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## **PROPOSAL FOR Multi-Jurisdictional Multi-Hazard Mitigation Plan** Papio-Missouri River NRD

October 1,2014





CONTACT

JEO Consulting Group, Inc. Jeffrey Henson, CFM Project Manager 2700 Fletcher Avenue Lincoln, Nebraska 68504 p 402.474.8764 e jhenson@jeo.com



October 1, 2014

Papio-Missouri River NRD Mr. John Winkler, General Manager 8901 South 154th Street Omaha, Nebraska 68138

RE: Multi-Jurisdictional Multi-Hazard Mitigation Plan - Papio-Missouri River NRD

Dear Mr. Winkler and Selection Committee Members:

JEO Consulting Group along with our teammate, French & Associates, is excited to submit the following proposal for professional consulting services to update your regional hazard mitigation plan. We have assembled a team that has over 50 approved Hazard Mitigation Plans (HMP) since 2009, we have six approved HMP updates in 2014 alone and will have as many as eight more by the end of the year. Our team has expertise with all aspects of the services required to successfully complete this project and offer the following benefits to Papio-Missouri River NRD and the participating jurisdictions:

- **Experience** Extensive experience with hazard mitigation planning in Nebraska and beyond. Our team has successfully completed multiple hazard mitigation plans and plan updates for all of the planning areas surrounding the Papio-Missouri River NRD. This experience in the region will allow us to "hit the ground running" for your HMP update.
- Expertise Expertise in all aspects of hazard mitigation planning including practical knowledge of FEMA's evolving requirements, grant development, plan development, HAZUS, GIS, benefit– cost analysis (BCA), and incorporating the 10–Step Community Rating System (CRS) planning process into HMPs.
- Relationships and Local Contacts Provided professional services and developed positive working relationships with numerous communities in your district. Our familiarity with these communities will greatly contribute to the data collection and community involvement, critical to this process.
- **Funding and BCA Experience** The JEO team includes a funding specialist that can assist communities in the identification of potential funding sources through the planning process. JEO was helpful in developing the planning grants for the Papio-Missouri River NRD HMP updates in both 2009 and 2014.

JEO takes pride in providing professional services to NRDs, counties, and other clients across Nebraska. We look forward to demonstrating our responsiveness and capabilities to you during this project.

Please review the attached proposal, which provides an overview of our project understanding, the approach we utilize, and the team we have assembled. If you have questions, please feel free to contact me at 402.474.8764 or at jhenson@jeo.com.

Sincerely,

Jeffrey Henson, CFM Project Manager/Hazard Mitigation Planner Lalit K. Jha, PE, D.WRE, CFM Project Principal in Charge

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## **PROJECT CONTACT**

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## **SECTION ONE: GENERAL OVERVIEW OF PROJECT**

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# PROJECT UNDERSTANDING AND APPROACH

Hazard mitigation plans are a result of the Disaster Mitigation Act of 2000 (DMA 2000). This legislation developed specific standards and requirements for communities wishing to utilize the Hazard Mitigation Assistance (HMA) program. The HMA consists of three grant programs: Pre-Disaster Grant Program, Flood Mitigation Assistance Program, and the Hazard Mitigation Grant Program. These three grant programs are used to support jurisdictions in the implementation of projects that will reduce community vulnerability and help reduce losses resulting from natural disasters.

Papio-Missouri River NRD (PMRNRD) adopted one of the first hazard mitigation plans in the state of Nebraska. **In 2005–2006 PMRNRD** worked with staff at the NDNR, USACE, and NEMA to develop a regional HMP. The 2006 plan included 27 jurisdictions and addressed a total of nine hazards. This plan enabled communities to access grants that would not otherwise been available. From adoption in 2006, through the update in 2011, there were two

funded projects in counties that participated in the plan. Both PMRNRD and the city of La Vista acquired structures located in the floodplain.

One of the requirements set forth in the DMA 2000 is that HMPs will be updated and reapproved by FEMA every five years. **So, in 2009–2010 PMRNRD completed the first update of the regional HMP. For the 2010 update there were nearly 30 participating jurisdictions.** Communities in the PMRNRD have used the HMA program to fund projects for warning system updates in Dakota County, property acquisitions, and infrastructure hardening.

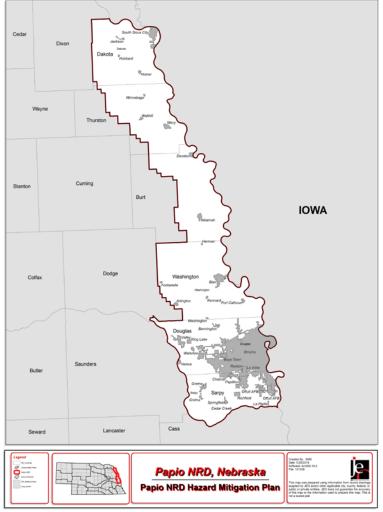
It is again time for PMRNRD to complete the required five year update. For this update, the focus of the project will be on the planning process and project implementation. With community rating system (CRS) communities participating in the planning area, there will need to be increased attention on the process utilized to ensure these communities are able to meet the requirements of the CRS program. In addition to the CRS components, this project will include a benefit-cost analysis (BCA). The BCA will require communities to have a clear understanding of hazard mitigation and access to experts to facilitate a discussion related to community needs and specific strategies to address those needs.

#### **PROJECT SCOPE**

The 2010 PMRNRD Multi-Hazard Mitigation Plan includes nearly 30 participating jurisdictions:

- 1 NRD
- 5 counties
- 12 cities
- 4 villages
- 5 school districts
- 2 colleges

This planning area is one of the most diverse and challenging areas in the state of Nebraska. The range of community size and population density varies dramatically from north to south. In addition to the demographic differences throughout the planning area, there are also political, social, and cultural differences



which must be taken into account. It will be important to design the planning process so that it accounts for these differences and can fully address the needs of the entire planning area. The first step will be developing a project steering committee, which is representative of the entire area. The steering committee will work with the JEO planning team to determine an appropriate distribution for public meetings, the most appropriate use of technologies throughout the planning area, and a list of stakeholders who should be invited to participate in the process.

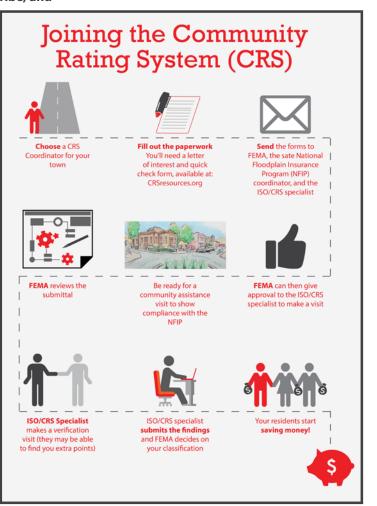
In addition to incorporating a wide range of stakeholders, the plan update provides an opportunity to increase the number of participating jurisdictions across the planning area. **There were a number of village, cities, and school districts that were not involved for the 2010 update. JEO will work with the steering committee to develop strategies to involve these jurisdictions.** Suggested approaches include, but are not limited to, offering a one day hazard mitigation planning course (based on principals presented in FEMA's G318 course) for community officials and municipal employees; sharing project implementation successes from across the NRD and the state as a whole; and meeting with communities to discuss other potential barriers to participation. Through the HMP planning process these communities can, if all requirements are met, earn a significant number of credits or points which will help further reduce premiums. There are other communities that might wish to pursue the CRS program during the update of the HMP, Sarpy County would be a good candidate for the program given the extent of the floodplain and the number of policies throughout the county. JEO works closely with staff at NDNR to identify communities that would benefit most from the CRS program. In addition to the in-state expertise of NDNR and JEO, we have asked French Wetmore of French and Associates to join the JEO team for this plan. Mr. Wetmore was instrumental in developing the 10-Step CRS planning process, in addition he has worked with countless communities to access HMP planning credits and identify ways to bolster their involvement in the CRS program.

The PMRNRD is also unique due to the location of tribal lands inside of the planning area. **The Winnebago Tribe, Omaha Tribe, and** 

Ponca Tribe can all be invited to participate in the HMP process. Over the last two years, JEO has worked with tribes in Nebraska and South Dakota, helping them to become involved in multi-jurisdictional hazard mitigation plans. We have found, that while there are some differences in what FEMA requires for tribal hazard mitigation plans, it is possible for tribal governments to participate in regional hazard mitigation plans.

#### Community Rating System (CRS) Planning Requirements

There are six communities which participate in the National Flood Insurance Program's (NFIP) CRS in the PMRNRD. The CRS is a voluntary program communities can participate in to reduce flood insurance premiums for members of the community who purchase flood insurance. Papillion and Valley have both achieved a Class 8 designation, resulting in a 10 percent reduction in flood insurance premiums for residents. Omaha is a Class 9 community, reducing premiums by 5 percent for community members.



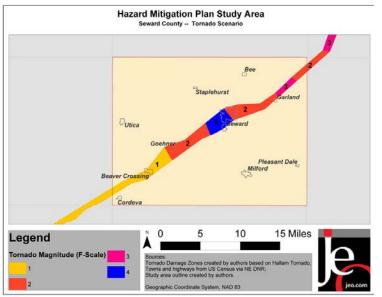


#### **Plan Improvements and Data Gaps**

Since the 2010 update of the PMRNRD Hazard Mitigation Plan there have been a number of changes, some a result of changing FEMA requirements and others resulting from state planning efforts. The most notable change since the 2010 update is the number of hazards which must be addressed within the plan. The 2011 and 2014 Nebraska State Hazard Mitigation Plans included a number of hazards, both natural (animal diseases and plant diseases) and some man-made (chemical transportation and fixed sites, radiological materials and fixed sites, terrorism, and civil disorder) that were not previously addresses. FEMA is now requiring that local planning mechanisms consider the same hazards as those outlined in the state HMP. JEO has had six hazard mitigation plan updates submitted and approved in 2014 alone, and we know how to address the comprehensive list of hazards required for this update. We have a good understanding of what FEMA expects to see in these plans and we know how to work with communities to ensure these standards. are met.

JEO is also working to improve the risk assessment process across all hazards. In many plans the risk assessment is more accurately described as the collective risk perception (and often very non-specific) of those participating in the planning process. An example of this is the discussion that is frequently had related to event probability. During the 2010 plan update, participants were asked if the hazards addressed were: 1) Low Probability = Less than 1 chance in 1,000 years; 2) Medium Probability = Between 1 chance in 1,000 years and 1 chance in ten years; or 3) High Probability = Greater than 1 chance in ten years. This allows for events, which occur four times in 100 years, to be classified as "High Probability". Based on plans that we have submitted and that have received approval, this type of methodology is not ideal for plan updates. FEMA expects discussions related to recurrence intervals, changes in trends and patterns, and a much more factual and specific analysis of available data. There are other specific expectations that we have worked on with FEMA to clarify what standard is expected and how to best meet that standard.

In reviewing the 2010 hazard mitigation plan, it is clear that considerable time and effort was spent developing comprehensive HAZUS mapping and analysis. This information will be great to carry forward for this update allowing for attention to be focused on other areas. JEO has instituted scenario-based risk assessments for hazards beyond flooding. Our GIS team works to develop spatial analysis tools based on historic regional events to project what potential impacts from specific scenarios occurring in various locations thought the planning area might be. We utilize scenario-based risk assessment for tornados, chemical transportation, and chemical fixed sites. Not only does the scenario-based risk assessment provide some amount of quantification previously not available for



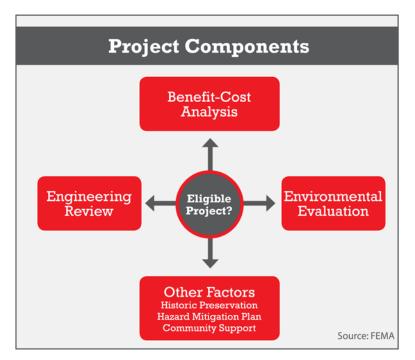
these hazards, but it also provides a great basis for emergency managers to develop tabletop exercises to test local response protocols, extending the utility of the hazard mitigation plan.

#### **Plan Implementation and Project Screening**

The end result of the HMP process needs to be implemented projects, bottom line. JEO has worked with communities, developing benefit-cost analysis (BCA), FEMA grant applications, and the identification of non-FEMA funding opportunities. **In 2013, we began including grant templates for some of the more common FEMA grant request items (warning sirens, saferooms, and infrastructure hardening) as a part of HMP updates.** In meeting with small communities across the state we found that small communities struggled to complete FEMA grants for projects like sirens and generators. By offering grant templates, communities have an additional resource to aid them in accessing grants and implementing projects.

The JEO team has extensive experience with BCA and can help communities in this process. **Having team members with technical expertise in BCA, engineering, and a comprehensive understanding of the HMGP process sets our team apart from many other teams.** In 2012/2013 we were able to work with a community in western Nebraska to secure approximately \$4 million in a FEMA grant to address community stormwater management issues. To develop this funding our team worked on the BCA to develop a creative approach to calculating loses, which resulted from the localized flooding problems.

Our comprehensive and collaborative approach to your planning process will provide communities with the tools they need to build stronger communities for the next generation.



#### THE BENEFITS OF WORKING WITH JEO

Through the development of hazard mitigation plan updates for 7 NRDs, 37 counties, 2 tribes, 1 public power district, and more than 150 communities across four states since 2012, JEO has displayed the skill and ability to effectively manage the process for you. JEO has developed plans with as few as eight participating jurisdictions and as many as 51. We have worked on mitigation plans for counties with as few as 725 residents as counties with population greater than 513,000. We believe our range of experience and established expertise will be the best fit for your project.

#### **Education and Outreach**



When communities begin the process of developing or updating hazard mitigation plans they typically have little experience with the process, the required components, or the ideal output. Across the state, and the country in general, there has been insufficient time focused on cultivating a better understanding of the hazard mitigation planning process at the local level. We at JEO feel that it is important to educate the communities that we are working with to help improve the planning process and to increase the potential for plan implementation. We find that communities that are more informed during the process have better success in building plans they can implement.

#### **Experience and Expertise**

Hazard mitigation plan requirements are set by the Federal Emergency Management Agency (FEMA), and include a review process that examines whether or not the established standard was met, and if not, what additional information needs to be included. Although this approval process is intended to be simple and straight forward, we have found the expectations and interpretation of the regulation to be constantly evolving. JEO's team includes professionals that not only understands FEMA requirements, but have been involved in developing some of those exact standards. We have a team that not only understands the basic requirements of mitigation planning, but also has a firm grasp on the intent of the standards allowing us to go beyond the minimum requirements during the planning process. For our client, this means a shortened review process from FEMA and the development of a hazard mitigation plan that can be used as a basis to develop stronger, more resilient communities.

The inclusion of communities participating in the CRS in the PMRNRD presents a unique challenge. **JEO's planning team has four Certified Floodplain Managers, as well as a CRS expert, who helped develop the 10-Step CRS planning process that has been employed by communities, large and small, across the country, that will be working on updating your hazard mitigation plan**. Our professionals regularly share project experience and expertise in the area of CRS and floodplain management as well as several other topics at local, state, and national professional conferences, and in the classroom.

#### Coordination and Relationships

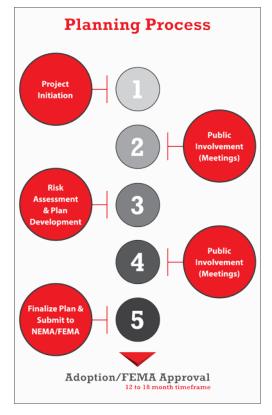
We recognize the necessity of developing dynamic hazard mitigation plans. Sometimes, it can be difficult in large planning areas to understand and identify the needs of individual communities participating

in the process. As we work on updating your hazard mitigation plan, we will draw upon the relationship that JEO has cultivated over our 76 years of working with communities in the PMRNRD and across the state. For communities that we have not worked with, our team will spend time to get to know their planning representatives, understand how their community works, and how hazard mitigation can be valuable to them.

JEO has also developed good working relationships with federal and state agencies, such as FEMA, NEMA, and NDNR. These relationships are beneficial to the communities that we work with through the planning and plan review process. NEMA and NDNR are often available to project planning teams for technical and general guidance related to the FEMA requirements and insights on the planning process. JEO works with these agencies during the project screening process and on some of the BCA processes.

#### Adaptive Approach to the Planning Process

We pride ourselves on having planners leading the planning process. Most firms that work on hazard mitigation plans are primarily engineering firms, and JEO is no exception, but our Hazard Mitigation and Emergency Planning Department is unique. **The team working on your project will consist of planners with a background in planning; more specifically by hiring JEO you will hire hazard mitigation planners with a background in hazard mitigation!** 



We understand that some communities are hesitant to participate in regional planning efforts and that some communities may not readily see the value of developing hazard mitigation plans; however, we accept the challenges that these issues present and will work hard to find a solution. We know that no two planning areas are the same and do not assume that there is a one-size-fits-all approach that should be used in the planning process. Through our various projects, we have tried a range of technologies, different meeting formats, and a variety of approaches in an effort to meet the needs of our clients and the communities participating in the process.

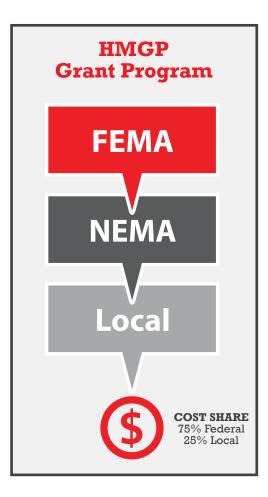
Our team understands that the planning process is every bit as important as the final document. We work hard to create a dynamic approach for each area, and each community that we work with. In the past we have tailored our approach to the planning process in an effort to ensure our results met the needs of the communities we were working with. We have utilized MindMixer, Survey Monkey, Turning Technologies, websites, and webinars to facilitate the involvement of interested communities. We have also created opportunities for communities to meet one-onone with the JEO planning team. Communities that have engaged in one-on-one meetings report a high level of satisfaction with the planning process as well as a more comprehensive understanding of the task at hand. During one-on-one meetings, communities can request additional resources such as architects, engineers, and land use planners to discuss community needs and assist in identifying specific community projects. We have found that through the use of multiple technological strategies and making subject matter experts available during the planning process, we are better able to accommodate the varied levels of needs and capabilities of the communities that we are working with.

#### **Plan Implementation**

The ultimate goal in developing a hazard mitigation plan must be its implementation. As we work with communities to build resilience, we must maintain a focus on how the project or plan will make a community stronger. Many times communities and consultants lose sight of the overarching goal of hazard mitigation planning. Having an approved plan is great, being eligible for hazard mitigation grants is even better; however, implementing projects and having a stronger, more resilient community is the most important component. **JEO is dedicated to bringing all of our resources to your planning project whether that means having architects and engineers available for consultation or visiting communities for an on-site discussion.** We have found, as we are updating many of the projects we worked on in the past, communities have had success both implementing projects and securing grant funding.

To further assist with plan implementation, JEO introduced the idea of advanced project screening to Nebraska in 2012. For many of the hazard mitigation plan updates completed by JEO in 2013 and 2014 planning areas included funds in the FEMA grant to assist communities in getting projects closer to implementation during the hazard planning process. This process has already resulted in property acquisitions projects and stormwater management projects receiving FEMA grant funding. JEO will be working with planning areas on developing information required for project grants related to: community safe rooms, residential saferoom programs, stormwater management projects, emergency management exercise protocols (table top exercises), and bridge repair projects.

The communities we have worked with have secured well over \$19 million in FEMA grants to implement a wide range of projects (including but not limited to: sirens, generators, education programs, stormwater and drainage solutions, alternative water sources, property acquisition, and many more). At JEO your success is our goal.



## **PROPOSED PROJECT SCHEDULE**

Project scheduling is contingent upon funding approval and the notice to proceed. We understand the current HMP will expire in July 2016 and we will make every effort to meet this deadline.

	Months															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Notice to Proceed/Kick-Off Meeting																
Data Collection																
Public Meetings/Webinars																
Additional Actions for CRS Credits																
Data Collection/Risk Assessment																
Progress Meeting with NRD Board and Steering Committee																
Data Collection/Risk Assessment/Develop HMP																
Progress Meeting with NRD and Steering Committee/Public Meetings and Webinars																
Develop Mitigation Plan																
Progress Meeting with NRD Board and Steering Committee																
Complete HMP																
Public Meeting and Webinars/Post Plan for Public Comment																
Final Revisions/Submit to NEMA/FEMA																
Revisions (if needed)																
Adoption																
Implementation																

## **SECTION TWO: QUALIFICATIONS OF FIRM**

- 08 Official Name of Firm
- 08 Firm Background
- 08 Principal Officers
- 09 Hazard Mitigation & Emergency Planning Department
- 10 Project Experience Matrix
- 11 Organization Chart
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# **QUALIFICATIONS OF FIRM**



ENGINEERING



ARCHITECTURE

#### **Official Name of Firm**

W.G. Johnson Construction Company was founded in Wahoo, Nebraska in 1937. In 1979, the corporation was renamed to Johnson-Erickson-O'Brien & Associates. Over the years, several services and office locations were added, including the addition of community planning in 1992. In 1999, Johnson-Erickson-O'Brien & Associates was officially renamed to JEO Consulting Group, Inc.

#### **Firm Background**

For over 77 years, JEO has provided engineering consulting services, unsurpassed in skill, creativity, and cost-efficiency. From our modest beginnings, JEO has grown into a highly skilled and respected consulting firm, serving individuals and communities throughout the Midwest.

With nearly 150 staff members, JEO offers a wide range of services centered around the needs of our municipal clients. These services include:

- hazard mitigation planning
- water resources,
- planning,
- water and wastewater,
- transportation,
- electrical,
- survey,
- architecture,
- economic development, and
- funding research.

JEO provides clients with quality services, delivered on time and within budget. We keep our promises, deliver solutions dependably, and communicate clearly. As a result, we have served many of the same clients year after year. A high percentage of our projects are repeat business.





PLANNING

SURVEYING

"We're a different kind of company but we're your kind of people." -Rob Brigham, CEO

The JEO philosophy is simple. If you are not satisfied, neither are we. We work tirelessly to attain your thorough satisfaction with skill, enthusiasm, and communication.

We credit our success to our values: professionalism, respect, integrity, and teamwork. These values guide our actions and ensure that we stay on the right course as we serve our clients.

#### **Principal Officers**

Chairman of Board Steven A. Parr, LS • Registered Land Surveyor: NE

#### Vice President/Vice Chairman

George A. Parris, PE, PLS

- Registered Professional Engineer: NE and IA
- Registered Land Surveyor: IA

#### **President/Treasurer**

Robert S. Brigham • Nebraska Bar Association

#### Secretary

Eric C. Obert, PE

• Registered Professional Engineer: NE, IA, KS, and MN

#### **Vice President**

Tyler L. Hevlin, PE

Registered Professional Engineer: NE, IA, MO, and WI

#### **Hazard Mitigation & Emergency Planning Department**

# Mission Statement Imovative Approach Mission Premier HMEP Staff

Be the premier hazard mitigation and emergency planning firm in the region, utilizing an innovative approach in developing implementable plans and our passion to assist in building stronger, more resilient communities.

#### Hazard Mitigation and Emergency Planning Department Background

JEO's hazard mitigation and emergency planning (HMEP) team is recognized for developing plans that are both implementable and feasible. The HMEP team at JEO includes nine staff members, and is continuing to grow. Our team is specifically dedicated to hazard mitigation planning (HMP) and emergency management projects and is at the front end of new national policies and initiatives, including taking an innovative approach to project identification and development. This dedication is proven by the HMP projects completed by JEO which have been eligible to receive over \$19 million in HMP grants.

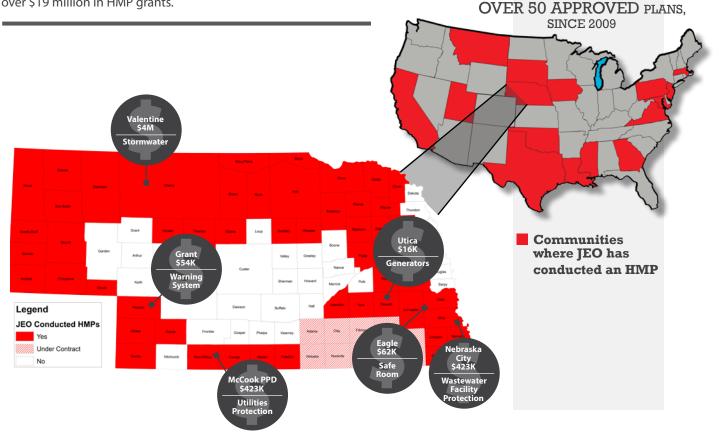
#### SERVICES

- Hazard Mitigation Plan
   Development
- Emergency
   Management Training
- Funding Assistance
- Benefit-Cost Analysis

#### GRANTS & FUNDING

JEO can assist you with the identification of grants and funding for both plan development and project implementation. Sources include:

- Federal grant programs from FEMA and other agencies
- Public-private collaboration
- Innovative local funding strategies



## Multi-Jurisdiction Multi-Hazard Mitigation Plan | Papio-Missouri River NRD [PAGE 9]

#### **Project Experience Matrix**

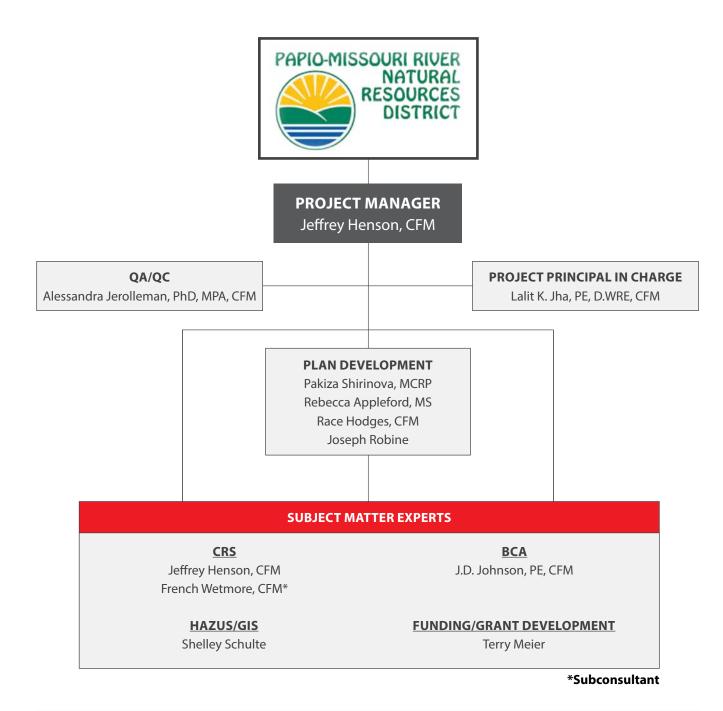
The matrix below reviews some of the hazard mitigation planning projects JEO has completed and identifies key project components that are applicable to the PMRNRD planning area. **Column 1:** identifies which projects took place in FEMA Region VII (MO, KS, IA, NE); **Column 2:** identifies planning areas which include tribal governments; **Column 3:** shows the planning areas that have utilized the safe growth audit; **Column 4:** indicates which projects included BCA as a planning component; and finally **Column 5:** shows which project areas were able to access HMGP grants for project implementation.

				PROJECT ELEMENTS						
				1	2	3	4	5		
	MITIG	ARD ATION AN	JURISDICTIONS	FEMA Region VII	<b>Tribal Participant</b>	Safe Growth Audit		HMGP Fended Projects		
PROJECT PLANS	1 <sup>st</sup> PLAN	UPDATE	JUR	FEM	Trib	Safe	BCA	DMH		
NEBRASKA	NATURAL F	RESOURCE	S DISTRI	стѕ		r	1			
Lower Platte South NRD	$\checkmark$	$\checkmark$	38/31							
Upper Loup NRD	$\checkmark$	$\checkmark$	15/16	•			•			
Lower Elkhorn NRD	$\checkmark$	$\checkmark$	51/52							
Lower Platte North NRD	$\checkmark$	$\checkmark$	38/40							
Nemaha NRD	$\checkmark$	$\checkmark$	56	-		•				
North Platte NRD	$\checkmark$		37							
South Platte NRD	$\checkmark$		22	-						
	COUNTY-W	IDE PLANS	S							
Seward County	$\checkmark$	$\checkmark$	12	-		•				
Camden, Cumberland, Gloucester and Salem Counties, New Jersey		$\checkmark$	70							
Perkins, Chase, and Dundy Counties	$\checkmark$	$\checkmark$	12	•						
York County	$\checkmark$	$\checkmark$	9							
Antelope, Holt, and Knox Counties	$\checkmark$		26							
Hamilton County	$\checkmark$	$\checkmark$	11							
Red Willow/Furnas/Harlan/Franklin Counties	$\checkmark$	$\checkmark$	36			1				
Shannon County and Ogallala Sioux Tribe	$\checkmark$		2			1				
PI	JBLIC POW		СТ							
McCook Public Power District	$\checkmark$		N/A							

#### **ORGANIZATION CHART**

Our team is organized with clear individual responsibilities and established lines of communication which will maximize productivity and assure a well-coordinated project. Many of the individuals identified for your project are the same members who have worked as a team on recent and relevant projects. It is this team concept, coordination, and understanding that has allowed this team to perform at a high level and exceed client expectations.





# RESUME

## Jeffrey Henson, CFM

Project Manager | CRS



EDUCATION Master of Community and Regional Planning

B.A. in Crisis and Disaster Management

PROFESSIONAL AFFILIATIONS Certified Floodplain Manager

International Association of Emergency Managers

Natural Hazard Mitigation Association

American Planning Association

ASFPM

Nebraska Association of Emergency Managers

JEO TENURE 2 years

INDUSTRY TENURE
3 years



#### QUALIFICATIONS

Jeff Henson is a project manager and senior mitigation planner at JEO Consulting Group, Inc. His experience includes: business continuity procedure analysis and program review, emergency management exercise design, research and analysis of disaster impacts on small businesses, resource distribution analysis for local emergency management agency, sustainability program review and support for a major university, and local hazard mitigation plan development. Jeff has been invited to speak on the necessity of incorporating hazard mitigation planning into comprehensive plan development. Incorporating the Community Rating System (CRS) into the HMP process, utilizing the HMP risk assessment to develop tabletop exercises, and project screening as a compound of HMP. Jeff also serves as an adjunct professor in the Community and Regional Planning Program at the University of Nebraska-Lincoln teaching a hazard mitigation course entitled: Planning for Disaster-Community Rick Assessment to Hazard Mitigation.

In addition to his role with JEO Consulting Group, Inc., Jeff is a volunteer with the Lancaster County Emergency Management Agency, a member of the Natural Hazard Mitigation Association, International Association of Emergency Managers, and the American Planning Association. Jeff graduated from the University of Nebraska in 2013 with his Masters of Community and Regional Planning with his thesis titled Drought as a Component of Local Hazard Mitigation Plans. The research for this thesis was presented at the International Workshop on Drought Monitoring, Assessing and Planning Under Global Climate Change in Beijing, China in 2012 as well as at the Natural Hazards Research and Applications Workshop.

#### PROJECT EXPERIENCE

#### Lower Platte South NRD Multi-Jurisdictional Hazard Mitigation Plan | Nebraska

Jeff has been working with the JEO team to coordinate this hazard mitigation plan since early 2013. His role includes revising the risk assessment methodology, designing data collection tools, conducting demographic analysis, evaluating development trends and how they intersect with the risk facing the more than 35 participating jurisdictions.

#### Lower Elkhorn NRD Multi-Jurisdictional Hazard Mitigation Plan | Nebraska

Jeff is serving as project manager for the LE NRD Hazard Mitigation Plan. In his role as lead planner Jeff is responsible for plan development, coordination of public meetings, facilitation of stakeholder involvement and ensuring project objectives are completed in a timely basis. Jeff also serves as the primary point of contact for the project.

# **RESUME** Alessandra Jerolleman, PhD, MPA, CFM

Quality Assurance/Quality Control



EDUCATION Ph.D. in Urban Studies

Masters of Public Administration

B.A. in English and Spanish

PROFESSIONAL AFFILIATIONS Certified Floodplain Manager

American Society of Public Administration

Natural Hazard Mitigation Association

JEO TENURE 1 year

INDUSTRY TENURE 10 years



#### QUALIFICATIONS

Alessandra will serve as the technical reviewer/subject matter expert for your project. Alessandra Jerolleman is a Senior Emergency Management and Hazard Mitigation Planner for JEO Consulting Group Inc. Dr. Jerolleman's experience includes the following: serving as a Program Specialist in the Gulf Coast with Save the Children USA, working on a resilience initiative around children's needs in emergencies; over 30 hazard mitigation plans at the local, state and campus level; community education and outreach regarding mitigation measures and preparedness; development of collaborative networks and information sharing avenues among practitioners; and, delivery of training and education to various stakeholders. Dr. Jerolleman is the founder and Executive Director of the Natural Hazard Mitigation Association (NHMA). She is involved in various aspects of planning and policy at the national and local level, including participation in several workshops each year. Dr. Jerolleman speaks on many topics including: hazard mitigation and climate change; campus planning; threat, hazard and vulnerability assessments; hazard mitigation planning; protecting children in disasters; and, public/private partnerships.

#### PROJECT EXPERIENCE

#### Standard Hazard Mitigation Plan Update | State of Louisiana\*

Alessandra participated in both the 2008 and 2011 State of Louisiana Hazard Mitigation Plan updates. Roles included, project management, senior planning support, and GIS. Key components of the 2011 Update included the identification and incorporation of successful mitigation efforts following Hurricanes Katrina, Rita, Gustav & Ike; the incorporation of an extensive effort to address data limitations from the 2008 plan; and, the facilitation of an in-depth stakeholder coordination process.

- Identification and Incorporation of Successful Mitigation Efforts. This effort
  was based upon interviews with key staff, an analysis of data available
  regarding mitigation project applications and current projects, as well as a
  review of local recovery and mitigation plans.
- Addressing data limitations. This plan update included an extensive effort to address the data limitations identified in the 2008 update. As part of this effort, the project team addressed limitations with the state owned facility list, the lack of consistent digital Special Flood Hazard Area (SFHA) data, and the various inconsistencies between local mitigation plan terminology. Additional data was also obtained for all hazards through coordination with various agencies, academic institutions, and other entities.
- Coordination among various stakeholders. The 2011 update expanded the range of stakeholders involved in the planning process, as well as the extent of their involvement in the determination of risk assessment.

#### County Hazard Mitigation Plan | Seward County, Nebraska

JEO developed the first ever county wide Hazard Mitigation Plan for Seward County. Seward County was one of the first counties to move forward with a multi-jurisdiction plan. The county-wide plan included hazard assessments for all eligible participants within the district. The eligible participants included: County, Cities, Villages, School Districts, NRDs, Rural Water Districts, etc. Key components of this plan included stakeholder participation and coordination; use of GIS data and HAZUS for risk assessment. The county wide plan was approved by FEMA in March 2009. Currently, JEO is in the process of updating the Seward County Hazard Mitigation Plan.

- Stakeholder Participation and Coordination: The planning process involved extensive coordination with County staff to encourage stakeholders' participation. In addition to one-on-one meetings, several advisory group and public meetings were held. The public involvement effort also included meeting reminder phone calls, and emails to key individuals in communities along with typical letters of invitation, posting of flyers, and press releases in local newspapers. As a result of these efforts all eligible jurisdictions participated in the county wide plan.
- FEMA software HAZUS and existing GIS data base was used to perform risk assessment. This avoided costly Hydrologic and Hydraulic modeling to delineate the floodplain as well as field visit to perform structural inventory for this task.

# Multi-Jurisdictional Hazard Mitigation Plan | Oglala Sioux Tribe, Pine Ridge Reservation & Shannon County, South Dakota

JEO worked with the Oglala Sioux Tribe (OST) and Shannon County in South Dakota to update the Shannon County Hazard Mitigation Plan and develop the plan for the Oglala Sioux Tribe, Pine Ridge Reservation. The planning process utilized was unique in that the OST utilized a local tribal consultant, in conjunction with University students, to conduct intensive public outreach across the Reservation. The hazard mitigation plan included hazard assessments for a wide range of hazards and for all of the districts within the Pine Ridge Reservation, as well as the jurisdictions within Shannon County.

#### Regional Hazard Mitigation Plan Update | Alamo Area Council of Governments

The primary objective of this project was to update the current multi-jurisdictional Hazard Mitigation Plan (HMP) for the Alamo Area Council of Governments (AACOG). The planning process included 11 counties, 43 cities, and the San Antonio River Authority. Participating cities ranges from large metropolitan areas such as San Antonio, to very small rural jurisdictions. The planning process took place over a period of 18 months and looked at 14 region-wide hazards. Dr. Alessandra Jerolleman, prior to her employment at JEO, served as the project manager and senior hazard mitigation planner for the HMP.

#### RELEVANT PUBLICATIONS AND PRESENTATIONS

- "The Privatization of Hazard Mitigation: A Case Study of the Creation and Implementation of a Federal Program". Dissertation (2013)
- "What Has Been Done? Louisiana After Katrina." In Kapucu, Naim & Liou, Kuotsai Tom (eds), Disasters & Development: Issues and Country Studies (2013)
- Natural Hazard Mitigation: A Casebook for Academics and Practitioners. CRC Press (2012)
- "Fostering Resilient Communities: Implementing a Whole Community Approach", Workshop Trainer, American Society for Public Administration (2013)
- "FEMA G-318: Hazard Mitigation Planning", Instructor, Pennsylvania Emergency Management Agency (2012)

# **RESUME** Lalit K. Jha, PE, D.WRE, CFM

Project Principal In Charge



EDUCATION M.S. in Civil/Environmental Engineering

B.S. in Civil Engineering

PROFESSIONAL REGISTRATION Registered Professional Engineer Nebraska Texas

PROFESSIONAL AFFILIATIONS Certified Floodplain Manager

Diplomate, Water Resources Engineering

JEO TENURE 13 years

INDUSTRY TENURE 19 years

#### QUALIFICATIONS

Lalit currently serves as vice president of the water resources engineering and hazard mitigation and emergency planning department manager for JEO. Lalit has over 19 years of extensive experience in water resources engineering and nearly 10 years of experience developing hazard mitigation plans in Nebraska. He oversees the stormwater, floodplain, and hazard mitigation projects for JEO. Other responsibilities include quality control and business development. His experience includes floodplain and stormwater management projects, watershed master planning, hazard mitigation planning, hydrologic and hydraulic analyses, flood control projects, and public involvement/outreach programs. Lalit has also coauthored and co-presented on Hazard Mitigation Planning at various national and international conventions.

As the Project Principal in Charge, Lalit will ensure that this project is completed to the clients's satisfaction. Lalit will make certain that the project team has all resources available to complete the project in a timely manner while exceeding expectations of all plan participants.

#### PROJECT EXPERIENCE

#### **Hazard Mitigation Planning Experience**

Lalit has worked on hazard mitigation planning projects for several jurisdictions. He is familiar with all aspects of hazard mitigation planning requirements. A few highlights include.

- Managed or supervised the development of over 30 Multi-Jurisdiction Hazard Mitigation Planning projects involving over 500 Jurisdictions.
- Hazard Mitigation Grant Program (HMGP) planning and project grant assistance.
- Flood Mitigation Assistance (FMA) planning and project grant assistance.

#### AGENCY COORDINATION

- Federal Emergency Management Agency (FEMA)
- United States Army Corps of Engineers (USACE)
- Department of Natural Resources
- State Emergency Management
- Department of Roads
- Counties
- City, Villages, and Tribes



#### RELEVANT PUBLICATIONS AND PRESENTATIONS

- "Multi -Jurisdictional Hazard Mitigation Planning", Presenter, Western Planning Conference Cheyenne, WY, (August 2008)
- "Hazard Mitigation Planning in the United States "World Environmental & Water Resources Congress Bangkok , Thailand (January 2009)
- "Advance Multi-Jurisdictional Hazard Mitigation Planning" Nebraska Floodplain and Stormwater Association (NeFSMA) Annual Conference - Kearney, NE (2012)

# **RESUME** Pakiza Shirinova, MCRP

Plan Development



EDUCATION Master of Community and Regional Planning

Graduate Certificate in Public Management

B.A. in Business Administration

PROFESSIONAL AFFILIATIONS American Planning Association Nebraska Chapter

JEO TENURE 1 year

INDUSTRY TENURE
1 year



#### QUALIFICATIONS

Pakiza is a planner in the hazard mitigation and emergency planning department at JEO Consulting Group, Inc. Her focus is on Hazard Mitigation Planning which involves public outreach, data collection, survey administration, assisting with plan writing, and public meeting facilitation. Pakiza has proven experience administering complex programs with multiple stakeholders in fast-paced and difficult environments. Pakiza received a Masters of Community and Regional Planning degree from the University of Nebraska-Lincoln in 2013 with her thesis titled "The Role of Multicultural Planning in Rural Nebraska: Case Studies of Four Mid-Sized Cities" and a Graduate Certificate in Public Management from the University of Nebraska-Omaha.

#### PROJECT EXPERIENCE

#### **Hazard Mitigation Experience**

Pakiza ensures that all necessary data is collected and processed, as well as all set objectives are accomplished in a timely manner. During plan development, Pakiza will warrant that feedback to participating communities is provided and on-going assistance offered throughout the planning process. A few highlight projects include:

- Lower Platte South NRD Advanced Hazard Mitigation Plan
- Lower Elkhorn NRD Multi-Jurisdictional Hazard Mitigation Plan
- Nemaha NRD Hazard Mitigation Plan
- Regional All-Hazard Mitigation Plan, Camden, Cumberland, Gloucester, and Salem Counties, New Jersey

# **RESUME** Rebecca Appleford, MS

Plan Development



EDUCATION Graduate Certificate in Geographic Information Science

M.S. in Atmospheric Science

B.S. in Meteorology

#### FELLOWSHIPS

NASA Experimental Program to Stimulate Competitive Research (EPSCoR)

#### PROFESSIONAL AFFILIATIONS American Meteorological Society

JEO TENURE <1 year

#### INDUSTRY TENURE 6 years



#### QUALIFICATIONS

Rebecca is a planner in the hazard mitigation and emergency planning department at JEO Consulting Group, Inc. With experience in climatology, weather forecasting, geographic information science (GIS), and data analysis, she brings a dynamic perspective to Hazard Mitigation Planning. Her expertise with the National Climatic Data Center's datasets, understanding of climate impacts on a local, regional, and national level, and knowledge of severe weather hazards are an asset to developing the hazard mitigation plan. Additionally, her experience with data analytics and quality control of climate data will ensure that the most up to date and correct information is included and analyzed in your plan. Rebecca has a bachelor's degree in Meteorology and Climatology from the University of Nebraska–Lincoln and a master's degree in Atmospheric Science with a Graduate Certificate in Geographic Information Science from the University of North Dakota.

#### PROJECT EXPERIENCE

#### Hazard Mitigation Experience

Rebecca provides management and quality control of data, and analyzes this data on a jurisdictional level. Rebecca also provides support to and requests feedback from the participating communities during the planning process.

- Regional All-Hazard Mitigation Plan, Camden, Cumberland, Gloucester, and Salem Counties, New Jersey
- Hazard Mitigation Plan Update, Hamilton County, NE
- Lower Platte North NRD Hazard Mitigation Plan Update

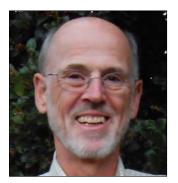
#### RELEVANT PUBLICATIONS AND PRESENTATIONS

- "Frozen to the Saddle: A 19th Century Flash Freeze Investigation",
   Presenter, Conference on Applied Climatology Asheville, NC (July 2011)
- "Tracking an Asian Dust Event Using Surface, Satellite, and Aircraft Measurements during INTEX-B", Poster Presentation, Gordon Research Conference on Radiation and Climate - New London, NH (August 2011)
- "A Study of Asian Dust Events using NASA Satellite Retrievals and DC-8 in situ Measurements during INTEX-B", Poster Presentation, INTEX-B Science Team Meeting - Virginia Beach, VA (March 2007)

# RESUME

## French Wetmore, CFM

CRS



EDUCATION Masters of Public Administration

B.A. in Government

PROFESSIONAL AFFILIATIONS Certified Floodplain Manager

Association of State Floodplain Managers

Natural Hazard Mitigation Association

Northwest Regional Floodplain Management Association

INDUSTRY TENURE 38 years



#### QUALIFICATIONS

French Wetmore is the President of French & Associates, Ltd., a consulting firm specializing in floodplain management, hazard mitigation, and training.

French was Illinois' State Coordinator for the National Flood Insurance Program, 1976 – 1988. During that time he served as Chair of the Association of State Floodplain Managers and was named as one of the first members of the Community Rating System Task Force. He left the Task Force and the State of Illinois to be the technical advisor to FEMA and the Insurance Services Office and to help design and administer the CRS. He served as the lead technical consultant from 1988 to 2012. He was the project manager for the CRS's strategic plan that resulted in the 2013 changes to the *CRS Coordinator's Manual*.

French and French & Associates have also worked with numerous Federal, state, regional, and local agencies on floodplain management and hazard mitigation planning projects. The firm prepared the 2003 county-wide Natural Hazards Mitigation Plan for Kane County, Illinois, which

"...was the first in the nation to meet the eligibility requirements and qualify the communities for the Hazard Mitigation Grant Program, the Pre-Disaster Mitigation Program, and the Flood Mitigation Assistance Program. In addition, the plan qualifies any Kane County communities that participate in the NFIP's CRS for points toward a reduction in the cost of resident's flood insurance." -Creating Safe, Sustainable Communities Through Mitigation Planning and Programs. FEMA 498

French & Associates has completed many other local plans, including flood hazard mitigation plans for the cities of Huntsville, Alabama (2001), Gurnee, Illinois (2001), and Gretna, Louisiana (2007). The last two were approved as FMA plans. He has authored DMA-qualifying multi-hazard mitigation plans for St. Tammany Parish, Louisiana (2004), Kankakee County, Illinois (2005), Calumet City, Illinois (2005), and Des Plaines, Illinois (2007). All of these flood and multi-hazard plans qualified for credit under the Community Rating System.

French has taught mitigation planning for local officials and was an advisor to FEMA's series of mitigation planning guides, FEMA 386. He is the author of several guidebooks for local planning efforts, including:

- "Flood Mitigation Planning The CRS Approach," Natural Hazards Informer (1999)
- "Flood Mitigation Planning The First Steps," video and guidance materials (ASFPM and PERI, 2000)
- Example Plans (FEMA/CRS, 2007)
- How-to Guide for No Adverse Impact (NAI) Planning (ASFPM, 2014)
- No Adverse Impact Toolkit (ASFPM, 2003)
- Reducing Damage from Localized Flooding (FEMA, 2005)
- Using Multi-Objective Management to Reduce Flood Losses in Your Watershed (USEPA, 1996)

# **RESUME** Shelley Schulte

Hazus/GIS



EDUCATION B.S. in Meteorology/Climatology

PROFESSIONAL AFFILIATIONS Nebraska GIS/LIS Association

JEO TENURE 3 years

INDUSTRY TENURE 9 years

#### QUALIFICATIONS

Shelley is a GIS Specialist in the water resources engineering department. She has over six years of combined GIS experience in the fields of floodplain mapping, water resources, natural resources, meteorology, and climatology. Her experience also includes work with DFRIM databases and maps. Shelley assisted in the creation of DFRIM databases for FEMA floodplain maps as a CTP partner to FEMA. She has worked with the FMD software package to create the databases and maps, and is also proficient with ArcMap and ArcCatalog.

#### PROJECT EXPERIENCE

#### Geospatial Data Collection - Phase 3, Grand Island, NE

Shelley was instrumental in creating and maintaining the survey data collected in Grand Island for their storm water pipe network. During this collection process, Shelley was responsible for creating the spatial attributes and properly constructing pipe systems between surveyed manholes and inlets. Upon completion of Phase 3, Shelley was responsible for providing the City of Grand Island a hard copy map book for their use. This included all previous phases of data implemented into a template of their preference.

# Salt Creek and Its Tributaries Drainage Structure Inspection Report, Lower Platte South NRD

Shelley was responsible for updating the Lower Platte South Salt Creek Levee Structure geodatabase with new inspection data collected by JEO. This included linking video inspections and photos to the geodatabase, along with mapping the locations of the drainage structures. The final deliverable produced was an interactive geodatabase the client implemented for reference and technical service to the Salt Creek.

#### FEMA Floodplain Mapping, Nebraska Counties\*

During her tenure with the Nebraska Department of Natural Resources (NDNR), Shelley assisted in the creation of FEMA DFIRM maps for various counties throughout the state. During the map production process, she was responsible for ensuring that maps were produced in accordance with FEMA standards. This was done by following FEMA guidelines and incorporating strict QA/QC techniques with GIS.

\*Project completed prior to joining JEO.



# **RESUME** J.D. Johnson, PE, CFM

Project Engineer



EDUCATION B.S. in Civil Engineering

PROFESSIONAL REGISTRATION Registered Professional Engineer Nebraska Iowa

Certified Floodplain Manager

JEO TENURE 9 years

INDUSTRY TENURE 11 years

#### QUALIFICATIONS

J.D. currently serves as a project manager and project engineer in the water resources engineering department for JEO. J.D. has over 11 years of extensive experience in water resources engineering. He oversees the stormwater, floodplain, and hazard mitigation projects for JEO. His experience includes floodplain and stormwater management, hazard mitigation planning, benefit-cost analysis, hydrologic and hydraulic analyses, watershed master planning and flood control projects.

#### PROJECT EXPERIENCE

J.D. has been the lead engineer involved with the project development aspects of Advanced Hazard Mitigation Plans, as well as development of grant applications for the Hazard Mitigation Grant Program (HMGP). These efforts have included: pre-project screening; feasibility and eligibility assessment; hydrologic and hydraulic analyses; project development and prioritization; benefit-cost analysis; grant program application preparation; environmental reviews; grant submittal; NEMA and FEMA coordination. As part of his hazard mitigation experience, J.D. has expertise with the latest version of FEMA's Benefit Cost Analysis Tool. Demonstrating cost-effectiveness is of utmost importance when pursuing federal grant funding. J.D. along with our hazard mitigation team, have performed numerous BCAs using FEMA's tool and have a unique knowledge of the types and methods for quantifying the benefits to be realized from a given mitigation project.

- Lower Platte South NRD Advanced Hazard Mitigation Plan
- Region 24 Advanced Hazard Mitigation Plan
- City of Beatrice Advanced Hazard Mitigation Plan
- HMGP Application and BCA for 56th and Morton Drainage Improvements
- HMGP Application and BCA for Battle Creek Flood Control
- HMGP Application for Nebraska City Utilities Bank Stabilization





**Terry Meier** 

Funding | Grant Development



EDUCATION B.A. Mathematics and Economics

CERTIFICATION Certified Community Development Block Grant Administrator

#### HONORS/ACTIVITIES

Community Development Society, Nebraska Chapter (Past President)

#### JEO TENURE 6 years

INDUSTRY TENURE 25 years



#### QUALIFICATIONS

Terry has 25 years of professional grant-writing experience and joined JEO as a funding specialist after serving 19 years with the Southeast Nebraska Development District, where he was responsible for the implementation of all aspects of community betterment initiatives. He is well-versed in all phases of project development, including community needs identification, prioritization, strategic planning, and implementation. Terry has an abundance of knowledge in obtaining federal, state, regional, local, and private grants including the CDBG, USDA-RD, DWSRF, and CWSRF programs. He has successfully written applications for over \$100 million in community betterment projects. For this project, Terry will work closely with the Regional Planning Authority/Council of Governments to secure funding for the project.

#### AREA OF EXPERTISE

- Grant Writing and Administration (Over \$100,000,000 in Public/Private Partnerships Assisted Projects)
- Community Strategic Planning
- Community Assessment, Needs Identification and Prioritization
- Project Development and Coordination
- Issues Facing Rural Development
- Volunteer Training
- Economic Development Planning
- Historic Preservation Experience
- Tourism Development Projects
- Housing Needs Assessment and Implementation
- Business Transfer Issues

#### PROJECT ASSISTANCE

- Nebraska Disaster Recovery Assistance with CDBG, NEMA, and FEMA
   Berm Restoration, Ithaca, NE
  - Relief Storm Sewer, Schuyler, NE
  - North Lift Station, Schuyler, NE
  - Elm Creek Watershed Study, Platte Center, NE
  - Lagoon Enhancement, Alexandria, NE
  - Watershed and Interior Drainage Study, Hickman, NE
- Community Betterment Funding Plan, Ralston, NE
- Nebraska Crossing Outlet Mall Blight & Substandard Study, Gretna, NE
- Surface Drainage Improvements, Greenwood, NE
- Surface Drainage Improvement Project, Chambers, NE
- Levee Improvement Project, Council Bluffs, IA
- Indian Creek Channel Improvements, Council Bluffs, IA
- Berm Improvement Project, Ithaca, NE
- Interior and Sub-basin Drainage Study, Hickman, NE

## Race Hodges, CFM | plan development

B.A. in Sociology

#### JEO TENURE | <1 year

#### **INDUSTRY TENURE** | 6 years



SPECIALTY | Hazard Mitigation and Emergency Plan Writing

**QUALIFICATIONS** | Race is an emergency management and hazard mitigation planning intern for JEO. Races' experience includes the following: serving for three years as a United States Peace Corps volunteer with the National Emergency Management Agency of Mongolia and as the Deputy Training Manager of Peace Corps Mongolia; developing community based disaster preparedness materials; hazard mitigation planning at the municipal, tribal, public power district, natural resource district, and county level; grant writing; disaster assessment with the American Red Cross; and disaster rehabilitation surveying. Race has delivered presentations on community outreach and hazard mitigation at the International Disaster Conference and the National Evacuation Conference. Race is currently pursing post-graduate studies in urban planning, public administration, and disaster resilience leadership studies from the University of New Orleans and Tulane University.

## Joseph Robine | plan development

*M.S. in Natural Resources (expected December 2014) B.S. in Environmental Studies (with a minor in Energy Science)* 

**JEO TENURE** | <1 year

**INDUSTRY TENURE** | 3 years



SPECIALTY | Hazard Mitigation and Emergency Plan Writing

**QUALIFICATIONS** | Joseph worked at the National Drought Mitigation Center for three years, where he worked on a variety of projects. This experience involved working with the National Integrated Drought Information System (NIDIS) as part of the Engaging Preparedness Communities Working Group. As part of this working Group, Joseph was tasked with making a database of state drought plans to determine what information was in plans, what information was missing, who the state contacts are, what information is used to determine the severity of drought, and when the plan was last updated. He also assisted in developing a database of best mitigation practices for a project. Joseph brings unique benefit to the hazard mitigation planning team, as his background is in climate science which allows him to address questions on the vulnerability of communities to different natural hazards.

## **SECTION THREE:** SIMILAR PROJECT EXPERIENCE

- 24 Summaries
- 29 References
- 30 Letter of Recommendation

## **Multi-Jurisdictional Hazard Mitigation Plan**

Lower Platte South Natural Resources District

#### REFERENCE

Lower Platte South NRD Paul Zillig | Assistant General Manager PO Box 83581 Lincoln, NE 68501 p: 402.476.2729

#### JEO TEAM

Lalit Jha Jeffrey Henson Alessandra Jerolleman

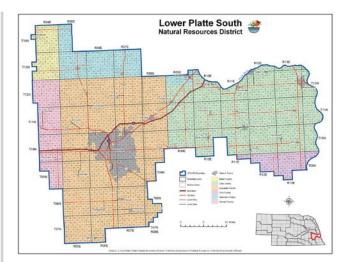
#### PROJECT RELEVANCE

- Regional HMP update
- Expanded risk assessment procedures
- Understanding of NEMA and FEMA expectations for updates
- Project screening
- CRS community

#### CONTRACT PERIOD

10/2007 - 08/2009 01/2013 - 12/2014 (expected)





The 2009 Lower Platte South NRD Multi-Jurisdictional Hazard Mitigation Plan was a joint planning effort between Lower Platte South NRD, the Counties, and communities that fall within the region. This project involved more than 31 participating jurisdictions including cities, villages, counties, school districts, colleges, and tribes. The Lower

Platte South NRD mitigation plan was one of the first to be developed and approved that was a true "regional" plan covering multiple counties located within one larger watershed. This plan paved the way for numerous regional mitigation plans in Nebraska which covered a larger area in one plan. This plan was completed within an expedited timeline to allow Lower Platte South NRD to be eligible for Hazard Mitigation Grant Program grants (HMGP).

JEO completed work on the update to this plan which involved the participation of many stakeholder groups throughout the participating communities. More than 60 stakeholder groups were contacted and encouraged to attend public meetings, provide feedback regarding potential impacts by natural and man-made hazards, and help to identify projects benefiting the populations they work with. The Lower Platte South NRD is now in the process of screening projects for potential funding opportunities in the HMGP.

#### **PROJECT FEATURES**

- Regional Hazard Mitigation Plan Update
- HMP meeting DMA 2000 requirements
- Risk assessment for natural and man-made hazards as required by FEMA
- Scenario based risk assessment
- Submitted to NEMA/FEMA for review (September 2015)

- Public involvement: stakeholder groups involved in the process
- Risk assessment covering a total of 19 hazards
- Development of scenarios for impact projections
- Advanced Plan: Pre-Project Screening

## **District-Wide Multi-Hazard Mitigation Plan Update**

Lower Elkhorn Natural Resources District

#### REFERENCE

Faythe Petersen Region 11 Emergency Manager 701 Koenigstein Norfolk, NE 68701 p: 402.649.0686 e: fpetersen@ci.norfolk.us

#### JEO TEAM

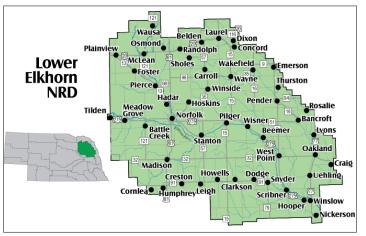
Lalit Jha Jeffrey Henson Alessandra Jerolleman Pakiza Shirinova Race Hodges

#### PROJECT RELEVANCE

- Regional HMP update
- Tribal participation
- Lower Elkhorn NRD neighboring jurisdiction to Papio-Missouri River NRD

#### CONTRACT PERIOD

10/2007 - 10/2009 02/2013 - 12/2014



The primary objective of this project is to update the current multi-jurisdictional hazard mitigation plan (HMP) for the Lower Elkhorn Natural Resources District (NRD). The NRD's existing HMP was approved by FEMA on August

17, 2009. FEMA requires the HMP to be updated and approved within a five year period. The NRD-wide plan includes hazard assessments for all eligible participants within the district. There are 52 participating jurisdictions that participated in this plan; participants include counties, cities, villages, school districts, and rural water districts, tribe, among others.

Through the update of the plan, JEO and the Lower Elkhorn NRD are taking the plan beyond FEMA minimum standards and creating an "advanced plan." In a traditional plan, typical mitigation projects include very minimal information on project components (i.e. benefit-cost analysis, environmental reviews, engineering reviews). Additional information for essential project components is necessary to accurately determine eligibility for FEMA grant programs.

This advanced plan will incorporate detailed project recommendations for post-plan implementation. Proposed mitigation projects will be screened based upon criteria for feasibility of FEMA funding. Those projects deemed most feasible will proceed to a pre-application stage, which may include additional screening for: engineering review, environmental review, cost opinions, benefit-cost analysis, and prioritization.

#### **PROJECT FEATURES**

- Emphasis on post-plan implementation
- Detailed feasibility assessment and project screening for selected projects
- Develop "pre-application" package for selected projects
- Provide a more efficient process for developing project grant applications

- Public involvement: stakeholder groups involved in the process
  - Risk assessment covering a total of 19 hazards
- Development of scenarios for impact projections
- Advanced Plan: Pre-Project Screening



## **Multi-Jurisdictional Hazard Mitigation Plan**

Nemaha Natural Resources District

#### REFERENCE

Nemaha NRD Bob Hilske | General Manager 6216 Highway 136 Tecumseh, NE 68450 p: 402.335.3325

#### JEO TEAM

Lalit Jha Alessandra Jerolleman Jeffrey Henson Pakiza Shirinova Rebecca Appleford

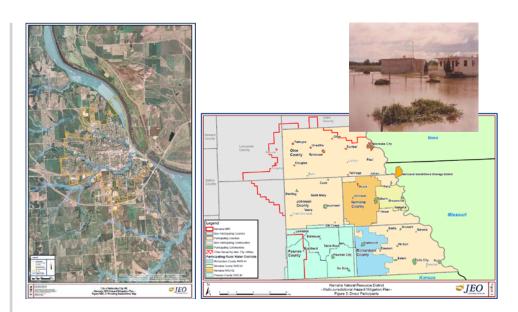
#### PROJECT RELEVANCE

- Regional HMP update
- Expanded Risk Assessment
   Procedures
- Understanding of NEMA and FEMA expectations for updates
- Nemaha NRD is a neighboring jurisdiction to Papio-Missouri River NRD
- Shared exposure to flood events with Papio-Missouri River NRD

#### CONTRACT PERIOD

10/2007 - 03/2010 09/2013 - 01/2015 (expected)





The 2010 Nemaha NRD Multi-Jurisdictional Hazard Mitigation Plan was a joint planning effort between Nemaha NRD and the counties and communities that fall within the region. This project involved more than 50 participating jurisdictions including cities, villages, counties, school districts and college, rural water districts, city utility departments, and levee districts.

JEO is currently working on an update to this plan which will include many stakeholder groups throughout the participating communities. More than 45 stakeholder groups were contacted and encouraged to participate in the planning process and provide feedback regarding how their group could potentially be impacted by natural and man-made hazards.

#### **PROJECT FEATURES**

- Regional Hazard Mitigation Plan Update
- HMP meeting DMA 2000 requirements
- Risk assessment for natural and man-made hazards as required by FEMA
- Scenario based risk assessment

- Public involvement: multiple stakeholder groups contacted regarding participation
- Risk assessment covering a total of 19 hazards
- Development of scenarios for impact projections
- Advanced Plan: Pre-Project Screening

## **Multi-Jurisdictional Hazard Mitigation Plan**

Camden, Cumberland, Gloucester, and Salem Counties, New Jersey

#### REFERENCE

Camden County Office of Emergency Management Sam Spino | Director of Emergency Management & Highway Traffic Safety 2311 Egg Harbor Road Lindenwold, NJ 08021 p: 856.783.4808

#### JEO TEAM

Lalit Jha Jeff Henson Pakiza Shirinova Alessandra Jerolleman Rebecca Appleford Shelley Schulte

#### PROJECT RELEVANCE

- Diverse planning area
- Densely populated urban areas
- Significant vulnerability to
  flooding
- CRS screening for participating jurisdictions

#### CONTRACT PERIOD

10/2007 - 03/2010 04/2014 - ??/??? (expected)







In April of 2014 JEO teamed with Stuart Wallace, LLC to update a four county multijurisdictional plan in western New Jersey. This project was an update of the regional plan developed and approved in 2010. For this project there are more than 70 participating jurisdictions ranging in size, density, and land area. JEO as primarily worked in Camden

County, the most densely populated and diverse of the four counties. There are more than 30 participating jurisdictions in Camden County alone. In addition to assigning a planning team to work specifically with Camden County, JEO also filled the roles of technical and subject matter expert for the FEMA review process and GIS/spatial analysis experts. For this project JEO coordinated with subject matter experts in the areas of: Funding, Benefit Cost Analysis, the Community Rating System, and Climate Adaptation Planning. Through this process we were able to develop stellar working relationships with subject matter experts that can be utilized in future planning efforts.

#### **PROJECT FEATURES**

- On-on-One meetings with participating jurisdictions
- Additional educational efforts
- · Coordination with a wide range of subject matter experts
- Involvement in the RiskMap process

- Project Management
- Technical expert for FEMA required planning process
- GIS and mapping for all jurisdictions and hazards
- County specific planning team

## **Multi-Jurisdictional Hazard Mitigation Plan**

Seward County, Nebraska

#### REFERENCE

Seward County Gary Petersen | Emergency Manager PO Box 190 Seward, NE 68434 p: 402.362.5573

#### JEO TEAM

Jeffrey Ray Alessandra Jerolleman Jeffrey Henson

#### PROJECT RELEVANCE

- HMP update
- Expanded Risk Assessment
   Procedures
- Understanding of NEMA and FEMA expectations for updates
- 2009 HMP approved on first submittal

#### **CONTRACT PERIOD**

10/2007 - 03/2009 and 01/2013 - 11/2014



JEO worked with Seward County to develop their first county wide hazard mitigation plan in 2009. Seward County was one of the first counties to Engend Brand (Mar) Brand (Mar)

move forward with a multi-jurisdictional hazard mitigation plan and was one of the first areas to undergo the HMP update process mandated by FEMA. Seward County contracted with JEO early in 2013 to assist in the update process. The update was approved by FEMA on September of 201. For the next phase of the project, Seward County's planning team and JEO will work to develop a residential safe room grant program.

#### **PROJECT FEATURES**

- HMP meeting the DMA 2000 standard for 12 jurisdictions (county, villages, city, NRD, and school districts)
- Expanded risk assessment to include both natural and man-made hazards
- Scenario based risk assessment
- Public involvement began in June 2013, completed February 2014, submitted to FEMA March 2014

- Public involvement: multiple stakeholder groups contacted to participate in the planning process
- Follow-up presentation to Seward Area Chamber of Commerce regarding HMP and Business Continuity Planning programs
- Risk assessment covering a total of 19 hazards
- Development of scenarios for impact projections
- Advanced Plan: Pre-Project Screening
- Shortened project schedule to meet the county's needs



#### REFERENCES

#### LOWER PLATTE SOUTH NRD Paul Zillig PO Box 83581 | Lincoln, NE 68501 402.476.2729

#### SEWARD COUNTY/YORK COUNTY

Gary Petersen PO Box 190 | Seward, NE 68434 402.643.2883

#### LOWER ELKHORN NRD

Faythe Petersen 701 Koenigsten | Norfolk, NE 68701 402.649.0686

#### NEMAHA NRD

Bob Hilske 62161 Hwy 136 | Tecumseh, NE 68450 402.335.3325

**NEBRASKA DEPARTMENT OF NATURAL RESOURCES** 

Mitch Paine 301 Centennial Mall South | Lincoln, NE 68509 402.471.9252

#### **NEBRASKA DEPARTMENT OF NATURAL RESOURCES**

John Callen 301 Centennial Mall South | Lincoln, NE 68509 402.471.3957

#### **NEBRASKA EMERGENCY MANAGEMENT AGENCY**

Mary Baker 2433 NW 24th Street | Lincoln, NE 68524 402.471.7185 "JEO staff has worked to improve the planning process and they kept Seward County up-todate on any changes occurring at the State and Federal level. This resulted in the first submission of the Hazard Mitigation Plan being approved by FEMA prior to the scheduled date of completion."

-GARY L. PETERSON SEWARD COUNTY FEMA

# REGION 11 EMERGENCY MANAGEMENT

#### ANTELOPE COUNTY

MADISON COUNTY CITY OF NORFOLK PIERCE COUNTY

Faythe Petersen, Director 701 Koenigstein Avenue Norfolk, NE 68701 402 844 2050

August 5, 2014

Council Agenda: August 18, 2014

To Whom it May Concern:

I have had the pleasure working with Jeff Henson of JEO during the past several years. He is the project lead for the update revision of the Lower Elkhorn Natural Resources District Hazard Mitigation Plan. This task is not small and Mr. Henson has kept the team on task and the plan on schedule. I believe he has the natural resources district's best interest in mind and has been accessible and easy to work with.

I believe any project team Mr. Henson would serve on would benefit from his knowledge, patience and experience. I strongly refer Mr. Henson to serve on the Lower Elkhorn HMP project.

If you have any questions, please give me a call.

Sincerely,

Faythe Petersen Region 11 Emergency Management Coordinator

#### Letter of Recommendation



Gary Petersen Director Seward/York Emergency Management 510 Lincoln Ave. York, NE 68467

I am writing to recommend the services of JEO Consulting Group INC. including Planner Jeff Henson. We have contracted twice in both Seward and York County with JEO Consulting. First in 2008 to assist in creating a FEMA approved Hazard Mitigation Plan and in 2013 for the Plan revision. Jeff and other staff members provided knowledge and attention to detail in keeping us on track during the revision process. They also adjusted the planning format to fit our needs.

I feel confident in recommending JEO Consulting Group INC. planning services. They are not only thorough, but also easy to work with, and always willing to take the time to discuss my concerns and respond to questions.

If you have any further questions, please feel free to contact me.

Regards,

Gary Petersen 402-643-5761 gpetersen@co.seward.ne.us