERIENCE

Emergency Management

Consultant – Senior Emergency Management Planner (January 2023 – Present)

City of Houston | Comprehensive Emergency Management Plan

Served on the planning team for the City of Houston Office of Emergency Management update of their Comprehensive Emergency Management Plan (CEMP), accompanying annexes, and standard operating plans.

- Developed the Commodities Points of Distribution Plan and supplemental appendices
- Developed and facilitated presentations for the City's OEM at community and stakeholder meetings
- Drafted the presentation slides and materials for the plans workshop and tabletop exercise

Senior Director, Campus Safety (September 2021 – January 2023) Mount Saint Mary's University

Provided strategic operations and personnel leadership for the Campus Safety Department comprised of four operational units: security, emergency management, business continuity and environmental health and safety. Served as Clery Compliance Officer and member of senior leadership in the Administration and Finance Division.

- Led the University's ongoing COVID-19 response and maintain University-wide situational awareness through coordination meetings, newsletters, website updates, an online dashboard and community forum presentations.
- Established University emergency management and safety plans development structure and schedule.
- Developed and submitted the Annual Fire Safety and Security Report and Jeanne Clery Act data.

- Launched the Campus Safety Advisory Council (CSAC) and subcommittees, the University's multi-department committee established to collaborate on strategies and initiatives designed to enhance safety culture and improve the University's ability to mitigate and respond to all threats.
- Executed the department restructuring project including communications and emergency operations center construction planning, department rebranding, radio systems upgrade and policy development Job description bullets. Detail.

Director, Emergency Management & EHS (September 2020 – September 2021) Mount Saint Mary's University

The University's first emergency manager and safety officer tasked with establishing the Emergency Management & Safety department and programs (emergency management, business continuity and environmental health & safety).

- Steered coordination for the University's ongoing COVID-19 response and developed operations plans.
- Established University incident command structure and corresponding training.
- Developed the comprehensive 2021 Commencement Operations Plan in compliance with local government COVID-19 event regulations and serve as compliance officer and public health liaison.
- Revised and rebranded the University-wide emergency notification operations plan and user training.

Director, Organizational Strategy (July 2019 – July 2020)

Homeland Security Advisory Council, Los Angeles

Provided programmatic leadership for and strategic direction for a crisis and event management geographic information system-based technology platform, including managing the annual \$1.3 million grant-funded yearly budget and leading a team of programmatic and technical staff and consultants. Also served as a member of the senior leadership team tasked with recruitment, training, and development strategies.

- Oversaw quality improvement and platform augmentation strategy projects to enhance the user interface and experience
 on desktop and mobile devices maintaining quality assurance and checks and encompassing end-user feedback gathered
 during workshops and emergency exercises.
- Amplified community resilience through technological innovation in the Los Angeles region by expanding to nearly 30 user agreements and over 500 end-users.
- Collaborated with end-users for customized solutions for their special event and incident response including COVID-19, the 2020 LA (Los Angeles) Marathon, the 2019 Fleet Week, and the 2019 October Fires, among others.
- Established formal customer service standards incorporating the implementation of the customer relationship management software for technical and program support and the development of the end-user engagement/customer service strategy.
- Invested in the people of the organization by leading quarterly professional development training, financially supporting conference and training participation, and revamping onboarding through formalizing documentation and revising the employee handbook and orientation process.

Assistant Director, Emergency Preparedness (February 2018 – July 2019)

Georgia Institute of Technology (Georgia Tech) Police Department

Led university-wide emergency plans development and maintenance to identify, minimize or eliminate natural and man-made hazards and threats, including the Emergency Operations Plan, Continuity of Operations Plan, special event operations and annexes as part of the Police Department Office of Emergency Management and Communications. Also supervised intern/student worker staff and assisted in department goal setting and strategic planning.

- Strengthened overall campus readiness by establishing the campus emergency planning structure and guiding senior executives and key campus stakeholders in setting their emergency and business continuity plans, standard operating procedures, and policies to align with the university-wide plans.
- Empowered students, faculty, and staff to take part in their personal emergency response and maintained awareness of potential and actual threats to campus through the management of the campus-wide emergency notification system and issued university-wide emergency alerts.

- Ensured public safety during large, high-security assemblies by collaborating with law enforcement, athletics, fire, etc. to develop operations plans for high-level events, including gubernatorial inauguration, Major League Soccer matches, Division I college football, and Super Bowl LIII sponsored events.
- Enhanced campus resilience at the building level by revising the building emergency response plan, redesigning the online portal and engaging campus building managers through regular meetings, marketing outreach, and an annual symposium.

Emergency Preparedness Coordinator (October 2016 – February 2018)

Georgia Institute of Technology (Georgia Tech) Police Department

Managed campus emergency preparedness, training, and exercise programs, including the Georgia Tech-Campus Emergency Response Team, and maintained the campus emergency notification system per standards outlined in the Clery Act. Served as a member of the Emergency Operations Center and Game Day Command Center staff.

- Created and launched the inaugural prepareGT campaign increasing stakeholder outreach and engagement with the Police Department.
- Developed and facilitated drills and exercises using Homeland Security Exercise and Evaluation Program (HSEEP) guidelines
 for key departments, including executives and department heads, on various scenarios including emergency notification,
 incident command, winter weather, and special event emergency response.
- Concurrently managed multiple programs to strengthen campus responder and volunteer preparedness, including the Georgia Tech Campus Emergency Response Team program and the Emergency Preparedness Certificate Program.
- Served on International Crisis Management Committee and lead planning efforts for the annex plan to support students and faculty abroad.

Emergency Coordinator (November 2015 – September 2016)

UCLA David Geffen School of Medicine

Led and facilitated school-wide and department-level emergency planning and coordination, including operations, emergency action, and business continuity plans to support education, research, and clinic operations with an annual budget of \$30,000. Supported and served as emergency response staff for the UCLA Health Medical Centers and Health Sciences Schools.

- Facilitated evacuation drills of a health education complex that occupies 3.1 million square feet and has over 28 miles of corridors and prepared the subsequent after-action report and improvement plan.
- Led the expansion of an employee volunteer-based emergency response team to 300 members which involved recruitment, retention, meetings, training, and supply and resource management.
- Developed and effectively delivered emergency management guidance, training, and exercises to audiences ranging from line level to executive staff and facilitated activities for testing emergency operations plans and emergency action plans to increase preparedness throughout the school and outpatient clinics.
- Provided structure to emergency response by creating Department Operations Center (DOC) plans, procedures and job aids and training executives on their DOC response role.

Emergency Management Specialist (April 2012 – October 2015)

Loyola Marymount University

Led annual outreach initiatives: emergency preparedness campaign with monthly themes and activities, campus-wide preparedness fair, and Great ShakeOut and Active Shooter drills. Assisted in the development, planning, implementation, and maintenance of emergency management and emergency notification programs.

- Improved overall campus resilience by designing and facilitating various training courses for over 300 campus community members, including Emergency Operations Center (EOC) coordination and Incident Command, and developing the EOC Activation Notification procedures and position checklists for 49 EOC positions.
- Strengthened relationships with local response agencies by partnering to conduct a full-scale exercise with simultaneous Emergency Operations Center activation, Unified Command Post, and field response; exercised response capabilities by coordinating various exercises and drills and testing emergency notification systems.
- Exemplified strong program management skills by increasing the Emergency Response Team to 292 from 175 members, supervising ten staff and streamlining their duties by implementing task checklists and policies.

• Increased compliance through review and revision of the University Emergency Operations Plan and the Mental Health Recovery Annex with a recovery cadre and designation of evacuation zones per fire code regulations.

Project Manager (June 2011 – March 2012)

City of Los Angeles Emergency Management Department

One of two awardees selected for a highly competitive, award-winning internship in the nation's 2nd largest city. Concurrently managed multiple projects while facilitating program peer presentations and partner site visits.

- Led full revision of the EOC Section-Specific Training course content, presentation slides, exam and manual.
- Developed site-specific Incident Action Plans ensuring ADA compliance for 30 pre-designated medical points of distribution locations and standard operating procedures and policy for the Duty Officer and Duty Team Manual.
- Served on the City Advance Recovery Task Force to develop the Advance Recovery initiatives.
- Composed and designed the department's Annual Report in compliance with grant funding.

ADDITIONAL EXPERIENCE

Instructor - GT 1000, Georgia Institute of Technology (08/2018-12/2018)

Program Support Clerk, Michael E. DeBakey VA Medical Center (July 2003 – February 2009)



Liz Sullivan, MEP, MPA

Senior Planner, Emergency Management | Risk & Resilience

9 YEARS OF EXPERIENCE

Areas of Expertise

Training and Exercise

After-Action/Improvement Planning

All-Hazards Planning

Public Health Emergency Management

Registrations/Affiliations

None

KEY Training/ Certifications

Master Exercise Practitioner

FEMA Emergency Management Basic Academy

Type III IMT Supply & Food Unit Leader

ICS Train-the-Trainer

Intermediate and Advanced ICS Curricula

Education

MPA, Emergency Management and Homeland Security, George Mason University, 2014

Contact

678-775-3125

liz.sullivan@tetratech.com

EXPERIENCE SUMMARY

Liz Sullivan is a skilled emergency manager with 9 years of experience in the field. She has held various roles in all-hazards and public health emergency management at local, regional, and state levels. Her areas of expertise are the development and evaluation of training and exercise programs and all-hazards planning. She has held the role of Exercise Director for multiple operations-based large-scale exercises including a 4-day full-scale exercise with the activation of multiple jurisdictional Emergency Operations Centers, Department Operations Centers, and Points of Dispensing across the Washington National Capital Region. Additionally, Ms. Sullivan has supported local and regional incident responses in Planning and Logistics Section roles during national-level events including Operations Allies Welcome, the January 6th U.S. Capitol Civil Unrest, and COVID-19.

RELEVANT EXPERIENCE

Training and Exercise Specialist – Gwinnett County, GA Exercise Support Project

Ms. Sullivan is currently serving as the training and exercise support specialist for the Gwinnett County Exercise Support Project. The project will include developing and conducting a series of one workshop and two tabletop exercises to update and revise current Recovery, Closed Points of Dispensing, and Continuity of Operations (COOP) plans for the County.

Planner – Dallas County, TX Elections Security Plan Project

Ms. Sullivan is currently serving as a planner for the Dallas County Elections Security Plan Project. The project includes the development of an Elections Security Plan that addresses the security and continuity of the elections process utilizing best practices, audit results and state/federal requirements.

Planner – Gwinnett County Water Resources, Facility Operations, Development of Standard Operating Procedures Project

Ms. Sullivan is currently serving as a planner for the Gwinnett County Development of Standard Operation Procedures (SOPs) for the Gwinnett County Water Resources – Facility Operations Project. The project will include the development of SOPs that capture the Facility Operations Division's business operations and day-to-day activities.

Training and Exercise

Training and Exercise Coordinator, Northern Virginia Hospital Alliance.

Ms. Sullivan implemented the Northern Region Healthcare Coalition Training and Exercise Program ensuring all applicable local, state, and federal requirements were met. Ms. Sullivan developed the first regional Home Health/Hospice Agency Tabletop Exercise and designed a multi-day Medical Surge Workshop to engage public health, emergency management, and healthcare personnel for the development of a regional Alternate Care System Plan.

Training and Exercise Coordinator, Fairfax County Health Department

Ms. Sullivan planned, developed, and evaluated emergency preparedness and response-related trainings and exercises for over 1,250 health department staff and volunteers. Ms. Sullivan also designed an extensive Point of Dispensing (POD) training and exercise program utilizing discussion-based and operations-based exercises of varying sizes over a three-year period, culminating in a four-day, multi-state, full-scale exercise.

All-Hazards Planning

All-Hazards Planner, VDEM Region 7

Ms. Sullivan delivered technical assistance to localities, state agencies, higher education institutions, the National Capital Region, and other partners on the development, maintenance, and review of all-hazards plans including Hazard Mitigation Plans (HMPs), Emergency Operations Plans (EOPs), and Threat and Hazard Identification and Risk Assessments (THIRAs). Ms. Sullivan has conducted root cause analysis and developed After-Action Report/Improvement Plans (AAR/IP) for agency exercises and emergency responses and leveraged interpersonal relationships to maintain the corrective action program.

SCIENTIFIC/TECHNICAL PUBLICATIONS

None

ADDITIONAL TRAINING/CERTIFICATIONS

Homeland Security Exercise and Evaluation Program (HSEEP)

FEMA Basic Instructional Design Certificate

Type III All-Hazards Incident Management Team

All-Hazards Logistics Section Chief

HazMat Awareness and Core HazMat Operations

ADDITIONAL EXPERIENCE

National Capital Region Incident Management Team, Former Member

EMPLOYMENT HISTORY

2020 – 2022	All-Hazards Planner, Virginia Department of Emergency Management Region 7, Fairfax, VA
2019 – 2020	Training and Exercise Coordinator, Northern Virginia Hospital Alliance, Reston, VA
2016 – 2019	Training and Exercise Coordinator, Fairfax County Health Department, Fairfax, VA
2015 – 2016	Training and Exercise Specialist, ABS Consulting, Arlington, VA
2013 – 2015	Administrative Associate, Fauquier County Department of Fire Rescue and Emergency Management, Warrenton, VA



Aaron M. Sines

Senior FEMA BCA Analyst, Emergency Management | Risk & Resilience

17 YEARS OF EXPERIENCE

Area of Expertise

Program and Project Management

HMA Subject Matter Expert

FEMA BCA Subject Matter Expert

Mitigation Planning

CDBG-DR Mitigation Specialist

Federal Procurement Standards

Grants Management

Project Scoping

Education

BA Philosophy. University of Maine-Orono.

EXPERIENCE SUMMARY

Mr. Sines is a seasoned hazard mitigation specialist with over 17 years of experience in the emergency management field. As part of Tetra Tech's Disaster Recovery Team, he specializes in the development of benefit-cost analyses (BCAs) incorporating state of the art strategies to include quantifiable benefits to demonstrate economic feasibility of federally and locally funded projects. He also specializes in data management and web-based application development projects that help simplify and streamline the collection and analysis of information required for grant application development.

He has extensive expertise in federal grants and long-term recovery, having worked as a disaster reservist for FEMA from 2006-2015 and as a private sector consultant for multiple consulting firms. In addition to developing BCAs, throughout his career Mr. Sines has provided community education and outreach, grants technical assistance, planning outreach, grants management, application review, and substantial damage estimation. He has been a team lead for several FEMA acquisition and demolition programs, as well as a project specialist for various HUD and hazard mitigation grant program applications. With his combined knowledge of federal grant administration and local municipal administration, Mr. Sines guides his clients through the federal procurement process to ensure they are reimbursed for all eligible expenses related to their grants. He also helps guide clients through all phases of the federal grant application life cycle, from project scoping through to close-out. Mr. Sines has engaged with clients throughout the disaster recovery lifecycle across various disaster events, including the 2020-2021 Wildfires in Oregon, Hurricane Sandy, Hurricane Harvey, and Hurricane Maria in Puerto Rico.

RELEVANT EXPERIENCE

FEMA Hazard Mitigation Assistance and Benefit Cost Analysis

Mr. Sines has prepared competitive mitigation grant applications and fully documented FEMA BCAs in accordance with the FEMA benefit-cost methodology since 2014. These successful BCAs and applications have resulted in millions of mitigation dollars awarded to jurisdictions across the U.S. The range of these analyses includes small projects to evaluate loss on a single structure to very complex analyses that assess loss avoidance on hundreds of properties, as well as critical facilities and infrastructure. Mr. Sines' recent BCA and HMA work performed includes:

State of Oregon: Wildfire Mitigation (2019 – 2020)

Mr. Sines completed and submitted an HMGP application and BCA for wildfire mitigation on behalf of the City of Talent, Oregon.

FEMA Hazard Mitigation Technical Assistance Program (HMTAP) Contractor (2023 – Present)

Tetra Tech is a FEMA Region 5, 6, 7 Hazard Mitigation Technical Assistance Program contractor as the Alliance for Resilience Mitigation (ARM). Mr. Sines is part of the joint

venture team performing technical reviews of BCAs to support HMGP funding across the three FEMA regions.

State of Connecticut, HMGP Application and BCA Review (2022 – Present)

Mr. Sines was part of a Tetra Tech team hired by the State of Connecticut to review HMGP project applications and BCAs. Mr. Sines was responsible for reviewing 12 application packages with all supporting documentation and participated in technical assistance calls with the sub applicants.

State of Utah, BCA Review (2023 – Present)

Mr. Sines reviewed and provided recommendations for seven 404 BCAs and one 406 BCA for the State of Utah's Hazard Mitigation Grant Program. He helped sub applicants address issues and participated in technical assistance calls to answer questions.

State of Iowa: BRIC Subject Matter Expert (2022 – 2023)

Mr. Sines was the lead analyst on a team hired by the State of lowa to evaluate their administration of FEMAs BRIC program. He acted as the subject matter expert for hazard mitigation, reviewing old BRIC applications, interviewing staff, drafting technical reports, and providing technical assistance and recommendations for BRIC applicants in lowa. He also helped evaluate the states building codes and provided recommendations on how to strengthen them.

State of Florida, Hurricane lan/Nicole HMGP (2023 – Present). Mr. Sines is the BCA subject matter expert on a Tetra Tech team assisting multiple Florida communities apply for HMGP funding. He is currently helping the cities of Fort Meyers, Cape Coral, Orlando, South Daytona, and Sanford. The team helps sub applicants develop their HMGP applications and BCAs.

Toho Water Authority, FEMA BRIC Support (2022 - Present). Mr. Sines has partnered with Tetra Techs IEW group in Orlando, Florida to assist the Toho Water Authority in their efforts to apply for HMGP under Hurricane Ian. He organized the effort to complete the application, advised the Water Authority on federal procurement policy, and personally completed the HMGP application and benefit cost analysis.

Suffolk County, New York: The Suffolk County Coastal Resiliency Initiative (2019 – 2020)

Mr. Sines served as the Phase two BCA subject matter expert for this massive HMGP project, totaling over \$300 million dollars. He researched the economic and environmental losses associated with nitrogen intrusion into Great South Bay and used that data to help determine cost-effectiveness for the project. The project was approved by FEMA in 2021.

The Village of Island Park, New York: The Village of Island Park Flood Mitigation Project (2019 - 2020)

Mr. Sines served as the Phase two BCA subject matter expert for this important HMGP project, totaling \$42 million dollars. The small village in Nassau County, NY suffered from severe, coastal residential flooding. The FEMA approved project funded the cost to install tide valves, which prevent residential properties from flooding.

Upstate New York FEMA Buyout Lead: Hurricane Sandy/Tropical Storm Irene (2014 - 2015)

Mr. Sines acted as the Upstate New York Buyout Lead as a consultant for the Governor's Office of Storm Recovery (GOSR) after Hurricane Sandy. He led the outreach effort in Upstate New York, convincing communities, and homeowners to participate in a FEMA-funded residential buyout program. Mr. Sines organized and led outreach efforts, educated community leaders, educated homeowners, organized, and protected personally identifiable information, prepared the HMGP applications, and completed any required BCAs for the project. Twelve of the fourteen communities that applied for HMGP were approved for funding, resulting in dozens of homes being removed from the flood plain.

State of Texas as FEMA HMTAP contractor (2018 – 2019)

Mr. Sines supported post-Hurricane Harvey FEMA grant application and BCA reviews across the State of Texas. He also visited communities personally across Harris County to provide direct technical assistance directly to the effected communities.

State of Texas: COVID HMGP (2019 - 2020)

Mr. Sines completed HMGP applications and BCAs for a home elevation project in Aransas Pass, and for an emergency generator is San Patricio County.

FEMA Disaster Reservist, Region One (2006 – 2015)

Shortly after college, Mr. Sines was employed as a FEMA Disaster Reservist. He completed dozens of FEMA-accredited emergency management trainings, mentored under the State of Maine's State Hazard Mitigation Officer, and traveled all over the country responding to presidentially declared natural disasters. During his tenure, he worked in various capacities, including Hazard Mitigation Grants Specialist, Hazard Mitigation Planner, BCA Analyst, and HMA Specialist. His performed various duties, such as community education and outreach, grants technical assistance, planning outreach, grants management, application review, and substantial damage estimating.

Hazard Mitigation Specialist - Private Sector Consultant

H2O Partners (2014–2022)

- Hurricane Sandy. As Upstate NY Buyout Team Lead, Mr. Sines led a FEMA acquisition/demolition program in upstate NY after Hurricane Sandy. 14 applications approved.
- BCA Analyst for Suffolk County Coastal Resiliency Initiative and the Village of Island Park Flood Mitigation Project
- Hurricane Harvey. FEMA HMTAP Worked as part of a FEMA HMTAP team in Texas following Hurricane Harvey.
- HUD CDBG Project Specialist Was a CDBG-DR Project Specialist in Austin, Texas following the HUD allocation for Hurricane Harvey. Reviewed dozens of project application and provided technical assistance to the Texas General Land Office

Wilson & Associates (2020–2022)

- 2020-2021 Wildfires, Oregon Office of Emergency Management. HMGP Application development for several wildfire mitigation projects in Talent, Oregon.
- 2021 BRIC- City of Excelsior Springs, MO. Submitted an application to BRIC for the Excelsior Spring City Hospital Microgrid.

Hagerty (2020–2021)

• California Office of Emergency Services. Inland Unit. HMA technical assistance and grants management.

Enovate Engineering (2022)

• Hurricane Maria, Puerto Rico. HMGP application development and technical assistance.

Housing and Urban Development – CDBG-DR Hazard Mitigation Specialist

Mr. Sines also has experience as a Hazard Mitigation Specialist under HUDs CDBG-DR program. He spent two years in Austin, Texas assisting the Texas General Land Office in administering over \$1 billion dollars of disaster relief funds provided to the state after Hurricane Harvey.

Austin, Texas: Texas General Land Office. Hurricane Harvey (2019 – 2021)

Mr. Sines reviewed dozens of CDBG-DR applications for disaster relief, confirmed National Objectives, researched project benefitting areas, and provided technical assistance to the GLO grant managers. He also completed over a dozen procurement reviews to ensure that all procurement activities complied with 2 CFR 200.



Heather Apgar, CFM

FEMA Hazard Mitigation Assistance Grant Writer

17 YEARS OF EXPERIENCE

17 YEARS WITHIN FIRM

Areas of Expertise

STATE AND LOCAL HAZARD MITIGATION PLANNING

PUBLIC OUTREACH

GRANT DEVELOPMENT AND ADMINISTRATION

Registrations/ Affiliations

Certified Floodplain Manager, 2009

Key Training/Certifications

OSHA 8-HOUR HAZWOPER REFRESHER, 2022

MASSACHUSETTS MUNICIPAL VULNERABILITY PREPAREDNESS (MVP) CERTIFIED VENDOR

Education

B.S., ENVIRONMENTAL SCIENCE, UNIVERSITY OF NEW ENGLAND, BIDDEFORD, MAINE, 2005

Office

Parsippany, New Jersey

Contact

heather.apgar@tetratech.com

(973) 630-8046

EXPERIENCE SUMMARY

Ms. Heather Apgar is a project manager and hazard mitigation planner for Tetra Tech. She holds a bachelor's degree in Environmental Science and is a Certified Floodplain Manager. Ms. Apgar has been directly involved with various projects, including public and stakeholder outreach; hazard mitigation planning; disaster management; and grant support and administration. Ms. Apgar provides support to numerous private and local, state and federal government sector clients. She is currently a part of the hazard mitigation team for state and local hazard mitigation planning projects. She supports all aspects of the DMA 2000 process and has gained proficiency in the planning process for New Jersey, New York, Pennsylvania, Massachusetts, Hawaii, Puerto Rico, California, Colorado, Oklahoma, Texas, and Illinois. Ms. Apgar provides grant administration for property acquisitions and elevations in New Jersey, Ohio, and Washington. Ms. Apgar currently is an ASFPM Certified Floodplain Manager, 40-hour HAZWOPER trained, and a certified provider for the Massachusetts Municipal Vulnerability Preparedness (MVP) grant program.

RELEVANT EXPERIENCE

Hazard Mitigation Planning

DMA 2000 Mitigation Planning – Multiple Locations Throughout the U.S. (2006 – present)

- Ms. Apgar supports local All-Hazard Mitigation Plan projects for state and local jurisdictions in FEMA Regions I, II, III, IV, V, VI, and IX. She supports all aspects of the planning process, from project management to authoring sections of the plan. This includes working with the mitigation division of FEMA Region II, Region III, and Region VI, New York State Department of Homeland Security and Emergency Services (NYDHSES), New Jersey State Police Office of Emergency Management (NJOEM), Pennsylvania Emergency Management Agency (PEMA), and Texas Division of Emergency Management (TDEM). Her responsibilities include facilitating meetings with county, local and public entities, working one-on-one with county and local representatives, public and stakeholder outreach, hazard research and profiling, risk and capability assessments, supporting local and county representatives in developing mitigation strategies, and plan review and editing. She has developed useful tools and graphics to incorporate into and enhance hazard mitigation plans that reduce losses to natural and non-natural hazards.
- o Relevant projects include:

 Union City-Newark, California (2016) 	• State of New Jersey (2014)	Saratoga County, New York (2010)
Douglas County, Colorado (2021)	• Sussex County, New Jersey (2016)	 Suffolk County, New York (2014 and 2020)
• State of Connecticut (2019)	• Warren County, New Jersey (2016)	• Tioga County, New York (2018)
• Fulton County, Georgia (2016)	Broome County, New York (2019)	 Tompkins County, New York (2021)
• State of Hawaii (2018)	• Cayuga County, New York (2021)	• Warren County, New York (2015)
Cook County, Illinois (2014)	 Chenango County, New York (2008, 2013, and 2020) 	 Washington County, New York (2016)
State of Massachusetts (2015)	 City of New Rochelle, New York (2010) 	 Westchester County, New York (2014 and 2020)
 Burlington County, New Jersey (2019*) 	• City of Port Jervis, New York (2009)	 Dauphin County, Pennsylvania (2020)
• Cape May County, New Jersey (2010, 2015, and 2020*)	• Cortland County (2020)	 Lancaster County, Pennsylvania (2017)
• Essex County, New Jersey (2015 and 2020)	• Dutchess County, New York (2015)	 Lehigh Valley, Pennsylvania (2013 and 2018)
 Hudson County, New Jersey (2009, 2015, and 2020) 	• Greene County, New York (2009)	 Pike County, Pennsylvania (2017 and 2022*)
 Hunterdon County, New Jersey (2016) 	 Montgomery County, New York (2016) 	 Schuylkill County, Pennsylvania (2019)
Mercer County, New Jersey (2016)	 Onondaga County, New York (2014 and 2019) 	 Brownsville Public Utilities Board, Texas (2022)*
 Morris County, New Jersey (2015 and 2020) 	Otsego County, New York (2018)	• City of Sugar Land, Texas (2020)*
 Passaic County, New Jersey (2015 and 2020) 	 Putnam County, New York (2014 and 2020) Rockland County, New York (2016) 	 Galveston County, Texas (2022)*

FEMA HMA Grant Applications and Administration

Cape May County, New Jersey

FEMA Grant Administration and Project Management (2018-present)

- Ms. Apgar supported the preparation of the FEMA FMA grant application in FEMA's eGrants for Cape May County, New Jersey to elevate 39 repetitive loss and severe repetitive loss properties in North Wildwood, Ocean City, Sea Isle City and Stone Harbor. The award was approved by FEMA for \$8.1 million. More recently, Ms. Apgar was the lead in the preparation of the FEMA HMGP grant application in FEMA's eGrants for the City of Ocean City, New Jersey to elevate 23 homes in the municipalities of Avalon, Ocean City, Sea Isle City, and Stone Harbor. The award was approved by FEMA for \$5.3 million to elevate the homes.
- Ms. Apgar is the project manager for three residential elevation projects in Cape May County, including a sevenbuilding condominium complex. She works with Cape May County, municipal representatives, and homeowners throughout the home elevation process. This includes reviewing contractor estimates to ensure costs are eligible for

reimbursements, develop tools to assist with the reimbursement process, management of documents, communication with state and local agencies, and submittal of reimbursement requests to NJOEM and FEMA.

Township of Green Brook, New Jersey

FEMA Grant Administration and Project Management (2018-present)

Ms. Apgar is the project manager for residential acquisitions in Green Brook, New Jersey. She is working with the
Township and homeowners to acquire flood-prone properties. This includes scheduling inspections, developing offer
documentation, communication with state and local agencies, site inspections, and preparation of reimbursement
requests for submittal to NJOEM and FEMA.

Community Rating System (CRS) Support

Township of Upper, New Jersey

Township of Upper Repetitive Loss Area Analysis (2020-2021)

Tetra Tech assisted the Township in developing a Repetitive Loss Area Analysis (RLAA) that identified flood-prone areas
and proposed mitigation actions to reduce or eliminate flood losses in those areas. The RLAA was developed in
accordance with the 2017 CRS Coordinator's Manual, Activity 510 (Floodplain Management Planning) and received full
credit for the completed RLAA. Ms. Apgar served as project manager and supported the Township and Tetra Tech staff
throughout the project.

City of Long Beach, New Jersey

City of Long Beach CRS Recertification (2019)

• Ms. Apgar supported the City with their annual CRS recertification including reviews of elevation certifications for properties located within the City.

Township of Brick, New Jersey

Township of Brick Floodplain Management Plan (2015)

• Ms. Apgar worked with Tetra Tech staff and the Township to develop and update a Floodplain Management Plan to assist the Township with identifying floodprone areas, developing mitigation strategies to address those areas, and maximize their potential credit under the CRS program.

Floodplain Management

Washington, D.C. Department of Energy and Environment

Flood Risk Governance and Structure Review and Recommendations for Washington, D.C. (2016-2017)

• Ms. Apgar provided support in the development of a recommended flood risk management governance structure for the District of Columbia. She assisted with the review of numerous plans, studies, and reports and developed a summary of each to determine the types of flooding included and the governance elements each covered. Through a comprehensive review of the literature, current governance structure identification, and stakeholder involvement, the Tetra Tech team developed a recommended governance structure to streamline and better support flood risk management efforts in the District.

Disaster Management

New Jersey Urban Areas Security Initiative (UASI)

Administrative and Grant Support for the New Jersey Urban Areas Security Initiative (UASI), Morris County, New Jersey (2011-2012)

Ms. Apgar provided administrative and grant support to the Northern New Jersey Urban Area Security Initiative (UASI) since April 2011. She has worked on numerous tasks for the UASI Executive Committee (UEC) and the various subcommittees. These tasks included regular attendance to meetings and preparation of meeting minutes; corresponding with state, county and local officials; providing administrative support to the UEC and several subcommittees that included file organization and cataloging of documentation, preparation of documents and

spreadsheets, and assisting with projects; and providing administrative support for the FY11 and FY12 grant years that included project organization, corresponding with OHSP, the UEC and the UASI subcommittees, and assisting with the review of several annexes and investment justifications.

Morris County, New Jersey

Administrative and Grant Support for the Morris County Office of Emergency Management (MCOEM), Morris County, New Jersey (2012 – 2013)

• Ms. Apgar provided administrative and grant support to the MCOEM. She has worked on numerous tasks for the MCOEM, including regular attendance to meetings and preparation of meeting minutes; corresponding with county and local officials; preparing various county plans, and providing administrative support to MCOEM staff that included file organization and cataloging of documentation, preparation of documents and spreadsheets, and assisting with projects. Ms. Apgar was the client manager and lead author of the County Debris Management Plan and responsible for working with various county departments to gather data in order to complete the plan. She assisted with the completion of the County Utility Interruption Plan. Ms. Apgar was also responsible for updating the County's equipment inventory database. Recently, Ms. Apgar assisted the County with completing the Hurricane Sandy After Action Report. Her responsibilities included attending meetings with the municipalities and county departments; preparing a questionnaire that was issued to all municipal OEM coordinators, which was then organized; meeting minutes; and the completion of the after-action report.

Economic Development

Illinois Department of Natural Resources

Asian Carp Business Process Analysis (2017)

Ms. Apgar supported the Asian Carp Business Process Analysis to identify gaps and barriers that impede Asian carp-related business development for the Illinois Department of Natural Resources (DNR). She conducted in-depth interviews with numerous stakeholders that included government agencies, universities, fish processors, and fishers.
 Ms. Apgar assisted with summarizing the findings from over 35 interviews that were presented to the steering committee of key stakeholders involved in Asian carp control. Tetra Tech provided cost estimates, implementation timelines and measurement metrics for each recommended action. The findings were identified through the research conducted and provided recommendations to DNR to address the gaps and barriers that impede Asian carp-related business growth.

Reading's Future LLC

New Markets Tax Credit Application Preparation (2017-2018)

Ms. Apgar supported the preparation of a New Markets Tax Credit (NMTC) application for Reading's Future, LLC. The
goal of the NMTC program is to spur revitalization efforts of low-income and impoverished communities across the
United States. Reading's Future, LLC requested \$40 million to target operating businesses that provide goods and
services to low income communities and persons, as well as real estate development projects that offer quality
employment opportunities for low-income populations. Ms. Apgar was responsible for organizing and completing
portions of the application, working with the client to obtain required information, and for completing and submitting
the online application through the U.S. Department of the Treasury Community Development Financial Institutions
Fund website.

Site Remediation

Cornell Manufacturing

Data Manager/Field Assistant, Orangeburg, New York (2007-2011)

Ms. Apgar assists in the quarterly groundwater monitoring efforts for the Cornell Manufacturing Company in
Orangeburg, NY. Sampling is conducted utilizing the EPA methodology for low-flow purging and sampling. Her
responsibilities include scheduling of activities, placing the bottle order with the laboratory, ordering equipment,
conducting the groundwater sampling, maintain field log books and groundwater purge sheets, manage the analytical

data in Microsoft Access, generate and prepare groundwater sample result tables, and assist in preparing quarterly reports.

Burlington Neck, LLC

Data Manager/Field Assistant, Burlington, NJ (2008-2014)

• Ms. Apgar assisted in the completion of the RAR and provided assistance with data management during site remediation. Currently, Ms. Apgar assists in the quarterly groundwater monitoring efforts at the Burlington Neck, former Hercules Manufacturing site, in Burlington, NJ. Sampling is conducted utilizing the NJDEP methodology for low-flow purging and sampling. Her responsibilities include scheduling of activities, placing the bottle order with the laboratory, ordering equipment, conducting the groundwater sampling, maintain field log books and groundwater purge sheets, manage the analytical data in Microsoft Access, generate and prepare groundwater sample result tables, and assist in preparing quarterly reports.

DR Horton

Phase I ESA Due Diligence, Pennsylvania and New Jersey (2011-2013)

Ms. Apgar conducted several Phase I ESAs on residential properties in New Jersey and Pennsylvania, on behalf of DR
Horton, Inc. (DHI). Ms. Apgar's duties included visual survey of the subject property and adjacent properties, review of
environmental regulatory information and historical documentation, preparation and authoring of the photographic
documentation log and site reconnaissance write-up, all done in accordance with the DHI scope of work and the
American Safety for Testing and Materials (ASTM) Designation E 1527-05, standard practices for ESAs.

ADDITIONAL TRAINING/CERTIFICATION

- Tetra Tech Project Management Level 1 Training
- Tetra Tech Project Management Level 2 Training
- Massachusetts Municipal Vulnerability Preparedness (MVP) Certified Vendor
- U.S. EPA HRS Training, 2010
- FEMA ICS-200, 2009
- FEMA ICS-100, 2009
- Certified Wetlands Delineator, Rutgers University, NJ, 2005

ADDITIONAL EXPERIENCE

- Microsoft Suite Word, Excel, Access, Outlook, and PowerPoint
- Canva
- Adobe Acrobat

MEMBERSHIPS

- Association of Floodplain Managers (ASFPM)
- New Jersey Association for Floodplain Management (NJAFM)

EMPLOYMENT HISTORY

- 2005 present Tetra Tech Environmental Scientist/Hazard Mitigation Planner
- 2004 National Park Service Interpreter Ranger



Rob Flaner, CFM

FEMA HMA Subject Matter Expert

30+ YEARS OF EXPERIENCE

Areas of Expertise

Hazard Mitigation Planning

Community Resilience Planning

Urban Planning

Risk Assessment

Floodplain Management

Community Rating System

FEMA Grant Programs

FEMA Benefit/Costs Analysis

Registrations/Affiliations

Certified Floodplain Manager, 2000

ASFPM US-00-00143

Key Training/Certifications

Certified Floodplain Manager, 2000

ASFPM US-00-00143

Education

B.S., Biological Sciences, University of California at Davis, 1984

Office

Eagle, ID

Contact

(208) 939-4391

rob.flaner@tetratech.com

EXPERIENCE SUMMARY

Rob Flaner has spent over 30 years developing a comprehensive background in all aspects of floodplain management while administering the Community Rating System (CRS) under contract with the Federal Emergency Management Agency (FEMA). The CRS is a FEMA program that provides incentive to communities to exceed the minimum requirements of the National Flood Insurance Program. The CRS program recognizes a comprehensive range of non-structural flood hazard mitigation activities that include public information, mapping and regulations, flood damage reduction, planning and flood warning. Rob was responsible for coordinating all CRS objectives between State, Local, and Federal entities in a 9-state territory that spanned three FEMA Regions. During his tenure with the CRS program, Rob was able to develop strong working relationships with his Federal, State, and Local partners. The CRS since its inception has developed into a template for sustainable floodplain management that can be used at the local level to support multiple facets of community programs. Rob's detailed understanding of the CRS program and floodplain management helped him to develop a diverse floodplain management background that has been utilized by FEMA as a Disaster Assistance Employee.

Rob has taken this diverse experience in floodplain management and expanded it into planning and preparing for the impacts of all-natural hazards through coordinated planning efforts pursuant to the Disaster Mitigation Act of 2000. Utilizing planning tools such as HAZUS-MH, FEMA's Benefit Cost Analysis Re-engineering (BCAR) and the CRS 10-step planning template, Rob has supported local governments across the country in all phases of emergency management. Rob currently serves as Tetra Tech's Hazard Mitigation Program Manager for the western U.S. This position involves managing multi-disciplined projects as well as providing subject matter expertise in all phases of emergency management.

RELEVANT EXPERIENCE

Hazard Mitigation Planning

City of Norwalk Hazard Mitigation Plan, Norwalk, CA, February 2012 to February 2022

Update, San Mateo County, CA, January 2021 to December 2021

Owner/Project Manager: City of Norwalk, eric Wosick, Emergency Manager, (562) 929-5732, ewosick@norwalkca.gov

Tetra Tech was selected by the City of Norwalk to facilitate the development of its initial hazard mitigation plan. The City's principal objectives for this effort was to position itself for eligibility for FEMA Hazard Mitigation Assistance (HMA) grant funding. Rob was the project manager for this effort leading a multidisciplined team with the capacity to assess the unique risks for the City of Norwalk. This plan includes a comprehensive risk assessment of City assets and general building stock as they intersect 4 identified hazards of concern (dam failure, drought/extreme heat, earthquake, and flood,). The plan also includes a robust profile of the possible impacts from climate change on the district's abilities to provide its services. The plan identifies and prioritizes 16 actions to be implemented over the 5-year performance period that

will move the district towards its resiliency goals. The plan was approved pending adoption by FEMA Region IX on February 1, 2022.

San Mateo County 2021 Multijurisdictional Local Hazard Mitigation Plan-Update, San Mateo County, CA, January 2021 to December 2021

Owner/Project Manager: San Mateo County Office of Emergency Management, Dan Belville, Director; 650-363-4118, dbelville@smcqov.org

Tetra Tech was selected by the San Mateo County Office of Emergency Management to perform a comprehensive update to the multijurisdictional local hazard mitigation plan for the County and 35 local government planning partners. This effort was a continuation of the relationship between Tetra Tech and San Mateo County in that Tetra Tech had prepared the 2016 version of the plan as well. Rob was the project manager for this effort leading a multidisciplined team with the capacity to assess the unique vulnerabilities of San Mateo County. This process was conducted under an expediated timeline to avoid plan expiration with plan submittal to Cal OES within 9 months of project initiation. New for this plan update was the application of a "social equity lens" to all phases of the plan's development. This planning process assessed the risk to 12 identified natural hazards of concern as well as a qualitative assessment of the potential impacts from global climate change to those natural hazards. The plan was developed to be in full compliance with state of California requirements mandated under Assembly Bill 2140 and Senate Bill 379. Additionally, profiles of other non-natural hazards of interest was created. The plan identified and prioritized over 800 mitigation actions to be implemented by 36 local government planning partners (San Mateo County, 20 municipalities and 15 special purpose districts). Rob managed the multi-disciplined team that completed the scope of work for this project. The plan received 1st review approval by both the California Office of Emergency Services and FEMA Region IX on December 7, 2021.

Marin Municipal Water District Hazard Mitigation Plan, January 2021 to December 2021

Owner/Project Manager: Kristin Arnold, Associate Engineer, 415.945.1589, KArnold@MarinWater.org

Tetra Tech was selected by the Marin Municipal Water District to facilitate the development of its initial hazard mitigation plan. The District's principal objectives for this effort was to position itself for eligibility for FEMA Hazard Mitigation Assistance (HMA) grant funding. Rob was the project manager for this effort leading a multidisciplined team with the capacity to assess the unique capabilities of special purpose service provider. This plan includes a comprehensive risk assessment of district assets as they intersect 8 identified hazards of concern (dam failure, drought, earthquake, flood, mass movements, severe weather, tsunami, and wildfire). The plan also includes a robust profile of the possible impacts from climate change on the district's abilities to provide its services. The plan identifies and prioritizes 23 actions to be implemented over the 5-year performance period that will move the district towards its resiliency goals. The plan was approved pending adoption by FEMA Region IX on December 20, 2021.

Crescenta Valley Water District Hazard Mitigation Plan, September 2020 to November 2021

Owner/Project Manager: David Gould, Director of Engineering & Operations, 818-236-4119, dgould@cvwd.com

Tetra Tech was selected by the Crescenta Valley Water District to facilitate the development of its initial hazard mitigation plan. The District's principal objectives for this effort was to position itself for eligibility for FEMA Hazard Mitigation Assistance (HMA) grant funding. Rob was the project manager for this effort leading a multidisciplined team with the capacity to assess the unique capabilities of special purpose service provider. This plan includes a comprehensive risk assessment of district assets as they intersect 6 identified hazards of concern (drought, earthquake, flood, landslide/debris flow, severe weather, and wildfire). The plan also includes a robust profile of the possible impacts from climate change on the district's abilities to provide its services. The plan identifies and prioritizes 23 actions to be implemented over the 5-year performance period that will move the district towards its resiliency goals. The plan was approved by FEMA Region IX on November 12, 2021.

Sonoma County Multijurisdictional Hazard Mitigation Plan Update 2021, May 2020 to October 2021

Owner/Project Manager: John Mack, Natural Resource Manager, 707-565-1233, <u>John.Mack@sonoma-county.org</u>

Tetra Tech recently completed a comprehensive update to the Sonoma County Hazard Mitigation Plan by converting the plan from a single jurisdiction format that covered only Sonoma County, to a multi-jurisdictional format providing compliance to 15 local governments (the County, 4 cities and 10 special purpose districts) within the Sonoma County Operational area. Rob was the project manager for this effort leading a multidisciplined team with the capacity to assess the unique vulnerabilities of

Sonoma County. As with all Tetra Tech plans, the cornerstone of this plan was a comprehensive risk assessment of 9 hazards of concern (dam failure, drought, earthquake, flood, landslide/debris flow, se-level rise, severe weather, tsunami, and wildfire). The wildfire component of the plan was enhanced using new wildfire mapping and severity data generated by the county using vital data from recent fires within the operational area. Also unique to this planning effort was the development of an ESRI "Story Map" as an interactive public engagement/risk communication tool that will have legacy with the County in perpetuity (https://experience.arcgis.com/experience/64d531fc0e654c19a40a172a074a5640/). This Story Map supported a public outreach strategy that emphasized inclusion and social equity within the planning area. The plan identifies and prioritizes over 300 action to be implemented by the 15 planning partners. The Plan was approved by FEMA Region IX on October 13, 2021.

2021 Canyon County All-Hazard Mitigation Plan, Canyon County, ID, June 2019 to August 2021

Owner/Project Manager: Canyon County Sheriff's Office, Christine Wendelsdorph, Emergency Manager, 208-454-7271, cwendelsdorf@canyonco.org

Tetra Tech was selected by the Canyon County Sheriff's Office to prepare the update to the Canyon County All-Hazards Mitigation Plan. Rob was the project manager for this effort leading a multidisciplined team with the capacity to assess the unique capabilities of this rural County. Since the prior plan had expired, this effort presented the opportunity to functionally rewrite and format the plan. Attempting to complete this process in the middle of a global pandemic created many challenges for the planning partnership as well as the Tetra Tech team. Through robust coordination and communication with the County and its stakeholders, the plan update process was completed on-time and on-budget. The planning partnership for this effort included the County, 2 cities and 4 special purpose districts. As with all Tetra Tech plans, the cornerstone of this project was a comprehensive risk assessment of seven natural hazards of concern (Dam Failure, Drought, Earthquake, Flood, Landslide, Severe Weather and Wildfire). Hazus-MH was utilized to assess the dam failure, earthquake, and flood hazards. Tetra Tech's level II, user-defined protocol was applied to the earthquake and flood analyses. This plan was facilitated through an 18-member Steering Committee made up of planning partners and other stakeholders from within the planning area. The plan identified and prioritized 64 action to be implemented by the 6 planning partners over the 5-year performance period of the plan. The Plan was approved by FEMA Region X on August 27, 2021.

County of Kauai, Multi-Hazard Mitigation and Resilience Plan, Kauai County, HI, May 2020 to April 2021

Owner/Project Manager: Kauai Emergency Management Agency, Ms. Chelsie Sakai, (808) 241-1800, csakai@kauai.gov

Tetra Tech recently completed a comprehensive update to the Kauai County Hazard Mitigation Plan. This was a multi-hazard planning effort covering all of the planning districts on the island of Kauai. Rob was the project manager for this effort leading a multidisciplined team with the capacity to assess the unique capabilities of this island community. As with all Tetra Tech plans, the cornerstone of this project was a comprehensive risk assessment of ten natural hazards of concern (Tropical Cyclone, Wildfire, Climate Change, Inland Flood, High Surf-Coastal Flood & Erosion, Tsunami, Landslide, Dam Failure, Earthquake, and Heat & Drought). Hazus-MH was utilized to assess the dam failure, tropical cyclone, earthquake, and flood hazards. Tetra Tech's level II, user-defined protocol was applied to the earthquake and flood analyses. This plan was facilitated through a 13-member Steering Committee made up of planning partners and other stakeholders from within the planning area. This committee identified a multi-media public involvement strategy that was deployed by the Tetra Tech planning team during the course of the project. This included a "Story-Map" that played an integral role in engaging the public during the plans development and will be utilized by the County to communicate the plan's implementation. The plan identified and prioritized 49 actions to be implemented by the Kauai County over the 5-yearperformance period of the plan. The Plan was approved by FEMA Region IX on April 30, 2021.

Hawaii County Hazard Mitigation Plan, Hilo, HI, August 2019 to September 2020

Owner/ Project Manager: County of Hawaii Civil Defense Agency (HCCDA), Mr. Talmage Mango,(808) 935-0031, Talmadge.Magno@hawaiicounty.gov

In July of 2019 Tetra Tech was awarded the project to prepare the 2020 update to the Hawaii County Hazard Mitigation Plan (HMP), as required by FEMA regulations. Rob was the project manager for this effort leading a multidisciplined team with the capacity to assess the unique capabilities of this island community. Tetra Tech conducted the HMP update using a planning process that met both Disaster Mitigation Act (DMA) of 2000 requirements and CRS Activity 510 Comprehensive Floodplain Management Plan requirements. Tetra Tech performed the following tasks as part of the 2020 update:

- Completed an extensive repackaging of the County plan to increase readability, usability and integration opportunities with County plans and programs that could support/enhance hazard mitigation actions identified by the plan.
- Organized a stakeholder working group that oversaw the plan development processes and facilitated nine steering committee meetings.
- Updated goals, objectives and mitigation initiatives to more readily align with existing County and State goals, programs and priorities.
- Conducted an enhanced risk assessment using HAZUS-MH and GIS analysis as applicable for 12 hazards of concern.
 The assessment included an update of the general building stock as well as the development of a critical facilities database.
- Developed and employed a public participation strategy that included a public survey, several public meetings, and a
 public comment period.
- Updated hazard profiles with best available data, the results of the risk assessment and a description of hazard events that have impacted the County since the development of the previous plan.
- The plan identified and Prioritized over 35 actions based upon the County's core capabilities and capacity to implement the actions.

The plan was approved by FEMA region IX on September 15, 2020.

East Orange County Water District Hazard Mitigation Plan, Tustin, CA, January 2020 to September 2020

Owner/ Project Manager: East Orange County Water District, Ms. Lisa Ohlund, General Manager, 714-538-5815, lohlund@eocwd.com

Tetra Tech was selected by the East Orange County Water District to facilitate the update of its initial hazard mitigation plan. The District had 2 principal objectives for this effort; first to integrate this mitigation planning effort with its on-going America's Water Infrastructure Act (AWIA) planning effort and second, to identify eligible projects for FEMA's new "Building Resilient Infrastructure and Communities" (BRIC) grant program. Rob was the project manager for this effort leading a multidisciplined team with the capacity to assess the unique capabilities of special purpose service provider. This plan includes a comprehensive risk assessment of district assets as they intersect 8 identified hazards of concern (dam failure, drought, earthquake, flood, landslide, severe weather, wildfire, and space weather). The plan also includes a robust profile of the possible impacts from climate change on the district's abilities to provide its services. The plan identifies and prioritizes 16 actions to be implemented over the 5-year performance period that will move the district towards its resiliency goals. The plan was approved by FEMA region IX on September 17, 2020.

Chelan County Multi-Jurisdiction Natural Hazard Mitigation Plan, Chelan County, WA; June 2018 to December 2019

Owner/Project Manager: Chelan County Natural Resource Department, Mike Kaputa, (509) 670-6935;

Mike.Kaputa@CO.CHELAN.WA.US

Following the successful completion of the initial Comprehensive Flood Hazard Management plan for the Chelan County Flood Control District, Tetra Tech was awarded the contract to complete the 5-year update to the Chelan County Multijurisdictional Hazard Mitigation Plan. Rob was the project manager for this project, leading a multidisciplined team consisting of members from Tetra Tech and its teaming partner, Perteet. This was a multi-jurisdictional planning effort that covered the County, 5 Cities and 9 special purpose districts within the Chelan County operational area. The Plan update was facilitated through a 10-member Steering Committee and followed the 10-step planning process prescribed under FEMA's Community Rating System. The plan fully assessed 8 hazards of concern, including robust Hazus modeling for the Dam Failure, Earthquake and Flood hazards. The plan identifies and prioritizes 249 actions to be implemented over a 5-year performance period by the 15 planning partners. The project was completed on time and on budget and was approved by FEMA Region X on December 30, 2019.

Humboldt Operational Area Hazard Mitigation Plan-Update, Humboldt County, CA, August 2018 to January 2020 Owner/Project Manager: Humboldt County Office of Emergency Services, Ryan Derby, 707-268-2505, rderby@co.humboldt.ca.us

Tetra Tech recently completed its 3rd comprehensive update of the Humboldt County Operational Area Hazard Mitigation Plan for Humboldt County and 22 local government planning partners. The Tetra Tech team has had the pleasure of being the only hazard mitigation planning consultant the County has ever had, facilitating the development of all 3 Humboldt County planning efforts since 2005. As with all of Tetra Tech's multijurisdictional mitigation planning efforts, the latest updated involved an

important level of coordination and facilitation skills to keep 23 planning partners (8 municipals, 15 Special Purpose Districts) on task, and in compliance with FEMA's planning requirements for multi-jurisdictional plans. This plan update was centered upon a comprehensive risk assessment that fully assessed 8 natural hazards of concern (Drought, Dam Failure, Earthquake, Flood, Landslide, Severe Weather, Tsunami and Wildfire) and included profiles of human caused and human health hazards. The plan also included a very comprehensive profile in the potential impacts of climate change on the natural hazards of concern pursuant to the requirements of CA Senate Bill 379 (SB379). This plan update identified and prioritized over 305 actions. This planning effort included the full integration of the County's recently completed Community Wildfire Protection Plan (CWPP) so that all future updates to the plan would include the update of the CWPP as well. Rob was the project manager for this effort, as he has been for all prior efforts for the County as well. Rob led a team of identified discipline leads and support staff that completed this project on schedule and within budget. The plan was approved by FEMA region IX on January 2, 2020.

Harris County Hazard Mitigation Plan Update, Harris County, TX, September 2018 to July 2020

Owners/project Manager: Harris County Office of Homeland Security and Emergency Management, Mr. Benzon John, 713-881-3100, <u>Benzon John@oem.hctx.net</u>

Tetra Tech was selected by the Harris County Office of Homeland Security and Emergency Management (HCOHSEM) to perform a comprehensive update to the 2015, Harris County Hazard Mitigation Plan. As the state's largest metropolitan population County, Harris County poses several unique challenges in both risk exposure and risk resilience. To address these challenges, the Tetra Tech team helped the County to identify a robust cadre of local government and private sector stakeholders that have or could enhance resilience capabilities within the planning area. This plan update process was facilitated through these stakeholders, with an emphasis on understanding risk, the core capabilities to address that risk, and the range of alternatives planning partners could consider utilizing those core capabilities.

Rob was the project manager for this project overseeing a team of discipline leads. This plan update process increased the planning partnership covered by the Harris County Hazard Mitigation Plan from 32 to 42 planning partners. This planning partnership included both municipal and local taxing district panning partners that covered most of the local government interests in the planning area. The stakeholder steering committee that provided key input on plan outcomes and milestones met 6 times over the 14-month planning process. The planning process was facilitated with a strict adherence to the CRS 10-step planning requirements so that the 23 planning partners that participate in the CRS program could maximize their credit potential under the CRS program.

The resulting plan will be totally reformatted in the Tetra Tech 2-volume format, where volume 1 includes all information that applies to whole partnership and planning area, and volume 2 includes all information that is panning partners specific. This plan update process was facilitated over a 14-month time frame with plan submittal to the Texas Department of Emergency Management (TDEM) in February of 2020, and FEMA approval of the final plan on July 23, 2020.

Santa Ynez Band of Chumash Indians, Tribal Hazard Mitigation Plan, Solvang, CA; March 2018 to November 2019

Owners/project Manager: Santa Ynez band of Chumash Indians, Ms. Teresa Romero, 805.688-7997 ext. 4107, tromero@santaynezchumash.org

Tetra Tech was selected by the Santa Ynez Band of Chumash Indians to facilitate the development of its initial tribal hazard mitigation plan pursuant to the requirements of the Disaster Mitigation Act of 2000. This project was an offshoot of a facilitated resilience planning Through EPA's Building Blocks program, led by Tetra Tech. The Building Blocks" project identified the development of a hazard mitigation plan as a key next step to help the tribe to become more resilient to flood hazards. This was the initial planning effort for the Tribe that was funded by a FEMA Pre-Disaster Mitigation grant. The plan is built upon a comprehensive risk assessment of 7 natural hazards of concern that may impact the tribe including the impacts from climate change; and identifies and prioritizes 17 actions to be completed over its 5-year performance period. The plan emphasized tribal sovereignty focusing on the preservation of cultural resources that are importing to its tribal members. Rob was the Project Manager and lead project planner for this effort coordinating a team of identified discipline leads. This was a stand-alone tribal hazard mitigation planning approved by FEMA on November 21,2019.

Gem County Hazard Mitigation Plan Update, Emmett, ID, November 2017 to November 2018

Owners/project Manager: Gem County Office of Emergency Management, Ms. Laurie Boston, (208)284-0772, lboston@co.gem.id.us



Tetra Tech was selected by Gem County Office of Emergency Management Emergency Management to facilitate the comprehensive update of a multi-jurisdictional hazard mitigation plan for Gem County, The City of Emmett and 3 special purpose district planning partners. Tetra Tech had facilitated the last 5-year update for Gem County and its planning partners in 2011. Rob was the project manager for this project as well as the lead project planner for both planning efforts. Rob managed the multi-disciplined team that completed the scope of work for this project. As with the last plan, this plan update was facilitated through a 17, member stakeholder steering committee with the cornerstone of the plan being a comprehensive, state-of-theart risk assessment. The plan assessed risk to 8 natural hazards of concern. Tetra Tech followed the CRS 10-step planning process to maximize CRS credit potential for the 6 CRS participating jurisdictions in the planning partnership. The plan identified and prioritized over 100 mitigation actions to be implemented by the 5 planning partners. The plan was approved by FEMA region X on March 15, 2019.

Del Norte Operational Area Hazard Mitigation Plan, Update. Del Norte County, CA, July 2017 to December 2018

Owner/Project Manager: Del Norte County Office of Emergency Services, Caitlin Goins, (707) 465-0430 ext. 1135, cgoins@co.del-norte.ca.us

Tetra Tech was selected by the Del Norte County Office of Emergency Services to facilitate the 5-year update to the Del Norte Operational Area Hazard Mitigation Plan. This was an update of the planning effort facilitated by Tetra Tech in 2011 and is a testament to the commitment Tetra Tech provides to its clients and the quality of Tetra Tech Plans. This was a multi-jurisdictional planning effort covering the County, Crescent City, the Elk Valley Rancheria and 10 special purpose districts. This process included full incorporation of the Elk Valley Rancheria Tribal government and meat all section 201.7, 44CFR planning requirements for tribal governments. This planning process assessed the risk to 7 identified natural hazards of concern as well as a qualitative assessment of the potential impacts from global climate change to those natural hazards. The plan was developed to be in full compliance with state of California requirements mandated under Assembly Bill 2140 and Senate Bill 379. Additionally, a profile of hazardous materials exposure to the planning area was created. The plan identified and prioritized over 135 mitigation actions to be implemented by 13 local government planning partners. Rob managed the multi-disciplined team that completed the scope of work for this project. The plan received approval by both the California Office of Emergency Services and FEMA Region IX on December 21, 2018.

Contra Costa County Hazard Mitigation Plan Update, Contra Costa County, CA, November 2016 to January 2018

Owner/Project Manager: Contra Costa County Office of Emergency Services, Marcelle Indelicato (925)313-9609, MInde@so.cccounty.us

Tetra Tech was selected by Contra Costa County Office of Emergency Services to facilitate the 5-year update to the Contra Costa County Hazard Mitigation Plan. This was an update of the planning effort facilitated by Tetra Tech in 2012 and is a testament to the commitment Tetra Tech provides to its clients and the quality of Tetra Tech Plans. This was a multi-jurisdictional planning effort covering the County, 15 cities and 19 special purpose districts. This planning process assessed the risk to 8 identified natural hazards of concern as well as a qualitative assessment of the potential impacts from global climate change to those natural hazards. The plan was developed to be in full compliance with state of California requirements mandated under Assembly Bill 2140 and Senate Bill 379. Additionally, profiles of other non-natural hazards of interest was created. The plan identified and prioritized over 520 mitigation actions to be implemented by 35 local government planning partners. This plan followed the CRS planning script adding the additional benefit of CRS credits for the 6 CRS participating communities within the planning area. The cornerstone of this plan update was a comprehensive risk assessment of the planning area using HAZUS-MH following the level-2, user-defined protocol pioneered by Tetra Tech, that included a comprehensive update of over 3000 critical facilities using the CDMS tool within Hazus. Rob managed the multi-disciplined team that completed the scope of work for this project. The plan received approval by both the California Office of Emergency Services and FEMA Region IX on April 19, 2018.

The Tri-Valley Hazard Mitigation Plan, Cities of Dublin, Livermore and Pleasanton, CA, March 2017 to June 2018 Owners/project Manager: The Cities of Dublin, Livermore and Pleasanton, CA, Ms. Tracy Hein, (925) 454-2317, THEIN@Ipfire.org/

Tetra Tech was selected by the Cities of Dublin, Livermore and Pleasanton, California to facilitate the development of a local hazard mitigation plan for the 3 cities and the Dublin/San Ramon Service District (DSRD). All three cities had been covered under a regional planning effort for 9 Bay Area Counties sponsored by the Association of bay Area Governments (ABAG). ABAG disbanded its regional support for updating the regional hazard mitigation plan in 2016, thus requiring the communities covered under the regional plan to start over. Like the other ABAG plan updates performed by Tetra Tech, this effort was treated as a

functional reset for the Cities. This represented a 1st-time planning effort for DSRD. Rob managed the multi-disciplined team that completed the scope of work for this project. The plan included a comprehensive risk assessment of 7 natural hazard of concern as well as a profile for human health and human caused hazards for both cities. In addition, the plan includes a comprehensive profile on the possible impacts to the planning area from Climate Change in compliance with the requirements of California Assembly Bill 379 (SB379). The plan identified and prioritized over 70 actions to be implemented by the 4 planning partners and includes plan integration policies with the general plans for each of the 3 cities pursuant to California Assembly Bill 2140 (AB2140). The plan was submitted to CAOES on time and on budget by January 19, 2018. The plan was approved by FEMA region IX on June 25, 2018

The City of Los Angeles Hazard Mitigation Plan Update, Los Angeles, CA, January 2017 to September 2017

Owners/project Manager: Los Angeles Emergency Management Department, Ms. Carol Parks, (213) 484-4815 <u>Carol.Parks@lacity.org</u>

Tetra Tech was selected by the City of Los Angeles, Emergency Management Department to perform a comprehensive update to the city's 2012 Hazard mitigation Plan. This was a very time sensitive project due to pending plan expiration. The entire planning process for initiation to submittal was completed in 6 months. This process engaged over 15 City departments in the identification and prioritization of over 300 hazard mitigation actions. The cornerstone of the plan update was a comprehensive risk assessment of over 19 identified hazards of concern. Multiple scenarios were modeled for the Dam failure, Earthquake, Flood, tsunami hazards using FEMA's Hazus-MH risk assessment platform following the Tetra Tech refined user-defined protocol for level II analyses. In addition, and full Hazus analysis was performed for 3 sea level rise scenarios. The planning process was facilitated through a steering committee made up of stakeholders within the City of Los Angeles Operational Area. The plan was submitted to CA Office of Emergency Services, on time and on budget, on June 29th, 2017. The plan received approval by both the California Office of Emergency Services and FEMA Region IX on January 26, 20178.

The Santa Clara County Regional Hazard Mitigation Plan, Santa Clara County, California, July 2016 to December 2017 Owner's/Project Managers: Santa Clara County Office of Emergency Services, Darrell Ray, (408) 808-7800, Darrell-Ray@oes.sccgov.org

Tetra Tech was selected by the Santa Clara County Office of Emergency Services to perform a comprehensive update to the mitigation plans of record for San Mateo County and all incorporated cities within the County as well as Santa Clara County Fire District. The prior plan of record for San Mateo County was the regional planning effort sponsored by the Association of Bay Area Governments (ABAG) that disbanded is regional support for regional mitigation planning in 2015. This was a very complex project in that it required engaging a newly formed partnership and facilitating a process different from what that partnership had experienced in the past. This process was treated as a functional reset in mitigation planning for the partnership. This planning process assessed the risk to 8 identified natural hazards of concern as well as a qualitative assessment of the potential impacts from global climate change to those natural hazards. The plan was developed to be in full compliance with state of California requirements mandated under Assembly Bill 2140 and Senate Bill 379. Additionally, profiles of other non-natural hazards of interest was created. The plan identified and prioritized over 340 mitigation actions to be implemented by 17 local government planning partners (Santa Clara County, 15 municipalities and 1 special purpose district). Rob managed the multidisciplined team that completed the scope of work for this project. The plan received approval by both the California Office of Emergency Services and FEMA Region IX on December 19, 2017.

The Union City/Newark, Multi-Jurisdictional Hazard Mitigation Plan, Cities of Union City and Newark, California, June 2016 to February 2017

Owner's/Project Managers: Union City- Joan Malloy, (510)675-5327; <u>JoanM@UnionCity.Org</u>; Newark-Terrance Grindall, 510-578-4200, <u>terrence.grindall@newark.org</u>

Tetra Tech was selected by the Cities of Union City and Newark, California to facilitate a comprehensive update to the hazard mitigation plan for both communities. Both cities had been covered under a regional planning effort for 9 Bay Area County sponsored by the Association of bay Area Governments (ABAG). ABAG disbanded its regional support for updating the regional hazard mitigation plan in 2016, thus requiring the communities covered under the regional plan to start over. Like the other ABAG plan updates performed by Tetra Tech, this effort was treated as a functional reset for both Cities. A planning partnership was formed between the 2 cities and Alameda County Water District, Union Sanitary District, and the Newark Unified School District. Rob managed the multi-disciplined team that completed the scope of work for this project. This planning effort was conducted under an expedited schedule with the entire process up to plan submittal to the State of California being completed

in less than 6 months. The plan included a comprehensive risk assessment of 7 natural hazard of concern as well as a profile for human health and human caused hazards for both cities. The plan identified and prioritized over 140 actions to be implemented by the 5 planning partners. The plan was submitted to CAOES on time and on budget by December 31, 2016. Approval Pending Adoption (APA) was provided by FEMA region IX on March 15, 2017, with all 5 planning partners slated for plan adoption by June of 2017.

Ada County Hazard Mitigation Plan-Update, Ada County, Idaho, January 2016 to November 2016

Owner/Project Manager: Ada County Emergency Management, Paul Marusich, (208) 577-4754, pmarusich@adaweb.net

Tetra Tech was selected by Ada County Emergency Management (ACEM) to facilitate the comprehensive update of a multijurisdictional hazard mitigation plan for Ada County, 6 incorporated cities and 14 special purpose district planning partners. Tetra Tech had facilitated the last 5-year update for Ada County and its planning partners in 2011. As with the last plan, this plan update was facilitated through a 17, member stakeholder steering committee with the cornerstone of the plan being a comprehensive, state-of-the-art risk assessment. The plan assessed risk to 8 natural hazards of concern. Tetra Tech followed the CRS 10-step planning process to maximize CRS credit potential for the 6 CRS participating jurisdictions in the planning partnership. The plan identified and prioritized over 224 mitigation actions to be implemented by the 21 planning partners. The plan was approved by FEMA region X on November 22, 2016.

The City of Roseville, Multi-Hazard Mitigation Plan-Update, City of Roseville, California, November 2015 to December 2016

Owner/Project Manager: The City of Roseville, Carl Walker, (916)746-1349

Tetra Tech was selected by the City of Roseville to perform the 5-year update to the City's Multi-Hazard Mitigation Plan. Tetra Tech has been fortunate to be the firm of preference to prepare and update every hazard mitigation plan for the City since 2005. This planning effort represented the 3rd comprehensive hazard mitigation planning effort facilitated by Tetra Tech for the City of Roseville and is a testament to the commitment Tetra Tech provides to its clients and the quality of Tetra Tech Plans. The City's initial hazard mitigation plan in 2005 that paved the way for the City to become the nation's first and only CRS Class 1 community. This plan acted as the conduit for this accomplishment. Rob was the project manager for this project as well as the lead project planner. Rob managed the multi-disciplined team that completed the scope of work for this project. During the plan update process, key elements of the plan were strengthened or enhanced, including: the addition and analysis of the dam failure hazard, update and enhancement of the initial Hazus model to include a level 2/user defined analysis of the dam failure hazard, and enhancement of the public outreach strategy using new technology and tools. Key to this planning effort was maintaining the City's CRS Class 1 by making sure the process met all the CRS planning prerequisites for plan updates. Once completed, the plan update was scored as 1 of the top 5 scoring plans under CRS activity 510 in the nation. This plan was approved by FEMA on February 21, 2017 on a first pass review by both the State and FEMA.

The City of Portland Mitigation Action Plan (MAP), Portland, Oregon, June 2015 to November 2016

Owner/Project Manager: The City of Portland Bureau of Emergency Management, Jonna Papaefthimiou, (503) 823-3809, Jonna.Papaefthimiou@portlandoregon.gov

Tetra Tech was selected by the City of Portland Bureau of Emergency management to facilitate a comprehensive update to the City's Hazard mitigation Plan. This plan update represented the 3rd hazard mitigation planning effort for the city and was in essence functional reset of hazard mitigation planning for the City. This "reset" was necessary because of the city's desire to emphasize social equity in the planning process. The concept of hazard mitigation planning through an "equity lens" was coined for this process. This was considered to be one of the first mitigation plans in the country to apply a social equity emphasis to the standard FEMA advocated mitigation planning process.

Rob managed the multi-disciplined team that completed the scope of work for this project. Key to this planning effort was the formation of a 32-member Steering Committee with a diverse makeup that supported the equity-based objectives for this

planning process. This committee met 10 times over the 15-month planning process, and they were responsible for confirming key milestones for the plan such as: mission statements, goals, outreach strategies, comprehensive range of alternatives and the plan maintenance strategy. The Tetra Tech planning team facilitated all steering committee meetings with support from PBEM staff.

The cornerstone for this plan was a comprehensive risk assessment of 9 hazards of concern confirmed by the Steering Committee. Hazus-MH was used to construct level II, user-defined models for the earthquake, flood, and dam failure hazards. Multiple scenarios were modeled for each of these hazards and the property specific results were used to support public outreach efforts and mitigation action selection and prioritization.

Another key component of this project was a focused look at the vulnerability to all hazards of concern identified by hazard mitigation of the Critical Energy Infrastructure Hub (CEI Hub) located in the Linton District of the City of Portland. The CEI Hub is a vital piece of critical infrastructure to the entire Pacific Northwest. This Study included detailed modeling of the facilities using Hazus-MH and included a list of resilience recommendations for the City to include in the MAP.

The Plan was approved by FEMA region X on November 28, 2016.

Maui County Hazard Mitigation Plan, Wailuku, HI, December 2014 - September 2015

Owner/Project Manager: Maui County Civil Defense Agency (MCDA), Anna Foust 808.270.7285

In 2014 Tetra Tech was contracted to complete a comprehensive update to the Maui County Hazard Mitigation Plan. This was a multi-hazard planning effort covering all of the islands within the County (Maui, Lanai, Molokai, Kahoolawe, and Molokini). Rob was the Project Manager and Lead project Planner for this project, managing a multidisciplined team of planning professionals. As with all Tetra Tech plans, the cornerstone of this project was a comprehensive risk assessment of twelve natural hazards of concern. Hazus-MH was utilized to assess the dam failure, tropical cyclone, earthquake, and flood hazards. Tetra Tech's level II, user-defined protocol was applied to the earthquake and flood analyses. This plan was facilitated through a 16-member Steering Committee made up of planning partners and other stakeholders from within the planning area. This committee identified a multi-media public involvement strategy that was deployed by the Tetra Tech planning team during the course of the project. The plan identified and prioritized over 60 actions to be implemented by the Maui County over the 5-yearperformance period of the plan. The Plan was approved by FEMA region IX on August 26, 2015.

King County Regional Hazard Mitigation Plan-Update, King County, WA, January 2013 to May 2015

Owner/Project Manager: King County Office of Emergency Services, Janice Rahman, (206) 205-4061

Tetra Tech was selected by the King County Office of Emergency Services to perform a comprehensive update to the King County Regional Hazard Mitigation Plan. This planning effort sought to reengage all eligible local governments within the King County Operational Area which was a KCOES identified deficiency. This planning process assessed the risk to 10 identified natural hazards of concern as well as a qualitative assessment of the potential impacts from global climate change to those 10 natural hazards. Additionally, profiles of other non-natural hazards of interest was created. The plan identified and prioritized over 700 mitigation actions to be implemented by 54 local government planning partners (King County, 26 municipalities and 27 special purpose districts). Rob managed the multi-disciplined team that completed the scope of work for this project. The plan received 1st review approval by both Washington Emergency Management Division and FEMA Region X on May 1, 2015.

Spokane County Regional Hazard Mitigation Plan-Update, Spokane County, WA, October 2012 to February 2015 Owner/ Project Manager: Greater Spokane Emergency Management, Gerry Bozarth, (509) 477-7613

Tetra Tech was selected by the Greater Spokane Emergency Management Agency to perform a comprehensive update to the Spokane County regional Mitigation Plan. Tetra Tech facilitated an update that involved expansion of the coverage of the plan, preparation of a local Threat Hazard and Risk Assessment (THIRA) framework for Spokane County and an update to the Spokane County Community Wildfire Protection Plan (CWPP) for incorporation in to the Hazard Mitigation Plan. Rob managed the multi-disciplined team that completed the scope of work for this project. The final plan assessed 7 natural hazards of concern, provided a profile of other hazards of interest, identified, and prioritized over 100 actions to be implemented by 11 local governments within Spokane County. A level 2, user defined Hazus model was constructed to support the earthquake and flood hazard analyses. This enabled the Tetra Tech Planning team to convey property specific risk information during the implementation of

the public involvement strategy deployed during this process. The plan received 1st review approval by both Washington Emergency Management Division and FEMA Region X on February 27, 2015.

The City of Covington Hazard Mitigation Plan, Covington, WA, March 2013 to October 2014

Owner/ Project Manager: The City of Covington, Shellie Bates, (253) 480-2400

Tetra Tech was selected through a procurement process by the City of Covington to develop their initial hazard mitigation plan. This single jurisdictional planning effort was managed by Rob who also acted as the lead project planner. The plan assessed 8 natural hazards of concern and profiled other hazards of interest for the City. A robust risk assessment was created for the City using Hazus-MH and other GIS based tools created by Tetra tech to support hazard mitigation planning. As will all Tetra Tech plan's, this risk assessment was the cornerstone of the plan that identified and prioritized 40 actions to be implemented by the City. This plan was approved on the 1st reviews by Washington Emergency Management Division and FEMA Region X on October 14, 2014

Cook County Regional Hazard Mitigation Plan, Cook County, IL, July 2013 to October 2014

Owner/ Project Manager: Cook County Department of Homeland Security and Emergency Management, Gene Ryan, (312) 603-8547

Tetra Tech was selected by the Cook County Department of Homeland Security and Emergency management to complete the nation's largest multi- jurisdictional hazard mitigation plan. This planning effort provided DMA compliance to 115 local governments within the Cook County operational area. Rob was the lead project planner for this project and managed a multi-disciplined team that developed many innovative tools to support a planning effort of this scale. The plan assessed 7 natural hazards of concern and profiled other hazards of interest. A level 2, user-defined Hazus-MH model was constructed to support the risk assessment for this project. Over 300,000 user defined facilities were analyzed using a web-based portal developed by Tetra Tech to support large scale planning efforts. This tool was developed to interface with the CDMS extension to Hazus enabling the Tetra Tech team to develop a comprehensive risk assessment that is considered to be a model nationally. This risk assessment was the cornerstone of the public outreach strategy deployed during the process and supported the 115 planning partners in the selection and prioritization of over 1400 actions. The plan was approved on their 1st reviews by Illinois Emergency Management and FEMA Region V on September 26, 2014.

Humboldt Operational Area Hazard Mitigation Plan-Update, Humboldt County, CA, December 2012 to January 2014 Owner/ Project Manager: Humboldt County Department of Public Works, Cybelle Immitt, (707) 267-9542

Tetra Tech was selected by Humboldt County Department of Public works to perform the 5-year update to the Humboldt Operational Area Hazard Mitigation Plan. Tetra Tech facilitated the development of the initial plan as a sub-consultant to Winzler-Kelly, Inc. This update effort included 34 local government planning partners. Rob was the project manager for this project as well as the lead project planner. Rob managed the multi-disciplined team that completed the scope of work for this project. The plan assessed eight natural hazards of concern (dam failure, drought, earthquake, flood, landslide, severe weather, tsunami, and wildfire) using Hazus-MH as the primary risk assessment tool. This plan also includes integration of the County's Comprehensive Wildfire Preparedness Plan (CWPP) following the approach and methodology used in the Siskiyou County plan. This planning process also included integration of the County General plan pursuant to CA Assembly Bill 2140. This planning process resulted in the identification and prioritization of 75 mitigation actions to be targeted for implementation by individual planning partners. This plan was approved by FEMA Region IX on March 20, 2014.

Tehama County Hazard Mitigation Plan, Tehama County, CA, July 2010 to September 2012

Owner/Project Manager: Tehama County Department of Public Works, Gary Antone, (530) 385-1462 (ext. 3005)

Tetra Tech was selected by Tehama County department of Public Works to prepare the initial hazard mitigation plan for Tehama County and six local government planning partners. Rob was the project manager for this project as well as the lead project planner. Rob managed the multi-disciplined team that completed the scope of work for this project. The plan assessed eight natural hazards of concern (avalanche, dam failure, drought, earthquake, flood, landslide, severe weather, and wildfire) using Hazus-MH as the primary risk assessment tool. This plan also includes integration of the County's Comprehensive Wildfire Preparedness Plan (CWPP) following the approach and methodology used in the Siskiyou County plan. This planning process also included integration of the County General plan pursuant to CA Assembly Bill 2140. This planning process resulted in the

identification and prioritization of 75 mitigation actions to be targeted for implementation by individual planning partners. This plan was approved by FEMA Region IX on September 18, 2012.

Siskiyou County Hazard Mitigation Plan, Siskiyou County, CA, July 2010 to May 2012

Owner/Project Manager: Siskiyou County Office of Emergency Services, Robert Rowley (530) 841-2155

Tetra Tech was selected by Siskiyou County Office of Emergency Services to prepare the initial hazard mitigation plan for Siskiyou County and ten local government planning partners. Rob was the project manager for this project as well as the lead project planner. Rob managed the multi-disciplined team that completed the scope of work for this project. The plan assessed eight natural hazards of concern (dam failure, drought, earthquake, flood, landslide, severe weather, volcano, and wildfire) using Hazus-MH as the primary risk assessment tool. This plan also includes integration of the County's Comprehensive Wildfire Preparedness Plan (CWPP) which was one of the first plans in the state to do so. This planning process also included integration of the County General plan pursuant to CA Assembly Bill 2140. This planning process resulted in the identification and prioritization of 153 mitigation actions to be targeted for implementation by individual planning partners. This plan was approved by FEMA Region IX on June 15, 2012.

Kittitas County Hazard Mitigation Plan, Kittitas County, WA, June 2010 to July 2012

Owner/Project Manager: Kittitas County Department of Public Works, Christina Wollman (509)962-7051

Tetra Tech was selected by Kittitas County Department of Public Works to prepare the initial hazard mitigation plan for Kittitas County and twelve local government planning partners. Rob was the project manager for this project as well as the lead project planner. Rob managed the multi-disciplined team that completed the scope of work for this project. The plan assessed nine natural hazards of concern (avalanche, dam failure, drought, earthquake, flood, landslide, severe weather, volcano, and wildfire) using Hazus-MH as the primary risk assessment tool. This planning process resulted in the identification and prioritization of 157 mitigation actions to be targeted for implementation by individual planning partners. This plan was approved by FEMA Region X on July 27, 2012.

Multi-Jurisdictional Hazard Mitigation Plan Update, Ada County, ID, CA, August 2008 to August 2011

Owner/Project Manager: Ada City-County Emergency Management (ACCEM), Paul Marusich (208577-4754

Tetra Tech was selected by Ada City-County Emergency Management (ACCEM) to perform a comprehensive update to the Ada County All Hazards Mitigation Plan. Rob was the project manager for this project as well as the lead project planner. Rob managed the multi-disciplined team that completed the scope of work for this project. This planning effort culminated in a total restructuring of the initial plan that involved expanding the coverage of the plan from 6 to 21 eligible local governments within the Ada County planning area. A key element in this planning effort was a comprehensive risk assessment of 8 identified hazards of concern. Hazus-MH was utilized to assess the risk to dam failure, earthquake, and flood hazards. This was a level 2 analysis of over 37,000 user defined facilities. A highly accurate DEM of the planning area was prepared by Tetra Tech using available Green LIDAR provided by the County. The plan identified and prioritized over 200 risk reduction actions to be implemented by the 21 planning partners. This plan was approved by FEMA Region X on December 1, 2011.

Multi-Jurisdictional Hazard Mitigation Plan Update, Snohomish County, WA, August 2009 to August 2010

Owner/Project Manager: Snohomish County Department of Emergency Management DEM, Jason Biermann (425)388-5068

Tetra Tech was retained by the Snohomish County to perform a compressive update to its multi-jurisdictional natural hazard mitigation plan pursuant to the FEMA specified 5-year plan update requirements. Tetra Tech was the lead consultant on the initial planning effort for Snohomish County, which generated the largest multi-jurisdictional plan in all of FEMA region X. Rob was the project manager for this project as well as the lead project planner. Rob managed the multi-disciplined team that completed the scope of work for this project. This plan update process included a comprehensive update to the risk assessment using HAZUS-MH (MR4). This was a level 2 analysis of over 8,000 user defined facilities for earthquake, flood, and Tetra Tech's adaptation to HAZUS for the Tsunami hazard. This project also involved the development of a Tsunami inundation map including depth grids using a 2-dimensional tsunami simulation model generated by WA Department of Natural resources. This plan was approved by FEMA on April 20, 2010. On a first pass review by both the State and FEMA.

Hazard Mitigation Plan Update, the City of Snoqualmie, WA, January 2009 to May 2010

Owner/ Project Manager: The City of Snoqualmie, Planning Dept., Lauren Hollenbeck (425)0888-5435



Tetra Tech was retained by the City of Snoqualmie to perform a compressive update to its multi-hazard mitigation plan pursuant to the FEMA specified 5-year plan update requirements. Rob was the project manager for this project as well as the lead project planner. Rob managed the multi-disciplined team that completed the scope of work for this project. This project involved a compressive risk assessment utilizing HAZUS-MH (MR4) at a level 2, user defined analysis of all structures within the City for flood and earthquake hazards. A planning process was followed to maximize the City's CRS credit potential, enabling the City to meet the prescriptive CRS Class 4 or better perquisites. This plan was approved by FEMA on August 17, 2010 on a first pass review by both the State and FEMA.

Multi-Jurisdictional Natural Hazards Mitigation Plan, Humboldt County, California, 2006-2007

Owner/Project Manager: Humboldt County, CA, Cybelle Immett (707)268-3736

A planning partnership of 26 eligible local governments within Humboldt County joined forces in the development of a Multi-Hazard Mitigation Plan pursuant to the requirements of the Disaster Mitigation Act of 2000. As a sub-consultant to Winzler-Kelley Consulting Engineers, Rob was the lead project planner on this project, assuring DMA compliance and recognition under the CRS. The CRS planning guidance was followed in the development of this plan to assure compliance with both the DMA as well as the program requirements of the Flood Mitigation Assistance Grant program. A detailed risk assessment of the impact of 9 natural hazards was performed by using risk assessment tools such as HAZUS and HAZUS-MH. During this project, the Tetra Tech planning team was able to retrofit the HAZUS-MH model to analyze risk from the Tsunami hazard. The Humboldt County Operational Area Hazard Mitigation Plan was formally approved for DMA compliance by FEMA region IX in January of 2008.

Multi-Jurisdictional Natural Hazards Mitigation Plan, Whitman County, Washington, 2004-2005

Owner/Project Manager: Whitman County, WA, Fran Martin (509)397-6280

A planning partnership of 27 eligible local governments within Whitman County has joined forces in the development of a Multi-Hazard Mitigation Plan pursuant to the requirements of the Disaster Mitigation Act of 2000. As the project manager and principal planner for this effort, Rob facilitated this planning process to assure DMA compliance and recognition under the CRS. The CRS planning guidance was followed in the development of this plan. A detailed risk assessment of the impact of 6 natural hazards was performed by using risk assessment tools such as HAZUS and HAZUS-MH. This risk assessment was used to create a Hazard Inventory and Vulnerability Analysis (HIVA) that would become an integral part of the Natural Hazard Mitigation Plan and overall emergency management program for the County. Tetra Tech was also successful in securing a FEMA grant on behalf of the partnership that would fund the entire planning effort. The Whitman County Natural Hazard Mitigation Plan was formally approved for DMA compliance by FEMA region X in June of 2006.

Multi-Hazard Mitigation Plan, Sultan, Washington, 2004

Owner/Project Manager: City of Sultan, Craig Bruner, Building Official 360-793-2231

Rob was the lead project planner on this project working with the City of Sultan to develop a Multi-hazard Mitigation Plan pursuant to the Disaster Mitigation Act of 2000 (DMA). This plan was developed using the Community Rating System (CRS) guidance as the template to maximize the benefits to the City of Sultan under the CRS and also utilized the HAZUS-MH program to assess the risk in the City of Sultan.

Multi Hazard Mitigation Plan, Gold Bar, Washington, 2004

Owner/Project Manager: City of Gold Bar, John Light, 360-793-1101

Rob was the lead project planner on this project working with the City of Gold Bar to develop a multi-hazard mitigation plan pursuant to the Disaster Mitigation Act of 2000 (DMA). This plan was developed using the CRS guidance as the template, which will help to maximize the benefits to the City of Gold Bar under the CRS and also utilized the HAZUS-MH program to assess the risk in the City of Gold Bar.

Floodplain Management Plan, North Bend, Washington, 2004



Owner/Project Manager: City of North Bend, Ron Garrow, Director of Public Works, 425-888-5633

Rob was the lead project planner on this project working with the City of North Bend to complete a Comprehensive Floodplain Management Plan and incorporate it into the King County Multi-Jurisdictional Hazard Mitigation Plan pursuant to the requirements of the Disaster Mitigation Act of 2000 (DMA). The plan was developed using the Community Rating System (CRS) guidance as the template, to maximize the benefits to the City of North Bend under the CRS and involved the detailed assessment of risk to the flood hazard and the selection of appropriate strategies to mitigate the impacts of the flood hazard.

Community Rating System (CRS) Program Assistance

Skagit County, CRS Program Support, Skagit County, Washington, November 2017 to November 2018

Owner/Project Manager: Skagit County Planning & Development Services, Jack Moore, (360) 416-1320, jrmoore@co.skagit.wa.us

Tetra Tech was retained by Skagit County to provide technical support in the preparation of the County's 2018 cycle reverification package to the CRS program. Rob was the project manager for this project as well as the lead technical expert who performed all phases of the scope of work for this project. The scope of work for this project involved; a baseline assessment of the County's overall floodplain management program, preparation of a CRS impact analysis report that identified CRS credit potential and impacts for the County, preparation of the County's CRS cycle re-verification package and technical support to the county throughout the CRS verification Process. The County was confirmed for a CRS Class 5 to become effective May 1, 2019.

City of Issaquah, CRS Program Support, Issaquah Washington, July 2017 to February 2018

Owner/Project Manager: City of Issaquah, Department of Public Works, Robert York, (425) 837-3410, roberty@issaquahwa.gov

Tetra Tech was retained by the City of Issaquah to provide technical support in the preparation of the City's 2017 cycle reverification package to the CRS program. Rob was the project manager for this project as well as the lead planner who performed all phases of the scope of work for this project. The scope of work for this project involved; a baseline assessment of the City's overall floodplain management program, preparation of a CRS impact analysis report that identified CRS credit potential and impacts for the City, preparation of the City's 2017 Cycle re-verification package and technical support to the city throughout the CRS verification Process. The City was confirmed for a CRS Class 5 that became effective October 1, 2018.

City of East Palo Alto On-call technical support for CRS/Floodplain Management, City of East Palo Alto, CA, May 2016 to Present

Owner/Project Manager: The City of East Palo Alto, CA, Guido Periscone, (650) 853-3148, apersicone@cityofepa.ora

Since 2016, Tetra Tech has been providing on-call technical assistance to the City of East Palo Alto in the administration of the City's Floodplain management program and its CRS program. The initial task under this technical service contract was to perform a thorough assessment of the City's CRS program to identify a roadmap for the City to improve its CRS classification. After completion of that assessment, Tetra Tech has provided the City assistance in implantation of the recommendations from that assessment that includes: technical support for permit application review, elevation certificate review, post-Community Assistance Visit (CAV) follow-up, code writing, code amendment review and overall training of the staff on floodplain management through the NFIP. Rob was the lead subject-matter expert as well as project manager for all task orders issued under this contract.

Sacramento County, CRS Program Support, Sacramento County, California, December 2014 to July 2016

Owner/Project Manager: Sacramento County Department of Water Resources, George Booth, (916) 874-6851, boothg@saccounty.net

Tetra Tech was hired by the Sacramento County Department of Water Resources to provide subject matter expertise and technical assistance in the County's efforts to achieve a CRS Class 2 rating. Rob was the project manager and the CRS subject-matter expert for this project. This project involved a detailed look at the County's CRS program to help it navigate the 35 classification prerequisites the County would need to meet to achieve a CRS Class 2 rating. Rob acted as the liaison between the County and the CRS technical review process for CRS activities 410 and 450. Sacrament County became the nation's 4th CRS Class 2 community on October 1, 2016.

City of Portland, Oregon, CRS Program Support, November 2014 to December 2015

Owner/Project Manager: Bureau of Environmental Services, Maggie Skendarian (503) 823-5334



Under this project, Tetra Tech provided services to the City of Portland to prepare its floodplain management program for review by FEMA under its Community Rating System program. Rob was the project manager for this project as well as the CRS subject matter expert for this project. Task completed under this project included:

- Project scope of work development and budgeting.
- Comprehensive review of City's floodplain management program to provide recommendations for program enhancement.
- Evaluation of the City's Flood Threat recognition system and Flood Warning Program for CRS credit application.
- Review and update of City's Multi-hazard mitigation plan to get it into compliance with FEMA/CRS program requirements.
- Preparation of City's CRS application for re-verification.
- Review/analysis of new construction as it pertains to permit enforcement

City of Meridian, ID, CRS Program Support, Meridian, ID, March 2014 to January 2016

Owner/Project Manager: The City of Meridian, David Miles, (208) 489-0383

Tetra Tech was retained by the City of Meridian to provide technical support in the preparation of the City's initial application to the CRS program. Rob was the project manager for this project as well as the lead planner who performed all phases of the scope of work for this project. The scope of work for this project involved; a baseline assessment of the City's overall floodplain management program, preparation of a CRS impact analysis report that identified CRS credit potential and impacts for the City, preparation of the City's CRS application and technical support to the city throughout the CRS verification Process. The City was confirmed for a CRS Class 8 to become effective May 1, 2016.

City of Long Beach NY, CRS Program Support, Long Beach, NY, May 2014 to October 2014 to December 2014

Owner/Project Manager: The City of Long Beach, Jim LaCarrubba, (516)431-1011

Tetra Tech was retained by the City of Long Beach to provide technical support in the preparation of the City's 2014 cycle-reverification application. The City sought support to aid in its goal of improving its CRS classification by the 2-year anniversary of Supper Storm Sandy, which had significant impacts on the City. Rob was the project manager for this project who oversaw a team that helped the City remedy identified deficiencies in its floodplain management program, and ultimately improve its CRS class to 7.

On-call CRS Technical Support, The City of Roseville, California, June 2004 to present

Owner/Project Manager: The City of Roseville, Carl Walker, (916)746-1349

Tetra Tech provides services to the City of Roseville via an annual "on-call" contract to support the City's nationally acclaimed CRS and Hazard Mitigation programs. As the nation's first and only CRS class 1 community, Roseville has become the national role model for pro-active floodplain management and hazard mitigation. Rob manages all work orders issued under this contract as well providing the principal subject matter expertise. Tetra Tech has been the city's principal support contractor for these programs since 2005 and provides services that include:

- Task order scoping and budget development
- Management of all facets of the City's CRS program including annual recertification and re-verification of its classification during its review cycle.
- Evaluation of the City's Flood Threat recognition system and Flood Warning Program for CRS credit application.
- Development of an emergency response plan for flood and dam failure threats.
- Hazard Mitigation program support that includes application preparation and benefit-cost analyses.
- Tetra Tech has aided the City of Roseville in securing over \$1.5 million in grant funding under FEMA Hazard Mitigation grant programs since 2005.
- Completion of the annual progress report for accomplishments of the Roseville Hazard Mitigation Plan.

On-call CRS Technical Support, King County, Washington, 2005 to present

Owner/Project Manager: King County Department of Natural Resources, River and Floodplain Management, Steve Bleiphus, (206)477-4726

King County is the nation's highest rated county under the CRS program. Rob manages all work orders issued under this contract as well providing the principal subject matter expertise Tetra Tech was awarded an on-call contract in 2005 and has provided the following services under a work-order/task order basis:

- Work order scoping and budget development.
- Establishing a training curriculum on proper completion and maintenance of the FEMA elevation certificate. This training was provided to key personnel from The Department of Development and Environmental Services (DDES) as part of a memorandum of understanding between DDES and the Flood Hazard Reduction Services Section.
- Planning assistance was provided by facilitating the development of a Flood Hazard Identification and Vulnerability
 Analysis (HIVA) to be included in the 2006 King County Flood Hazard Management Plan. This HIVA modeled outputs
 from the FEMA HAZUS-MH program and seeks to create a bridge between the FHRP and the County's Regional Hazard
 Mitigation Plan, prepared pursuant to the Disaster Mitigation Act.
- Prepare and analysis for the Green River Flood Control Zone District (GRFCZD) on possible benefits/impacts of CRS in the region due to potential mapping change scenarios.
- Prepare the County's cycle re-verification applications under the CRS program. These applications include a comprehensive review and evaluation of the County's entire floodplain management program as it attempts to maintain its status as the nation's 2nd highest ranked community under the CRS program.
- Representation of King County during the Cycle re-verification process
- Providing input to King County personnel on floodplain management program enhancements with regards to CRS impacts, including but not limited to; public outreach, regulations and flood warning and response planning.
- Technical assistance in maintaining NFIP/CRS program compliance

On-call CRS Technical Support, Pierce County, Washington, 2002 to present

Owner/Project Manager: Pierce County Department of Public Works, Water Programs,

Randy Brake, (253)798-4651

Pierce County is the nation's second highest rated county in the CRS program. Tetra Tech provides technical assistance under its Stormwater on-call contract with Pierce County to provide floodplain management services and training that addressed the following objectives:

- Work order scoping and budget development.
- Comprehensive review of City's floodplain management program to provide recommendations for program enhancement.
- Evaluation of the County's Flood Threat recognition system and Flood Warning Program for CRS credit application.
- Prepare the County's application for re-verification to the Community Rating System (CRS).
- Representation of Pierce County during CRS verification Process
- Provide interdepartmental training to County Staff on proper completion of the FEMA Elevation Certificate and maintaining compliance with the National Flood Insurance Program.
- Create a county-wide Food Hazard risk Assessment that would augment the County's existing Basin Planning program, and thus qualify that program for CRS credit, and thus meeting CRS classification prerequisites.
- Providing input to Pierce County personnel on floodplain management program enhancements with regards to CRS impacts.
- Technical assistance in maintaining NFIP/CRS program compliance

Rob managed all work orders issued under this contract as well providing the principal subject matter expertise.

Floodplain Management Services and Training, Snohomish County, Washington, 2005-present

Owner/Project Manager: Snohomish County DPW, Mary Hurner (425)388-6401

Tetra Tech provides annual technical assistance on a "work-order" basis under its Stormwater on-call contract with Snohomish County to provide floodplain management services and training that addressed the following objectives:

Work order scoping and budget development



- Prepare the County's application to the Community Rating System (CRS).
- Evaluation of the County's Flood Threat recognition system and Flood Warning Program for CRS credit application.
- Review and provide recommended changes to the County's Critical Areas Regulations as they pertained to floodplain management.
- Provide interdepartmental training to County Staff on proper completion of the FEMA Elevation Certificate and maintaining compliance with the National Flood Insurance Program.
- Provide technical assistance in the annual implementation and progress reporting of the Snohomish County Natural Hazards Mitigation Plan.
- Provide FEMA grant application technical support in that includes: benefit/cost analysis of the prospective project, egrant support, and grant writing.

Rob managed all work orders issued under this contract as well providing the principal subject matter expertise.

Community Rating System Application, City of Auburn, Washington, 2006-2010

Owner/Project Manager: Department of Public Works, Tim Carlaw (253)804-5060

Tetra Tech was retained by the City of Auburn to prepare its cycle re-application to FEMA's Community Rating System program. Rob was the project manager for this project as well as the CRS subject matter expert for this project. This project resulted in the City of Auburn improving its CRS classification to a CRS class 5, entitling the citizens of Auburn to a 25% flood insurance premium reduction. Task completed under this project included:

- Contract negotiation and scope development.
- Comprehensive review of the City's on-going floodplain management program.
- Recommendations for program enhancement to maximize CRS credit potential.
- Preparation of the City's application to the CRS program
- Facilitation of CRS credit verification/audit process

Community Rating System Application/Floodplain Management TA, City of Kent, Washington, 2007

Owner/Project Manager: Department of public Works, Beth Tan (253)856-5552

Tetra Tech has been retained several times, most recently in 2013 by the City of Kent support its CRS program. Rob has been the project manager for these projects as well as the CRS subject matter expert. This project resulted in the City obtaining and maintaining a CRS class 6 rating, entitling the flood insurance rate payers within Kent up to a 20% reduction on flood insurance premiums. Task completed under this project included:

- Contract negotiation and scope development.
- Comprehensive review of the City's on-going floodplain management program.
- Recommendations for program enhancement to maximize CRS credit potential.
- Preparation of the City's application to the CRS program
- Facilitation of CRS credit verification/audit process

Community Rating System Application, City of Fife, Washington, 2005

Owner/Project Manager: Department of Community Development, (253)922-9624

Tetra Tech was retained by the City of Fife to prepare its application to FEMA's Community Rating System program. This project was very important to the City of Fife in that the City was preparing for significant financial impacts of re-mapping of the floodplain by FEMA. The purpose of this project was to employ all possible measures to reduce the net fiscal impact of this remapping to the citizens of Fife. This project resulted in the City of Fife achieving a CRS class 7, entitling the citizens of Fife a 15% flood insurance premium reduction. Rob was the project manager for this project as well as the CRS subject matter expert for this project Task completed under this project included:

- Project scope and budget development.
- Comprehensive review of the City's on-going floodplain management program.
- Recommendations for program enhancement to maximize CRS credit potential.
- Preparation of the City's application to the CRS program
- Facilitation of CRS credit verification/audit process

Community Rating System (CRS) Update, Thurston County, Washington

Owner/Project Manager: Thurston Co. OPBD, Mark Swartout, (360) 709-3079

As the project manager and CRS Subject Matter Expert, Rob prepared the CRS application for Thurston County's cycle reverification. Project included the preparation of the CRS class prerequisite justification package necessary for Thurston County to obtain a CRS Class 4 or better rating. This application included a comprehensive review and evaluation of the County's entire floodplain management program that included all of the County's outreach, mapping, regulatory, planning and Flood warning programs.

Community Rating System Application, Clark County, Washington, 2003

Owner/Project Manager: Clark County Department of Community Development, Steve Hale

Rob prepared the initial CRS application for Clark County, WA. Project included development of a "multi-hazard" outreach project, and an "Agents Hazard Information" brochure to be used by Clark County Real Estate Agents to advise potential buyers of the hazards. The latter projects were developed to meet the County's scope of work under FEMA's Project Impact Program. This application included a comprehensive review and evaluation of the County's entire floodplain management program that included all of the County's outreach, mapping, regulatory, planning and Flood warning programs. Rob managed all phases of this project that was completed on time and under budget.

Training and Marketing of CRS program, Western U.S., 1989-2002

Owner/Project Manager: Insurance Services Office (ISO), Jerry Foster

Throughout his tenure as a CRS Specialist, Rob was tasked with educating and promoting states and local communities on the benefits of the CRS program. This was accomplished via workshops and state-sponsored or Association-sponsored conferences. During his 15 years as a CRS Specialist, Rob averaged five workshops per year. Rob was also a certified instructor at the Emergency Management Institute (EMI) in Emmetsburg, MA for the FEMA course on the CRS (E-278). Since the course's inception in 1990, Rob has been an instructor five times at the request of FEMA.

CRS Specialist, Western U.S., 1989-2001

Owner/Project Manager: Insurance Services Office, Bill Trakimas

Since its inception in 1990, Rob was the CRS Specialist for the States of Alaska, California, Hawaii, Idaho, Montana, Nevada, Oregon, Utah, and Washington. This territory spanned three FEMA Regions (VIII, IX, and X) and included 126 CRS participating communities. As the CRS Specialist, Rob was responsible for the coordination of all aspects of the CRS program, including application, verification of all activities, annual recertification, and program compliance. Having been associated with the CRS from its developmental phases, Rob has developed very strong working relationships with his State, Federal, and local counterparts. His expertise in this field is noteworthy. The CRS program is recognized nationally as the quintessential programmatic guide for non-structural floodplain management. Implementation of the CRS program requires a detailed understanding of 18 non-structural floodplain management activities that canvas the following categories:

- Public Information
- Mapping and Regulations
- Flood Damage Reduction and Planning
- Flood Warning

Floodplain Management Technical Assistance

Chehalis River Basin Comprehensive Floodplain Hazard Management Plan – Lewis County, WA, Feb 2019 to December 2021

Owner/Project Manager: Lewis County, WA, Erik Martin, Lewis County Manager, (360) 740-2697

Tetra Tech and Perteet joined forces to update the 2008 Comprehensive Flood Hazard Management Plan for Lewis County WA that would be the visioning plan for the Chehalis River Basin Flood Control Zone District. Rob served as the technical lead for this project in coordination with the Perteet Lead project Planner. The principal objective for this plan is to identify actions to minimize flood damages at the local level, while supporting and coordinating with project occurring at the regional and state level. The plan was developed to maximize Community Rating System points for the participating jurisdictions, which include Lewis County and the City of Chehalis. The plan incorporated the significant amount of data that exists for the basin, including Hazus results, 2D flood modeling of climate change forecasts, habitat enhancement plans, land use data to develop actions, and recommendations to reduce risk and flood damage within the County. The planning process included a hybrid approach to public outreach, as the process spanned the COVID pandemic, and included a survey, story map, and virtual meetings. The plan was adopted by the participating agencies in November 2021.

The Los Angeles County Comprehensive Floodplain Management Plan, Los Angeles County, California, June 2019 to March 2021

Owner/Project Manager: Los Angeles County Public Works, Ms. Patricia Wood P.E., (626) 458-6131, PWOOD@dpw.lacounty.gov

Tetra Tech was retained by Los Angeles County Public Works to update its Comprehensive Floodplain Management Plan to aid the County in maximizing its credit potential under the Community Rating System (CRS) program. Rob managed the multidisciplined team that completed the scope of work for this project. Tetra Tech had prepared the 2015 plan for the County and this plan update followed the same 10-step CRS process that is facilitated through an oversight committee made up of stakeholders from within the region. The epicenter of this planning process is a comprehensive flood hazard risk assessment that looked at multiple flood scenarios (10, 50, 100 and 500-year flood events). This risk assessment was utilized to communicate the flood risk to the Citizens of LA County as well as identifying and prioritizing flood loss reduction actions. This project was also inclusive of a detailed look at FEMA identified "Repetitive Loss" properties through the completion of a Repetitive Loss Area Analysis and the development of program for public involvement (PPI) according to the CRS activity 330 requirements. This plan update process included the identification of a comprehensive range of flood mitigation alternatives through a detailed look a strengths, weaknesses, obstacles, and opportunities within the LA County planning area. The plan identifies and prioritizes 37 actions to be implemented over the 5-year performance of the plan. The Plan was adopted by the LA County Board of Supervisors on June 15, 2021 and approved by the Insurance Services Office on June 30, 2021 for CRS program Credit.

The City of Los Angeles Comprehensive Flood Hazard Management Plan-Update, July 2019 to September 2020 Owner/Project Manager: City of Los Angeles Department of Public Works, Susan Shu, P.E., (213) 485-4493, susan.shu@lacity.org

Tetra Tech recently completed the 5-year update to the 2015, City of Los Angeles Comprehensive Floodplain Management Plan. Rob managed the multi-disciplined team that completed the scope of work for this project. The 2015 plan was also a plan prepared by Tetra Tech that was managed by Rob. The principal object of this planning process was to maximize the City's credit potential under its Community Rating System (CRS) program. There is significant flood risk within the City of LA. With over 6500 structures at risk, over 9000 flood insurance policies in force exceeding \$5.6 million per year in premium, enhancing its benefits under the CRS program is very important to the City of LA. Tetra Tech followed the 10-step CRS process that is facilitated through an oversight committee made up of stakeholders from within the region. The epicenter of this planning process is a comprehensive flood hazard risk assessment that assessed multiple flood scenarios (10, 50, 100 and 500-year flood events). This risk assessment was utilized to communicate the flood risk to the Citizens of LA County as well as identifying and prioritizing flood loss reduction actions. This project will also involve the development of natural and beneficial floodplain functions component of the floodplain management plan according to the CRS activity 510 requirements. This planning process also included a "Repetitive Loss Area Analysis" (RLAA) as a functional annex to the CFHMP, that was an enhanced look at the repetitive

flood issues within the City, by using FEMA identified "Repetitive Loss" properties as the identifier for repetitive loss properties within the City. The Plan was approved for CRS program credit by FEMA's CRS contractor, The Insurance Services Office (ISO) on November 12, 2020.

Training Materials for Integrating Green Stormwater Infrastructure, Stormwater Management and Watershed Protection into Natural Hazard Mitigation Plans, National, July 2018 to December 2019

Owner/Project Manager: U.S. Environmental Protection Agency, Office of Wetlands, Oceans and Watersheds

Tetra Tech supported EPA's Nonpoint Source Management Branch by preparing background training materials to demonstrate the link between water quality protection, watershed planning, source water protection, and flood risk management. Rob supported this project as the lead floodplain management and hazard mitigation planning subject-matter expert. The materials can be used by environmental or hazard mitigation specialists to demonstrate the alignment of program goals across agencies and how planning efforts can be enhanced when accomplished together. When concepts are applied during the preparation of planning documents (e.g., watershed plans and hazard mitigation plans), the training materials will help professionals achieve mutual benefits to water resource protection, water programs integration, and hazard mitigation. Training materials include draft text for a series of module topics including how water quality management activities can mitigate natural hazards, how watershed planning and hazard mitigation planning overlap, funding options, FEMA's Community Rating System, example Hazard Mitigation Plans (HMPs) incorporating series concepts, and lessons learned from several pilot projects. For the planning overlap module, summarized basic elements and steps involved in EPA watershed planning efforts and provided a crosswalk of how they align with FEMA planning initiatives. The descriptive and graphical crosswalks are intended to help professionals determine where overlaps occur and what efficiencies could be gained by aligning the two planning processes. Developed summary tables of EPA programs, such as the Nonpoint Source Program, that outline key elements of the programs and highlight linkages to HMP goals and action items, as if they were in a state plan. Developed a PowerPoint webinar presentation, including layout, slide text, graphics, and presenter notes, that provides an overview of concepts presented in the module series. Delivered with EPA as a co-presenter, the PowerPoint is archived for future trainers to use. Final modules will be made available online. Tabular, customizable templates will also be provided to facilitate the integration of planning efforts across programs.

The Chelan County Comprehensive Flood Hazard Management Plan, Chelan County, Washington, May 2015 to October 2017

Owner/Project Manager: Chelan County Department of Public Works, Jason Detamore, (509) 667-6415, Jason.Detamore@co.chelan.wa.us

Tetra Tech was selected by the Chelan County department of Public Works to facilitate the development of a Comprehensive Flood Hazard Management Plan pursuant to Washington State planning requirements and FEMA's Community Rating System program (CRS). Rob managed the multi-disciplined team that completed the scope of work for this project. The Chelan County Comprehensive Flood Hazard Management Plan (The Flood Plan) recommends regional policies, programs, and projects to reduce the risk to people and property from river flooding, alluvial fans, and channel migration in Chelan County. This plan presents a long-term vision for managing all flood hazards within Chelan County and recommends specific near-term actions to achieve that vision. The Flood Plan recommends actions Chelan County and cities in the county may take to reduce flood risks and to protect, restore or enhance riparian and aquatic ecosystems.

The Los Angeles County Comprehensive Floodplain Management Plan, Los Angeles County, California, August 2014 to July to 2016

Owner/Project Manager: Los Angeles County Department of Public Works, Eduardo Escobar, P.E., (626) 458-4355, edescoba@dpw.lacounty.gov

Tetra Tech's services were retained by the Los Angeles County Department of Public Works to develop a comprehensive flood hazard mitigation plan and repetitive loss area analysis to address the total flood risk of the unincorporated portions of Los Angeles County. Rob was the lead project planner/technical subject matter expert for this project who directed a multidiscipline team through all phases of the scope of work for the project. The development of this plan was very process centric pursuant to the requirements of FEMA's Community Rating System (CRS) program based on the County's primary objective, to lower its CRS rating. The plan assessed risk to 5 flood hazards of concern (riverine, urban drainage, coastal, tsunami and dam failure) and identified/prioritized 35 flood hazard mitigation actions through a facilitated process that allowed for public participation

throughout all phases of the plan's development. The planning effort also included the development of a repetitive Loss Area Analysis (RLAA) pursuant to CRS section 512.b requirements for the County's 52 FEMA identified repetitive loss properties. This project was completed on time and on budget. The plan was adopted by the Los Angeles County Board of Supervisors September 6, 2016.

The City of Los Angeles, Comprehensive Flood Hazard Management Plan, June 2014 to October 2015

Owner/Project Manager: City of Los Angeles Department of Public Works, Susan Shu, P.E., (213) 485-4493

Tetra Tech's services were retained by the City of Los Angeles Department of Public Works to develop a comprehensive flood hazard mitigation plan to address the total flood risk of the City of Los Angeles. Rob was the lead project planner/technical subject matter expert for this project who directed a multidiscipline team through all phases of the scope of work for the project. The development of this plan was very process centric pursuant to the requirements of FEMA's Community Rating System (CRS) program based on the City's primary objective, to lower its CRS rating. The plan assessed risk to 5 flood hazards of concern (riverine, urban drainage, coastal, tsunami and dam failure) and identified/prioritized 80 flood hazard mitigation actions through a facilitated process that allowed for public participation throughout all phases of the plan's development. This project was completed on time and on budget. The plans were adopted by the City of Los Angeles city Council on October 7, 2015 and was approved by FEMA for CRS credit on October 19, 2015.

Floodplain Management Training and Technical Services, The State of Idaho, 2008

Owner/Project Manager: The Idaho Department of Water Resources (IDWR), Mary McGown (208)287-4928

Under this project, Rob provided technical assistance to the State of Idaho in the implementation and management of the State Floodplain Management Program established pursuant to the National Flood Insurance Program. This assistance included the following tasks:

- Training of new personnel hired by the state to manage its floodplain management program.
- Training to the local communities and the state and federal requirements established pursuant to the National Flood Insurance Program
- Training of local Building Officials on proper documentation of Building Compliance and the FEMA Elevation Certificate.
- Development of training modules to be utilized by state personnel for future training and possible deployment via other mediums such as the internet.

Rob managed all phases of this project that was completed on time and within the proposed budget.

Floodplain Management Training and Technical Services, the State of Montana, Montana, 2006 – 2007

Owner/Project Manager: The Department of Natural Resources and Conservation (DNRC)

Under this project, Rob provided technical assistance to the State of Montana in the implementation and management of the State Floodplain Management Program established pursuant to the National Flood Insurance Program. This assistance included the following tasks:

- Performance of community compliance reviews (Community Assistance Visits) on behalf of the State of Montana.
- Training of new personnel hired by the state to manage its floodplain management program.
- Training to the local communities and the state and federal requirements established pursuant to the National Flood Insurance Program
- Development of training modules to be utilized by state personnel for future training and possible deployment via other mediums such as the internet.

Rob managed all phases of this project that was completed on time and within the proposed budget.

FEMA Disaster Assistance Employee (DAE), Anchorage AK (DR-1445), 2002

Owner/Project Manager: Mark Carey, Branch Chief, Mitigation



As a floodplain management specialist, Rob was deployed by FEMA Region X as a Disaster Assistance Employee for the declared flood disaster (DR-1445) in the Kenai Peninsula Borough (KPB) in the fall of 2002. Rob's duties included a systematic review of the regulatory floodplain management program for KPB to determine compliance with the requirements of the National Flood Insurance Program. Compliance with the NFIP is a prerequisite to receiving disaster assistance in a declared disaster.

Hazard Mitigation Grant Program support

City of Houston, Hurricane Harvey Disaster Recovery Consulting Services, August 2017 to Current

Owner/Project Manager: City of Houston, TX, Steve Costello, (832) 563-2113

Following the devastating impacts from Hurricane Harvey, Tetra Tech mobilized two specialty teams to the City of Houston within 48 hours of the disaster: one team for debris management and tracking, and a second program management team to assist City leadership with the development of a strategy for accessing federal and state grant programs for infrastructure and housing programs. As the disaster has moved into long-term recovery, our team has worked in concert with the City to implement systems for the continuous development of documentation to keep the federal and state funds flowing, and with technical teams to evaluate damages and track the individual repair projects through completion. Rob supported this effort as the Lead BCA analyst that directed a team of analysts in support of the City's 404 grant applications under FEMA's Hazard Mitigation Assistance (HMA) grant program. To date, over 2 dozen BCA analyses were completed for projects totaling over \$300 million in grant funding requests. Many of these analyses required innovative modeling and analysis to render projects as cost effective.

Good Samaritan Hospital Grant Application Support, Los Angeles, CA, April 2018 to Sept. 2018

Owner/Project Manager: Good Samaritan Hospital, Los Angeles, CA, Brian Thorne, 213-482-2774

Tetra Tech was hired by the Good Samaritan Hospital in Los Angeles, CA to two grant applications designed to retrofit equipment necessary to maintain essential services following an earthquake. Rob was the Project Manager and Lead BCA Analyst for this project. In addition to providing grant application assistance, Tetra Tech also assisted with project design development and scoping, cost estimation, and benefit-cost analysis. To advance the grant application, Tetra Tech was able to leverage existing mitigation planning data and a model that we had recently completed for the City of Los Angeles. The Los Angeles hazard mitigation plan included construction of a robust, user-defined facility model for earthquakes that looked at five deterministic scenarios likely to have the greatest impact on the city. To yield a viable benefit cost analysis, Tetra Tech deployed an innovative approach to measure both pre- and post-project conditions using the net benefit of both projects using the Advanced Engineering Building Model (AEBM) in Hazus-MH. Applying these approaches to other grant application efforts will likely result in reduced seismic risk to vulnerable critical infrastructure. The total cost for the projects was nearly \$3 million, and both grant applications were approved for award.

Presidential National Disaster Resilience Competition Grant support, Pierce County, WA, August 2015 – January 2016 Owner/Project Manager: Pierce County Water Programs, Randy Brake (253) 798-4651

Tetra Tech's services were retained by Pierce County to perform the benefit-cost analyses for projects targeted for the County's National Disaster Resilience Competition (NDRC) application. Rob was the project manager and sole analyst for the project. The County has identified over 30 projects totaling over \$100 million in project costs that need to be shown as cost-effective under the NDRC. This project was a real challenge in that cost-effectiveness parameters were not defined under the NDRC program. Rob utilized FEMA's BCA methodology to measure both direct benefits as well as environmental benefits for over 30 projects. Pierce county was identified as one of 40 finalists out of over 200 applications to the NDRC program.

VVWRA- Upper Narrows Sewer Line Interceptor Replacement, 2011

Owner/Project Manager: Victor Valley Wastewater Reclamation Authority (VVWRA)

Rob was the lead benefit-cost analyst on this project to coordinate and secure FEMA funding for the loss of Victor Valley Wastewater Reclamation Authority's main sewer line interceptor originally constructed in 1970 within the Mojave Riverbed lost during the storm event of December/January 2011. Funding under the FEMA 406 mitigation program was being pursued by VWWR, which needed to show the project was cost effective to be eligible for funding under the grant program. Rob ran analyses of multiple alternatives to find the best alternative, which was a relocation of the pipeline out of the Mojave riverbed. These analyses were very complex and involved utilization of engineering, historical loss and cost data that was provided by the Tetra

Tech team supporting the project. Rob also provided VVWRA guidance on the 406-mitigation grant program including: project eligibility, grant application requirements and project screening.

Hazard Mitigation Program Assistance, Idaho Bureau of Homeland Security, June 2008 – Present

Owner/Project Manager: The Idaho Bureau of Homeland Security, Dave Jackson (208)422-3047

Tetra Tech provides service order based technical assistance to the Idaho Bureau of Homeland Security (IBHS) to support its Hazard Mitigation Assistance (HMA) program annually. Rob manages a multi-disciplined team in response to all task orders issued by the State. Tetra Tech directly supports local governments within the State of Idaho in the preparation of grant applications for FEMA's pre and post disaster mitigation grant programs. This technical assistance includes:

- Participation in conference calls between the IBHS and any local government wishing to prepare and HMA application for FY-2009.
- Performance of benefit-cost analyses using FEMA approved methodologies and software (BCAR)
- Technical review of benefit-cost analyses not performed by Tetra Tech
- FEMA "e-grants" technical assistance
- Grant application QA/QC

Hazard Mitigation Program Assistance, the City of Snoqualmie, WA, January 2008 - Present

Owner/ Project Manager: The City of Snoqualmie, Planning Dept., Lauren Hollenbeck (425)0888-5435

The City of Snoqualmie, WA is the "poster child" for flood risk exposure in FEMA Region X. Severally impacted by 3 presidentially declared flood events in a 2-year period; The City of Snoqualmie retained Tetra Tech to provide hazard mitigation support services, including:

- Grant application assistance for FEMA hazard mitigation grant programs.
- Benefit-cost analyses for over 50 flood damaged structures.
- Construction of a detailed level-2 HAZUS-MH flood model utilizing property specific data (FEMA Elevation Certificates) to establish/validate damage functions.
- Public education on FEMA grants programs and their eligibility requirements.
- Mediator between the State, FEMA, and the City on technical and programmatic issues
- NFIP compliance
- Initiation of the 5-year update to the City's hazard mitigation plan.

Rob managed all phases of this project as well and providing the principal subject matter expertise. This included oversight of a multi-disciplined team assembled to meet the needs of the City.

Hazard Mitigation Program Assistance, Federal Emergency Management Agency June-December 2008

Owner/Project Manager: FEMA, Jody Springer (202)646-3389

Under this volunteer project, Tetra Tech served FEMA as a registered "beta" tester for the benefit-cost Analysis Re-engineering (BCAR) platform. During this beta test phase Tetra Tech performed the following tasks:

- Performed over 50 benefit-cost analyses for existing Tetra Tech clients utilizing both the new BCAR methodology and the older FEMA BCA toolkit to compare results.
- Provided feedback to FEMA staff on observations and findings during testing phase.
- Supported FEMA staff on trouble-shooting software application problems.
- Validation of damage functions
- Utilized BCAR methodology for actual FY-2009 HMA applications

 $On \ Call \ Contract, \ Hazard \ Mitigation \ Planning \ and \ Technical \ Services, \ King \ County, \ Washington, \ 2005-present$

Owner/Project Manager: King County, Steve Bleifuhs, (206)296-8011



As part of its on-call contract for floodplain management and Hazard mitigation technical assistance, Tetra Tech has provided the following services under a work-order/task order basis:

- Project development, scoping, and cost estimation
- Tetra Tech has performed over 200 benefit-cost analyses for King County since 2005 that has resulted in the county securing over \$8 million grant funding under FEMA Hazard Mitigation Grant programs.
- HMA Grant application preparation and technical assistance
- Post project loss avoidance study
- Hazus model development
- Risk based analysis of capital projects

Floodplain Management / Hazard Mitigation Services and Training, Pierce County, Washington, 2006 – present Owner/Project Manager: Pierce County Water Programs, Hans Hunger, (253)798-6162

As part of its Stormwater on-call contract with Pierce County, Tetra Tech provides hazard mitigation program technical that includes the following services on a work-order/task order basis:

- Project development, scoping, and cost estimation
- Provide FEMA grant application technical support in that includes benefit/cost analysis of the prospective project, egrant support, and grant writing.
- Tetra Tech has performed over 30 benefit-cost analyses for Pierce County since 2006 that have resulted in the County securing over \$6 million grant funding under FEMA Hazard Mitigation Grant programs.

Hazard Mitigation Program Assistance, City of Roseville, California 2005 - Present

Owner/Project Manager: The City of Roseville, Carl Walker, (916)746-1349

Tetra Tech provides Hazard Mitigation program assistances to the City of Roseville on an "on-call" basis. Services provided under these contracts include:

- Hazard Mitigation program support that includes application preparation and benefit-cost analyses.
- Tetra Tech has aided the City of Roseville in securing over \$1.5 million in grant funding under FEMA Hazard Mitigation grant programs since 2005.
- Development/Maintenance of City's Hazus model

ADDITIONAL EXPERIENCE

MS Excel, MS Word, MS Outlook, MS Access, Hazus-MH, Benefit-Cost Analysis Re-engineering (BCAR)

EMPLOYMENT HISTORY

2003 – Present	Hazard Mitigation Program Manager, Tetra Tech, Inc.
1985 – 2002	ISO/CRS Specialist, Insurance Services Office, Inc. (FEMA Contractor)
1983 – 1985	Insurance Claims Adjuster, Gene Riggs, and Associates



Alison M. Miskiman, GISP, CFM

Subject Matter Expert - BRIC



20+ YEARS OF EXPERIENCE

Areas of Expertise

Program and project management; planning – adaptation, resilience, mitigation; natural hazard and climate change risk; leveraging federal funding to build resilience; loss estimation using Hazus; FEMA grant and benefit-cost analysis (BCA development); geospatial analysis to support planning and risk communication

Key Training/Certifications

ASFM Certified Floodplain Manager, No: US-07-03029, issued 10/29/07

Geographic Information System Professional (GISP), member 90661, issued 4/25/2015

Protected Critical Infrastructure Information (PCII) Authorized User

OSHA 1910.120, 40-hour and 8-hour refresher

Secret Clearance

Education

M.S., Earth Science, University of New Hampshire

B.S., Environmental Science, University of Scranton

EXPERIENCE SUMMARY

Alison Miskiman has 20 years of experience and leads Tetra Tech's Mitigation/Risk & Resilience services as part of our Emergency Management Risk & Resilience program. She specializes in risk-informed planning; working in partnership with clients to maximize funding and increase resilience to natural hazard events and the changing climate. Ms. Miskiman leads our FEMA Hazard Mitigation Assistance (HMA) grant services team aligning funding sources with competitive projects to achieve implementation. Ms. Miskiman has extensive technical experience in the development of benefit cost analyses (BCAs) incorporating state of the art strategies to include quantifiable benefits to demonstrate economic feasibility of federally and locally funded projects. She also manages large-scale Geographic Information Systems (GIS), data management, and web-based application development projects to simplify and streamline the collection and analysis of information for environmental, emergency management and economic development projects and utilizes the software to support data visualization and technical analyses required for FEMA grant applications and BCAs.

RELEVANT EXPERIENCE

Natural Hazard Modeling/Geographic Information Systems

Ms. Miskiman manages the geospatial team for the Emergency Management Risk & Resilience practice that build robust spatial inventories and perform hazard loss estimation through modeling. She has been involved in multiple aspects of hazard modeling and GIS projects including technical project management, data acquisition and integration, data conversion, database design, metadata documentation, application development, software customization, and map design and production. She utilizes ESRI ArcGIS products and customizes FEMA's Hazards-US (Hazus) to support data-driven decision making across all business practices (i.e., environmental, emergency management, economic development) and has applied hazard loss estimation in all worked on hazard mitigation plans, resilience plans, vulnerability assessments, loss avoidance and BCAs developed.

Ms. Miskiman has conducted detailed analyses to quantify the impact of multiple hazards (e.g., flood, earthquake, dam failure, wildfire, landslide, and sea level rise) on population, land use, buildings and infrastructure and the natural environment. She has provided training in the benefits of using GIS to the Pennsylvania Municipal League (2018, 2019, 2020). Further, she leverages spatial analytic tools (e.g., ESRI Business Analyst) to demonstrate the economic feasibility of structure/infrastructure projects.

Ms. Miskiman is the technical lead and manager of Tetra Tech's Baseline Assessment Tool (BAToolSM). The BAToolSM is a web application service that provides jurisdictions the capability to review and update their mitigation strategy for the purposes of Community Rating System (CRS) annual reporting, hazard mitigation plan updates and to support FEMA HMA grant application development.

All areas highlighted on her resume integrate GIS and spatial data management into the processes to inform data-driven decision making.

- Resilience, Adaptation, and Mitigation Planning Develop asset-level building inventories for local and state clients to
 quantify the impact of natural hazards. Building and asset inventories are assembled using geocoding services, U.S.
 Census data, building footprints, property assessment data, parcels and additional client sources. Develop custom
 scenario and strategy evaluation methodologies to quantify benefits, challenges, obstacles and externalities leveraging
 spatial tools and solutions.
- Business Continuity Planning Work with private sector clients (insurance, utilities, academia) to conduct evaluate asset-specific vulnerabilities to natural, technological and intentional hazards.
- Customize FEMA's Hazus geospatial modeling program to support data-driven decision-making ranging from planning, project identification, quantification of avoided losses and to support grant applications.

Resilience and Adaptation Planning

Ms. Miskiman leads the Risk and Resilience sub-practice which focuses on partnering with communities and private-sector clients to increase resilience to natural hazards and climate change through risk assessment and adaptation strategy development. She manages interdisciplinary project teams and industry thought leaders to deliver high quality actionable plans while integrating innovative solutions to promote adaptation and resilience.

Palm Beach County, Florida (2023 to Present). Ms. Miskiman is the Deputy Project manager working with the technical team to conduct the natural hazard vulnerability assessment integrating climate change projects and leading the U.S. HUD CDBG-MIT Action Plan development.

Military Installation Resilience Study, Orange County, New York (2021 to 2023). Ms. Miskiman is the project manager and resilience lead working with Orange County New York and U.S. Military Academy (USMA)/U.S. Army Garrisons (USAG)-West Point to develop a resilience study that will identify and analyze hazard risks, inclusive of climate change, to the electric energy supply to USMA/USAG and its surrounding communities. Tetra Tech identified and prioritized strategies to increase energy resilience and security.

NCORR RISE Regional Resilience Portfolio Program (2022): Ms. Miskiman is the Principal in Charge for the NCORR (North Carolina Office of Recovery and Resiliency) RISE (Regions Innovating for Strong Economies and Environment Program) Regional Resilience Portfolio Program. The Regional Resilience Portfolio Program is supporting nine regional partnerships, based on COG geographies in Eastern North Carolina, to develop a vulnerability assessment and a portfolio of priority resilience projects that reduce risk and increase resilience for the region.

Extreme Weather Response Plan, Port Moody, British Columbia, Canada (2022). To make progress on Port Moody's climate action goals, the City hired Tetra Tech to conduct a vulnerability analysis and develop a strategy with specific actions that will result in reducing climate change risk and vulnerabilities associated with potential extreme weather events. Ms. Miskiman is the climate resilience lead evaluating current and future climate projections, assessing risks and vulnerabilities to persons, groups, services, and infrastructure, and developing short-, medium- and long-term actions to effectively and strategically reduce risks and vulnerabilities while not increasing greenhouse gas (GHG) emissions. The plan acknowledges vulnerable population numbers and future estimates in the analysis that account for potential downscaling of initiatives from other levels of government.

Resilient NJ (Regional Planning for a Stronger New Jersey); NJ Department of Environmental Protection (NJDEP) (2017 to Present). Ms. Miskiman is the cost-benefit analysis program lead for the Tetra Tech scope as part of the Michael Baker International team. The project is to provide program management services for Resilient NJ, a regional resiliency program. This work is funded through post-disaster Department of Housing and Urban Development Community Development Block Grant – National Disaster Resiliency (HUD, CDBG-NDR) Program. Ms. Miskiman has developed a custom resilience scenario and strategy evaluation methodology to obtain a comprehensive understanding of all benefits, challenges and externalities for each region participating in the resilience program.

FEMA Hazard Mitigation Planning

Ms. Miskiman leads our mitigation program and is a senior project manager for state and local Hazard Mitigation Planning projects across the U.S. She also serves as the lead risk assessor for all hazard mitigation and community resilience projects in

our Northeast operations (supporting over 50 state and local mitigation plans to date). Recent state and local mitigation planning projects are highlighted below.

State of Hawai'i Hazard Mitigation Plan Update (2022 to Present). Ms. Miskiman is the project manager for the 2023 State of Hawai'i Hazard Mitigation Plan update. The plan update will enhance the 2018 plan that includes extensive local, state and federal outreach, an enhanced risk assessment, a strengthened mitigation strategy, integration of climate change and socially vulnerable populations.

State of New Jersey Hazard Mitigation Plan Update (2022 to Present). Ms. Miskiman is the project manager for the 2024 State of New Jersey Hazard Mitigation Plan update that Tetra Tech is updating in partnership with Michael Baker International.

Sussex County, New Jersey Hazard Mitigation Plan Update (2023 – Present; 2020 to 2021). To remain eligible for FEMA Hazard Mitigation Assistance funding, Sussex County hired Tetra Tech to update their multi-jurisdictional hazard mitigation plan. As Project Manager, Ms. Miskiman led the risk assessment and resilience planning team to evaluate the impact of natural hazards on population, land use, buildings, infrastructure, and the environment. A public outreach strategy was implemented including the development of an online StoryMap. A robust mitigation strategy outlines an action plan to implement projects to reduce future risk. Sussex County's 5-year update has commenced; and they have engaged Tetra Tech under Ms. Miskiman's leadership to conduct this plan update.

Camden County, New Jersey Hazard Mitigation Plan Update (2021 to Present). To remain eligible for FEMA Hazard Mitigation Assistance funding, Camden County hired Tetra Tech to update their multi-jurisdictional hazard mitigation plan. As Project Manager, Ms. Miskiman led the risk assessment and resilience planning team to evaluate the impact of natural hazards on population, land use, buildings, infrastructure, and the environment. A public outreach strategy was implemented including the development of an online StoryMap. A robust mitigation strategy outlines an action plan to implement projects to reduce future risk.

Mercer County, New Jersey Hazard Mitigation Plan Update (2021 to 2022). To remain eligible for FEMA Hazard Mitigation Assistance funding, Mercer County hired Tetra Tech to update their multi-jurisdictional hazard mitigation plan. As Project Manager, Ms. Miskiman led the risk assessment and resilience planning team to evaluate the impact of natural hazards on population, land use, buildings, infrastructure, and the environment. A public outreach strategy was implemented including the development of an online StoryMap. A robust mitigation strategy outlines an action plan to implement projects to reduce future risk.

Hunterdon County, New Jersey Hazard Mitigation Plan Update (2021 to 2022). To remain eligible for FEMA Hazard Mitigation Assistance funding, Hunterdon County hired Tetra Tech to update their multi-jurisdictional hazard mitigation plan. As Project Manager, Ms. Miskiman led the risk assessment and resilience planning team to evaluate the impact of natural hazards on population, land use, buildings, infrastructure, and the environment. This plan included an update to meet the High Hazard Potential Dam (HHPD) optional plan review tool element to secure the County's eligibility for this FEMA grant funding source. A public outreach strategy was implemented including the development of an online StoryMap. A robust mitigation strategy outlines an action plan to implement projects to reduce future risk.

Suffolk County, New York Multi-Jurisdictional Multi-Hazard Mitigation Plan (2020 to 2021). Ms. Miskiman is the Project Manager for the Suffolk County Hazard Mitigation Plan update. The plan update includes a robust risk assessment a robust risk assessment for, and the review and update of an enhanced mitigation strategy for the County, Suffolk County Water Authority, two Tribal Nations and 42 towns and villages. The plan commenced during the COVID-19 pandemic and successfully met the aggressive schedule for draft public review and submittal to the State and FEMA in the fall 2020. The plan was approved by the State and FEMA, first pass, with no required revisions.

County of Hawai'i Volcanic Risk Assessment and Mitigation Strategy (2019 to 2020). Ms. Miskiman was the mitigation technical lead for this project evaluating island-wide volcanic risk post-2018 Kilauea eruption. The risk assessment involved a detailed examination of volcanic hazard risk exposure to the population, buildings, land use, critical facilities, lifelines, environmental and cultural resources. A robust mitigation strategy was developed concurrent with the County's Recovery Strategic Action Plan to reduce future volcanic risk, taking into consideration all natural hazards.

State of Hawai'i Hazard Mitigation Plan Update (2017 to 2018). Ms. Miskiman was the lead planner for the State of Hawai'i Hazard Mitigation Plan update. The plan update includes extensive local, state and federal outreach, an enhanced risk assessment, a strengthened mitigation strategy and an integration of climate change. This plan has been approved by FEMA on the first submittal for review.

Local Hazard Mitigation Planning (2006 to Present): As Project Manager and lead risk assessor, Ms. Miskiman manages and supports the development of single and multi-jurisdictional local hazard mitigation planning efforts in accordance with the Disaster Mitigation Act of 2000 with a focus in New Jersey, New York, Puerto Rico and Pennsylvania. These plans include working with the mitigation division of FEMA – Regions II and III, New Jersey State Police – Office of Emergency Management, Pennsylvania Emergency Management Agency and various federal, county and local agencies and organizations. Alison leads the risk assessment team in developing custom building and critical facility inventories are built to enhance the risk assessment utilizing HAZUS-MH to quantify potential losses to flood, seismic, and wind events. In addition, as Project Manager, Alison assists each county and municipality in identifying well-defined, implementable projects with careful considerations of benefits, costs, and possible funding sources. These projects are included in community-specific annexes which detail each jurisdiction's hazard risk, capabilities, program integration and mitigation strategy.

FEMA Grant and Benefit Cost Analysis

Ms. Miskiman has prepared competitive hazard mitigation and climate adaptation grant applications and fully documented FEMA BCAs in accordance with the FEMA benefit-cost methodology since 2009. These successful applications and BCAs have resulted in hundreds of millions of mitigation dollars awarded to jurisdictions across the U.S. The range of these analyses includes small projects to evaluate loss on a single structure to very complex analyses that assess loss avoidance on hundreds of properties, as well as critical facilities and infrastructure; and preserving the natural environment. The following highlights recent work performed by Ms. Miskiman:

State of New Jersey Office of Emergency Management. Local Technical Assistance for FEMA Hazard Mitigation Assistance Grant Programs (2021 to Present). Ms. Miskiman is leading the Tetra Tech team to conduct outreach to local and state governments and assist with the development of FEMA Flood Mitigation Assistance (FMA), Building Resilient Infrastructure and Communities (BRIC), and Hazard Mitigation Assistance Grant Program (HMGP), and Pre-Disaster Mitigation (PDM) grant applications and BCAs.

State of Utah Division of Emergency Management. FEMA BCA Technical Reviews and Subapplicant Technical Support (2022 to Present). Ms. Miskiman is leading the Tetra Tech team to conduct FEMA BRIC and HMGP technical reviews of BCAs for seismic, flood, drought, wildfire, and generator projects. The team is working to enhance BCAs working in collaboration with the subapplicants.

FEMA HMTAP contractor (2021 to Present). Tetra Tech is the managing partner of a Joint Venture with Michael Baker International named the Alliance for Resilience & Mitigation. The single-source contract is designed to provide technical support to FEMA Regional 5, 6, and 7 as well FEMA HQ Mitigation Directorate's Risk Management Division and Office of Floodplain Insurance Advocate. Ms. Miskiman is a key staff person on this contract. Ms. Miskiman is the current task order objective lead managing the team conducting technical reviews of BCAs to support HMGP funding.

Toho Water Authority, FEMA BRIC Support (2021 to Present). Ms. Miskiman is the project manager and technical lead providing the authority grant services including FEMA HMGP, BRIC, and Resilient FL.

Township of Pequannock, Morris County, New Jersey (2015 to Present). Ms. Miskiman developed the successfully awarded the Township's 2015, 2016, 2018, 2019, 2020 FEMA FMA elevation grant applications and BCAs; greater than \$18.5 Million in awards to date. Tetra Tech continues to service the Township and recently prepared the FY22 FMA application for structural elevations.

Township of Rochelle Park, Bergen County, New Jersey (2021 to 2022). Ms. Miskiman managed the Township's FEMA Flood Mitigation Assistance elevation grant application and BCA development to mitigate impacts to repetitively flooded homes impacted by Hurricane Ida. This FY21 application was selected for further review.

State of Texas as FEMA HMTAP contractor (2018 to 2019). Tetra Tech supported post-Hurricane Harvey FEMA grant application and BCA reviews and development across the State of Texas. Ms. Miskiman is Tetra Tech's lead FEMA BCA trainer and subject matter expert providing technical guidance and reviews to the internal team for BCA submission to the Texas Division of Emergency Management.

Township of Neptune, Monmouth County, New Jersey (2013 to 2019). Ms. Miskiman was the project manager and lead BCA analyst for post-Sandy HMGP grant work and FEMA HMA grant applications for Neptune Township, New Jersey. She has conducted BCAs for the following FEMA flood project types: stormwater drainage improvements; bulkheading and tide-check valve projects; pumping station mitigation and living shorelines.

Local New York and New Jersey Elevations and Acquisitions (2010 to Present): Ms. Miskiman has served as technical reviewer and/or BCA lead for FEMA HMA grant applications to elevate and acquire flood prone homes in FEMA Region II. This includes the following projects: elevate 42 NFIP-insured flood prone properties in eight jurisdictions in Cape May County, New Jersey; and acquire flood-prone homes in Borough of Manville and Township of Green Brook, Somerset County New Jersey; acquire repetitive and severe repetitive loss homes in Warren and Hunterdon Counties, New Jersey; and acquisition of flood-prone homes in the Town of Riverhead, Suffolk County, New York.

State of Idaho (2010 to 2017). Ms. Miskiman has supported Tetra Tech's on-call grant application technical support contract with the Idaho Bureau of Homeland Security performing BCAs for HMGP, PDM and FMA grant applications. These projects included stormwater projects, flood mitigation and bank stabilization some of which are summarized below. Ms. Miskiman now mentors the BCA team that continues to work on this contract through 2020.

St. John's University, New York (2013). Ms. Miskiman was awarded a sole-source contract with St. John's University to prepare a post-Hurricane Sandy HMGP grant application and conduct a full FEMA-compliant BCA for an on-campus cogeneration facility. The proposed facility will provide full electrical power capability to the Queens campus in the likely event that the power grid goes down.

Ocean City, Cape May County, New Jersey (2010). Ms. Miskiman prepared the FEMA HMGP application for Ocean City New Jersey to mitigate flooding. The proposed \$8.2 Million flood mitigation project is to install a pump station and partially reconstruct and reroute stormwater to the pump station. The HMGP grant was awarded in 2012.

Business Continuity

New York University (2019 – 2020). Ms. Miskiman was the technical lead to conduct a hazard identification and risk assessment for the New York University Manhattan and Brooklyn campuses. This project involved an assessment of historic impacts, a workshop and detailed vulnerability assessment of the University's assets.

Horizon Blue Cross Blue Shield of New Jersey (2015 – 2016). Ms. Miskiman was the lead risk assessor for the Horizon hazard, vulnerability and risk analysis (HVRA). This analysis allowed Horizon's emergency management and business continuity professionals to target the organization's limited time and resources to address the most significant risks that the organization faces. This concept, called risk-informed planning, also provided the Horizon BCBSNJ professionals with the ability to measure the risk reduction impacts of preparedness activities in the future.

Exelon Generation (2015 – 2016). Ms. Miskiman was the project manager for the Exelon Generation tornado analysis. Tetra Tech was contracted to evaluate Exelon's vulnerability to tornado events as 12 facilities across the U.S. The results of this analysis enabled Exelon to prioritize resources to address their wind and storm risk.

Subject-Matter Expert for Mitigation and Resilience Programs

Gilbert F. White National Policy Forum, Increasing Our Resilience To Urban Flooding (March 2019). Ms. Miskiman attended the national policy forum to discuss how we can be better equipped to deal with rapidly increasing flood risk in urban areas.

SME at the National Disaster Resilience Competition (CDBG-NDR) Resilience Academy in Chicago, Illinois (July 2015). Ms. Miskiman participated as a risk assessment and benefit-cost analysis subject-matter-expert at the Resilience Academy in Chicago, Illinois. The Academy was a nationwide capacity-building initiative in support of the National Disaster Resilience Competition.

FEMA Hazus Award (2014). Ms. Miskiman received a national recognition award for the customization of Hazus for mitigation planning projects.

PROFESSIONAL MEMBERSHIPS

- Association of Floodplain Managers (ASFPM)
- Mid-Atlantic Chapter of the Urban and Regional Information Systems Association
- New Jersey Association for Floodplain Management (NJAFM)
- New Jersey Geospatial Forum
- Resilient Virginia
- Women in GIS



Stephen Sims

CDBG Program Manager

40 YEARS OF EXPERIENCE

Areas of Expertise

Project Management

FEMA Public Assistance

Case Management

Grant Administration

HUD Grant Management

Software Development

Key Training/Certifications

CIO Top 100 Innovations (2006)

Certified Adjuster (Texas)

PMI Project Management Professional (PMP)

FEMA Public Assistance Program Delivery Management

FEMA Public Assistance Program IS-634

Debris Operations IS-632A

Incident Command System (ICS) IS-100C

Damage Assessment for Public Works IS-556

Debris Management Plan Development IS-633

FEMA Operational Planning IS-2002

Sun E10K Systems Administration

EDS Technical Development and Leadership Classes

Education

University of LA-Lafayette Honors Bachelor of Science in Computer Science, 1983

EXPERIENCE SUMMARY

Mr. Sims is a hands-on senior project manager with extensive experience in the development, implementation, and operation of federal grant programs and quality assurance management. He has a broad understanding of federal processes and years of direct experience working with local, state, and federal agencies.

In his current role, Mr. Sims utilizes his knowledge and experience to lead case management personnel, develop quality policy and procedures, and provides direct support to clients. He has assisted process improvement and efficiency and fulfilled numerous contract deliverables.

RELEVANT EXPERIENCE

Program Manager (February 2022 – Present)

Harris County, TX | CDBG-DR Mandatory Buyout Program

Mr. Sims serves as the program manager for Harris County's Mandatory Buyout program, a \$200 million housing program to purchase homes with a high risk for repetitive flooding and relocate the residents to home outside of the flood plain. Several of the property acquisitions are multi-lot mobile home parks, with hundreds of residents needing relocation. This program requires detailed knowledge of the URA guidelines, as many of the household are a mix of U.S. citizens, legal residents, and undocumented residents. The program is one of the largest involuntary acquisition and relocation disaster recovery programs in the country and is on schedule and on budget.

Project Manager (February 2021 – February 2022)

Mobile County, AL | Emergency Rental Assistance Program

Mr. Sims served as the project manager for Mobile County's Emergency Rental Assistance program 1 and program 2, which together have been allocated over \$20 million from the U.S. Treasury. He developed policies and program operations for Mobile County and various other Tetra Tech clients. Additionally, Mr. Sims managed multiple teams of Eligibility Specialists, Quality Control Specialists, and Team Supervisors. Mr. Sims and his team have paid out nearly \$17 million in assistance and processed over 13,000 cases.

- Mobile County, Alabama ERA1 program management
- Mobile County, Alabama ERA2 program management

FEMA Senior Consultant (2018 – 2020)

Various Clients | FEMA Public Assistance Program

For the FEMA Public Assistance Program, Mr. Sims managed over 20 clients in the state of Ohio response to the Ohio river flooding in 2018. He assisted counties, cities, and townships recover from damages to roads and embankments. Mr. Sims closed out nearly 100 projects during his tenure (Cat. A, B, and C projects).

Director of Operations and QA/QC (2008 – 2018)

Hammerman & Gainer (HGI) | Louisiana

Mr. Sims was responsible for marketing accomplishments, project management, program implementation, program development and team management during his

tenure. Most notably, he was the operations principal for CDBG-DR recovery efforts (\$10 billion), implementing and managing seven HUD grant programs and eight unmet needs programs. Additionally, Mr. Sims hired and trained over 120 staff for deliverables in 30 days, wrote RFPs, created satellite offices, managed various teams, and utilized Xactimate for construction estimation.

Manager of Audits and QA/QC (2007 - 2008)

ICF - Louisiana Road Home Program | Louisiana

Mr. Sims managed over 30 state, federal, and external audits for a \$10 billion federal HUD grant program. He developed and trained a QA/QC team of over 40 analysts, directed daily operations, and applied standard statistical analysis to extrapolate data.

ADDITIONAL EXPERIENCE

Director of Core Services, KnowledgeBase Marketing (2001 – 2007)

Senior Consultant/Owner, Superior Software Solutions (1994 – 2001)

Project Manager, Electronic Data Systems (1985 – 1994)



Sarah Roque Parker

CDBG Deputy Program Manager

8 YEARS OF EXPERIENCE

Areas of Expertise

CDBG and CDBG-DR Regulations

CDBG Housing Activities

Data Management

Document Management

Eligibility Review

FEMA Direct Housing

Policy Interpretation

Procedure Development

Process Improvement

Program Operations & Administration

Program Management

Reporting

Technical Assistance

Training and Development

Federal Grant Program Experience

IA Direct Housing

Homeowner Reimbursement Programs

Homeowner Assistance Programs

Mandatory Buyout Program

Voluntary Home Buyout Programs

Key Training/Certifications

Various State and Federal trainings

Education

Texas A&M University, Bachelor of Science in Chemistry, 2014

EXPERIENCE SUMMARY

Ms. Roque has managed multiple HUD grants where she specializes in program oversight, process improvement, data management, and large-scale data analytics. Ms. Roque is a key leader in the development and implementation of process and production management tools and utilizes available data to generate reports for business needs, reach program goals, and increase efficiency across various teams.

In her current role as HUD Deputy Practice Manager for Tetra Tech, Ms. Roque provides guidance to teams on the management of CDBG-DR and CDBG-MIT programs to ensure constituents recovering from disasters are served in the most impactful ways. She has provided policy review, subject matter expertise, key reporting metrics to the client, and streamlined processes.

Ms. Roque has assisted in the oversight and implementation of disaster recovery programs with expertise in the rehabilitation and reconstruction of homes affected by Hurricane Harvey in the City of Houston (\$424.6 million) and Harris County (\$286.3 million) with a primary focus on low-to-moderate income households. Prior to her CDBG-DR work, Ms. Roque was deployed on the Hurricane Harvey Direct Housing mission alongside the Texas General Land Office (GLO) in the first state-run Individual Assistance (IA) Direct Housing program, where she assisted in housing approximately 3,500 Texas families, created internal tracking and production management reporting processes, and ensured program compliance under the current federal housing guidelines of FEMA. Her knowledge of CDBG-DR funding and proven experience leading similar programs to the County"s makes her the ideal candidate to lead this contract.

RELEVANT EXPERIENCE

Deputy Practice Manager (June 2022 – Present)

Multiple Clients | Austin, TX

As the HUD practice deputy for Tetra Tech Disaster Recovery, Ms. Roque guides her teams and provides subject matter expertise to government clients implementing federal grant programs. She currently works with CDBG-DR and CDBG-MIT projects. Her duties include researching and providing guidance on policies and procedures, communicating regularly with clients, developing standardized process flows, and implementing controls to ensure project efficiency.

In her role as Deputy Practice Manager, Ms. Roque leads project management teams in the implementation of CDBG-DR and CDBG-MIT programs, reviews policy, and aids in the development of procedures and process improvements. Ms. Roque ensures HUD compliance is met while managing client satisfaction. Since June 2022, she has provided guidance and led staff across 21 different projects, through various program stages.

ADDITIONAL EXPERIENCE

Grants Manager (October 2019 – June 2022)

GrantWorks, Inc.

Ms. Roque led a team of grant managers who supported the GLO in overseeing state-managed single-family housing programs administered in Harris County and the City of Houston, where she monitored team tasks and performance to ensure continuous process improvements and provided a structured change management approach. As Grants Manager, Ms. Roque developed and enhanced program related policies, guidelines, and SOPs for the State Managed Homeowners' Assistance Program. She developed and provided data analysis and reports for public, state, and federal officials to ensure progress in the program was adequately captured and needs of standardized reports were met for Quarterly Progress Reports (QPR) and Legislative Budget Board (LBB) reports. Mr. Roque interfaced directly with the client and stakeholders to anticipate business demands to realign operational priorities; conducted technical assistance trainings to clients, vendors, and direct reports; updated and maintained program budgets to monitor program benchmarks and ensure timely spend down of funds; and provided support for multiple successful monitoring and audit reviews.

Program Manager (March 2018 – October 2019) HORNE, LLP

Ms. Roque worked on the Texas GLO's FEMA IA Direct Housing Program, providing oversight for the temporary housing programs for individuals most severely impacted by Hurricane Harvey. In this role, she understood the intricacies of temporary housing requirement set forth in housing programs. Ms. Roque's duties included the oversight of 20,000+ reports from across the state of Texas regarding an applicant's housing plan and ultimate transition plan for long-term permanent housing. While interfacing directly with the Texas GLO, Ms. Roque managed large amounts of data and created compelling data visualizations to easily display trends and outliers and deliver real-time KPIs to clients and stakeholders. By utilizing project requirements, she reduced process gaps and was able to anticipate business intelligence needs of internal operations. She mentored her team on protocol and best practices while dealing with PII and correspondence with COGs, and trained and oversaw a team in QC review, program implementation, database management, and data quality procedures.

Program Manager (June 2014 – March 2018)

Texas Commission on Environmental Quality

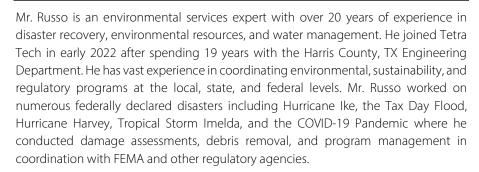
- Ingested, evaluated, and validated real-time, continuous ambient air monitoring data for 25+ unique parameters, averaging a minimum of 100,000+ data points per day for 300+ continuous sampling channels across Texas
- Developed, improved, and maintained data extraction techniques and data comparisons with the use of SQL, statistics, and Excel for database maintenance, data requests, and annual data quality certification
- Trained and oversaw new staff in validation, data quality procedures, and database management
- Maintained current training curriculum for all continuous air monitoring validators in the agency and staff members from local programs outside the agency
- Reviewed and updated standard operating procedures, quality assurance project plans, data quality objectives, and other technical documents
- Conducted oversight review of validated CAMS data and communicated any findings to the validating organization



Nick J. Russo III

Environmental Subject Matter Expert, Case Management

EXPERIENCE SUMMARY



Mr. Russo was specifically chosen for this project due to his in-depth knowledge of disaster recovery operations within the State of Texas.

RELEVANT EXPERIENCE

Director of Environmental Services (April 2022 - Present) Oregon Housing and Community Services (OHCS) | CDBG Program

Mr. Russo managed technical program and staffing for the HUD-mandated environmental reviews (Tier I Environmental Reviews for seven counties) in support of federal grants to benefit disaster survivors and impacted communities in Oregon, as a result of the major disasters that occurred during Labor Day weekend of 2020 when wildfires caused the loss of nearly 4,200 homes with seven counties.

Director of Environmental Services (March 2022 – Present) Puerto Rico Department of Housing (PRDOH) | R3 Puerto Rico CDBG Program

Mr. Russo managed technical program and staffing for the HUD-mandated environmental reviews (Tier II Site Specific Reviews), Damage Assessment Inspection/Cost Estimate, LBP, and Asbestos Inspection program in accordance with 24 CFR Part 58 and the current Puerto Rico PRHOH R3 Program Environmental Review (Tier II) Procedures for an estimated 60,000 hurricane and flood damaged properties as a result of Hurricane Maria in 2017.

Director of Environmental Services (March 2022 – Present) Harris County, TX | Project Recovery CDBG Program

Mr. Russo managed technical program and staffing for the HUD-mandated environmental reviews (Tier II Site Specific Reviews), Damage Assessment Inspection/Cost Estimate, and LBP program in accordance with 24 CFR Part 58 and the current Puerto Rico PRHOH R3 Program Environmental Review (Tier II) Procedures for an estimated 2,500 hurricane and flood damaged properties as a result of Hurricane Harvey in 2017.

Director of Environmental Services (March 2022 - Present) State of Florida | Rebuild Florida CDBG Program

Mr. Russo managed technical program and staffing for the HUD-mandated environmental reviews (Tier II Site Specific Reviews), Damage Assessment



20+ YEARS OF EXPERIENCE

8 DISASTERS

Areas of Expertise

Disaster Recovery
Debris Management
Resiliency Planning
Sustainability
Storm Water Management
Wetlands & Natural Resources
Green Infrastructure
Environmental Planning

Training/Certifications

Envision ENV-SP Wetland Delineation NIMS ICS

Education

Texas A&M University, Master of Science in Water Management & Hydrological Science, 2009

Texas State University, Bachelor of Science in General Agriculture, 2002 Inspection/Cost Estimate and LBP Inspection program in accordance with 24 CFR Part 58 and the current Florida Department of Economic Opportunity (DEO) Program Environmental Review (Tier II) Procedures for an estimated 7,000 flood damaged properties.

Director of Environmental Services (March 2022 – Present)

State of Texas | Rebuild Texas CDBG Program

Mr. Russo managed the HUD-mandated environmental reviews program and staffing (Tier II Site Specific Reviews), Damage Assessment Inspection/Cost Estimate and LBP Inspection program in accordance with 24 CFR Part 58 and the Texas General Land Office (GLO) Program Environmental Review (Tier II) Procedures for an estimated 1,200 flood damaged properties.

ADDITIONAL EXPERIENCE

Director of Environmental & Sustainability Services (2021 – 2022)

Harris County Engineering Department | Houston, TX

- Lead the environmental services team in achieving program goals, objectives, and sustainability metrics. Coordinated sustainability programs with other county departments.
- Provided research and guidance to executives, clients, and other county departments, regarding federal, state, and local environmental regulations, initiatives, and programs.
- Provided environmental regulatory planning, oversight, and agency coordination as a key member of the emergency management team within the Engineering Department.
- Served as Debris Operations Manager for the response following Winter Storm Uri in 2021. Coordinated damage
 assessments, managed setup and operations of public debris drop-offs within the County, and managed right-of-way debris
 removal in heavily impacted areas of the County.

Planning Section Leader – COVID-19 Non-Congregate Medical Shelter (March – May, 2020) Harris County Engineering Department | Houston, TX

- Mobilized a "Field Hospital" at the County's NRG Stadium Complex within 7 Days due to the rampant increase in COVID-19 infection and hospitalization rates.
- Researched and negotiated a contract for a general contractor to fully mobilize and provide medical staff turnkey.
- Planned and executed setup of the field hospital (NCMS) on time and under budget with an estimated cost of \$30M.
- Fully mobilized setup, monitored regional needs, and demobilized the operation over 30 days.

Planning Section Leader – COVID-19 Continuity of Government Task Force (March 2020 – March 2022) Harris County Engineering Department | Houston, TX

- Developed Harris County's COOP/COG plan specific to the COVID-19 Pandemic.
- Created an online department web dashboard for the purpose of tracking the impact to county essential operations and manpower losses due to quarantine or illness.
- Evaluated shelter contingencies for housing criminal justice populations.
- Developed a Resource Guide with guidelines and procedures for implementation of 50 county departments to follow.

Environmental Compliance Officer (2017 – 2021)

Harris County Engineering Department | Houston, TX

Executive staff member within the Office of the County Engineer, assisted in overseeing daily operations for the entire 700-member organization.

 Implemented and oversaw sustainability and regulatory compliance for seven divisions within the department including capital project management, facility management, and recovery & resiliency programs. Project Manager for \$31M in grant funded recovery/resiliency/stormwater projects.

Debris Operations Manager – Hurricane Harvey (August 2017 – February 2019) Harris County Engineering Department | Houston, TX

- Managed Debris Removal Operations during the County's disaster recovery from Hurricane Harvey, for 30,000 homes flooded and 2M cubic yards of debris; total project cost \$40M.
- Responsible for identification, permitting, and environmental compliance for 15 DMS sites

Environmental Services Team Leader (2011 – 2017)

Harris County Engineering Department | Houston, TX

Responsible for managing the Environmental Services Team and coordinating various environmental initiatives with local, state, and federal agencies for hundreds of roadways, parks, and architectural projects.

- Provided management of regulatory processes in obtaining a unique Regional General Permit from the US Army Corps of Engineers-Galveston District.
- Management and oversight of numerous studies in support of USACE Individual and Nationwide permits supporting Capital Improvement Projects.

Debris Operations Manager – Tax Day Flood (April 2016)

Harris County Engineering Department | Houston, TX

• Served as a Debris Operations Manager during emergency recovery operations following April 18 "Tax Day" Flooding in Harris County, TX.

Senior Environmental Coordinator (2009 – 2011)

Harris County Architecture & Engineering Division | Houston, TX

- Substantially reduced environmental permitting delays to increase project delivery on time and within budget. Coordinated project meetings and reviews with USACE through the establishment of a WRDA 214 agreement for the purpose of prioritizing capital improvement projects and expediting wetland delineations and permits.
- Created guidelines for the use of Low Impact Development/Green Infrastructure techniques for use in Harris County work with numerous stakeholders.
- Represented Harris County on a technical committee for the San Jacinto Waste Pits Superfund Site to coordinate time critical removal actions and restrict public access to the site.
- Led a disaster response team to complete flood damage assessments following two April 2009 flood events resulting in approximately 1,000 homes damaged. Preliminary assessments were completed within four days.



David Venables

Subject Matter Expert – Housing Programs

34 YEARS OF EXPERIENCE

Areas of Expertise

Project Management

Budget Oversight

Team Development

Partnership Development

Relationship Management

Consulting Services

Strategic Planning

Cost Estimating

Salesforce

Military Experience

Cartographer, United States Marine Corps, 1984 – 1989

EXPERIENCE SUMMARY

Mr. David Venables is a Disaster Recovery and Housing Professional as well as a U.S. Marine Corps Veteran who has accumulated over 15 years of leadership experience in partnership development and project management. David's diverse background has equipped him with the ability to effectively navigate complex situations while maintaining a high level of efficiency.

In his most recent role as a National Account Manager for Lowe's, a Fortune 50 corporation, David demonstrated his exceptional leadership skills by founding and leading a new business vertical targeting the disaster recovery sector. This new business vertical focused on non-profit organizations, for-profit disaster contractors, and emergency management agencies at all levels of government. David was able to leverage his extensive experience in business management and corporate ownership to build strong relationships with key stakeholders in the disaster recovery sector.

David's vast operational and leadership background has provided him with the necessary tools to manage complex projects and partnerships. Throughout his career, he has demonstrated his ability to effectively lead teams to success by clearly communicating goals and expectations, motivating team members, and fostering an environment of collaboration and innovation.

RELEVANT EXPERIENCE

Director of Long-Term Recovery (2023 – Present)

Tetra Tech, Inc.

Mr. Venables serves Tetra Tech clients with long-term recovery consulting expertise covering a wide range of projects, including disaster housing operations.

National Account Manager (2020 – 2023)

Lowe's

Launched new business vertical focused on disaster response and recovery

- Managed all aspects of business development and partnership management with government agencies, private sector partners and national non-profit organizations
- Fostered relationships with various business and industry partners to expand sales nationally
- Partnered with internal business unites to guide marketing decisions, capture strategies and proposals

Deputy Director of Rebuild Operations (2017 – 2020)

Team Rubicon – Dallas, TX

Launched new long-term recovery division of the organization to rebuild homes affected by disasters.

- Established and managed national offices; hired, trained, and supervised staff of over 30 employees across two states and Puerto Rico
- Developed strategic partnerships to expand organizational capabilities, improve services and increase funding
- Assisted with the development of program guidelines and policies; implemented new organizational standards and streamlined processes across the company

Oversaw the successful reconstruction of storm damaged homes in Florida, Texas and Puerto Rico

Red Ladder Field Services (2009 - 2018)

Established property management and maintenance business working directly with national lenders to secure, maintain, renovate, and sell commercial and residential properties across four states.

- Developed strategic partnerships with local and national lenders to increase company revenues
- Collaborated with partners across multiple platforms to schedule work order completion in most efficient cost-effective manner.

Owner (2006 - 2009)

Gold Coast Builders

- Managed all business operations including strategic planning, budget controls, team management and financial oversight.
- Conducted business development to expand client base to include the nation's largest home builders and commercial contractors—grew the organization to the areas fourth largest masonry firm within 3 years

Owner (1992 - 2009)

Venables, Stevens, & Maghan

- Conducted all business development and contract negotiation
- Assisted with construction design, estimates, bids and awards
- Oversaw project completion including planning and scheduling through close out

Project Manager (1989 – 1992)

W. B. Venables & Sons, Inc.

- Project Manager of public commercial construction projects ranging from \$500K to \$5M
- Oversaw contract award, material purchases, and scheduling of construction meetings; managed budget responsibility to deliver project on time, on budget, and as designed
- Collaborated with onsite project superintendents and subcontractors to resolve construction issues ranging from manpower management to technical details of construction materials and processes

INDUSTRY AFFILIATIONS

Disaster Recovery Coalition of America | Board of Directors | 2020 – Present

Florida Division of Emergency Management | Member Disaster Housing Task Force | 2022 – Present

Idaho Department of Emergency Management | Member Disaster Housing Core Working Group | 2022 – Present

Federal Alliance for Safe Homes | Chair, Hurricane Ian Strong Homes Task Force | 2022 – Present

All Hazards Consortium | Member | 2022 - Present

COMMUNITY INVOLVEMENT

Regional Field Operations Manager (2013 – 2017)

Team Rubicon | Various Locations

Managed area operations within a nonprofit disaster planning firm. Coordinated planning and preparation to ready staff to respond within short notice to emergency operations.

- Oversaw operational accountability of deployed resources to include command and general staff, volunteers, life safety
 equipment and vehicle fleet.
- Assembled and supervised regional Incident Management Assistant Teams; planned training in compliance with regional, state, and local offices for emergency management guidelines.
- Responsible for all communication with partner organizations, first responders and emergency management agencies to develop industry recognition and create opportunities for engagement.



Susan K. Elkins

Subject Matter Expert – CDBG



DISASTER

\$1B ACTION

Areas of Expertise

Community Development Programs

Federal Grant Management

Housing, Infrastructure, and Economic Development

Grant Experience

CDBG-DR

CDBG-MIT

Education

B.A, Louisiana State University, 1982

EXPERIENCE SUMMARY

Ms. Elkins has worked with state and federal programs for more than 40 years. She was responsible for Louisiana's state and local governments receiving billions of dollars of federal grant funds. For 30+ years, she has had a good working relationship with the HUD staff in Washington, D.C. Ms. Elkins managed the Louisiana Office of Community Development, which includes three divisions: Community Development Office, State Grants Management Office, and the Disaster Recovery Office.

Ms. Elkins oversaw the largest supplemental appropriation in the history of disaster recovery. Louisiana received one supplemental appropriation for Hurricane Andrew and three supplemental appropriations for Hurricanes Rita and Katrina. Ms. Elkins' responsibilities included administering and ensuring compliance with HUD, state, and program regulations for over 25 disaster programs for activities such as housing, infrastructure, and economic development programs. She also assisted in the development of the Action Plans for over \$1 billion; wrote memorandums of agreement for data sharing for SBA, FEMA, etc.; wrote waiver letters; and developed a model agreement with banks after coordinating with the National Mortgage Lending Association and the Louisiana Bankers Association for escrowing housing compensation funding. Of the \$13 billion, approximately \$322,555,660 was utilized for economic development programs to assist businesses impacted by the disaster.

After retiring from the State, Ms. Elkins created a consulting firm to provide community development planning services to states and local governments. In the past eight years, she has worked on many disaster recovery programs.

RELEVANT EXPERIENCE

National Disaster Resiliency Competition

Ms. Elkins worked with the City of Minot, North Dakota, in preparing a competitive application for the HUD National Disaster Resiliency Competition. Her responsibilities included assisting in determining the scope and breadth of projects to be included in the proposal, ensuring activities were CDBG eligible and compliant, holding and participating in public meetings, identifying and enlisting key partners in the development of the application, and working directly with the client in the writing and preparation of the application. The City was one of 16 to receive an allocation from the Resiliency Competition. The City received an award notice for \$74 million.

CDBG-Disaster Recovery Programs

Since 2008, Ms. Elkins has assisted the Commonwealth of Puerto Rico, U.S. Virgin Islands, State of Illinois, City of Minot, City of Lake Charles, State of New York, State of New Jersey, State North Carolina, State of West Virginia, State of Colorado, and Harris County, Texas, on CDBG-Disaster Recovery Programs.

Ms. Elkins has worked with the States of Illinois and Colorado and the Cities of Minot and Lake Charles in developing policies and procedures for implementing disaster programs for rental rehabilitation and reconstruction, homeowner rehabilitation and reconstruction, reimbursement, buyout/acquisition (voluntary and involuntary), and infrastructure. She also provided assistance in the start-up of each of these programs. For the State of New York, she assisted in writing the policies and procedures for the homeowner rehabilitation program. Ms. Elkins also wrote the Disaster Recovery Actions Plans for the State of Illinois, the State of Louisiana, and the City of Minot, and she assisted in writing the Action Plan for the State of New Jersey. She has also written three CDBG disaster recovery manuals for three states. Ms. Elkins has reviewed action plans and provided HUD TA to the Commonwealth of Puerto Rico, State of West Virginia, and the U.S. Virgin Islands.

Ms. Elkins is currently serving as **Senior CDBG Advisor for the Harris County Disaster Recovery Program, Involuntary Buyout Program** where she is assisting with developing a compliant Involuntary Acquisition Program. She is writing program policies and standard operating procedures for involuntary acquisition for Harris County Buyout Interest Areas.

Louisiana Housing Finance Agency, Harris County, and the Louisiana Land Trust, 2008. Ms. Elkins developed CDBG monitoring manuals and Action Plans; designed Regular CDBG and Disaster CDBG housing, infrastructure and economic development programs; and developed NSP1 and NSP2 applications for the State, contracts for NSP subrecipients, and a NSP training manual for subrecipients and State staff.

Office of Community Development, DOA, State of Louisiana, 1981-2008

Ms. Elkins retired from state government as the Executive Director of the Louisiana Office of Community Development. This office prepares the Consolidated Plan for the State of Louisiana, which serves as the application for federal grants amounting to \$57,500,000 annually. These grants are for the HOME, Housing Opportunities for Persons with Aids, Emergency Shelter Grants, and the CDBG programs. This office also receives federal funding to administer the state Community Development Block Grant and other federal programs associated with community development such as the disaster recovery programs. CDBG programs that were implemented included Public Facilities, Housing, Technology, LaStep, Economic Development, and Demonstrated Needs. The annual budget was approximately \$10 billion.

Ms. Elkins directed this office in its efforts to pursue other funding sources for community and economic development in small Louisiana cities. She worked closely with the United States Department of Agriculture, Environmental Protection Agency, Economic Development Administration, and United States Department of Housing and Urban Development to secure joint funding for community projects. By leveraging dollars, they were able to fund more needed community and economic development projects in Louisiana. In addition, Ms. Elkins directed the Office of Community Development, which received approximately \$30 million annually for distribution to non-entitlement communities and \$10 million in state general funds to provide funding assistance to local governments. She is knowledgeable of federal programs that are available to states and local governments. She and her staff developed a data system, which local governments, state staff, and legislators used to locate federal, state, and foundation funds for different types of projects.

Ms. Elkins also served as president to the Council of State Development Agencies (COSCDA). COSCDA is a national organization based in Washington, D.C., which advocates and enhances the leadership role of states in community and economic development through innovative policy development. COSCDA members are executive branch agencies that have primary responsibility for providing community development, housing, or local economic development assistance to localities and communities. As one of her COSCDA roles, Ms. Elkins reviewed and edited the "Boot Camp" training on CDBG regulations for State community development staff.



Francis James Cipriani

Project Manager, Public Assistance



26+ YEARS OF EXPERIENCE

Areas of Expertise

Treasury CRF

Treasury ARPA

FEMA PA

Federal Grant Management

Compliance/Reporting

Grant Application Developments

WESTLAW & LEXIS-NEXIS Legal Research

FEMA Change order negotiations

FEMA Document review/conflict identification

Project Management

FEMA Government Cost Justifications

Grant Experience

FEMA PA

Disasters

4500 CT COVID-19 PA

4485 TX COVID-19 PA

4332 TX Hurricane Harvey

4286 Hurricane Matthew

1602 Hurricane Katrina

1134 Hurricane Fran

Education

University of Buffalo, 1993-1996

EXPERIENCE SUMMARY

Mr. Cipriani is a seasoned project manager with 26+ years of hands-on experience in all areas of project management, federal documentation, and COVID-19 recovery. Mr. Cipriani has exceptional interpersonal and communications skills and expertise with ARPA program management, change order negotiations; schedule building; value engineering; federal program cost justifications; federal grant program policy; procurement, and site inspections. Currently, Mr. Cipriani works as a program delivery manager supporting CARES Act and ARPA programs for the City of Houston. Mr. Cipriani has worked in all phases of grant management, including initial damage assessment, scoping, project management, and closeout.

RELEVANT EXPERIENCE

PA COVID-19 Consultant (2022 – Present)

State of Connecticut | FEMA PA COVID-19

Mr. Cipriani is currently assisting the State of Connecticut to determine the damages and effects of COVID-19. His responsibilities include:

- Closeout Team Lead
- Closeout SOP and Updates
- Tracking Closeout Process and Reporting
- Grants Portal Data Upload and Navigation for Client
- Team Management/Task Formulation and Assignment
- Orient PA and CARES ACT staff to the specific impacts of the event
- Provide compliance reviews and risk assessments for claims
- Detail Recipient involvement in the disaster
- Set expectations for the PA operation
- Information on the type of peril; State, Local, Tribe, or Territory capacity
- Primary impacts from the event
- Estimate disaster-related damage by Category of Work
- Project number of Applicants (including Private Non-profits)
- Project number of Project Worksheets (PWs)
- Quality Assurance and Quality Controls

PA/CARES ACT/ARPA Consultant (2019 – Present)

City of Houston | FEMA PA COVID-19 / CARES ACT FUND/ARPA

Mr. Cipriani is currently assisting the City of Houston to determine the damages and effects of COVID-19. His responsibilities include:

- Treasury CRF Quarterly Reporting Grant Solutions
- CRF Technical Assistance
- Treasury ARPA Quarterly Reporting Portal ARPA Technical Assistance
- GMS PA Quarterly Reporting and Supporting Data Upload (GMS-Texas Department of Emergency Services Portal)
- Grants Portal Data Upload and Navigation for Client
- Team Management/Task Formulation and Assignment

- Assist with Fund identification
- Review CARES Act Guidance and provide client recommendations
- Conduct successful Exploratory Calls and Recovery Scoping Meetings
- Draft initial Damage Inventory for each Applicant/COH stakeholder
- Orient PA and CARES ACT staff to the specific impacts of the event
- Provide compliance reviews and risk assessments for claims
- Detail Recipient involvement in the disaster
- Set expectations for the PA and CARES Act operation
- Information on the type of peril; State, Local, Tribe, or Territory capacity
- Primary impacts from the event
- Estimate disaster-related damage by Category of Work
- Project number of Applicants (including Private Non-profits)
- Project number of Project Worksheets (PWs)
- Potential involvement Other Federal Agency (OFA)

City of Houston | Hurricane Harvey (2019 – 2020)

Mr. Cipriani assisted the City of Houston to determine the damages and effects of Hurricane Harvey. His responsibilities include:

- Team Management/Task Formulation and Assignment
- PW writing
- Conduct successful Exploratory Calls and Recovery Scoping Meetings
- Draft initial Damage Inventory for each Applicant
- Orient PA staff to the specific impacts of the event
- Propose EHP and Mitigation considerations
- Detail Recipient involvement in the disaster
- Set expectations for the PA operation
- Information on the type of peril; State, Local, Tribe, or Territory capacity
- Primary impacts from the event
- Estimate disaster-related damage by Category of Work
- Geographic considerations
- Project number of Applicants (including Private Non-profits)
- Project number of Project Worksheets (PWs)
- Define Mitigation opportunities
- Potential involvement Other Federal Agency (OFA)

Program Delivery Manager (2017 – 2019)

Real Street/AECOM Recovery/FEMA, Houston, TX

Provided disaster recovery services and conducted successful exploratory calls and recovery scoping meetings. Additional duties included, but are not limited to:

- Drafted an initial Damage Inventory for each Applicant
- Oriented PA staff to the specific impacts of the event
- Described EHP and Mitigation considerations
- Detailed Recipient involvement in the disaster
- Set expectations for the PA operation
- Provided Information on the type of peril State, Local, Tribe, or Territory
- Determined primary impacts from the event
- Estimated disaster-related damage by Category of Work
- Geographic considerations
- Projected number of Applicants (including Private Non-profits)

- Projected number of PWs
- Special considerations challenges: Mitigation Opportunities

Program Manager/Disaster Recovery Expert (2012-2017)

Burk-Kleinpeter, Inc., on behalf of Sewerage & Water Board of New Orleans | Hurricane Katrina | Recovery FEMA Capital Projects

Responsibilities included reviewing and approving contract documents prior to bid release and reviewing construction documents for potential issues, FEMA eligibility, design, and constructability. Duties included:

- Responsible for owner relations between engineers and contractors
- Represented the owner's interests and handled day-to-day activities related to contract execution
- Ensured specifications and drawings issued for construction were executed properly in the field by contractor
- Pre-Construction coordination and meetings
- Provided agenda for construction management inspection staff
- Resolved issues related to contract documents and field conditions
- Cost analysis for additional scopes of work and ROM estimations
- Program safety oversight
- Track and report all related costs/expenditures
- Hold progress meetings/coordination meetings with the contractors and record and distribute meeting minutes
- Responsible for establishing project budget tracking tool and reporting for owner review/use
- Estimate and quantity take-offs.
- FEMA cost reasonableness reports and Written Version Requests (WVR's) change order justifications
- Client representation in GOSEP (State) and FEMA meetings
- Punch list generation, reporting and tracking
- Warranty issue resolution

Senior Project Manager/Disaster Recovery Expert (2011-2012)

Ellis Construction, New Orleans | Hurricane Katrina

Responsibilities included project buy-out, change orders, estimating, scheduling, forecasting, meetings, submittals, materials procurement, project document review, producing progress reports, identifying ambiguities or omissions of scope and issuing RFI's – with recommendations on potential FEMA eligibility issues.

- RS Means cost validation FEMA
- Document control FEMA requirements
- Support FEMA 406 Mitigation
- Estimating and quantity take-offs
- Schedule building and reviews
- Contract review
- Manage and coordinate construction efforts, engineer, architect, general-contractor and testing agency
- Successfully managed projects to achieving budget objectives and project timelines
- Financial tracking and reporting
- Change order negotiations and value engineering



Donn Olson

Subject Matter Expert, Public Assistance

13 YEARS OF EXPERIENCE

4 DISASTERS

Areas of Expertise

FEMA Public Assistance Consulting

Cost Analysis

Project Worksheet Formulation

Audit Preparation

Grant Experience

FEMA Public Assistance

HUD Community Development Block Grant (CDBG) Program

FEMA Community Disaster Loan (CDL)

Key Training/Certifications

FEMA IS-630 - Public Assistance

FEMA IS-632 – Public Assistance Operations

FEMA IS-632 - Debris

Operations

Education

University of Phoenix Bachelor of Science, Accounting, 2012

Houston Community College Associate of Applied Science, Accounting, 2007

EXPERIENCE SUMMARY

Mr. Donn Olson is a member of Tetra Tech's disaster recovery operations. In this role, Mr. Olson assists Tetra Tech clients in navigating federal grant programs for financial recovery from disasters. His knowledge of the Federal Emergency Management Agency (FEMA) Public Assistance (PA) Program assists the applicant with maximizing eligible reimbursements. Mr. Olson is a cross-cutting disaster recovery expert and has worked extensively in Project Worksheet (PW) formulation in areas such as debris removal, emergency protective measures, force account labor and equipment, and permanent work. During the PA process, he specializes in document analysis, eligibility requirements, audit preparation, and closeout assistance, which allows the client to maximize reimbursement. Mr. Olson is intimately familiar with FEMA policies, expectations, and technology, including the FEMA GrantsPortal. **Due to his extensive experience working directly with clients and subgrantees, Mr. Olson has excellent soft skills when interfacing with stakeholders.**

Mr. Olson is also a leader of Tetra Tech's Disaster Policy Working Group, a thinktank focusing on the latest policy changes in the disaster recovery grant space. In addition to PA consulting, he assists clients with fraud prevention policy formulation for Federal grant programs such as the Community Development Block Grant (CDBG) program.

RELEVANT EXPERIENCE

Document Specialist (August 2017 – Present)

Houston, Texas | Hurricane Harvey

Mr. Olson is currently working with the City of Houston to determine damages and effects of Hurricane Harvey, collecting and compiling data of the affected items and areas, interpreting the rules and guidelines in place for remedies. Responsibilities include:

- Assisting with financial recovery efforts as a result of Hurricane Harvey, Mr. Olson assists with the preparation of the Project Worksheets (PW) to FEMA
- Assessing City of Houston (COH) documents for eligibility
- Determining and documenting COH eligible costs
- Assigning team members for PW processing
- Writing of and quality control of PW documentation
- Coordinating teams for PW processing work flow
- Training FEMA PA policies and PW writing to team members
- Responding to PA policy and eligibility questions from team members
- Preparing PW's including damage descriptions, scope of work for repairs, repair cost estimates and activities to support development of project worksheets from formulation through closeout
- Quality control of cost estimates for building repairs/replacement
- Subject matter expert for policy considerations and eligibility reviews

Consultant (January 2010 – October 2017)

Port of Galveston, Texas | Hurricane Ike

Hurricane Ike made landfall in Galveston, Texas, on September 13, 2008. The Port

of Galveston (Port) maritime infrastructure (piers, docks, apron, bulkheads, underground utilities, and roadways) was heavily impacted by up to 20-foot tidal surge forces carried over and past Galveston Island to the northern reaches of Galveston Bay and channels. Mr. Olson was a specialist working on the Port of Galveston project for the eight years and supported the identification of additional damage not captured by FEMA. Mr. Olson assisted with the preparation of the PWs to FEMA and supervised the processes of obligation and closeout of over 150 PWs.

Document Specialist (April 2010 – June 2010)

City of Galveston, Texas | Hurricane Ike

Tetra Tech was hired by the City of Galveston, through a standing contract with the State of Texas Department of Rural Affairs, to help administer federal CDBG disaster recovery funds allocated for damage to City infrastructure sustained during Hurricane Ike. To repair damage from the storm, the City of Galveston completed 16 projects funded by CDBG program funds. Mr. Olson helped to provide complete grant application, administration, program management, and project delivery services for all CDBG program funded projects. Mr. Olson was also part of the team that provided assistance and oversight services for application development, environmental review, procurement, status reporting, compliance monitoring, project closeout, and audit.

Document Specialist (September 2008 – December 2008)

Fort Bend County, Texas | Hurricane Ike

On September 12, 2008, Hurricane Ike impacted Fort Bend County with hurricane force winds and heavy rain, causing damage and debris across the County. With estimated damage of more than \$15.3 million, the County requested that our team assist with applying for, administering, and managing FEMA PA funding for categories A–G.

Mr. Olson assisted the Fort Bend County Auditor Office with financial recovery due to Hurricane Ike. He identified and gathered the documentation for Category A–G PWs, including reviewing all Force Account Labor and Force Account Equipment costs to ensure they were accounted for.

Document Specialist (September 2008 – December 2008)

City of Bellaire, Texas | Hurricane Ike

On September 13, 2008, Hurricane Ike made landfall resulting in debris strewn throughout the City, public buildings damaged, public property damaged. With estimated damage of more than \$300,000, the City requested that Tetra Tech assist with applying for, administering, and managing FEMA PA funding for categories B-G. Mr. Olson acted as the documentation specialist to gather and review all pre- and post-storm Category B force account equipment and labor. This resulted in the swift development of 2 FEMA PA PWs for categories Category B totaling approximately \$300,000.

Document Specialist (September 2008 – August 2011)

City of Houston Solid Waste | Hurricane Ike

On September 12, 2008, Hurricane Ike made landfall in Texas, leaving behind massive amounts of debris from high winds, inland flooding, and storm surge. The City of Houston was faced with the overwhelming task of managing their labor and equipment hours to seek reimbursement through the FEMA PA program. Mr. Olson was an instrumental member of the team that documented, organized, and processed this intricate set of data into the required FEMA format. This information was then evaluated by a team of industry experts to request full reimbursement of damage related costs.



Bruce Firmin Jr.

Grant Management Specialist, Public Assistance

10 YEARS OF

Areas of Expertise

Disaster Recovery Program Management Grant Management Procurement Federal Compliance Project Closeout Data Management

Grant Experience

FEMA Public Assistance

Disasters

Hurricane Katrina Hurricane Sandy Hurricane Harvey Hurricane Laura Winter Storm Uri

Training/Certifications

FEMA IS1000 PA- Eligibility FEMA IS1001 PA- Delivery

Education

University of New Orleans – New Orleans, LA

Bachelor of Science in Business Administration, Minor in Management

EXPERIENCE SUMMARY

Mr. Firmin has over 10 years of experience in project management, logistics, disaster recovery consulting, and human resources. He also maintains a strong background in accounting processes, finance, logistics, and insurance.

As a FEMA Public Assistance expert, Mr. Firmin is proficient in reporting utilizing the FEMA Grants Portal, as well as state-specific grant portals, including the States of Texas (TDEM) and Louisiana (LAPA).

RELEVANT EXPERIENCE

Project Manager (December 2021 – Present)

Tetra Tech Disaster Recovery | City of Philadelphia, PA

Oversees the City of Philadelphia recovery from Hurricane Ida, including project formulation, grant management and site inspections.

Project Manager (April 2021 - Present)

Tetra Tech Disaster Recovery | Harris County, TX

Directly manages force account data analysts and oversees project formulation/reconciliation of force account labor and equipment for all County departments. Currently, the total estimated force account labor stands at 80M, for which our team is responsible for placing the costs to the correct grant program.

Project Manager (July 2021 – Present)

Tetra Tech Disaster Recovery | Frisco, TX

In charge of reconciling, filing, and submitting all the City's costs for the Covid-19 vaccine hub to FEMA PA

Project Manager (October 2021 – Present)

Tetra Tech Disaster Recovery | Hamilton County

In charge of reconciling, filing, and submitting all the County's costs related to the Covid-19 pandemic to FEMA PA

Project Manager (February 2022 – Present)

Tetra Tech Disaster Recovery | Fort Bend County, TX

Assisting Fort Bend County as a Project Manager for two separate projects

- Procurement Compliance: management of a FEMA legal specialist, who provides guidance and deliverables to the County purchasing department
- Program Management: management of a Disparity Study that is being conducted by a third-party consultant for the County. Additionally responsible for the data delivery to the third-party consultant as well as reviewing invoices for the County

FEMA Public Assistance Consultant- Project Manager (April 2021 – Present)

Tetra Tech Disaster Recovery | Houston, Texas

Mr. Firmin serves as a Project Manager on the Tetra Tech disaster recovery team. As a Public Assistance Consultant and Project Manager, Mr. Firmin oversees multiple Public Assistance grant application and administration tasks including data collection, cost reconciliation, compliance reviews, project worksheet development, grants portal project applications, and request for reimbursement submittals for clients.

Project Manager (November 2016 – March 2021)

Sulzer Group, LLC | New Orleans, LA

- Providing applicant support throughout the entire FEMA Public Assistance program
- Scope alignment for FEMA-funded projects
- Coordinating procurement for Architectural and Engineering firms as well as General Contractors for projects up to \$15 million
- Acting as Owner's representative throughout the entire construction process
- Conducting construction project site visits and status meetings
- Cost reconciliations
- Eligibility determinations, including, helping applicants capture any expenses that may be reimbursable by FEMA
- Federal compliance
- Insurance allocations
- Preparing and submitting requests for reimbursement for applicants to the State
- Document and file management

Closeout Specialist (October 2015 – October 2016)

Sulzer Group, LLC | New Orleans, LA

- Provided on site applicant support throughout grant closeout
- Assisted client in cost reconciliation of 100M+ in grants
- Assisted client in closeout of 100M+ in FEMA PA grants
- Preparing and submitting closeout workbooks
- Conducted closeout site visits with GOHSEP

Logistic Coordinator (February 2014 – October 2015)

Aggreko, LLC | Kenner, LA

- Safety Training (internal/customer site)
- Customer service
- 14-HR Workday Management
- Service Scheduling (shop)
- Fleet Readiness SIS
- Schedule equipment repairs/retrofits
- Global Service Center Standards (GSCS)
- Inventory Management
- Facility Management
- Coordinate freight vendors transporting equipment and parts to ensure timely cost-effective delivery, negotiate pricing as necessary
- Locate equipment and supplies from internal and external sources to fulfill orders
- Handle incoming customer calls to address equipment, service, or contract issues
- Process purchasing transactions for parts, fuel, and other items
- Provide freight cost estimates for proposals and contracts
- Maintain optimum inventory levels of equipment and parts for current and future needs
- Maintain and provide accurate records of equipment and parts inventory
- Load and unload equipment and parts from trucks and ensure its appropriate storage as needed
- Provide timely review of service-related paperwork to determination eligibility for billing as needed
- Process paperwork and data entry in various areas such as payroll, service documentation, purchasing, and rental contracts
- Adhere to safe operating practices and quality standards

Regional Human Resources Assistant (January 2010 – January 2014)

Group 1 Automotive | New Orleans, LA

Group 1 Automotive is an international Fortune 500 automotive retailer operating over 150 dealerships across North America, Europe and South America. In this role, Mr. Firmin's responsibilities included:

- Directly assisted Regional Human Resources Director, in all HR functions for ten dealership locations
- Performing HR Generalist tasks included: Attending job fairs, recruiting and assisting director with investigations
- Conducted New Hire Orientation on a weekly basis
- Responsible for various tasks throughout the employee life cycle.
- Screened Potential Candidates for hire and performed hand off to hiring manager
- Conducted exit interviews.
- Tracked job postings through various media outlets
- Communicated policy, payroll and benefit information to the hundreds of employees across multiple states
- Maintained and insured accuracy of employee files in online filing system, while expediting workflow process through corporate payroll
- Completed Verifications of Employment



Meridith Sanders

Legal/Appeals Specialist

10 YEARS OF EXPERIENCE

Areas of Expertise

FEMA Public Assistance Guidelines and Compliance Public Assistance Appeals Disaster Cost Recovery Policy Development Risk Management Financial Reporting

Education

University of North Dakota, Master of Business Administration (May 2011)

University of North Dakota School of Law, Juris Doctor, with distinction (May 2011)

Minnesota State University Moorhead, Bachelor of Arts in Economics (May 2005)

EXPERIENCE SUMMARY

Ms. Meridith Sanders is a financial recovery and management professional with a wide range of experience throughout her 10-year career. She evaluates existing contracts for FEMA Public Assistance 2 CFR 200 compliance and advises accordingly to reduce the risk of deobligation. Ms. Sanders successfully advocates for clients, through the draft and submission of both first and second appeals. She monitors new guidance related to disaster cost recovery and disseminates guidance to clients. She also conducts applicant timesheet reviews and the creation of force account labor, material, and equipment summaries. Most recently, she assisted clients from Miami to Anchorage with completing FEMA Public Assistance (PA) Project Worksheets for categories A-G in response to hurricanes, earthquakes, and COVID-19. Ms. Sanders has a background in business management, with experience in process management, finance, and risk management.

RELEVANT EXPERIENCE

Program Delivery Manager (March 2020-Present)

Harris County, TX

Harris County engaged Tetra Tech in March 2020 to assist in responding to the COVID-19 pandemic. Ms. Sanders worked closely with the Public Health, Budget Management, Community Services, and Engineering Departments to establish multiple sheltering operations and alternate care sites. She wrote and submitted an expedited project worksheet to ensure the County received immediate funding to address the developing and continuing response effort. Ms. Sanders reviews all emergency purchases for compliance with federal requirements and makes recommendations for the most appropriate funding source based on the nature and method of each activity

Program Delivery Manager (April 2019-Present)

Port of Corpus Christi, TX

Evaluate existing contracts for FEMA Public Assistance 2 CFR 200 compliance and draft addendums to reduce risk of deobligation. Assisted client in future event planning including operating procedures, best practices, and policy development. Develop roadmap to expedite and streamline recovery by meeting with client and FEMA, assessing damage inventory and Grants Portal status. Compliance review of future contracts and procurements to minimize risk of future deobligation. Applicant timesheet review and creation of force account labor, material, and equipment summaries. Small project certification packet creation. Create project worksheets for management and administrative costs. Project closeout.

Financial Analyst (December 2015—April 2019)

City of Houston, TX

Managed Hurricane Harvey recovery efforts for multiple City of Houston departments as the liaison to the Finance Department. Coordinated communication between FEMA, external consultants and City of Houston departments. Ensured department activities complied with FEMA disaster cost recovery guidelines established under 2 CFR 200 and other sources. Planned and executed city-wide training for topics such

as Disaster Cost Recovery Procurement. Developed training manuals and PowerPoint presentations. Drafted and reviewed policies and procedures for compliance with local and federal requirements. Created, monitored, and analyzed specialized reports. Assisted in the development, implementation and monitoring of policies and procedures as part of City Enterprise Risk Assessment Project.

Consultant (June 2013—December 2015)

Morgan Garris Houston, TX

- Reviewed client financial processes and procedures to ensure compliance with statutory regulations and requirements. Performed compliance testing and consulting. Facilitated open and direct discussions about risk and
- control environments with clients to identify key risks. Performed risk and control assessments. Other duties included: Client relationship management, Business management consulting including process management and
- financial management, Review of statutory changes, Composing executive summaries of pertinent legal changes, Development of marketing materials, Business development.

Financial Analyst - ITNA Budget and Portfolio (November 2012—June 2013)

Marathon Oil (Insight Global) Houston, TX

- Financial reporting and forecasting. Reconciling budgets for previous years. Assigning costs to appropriate cost centers. Strategic planning and budgeting. Financial project management. Creating PowerPoint and Excel
- documents for C-Level audience. Software Asset Management, compliance and software procurement. Reviewing invoices
 to determine spending patterns and reduce costs. Using SAP FI to gather financial data and reporting. Budget coordination
 for multiple asset teams.

Client Relations Associate (August 2011—March 2012)

Alliantgroup Houston, TX

- Managed client relations and led project management for multiple service line teams at specialty tax consulting firm. Directly managed 16 individuals on 4 separate teams. Coached team members on project performance, professionalism, and communication techniques focusing on phone and email communication.
- Developed project plans for 300 simultaneous projects to comply with client expectations. Ensured compliance with Statute of Limitations resulting in no missed statutory deadlines. Fostered relationships with clients and CPA firms. Provided employee coaching and team mediation to develop professionalism. Resolved client issues regarding deadlines, expectations, and billing concerns. Created new business opportunities through phone calls to existing clients.
- Traveled to client locations to ensure client expectations were met regarding work product, professionalism, and billing.

Vice President of Finance (February 2010—August 2011)

Dakota Venture Group Grand Forks, ND

Managed finances for university-based angel capital fund. Created and executed operating budget for \$400,000 investment fund. Negotiated terms of investments. Led due diligence report team and conducted legal, market, and industry research. Managed existing portfolio investments. Developed exit plan for existing investment. Invested in start-up organizations. Created and revised legal and business documents for a new angel investment fund. Acted as co-coordinator and event planner for fundraising campaign to create a new multi-million-dollar angel fund. Advised local small businesses and start-ups on elevator pitches, operation and obtaining capital for growth.

Law Clerk (April 2010—May 2011)

Schuetzle Law Firm Grand Forks, ND

Provided clerking and administrative assistance for a small business-oriented law firm. Conducted legal research, specifically, for trial and litigation case preparation. Drafted documents necessary for new business start-ups. Interviewed clients. Researched and analyzed law sources to prepare drafts of briefs or arguments for review, approval, and use by attorney. Searched for and studied legal documents to investigate facts and law of cases to determine causes of action. Performed legal analysis.



Armando Mireles

Damage Estimator

14 YEARS OF EXPERIENCE

Areas of Expertise

Vendor Communication

Construction

Reporting

Employee supervision

Able to read blueprints

Bilingual in Spanish and English

Education

Bachelor of Arts in Chemistry – Austin College, 1993

EXPERIENCE SUMMARY

As a Program Delivery Manager, Mr. Armando Mireles is responsible for ensuring that program initiatives are met and communicated amongst the client and other stakeholders. Mr. Mireles has a wide range of skills and expertise. He performs data analysis, research, and regulatory reviews to support project management functions. He leads analysis for client deliverables and performs timesheet compliance reviews. With established partnerships with FEMA, state, and applicant agencies, he is able to provide efficient program oversight and expert technical assistance. He performs technical work of a high degree of difficulty requiring originality, initiative, and practical judgment.

RELEVANT EXPERIENCE

Program Delivery Manager (August 2018 – Current)

Tetra Tech, Inc., Houston TX

- Perform data analysis in support of project management functions.
- Perform research and regulatory reviews and analysis for federal, state and local engagements.
- Perform project management activities and lead analysis for client deliverables.
- Perform timesheet compliance reviews regarding project deliverables for grants under review by FEMA and TDEM
- Perform reconciliation of final project costs, reimbursements, payments, and appeal development and
- processing for project closeout.
- Develop creative and structured reports for assigned projects.
- Maintain a strong Social Media platform to stay competitive in the industry
- Establish partnerships with FEMA, State and applicant
- Provides program oversight and expert technical assistance on recovery planning and community development related policies, principles, and procedures
- Supervise and Conduct site inspections representing the state/local agency or as a member of a negotiation team
- QA/QC (review and analyze) iForm and Matterport application damage assessment documentation collected during site inspections for report formulation for assigned projects.
- Organized information collected by site inspection team including sign-in sheets, drawings, and notes, and upload information to SharePoint site for document management purposes.
- Data Collection and Dissemination of iForm and Matterport application data, photos and damage specification collected by Site Inspection team for managing of Damage Under Review, Damage Record Comparisons, RS Means, Cost Estimates and Damage Record Composites by cost estimators for assigned projects.
- Write damage descriptions, scopes of work to repair/replace damaged public infrastructure
- Write Project Worksheets (PWs) for determining project eligibility, scopes of work and estimating costs to repair or replace a facility or structure in order to restore it to its pre-disaster condition.

- Coordinate with FEMA and State Environmental agencies on all environmental issues and historic guidance
- Independently performs technical work of a high degree of difficulty requiring the exercise of originality, initiative, and practical judgment in the application and adaptation of standardized engineering techniques and methods
- Perform technical service functions and provide advice in the management of long-term community recovery
 components such as disaster damage and impact assessments teams, and long-term community recovery operations
 within the disaster field offices, regional offices and public assistance closeout officesMPACT Strategic Consulting, LLC

Consultant (October 2017- May 2018)

MPACT Strategic Consulting, LLC, Houston TX

- Perform data analysis in support of project management functions.
- Perform research and regulatory reviews and analysis for federal, state and local engagements.
- Perform project management activities and lead analysis for client deliverables.
- Develop creative and structured reports for assigned projects.
- Maintain a strong Social Media platform to stay competitive in the industry
- Establish partnerships with FEMA, State and applicant
- Provides program oversight and expert technical assistance on recovery planning and community development related policies, principles, and procedures
- Conduct site visits representing the state/local agency or as a member of a negotiation team
- Write damage descriptions, scopes of work to repair/replace damaged public infrastructure.
- Write Project Worksheets (PWs) for determining project eligibility, scopes of work and estimating costs to repair or replace a facility or structure in order to restore it to its pre-disaster condition.
- Coordinate with FEMA and State Environmental agencies on all environmental issues and historic guidance
- Independently performs technical work of a high degree of difficulty requiring the exercise of originality, initiative, and practical judgment in the application and adaptation of standardized engineering techniques and methods
- Perform technical service functions and provide advice in the management of long-term community recovery components such as; disaster damage and impact assessments teams, and long-term community recovery operations within the disaster field offices, regional offices and public assistance closeout offices

Estimator (June 2015 – October 2017)

Casillas Enterprises, LLC, The Woodlands, TX

- Acquire understanding of the requirements of the project/program at hand
- Select metrics to produce valid estimates
- Visit sites, warehouses and other venues to gather essential information
- Review documents or consult experts to collect all necessary data
- Analyze data, produce forecasts and perform risk analysis
- Prepare detailed reports or bids for submission to appropriate parties
- Select advantageous deals by evaluating offers and quotes
- Foster relationships with key vendors (subcontractors, architects etc.)

President/Owner (May 2012 - May 2015)

Waterline Advantage, Spring TX

- Oversee and direct construction projects from conception to completion
- Review the project in-depth to schedule deliverables and estimate costs
- Oversee all onsite and offsite constructions to monitor compliance with building and safety regulations
- Coordinate and direct construction workers and subcontractors
- Select tools, materials and equipment and track inventory
- Meet contractual conditions of performance
- Review the work progress on daily basis
- Prepare internal and external reports pertaining to job status
- Plan ahead to prevent problems and resolve any emerging ones

- Negotiate terms of agreements, draft contracts and obtain permits and licenses
- Analyze, manage and mitigate risks
- Ensure quality construction standards and the use of proper construction techniques

Project Manager/Estimator (January 2010 – May 2012)

JM2 Construction/SS Aqualift, Willis TX

- Overseeing and directing construction projects from conception to completion
- Reviewing the project in-depth to schedule deliverables and estimate costs
- Overseeing all onsite and offsite constructions to monitor compliance with building and safety regulations
- Coordinate internal resources and third parties/vendors for the flawless execution of projects
- Ensure that all projects are delivered on-time, within scope and within budget
- Developing project scopes and objectives, involving all relevant stakeholders and ensuring technical feasibility
- Ensure resource availability and allocation
- Develop a detailed project plan to track progress
- Use appropriate verification techniques to manage changes in project scope, schedule and costs
- Measure project performance using appropriate systems, tools and techniques
- Report and escalate to management as needed
- Manage the relationship with the client and all stakeholders
- Perform risk management to minimize project risks
- Establish and maintain relationships with third parties/vendors
- Create and maintain comprehensive project documentation