

STANDARD SERVICE PROVIDER CONTRACT

This standard service provider contract is between San Juan County, a political subdivision of the State of Utah, and the following person or entity (the “Service Provider”):

Service Provider:	Jones & DeMille Engineering, Inc	Contact Phone Number:	(435) 587-9100
Contact Person:	Scot Flannery, PE	Contact Email Address:	Scot@jonesanddemille.com
Address:	696 North Main Street PO Box 577 Monticello, Utah 84535	Type of Service:	San Juan County Hazard Mitigation Program Grant-Pack Creek Fire

San Juan County desires to obtain the services of a professional and competent service provider to provide the contractual services under this contract.

San Juan County issued a Request for Proposal on October 29, 2021, for the San Juan County Hazard Mitigation Program Grant-Pack Creek Fire assistance, and

Jones & DeMille submitted a responsive proposal for these services on December 3, 2021, meeting the due date requirements of the request; and

San Juan County Board of Commissioners approved the Notice of Award and Intent to Negotiate a Contract with Jones & DeMille to perform these services as the Service Provider on December 21; and

Jones & DeMille accepted the Notice of Award on December 27, 2021; and

The Service Provider, who has represented to San Juan County that it is a competent and experienced service provider and a licensed engineer in the State of Utah in accordance with Utah Code Title 58 Chapter 22, Professional Engineers and Professional Land Surveyors Licensing Act, desires to provide the contractual services under this contract.

The parties therefore agree as follows:

1. Scope of Services. The Service Provider agrees as follows:

- A. Service Provider will assist San Juan County in developing the San Juan County Hazard Mitigation Program-Pack Creek Fire Grant Packet; working in conjunction with the Utah Division of Emergency Management (DEM) Liaison, the San Juan County Emergency Manager, Watershed Management; Floodplain Administrator; Planner; and Chief Administrative Officer.
- B. Service Provider will be responsible for completing the FEMA Benefit-Cost Analysis.
- C. Design and development of full specifications, project manual and construction documents for a debris catch basin at the junction of the Cut-off Road in the Spanish Valley-San Juan County. This debris basin will be located on SITLA land. Permissions and easements will need to be obtained for the project.
- D. Create bid documents and construction documents for the Project in electronic versions of PDF once approved for distribution to potential bidders, including assisting the County in conducting pre-bid conferences, appraising proposals, and preparing contracts for construction. Including preparing a conformed set of Construction Documents including all addenda at the conclusion of the Bidding Phase.
- E. Assist with awarding a contractor.
- F. Assist in final development of a project grant application and packet will need to be complete and submitted to the State of Utah Department of Emergency Management.
- G. A second phase will be negotiated at a later date to include project management and construction administration as the Project commences and funding becomes available.

2. Compensation.

- A. Upon the Service Provider’s completion of its duties under section 1 of this contract, San Juan County will pay the Service Provider Eighty-Nine Thousand Six Hundred Seventy and 00/100 Dollars (\$89,670).
- B. The Compensation for the second phase of the project, to include construction administration, will be negotiated at a later date as the Project commences and funding becomes available and will be incorporated here within as an amendment.
- C. San Juan County shall mail its payment to the Service Provider within 30 days after the Service Provider completes its duties under section 1 of this contract, unless the parties agree, in writing, to alternative payment arrangements.

- D. Service Provider shall disclose its tax identification or Social Security number to San Juan County before a check or payment will be made by San Juan County to Service Provider.
- E. If this contract is terminated early, San Juan County will pay the Service Provider for the duties completed under section 1 of this contract through the date of early termination.
- F. The Service Provider is responsible for any taxes, contributions, assessments, or fees, which arise from payments made by San Juan County to the Service Provider.
- G. The Service Provider is responsible for paying all subcontractors, material providers, jobbers, or any other person who or entity that provides materials, services, equipment, utilities or otherwise at the request of Service Provider and in connection with or relating to this contract.

3. Effectiveness, Date, and Termination. This contract will become effective when all parties have signed it. The date of this agreement will be the date this agreement is signed by the last party to sign it (as indicated by the date associated with that party's signature). This contract will terminate on December 31, 2022, at 11:59 p.m unless extended by amendment to the Agreement.

4. Early Termination.

- A. San Juan County may terminate this contract if annual appropriations, as part of San Juan County's annual public budgeting process, are not made or are insufficient to pay the Service Provider. This termination will be effective at the time that San Juan County's notice is effective under section 8.
- B. San Juan County may terminate this contract due to its dissatisfaction with the Service Provider's services, which termination will be effective at midnight on the fifth day after San Juan County's notice is effective under section 8.
- C. San Juan County may terminate this contract for any reason, which termination will be effective at midnight on the 30th day after San Juan County's notice is effective under section 8.
- D. San Juan County may terminate this contract, which termination will be effective at the time San Juan County's notice is effective under section 8, if:
 - (1) The Service Provider engages in or permits any unlawful or disruptive conduct or any activity not permitted by law, regulation, ordinance, this contract, and/or the policies of San Juan County; and
 - (2) The Service Provider fails to immediately cease such conduct or activity after notification by law enforcement, San Juan County, or otherwise.
- E. Either party may terminate this contract after a material breach of this contract by the other party, which termination will be effective after the notice is effective under section 8.

5. Warranties.

- A. The Service Provider warrants to San Juan County that:
 - (1) All materials and equipment furnished under this contract shall be:
 - (a) New;
 - (b) Under manufacturer's warranty;
 - (c) Of reasonable quality; and
 - (d) Free from faults and defects; and
 - (2) All services performed under this contract shall:
 - (a) Be of reasonable quality;
 - (b) Conform with reasonable professional standards; and
 - (c) Conform to codes, regulations, and laws.
 - (d) Materials, Plans, Artwork, Drawings, Brochures, Maps, and Documents produced under this contract will be owned by San Juan County upon completion. San Juan County may use these items in future projects or opportunities as the County needs arise without written consent or authorization from any other party. Service Provider is not liable for any issues resulting from the reuse of these items.
- B. Service Provider shall correct or replace any materials, designs or equipment that do not satisfy subsections 5.A.(1)(a)-(d) within 30 days after San Juan County's notice is effective under section 8.
- C. Service Provider shall correct any services performed that do not satisfy subsections 5.A.(2)(a)-(c) within 30 days after San Juan County's notice is effective under section 8.
- D. The parties acknowledge that the warranties set forth in Title 70A, Chapter 2, Part 3, Utah Code Annotated, apply to this contract.
- E. The Service Provider shall and its sub-consultants shall provide the original Construction Documents to conform to the Project Record documents incorporating all as-built changes in the Work, including modifications and changes made during construction and provide same to County within two (2) months of Final Completion of the Project. Record drawings and specifications shall be submitted to County on a CD/DVD in CAD and PDF format; and

- F. Provide a digital copy of CAD files and all construction documentation to County, including, but not limited to, submittals, meeting minutes, warranties, and operation and maintenance manuals.
- G. The Service Provider shall assign and deliver to San Juan County all manufacturers’ warranties relating to the materials and equipment furnished under this contract as soon as reasonably possible, but in no event later than 10 days after this contract terminates.
- H. The Service Provider acknowledges the relationship of trust and confidence established between the Service Provider and the County by this Agreement. Accordingly, the Service Provider’s acts shall be consistent with this relationship. The Service Provider shall further the interest of the County through efficient business administration and management and design.

6. Insurance. The Service Provider shall maintain for the duration of this contract and for six years after the termination of this contract, the following types of insurance:

- A. A valid occurrence form commercial general liability insurance policy, which covers contractual liability and contractual agreements, with minimum limits as follows:
 - (1) Each occurrence - \$1,000,000.00;
 - (2) Damage to Rented Premises - \$300,000.00;
 - (3) Medical Exp. (Any one person) - \$5,000.00;
 - (4) Personal and Adv. Injury - \$2,000,000.00;
 - (5) General aggregate - \$2,000,000.00; and
 - (6) Products – Comp/Op aggregate - \$2,000,000.00;
- B. A valid automobile liability insurance policy that satisfies the minimum amounts required by Utah law; and
- C. A valid Workers Compensation and Employers’ Liability insurance policy with minimum limits as required by Utah law. If any proprietor, partner, executive, officer, member, or other person is excluded from the Workers Compensation and Employers’ Liability insurance policy, the Service Provider shall provide San Juan County with the applicable state issued waiver.

For the duration of this contract and for six years after the termination of this contract, San Juan County may request the Service Provider to provide San Juan County with certificates or other records that demonstrate that the Service Provider is in compliance with the insurance requirements set forth in this section (the “Certificates/Records”). If the Service Provider fails to provide San Juan County with the requested Certificates/Records within three business days of San Juan County’s request, San Juan County may immediately terminate this contract. If the Service Provider fails to have the insurances required by this contract, San Juan County may immediately terminate this contract.

- 7. Indemnification.** With respect to any judicial, administrative, or arbitration action, suit, claim, investigation, or proceeding (“Proceeding”) against San Juan County, San Juan County’s officers, employees, agents, consultants, advisors, and other representatives, and each of their heirs, executors, successors, and assignees (“San Juan County Indemnitees”) that arises out of this contract or the acts or omissions of Service Provider (each, a “Claim”), Service Provider shall, for the duration of this contract and for a period of six years after the termination of this contract, indemnify those San Juan County Indemnitees against any amount awarded in, or paid in settlement of any Proceeding, including interest (“Loss”) and any out-of-pocket expense incurred in defending a Proceeding or in any related investigation or negotiation, including court filing fees, court costs, arbitration fees, witness fees, and attorneys’ and other professionals’ fees and disbursements (“Litigation Expense”) (Loss and Litigation Expense means “Indemnifiable Losses”) arising out of that Proceeding, except to the extent that San Juan County negligently or intentionally caused those Indemnifiable Losses.
- 8. Notices.** All notices must be in writing and must be delivered personally, by a nationally recognized overnight courier, or by United States mail, postage prepaid and addressed to the parties at their respective addresses set forth below, and the same shall be effective upon receipt if delivered personally, on the next business day if sent by overnight courier, or three business days after deposit in the United States mail, if mailed. The initial addresses of the parties shall be:

<u>San Juan County</u>	<u>Service Provider</u>
San Juan County Attn: Mack McDonald PO Box 9 Monticello, UT 84535	<div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> <u>With a copy to:</u> San Juan County Attn: Attorney’s Office PO Box 9 Monticello, UT 84535 </div> <div style="width: 50%;"> Scoot Flannery 696 North Main Street PO Box 577 Monticello, Utah 84535 </div> </div>

- 9. Independent Contractor.** The Service Provider shall perform this contract as an independent contractor. The Service Provider acknowledges that it and its representatives are not employees of San Juan County, and, thus, have no right to and shall not be provided with any San Juan County benefits.
- 10. Conflict of Terms.** In the event of any conflict between the terms of this contract and any documents referenced in this contract or incorporated into this contract by reference, including exhibits or attachments to this contract, this contract shall control.
- 11. Assignment Restricted.** Except with the prior written consent of the other party, each party shall not transfer, including by merger (whether that party is the surviving or disappearing entity), consolidation, dissolution, or operation of law:
- A. Any discretion granted under this contract;
 - B. Any right to satisfy a condition under this contract;
 - C. Any remedy under this contract; or
 - D. Any obligation imposed under this contract.
- Any purported transfer in violation of this section will be void.
- 12. Waiver.** No waiver of satisfaction of a condition or nonperformance of an obligation under this contract will be effective unless it is in writing and signed by the party granting the waiver.
- 13. Entire Contract; Amendment.** This contract, including all attachments, if any, constitutes the entire understanding between the parties with respect to the subject matter in this contract. Unless otherwise set forth in this contract, this contract supersedes all other agreements, whether written or oral, between the parties with respect to the subject matter in this contract. No amendment to this contract will be effective unless it is in writing and signed by both parties.
- 14. Governing Law; Exclusive Jurisdiction.** Utah law governs any Proceeding brought by one party against the other party arising out of this contract. If either party brings any Proceedings against the other party arising out of this contract, that party may bring that Proceeding only in a state court located in San Juan County, Utah (for claims that may only be resolved through the federal courts, only in a federal court located in Salt Lake City, Utah), and each party hereby submits to the exclusive jurisdiction of such courts for purposes of any such proceeding.
- 15. Severability.** The parties acknowledge that if a dispute between the parties arises out of this contract or the subject matter of this contract, the parties desire the court to interpret this contract as follows:
- A. With respect to any provision that it holds to be unenforceable, by modifying that provision to the minimum extent necessary to make it enforceable or, if that modification is not permitted by law, by disregarding that provision; and
 - B. If an unenforceable provision is modified or disregarded in accordance with this section, by holding that the rest of the contract will remain in effect as written.
- 16. Counterparts, Digital Signatures, and Electronically Transmitted Signatures.** If the parties sign this contract in counterparts, each will be deemed an original but all counterparts together will constitute one contract. If the parties digitally sign this contract or electronically transmit signatures by email, such signatures will have the same force and effect as original signatures.

Each party is signing this contract on the date below the party's signature.

<p>SAN JUAN COUNTY</p> <p>By: _____</p> <p>San Juan County Board of County Commissioners</p> <p>Date: _____</p> <p>ATTEST:</p> <p>_____</p> <p>Lyman Duncan San Juan County Clerk/Auditor</p> <p>Date: _____</p>	<p>JONES & DeMILLE ENGINEERING, INC</p> <p>By: _____</p> <p>Ryan Jolley, CSO</p> <p>Date: _____</p>
--	--

Exhibit A
Proposal



SAN JUAN COUNTY

HAZARD MITIGATION PROGRAM GRANT
PACK CREEK FIRE



JONES & DEMILLE
ENGINEERING

435.587.9100
696 North Main
Monticello, Utah 84535

SAN JUAN COUNTY

HAZARD MITIGATION PROGRAM GRANT PACK CREEK FIRE

TABLE OF CONTENTS

Attachment A	1
Cover Letter	2
Introduction	
Executive Summary	3
Organizational Chart.....	5
Key Personnel/Resumes.....	6
References.....	9
Grant/Funding Experience	10
Qualifications & Experience	
Working with Agencies	11
Related Project Experience	12
Proposal	
Approach	15
Proposed Schedule	19
Fee Schedule	19

Attachment A

San Juan County RFP Form

Respondent Information: Provide the following information about yourself and your company.

Respondent Name: Jones & DeMille Engineering
(Note: give exact legal name as it will appear on the contract, if awarded)

Address: 696 North Main

City: Monticello State: Utah Zip: 84535

Business Structure:

- Individual or Sole Proprietorship
- Partnership
- Corporation
- Limited Liability Company
- Other, list business structure S Corporation

Insurance Certificate: Copy of insurance certificate, or You are willing to get the proper insurance requirements if awarded the contract during contract negotiation.

Contact Information: List the one person who San Juan County or their representative may contact concerning your proposal.

Name: Scot Flannery
Telephone Number: 435.459.2349
E-Mail: scoot@jonesanddemille.com

Final Bid/Pricing Structure:

\$89,670 - please see page 19 for more information

By submitting this proposal, Scot Flannery hereby certifies our willingness to enter into a contract with San Juan County, if selected.

Signature  Date December 3, 2021



Jones & DeMille
Engineering

www.jonesanddemille.com | 800.748.5275

San Juan County Government
Attn: Purchasing Agent
117 South Main Street
PO Box 9
Monticello, Utah 84535

December 3, 2021

Dear San Juan County,

Public and private infrastructure is critical to the health and maintenance of a thriving community. As San Juan County (the County) seeks professional engineering services for the San Juan County Hazard Mitigation Program Grant for the Pack Creek Fire, Jones & DeMille Engineering (JDE) would love to provide the services needed. We appreciate the opportunity to submit our proposal to demonstrate our qualifications and interest in providing professional engineering services.

Our proposal details our capabilities, expertise, and reasons why JDE would be a good fit to work with the County on this important project. They include:

- **Experience Counts.** Our in-depth experience in the engineering field and 39 years of experience throughout Utah, with federally funded mitigation project, has given us an understanding of the most important elements for these types of projects. We have included a list of related projects our team has completed. We know the issues, the process, the agencies and the path to success. Moreover, our experience includes the use of GIS, survey, 3D modeling, economic analyses, innovative best practices, familiarity with state requirements, funding procurement and financial planning expertise.
- **Full-Service Firm.** JDE provides general and strategic planning, code and ordinance support, infrastructure planning, funding procurement, GIS, civil design engineering, rights-of-way acquisition, owner representative services, construction management, materials testing, survey, environmental, etc. Our breadth of services provides an engineering consultant who understands all facets and elements of infrastructure planning and construction and can successfully advise the County on any aspect of infrastructure-related projects and issues.
- **LOCAL and Available NOW.** JDE has ten office locations—Monticello, Price, Richfield, Manti, Springville, Roosevelt, Vernal, St. George, Tooele and Evanston, WY. Our staff is available now and will be readily accessible to the County. We are close enough to offer our award-winning services and work to assist the County shape the quality of life. JDE has found the key to delivering high-quality projects in rural areas is having an established local presence committed to delivering quality projects. Our close proximity to this project will allow us to maximize time and cost savings.

I will be JDE's authorized representative for purposes of this proposal and to contractually bind the firm. JDE brings a strong team of professionals to work with the County including Darin Robinson, as principal-in-charge. I can always be reached by phone at 435.459.2349, or by email at scoot@jonesanddemille.com. Darin can be reached by phone at 435.979.7630, or by email at darin@jonesanddemille.com.

We look forward to hearing from the County and welcome an opportunity to review our capabilities and services in greater detail. Please let us know if we can provide additional information.

Sincerely,

JONES & DeMILLE ENGINEERING, INC.

Scoot Flannery, PE | Project Manager

1535 South 100 West
Richfield, UT 84701
435.896.8266

50 South Main, Suite 4
Manti, UT 84642
435.835.4540

38 West 100 North
Vernal, UT 84078
435.781.1988

1675 South Highway 10
Price, UT 84501
435.637.8266

520 West Highway 40
Roosevelt, UT 84066
435.722.8267

775 West 1200 North
Suite 200A
Springville, UT 84663
801.692.0219

1664 South Dixie Drive
Building G
St. George, UT 84770
435.986.3622

7 South Main Street
Suite 107/109
Tooele, UT 84074
435.268.8089

696 North Main Street
PO Box 577
Monticello, UT 84535
435.587.9100

545 East Cheyenne Drive
Suite C
Evanston, WY 82930
307.288.2005

SAN JUAN COUNTY

HAZARD MITIGATION PROGRAM GRANT PACK CREEK FIRE

EXECUTIVE SUMMARY

As San Juan County (the County) receives proposals for the development of the San Juan County Hazard Mitigation Program Grant for the Pack Creek Fire, Jones & DeMille Engineering (JDE) would love to provide the expertise and necessary professional services. JDE is uniquely qualified to help the County successfully complete this project. We appreciate the opportunity to demonstrate our qualifications and interest through this proposal.

Introduction

1. Team Experience

We recognize the most important element for any successful project is the people selected to do the work. The JDE team is uniquely qualified to perform the services for the County's project. Our team is best positioned to maximize efficiency and to be immediately responsive to the needs of the County.

Darin Robinson, PE will be the Principal-in-Charge and has over 22 years of experience. Darin currently serves as JDE's NRCS project team leader for the NRCS IDIQ contract and is the Principal-in-Charge for the Watershed Plan-EAs for Sevier County Richfield-West Sevier Watershed, Weber Basin WCD-Upper Weber River Watershed, Duchesne County WCD Efficiency Project, and Olsen Reservoir Price Watershed Plan.

Scot Flannery, PE will serve as the Project Manager and brings 18 years of construction management and engineering experience. He has lived and worked in southeastern Utah for over 20 years and currently resides in Blanding. Scot served on the San Juan County Planning Commission for five years which provided him with a unique perspective both as a consultant as well as a local government representative. He has managed over 100 design projects that included transportation, water resources, feasibility studies, structural, survey, inspections, site development, funding procurement, construction engineering and master planning efforts.

Ted Mickelsen, PE will be the Program Resource Manager and brings more than 26 years of civil engineering management, analysis, design, planning, funding, and construction services experience. He was the Project Manager for the recently completed Woodland Hills FEMA Hazard Mitigation Grant Program Debris Basin as a result of the Pole Creek and Bald Mountain Fires and is familiar with the program and Utah DEM personnel.

Ricky Anderson, PE, CFM will serve as the H&H Technical Advisor and brings over 10 years of water resources engineering experience, including four years working on this project similar to this one. Ricky has been involved in over 10 NRCS PL566 Watershed Plan-EAs in Utah, Colorado, and California in the last two years, and is ready to apply lessons learned to the success of this project.

2. References

The County is invited to contact any of the references listed for confirmation of our claims in this proposal.

3. Experience with Grant and Funding

One of JDE's strengths is helping communities fund projects through state and federal programs. JDE has developed a broad understanding of the different funding programs available and how best to position a community and their needs for ideal funding. Much of this experience comes from working with communities in rural Utah, over the past 39 years, where this is a need for experts who can help with all aspects of a project including funding. JDE prides itself on the high level of service we provide in this regard and are excited to apply this experience to your project. More specifically we just recently completed a project funded through FEMA's Hazard Mitigation Grant Program using FMAG funds and have developed specific program experience

Qualifications and Experience

4. Resource Agency Experience

JDE has developed excellent relationships with FEMA (through the Utah Department of Emergency Management [DEM]), U.S. Fish and Wildlife Service (USFWS), the Utah Division of Wildlife Resources (UDWR), the U.S. Army Corps of Engineers (USACE), the Utah Division of Water Rights, and other agencies that may be involved in this project. We have developed these relationships through proactive and humble communication, discipline-specific expertise, and high quality work on similar projects throughout the state. Our relationships will facilitate building effective relationships between the County and the agencies you may work with.

SAN JUAN COUNTY

HAZARD MITIGATION PROGRAM GRANT PACK CREEK FIRE

Understanding how to engage regulatory agencies such as FEMA on a flood protection project is key to gaining support, receiving feedback, and avoiding delays. In FEMA compliance cases JDE has documented the compliance issues, performed modeling and studies, and prepared meeting agendas, which efforts have enabled the Utah DEM and FEMA to provide critical feedback. Our goal has been to make the communication productive, to focus on the solutions, and explain the situations in a way that everyone can understand.

5. Related Project Experience

Fires, flooding, and other natural disasters can be a true test of a community's resiliency and response abilities. Our team has helped many entities through these difficult circumstances with great success. These successes include connecting with agencies, determining a funding plan, completing an accurate and compelling funding application, and seeing a project through design and construction. Some such projects have been: Woodland Hills – FEMA Flood Mitigation, Price City Flood Repair Project, Springville City – Technical FEMA Assistance, Duchesne County – Dollar Ridge Emergency Watershed Protection, Utah County – NRCS EWP/PL-566, NRCS – IDIQ Ivins Debris Basins Design Review, Annabella Town – Storm Water Master Plan/Flood Protection System and Drainage Improvements, and Springville City – Hobble Creek Watershed Plan EA.

Proposal

6. Understanding of the Project and Approach

In June of 2021 the Pack Creek Fire burned approximately 9,000 acres in the mountains 14 miles southeast of Moab in both San Juan and Grand Counties. Following the fire the Burned Area Emergency Response (BAER) Team sampled sites to evaluate soil changes caused by the fire. They collected information on ground cover, canopy consumption, intact roots, and water repellency to better understand soil burn severity. The analysis showed that 49% of the burned area was at a moderate level and 2% at a high level. Areas located downstream from moderate and high soil burn severity may experience increased rates of erosion, debris flows, and surface run-off following short-duration, high-intensity rainfall events.

As a result the County is seeking funding from the Federal Emergency Management Agency (FEMA), working with the State Division of Emergency Management (DEM) through their Hazard Mitigation Grant Program (HMGP). We understand that Utah DEM has set aside Fire Management Assistance Grants (FMAG) funding specifically to address potential community hazards and threats related to this fire.

Having completed a similar project for a community that was impacted by a large wildfire, we have developed key objectives that will be applied in our approach to this project.

1. The Strength of the application can reduce the application review time.
2. Leveraging funding can balance affordability with maximum mitigation efforts.
3. Budget control needs to be applied during the project considering the entire project costs and contributions.
4. Documentation is important for a fluid project.
5. Understanding the environmental process is an important part of the funding application
6. Quality engineering design and construction builds confidence with FEMA.

7. Proposed Schedule

Our proposed schedule is an option to accelerate the project in hopes of **completing construction in the late fall of 2022**. We will work with FEMA and Utah DEM early on to establish the design criteria and approach in an attempt to reduce the review time or give us an opportunity to continue the design during the application review by FEMA.

8. Fee Schedule and Hourly Rate Schedule

Fee schedule and hourly rate schedule are provided to demonstrate our understanding of the level of effort and time commitment that will be required to provide the County with a quality Hazard Mitigation Grant Program.

SAN JUAN COUNTY

HAZARD MITIGATION PROGRAM GRANT PACK CREEK FIRE

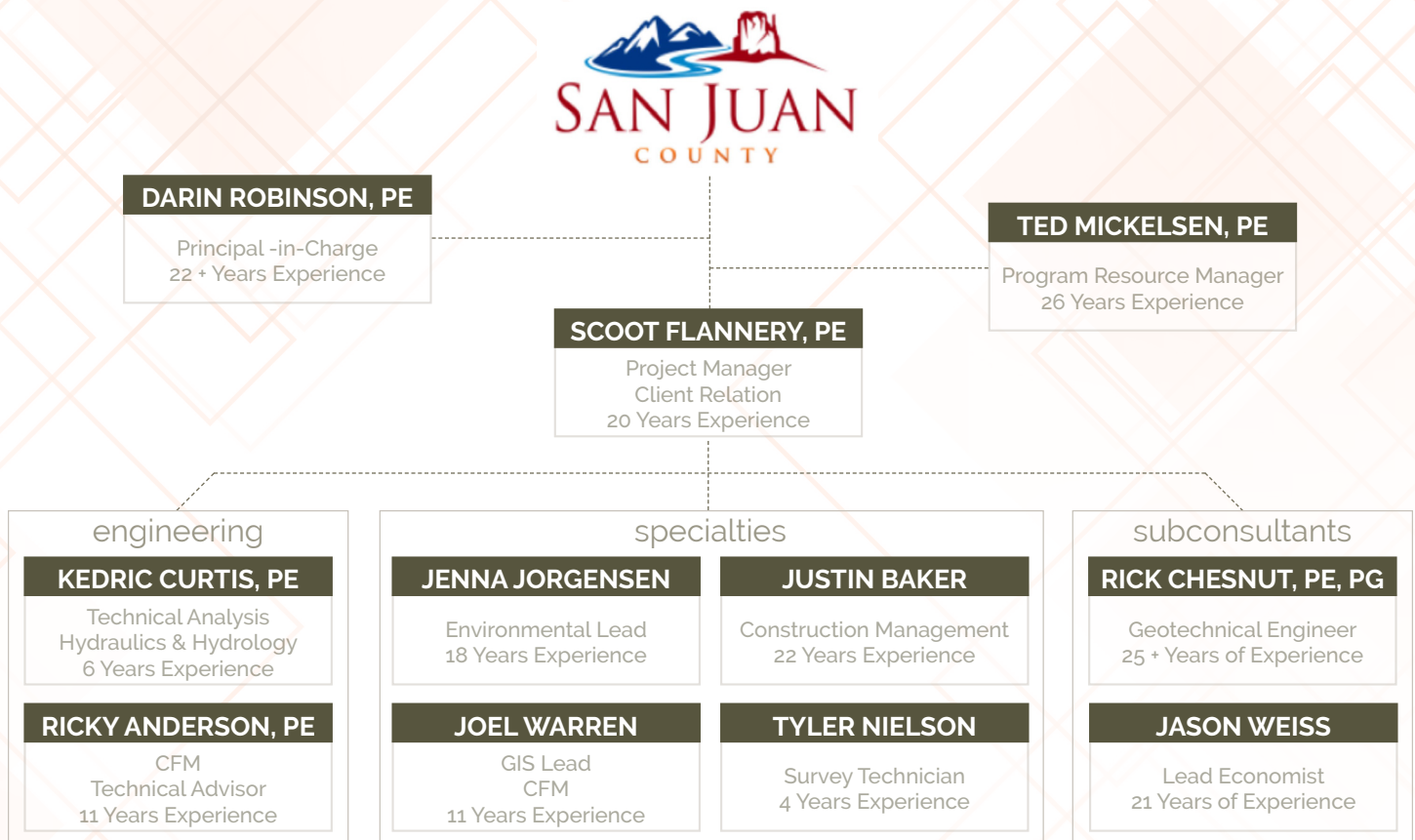
ORGANIZATIONAL CHART

We recognize the most important element for any successful project is the people selected to do the work. The JDE Team is uniquely qualified to perform the services for the County’s project. Our team is best positioned to maximize efficiency and to be immediately responsive to the needs of the County.

JDE represents that, if selected, the below-referenced key personnel will be available and assigned to the anticipated project. Such personnel will be available to work on the project for the duration of the project and will complete all tasks necessary to fulfill their responsibilities. If, for any reason, a team member is not able to assist and/or continue with the potential project, the County will be notified in writing of such change in personnel

The organizational chart illustrates a robust, results-oriented, resourceful and integrated project team that is streamlined for efficiency and includes an appropriate mix of senior and junior level staff to accomplish the work efficiently. We are proposing Scoot Flannery as the project manager and point of contact to the County. Darin Robinson will provide quality control and quality assurance (QC/ QA) on project deliverables and ensure the project quality control plan is implemented throughout the project.

One of the key components of success for our projects, is to ensure project documentation is standardized, unified, and submitted in a timely fashion.



SAN JUAN COUNTY

HAZARD MITIGATION PROGRAM GRANT PACK CREEK FIRE

KEY PERSONNEL RESUMES



DARIN ROBINSON, PE

▪ **Principal-in-Charge**

BS—Civil & Environmental Engineering ▪ Utah State University
UT # 5252823

Darin has over 22 years of experience in project design engineering and project management, specializing in hydraulics, hydrology, water and agricultural delivery systems and other river system and watershed mitigation and protection design. Darin has managed and/or completed numerous Natural Resource Conservation Service (NRCS) Emergency Watershed Protection (EWP) projects and has completed the design and construction management of many irrigation diversion and waterway modification projects. Due to his relationships and as a shareholder in several canals, he acts as an unofficial technical advisor to local canal companies in improving systems operations and functionality. Darin has extensive water project funding and agency coordination experience with the Permanent Community Impact Board (CIB), Natural Resource Conservation Service (NRCS), Water Resources Board and the USDA Rural Development.

QUALIFICATIONS

Project Management ▪ Quality Control Oversight ▪ Technical Reviews ▪ Project Leadership ▪ Resource Allocation & Availability ▪ Resource Management ▪ Water Resources ▪ Infrastructure Design & Construction



TED MICKELSEN, PE

▪ **Program Resource Manager**

BS—Civil Engineering ▪ University of Utah
UT # 270769

PROFESSIONAL AFFILIATIONS

American Public Works Association ▪ American Water Works Association ▪ American Council of Engineering Companies

Ted is JDE's Northwest Regional Director and heads our Wasatch Front office. He brings more than 26 years of civil engineering management, analysis, design, planning, funding, and construction services experience. He served as Project Manager for the \$1.2M Woodland Hills FEMA HMGP funded Debris Basin project and is currently serving as project manager for the \$25M Utah County NRCS EWP and Watershed Ops flood mitigation projects. His areas of expertise include managing federally funded projects, local government infrastructure projects encompassing water conveyance facilities such as pipelines, pump stations, water tanks, hydraulic analysis, and modeling; wastewater facilities analysis and design; modeling and designing facilities for large drainage basins; design; and construction cost estimating and construction management. Ted has served as a senior project manager, project engineer, and construction manager for several municipalities, water and wastewater improvement districts and governmental agencies on projects ranging from a few thousand dollars to \$1.2 billion. His participation in many large-scale and challenging projects has provided him with experience in innovation for projects requiring unique design and delivery needs. He has experience in multi-disciplinary management and coordination and alternative project delivery methods.

QUALIFICATIONS

Regional Manager/Client Coordinator ▪ Project Management ▪ Client Management ▪ Quality Control Oversight ▪ Schedule & Budget Control ▪ Project Deliverables ▪ Project Supervision



SCOOT FLANNERY, PE

▪ **Project Manager**

BS—Civil Engineering ▪ Brigham Young University
UT # 7734559

Scoot is the lead engineer in our Monticello, Utah office and brings 18 years of construction management and engineering experience. He has lived and worked in southeastern Utah for over 20 years and currently resides in Blanding. Scoot served on the San Juan County Planning Commission for five years which provided him with a unique perspective both as a consultant as well as a local government representative. His time on the Planning Commission helped Scoot gain the knowledge of what is required to deliver successful projects and be responsive to client needs. Scoot has extensive experience in both civil and structural construction as a foreman, superintendent and project manager. His areas of expertise also include project planning, management, budgeting, project planning, scheduling, funding procurement, and project design. He has worked for the past six years as a project manager for several projects in southeastern Utah and the Four Corners region. He has managed over 100 design projects that included transportation, water resources, feasibility studies, structural, survey, inspections, site development, funding procurement, construction engineering and master planning efforts.

QUALIFICATIONS

Project Management ▪ Quality Control Oversight ▪ Technical Reviews ▪ Project Leadership ▪ Resource Allocation & Availability ▪ Resource Management ▪ Water Resources ▪ Infrastructure Design & Construction

SAN JUAN COUNTY

HAZARD MITIGATION PROGRAM GRANT PACK CREEK FIRE



RICKY ANDERSON, PE

▪ **Certified Floodplain Manager** | **Technical Hydraulics & Hydrology Advisor**

MS—Civil Engineering ▪ Utah State University
UT # 9302972

PROFESSIONAL AFFILIATIONS

American Society of Civil Engineers

Ricky will serve as a lead water resources engineer for this project. His expertise includes hydrologic and hydraulic engineering, analysis, modeling, design, etc. He has worked on studies and projects related to debris basins, dams, levees, stream restoration, streambank/streambed stabilization and restoration, dam breach analysis, flood inundation studies, diversions, storm drainage systems, postfire flood response, etc. This has included collaborating with state and federal agencies, cities, and the FEMA regional office on permitting and compliance associated with these projects. FEMA studies have included no-rise analysis, Conditional Letter of Map Revision (CLOMR), Letter of Map Revision (LOMR), and county wide hydrology and hydraulic FEMA studies. In addition, Ricky has worked closely with local communities and individuals to resolve FEMA compliance issues and facilitate collaboration with the state and the FEMA. His experience includes serving as a project engineer, task lead, and project manager overseeing engineering, GIS, environmental, surveying, and construction for related projects.

QUALIFICATIONS

Hydraulics ▪ Modeling ▪ Water Resources ▪ Infrastructure Design & Construction



KEDRIC CURTIS, PE

▪ **Technical Hydraulics & Hydrology Analysis**

MS—Civil Engineering ▪ Utah State University
UT # 11415731

Kedric is a water resources engineering specializing in technical hydrologic and hydraulic modeling and design. He is known for his aptitude for hydrology studies, and as served as a task lead on related projects including flood control projects, storm drainage systems, dams, rivers, flood response projects, stream restoration, streambank/streambed protection/stabilization, etc. Kedric is a technical reviewer and quality management lead at JDE for hydrology and hydraulic studies related to surface water. His project experience has naturally included understanding and coordinating hydrology and hydraulic design criteria from wide range of local, state, and federal agencies, including FEMA, Utah Dam Safety, and others. More recently, he has served as a hydrology lead and technical reviewer on several post-fire flood response projects including the Utah County Fire and Dollar Ridge Fire Emergency Watershed Protection projects.

QUALIFICATIONS

Hydraulic Analysis ▪ Hydraulic Design Structures ▪ Drainage Studies ▪ Hydrology Methods Hydrology Modeling Techniques ▪ ArchGIS
▪ AutoCAD



JENNA JORGENSEN

▪ **Environmental Lead**

MS—Integrative Biology ▪ Brigham Young University

Jenna brings over 16 years of experience with federal agencies involving NEPA, project management, environmental policy compliance, and environmental document preparation. Her responsibilities have included completion of all necessary NEPA documents required for federal permits, preparation of permit applications, and project management. Jenna has served as a team leader for numerous projects, including those documented in categorical exclusions, environmental assessments (EAs), biological assessments (BAs), and environmental impact statements (EISs). Jenna has prepared numerous environmental documents ranging in size from \$2,000 to \$30 million in total project costs. She has worked as a wildlife biologist for the U.S. Forest Service, BLM, and U.S. Fish and Wildlife Service. While at the Forest Service, Jenna was the IDT leader and wildlife biology lead for the TransWest Express, Energy Gateway South, and Sigurd to Red Butte power transmission projects.

QUALIFICATIONS

NEPA Land Use Planning ▪ Property Management ▪ Policy Compliance ▪ Permitting

SAN JUAN COUNTY

HAZARD MITIGATION PROGRAM GRANT PACK CREEK FIRE



JOEL WARREN

▪ **GIS Lead | Certified Floodplain Manager**

MLA—Landscape Architecture ▪ Utah State University

Joel has over 11 years of GIS experience in land use planning, environmental planning, and civil engineering applications. He has completed landscape inventories, analyses, and planting plans using native species and a variety of materials. Joel's development of an interactive environmental database resulted in more focused planning on a 25,000-acre government facility. His contribution to the publication of other planning documents includes canal safety management plans, storm water master plans, county resource management plans, and environmental assessments. Joel has helped to complete FEMA LOMR/CLOMR applications and other FEMA compliance tasks. His contribution to the publication of other planning documents includes canal safety management plans, storm water master plans, county resource management plans, and environmental assessments.

QUALIFICATIONS

ArcGIS ▪ ArcGIS Online ▪ Google Earth ▪ Cartographic Products ▪ Static Maps ▪ Interactive Web Maps ▪ Data Acquisition Creation Date Editing and Querying ▪ Geodatabase Design and Maintenance ▪ Land-use Planning and Analysis



JUSTIN BAKER

▪ **Construction Management**

WAQTC 162922 | ACI 01375061

Justin has over 22 years of experience in the construction industry. He has managed and supervised work on projects including the rehabilitation and construction of residential streets and parking lots, as well as state and county roadways. His work has included that of a laborer to paving crew foreman and manager over civil site projects in recent years. Justin is ACI and WAQTC certified and is an International Code Council (ICC) certified soils inspector. He's also building inspector certified and currently does many of San Juan county's residential inspections. Justin has spent the past two years working in Southeastern Utah including the Moab area.

QUALIFICATIONS

Construction ▪ Residential Experience ▪ Manager over Civil Site Projects ▪ ACI and WAQTC Certified ▪ ICC Certified Soils Inspector ▪ Building Inspector Certified



TYLER NIELSON

▪ **Survey Technician**

AS—Geomatics ▪ Salt Lake Community College

Tyler has been a field surveyor for more than two years. Previously Tyler had opportunities to work for various government entities on city and county projects. He has a thorough working knowledge of principles, practices and procedures of ALTA surveys, topographic surveys, boundary surveys, legal description and easement preparation. Tyler has also provided many construction and staking projects for government and private agencies and completed subdivision projects of mostly private homeowners, which consisted of topographic surveys, searching for section corners and staking boundaries. Tyler is competent in using Autodesk Civil 3D, ArcMap, Trimble GPS, total stations, ArcGIS and drones.

QUALIFICATIONS

Right-of-Way ▪ ALTA Surveys ▪ Topographic Surveys ▪ Site Development ▪ Easements & Right-of-Way Acquisition ▪ Surveys

RICK CHESNUT, PE, PG

▪ **Geotechnical Engineer**

MS—Civil Engineering ▪ Brigham Young University

Rick has managed a wide variety of projects, including geotechnical design and investigations for energy transmission lines and facilities, transportation, bridges, commercial retail and industrial developments, water tanks, water treatment plants and earth-fill dams, geologic hazards studies, structural distress investigations, and expert witness for legal services. He reviews geotechnical engineering designs, provides interpretations on results, and partners with other civil engineering members to provide a cost-effective approach to geotechnical-related issues. Rick serves as a Principal Engineer and Project Manager for large- and small-scale projects. His experience in managing projects has allowed him to design systems for fieldwork and report writing cost-effectively.

JASON WEISS

▪ **Economist Lead**

Jason brings 21 years of professional experience as a researcher and consultant in the fields of economics, planning, engineering, and community development. He has performed flood risk management, navigation, recreation, environmental restoration, and transportation projects. Jason has been completing NRCS projects in Texas, Oklahoma, Arkansas, and Virginia for over 15 years, including dam rehabilitation studies, watershed studies, and irrigation studies. In addition to applying the guidance provided in the P&G to NRCS and USACE projects, Mr. Weiss has worked with the USACE Institute for Water Resources to develop guidance, tools, and methods that can be used by planners and economists.

SAN JUAN COUNTY

HAZARD MITIGATION PROGRAM GRANT PACK CREEK FIRE

REFERENCES

Woodland Hills FEMA Flood Mitigation Project

■ **Wendy Pray, Mayor** | *Woodland Hills*
200 South Woodland Hills Dr. Woodland Hills, UT 84653 | 385.448.7865

Price City | Flood Repair Project

■ **Russell Seeley, PE City Engineer** | *Price City*
PO Box 893 Price, UT 84501 | 435.637.5010

Springville City | Technical FEMA Assistance

■ **Jeff Anderson, PE, City Engineer** | *Springville City*
110 South Main Street Springville, UT 84663 | 801.491.2780

Duchesne County | Dollar Ridge Emergency Watershed Protection

■ **Mike Lefler, Emergency Manager** | *Duchesne County Emergency Management*
734 North Center - PO Box 910 Duchesne, UT 84021 | 435.738.1226

Utah County | NRCA EWP/PL-566 Project

■ **Glen Tanner, PE County Engineer** | *Utah County*
801.851.8602

Annabella Town | Storm Water Master Plan/Flood Protection System and Drainage Improvements

■ **Brent Christensen, Mayor** | *Annabella Town*
PO Box 175 - 295 East 300 North Annabella, UT 84711 | 435.896.6571

SAN JUAN COUNTY

HAZARD MITIGATION PROGRAM GRANT PACK CREEK FIRE

GRANT/FUNDING EXPERIENCE

JDE has successfully procured over \$600M in funding for hundreds of projects during our 39-year history. Our professional engineers have decades of experience working with various funding entities to allow projects to move forward with feasible funding packages—essentially expanding available resources and increasing project scope and elements. JDE has successfully procured funding with the Permanent Community Impact Board (CIB), Division of Drinking Water, Division of Water Quality, Board of Water Resources, and state legislative earmarks.

Additionally, we have federal funding experience with the Bureau of Reclamation in obtaining WaterSMART and salinity funding, the USDA Natural Resource Conservation Service (NRCS), the National Park Service, Department of Transportation, and USDA Rural Development, among others. JDE understands how to best leverage multiple funding requests and how to best match funding with project components. We also offer extensive experience in funds administration and auditing requirements once funding is obtained.

One of JDE's strengths is helping communities fund projects through state and federal programs. JDE has developed a broad understanding of the different funding programs available and how best to position a community and their needs for ideal funding. Much of this experience comes from working with communities in rural Utah, over the past 39 years, where this is a need for experts who can help with all aspects of a project including funding. JDE prides itself on the high level of service we provide in this regard and are excited to apply this experience to your project.

JDE is privileged to provide this proposal and help assist the County with developing a funding strategy for this project. This strategy included understanding how the different funding sources could be utilized and positioning the project for success in applying to these sources. The NRCS PL-566 program facilitates a broad public planning process that is ideal for bringing state and federal agencies, project stakeholders, land owners, as well as special interest groups, together on all aspects of a project – including funding. Each funding source has its own goals, restraints, and specific application. Based on our understanding of the project, the County's needs, and the opportunities with applicable funding sources, we propose the following be considered:

- **FEMA** – The County is submitting an application through FEMA's Hazard Mitigation Grant Program working with Utah DEM. FMAG funds have been set aside for the County as a result of the Pack Creek Fire. Our project experience will show that in the past few years we have submitted several applications and successfully worked on projects for FEMA's HMGP and BRIC programs and are very familiar with the program requirements. The funding is basically a two part process; completing and submitting the application, then final engineering and construction. The Utah DEM should be considered a project partner and be included in regular project updates, in order to receive feedback on proposed alternatives and how best to position for FEMA funding.
- **NRCS** – The PL-566 process consists of three phases: Planning (Plan-EA), Design, and Construction. The planning phase of the project has been funded at 100% by the NRCS; the NRCS will also fund 100% of design upon successful completion of the Plan-EA. Construction costs are cost-shared at rates depending on the purpose of the improvements. For example, flood control measures are funded by NRCS at 100%, while public fish and wildlife measures are cost-shared at up to 50%. NRCS funds cannot be used for “real property rights,” which includes land acquisition and water rights, while other funding sources can be used for these costs. The Watershed Plan-EA will include a detailed funding breakdown of the preferred alternative final design and construction costs. It is important to note that several funding sources were suggested in the PL-566 funding application, including those listed below. The NRCS awarded funding of this application in part because of the opportunity for cost sharing between these sources, which shows broad benefits, support, and participation.
- **Other State Funding Agencies** - There are many layers and related issues and benefits to the County's needs that could open doors to other optimal funding sources that should be considered. One example is recreational related project components or spin-off projects may be funded through Utah Outdoor Recreation Grant (UORG) or Recreation Trails Program grants. This can be another creative means for the County to come up with matching funds to match federal input dollars. Other examples are spin-off projects in which water quality benefits could be realized and the County could involve the State DEQ Water Quality fund board. These are examples of how we strive to increase our value to the County and find deep satisfaction in investing ourselves in County needs “beyond the project”.

Timing is critical when utilizing federal funding sources with specific requirements and eligibility criteria. During the initial stages of the project, a funding timeline and responsibility breakdown should be developed to help guide future efforts in securing funding. This would include a timeline that identifies critical decisions and milestones focused on the funding deadline.

SAN JUAN COUNTY

HAZARD MITIGATION PROGRAM GRANT PACK CREEK FIRE

QUALIFICATIONS & EXPERIENCE

Working with the County, Government and other Agencies

Understanding how to engage regulatory agencies such as FEMA on a project is key to gaining support, receiving feedback, and avoiding delays. JDE has developed a great reputation with FEMA, (through the Utah Department of Emergency Management [DEM]), while working with them on several projects, including the early stages of this project.

JDE has experience with several projects that require collaboration and permitting with the Utah DEM and FEMA. Our experience has taught us to facilitate frequent communication with these agencies. In FEMA compliance cases (such as Monroe City and Sevier County where there have been FEMA violations due to structures not being built to FEMA standards), JDE has documented the compliance issues, performed modeling and studies, and prepared meeting agendas, which efforts have enabled the Utah DEM and FEMA to provide critical feedback. Our goal has been to make the communication productive, to focus on the solutions, and explain the situations in a way that everyone can understand.

It is important to engage early with critical agencies (e.g., Utah DEM and FEMA) which have a special interest or could significantly impact the project. Perhaps more important though, is having an existing understanding and relationship with these agencies to build from. As demonstrated in other sections of the proposal, JDE has strong experience in completing projects and environmental assessments which required a high level of collaboration with agencies such as the FEMA, U.S. Fish and Wildlife Service (USFWS), Utah Division of Wildlife Resources (UDWR), the U.S. Army Corps of Engineers (USACE), the Utah Division of Water Rights, etc.

FEMA specifically, collaboration will be crucial where this project includes mitigating the impact post fire hazard events. Understanding the FEMA requirements for levees and the process for certification will be critical as the project is planned, designed, and constructed. In the Woodland Hills project completed by JDE, we contacted FEMA Region 8 out of Denver to discuss and confirm our proposed approach for this project. We met with the Director and the Utah DEM at the site to confirm our approach to the project and review the project requirements and process.

We propose to engage with FEMA then local and Federal funding agencies in two ways: (1) Regular updates with the Utah DEM, who represents FEMA at the state level and oversees the FEMA funding program (HMGP). These updates would include discussions on the project alternatives and how best to position the project for a successful funding application. The Utah DEM awareness of the project will also help in collaborating on the design of a debris basin, but most of that coordination will come from the regional level from FEMA. (2) Communicate the design criteria as the project progresses. Our experience with FEMA on other projects similar to this one is that there is not specific design guidelines published by FEMA. So it's important to review and thoroughly communicate the design approach with FEMA early and regularly through the application phase so there is buy in to the design criteria. Previously they have accepted the design criteria established by the Natural Resource Conservation Service (NRCS) and Utah Dam Safety for debris basin. We will propose this criteria early in the design and modify the criteria or get acceptance as directed by FEMA.

Related Project Experience

There are several reasons for our long tenure and steady growth in an extremely competitive market. These include our continual efforts to foster client relationships, well thought-out concepts to determine the most feasible plan of attack, proactive project management, ability to resolve concerns quickly, and involvement through the entire project timeline. Following is a summary of our project experience and areas of expertise.

SAN JUAN COUNTY

HAZARD MITIGATION PROGRAM GRANT PACK CREEK FIRE

Woodland Hills | FEMA Flood Mitigation Project

Ted Mickelsen (PM)

As a result of the Pole Creek/Bald Mountain fire in September 2018, the watershed above the City of Woodland Hills was severely impacted. To mitigate the potential post fire flood and debris hazards, JDE was contracted by the City of Woodland Hills to work closely with the Utah Division of Emergency Management (DEM) to acquire funding through FEMA's Hazard Mitigation Grant Program (HMGP) to fund, design, and construct a \$1.2 million mitigation project. The scope of services included preparing the funding application, manage the funds, design the flood mitigation projects, contractor procurement, and provide construction oversight services. The results of these funds allowed the City to purchase two acres of property and construct a debris/flood detention basin and channel.

Wendy Pay, Mayor | Woodland Hills | 385.448.7865



Price City | Flood Repair Project

Ricky Anderson (PE)

Project included rehabilitation and replacement of flood conveyance infrastructure along Meads Wash, a major drainageway through the heart of Price City. Channel work included major grading, bank protection, grade control structures, headwalls and wingwalls, an replacing a major culvert (diameter = 12'). These improvements were implemented within a Zone AE floodplain with a Floodway, and therefore permitting was required per Federal Emergency Management Agency (FEMA) guidelines. This required accommodating the FEMA permitting requirements in the design such as excessively raising the Based Flood Elevation (BFE), to ensure the design would be accepted before construction as part of the Conditional Letter of Map Revision (CLOMR). The current effective HEC-RAS model was updated to include current conditions with collected survey data and proposed conditions, and the process was automated using HEC-GeoRAS within ESRI's ArcGIS program. After the project was constructed, a Letter of Map Revision (LOMR) was submitted based on an as-built survey. The CLOMR and LOMR submittals included a summary of the Flood Insurance Rate Map (FIRM) and the associated hydraulics and hydrology, an updated hydraulic study, detailed GIS mapping, landowner notification letters, etc. JDE worked together with the local floodplain administrator and the FEMA Region 8 reviewers to successfully design and permit the project. (LOMR case 18-08-1056P, approved April 1, 2019) Key Features: CLOMR/LOMR Permitting, major channel restoration, hydrologic modeling, GIS analysis, crossing replacement, working with local floodplain administrator and FEMA region.

Russell Seeley, City Engineer | Price City | 435.637.5010



Springville City | Technical FEMA Assistance

Ricky Anderson (H&H/FEMA)

Springville City selected JDE to provide technical FEMA assistance in reviewing a recently updated Flood Insurance Study (FIS) and Flood Insurance Rate Maps (FIRMs). Due to prior experience working with cities and counties on updating FIS' and FIRMs, as well as experience completing hydrology and hydraulic analysis to satisfy FEMA regulations through applications and permits (e.g., CLOMR, LOMR). Project includes reviewing hydrology and hydraulic analysis and models in order to validate and, if needed, update the recently published FIRMs. This will allow the city to manage and enforce FEMA regulations based on the most accurate FIRMs. The study will also consider how the new larger floodplain and floodway delineations will affect property owners, and how to reduce these impacts.

Jeff Anderson, PE, City Engineer | Springville City | 801.491.2780

SAN JUAN COUNTY

HAZARD MITIGATION PROGRAM GRANT PACK CREEK FIRE

Duchesne County | Dollar Ridge Emergency Watershed Protection

Darin Robinson (PIC)
Ricky Anderson (H&H)

The purpose and scope of this project is to protect infrastructure and property along the Strawberry River and Timber Creek in Western Duchesne County. Damage due to flooding after the Dollar Ridge Fire was the primary focus of repair efforts. Work is beginning at the Pinnacles and Promised Land Resort area and extends past Timber Canyon (overlapping the Wasatch County portion) and includes stabilization measures, sediment removal, channel cleaning, debris cleanup, and miscellaneous related work in accordance with NRCS EWP guidelines. JDE has been able to design the project to utilize materials and in-kind value to provide the 25% match required by the County, eliminating any out of pocket expenses. Permitting scope included obtaining Stream Alteration Permits for early steps of construction, US Army Corps of Engineers Nationwide Permit to work within the floodplain and Ordinary High Water Mark (even when there wasn't anything ordinary about it), license agreement from the Bureau of Reclamation, NRCS approvals, US Fish and Wildlife clearances, and Utah Division of Wildlife Resources coordination. Our experience and the pathway forward found through this project will directly benefit Wasatch County.

Mike Lefler, Emergency Manager | Duchesne County Emergency Management | 435.738.1226



Utah County | NRCS EWP/PL-566 Project

Darin Robinson (PIC)
Ted Mickelsen (PM)

In September of 2018, the Pole Creek and Bald Mountain fires in southern Utah County merged to become the largest Type 1 fire incident in the nation at the time, burning over 120,000 acres of mountain watersheds. Realizing the threat to several of the southern Utah County impacted municipalities from floods, landslides, and debris flows, Utah County applied for and was authorized for nearly \$20 million dollars in funding with the National Resource Conservation Service (NRCS). The funding was provided through the Emergency Watershed Protection (EWP) and Watershed Operations (PL-566) programs to restore the watersheds and reduce the threat to the livelihood and infrastructure of these communities. In total, there are six municipalities including Santaquin, Payson, Salem, Elk Ridge, Woodland Hills, and Spanish Fork, as well as Utah County facilities. Realizing the difficulty in managing several stakeholders and processes, Utah County selected the JDE and JUB partnership to provide program management, design engineering, and construction management for this very important project.

Glen Tanner | Utah County | 801.851.8602

NRCS-IDIQ Ivins Debris Basins Design Review

Darin Robinson (PIC)
Ricky Anderson (PE)
Jenna Jorgensen (Environmental)

JDE completed a technical review of the 90% rehabilitation design of the Ivins debris basins located north of Ivins City in Washington County. The project consisted of rehabilitation of six debris basins within the Warner Draw Watershed originally constructed in 1976-77 to reduce flood damages. Our technical review included the design report, specifications, drawings, supporting calculations, cost estimate, geologic and geotechnical analysis, hydraulic and hydrologic design data, quality assurance plan, and operation and maintenance plan.

Michelle Bourret-Belkot, Contracting Officer | NRCS | 503.414.3294



SAN JUAN COUNTY

HAZARD MITIGATION PROGRAM GRANT PACK CREEK FIRE



Annabella Town| Storm Water Master Plan/Flood Protection System and Drainage Improvements

Darin Robinson (PM)
Ted Mickelsen (PM)
Ricky Anderson (PE)
Jenna Jorgensen (Environmental)

This project included funding procurement, storm water master planning, an environmental assessment (EA), dam safety analysis and approvals, dam breach analysis, design, construction engineering, permitting, right-of-way, and easements. Improvements included two moderate hazard earthen flood detention basins with controlled flow concrete outlet structures, embankment, bank armor, riprap, multiple reinforced concrete cross gutters, surface ditch, shoulder grading and armor, and a concrete emergency canal spillway structure. The analysis for the debris basins included hydrology and hydraulics to meet Utah Dam Safety criteria, which includes Hydrometeorological Report No. 49 (HMR 49) and state specific precipitation studies. Hydrologic modeling was completed using HEC-HMS for the hydrology. The dam breach analysis was completed which include development of the breach hydrograph using HEC-HMS and routing the flood downstream using Flo-2D. Dam breach inundation mapping was prepared which was used in the Emergency Action Plan (EAP). The design reports, final design construction documents, and construction oversight was completed in close coordination and

with reviews and approvals by Utah Dam Safety; as well as other agencies including the CIB, NRCS, BLM, Utah Division of Water Rights, USACE, Annabella Town, and property owners. Upon completion of the debris basins an Operation and Maintenance (O&M) manual and an Emergency Action Plan (EAP) was developed and provided to Utah Dam Safety and Annabella Town.

Brent Christensen, Mayor | Annabella Town | 435.896.6571

Springville City | Hobble Creek Watershed Plan-EA

Darin Robinson (PIC)
Ricky Anderson (PM),
Ted Mickelsen (Client Coordinator)
Jenna Jorgensen (Environmental)
Joel Warren (GIS)

The primary objective for JDE is to assist Springville City in developing a Watershed Plan-EA that meets NRCS requirements and approval of the NRCS National Water Management Center (NWMC) as well as aligns with the goals and priorities of the City. The NRCS has several references which outline the requirements to complete a Plan-EA which aligns with the Watershed Protection and Flood Protection Act (Section 14 of PL-83-566), which includes the National Watershed Program Manual (NWPM, Title 390, Part 500), and National Watershed Program Handbook (NWPH, Title 390, Parts 600, 601, and 602). The following typical project phases provide an outline for completion of a Plan-EA per the guidelines of the NWPM. Phase I – Identify Problems and Determine Objectives, phase II – Inventory Resources and Analyze Resource Data, phase III – Alternative Formulation Evaluation and Decision, phase IV – Preparation of the Watershed Plan-Environmental Document Through the completion of these phases and deliverables outlined a Plan-EA will be prepared and submitted to the NWMC for final review and approval. JDE will work with Springville City and the NRCS to develop an accepted and approved Plan-EA within the proposed schedule and fee.



Jeff Anderson, City Engineer | Springville City | 801.491.2780

SAN JUAN COUNTY

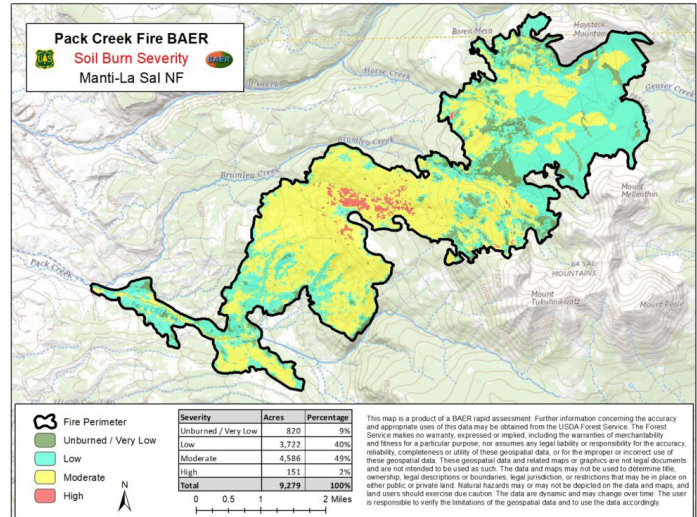
HAZARD MITIGATION PROGRAM GRANT PACK CREEK FIRE

APPROACH

Understanding of the Project and Project Approach

In June of 2021, the Pack Creek Fire burned approximately 9,000 acres in the mountains 14 miles southeast of Moab in San Juan and Grand counties. Following the fire, the Burned Area Emergency Response (BAER) Team sampled sites to evaluate soil changes caused by the fire. They collected information on ground cover, canopy consumption, intact roots, and water repellency to better understand soil burn severity. The analysis showed that 49% of the burned area was at a moderate level and 2% at a high level. Areas located downstream from moderate and high soil burn severity may experience increased rates of erosion, debris flows, and surface run-off following short-duration, high-intensity rainfall events.

As a result, the County is seeking funding from the Federal Emergency Management Agency (FEMA), working with the State Division of Emergency Management (DEM) through their Hazard Mitigation Grant Program (HMGP). We understand that Utah DEM has set aside Fire Management Assistance Grants (FMAG) funding specifically to address potential community hazards and threats related to this fire.



The application process for FEMA's HMGP funds is generally a two-part process:

1. **Funding application:** The funding application requires an environmental assessment, approximately a 30% engineering design to determine the hazards and threats as a result of the changed environmental conditions, and a benefit-cost analysis (BCA) to determine if the cost associated with the risk of doing nothing is greater than the cost of the proposed mitigation.
2. **Engineering and Construction:** Once the funding application is authorized, design is carried through completion and the mitigation improvements are constructed.

Having completed several FEMA funded projects, including a debris basin through the HMGP with FMAG funds in 2019-2020 that was impacted by a large wildfire, we have developed key objectives that will be applied in our approach to this project.

1. **Strength of the Application.** The FEMA authorization process can be time consuming. After the application is submitted, FEMA will review the application and prepare a Request for Information (RFI) to clarify questions about the application or ask for additional information. Preparing a strong application on the first submittal will decrease the information exchange process. Our past experience has given us an insight into the information they look for.
2. **Leverage Funding.** We understand that most public agencies haven't financially planned for an emergency event, so balancing affordability with maximizing the funding for the necessary mitigation efforts is key to a successful project.
 - The application requires a sufficient level of design and environmental review to develop the costs of the proposed measures and determine their viability; the expense for this work is reimbursable if the application is approved. Our approach is to complete enough design and environmental analysis to have a quality application but not go further than is necessary until funding is received.
 - During the design, we will look for opportunities to use in-kind contributions from the county to offset the 25% match requirement. This not only makes the project more affordable to the county, but also shows investment in the project and strengthens the overall funding application.
 - We will investigate other funding sources that could be used as 25% match. This could include local funds, or funding from other agencies such as the NRCS.
3. **Budget Control.** We understand that there is a set amount of funding available, so our goal is to manage the overall project budget through sound mitigation development and engineering. The total project budget also needs to fit the county's affordability criteria for the 25% local match. Through our design and bidding, we will proactively look for ways for the County to provide in-kind material and/or labor costs to count toward the match requirement. We have come up with creative measures to do this on many projects, including the Montezuma Canyon EWP that was completed in 2016 for San Juan County.

SAN JUAN COUNTY

HAZARD MITIGATION PROGRAM GRANT PACK CREEK FIRE

4. **Documentation.** We use in-house staff to help track project documents including in-kind work, project progress updates to FEMA, and funding reimbursements to relieve this burden from the county. Our previous experience with FEMA funding applications will help streamline the process and reduce risk to budget and schedule.
5. **Environmental Assessment.** Our team includes in-house environmental staff with extensive experience in federal funding applications and requirements. We will use publicly available data as much as possible to complete the required environmental assessment.
 - A cultural resource survey will be required to comply with the National Historic Preservation Act requirements of the application.
 - A preliminary review of listed species in the area suggests that field surveys will not be required for compliance with the Endangered Species Act.
 - Based on aerial imagery and knowledge of the general area, wetlands do not occur in the area and an aquatic delineation will not be required. The need for Clean Water Act permitting will be identified, but permits would not be acquired unless the application was approved.
6. **Engineering and Construction.** Following authorization of the funding, the engineering will be completed. We believe that with modifications to the existing cut off road, an effective debris basin can be constructed to capture flood water and debris, dissipate energy, and slowly release water to prevent damage downstream. Riprap and concrete could be used to armor a section of the roadway to serve as a spillway for extreme events and prevent washing out the road. It is possible that on-site material could be used for riprap armoring, potentially reducing costs to bring in material from somewhere else. In-kind measures will be identified and implemented during this process. It's also important to identify and qualify contractors that are experienced with these projects and are willing to support the county in any in-kind efforts.



The FEMA process can be time consuming and cumbersome to negotiate. However, through our relationship with the Utah DEM and experience with FEMA funded projects, our project goal will be:

Partner with the county and Utah DEM to traverse, guide and mentor through the process so that the county is comfortable with the outcome and confident in communicating with all stakeholders.

To accomplish the outlined project approach and achieve the project goal, we propose the following specific scope of services:

Scope of Services

Funding Phase - Pre-Design and Planning Services

- *Vendor who will assist the County in developing the San Juan County Hazard Mitigation Program-Pack Creek Fire Grant Packet. Working in conjunction with the Utah Division of Emergency Management (DEM) Liaison, the San Juan County Emergency Manager, Watershed Management; Floodplain Administrator; Planner; and Chief Administrative Officer.*
- *Vendor will be responsible for completing the FEMA Benefit-Cost Analysis.*
- *Assist in final development of a project grant application and packet will need to be complete and submitted to the State of Utah Department of Emergency Management*



SAN JUAN COUNTY

HAZARD MITIGATION PROGRAM GRANT PACK CREEK FIRE



Specific tasks for the application scope include:

Task 1: Kickoff Meeting and Data Collection.

JDE will begin the project by holding a kickoff meeting. The project goals and priorities will be established related to mitigating flood risk due to the fire with the county. Information collected will include requirements from the funding application as well as information related to the site and design. JDE will also collect data for the analysis and design such as land ownership, hydrology and hydraulics, environmental, and geotechnical.

Task 2: Review Funding Application and Assignments.

JDE will work with the County, the Utah Division of Emergency Management, and FEMA to complete the HMGP Wildfire application to secure the funding needed for design of the proposed debris catch basin on Pack Creek. JDE has successfully submitted several applications for FEMA BRIC funding through FEMA GO in the past couple of years. JDE's familiarity with FEMA GO and

relationships with the Utah DEM will enable us to complete the application efficiently.

Task 3: Field Survey.

We will complete a topographic survey of the project area to supplement the elevation data collected during the Spanish Valley Water and Sewer project. The survey will include the topography of the site as well as utilities and other features which could impact the project.

Task 4: Hydrologic and Hydraulics Analysis.

A hydrologic study will be conducted to determine the peak flow rate and runoff volumes resulting from the post-fire condition of the Pack Creek watershed. The flood hydrographs will be developed and modeled in HEC-HMS. The debris basin will be sized by routing the resulting hydrograph through the debris basin. Additionally, this information will be used to develop a hydraulic model that will be used to model the breach of the debris basin dam. This will help determine the dam hazard classification and what level of design will be required. The sizing and design of the debris basin will be based on reducing the peak flows from the watershed to an acceptable level that can be handled downstream.

Task 5: Identify Project Mitigation Improvements.

In addition to a debris basin, other mitigation measures may be recommended. These could include improvements in the watershed to aid in watershed recovery, reduce sediment/debris loads from the watershed, or to improve conveyance through the natural channels. Downstream improvements could include channel and crossing improvements. The overall flood control system will be considered, and improvements will be balanced to provide overall protection considering the long-term goals of the county and the overall cost and impact of the project.

Task 6: Environmental Assessment.

We will complete the environmental requirements outlined in the FEMA application items A-J. The cultural resource survey will be completed by local archaeological subconsultants.

Task 7: Opinion of Probable Project Costs.

The opinion of probable cost will consider design and construction of all proposed improvements, including permitting. In addition, JDE will investigate and strategize with the county on how best to develop the match for the project. This could include contributing in-kind match (donating land, riprap, etc.) or assisting in part of the construction. Other funding sources will also be investigated.



SAN JUAN COUNTY

HAZARD MITIGATION PROGRAM GRANT PACK CREEK FIRE

Task 8: Benefit-Cost Analysis.

Experienced JDE staff will complete a BCA that evaluates flood conditions with and without the proposed project in order to demonstrate the reduction in flood damage. Flood inundation models will be developed for recurrence interval storms to evaluate the flood damage. To be efficient in the analysis, the same model used for the dam breach analysis will be used. Flood depths will be estimated at each structure and used to estimate flood damages in the economics analysis. Other potential economic impacts could include utilities, agricultural areas, and recreation. The BCA is one of the main reasons funding applications are rejected, which is why our experience completing BCAs for this specific funding opportunity is critical to the success of the project.

Task 9: Permissions and Easements.

JDE will work with the county to establish and coordinate permissions and easements related to the construction and long-term management of the proposed measures. Land costs are paid for by FEMA through the HMGP program. One requirement for the funding application is that all land requirements are agreed upon before the application is submitted. Generally, this is accomplished by providing letters from landowners stating that they are willing to work with the county on easements and purchases of land.

Task 10: Finalize and Submit Application.

The funding application will be finalized and submitted through FEMA GO. In our experience, Utah DEM is very helpful in answering questions and making suggestions to strengthen funding applications. Utah DEM typically provides at least one round of comments and suggestions before the application is finalized and submitted for funding consideration. The documentation for the application will include a description of the project, an engineering report, an environmental report, cost estimates, a project implementation schedule, and a BCA report.

Preconstruction Engineering

- Design and development of full specifications, project manual and construction documents for a debris catch basin at the junction of the Cut-off Road in the Spanish Valley-San Juan County. This debris basin will be located on SITLA land. Permissions and easements will need to be obtained for the project.*
- Assist with project management.*
- Create bid documents*
- Assist with awarding a contractor.*

Task 1: Geotechnical Investigation.

JDE will conduct a geotechnical investigation of the site and provide testing results and recommendations in a geotechnical report. The geotechnical investigation will focus on the feasibility and design of the debris basin embankments and related infrastructure.

Task 2: Complete Design.

Design drawings will be developed and provided at 30%, 60%, and 90% design levels and shared with the county for review and approval. Permits with the U.S. Army Corps of Engineers and Utah Division of Water Rights will be acquired. Upon final approval of the proposed design, contract documents including construction drawings, specifications, and a bid schedule and engineers estimate at the 90% review will be prepared.

Task 3: Submit and Approval with Utah Dam Safety

The results of the hydrologic and hydraulic analysis and preliminary design drawings will be documented and shared with Utah Dam Safety to determine the dam hazard class for the debris basin. Depending on the resulting dam hazard classification, either a small dam application will be submitted or a formal dam plan review will be submitted to Utah Dam Safety for review and approval.

Task 4: Final FEMA and Utah DEM Approvals.

Engineering design reports and the construction documents will be provided to FEMA and Utah DEM for review and approval. To aid in the review and approval process, JDE will submit these items as they are completed for review to expedite the process and reduce the risk of changes later in the project. Our experience in working closely with FEMA and Utah DEM on similar projects will help us to provide the right information and quickly move through the review and approval process.

Task 5: Contractor Procurement. (Include contractor pre-qualification)

JDE will assist the County with contractor procurement. We will advertise and assist with the process to select a contractor that is familiar with this type of project. We recommend a contractor pre-qualification process to select a pool of qualified contractors to bid on the project. Conduct pre-bid meeting and answer questions during bidding process. Review bids prepare a bid tab and make a contractor recommendation.

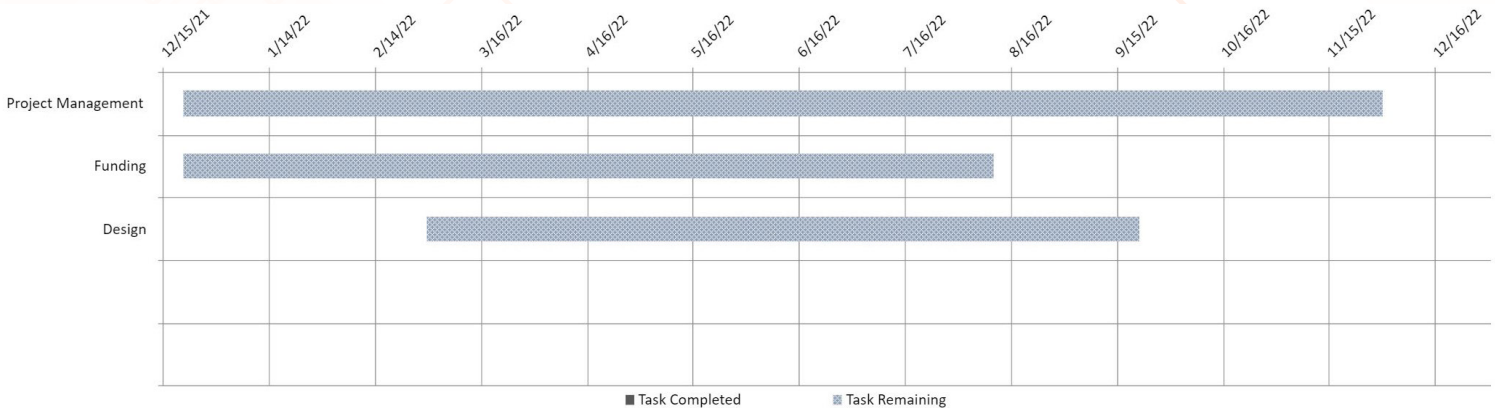


SAN JUAN COUNTY

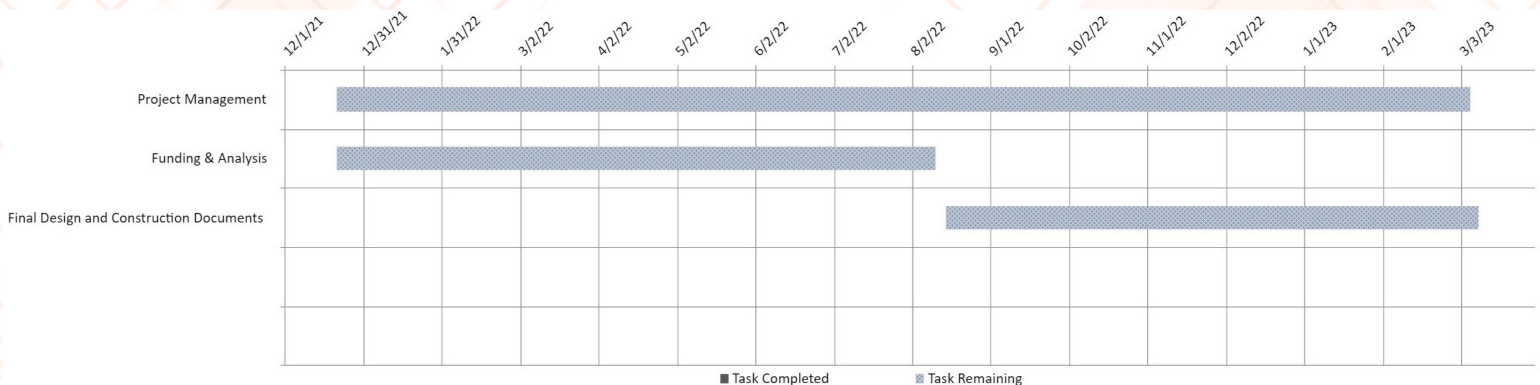
HAZARD MITIGATION PROGRAM GRANT PACK CREEK FIRE

PROPOSED SCHEDULE

The following proposed schedule is an option to accelerate the project in hopes of completing construction in the late fall of 2022. We will work with FEMA and Utah DEM early on to establish the design criteria and approach in an attempt to reduce the review time or give us an opportunity to continue the design during the application review by FEMA. This schedule is dependent on FEMA allowing design during their anticipated 6-month review period. This puts some risk on the designer and County since typically the funds are not reimbursed until the application is approved. We believe that coordinating up front with FEMA on the proposed design criteria for the debris basin during the application process could help make this possible.



However, should that schedule not be an option, the Final Design and Construction Documents Phase would be pushed back until the application was approved - pushing the construction into early 2023. The overall duration of this phase would not change but would be shifted to accommodate for the FEMA funding application review process.



FEE SCHEDULE

The fee schedule is split into two phases: Funding & Analysis; and Final Design & Construction Documents. The proposed fee for each phase is shown below. Any adjustments to the scope of work would be handled on an hourly basis according to the attached hourly rates. Note that per the requirements in the RFP, the standard hourly rates are attached and include all personnel that could perform services on the project.

Project Phase	Total Cost
Funding & Analysis	\$40,560
Final Design & Construction Documents	\$27,462
Geotechnical Services	\$21,648*
Grand Total Cost	\$89,670

*This fee may be **reduced by \$2000** if the County provides a backhoe or excavator and an operator to dig test pits. This work may also be applied to the County's match requirement according to FEMA's rates.

Jones & DeMille Engineering, Inc.
ENGINEERING SERVICES HOURLY RATES
As of June 1, 2021

ENGINEERING SERVICES

Principal	\$	215.00
Senior Project Manager	\$	190.00
Project Manager II	\$	155.00
Project Engineer	\$	128.00
Graduate Engineer III	\$	115.00
Graduate Engineer II	\$	105.00

SURVEY/STAKING SERVICES

Survey Office Technician	\$	97.00
--------------------------------	----	-------

ENVIRONMENTAL SERVICES

Environmental Project Manager	\$	126.00
-------------------------------------	----	--------

GIS SERVICES

GIS Specialist	\$	95.00
----------------------	----	-------

GEOTECHNICAL SERVICES (TERRACON)

Principal	\$	200.00
Senior Project Engineer	\$	150.00
Project Engineer	\$	125.00
Staff Engineer	\$	110.00
Field Engineer	\$	100.00
Geologist	\$	100.00
Clerical	\$	60.00