



# Perkins County Canal Project Third-Party Environmental Impact Statement

Proposal for Engineering Design Services

(RFP #NDNR25-01)

P05257416

July 18, 2025

15080 A Circle  
Omaha, Nebraska 68144  
P (402) 330-2202  
**[Terracon.com/Nebraska](http://Terracon.com/Nebraska)**



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Omaha, Nebraska 68144  
P (402) 330-2202  
**Terracon.com**

July 18, 2025

Nebraska Department of Natural Resources  
245 Fallbrook, Suite 201  
Lincoln, NE 68521

Attn: Mr. Matt Manning  
P: (402) 471-2363  
E: matt.manning@nebraska.gov

Re: Request for Proposal for Perkins County Canal Project Third-Party Environmental Impact Statement  
Proposal for Engineering Design Services  
Solicitation Number: RFP NDNR25-01  
Terracon Proposal Number: P05257416

Dear Mr. Manning:

The Nebraska Department of Natural Resources (NeDNR) plays a vital role in safeguarding the state's water future, and the Perkins County Canal Project is a cornerstone of that mission. Terracon Consultants, Inc. (Terracon) recognizes the strategic importance of this initiative in securing long-term water access for Nebraska's agricultural and natural resource sectors. We are pleased to submit this proposal in response to Solicitation Number RFP NDNR25-01, dated June 18, 2025, and welcome the opportunity to provide Contractual Services for a National Environmental Policy Act (NEPA) Environmental Impact Statement (EIS) that will help advance this critical project.

Terracon understands that the objective of this solicitation is to ensure NeDNR has adequate biological and cultural resources, environmental planning, and NEPA support. Terracon understands that NeDNR's Air Permits, Compliance & Monitoring group has the expertise and experience to provide Air Permits to NeDNR's Major Projects group with the air quality information needed for determining the candidacy of a site for a CC/CT project; however, Terracon understands that expanding the resource pool to include a consultant(s) specializing in air environmental services will reduce the risk of projects not meeting scheduled milestones. Terracon's professionals understand the implications of unanticipated schedule delays and the potential for subsequent impacts to project timelines, cost, and overall feasibility. Terracon's response to the NEPA environmental services SOW will demonstrate that Terracon employs over 1,000 environmental professionals of varying skill and experience levels. Of those professionals, Terracon has over 50 NEPA specialists with experience in a wide variety of environmental planning reviews and over 300 Environmental Planning specialists with experience in natural resources, cultural resources, and other NEPA-related studies.

Terracon's experienced environmental planning staff have completed NEPA evaluations for thousands of projects nationwide for agencies including the U.S. Department of Agriculture (USDA), the Federal Communications Commission (FCC), the Department of Defense (DOD), Federal Highway Administration (FHWA), and many more. Our project experience includes minor Categorical Exclusions (CEs) on small housing projects to Environmental Assessments (EAs) for renewable energy projects to complex Environmental Impact Statements (EISs) for major highway modification projects.

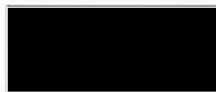
We look forward to supporting this important effort to strengthen Nebraska's agricultural industry and conserve its natural resources for future generations.

Sincerely,

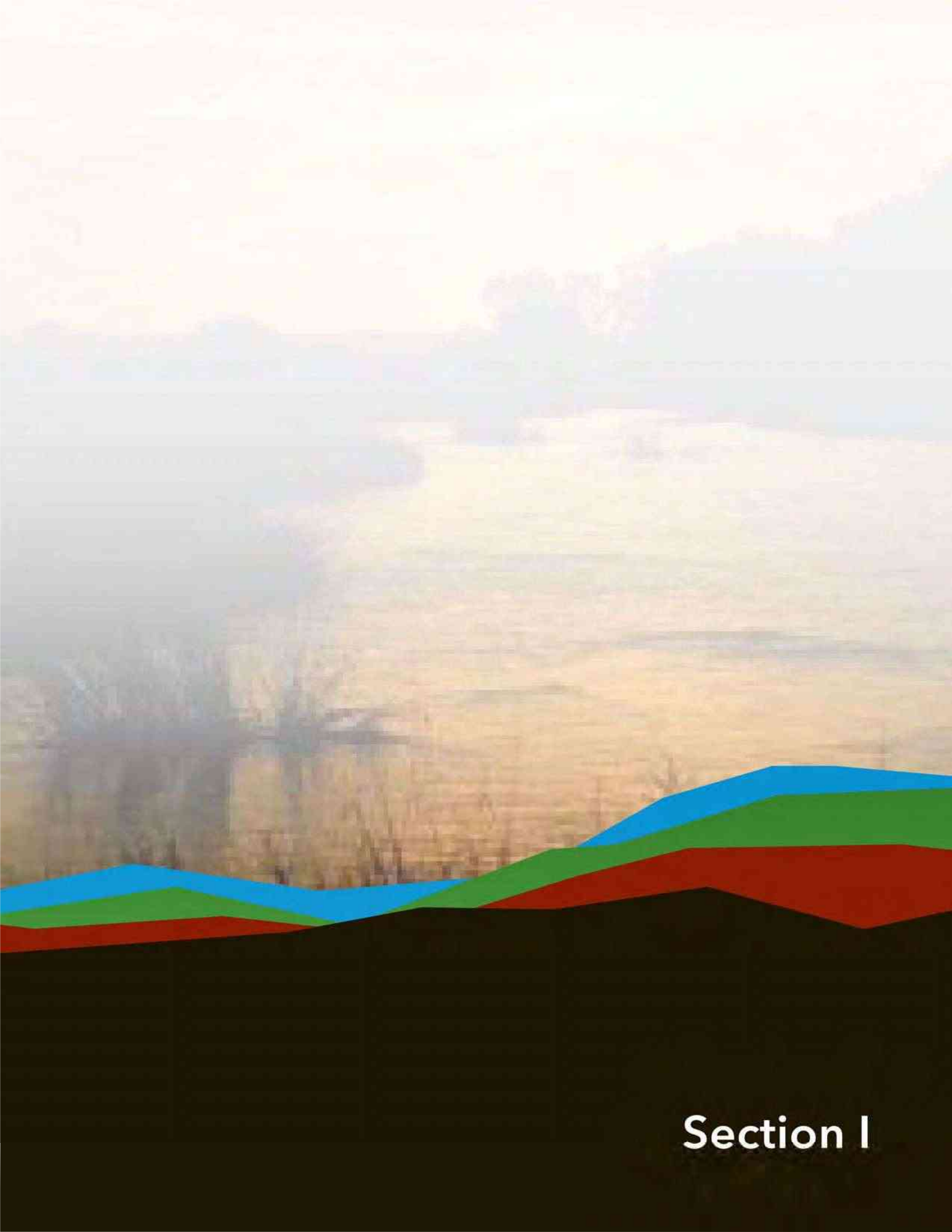
**Terracon**



Jean Ramer  
Senior Environmental Scientist



Jeremy Hanzlik  
National Director



Section I



## Form A

## Bidder Contact Sheet

## Request for Proposal NeDNR (NDNR25-01)

Form A should be completed and submitted with each response to this Request for Proposal. This is intended to provide the State with information on the bidder's name and address, and the specific person(s) who are responsible for preparation of the bidder's response.

Preparation of Response Contact Information	
Bidder Name:	Terracon COnsultants, Inc
Bidder Address:	15080 A Circle Omaha, NE 68144
Contact Person & Title:	Jean Ramer, Senior Environmental Scientist
E-mail Address:	jean.ramer@terracon.com
Telephone Number (Office):	402-330-2202
Telephone Number (Cellular):	[REDACTED]
Fax Number:	402-330-7606

Each bidder shall also designate a specific contact person who will be responsible for responding to the State if any clarifications of the bidder's response should become necessary. This will also be the person who the State contacts to set up a presentation/demonstration, if required.

Communication with the State Contact Information	
Bidder Name:	Terracon COnsultants, Inc
Bidder Address:	15080 A Circle Omaha, NE 68144
Contact Person & Title:	Jean Ramer, Senior Environmental Scientist
E-mail Address:	jean.ramer@terracon.com
Telephone Number (Office):	402-330-2202
Telephone Number (Cellular):	[REDACTED]
Fax Number:	402-330-7606



## REQUEST FOR PROPOSAL FOR CONTRACTUAL SERVICES FORM

### BIDDER MUST COMPLETE THE FOLLOWING

By signing this Request for Proposal for Contractual Services form, the bidder guarantees compliance with the procedures stated in this Request for Proposal and agrees to the terms and conditions unless otherwise indicated in writing, certifies that contractor maintains a drug free workplace, and certifies that bidder is not owned by the Chinese Communist Party.


Per Nebraska's Transparency in Government Procurement Act, Neb. Rev Stat § 73-603 DAS is required to collect statistical information regarding the number of contracts awarded to Nebraska Contractors. This information is for statistical purposes only and will not be considered for contract award purposes.

☒ NEBRASKA CONTRACTOR AFFIDAVIT: Bidder hereby attests that bidder is a Nebraska Contractor. "Nebraska Contractor" shall mean any bidder who has maintained a bona fide place of business and at least one employee within this state for at least the six (6) months immediately preceding the posting date of this Solicitation.

☐ I hereby certify that I am a Resident disabled veteran or business located in a designated enterprise zone in accordance with Neb. Rev. Stat. § 73-107 and wish to have preference, if applicable, considered in the award of this contract.

☐ I hereby certify that I am a blind person licensed by the Commission for the Blind & Visually Impaired in accordance with Neb. Rev. Stat. § 71-8611 and wish to have preference considered in the award of this contract.

### FORM MUST BE SIGNED MANUALLY IN INK OR BY DOCUSIGN

BIDDER:	Terracon COnsultants, Inc
COMPLETE ADDRESS:	15080 A Circle, Omaha, NE 68144
TELEPHONE NUMBER:	402-330-2202
FAX NUMBER:	402-330-7606
DATE:	July 18, 2025
SIGNATURE:	
TYPED NAME & TITLE OF SIGNER:	Jeremy Hanzlik, National Director





## Section II



## EXECUTIVE SUMMARY

Terracon understands that the NeDNR is seeking a qualified consultant to prepare an EIS in accordance with the National Environmental Policy Act (NEPA) under the direction of the United States Army Corps of Engineers (USACE). The need for the EIS is triggered by the USACE permit responsibilities under Section 404 of the Clean Water Act. The State of Nebraska is seeking approval from USACE for the construction of the Perkins County Canal (Canal). The physical features of the Canal will require construction of flow diversion and control structures, conveyances, and reservoirs that likely will require the discharge of dredged or fill material into the South Platte River, and its adjacent wetlands and tributaries. The Canal Project will allow water storage during the winter months to be used during the irrigation season. The purpose of the construction of the Canal is to ensure Nebraska receives its allotted quantity of water from the South Platte River, in accordance with the December 1923 South Platte River Compact between the States of Colorado and Nebraska. The construction of the Canal will allow Nebraska (as a senior water right holder) to receive irrigation return flows that are currently being studied for consumptive uses in Colorado.



Terracon also understands that the Canal Project will include:

- Project Meetings including scoping, cooperating agency, and public meetings
- Perform environmental evaluations to supplement existing survey information for Project area
- Preparation of Final Environmental Impact Statement
- Preparation of Draft Record of Decision

In order to receive a permit from the USACE, the alternative selected for approval must be the least environmentally damaging practicable alternative (LEDPA) according to the USACE's Section 404 (b)(1) Guidelines (Guidelines) which are the evaluation procedures used by USACE to ensure compliance with NEPA, Section 7 of the Endangered Species Act (ESA), and Section 106 of the National Historic Preservation Act (NHPA). Terracon will analyze various alternatives to assist NeDNR with selecting the LEDPA that will 1) achieve the Project's purpose and need, and 2) comply with the Section 404 (b) (1) Guidelines as a prerequisite for authorization from USACE.



## Section III



# CORPORATE OVERVIEW

## Bidder Identification & Information

### PURPOSE, VISION AND CORE VALUES

**We Are Caring Explorers** - Terracon's employee-owners bring their talents, passions, and curiosity to discover new and better solutions to overcome challenges. Our Purpose and Values guide us on our shared exploration and discovery journey.

### Terracon

Since our founding in 1965, Terracon has grown into a thriving, employee-owned, multidisciplinary engineering consulting firm. We deliver facilities, environmental, geotechnical, and materials services through our more than 7,000 curious minds, including engineers, scientists, architects, facilities experts, and field professionals. With over 180 locations nationwide, we focus on solving engineering and technical challenges. Our talented employee-owners provide on-time and real-time data-driven insights, creating an unmatched client experience that spans the lifecycle of any project from earth to sky.

Terracon consistently ranks as a top 20 design firm by Engineering News-Record. Our growth includes organic expansion, innovation, and the acquisition of over 60 specialized firms. We prioritize safety and support for our employees, clients, and communities.

We work as partners with our clients, with a personal commitment to their success, driven by an understanding of their project needs, goals, and priorities. Working collaboratively with partner firms in architecture, engineering, and construction, we provide clients in our key business sectors technical expertise, commitment to safety, unmatched service and personal accountability. We are proud of the positive relationships we have developed with our long-time clients, and we continue to form partnerships with new ones.

Corporate Office: Olathe, Kansas

Terracon's more than 180 offices provide services in all 50 states. We have offices in 45 states (all except: Alaska, Delaware, Hawaii, South Dakota, and Vermont)

State of Incorporation:

Celebrating 60 years of Adventure in 2025

Federal Tax ID Number:

100% EMPLOYEE OWNED

### Corporate Structure

#### TSVC, Inc.

Parent company of Terracon Consultants, Inc.

Federal Tax ID:

State of Incorporation: Delaware

10841 S. Ridgeview Road

Olathe, KS 66061

#### Terracon Consultants, Inc.

Parent Company to all Terracon subsidiaries

Federal Tax ID:

State of Incorporation: Delaware

10841 S. Ridgeview Road

Olathe, KS 66061

### Ownership Structure

Terracon Consultants, Inc. is owned by a parent company, TSVC, Inc. TSVC is owned ultimately by a 100 percent Terracon employee-owned holding company parent. No single employee owns more than five percent of overall company shares. The single largest shareholder is a Terracon employee ESOP program.



Explore with us

Explore with us

Explore with us







# CORPORATE OVERVIEW

## Office Locations

Terracon's Omaha office has provided Special Inspections, construction materials testing, geotechnical engineering, and environmental services in Omaha for 40 years!

We locally employ more than 100 professionals who operate out of one office which allows excellent collaboration between our professionals. Terracon's engineers, who prepared the geotechnical engineering report for this project are immediately accessible for as-needed consultation.

**Terracon Consultants, Inc.**  
15080 A Circle  
Omaha, NE 68144

By being responsive, resourceful, and reliable, we strive to exceed our clients' expectations for service, solutions, quality, and speed of delivery. Based on a deep understanding of our clients' needs, Terracon's commitment is centered around these key objectives.

## Licensure

All applicable and necessary licenses held by Terracon and by the individuals assigned to this contract will be maintained for the term of the project.

## Relationships with the State

Nebraska Department of Environment and Energy - Statewide Petroleum Assessment, Remediation, and Construction Contract

Nebraska Game & Parks - Branched Oak Project

Nebraska Department of Transportation - On-Call Hazmat Contract #VK-2433

University of Nebraska, Environmental Services

Various entities in coordination with the Nebraska Department of Environment and Energy - Title 200



## Contract Performance

**Terminated Services Statement:** As a large firm performing many projects, on very rare occasions we have terminated services on our projects prior to project completion. These situations usually arise from a failure to pay for those services, or from decisions to reduce our scope of service to the point where we are no longer comfortable, from a professional perspective, with the continuation of our services on a project. Again, we stress that we perform several thousand projects annually and these situations arise very rarely and only after thorough efforts to reasonably resolve these issues.

**Errors and Omissions Statement:** In the case of a problem on a project, Terracon makes every attempt to work proactively and cooperatively with our clients to try to identify the cause of

the issue. To the extent a problem is caused or impacted by an error or omission by Terracon, we also try to work proactively and cooperatively with our client to resolve those issues in a fair manner consistent with our contractual obligations, terms and conditions, hopefully avoiding protracted legal disputes in the process.



# CORPORATE OVERVIEW

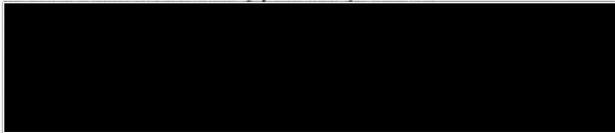
## Summary of Bidder's Corporate Experience Locations

The following projects demonstrate Terracon's capabilities and experience to execute the scope of environmental services requested:

- **Kingston Fossil Plant Retirement EIS, PM Misty Huddleston (prior to joining Terracon)**

Dr. Huddleston was the NEPA project manager for the consultant team supporting TVA's environmental impact assessment of TVA's proposed retirement and decommissioning and deconstruction of the Kingston Fossil Plant, Harriman, Roane County, Tennessee. Dr. Huddleston led a team of NEPA professionals in the development of the Kingston Fossil Plant Retirement environmental impact assessment, public involvement, ROD, and administrative record. TVA prepared an EIS to assess the Proposed Action of retiring and decommissioning the nine coal-fired units at Kingston Fossil Plant by the end of 2027 and constructing and operating replacement generation that can supply 1,500 MW of firm, dispatchable power. This highly complex project involved the USEPA and National Park Service as cooperating agencies and included a new 122-mile natural gas pipeline requiring coordination with the Federal Energy Regulatory Commission (FERC) and their contractors to incorporate information from the pipeline project into the larger TVA project at Kingston as both projects were related actions. The project also required transmission line upgrades along six existing transmission lines. Due to the magnitude and complexity of the project, there was significant public interest requiring robust public engagement and resulting in the project receiving over 2,000 stakeholder comments, with over 120 requiring substantive responses.

- a) Time of Project - 2021-2023
- b) Scheduled and actual completion dates
- c) Contractor's responsibilities - Lead preparer of EIS
- d) Client contact name, phone, email:



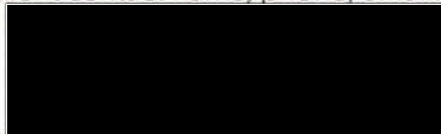
- e) Prime or sub? Prime worked with one sub and coordinated with TVA on development of EIS.



- **Kilgore Wind Energy Project, Kilgore, NE**

Jean is the lead preparer for ongoing USDA EA for a 14-turbine wind farm in north central Nebraska.

- a) Time of Project - August 2023 - ongoing
- b) Scheduled and actual completion dates - Scheduled completion October 2024, delays resulting from disruptions in federal funding due to January 2025 Executive Orders, and agency disruptions due to reductions in the work force.
- c) Contractor's responsibilities - Wetland Delineation, T&E species surveys, Cultural Resources Surveys and Section 106 consultation, NEPA EA, Biological Assessment and Section 7 ESA consultation, Phase I Environmental Site Assessment, Geotechnical exploration.
- d) Client contact name, phone, email:



- e) Prime or sub? Terracon is the prime environmental consultant. Project budget is approximately \$

# CORPORATE OVERVIEW

- **New Water Main and Wastewater Treatment Plant, Plattsmouth, NE**

Served as Senior Project Manager for permitting a new municipal water pipeline and new wastewater treatment plant in Plattsmouth, NE. Project involved a NEPA Environmental Assessment, Sec 7 ESA consultation, Bald Eagle Disturbance permit, wetland mitigation plan development and monitoring. Project is currently under construction and Ms. Ramer is leading the avian monitoring effort to maintain compliance with ESA, the Migratory Bird Treaty Act, and the Bald and Golden Eagles Protection Act.

- a) Time of Project - 2021 - 2025
- b) Scheduled and actual completion dates - Project was scheduled to be completed in 2023. Scope changes and agency requirements (FEMA) resulted in delays that Terracon assisted with minimizing. Seasonality of wetlands field work and species surveys also contributed to delays. Project is currently under construction.
- c) Contractor's responsibilities - NEPA EA, wetland delineation, cultural resources surveys, wetland permitting and mitigation plan development, T&E consultation and eagle nest take permit, ongoing piping plover presence/absence monitoring.
- d) Client contact name, phone, email:



- e) Prime or sub? Terracon was a subcontractor for the primary civil engineering design firm





# SUMMARY OF BIDDER'S PROPOSED PERSONNEL/MANAGEMENT APPROACH



## Project Executives

David Dickson  
Scott Kolodziej

## Project Managers/NEPA SMEs/Technical Editors

Primary - Misty Huddleston  
Secondary - Jean Ramer

## Quality Assurance/NEPA SMEs

Emily McMillan  
Jeremy Hanzlik  
Woo Smith

## Biological Resources/T&E

\* Jeff Jenkerson  
Anna Keenan  
Kelsey Retich  
Jessica Engelbart  
Seth Moyer  
Matthew Harbeck

## Water Resources/ Wetlands

\* Hannah Davis  
Noah Oswald  
Adam Corcoran  
Aric Larson  
Scott West  
Jean Mayne  
Amanda Herrit  
Jim Baxter  
John Rathgeber

## Cultural Resources/Visual

\* Ann Scott  
Bryce Lowry  
Kyle Coxen  
Heather Puckett  
Beth Valenzuela  
Heather Weymouth  
Woo Smith  
Emily McMillin

## Public Involvement

\* Chris Amy  
Jeremy Hanzlik  
Emily McMillin  
Misty Huddleston  
Jean Ramer  
David Dickson  
Jean Mayne

## GIS

\* Brad Reece  
Alexa Fernandez  
Juan Ortiz

\* Team Leader



# Misty Huddleston, Ph.D., FP-C

## SENIOR ENVIRONMENTAL SCIENTIST / PROJECT MANAGER

### PROFESSIONAL EXPERIENCE

Dr. Misty Huddleston is a Senior Environmental Scientist/Project Manager in Terracon's Nashville, Tennessee office. Dr. Huddleston has over 20 years of diverse professional experience supporting client projects involving environmental investigations, regulatory compliance, technical writing, and impact assessment under the National Environmental Policy Act (NEPA). With additional professional experience assistance clients with regulatory compliance under multiple states of the Clean Water Act including Sections 316(a) and (b), 401, 404, and 408. ). She has worked on projects for hydropower, natural gas pipelines, and liquefaction utilities, industrial developments, and assisted clients from local, state, and federal agencies (Environmental Protection Agency, Federal Highway Administration, Department of Energy, and Department of Defense). Dr. Huddleston has supported multiple FERC licensing, relicensing, and compliance efforts, including developing, managing, and implementing study plans; preparing mitigation and monitoring plans for federally protected species; and performing compliance monitoring and reporting activities. Dr. Huddleston's management philosophy is to cultivate effective communication, cooperation, and trust between all personnel, from consultants to clients to regulatory agencies to achieve project goals on time and within budget.

### TERRACON PROJECT EXPERIENCE

#### Environmental Planning and NEPA Compliance

##### Stockton I & II Solar Project, Stockton, Alabama – Confidential Client

As the Project Manager, Dr. Huddleston is leading multiple teams in the completion of site due diligence and cultural and biological surveys. The project involves completing a desktop constraints analysis with permitting matrix, Phase I ESA, desktop cultural resources assessment, field surveys and reporting for wetlands and streams and threatened and endangered species habitat assessments, and associated permitting needs.

##### Okolona Solar Farm Environmental Assessment – Confidential Client

As the Project Manager, Dr. Huddleston is leading the development of the Okolona Solar Farm (Project) Environmental Assessment for a proposed 145-MW solar farm on approximately 1,698 acres of land in Okolona, Mississippi. The proposed site is being developed under a Renewable Energy Power Purchase Agreement with the Tennessee Valley Authority (TVA), allowing TVA to purchase the power generated by the Project.

##### Due Diligence, Environmental Planning, Pre-NEPA Studies, and NEPA – Solar Developer, Texas

Dr. Huddleston is the Project Manager for four projects in Texas, three solar developments and one battery energy storage system development. Dr. Huddleston leads a team of scientists and regulatory compliance staff completing Phase I ESAs, Desktop Critical Environmental Issues Analysis (CEIA) and permitting matrices, and desktop assessments of wetlands and waters of the US, threatened and endangered species, and cultural resources for the proposed project sites. Dr. Huddleston is also leading the development of an environmental assessment for one of the solar projects under the USDA Rural Energy for America Program (REAP).

### PRE-TERRACON EXPERIENCE

#### Federal Environmental Planning and NEPA Compliance

##### Saulpaw Mill Dam Removal Project, Environmental Planning and NEPA Services, Draft Environmental Assessment – Tennessee Valley Authority (TVA)

Dr. Huddleston was the NEPA project manager for the consultant team supporting TVA's environmental assessment of the proposed removal of the Saulpaw Mill Dam, Calhoun, McMinn County, Tennessee. Misty lead the development of the draft environmental assessment and public involvement phases of the project.

##### John Sevier Dam Modification Project, Environmental Planning and NEPA Services,

##### Environmental Assessment and FONSI – Tennessee Valley Authority (TVA)

Dr. Huddleston was the NEPA project manager for the consultant team supporting TVA's environmental assessment of the proposed modification of the John Sevier Dam (JSF), Rogersville, Hawkins County, Tennessee. TVA evaluated three alternatives for proposed future modification of the JSF Dam spillway. Dr. Huddleston led the development of the environmental assessment, public involvement, FONSI, and administrative record.



### EDUCATION

B.S., University of Tennessee, Wildlife and Fisheries Science, Minor in Forestry, 2004

M.S., University of Tennessee, Wildlife and Fisheries Science, 2006

Ph.D., University of Tennessee, Forest Health and Invasion Ecology, 2011

### CERTIFICATIONS

Certified Fisheries Professional (FP-C)

### WORK HISTORY

Terracon Consultants, Inc.,  
Senior Scientist, Nashville, TN, March 2024 – Present

HDR Engineering, Inc., Associate,  
Environmental Planning and NEPA  
Lead, Knoxville, TN, November 2016 – March 2024

EA Engineering, Science, and  
Technology, PBC, Senior Scientist  
NEPA, FERC, and CWA 316b,  
Hunt Valley, MD, January 2016 – November 2010

Geosyntec Consultants, Senior Project  
Scientist, Kennesaw, GA, November 2013 – January 2016

AquaAeTer, Environmental Scientist,  
Brentwood, TN, June 2011 – November 2013

Univ. of Tennessee/USDA CSREES  
Grant, Instructional Design for Adult  
Learners for the Forest Health and  
Biofuels Initiative, Knoxville, TN, August 2008 – May 2011

Univ. of Tennessee, Research  
Assistant, Fisheries and Aquatic  
Ecology, Dr. Larry Wilson, July 2004 – July 2007

American Aquatics, Aquatic Ecology  
Laboratory Technician, May 2003 – July 2004



### **Kingston Fossil Plant Retirement, Environmental Planning and NEPA Services, Environmental Impact Statement (EIS) and Record of Decision (ROD) - TVA**

Dr. Huddleston was the NEPA project manager for the consultant team supporting TVA's environmental impact assessment of TVA's proposed retirement and decommissioning and deconstruction of the Kingston Fossil Plant, Harriman, Roane County, Tennessee. TVA prepared an EIS to assess the Proposed Action of retiring and decommissioning the nine coal-fired units at Kingston Fossil Plant by the end of 2027 and implement replacement generation that can supply 1,500 MW of firm, dispatchable power. This highly complex project involved the USEPA and National Park Service as a cooperating agencies, and included a new 122-mile natural gas pipeline and transmission line upgrades along six existing transmission lines. Dr. Huddleston led a team of NEPA professionals in the development of the Kingston Fossil Plant Retirement environmental impact assessment, public involvement, ROD, and administrative record.

### **Cumberland Fossil Plant Retirement, Environmental Planning and NEPA Services, EIS and ROD - TVA**

Dr. Huddleston was the NEPA project manager for the consultant team supporting TVA's environmental impact assessment of TVA's proposed retirement and decommissioning and deconstruction of the Cumberland Fossil Plant, Cumberland City, Stewart County, Tennessee. TVA prepared an EIS to assess the Proposed Action of retiring and decommissioning the two coal-fired units at Cumberland Fossil Plant (one unit by the end of 2026 and the second unit by the end of 2028) and implement replacement generation that can supply 1,450 MW of firm, dispatchable power by the time the first unit is retired in 2026. This highly complex project involved the USEPA as a cooperating agency, and included new gas pipeline and transmission line upgrade components. Dr. Huddleston led a team of NEPA professionals in the development of the Cumberland Fossil Plant Retirement environmental impact assessment, public involvement, ROD, and administrative record.

### **Fire Island National Seashore Breach Management Plan and EIS, New York - National Park Service**

Assisted with the development of the draft and final EIS documents and processing of large volumes of public comments received on the draft EIS. The EIS evaluated the potential environmental impacts of the US Army Corps of Engineers proposed Fire Island National Seashore Breach Management Plan which details the preferred approach for repairing and managing an open breach in the Fire Island National Seashore that resulted from Hurricane Sandy in 2012. Assisted team that developed the biological and physiological synthesis reports that support the EIS and ROD.

### **Golden Gate National Recreation Area Final Environmental Impact Statement with Preferred Alternative for Dog Management – National Park Service**

Assisted with the development of the draft and final EIS documents and processing of large volumes of public comments received on the draft EIS and Dog Management Plan. The EIS evaluated the potential environmental impacts of the National Park Service's proposed Dog Management Plan.

### **Environmental Assessment for Golf Course Water Source, BIEST (Base Integrated Environmental Support Tasks) Contract Support, US Air Force Civil Engineer Center Command, Robins Air Force Base, Macon, GA**

Dr. Huddleston assisted in the development of the Golf Course Water Source Environmental Assessment. This project was completed under the BIEST contract. The project evaluated potential sources for providing an independently owned source of water to provide greater flexibility in managing the demand and use of irrigation water at the golf course.

### **Federal Energy Regulatory Commission Licensing/Relicensing Project Experience Byllesby-Buck Hydroelectric Project, FERC Relicensing, AEP, Virginia**

As Study Program Lead and Lead Aquatic Biologist for the relicensing of the Byllesby/Buck Hydroelectric Project No. 2514 on the New River in Carroll County, Virginia, Dr. Huddleston led a team of environmental scientists in data collection, analyses, field studies, reporting, and client and agency coordination in support of the relicensing effort. Dr. Huddleston also led report development, and client and agency coordination in support of the entrainment and impingement assessment required for the Byllesby-Buck Project relicensing effort.

### **Racine Hydroelectric Project, FERC Relicensing, AEP, Virginia**

As Lead Aquatic Biologist, Dr. Huddleston led an assessment of fish susceptibility to entrainment and impingement mortality at the Racine Hydroelectric Project (No. 2570) at the U.S. Corps of Engineers' Racine Locks and Dam on the Ohio River in Meigs County, Ohio. Dr. Huddleston also led report development, and client and agency coordination in support of the entrainment and impingement assessment required for the Racine Project relicensing effort.

### **Cedar Cliff Hydroelectric Development (FERC), Inflow Design Flood and Spillway Upgrade Project, Duke Energy, North Carolina**

As Lead Aquatic Scientist, Dr. Huddleston developed preliminary analyses and environmental reports on water quality and fisheries for the spillway upgrade of the Cedar Cliff Hydroelectric Dam.

### **PUBLICATIONS**

Entrainment Sampling Gear Comparison Study: A Comparative Analysis of Performance of Two Gear Types for Characterizing Entrainment at Cooling Water Intake Structures. EPRI, Palo Alto, CA: 2018. 3002013680. Principal Investigator and Lead Author.

Huddleston, M.D. Demonstration of Efficacy of Curtain Wall Induced Entrainment Reduction. The 148th Annual Meeting of the American Fisheries Society, 2018 August 19-23.

Huddleston, M.D. 2011. Riparian Ecosystem Response to Hemlock Woolly Adelgid (*Adelges tsugae*) Induced Eastern Hemlock (*Tsuga canadensis*) Mortality in the Great Smoky Mountains National Park. Dissertation.

Huddleston, M.D. Movements and Habitat Preferences of the Juvenile Lake Sturgeon in the Upper Tennessee River System, USA. Master's Thesis. May 2006. Huddleston, M.D. and J.L. Wilson.



**Yadkin-Pee Dee Hydroelectric Project (FERC), Sturgeon Habitat Requirements for FERC Relicensing, Duke Energy, North Carolina**

Dr. Huddleston assisted in the collection of bathymetric data using ADCP technology to support habitat modeling efforts for federally protected sturgeon in the Yadkin-Pee Dee River in support of relicensing efforts for the Tillery and Blewett Falls Hydroelectric Developments.

**Niagara Hydroelectric Project (FERC), Bypass Habitat Evaluation, AEP, Virginia**

As Study Program Lead and Lead Aquatic Biologist, Dr. Huddleston led a team of environmental scientists supporting various aspects of data collection, analyses, field studies, reporting, and client and agency coordination in support of the relicensing of the Byllesby/Buck Hydroelectric Project (No. 2514) on the New River in Carroll County, Virginia. Key project contributions included the design of field data collection studies for benthic macroinvertebrates, fish, mussels, and crayfish. The project involved a specialty survey design and methods requiring close coordination with the USFWS and required both passive and active sampling techniques targeting different habitats for each life stage of the federally endangered Roanoke Logperch, which has since been recommended for delisting by USFWS, in part based on data collected for the Niagara project. Dr. Huddleston also led report development, and client and agency coordination in support of the entrainment and impingement assessment required for the Niagara Project relicensing effort.

**Tazewell Hybrid Energy Center Pumped Storage Project, Pre-Feasibility and Feasibility Studies, Dominion Virginia Power, Virginia**

As Lead Environmental Scientist, Dr. Huddleston developed field study plans for evaluations of aquatic organisms (fish and macroinvertebrates), water quality, and stream habitat located within the proposed project footprint. Dr. Huddleston also led a team of field biologists in data collection, analyses, and report development for these studies. She also led a team of biologists in the compilation, and synthesis of data, and report development, in support of project pre-feasibility and feasibility studies.

**FERC Licensing and Compliance Studies, Traditional Licensing Process (TLP), AMP Partners, Multiple Client Facilities on the Ohio River, West Virginia, Kentucky, and Ohio**

As Project Manager, developed study scope, costs, and designed and managed field study activities for multiple client hydroelectric facilities in various stages of FERC licensing, permitting, and compliance processes. Responsible for agency coordination and drafting responses to agency information requests. Key issues being addressed include threatened and endangered species, recreation facilities and access, and water quality.

**Mitigation and Monitoring Plans for FERC Licensing and Compliance, AMP Partners, Multiple Client Facilities on the Ohio River, West Virginia, Kentucky, and Ohio**

As Project Manager, lead studies required for compliance with License Articles associated with facility license authorizations. Developed Mitigation and Monitoring Plans for federally protected species, both aquatic and terrestrial, and performed compliance monitoring and reporting activities.

**FERC Licensing, Integrated Licensing Process (ILP), Wallace Dam Project, Georgia Power, Oconee River, Georgia**

As Task Leader, assisted with study plan development, resource studies, and license application preparation for relicensing of the 321-megawatt (MW) Wallace Dam Project, Georgia Power's largest hydropower facility. The project is a pumped storage facility that includes 19,050-acre Lake Oconee. Under FERC's ILP, assisted with preparation of the Pre-Application Document (PAD) in February 2015 and development of the Proposed Study Plan in July 2015. Key issues being addressed include shoreline erosion and sedimentation, water quality, sport fish habitat, invasive aquatic vegetation, protected species, recreation facilities and access, and cultural resources.

**Clean Water Act Section 316(a)&(b) Experience**

**Clean Water Act Section 316(b) Compliance for Fossil and Nuclear Stations, Duke Energy Midwest, Florida, and Carolinas Regions**

Project Manager currently leading the development and execution of compliance approach, field studies, and reporting for compliance with Clean Water Act Section 316(b) Rule. These regulations concern impingement and entrainment of fish and other aquatic species on cooling water intake structures at existing power plants and industrial and manufacturing facilities. Fourteen fossil stations and four nuclear stations located in multiple states are included in this program. The work associated with this comprehensive, multi-year project involves strategic planning, environmental studies, permitting and compliance, agency interactions, technology evaluations and engineering, economic evaluations, and peer review. Studies involve power plant operations, potential biological impacts, and social cost / social benefit economic evaluations. This program began in 2014 and will continue through 2022.

**NEPA References**



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## Jean L. Ramer

### Senior Scientist, Environmental Services

#### PROFESSIONAL EXPERIENCE

Ms. Ramer is a senior scientist/project manager within the environmental services department in Terracon's Omaha, Nebraska office. She has over 22 years of experience as a Regulatory and Natural Resources Specialist/Project Manager with the U.S. Army Corps of Engineers in Nebraska, Montana and Idaho, and over 11 years of experience as an environmental project manager / scientist with Terracon. Her expertise includes a thorough understanding of agency requirements pursuant to Section 404 Clean Water Act, Section 10 Rivers and Harbors Act, Endangered Species Act and Section 106 National Historic Preservation Act consultations. She currently manages a team of field scientist in the execution of proper procedures for delineating wetlands and other Waters of the United States including the changes resulting from the Sackett vs. EPA Supreme Court decision in May of 2023.

She currently serves as a subject matter expert for preparation and review of NEPA Categorical Exclusions and Environmental Assessments for telecom, public utilities, agriculture and renewable energy clients.

#### PROJECT EXPERIENCE

##### National Environmental Policy Act Experience

###### **Bureau of Indian Affairs – Crow Indian Reservation Transit Facility, Crow Agency, MT**

Was lead preparer for an EA assessing impacts of a proposed Transit Facility in Montana for the Crow Tribe's fleet of minibuses. The EA resulted in a Finding of No Significant Impact (FONSI), which Jean also prepared on behalf of the BIA. Services for the BIA included EA/FONSI preparation, public notification, and coordination with the Crow Tribe's Transit and Transportation departments.

###### **Bureau of Indian Affairs – Blackfeet Detention Center, Browning, MT**

Was lead preparer for a BIA EA on the Blackfeet Indian Reservation. Project involves ensuring compliance with NEPA for BIA funding of a new detention facility in Browning.

###### **Housing and Urban Development – Graceview Phase II, Council Bluffs, IA**

Was lead preparer of an EA for a HUD-funded affordable housing project in Iowa.

###### **Sandhills Energy, LLC – Solar Farms, Nebraska, Iowa and Colorado**

Was lead preparer of USDA EAs for a solar power generating station for the City of Alliance, Nebraska. FONSI was issued and funding was approved. Jean is lead preparer of ongoing EA's for two additional solar projects in Nebraska, one in Iowa and one in Colorado.

#### EDUCATION

Bachelor of Science,  
Geography/Environmental  
Science, University of Nebraska  
Omaha

#### REGISTRATIONS/ CERTIFICATIONS

National Highway Institute –  
NEPA and Transportation  
Decision-Making Training  
Classroom Course; 24 hours;  
August 20-22, 2024

Advanced NEPA Workshop –  
Online via National Assoc. of  
Environmental Professionals; 8  
hours; September 2023

Applying the NEPA Process –  
Classroom Course, Missoula,  
MT; 24 hours; August 2017

NEPA Cumulative Effects  
Analysis – Missoula, MT; 16  
hours; August 2017

#### AFFILIATIONS

National Association of Wetland  
Managers; May 2022

National Association of  
Environmental Professionals;  
May 2023

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## Jean L. Ramer (continued)

### **Cattlemen's Heritage Beef Processing Company – Council Bluffs, IA (2023)**

Lead preparer of an EA for a new beef processing facility. FONSI was issued and funding was approved by USDA.

### **New Water Main and Wastewater Treatment Facility, City of Plattsmouth, Nebraska (2021-2025)**

Served as Senior Project Manager for permitting a new municipal water pipeline and new wastewater treatment plant in Plattsmouth, NE. Project involved a NEPA Environmental Assessment, Sec 7 ESA consultation, Bald Eagle Disturbance permit, wetland mitigation plan development and monitoring. Project is currently under construction and Ms. Ramer is leading the avian monitoring effort to maintain compliance with ESA, the Migratory Bird Treaty Act, and the Bald and Golden Eagles Protection Act.

### **GoodLife Agriculture – Nebraska City, NE (2024)**

Lead preparer for ongoing USDA EA for an aquaculture facility.

### **BSH Kilgore – Kilgore Wind Energy Project, Kilgore, NE (2023-2025)**

Lead preparer for ongoing USDA EA for a wind farm in north central Nebraska.

### **Categorical Exclusions (Cat Ex's), NE (2024)**

Prepared two USDA Environmental Reports (ER) for fuel tank replacements for U-Stop convenience stores in Nebraska.

### **Parking Garage EA, Fargo, ND (2023)**

Prepared a VA Categorical Exclusion for construction of a parking garage in Fargo, ND for Veterans Affairs.

### **US Army Corps of Engineers, Section 408 Programmatic EAs, NE and IA**

Prepared two NEPA checklists for projects affecting Corps of Engineers levees in Nebraska and Iowa in accordance with Omaha District's Programmatic Environmental Assessment.

## **Oil and Gas**

### **Phillips 66 Pipeline, Idaho, Montana, Utah, Wyoming, Washington**

From 2013 to 2018, Jean served as an outsourced project manager for Phillips 66 Pipeline Billings Division and coordinated environmental permitting for pipeline maintenance and construction in Montana, Idaho, Utah, Wyoming and Washington. She was responsible for preparing and submitting environmental permit applications for repair and stabilization measures for pipeline construction and maintenance affecting waterways, floodplains and wetlands. These services included preparing Permit Applications and Storm Water Pollution Prevention Plans for over 60 drilled and open-cut river crossing projects, and coordination with state and federal agencies and Indian Tribes. She has successfully secured permits from state, local and federal agencies and Indian Tribes to ensure project schedules were adhered to.

### **BIA Categorical Exclusions, MT**

Prepared 12 Cat Ex documents for the Bureau of Indian Affairs on behalf of Phillips 66 for right-of-way renewals on trust lands within the Crow Indian Reservation in Montana.

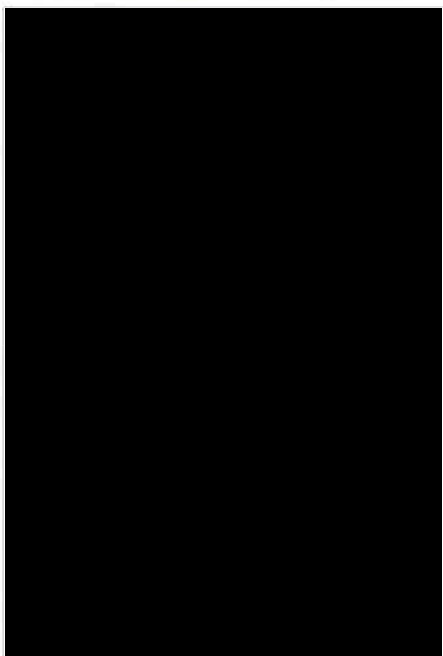
### **Phillips 66 - Little Bighorn River – Horizontal Directional Drill Environmental Assessment (EA)**

Prepared EA on behalf of Phillips 66 for the Bureau of Indian Affairs (BIA) for HDD pipeline crossing under Little Bighorn River on the Crow Indian Reservation in Montana. BIA approved through a FONSI and project proceeded on time.



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Jean L. Ramer (continued)





## Ann Scott, PhD, RPA

Subject Matter Expert | Cultural Resources & Heritage Surveys  
& Consultation

### PROFESSIONAL EXPERIENCE

Ann Scott serves as Program Manager for Environmental Planning in the Environmental Services Group in the greater Chicagoland region for Terracon. Dr. Scott has over 25 years of archaeological and environmental compliance experience and has worked for the National Park Service, the States of Wisconsin and Illinois, and private consulting firms in the Midwest and Texas. This work has involved all levels of Cultural Resources investigation including Phase I surveys, Phase II testing, and Phase III data recovery at both prehistoric and historic-period sites. Dr. Scott meets or exceeds qualifications for the *Secretary of the Interior's Standards and Guidelines* for Prehistoric and Historic Archaeology under 36 CFR 61. In addition, Dr. Scott serves as a Project Manager or senior team member on several multi-disciplinary projects involving wetlands, jurisdictional waters, endangered species and habitats, karst surveys, Phase I Environmental Site Assessments, and cultural resources including historic resources and archeological surveys. Dr. Scott also serves as part of the Quality Control Program at Terracon providing senior advisement, guidance, and mentoring to staff before and during project execution as well as performing reviews of deliverables to clients. Dr. Scott provides senior-level oversight on several federally funded solar projects taking place in the central United States.

### PROJECT EXPERIENCE

#### 13 Confidential Solar Projects – Illinois and Missouri

Serving as Portfolio Manager on each project, Dr. Scott provided project oversight, guidance, and project review for the Cultural Resources survey projects associated with 13 large proposed solar arrays in Missouri and Illinois. Because the project proponents are receiving funding from the USDA, compliance with National Environmental Policy Act (NEPA), Endangered Species Act, and Section 106 of the Nation Historic Preservation Act is required. In addition, the Osage Nation requested archaeological investigations be conducted on the project locations. Dr. Scott assists in agency coordination with SHPO, THPO, and USDA. Six cultural resources projects were completed by the team in 2023. Seven other projects are on-going and agency coordination is in progress.

#### Confidential Data Center Projects – Illinois and Wyoming

Serving as Quality Control for Cultural Resources tasks, Dr. Scott provided project oversight, guidance, and project review for the Cultural Resources survey projects associated with several data center projects across the US.

#### Chimney Hill Solar Project – Pontotoc County, Oklahoma

As Principal Investigator and Project Manager for the 115-acre solar project, Dr. Scott supervised the archeological survey, prepared the report, and coordinated with the OK SHPO and Oklahoma Archeological Survey on this due-diligence level report.



### EDUCATION

Doctor of Philosophy, Latin American Studies, The University of Texas at Austin, 2009

Master of Arts, Anthropology, Northern Illinois University, 1993

Bachelor of Science, Anthropology, Central Michigan University, 1988 (honors)

### REGISTRATIONS

2009, Register of Professional Archeologists, No. 16573

### TRAINING

Section 106 Training by ACHP-2011; 2023 Training by SRI

### CERTIFICATIONS

TXDOT Precertified 2.10.1 Archeology

### AFFILIATIONS

Register of Professional Archeologists

American Cultural Resources Association (Board member: 2019 to 2023; 2010-2015); Society for American Archeology Council of Texas Archeologists

Colorado Council of Professional Archeologists

Texas Archeological Society Fellow, National Speleological Society Board, Texas Speleological Survey

### WORK HISTORY

Terracon, Environmental Planning Program Manager, 2016 -present

J & L Consulting, Senior Principal Investigator; Environmental Specialist, 2015-2016

ACI consulting, Director of Cultural Resources, 2010-2015

HRA Gray and Pape, Archeologist, 2009

The University of Texas at Austin, Graduate Student/Research Assistant, 1999-2009



## Ann Scott, PhD, RPA (continued)

### **Roseland Solar Project – Falls County, Texas**

Serving as Portfolio Manager, Dr. Scott provided project oversight, guidance, and project review for the Natural and Cultural Resources assessment and permitting of 5,500-acre solar farm. Studies included: conducting WOTUS delineation/determination and protected species habitat assessment, Cultural Resources Surveys, and Phase I Environmental Site Assessment. Given the large project area, Terracon used an in-house GIS procedure that uses readily available geographic data to visualize areas where wetlands and other aquatic features are more likely to occur on large sites. Also acquired high resolution terrain data to assist in the delineation of streams and lakes. GIS assisted in the execution of the cultural resources survey.

### **Sangamon Solar Project, Sangamon County, Illinois**

Providing oversight on cultural resources Phase I survey for this 865-acre solar project. Challenges include avoiding archeological site and cemetery issues, which were done by the client and the project was approved by SHPO.

### **Upshur Solar Projects, Upshur County, Texas**

Assisted in the Phase I Archeological Survey and provided guidance and oversight for the evaluation of a previously recorded Titus-Phase Caddo archeological site located within the project boundary of this 46-acre proposed solar project. In collaboration with the client, it was decided that a different location should be explored given the sensitive nature of the archeological resources discovered and known in the project area. A second location was chosen and portions evaluated for cultural resources, where none were discovered.

### **Hopkins Solar Project, Hopkins County, Texas**

Acting as a senior advisor, provided oversight for the reconnaissance survey of the 1,895-acre project area where several archeological sites were documented and avoided by the project plans.

### **Ringling Solar Project, Carter County, Oklahoma**

Serving in an oversight role offering guidance on this 6,447-acre solar project for the cultural resources reconnaissance survey of high probability areas.

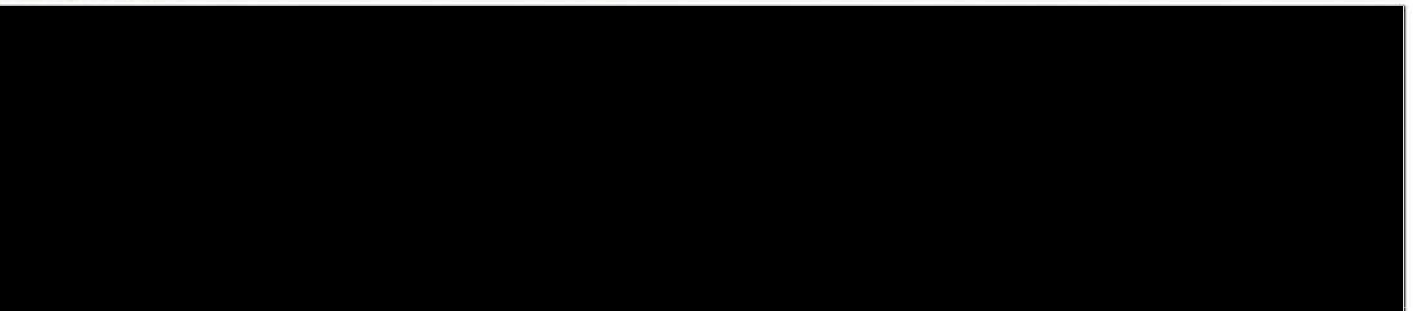
### **Tomato Substation Project, Callahan County, Texas**

Assisted in the Phase I Archeological Survey and provided guidance and oversight for the broad mechanical scraping near Callahan City Cemetery as part of the 10-acre project for a new substation for energy transmission.

### **WETT (Wind Energy Transmission of Texas) Transmission Line Survey – Texas\***

Dr. Scott served as Principal Investigator for a three-part, 375-mile transmission line project in 12 counties in west Texas. Approximately 100 sites, from Early Archaic to Late Prehistoric campsites, lithic procurement areas, and other site types to historic sites dating from the late 19th century to the mid 20th century were recorded. The project also required Phase II testing for National Register eligibility of several sites. Dr. Scott supervised about 10 team members on the project. Texas SHPO concurrence was received on all four reports and the project was approved for construction.

## REFERENCES





## Hannah Davis, M.S.

### Senior Staff Ecologist

#### PROFESSIONAL EXPERIENCE

Hannah is a Senior Staff Ecologist in the Denver Office with 6 years of relative experience in the environmental consulting field. Project duties include wetland delineations, Section 404 permitting, threatened and endangered species habitat assessments and surveys, Section 7 consultation, state waters guidance, stream buffer variance applications, guidance for mitigation banking, Section 404 compliance inspections, and National Environmental Policy Act (NEPA) documentation and reviews. She is a field lead and project manager responsible for site reconnaissance, site research, natural resource interpretation, field activities, regulatory research, and technical report writing for various ecological projects.

Experience includes jurisdictional waters development planning and guidance throughout the United States, including coordination with United States Army Corps of Engineers (USACE) districts in Colorado, Utah, Wyoming, Arizona, New Mexico, Georgia, Alabama, Louisiana, and Mississippi. Additionally, Hannah has performed species surveys to assess habitat and presence for threatened and endangered species, including the migratory birds, raptor nests, northern long-eared bat, Indiana bat, gray bat, gopher tortoise, eastern indigo snake, red-cockaded woodpecker, and various plant species. Historically, Hannah has conducted paleontological resources surveys, resource monitoring, sample collection and identification, museum curation, and technical report preparation for a transmission line project in Colorado, Utah, and Wyoming.

#### PROJECT EXPERIENCE

##### RENEWABLE ENERGY

###### **Proposed Solar Power Plants and Battery Energy Storage System (BESS) Sites – Ecology**

Field Lead and Project Manager for ecology services involved with constructing solar farms throughout the country, including projects in Colorado, Montana, New Mexico, Georgia, Alabama, Mississippi, Louisiana, and Michigan. These projects generally required a wetland delineation, threatened and endangered species survey, migratory bird surveys, Section 404 permitting (as applicable), and preparation of species conservation plans. Land area studies included proposed solar farm footprint, transmission corridors, and substation locations for interconnection. Project Manager for subsequent reports, as well as desktop constraints analysis and critical environmental issue assessment reports.

###### **Proposed Solar Power Plant Sites – NEPA**

Project Manager for sections of an Environmental Assessment (EA) with the Western Area Power Association (WAPA) related to a 1,100-acre solar site in Fairview, Montana. Primary EA sections consisted of water resources, federally listed threatened and endangered species, state species of concern, fish and wildlife, and vegetation. The EA sections contained an analysis of the affected environment, the environmental consequences of the proposed actions, and the environmental consequences of a no-action alternative.



#### EDUCATION

Master of Science, Geology,  
Northern Arizona University,  
2019

Bachelor of Science, Geology and  
Environmental Sciences,  
University of Tennessee, 2016

#### TRAINING

40 Hour Basic Wetland  
Delineation Training Consultation  
– Duncan & Duncan, 2022

Wetland Permitting Training –  
Richard Chinn Environmental  
Training, Inc., 2023

#### WORK HISTORY

Terracon Consultants, Inc.,  
Senior Staff Ecologist,  
July 2021 – Present

Environmental Planning Group, a  
Terracon Company,  
Geologist/Paleontologist,  
July 2019 – July 2021



## Hannah Davis, M.S. (continued)

### TELECOMMUNICATIONS

#### **Proposed Telecommunications Tower Sites – Ecology**

Project Manager for numerous proposed telecommunications tower sites across the southeast. Ecology services include wetland delineation and permitting, state waters guidance, northern long-eared, Indiana, and gray bat surveys, and protected species habitat assessments. Agency coordination for mitigation involved ecological impacts on numerous sites where avoidance is not achievable. Has completed nest surveys and monitoring projects for protected bird species at tower sites throughout the United States. Site analysis for species includes osprey, hawk species, bald eagle, and numerous migratory songbirds.

#### **Proposed Telecommunications Tower Sites – NEPA**

Project Manager for numerous proposed telecommunications tower sites across the southeast, including Alabama, Georgia, North Carolina, South Carolina, and Tennessee. NEPA responsibilities include contact with federal, state, and local government agencies, coordination of Cultural Resource Assessment for historical property evaluation, evaluating the presence/absence of potential effects to wetlands, floodplains, federal land, Native American religious sites, threatened and endangered species and critical habitats, and report writing. Agency consultation experience includes Section 7 consultation with the United States Fish and Wildlife (USFWS) agency, state wildlife/natural resource agency, and federally recognized American Indian Tribes.

### COMMERCIAL

#### **Proposed Data Center Sites – Ecology**

Field Lead for ecology services involved with the construction of proposed data centers primarily in the states of Wyoming, Arizona, and Georgia. These projects required a wetland delineation, threatened and endangered species survey, migratory bird surveys, historic tree surveys, noxious weed surveys, and Section 404 permitting (as applicable). Georgia state variance approvals for water impacts and buffer zones were also performed in certain cases. Assisted with SDD and permitting compliance portions of numerous projects. Conducted Section 404 permit compliance site inspections and prepared compliance/non-compliance letters for pre-construction, during construction, and post-construction activities.

#### **Proposed Commercial Sites – Ecology**

Field Lead and Project Manager for ecology services involved with the construction of various commercial projects throughout the southeast and Colorado. These projects required a wetland delineation, threatened and endangered species survey, migratory bird surveys, and Section 404 permitting (as applicable). Georgia state variance approvals for water impacts and buffer zones were also performed in certain cases.

### TRANSMISSION LINE

#### **Transmission Line Project – Ecology**

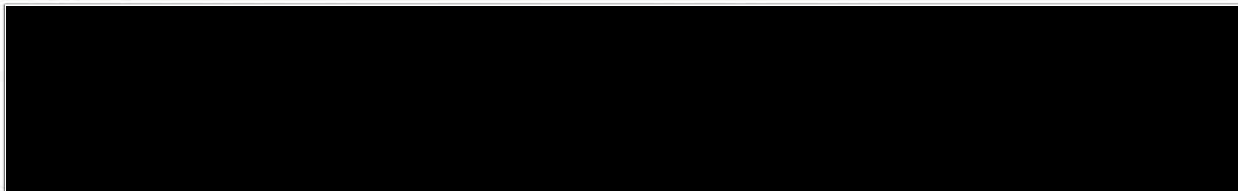
Project Manager for ecology services involved in rebuilding a transmission line. The project required a full wetland delineation and threatened and endangered species habitat assessment.

#### **Transmission Line Project – Paleontology**

Field Lead for paleontological resource services for a 370-mile transmission line corridor for the Energy Gateway South and Energy Gateway West Transmission Line Projects in Colorado, Utah, and Wyoming. Conducted paleontological resources surveys, resources monitoring during geotechnical drilling, sample collection and identification, museum curation, and technical report preparation. This work was performed for the Bureau of Land Management (BLM), U.S. Forest Service (USFS), National Park Service, as well as other state and local agencies.



## References



## David M. Dickson

### Principal/Manager Regional Services

#### PROFESSIONAL EXPERIENCE

Mr. Dickson has over 34 years of experience as a natural resource professional, specializing in the assessment of ecosystems and environmental permitting. He is a Principal with Terracon and serves as the Environmental Planning (EP) lead for the North Central Division (encompassing eleven states from Arkansas and Oklahoma to Minnesota and the Dakotas).

His expertise includes assessments of land, wetland delineations, natural resources permitting (i.e., Section 404, Section 401, state and local), NEPA studies and reporting, environmental analysis and due diligence, compliance monitoring, wetland mitigation, identification of critical issues, wildlife surveys, listed species permitting, and expert witness testimony. Projects such as power generation and transmission, natural gas and oil pipelines and facilities, LNG facilities, rail corridors, roadways, wetland mitigation banks, and commercial development encompass his experience.

He serves as an authorized project reviewer (APR) or project executive on key EP projects across the Company and leads our EP PG&T committee. Mr. Dickson previously built and led the EP practice for the Florida Division and recently served as the Pittsburgh office manager.

#### PROJECT EXPERIENCE

##### **Greens Creek Mitigation Bank – Clay County, FL**

Project manager and lead ecologist for a wetland mitigation bank. The project area encompasses over 4,200 acres of ecologically diverse land,  $\pm 4.5$  miles of Greens Creek and  $\pm 9.0$  miles of tributaries. The scope of services included the design, permitting with the state of Florida and United States Army Corps of Engineers (USACE), development of success criteria, and assessing the habitats. Activities proposed included thinning of pines, planting long-leaf pines in upland areas, maintenance of nuisance and exotic species, and re-introduction of fire management. Economic considerations were evaluated against the environmental lift for each proposed activity. The final credit yield was negotiated with the regulatory agencies.

##### **Mitigation Bank Evaluation – Freeport, TX**

Project manager and lead ecologist evaluating multiple parcels for a mitigation bank in or near Freeport, Texas. The scope of services included conducting a preliminary field review of the selected parcels identified by the client. The review included an initial evaluation of connectivity to regionally significant resources, restoration/enhancement activities to generate lift (credits), wildlife utilization and habitat, competition (i.e., other mitigation banks in the same basin), and potential demand. The collected data was incorporated into an on-line web viewer.

##### **Mitigation Bank Evaluation – Florida Parishes, LA**

Project Manager and lead ecologist for evaluation of parcels in the Florida Parishes (East Baton Rouge, East Feliciana, Livingston, St. Helena, St. Tammany, Tangipahoa, Washington, and West Feliciana).



#### EDUCATION

Bachelor of Science, Interdisciplinary in Social Sciences (Urban Planning & Geography), Florida State University, 1991

#### CERTIFICATIONS

American Safety & Health Institute, CPR, AED, and Basic First Aid

#### PROFESSIONAL TRAINING

FERC Environmental Review and Compliance for Natural Gas, 2013

Master Tree Farmer, 2004

Master Wildlifer, 2003

#### AFFILIATIONS

Florida Energy Pipeline Association

National Association of Environmental Professionals

Appalachian Pipeliners Association

Gas Processors Association Midstream – Appalachian Basin

#### PRESENTATIONS AND PUBLISHED ARTICLES

"From Degraded Pastureland to Forested Wetland" Land and Water, March/April 2006

2024 & 2025 SGA TPEC – "So I this project" Presentation (Parts 1 and 2) - challenges in pricing environmental services



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## David M. Dickson (continued)

The scope of services consisted of a preliminary desktop review of parcels identified as potential mitigation bank sites in the subject counties. The review included an initial evaluation of connectivity to regionally significant resources, competition (i.e., other mitigation banks in the same basin), potential activities, habitats present, and potential demand. The sites were ranked and compared in a matrix for the client to select the areas for further consideration.

### **Natural Resources Assessments – Orleans, Jefferson, and St. Bernard Parishes, LA**

Lead Ecologist for a project to evaluate client-owned parcels in Orleans, Jefferson, and St. Bernard Parishes for potential utilization as conservation areas, wildlife management areas, recreational areas, or mitigation banks. The scope consisted of conducting site visits to evaluate resources present, potential enhancement and restoration opportunities, or other property uses. Additional evaluation criteria included potential benefits, potential restrictions, next steps and processes, potential costs and incomes, evaluation of credits, competition, and potential demand. The sites and potential uses were ranked and compared in a matrix for the client to select the highest and best use for each property.

### **Wetlands and Streams Monitoring Projects – Southwestern PA**

Senior ecologist and APR for multiple stream relocation and restoration and associated created wetlands post construction monitoring for PennDOT. The monitoring projects are part of the requirements for permits associated with multiple roadway and bridge projects in southwestern Pennsylvania.

### **Due Diligence Assessments – FL, LA, and MS**

Project manager and lead ecologist for five industrial sites in Florida, Mississippi, and Louisiana. The scope of services included a desktop assessment and field visit to identify potential wetlands, listed species, and contamination concerns. Each property was evaluated for potential redevelopment or use as mitigation, including necessary actions to clean up the site, potential permitting requirements, and an assessment of the potential mitigation value at each site such as credits and potential demand. The sites and potential uses were ranked and compared in a matrix for the client to select the highest and best use for each property.

### **Natural Resources Assessment – Cook County, IL**

Senior technical advisor and APR for a natural resources assessment project associated with a light industrial project in Cook County. The scope included reviews for wetlands and WOTUS, listed species, and protected tree species.

### **Proposed Wetland Mitigation Bank – Leon and Gadsden Counties, FL**

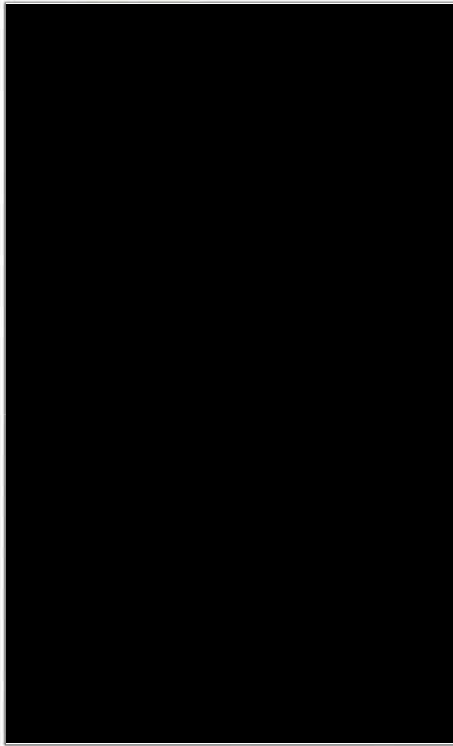
Project manager and lead ecologist for the evaluation of  $\pm 2,500$  acres located in Leon and Gadsden Counties for a potential mitigation bank. The project entailed evaluating the land for enhancement and restoration activities; assessing the land to identify the best configuration; determining the potential credit yield and value; and coordination with the state and federal regulatory agencies on a preliminary basis. Economic considerations were compared against the environmental lift for each proposed activity. The sites and potential activities were ranked and compared in a matrix for the client to select areas for consideration. Ultimately,  $\pm 1,200$  acres were selected for further review based on restoration potential, connectivity to other resources, and ecological value.

### **St. Johns Mitigation Bank – St. Johns County, FL**

Project manager and lead ecologist for the evaluation of the proposed phasing and hydrologic restoration activities for a mitigation bank during the initial planning analysis. Proposed ditch blocks/weirs and timber thinning were analyzed through a functions and values assessment to determine the potential functional lift. The phases were ranked and compared to determine the best configuration to provide credit releases on regular intervals while maximizing the economic return on value within each timber stand due to the mixed age of the multiple stands on site. These steps required oversight of the engineer and evaluation of their preliminary hydrologic studies.

David Dickson (continued)

## REFERENCES





## Emily McMillin, EP, AICP

### NEPA/Environmental Planning Manager, Principal

#### PROFESSIONAL EXPERIENCE

Ms. McMillin is a Principal, Environmental Professional (EP), AICP environmental planner, and the National Environmental Policy Act (NEPA) Manager in the Atlanta, Georgia office. Ms. McMillin has over 18 years of professional experience conducting National Environmental Policy Act (NEPA) reviews, Environmental Assessments (EAs), Phase I Environmental Site Assessments (ESAs), Risk Hazard Assessments (RHAs), environmental permitting evaluations, and asbestos, lead-paint, and mold assessments associated with commercial, residential, and industrial properties throughout the United States. Ms. McMillin oversees a group of natural and cultural resource specialists and manages several of Terracon's largest accounts. Her relevant project experience is outlined below:

#### NEPA/ENVIRONMENTAL SERVICES: FCC TELECOMMUNICATIONS

Ms. McMillin has worked on thousands of Phase I ESA and NEPA evaluations for telecommunications projects in accordance with FCC NEPA Regulations (Title 47 of the Code of Federal Regulations (CFR), Part 1, Subpart I, rule section 1.1307(a)(4), as amended by the Nationwide Programmatic Agreement for the Collocation of Wireless Antennas (47 CFR Part 1, Appendix B) and the Nationwide Programmatic Agreement Regarding the Section 106 National Historic Preservation Act Review Process (47 CFR Part 1, Appendix C). NEPA scopes included presence/absence of wetlands, floodplains, federal/tribal land, T&E species, critical habitat, historic resources, and archaeological resources impacted by the proposed tower. Agency consultations included Section 7 consultation with the United States Fish and Wildlife (USFWS) agency, state wildlife/natural resource agency (when applicable), the State Historic Preservation offices (SHPO), and numerous tribes as identified through the FCC Tribal Consultation Notification System (TCNS).

#### NEPA EA – NATIONAL TELECOMMUNICATIONS AND INFORMATION ADMINISTRATION (NTIA)

##### **Proposed 786-Mile Fiber Route, Lenoir County, North Carolina, 2023**

Ms. McMillin managed the preparation of an EA conducted in accordance with the Department of Commerce NTIA NEPA regulations for a 786-mile proposed fiber installation in Lenoir County, NC. Resource categories evaluated included air, noise, water resources, biological resources, cultural resources, socioeconomic resources and environmental justice, land use, infrastructure, environmental health and safety, and cumulative impacts. The project is currently in agency review with an anticipated FONSI.

#### NEPA EA – TENNESSEE VALLEY AUTHORITY (TVA)

##### **Proposed Okolona Solar Farm, 2024-2025**

Ms. McMillin managed the preparation of an EA conducted in accordance with NEPA and TVA's procedures for implementing NEPA for a proposed 145 megawatt (MW) solar farm and battery energy storage system (BESS) on approximately 1,637 acres of rural agricultural and residential land. The EA evaluation included aquatics, terrestrial zoology, managed and natural areas, wetlands, floodplains, parks and recreation, surface water and soil erosion,



#### EDUCATION

Master of Arts, Geography, Ohio University, Specializing in Environmental Planning and Impact Assessment, 2006  
Bachelor of Science, Environmental Geography, Ohio University, 2004

#### TRAINING / CERTIFICATIONS

Research Assistant for Sediment TMDL for the Upper Basin of the Raccoon Creek at ILGARD, Athens, Ohio, 2004 to 2005

Qualitative Habitat Evaluation Index Training and Fish Count, EPA, 2005

AHERA Certified Asbestos Inspector, 2007 through 2016

DCA/HUD Environmental Workshop, 2011

NEPA: Writing the perfect EA/FONSI or EIS, NWETC, 2012

Reviewing NEPA documents, Shipley Group, 2013

NEPA Cumulative Effects Analysis, Shipley Group, 2013

NEPA Compliance and Cultural Resources; National Preservation Institute, 2014

38 Hour Army Corps of Engineers Wetland Delineation Training, 2015

Effective NEPA Analysis and Documentation for Transportation Projects Adrian Collaborative, 2016

Assessing Indirect and Cumulative effects, Adrian Collaborative, 2016

American Institute of Certified Planners (AICP) Certification, 2021

#### PRESENTATIONS AND PUBLISHED ARTICLES

Regulatory Changes to ASR Filing, TriState Wireless Show, 2013  
Environmental Impact to FCC/FAA Regulations for Utility Structures, Utilisite Conference 2013  
Environmental Regulatory Panelist South Wireless Summit 2014, 2015, 2016, and 2019, 2023  
Tennessee Valley Solar, 2023

Improving NEPA Timelines, Above Ground Level (AGL) Magazine, Regulatory edition 2016



## Emily Kosmalski, EP, AICP (continued)

transportation, air quality, noise, geology/groundwater, soil & hazardous waste/hazardous materials, and visual resources. The EA concluded with a FONSI, utilizing the mitigation measures as outlined in a Memorandum of Agreement (MOA).

### **Proposed Ocoee 1 Hydro Consolidation, 2019-2021**

Ms. McMillin managed the preparation of an EA conducted in accordance with NEPA and TVA's procedures for implementing NEPA. The EA evaluated the consolidation of people and functions from the three existing O1H administrative houses into a new administration building and disposal of the vacated buildings. The EA evaluation included aquatics, terrestrial zoology, managed and natural areas, wetlands, floodplains, parks and recreation, surface water and soil erosion, transportation, air quality, noise, geology/groundwater, soil & hazardous waste/hazardous materials, and visual resources. The report was evaluated and reviewed by the lead agency and posted for public comment. The EA concluded with a FONSI, utilizing the mitigation measures as outlined in a MOA.

### NEPA EA – NAVY

#### **Proposed Land Exchange (Exchange of an Existing Navy Outlying Landing Field [NOLF] with a Proposed NOLF). Client: Department of Navy and Escambia County, Florida. 2014-2017.**

Ms. McMillin prepared an EA in accordance with the Navy regulations for implementing NEPA (32 CFR part 775), which provides Navy policy for implementing the procedural provisions of NEPA (40 Code of Federal Regulations [CFR] 1500-1508). The EA evaluates potential environmental consequences associated with carrying out the action alternatives and the no action alternative, as well as considerations for various alternative locations for the land exchange. The following resource areas are addressed in this EA: air quality, water resources, geological resources, cultural resources, biological resources, land use planning, visual resources, airspace, noise, infrastructure, transportation, public health and safety, hazardous materials and wastes, socioeconomic, and environmental justice. The EA report included coordination with additional specialists, tribes, special interest groups, and other federal agencies. The report was evaluated and reviewed by the lead agency and then posted for public comment. The EA concluded with a FONSI.

### NEPA EA – AIR FORCE

#### **Proposed Telecommunications Tower, Arnold Air Force Base, Tennessee, 2016-2017.**

Ms. McMillin co-managed the preparation of an EA conducted in accordance with NEPA, the CEQ for implementing the procedural provisions of NEPA, and the Air Force Environmental Impact Analysis Process (EIAP) Regulations 32 CFR Part 989. The EA evaluation included, but was not limited to, land use and zoning, transportation and circulation, hazardous materials and wastes, socioeconomic issues, air quality, noise, public services and utilities, water resources/quality, geological resources, biological resources, cultural resources, and safety. The report was evaluated and reviewed by the lead agency and then posted for public comment. The EA concluded with a FONSI.

### NEPA EAs (2) –UNITED STATES DEPARTMENT OF AGRICULTURE (USDA) RURAL UTILITY SERVICE (RUS) AND VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY PERMIT BY RULE

#### **USDA-RUS Funded Proposed Clarke Solar Farm; Clarke County, Virginia. Client: Hecate Energy LLC, 2016. USDA-RUS Funded Proposed Cherrydale Solar Farm; Northampton County, Virginia. Client: Hecate Energy LLC, 2016.**

Ms. McMillin has prepared two EAs in accordance with RUS Bulletin 1794A-601, Guide for Preparing an Environmental Report for Electric Projects Requiring an Environmental Assessment. Items evaluated per the NEPA analysis included, but were not limited to, land use planning, floodplains, wetlands and water quality, cultural resources, T&E species, wildlife resources, air quality, aesthetics, transportation, noise, safety, and socioeconomic. These projects added land use planning components such as coastal consistency determinations, farmland conversion impact rating in accordance with USDA requirements, local permit coordination, agency consultations, and public involvement. The EA reports all included coordination with numerous additional specialists, tribes, and government agencies. All reports concluded with a FONSI. Terracon additionally



## Emily Kosmalski, EP, AICP (continued)

coordinated the Virginia DEQ Permit by Rule requirements for both solar projects, which included similar NEPA evaluations on a state level.

### NEPA EAs (3) – DEPARTMENT OF VETERAN AFFAIRS (VA)

**Department of Veteran Affairs (VA) Proposed Outpatient Clinic Property Lease/Building Rehabilitation; Decatur, Georgia. Client: Carpenter Robins Commercial Real Estate (CR/CRE), 2012 – 2013. Department of Veteran Affairs (VA) Proposed Parking Lot; Fresno, California. Client: CB Richard Ellis (CBRE), 2015 – 2016. Department of Veteran Affairs (VA) Proposed Parking Lot; Sacramento, California. Client: CBRE, 2015 – 2016.**

Ms. McMillin has prepared multiple EAs for the VA in accordance with 40 CFR Parts 1500-1508, VA Implementing Regulations, Environmental Effects of VA Actions, 38 CFR Part 26 (51 FR 37182, Oct. 20, 1986), and NEPA Interim Guidance for Projects PG-18-17. Items evaluated per the NEPA analysis included, but were not limited to, land use planning, aesthetics; air quality; cultural resources; geology and soils; hydrology and water quality; wildlife and habitat; noise; land use; floodplains, wetlands, and coastal management; socio-economic/environmental justice issues, community service; solid and hazardous materials; transportation and parking, utilities, cumulative impacts; and potential for generating substantial controversy. The EA reports all included coordination with numerous additional specialists, tribes, and government agencies. All reports concluded with a FONSI.

### NEPA EA –USDA AGRICULTURAL RESEARCH SERVICE (ARS)

**USDA ARS Proposed Property Disposal; Decatur, Georgia. Client: Clemson University. 2012 – 2013.**

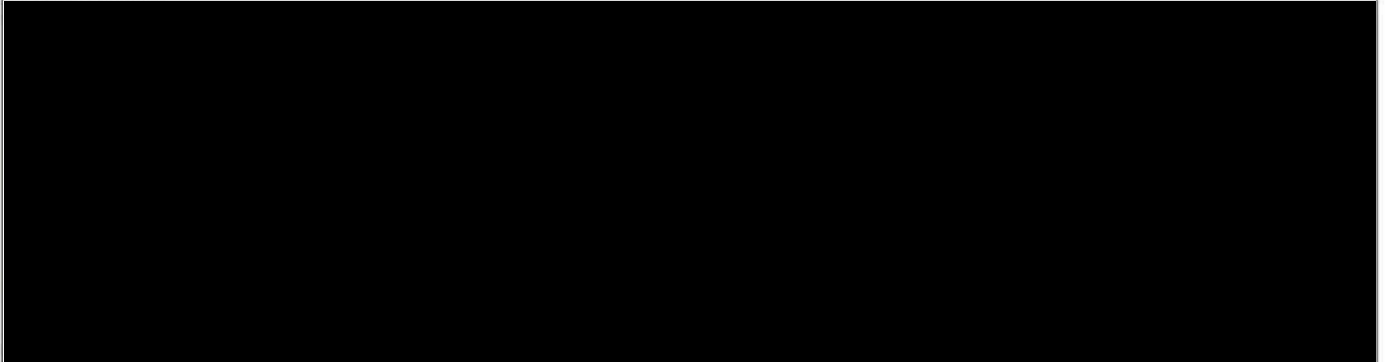
Ms. McMillin prepared an EA for the United States Department of Agricultural (USDA) Agricultural Research Service (ARS) on a proposed land disposal of an approximate 10-acre tract of commercial and agricultural land occupied by the USDA ARS and used for the purposes of agricultural research. The EA was performed in accordance with the NEPA Program of Requirements For the Potential Property Disposal of USDA ARS Lab Sites under P.L. 112-55 Title 40, Code of Federal Regulations (CFR) Parts 1500-1508, USDA regulations, specifically 7 CFR Part 1b, and USDA ARS regulations, specifically 7 CFR Part 520. Items evaluated per the NEPA analysis included, but were not limited to, air quality; cultural resources; geology and soils; hydrology and water quality; wildlife and habitat; noise; land use planning; floodplains, wetlands; socio-economic/environmental justice issues, hazardous materials; transportation, utilities, cumulative impacts; farmland conversion, and potential for generating substantial controversy. The EA report included coordination with additional specialists and government agencies. The report concluded with a FONSI.

### NEPA EA – BUREAU OF LAND MANAGEMENT (BLM)

**NM1 Lindrith Proposed Telecommunications Tower, Rio Arriba County, New Mexico, 2012.**

Ms. McMillin co-managed the preparation of an EA conducted in accordance with the BLMs U.S. Department of the Interior's guidance manual on the National Environmental Policy Act of 1969 (NEPA) (516 DM 1-7). The EA evaluation included, but was not limited to, land use, air quality, water quality, impact to cultural and natural resources, view shed, recreation, noise, Native American/Tribal concerns, and range. The report was evaluated and reviewed by BLM and then posted for public comment. The EA concluded with a FONSI.

### References:





## Anna Keenan

### Staff Scientist, Environmental Services

#### PROFESSIONAL EXPERIENCE

Ms. Keenan is a Staff Scientist in the Environmental Planning Group for Terracon's Omaha, Nebraska office. She has over ten years of experience in natural resources with an emphasis on wildlife and conservation biology. Her expertise includes a thorough understanding of agency requirements pursuant to Section 7(a) Endangered Species Act consultations.

She currently works as a staff scientist specializing in threatened and endangered species for the Terracon environmental services department.

As a threatened and endangered (T&E) species biologist, Anna shares her expertise in National Environmental Policy Act (NEPA) analysis and biological evaluations and assessments ranging from large-scale vegetation management EAs (Environmental Assessments) to small projects under CEs (Categorical Exclusions). She is well-versed in regulatory compliance and has extensive experience with Section 7 consultation under the Endangered Species Act (ESA), Section 404 of the Clean Water Act (SWA), Bald and Golden Eagle Protection Act (BGEA), and Migratory Bird Treaty Act (MBTA).

#### SELECT PROJECT EXPERIENCE

##### Solar Energy

##### **SE Municipal Solar, LLC Indianola Solar Farm Project EA-Indianola, Iowa (2024)**

Anna provided technical expertise for the Indianola project. She contributed to the biological assessment (BA) by providing research, technical writing, and species effects determinations. The BA was prepared in accordance with legal requirements pursuant to Section 7 of the Endangered Species Act, the Migratory Bird Treaty Act, the Bald and Golden Eagle Protection Act, and applicable guidance documents.

##### Wind Energy

##### **BSH Kilgore Wind Energy Project EA and BA, Sandhills Energy, LLC, Kilgore, Nebraska (2024)**

Anna provided technical expertise for the BSH Kilgore project. She contributed to much of the biological assessment (BA) by providing research, technical writing, and species effects determinations. The BA was prepared in accordance with legal requirements pursuant to Section 7 of the Endangered Species Act, the Migratory Bird Treaty Act, the Bald and Golden Eagle Protection Act, and applicable guidance documents.



#### EDUCATION

Bachelor of Science,  
Wildlife Ecology & Research  
Management/Biology Minor,  
University of Wisconsin-Stevens  
Point,  
Stevens Point, WI, 2016

Associate of Science,  
Fisheries & Wildlife  
Management, Wildlife Ecology  
Certificate,  
Vermilion Community College,  
2015

#### PROFESSIONAL TRAINING

U.S. Army Corps of Engineers  
Wetland Training Institute: 40-  
Hour Wetland Delineation

Terracon: Project Manager  
Training

National Highway Institute;  
Introduction to NEPA and  
Transportation Decisionmaking

U.S. Forest Service: Line Officer  
NEPA Leadership Course

U.S. Forest Service: 1950 NEPA  
Concepts Course

U.S. Forest Service: 1950 FS  
National NEPA Requirements  
Course

#### AFFILIATIONS

Nebraska Ornithologist's Union

Nebraska Chapter of the Wildlife  
Society

Keep Nebraska Beautiful

#### WORK HISTORY

Terracon Consultants, Inc.  
Staff Scientist  
August 2024-Present

Felsburg, Holt & Ullevig  
Environmental Scientist  
May 2023-August 2024

US Forest Service  
Wildlife Technician

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## Vegetation Management

### **Stone Moss Vegetation Management Project EA, Hiawatha National Forest, Rapid River Ranger District, Michigan (2018-2019)\***

Anna was the lead field biologist for the Stone Moss Project Area. The Forest Service proposed to treat vegetation on approximately 16,000 acres to benefit forest health, treat hazardous fuels, and enhance wildlife habitat in the Stonington Peninsula, Delta County, Michigan. Ms. Keenan conducted woodland raptor surveys to determine the presence/absence of Regional Forester Sensitive (RFSS) raptors including the American goshawk (*Astur atricapillus*) and red-shouldered hawk (*Buteo lineatus*). Call-back transect surveys were conducted in proposed timber treatment areas and adjacent stands considered suitable for nesting. The reproductive status of active nests was determined and active nests were re-visited throughout the summer to determine nest productivity/success.

### **Dollar Mountain Vegetation Management Project EA, Colville National Forest, Three Rivers Ranger District, Washington (2019)\***

The Forest Service proposed to treat vegetation on approximately 50,784 acres to benefit forest health, reduce fuels, and restore aquatic ecosystems. Ms. Keenan was one of the lead wildlife technicians for this Project. Anna utilized the broadcast call-back method to survey American goshawks (*Astur atricapillus*) within proposed treatment units and determined the reproductive status of active nests if possible. Active nests were revisited throughout the summer to determine nest productivity/success. In addition, Anna collected feather samples for DNA analysis of individual goshawks.

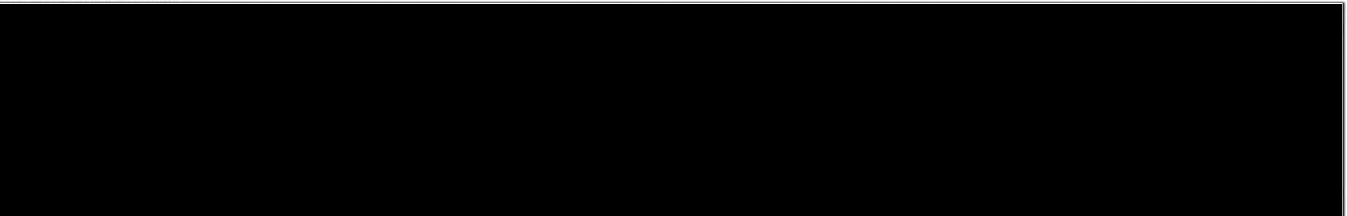
As part of a larger goshawk range study, several active nest sites were re-visited in order to capture and band goshawks. At two nest sites, the breeding female goshawk was captured, banded, and fitted with a backpack telemetry device. Anna assisted with handling, banding, and releasing live goshawks at these select sites.

### **West Zone Timber Stand Improvement EA, Hiawatha National Forest, Rapid River Ranger District, Manistique Ranger District, and Munising Ranger District, Michigan (2017-2018)\***

The West Zone of the Hiawatha National Forest proposed timber stand improvement (TSI) activities on approximately 436,000 acres to meet the desired conditions of a diverse productive, healthy, and sustainable forest. Ms. Keenan was the lead wildlife technician for this Project. Anna utilized the broadcast call-back method to survey American goshawks (*Astur atricapillus*) within proposed treatment units and determined the reproductive status of active nests if possible. Active nests were revisited throughout the summer to determine nest productivity/success. Ms. Keenan independently surveyed 80 goshawk nests within 35 territories.

**\*Project work was done prior to Anna's employment with Terracon.**

## REFERENCES





Noah P. Oswald  
Staff Scientist

#### PROFESSIONAL EXPERIENCE

Mr. Oswald is a Staff Scientist in the Omaha, Nebraska office. His duties include data collection, data evaluation, scheduling, site mapping, report development, and assisting with other projects as needed. He has experience in a variety of field and desktop activities including conducting Phase I Environmental Site Assessments, NEPA Screens, Limited Subsurface Investigations, wetland delineations, migratory bird surveys, nesting surveys, desktop constraints analysis, threatened and endangered species surveys, and NEPA projects including Environmental Review (ER).

Mr. Oswald's previous work experiences and educational background gives him a strong foundation for work in the Environmental Science field with an educational background in botany, microbiology, environmental sciences, physics, and chemistry. Mr. Oswald performs his work in a professional, safe, and efficient manner. His work ethic puts emphasis on client service and satisfaction.

#### PROJECT EXPERIENCE

##### NEPA Screens

Mr. Oswald has assisted with NEPA Screens (limited collocation exclusions, Section 106, and full FCC NEPA studies) for cell tower projects in Nebraska, Iowa, Colorado, South Dakota, North Dakota, Kansas, Wyoming, Montana, Minnesota, Utah, Washington, California, Arizona, and South Carolina. NEPA Screen activities included collecting all necessary archeological, cultural, and historical information, correspondence with various state and federal agencies, site reconnaissance, and final report preparation.

##### Phase I Environmental Site Assessments

Conducts Phase I Environmental Site Assessments in support of real estate transactions and due diligence purposes for various commercial and industrial clients. Mr. Oswald has also assisted in Phase I Environmental Site Assessments in support of real estate transactions for various commercial and industrial clients in Nebraska, Iowa, North Dakota, South Dakota, Colorado, California, Kansas, Missouri, Minnesota, Nevada, and Utah. Mr. Oswald's responsibilities included conducting site reconnaissance, obtaining and reviewing historical research, report preparation and final recommendations.

##### Wetland Delineations

Mr. Oswald led teams in parcel wetland delineations for various clients in Nebraska, South Dakota, and North Dakota in accordance with the USACE 1987 Manual and the 2010 Regional Supplemental Manual for the Midwest Region. Mr. Oswald's responsibilities include conducting field services such as: identification of hydrophytic vegetation, hydric soil, hydrologic indicators, marking wetland boundaries, and collecting GPS data points in addition to data entry, and report preparation.

#### EDUCATION

Bachelor of Science, Biology,  
Midland University, Fremont,  
NE

#### REGISTRATIONS/ CERTIFICATIONS

Wetland Delineation  
Certificate, Wetland Training  
Institute in part of the U.S.  
Army Corps of Engineers  
Wetland Delineation Manual

40-hour Hazardous Waste Site  
Operations (HAZWOPER)  
Training

State Certified Lead Inspector  
/ Risk Assessor - Nebraska

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Noah P. Oswald (continued)

**Desktop Constraints Analysis**

Conducted multiple desktop constraints analysis reports for multiple solar farm facilities in Nebraska and South Dakota. Desktop Constraints Analysis activities includes an initial desktop review for identifying specific issues that could render the site either economically unfeasible for development or that would pose an unacceptable level of risk if development were pursued.

**NATIONAL ENVIRONMENTAL POLICY ACT EXPERIENCE**

**Environmental Review and Categorical Exclusion**

**Viridis Chemical – Proposed Ammonia Facility – Columbus, Nebraska**

Is lead preparer for an ER for the application for funds under the USDA Business & Industry Loan Guarantees Program under the Rural Business-Cooperative Service (RBS) to build an ammonia facility on an approximate 7.7-acre parcel of land in Columbus, Nebraska.

**Migratory Bird Surveys/Avian Nesting Surveys**

Conducted multiple migratory bird surveys/avian nesting surveys for land development and telecommunications projects located in Nebraska in accordance with the Migratory Bird Treaty Act. Mr. Oswald has also conducted Bald Eagle Nest surveys for active nests in Nebraska. Mr. Oswald has additional experience coordinating with the Nebraska Game and Parks regarding potential impacts to Migratory Birds.

**Threatened and Endangered Species Surveys**

Conducted multiple Threatened and Endangered Species Surveys in Nebraska and South Dakota regarding potential impacts for multiple large-scale projects. Mr. Oswald conducted desktop threatened and endangered species reviews prior to in-field review of possible habitat for the possible threatened and endangered species that could occur on or near the project sites.

**REFERENCES**



## Jean Mayne, CPM

Project Manager | Natural Resources Lead

### PROFESSIONAL EXPERIENCE

Ms. Mayne is the Environmental Planning Lead for the Iowa Region. She is responsible for coordinating environmental planning services in the Des Moines, Cedar Falls, Cedar Rapids, and Bettendorf, Iowa offices. She builds teams to complete National Environmental Policy Act (NEPA) compliance projects, threatened & endangered species work, SHPO consultation, Tribal consultation, wetland delineation, and cultural resources investigations.

Ms. Mayne has more than 20 years of experience in the environmental field, specializing in NEPA compliance. She has drafted Programmatic Agreements (PA) and Memorandum of Agreements (MOA) for complicated Section 106 projects and built strong relationships with dozens of Tribal contacts. Ms. Mayne has worked seamlessly with the National Parks Service on those projects that involved National Historic Landmarks. Her legally-solid environmental review process has been praised by the Environmental Protection Agency (EPA) as "high quality analysis."

In 2008 and in 2010, Ms. Mayne was nominated for the Golden Dome Award, one of the highest awards for Iowa civil service for her work in building the Iowa State Revolving Fund environmental review program into a streamlined and efficient process. Her Terracon responsibilities also include championing safety and developing client relationships.

### PROJECT EXPERIENCE

#### WRA CSSSF – Des Moines, Iowa

This project consisted of the construction of a combined-sewer solids separation facility. Ms. Mayne composed the MOA for archeological monitoring of the excavation of a historic Native American cemetery. She coordinated NEPA documentation including threatened and endangered species, necessary wetland permitting, and in-person Tribal consultation. She assisted stakeholders in following policy after an ancient human remains find and coordinated with EPA staff to better define the scope of work.

#### WRA Ingersoll Run Outlet – Des Moines, Iowa

An extensive stormwater project, this project took place over three years in the downtown area of Des Moines. In addition to the other NEPA documentation, Ms. Mayne drafted the PA for archeological testing in advance of construction, was a hub of communication during construction as individual blocks of work were archeologically tested, and assisted in the consultation process for a human remains find. She documented the vibrational monitoring during construction and fielded Section 106 consultation for an unanticipated impact to a historic brick sewer.



### EDUCATION

Bachelor of Science, Biology,  
Minor in Religious Studies  
Iowa State University, Ames, IA

### CERTIFICATIONS

Certified Public Manager, Drake  
University

### PROFESSIONAL TRAINING

CPR/First Aid Training  
Writing the Perfect EA/FONSI or  
EIS  
Systematic Development of  
Informed Consent  
Professional Communications

### AFFILIATIONS

Association of Iowa  
Archaeologists  
Iowa Archeological Society

### WORK HISTORY

Terracon Consultants, Inc.,  
2025  
Iowa DNR, Environmental  
Specialist, SRF Program 2006-  
2025  
Trileaf, Environmental  
Specialist 2001-2006

### ACTIVITIES

Wood Badge, Scouting America  
March 2015  
Master Conservationist, Polk  
County Conservation, October  
2012  
Bald Eagle Nest Monitor, Iowa  
DNR, 2012-2013  
Frog & Toad Monitor, Iowa  
DNR, 2011-2012



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### **Grandview Park Water Tank Replacement – Sioux City, Iowa**

This project involved the demolition of a large, unused drinking water ground storage tank with an elaborate, National-Register-eligible mural from a local art festival to allow for enough room for a new, functional, ground storage tank. Ms. Mayne contracted with architectural historians to document the existing tank and negotiated with the Iowa SHPO. She completed NEPA documentation and drafted a successful MOA. Mitigation included restoration of an adjacent historic bandshell and other improvements to the local park to improve the public experience for future local festivals.

### **New Water Treatment Plant – Ames, Iowa**

This new water treatment plant was a highly complex project on several levels. Ms. Mayne compiled information from multiple sources and assisted the City in avoiding impacts to endangered mussels, pauper graves in the municipal cemetery, and impacts to the local historic bandshell park.

### **Soap Creek Sewer Separation – Keokuk, Iowa**

This project involved the functional replacement of a historic, egg-shaped, brick combined sewer. The timeline was critical for this project as bricks were becoming unstable and much of the sewer lay beneath existing 1950s era housing. Ms. Mayne compiled NEPA documentation in a swift manner and expedited Section 106 with the Iowa SHPO to allow for the prompt stabilization and functional replacement of the combined sewer with all appropriate historic documentation and preservation-in-place.

### **New Wastewater Treatment Units – New Albin, Iowa**

The existing treatment facility here was built on an area considered highly-sensitive by Tribes. In addition to other NEPA documentation, Ms. Mayne negotiated revisions to the design of necessary work to minimize impacts to the sensitive area, and she coordinated consultation to write an MOA for construction excavation monitoring by a qualified archeologist. Concerned Tribes and the City were pleased with the resulting outcome.

### **New Municipal Well Field – Council Bluffs, Iowa**

Ms. Mayne conducted NEPA documentation for a new well field, including documentation of floodplains, wetlands, endangered species. As part of the process, Ms. Mayne was able to inform the applicant of buried, known shipwreck that they were able to avoid with slight redesign.

### **Bee Branch Sewer Daylighting – Dubuque, Iowa**

This extensive sewer daylighting project required Ms. Mayne to sub-contract with archaeologists and architectural historians to appropriately document the neighborhoods above the existing undersized sewer before demolition, negotiate terms of investigation and mitigation with the Iowa SHPO, and follow up on unexpected structure situations. Ms. Mayne conducted NEPA documentation for both Upper Bee Branch and Lower Bee Branch.

### **Water System Consolidation – Amana Colonies, Iowa**

The Amana Colonies are a recognized National Historic Landmark. As part of the water system consolidation, Ms. Mayne discussed the project with the National Parks Service how to best document the lack of visibility of the new water tower from various notable locations within the Colonies, negotiated muted tower paint colors, and documented the several smaller non-historic towers slated for demolition. Ms. Mayne provided NEPA documentation and GIS mapping for work spanning five separate colony locations.



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### **New Wastewater Outfall Line – Guttenberg, Iowa**

Ms. Mayne partnered with municipal staff to document mussel studies for a new outfall line as it overlapped with the creation of a new marina for the City. By coordinating smoothly, additional rework was eliminated and the cost of municipal compliance with NPDES was minimized. Ms. Mayne subcontracted with archeologists to ensure that the outfall line area was sufficiently investigated for Section 106.

### **Main Street Water and Sewer Replacement – McGregor, Iowa**

In advance of a DOT highway resurfacing project, the City of McGregor worked with Ms. Mayne to replace water, sewer, and stormwater conveyances beneath the highway along a long stretch of Main Street. As McGregor is one of the earliest settlements in Iowa, Ms. Mayne contracted with appropriate archeologists and architectural historians to document the historic district, individual properties, and the original brick pavement. In addition to NEPA documentation such as wetland and floodplain permits, Ms. Mayne drafted an MOA for Section 106 including salvage of historic brick pavers, removal and replacement of adjoining historic features (clock, hitching post, etc.), investigation and data recovery for an adjacent cobbler's shop site, and vibrational monitoring during construction. This multi-year project was successfully completed in the fall of 2024. Additional work and cost for the subsequent McGregor Triangle Park project was minimized due to this project's appropriate documentation and salvage.

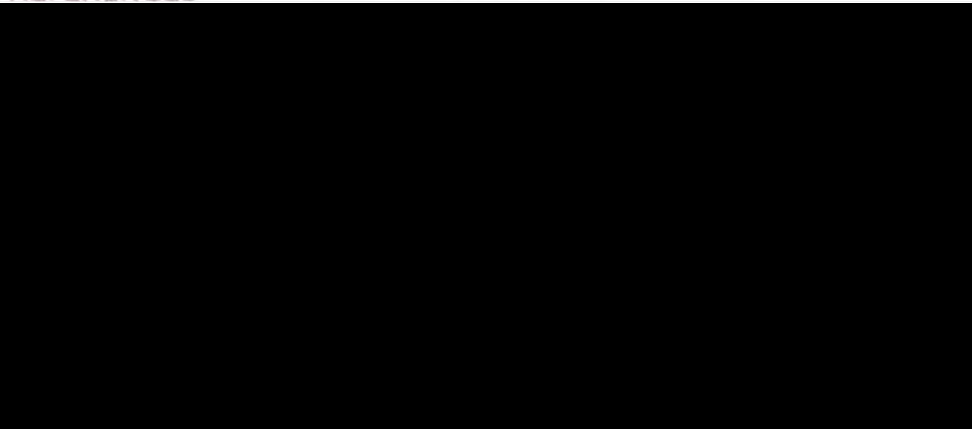
### **Victory Park Sewer Separation – Keokuk, Iowa**

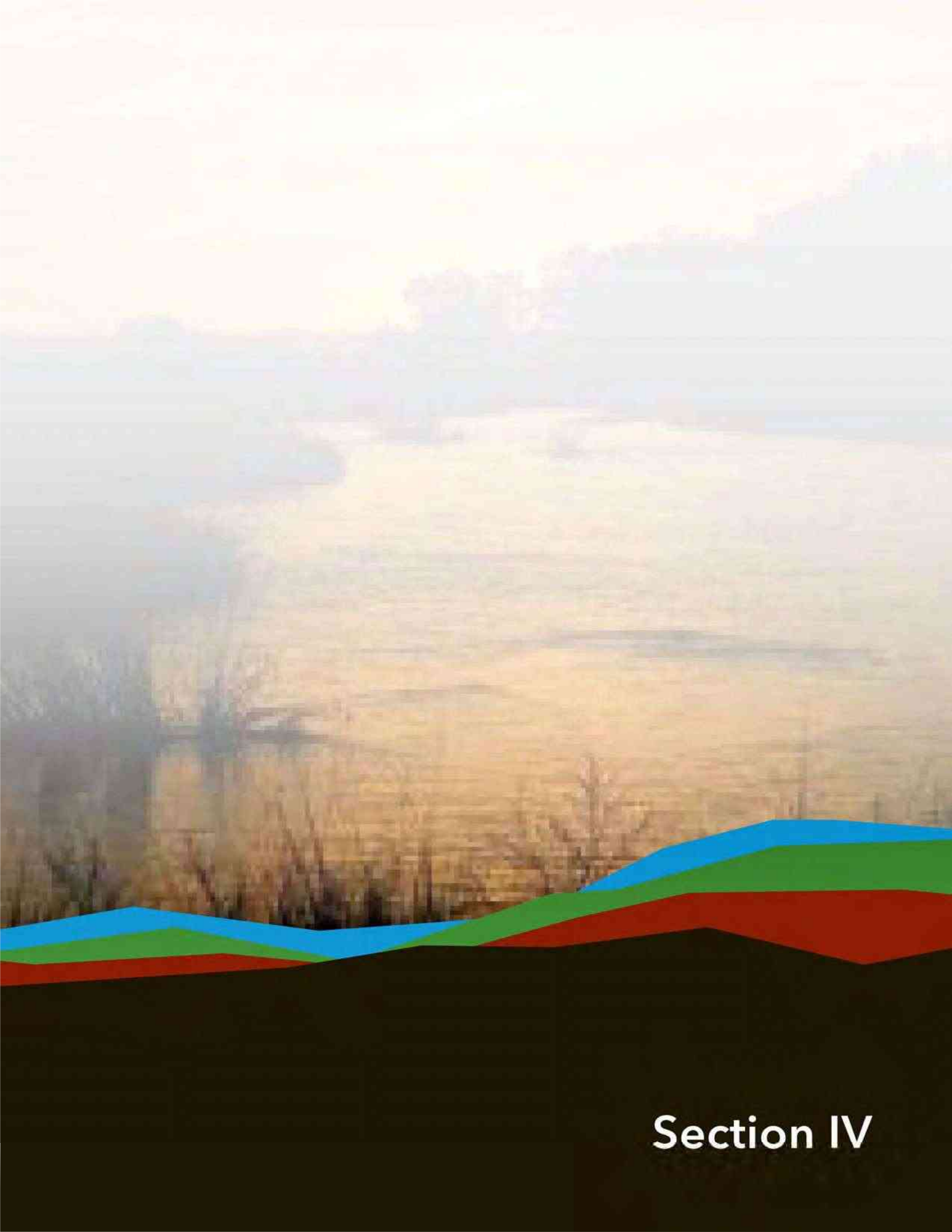
Ms. Mayne conducted NEPA documentation for a phase of the Keokuk sewer separation project adjacent the George M. Verity Riverboat Museum, a National Historic Landmark. Ms. Mayne estimated the potential for vibrational impacts to the dry-docked riverboat as part of the Section 106 consultation with Iowa SHPO.

### **Iowa Lakes Regional Water Solar Project – NW Iowa**

At multiple sites in Dickinson, Emmett, and Buena Vista Counties, Ms. Mayne provided NEPA and Section 106 clearances for solar panel installation at four booster pump stations and two water towers to provide electrical supply redundancy.

### **REFERENCES**





## Section IV



# TECHNICAL APPROACH



## Project Understanding

The State of Nebraska is seeking approval from USACE for the construction of the Perkins County Canal (Canal). The physical features of the Canal will require construction of flow diversion and control structures, conveyances, and reservoirs that likely will require the discharge of dredged and/or fill material into the South Platte River, and its adjacent wetlands and tributaries. The Canal Project will allow water storage during the winter months

to be used during the irrigation season. The purpose of the construction of the Canal is to ensure Nebraska receives its allotted quantity of water from the South Platte River, in accordance with the 1923 South Platte River Compact between the States of Colorado and Nebraska. The construction of the Canal will allow Nebraska (as a senior water right holder) to receive irrigation return flows that are currently being studied for consumptive uses in Colorado. Nebraska is not attempting to claim water from the South Platte that is not allocated to it in the 1923 Compact. In addition to enabling Nebraska to claim its senior water right, the return flows from the South Platte River will also support in-stream flows for fish and wildlife that have been identified as a need through the Platte River Recovery Implementation Program (PRRIP).

The purpose of the proposed SOW for NEPA is to provide a full range of environmental services and information management activities for the Canal Project. Terracon's environmental professionals will work collaboratively with environmental professionals with NeDNR and USACE who will lead and manage all major decisions, regulatory interpretations, and agency interface and communications related to the environmental reviews, permits, and compliance. This scope of services includes desktop research and field work to characterize environmental conditions: analysis of the environmental impacts of various alternative plans, development of impact mitigation plans, preparation of professional reports for technical and general audiences, and preparation of the EIS pursuant to NEPA of 1969. Terracon understands that analyses may include surveys, measurements, calculations to characterize existing conditions and predict near- and long-term future effects under various construction alternatives and the no-build alternative. Terracon understands that the environmental media to be evaluated may include air, surface water, groundwater, wetlands, floodplains, soils, hazardous waste, terrestrial and aquatic habitat and biota, archaeological sites and historic structures pursuant to the National Historic Preservation Act (NHPA); noise; transportation systems; aesthetic values; and socioeconomic parameters. The scope of services includes coordination, communication, and consultation with environmental regulatory agencies and the public that are required under the NEPA process. We also understand that the consultant will take its direction from USACE but will be under contract with NeDNR.

## Proposed Development Approach

Our Project management approach ensures the successful execution of all tasks through:

- Qualified Project Managers
- Regular Communication
- Detailed Scheduling
- Quality Control and Risk Management

Preparation of the EIS will be overseen by a primary Project manager with extensive experience in managing NEPA Projects and that understands the USACE's permitting requirements. Our team is highly qualified, with expertise in various environmental disciplines, including:

- NEPA Compliance: Extensive knowledge of federal and state environmental regulations.
- Environmental Impact Analysis: Proven experience in conducting comprehensive environmental impact assessments.
- Technical Skills: Proficiency in GIS and mapping, environmental modeling, and data analysis.



# TECHNICAL APPROACH

## Technical Considerations

For the Canal Project to move forward to construction, all required local, state and federal laws governing the Project must be complied with. Where federal actions are involved, (a Section 404 CWA permit in this case) a completed NEPA evaluation is a prerequisite. The lead federal agency (USACE in this case) determines the level of review and has determined an EIS is required. In addition to the EIS, the USACE will evaluate whether the Project complies with the Section 404 (b) (1) Guidelines, with the ultimate decision being to issue a permit for the LEDPA or to deny the permit. The results of the NEPA and Guidelines evaluations should lead the USACE to the appropriate decision approve the LEDPA that also satisfies the Project's purpose and need. The Canal Project is considered a "water dependent" action, and the alternatives that will need to be considered should reflect only those that are practicable. An alternative is considered practicable if it is "available and capable of being done after taking into consideration cost, existing technology, and logistics in light of overall Project purposes." (Sec 230.10 from the Guidelines). Understanding this concept is critical to a successful outcome for NeDNR and Nebraskans who will rely on the water secured by the Canal Project.

Terracon will work closely with the NeDNR's engineering consultant to develop a design that achieves the stated purpose and need based on previous studies to be provided by NeDNR. Terracon is uniquely situated with a former USACE Omaha District Regulatory staff member that understands the importance of the Guidelines and how the engineering design and LEDPA must be coordinated throughout the planning process. We understand the importance of adherence to established processes in arriving at a legally defensible permit decision and we can provide the necessary expertise to support USACE in their efforts.

In addition to compliance with NEPA and the Guidelines, the Project will require a water quality certification from the Nebraska Department of Water, Energy and Environment (DWEE). USACE has jurisdiction over Waters of the United States (WOTUS); however, DWEE considers all surface waters subject to the State's authority under Title 117, Nebraska Surface Water Quality Standards. Under Section 401 of the Clean Water Act (Section 401) the DWEE must provide either a certification (or waiver) to the NeDNR prior to USACE issuance of a permit. The evaluation conducted by DWEE will be relevant to the NEPA process (in the surface water section) and will be documented through the Section 401 certification process to be included in the EIS. Terracon understands the relationship between federal and state permitting requirements and has the expertise to support the coordination effort.



In 2025, President Trump issued Executive Order 14154, titled "Unleashing American Energy," which significantly impacted NEPA regulations. Here are the key changes:

- Rescinding CEQ Regulations:
  - The Council on Environmental Quality (CEQ) removed all existing regulations implementing NEPA from the Code of Federal Regulations. This action aimed to expedite and simplify the permitting process for energy Projects and other federally funded initiatives.
- New Guidance:
  - CEQ issued new guidance to federal agencies, encouraging them to use the NEPA regulations from the first Trump Administration (the 2020 Rule) as an initial framework while revising or establishing agency-specific NEPA procedures. This guidance is intended to minimize delays and confusion during the transition.



# TECHNICAL APPROACH

- Impact on NEPA Reviews:
  - Agencies are directed to continue ongoing NEPA analyses without delay, despite the removal of the regulatory framework. However, the dismantling of regulations that have been in place for nearly five decades may cause short-term delays in NEPA reviews.

These changes are part of a broader effort to streamline environmental reviews and reduce regulatory burdens on energy Projects and other federal actions. These changes will be relevant to the EIS process and Terracon will continue to stay up to date on any changes to the NEPA process and will report these updates during regularly scheduled meetings.

In 2023, the Supreme Court ruled in the case of *Sackett v. USEPA* (Sackett) that the reach of Section 404 of the Clean Water Act does not extend to ephemeral streams or wetlands that do not abut waters of the U.S. This decision has resulted in confusion regarding what waters are and are not subject to USACE jurisdiction

under Section 404. Terracon has been tracking this issue since 2023 and is well informed regarding the discussions and guidance that has resulted from both USACE's and the USEPA's interpretations of the Sackett case. We will bring this expertise to the table in the EIS preparation and Guidelines analysis.



## Detailed Project Work Plan

After attending the kickoff meeting, and collecting and analyzing past studies and correspondence, Terracon, with guidance from USACE, would assess which studies, if any, require renewal and will prepare scopes and budgets for this task. Subconsultants may be used, depending on the timeframe studies are needed (seasonal restrictions for species studies).

The EIS preparation team would be assembled and resumes with references provided to NeDNR and USACE. Tasks would be assigned to the appropriate personnel, with a schedule for each task provided to NeDNR.

Upon approval of NeDNR and USACE, scoping correspondence would be prepared and distributed to interested agencies and tribes.

A Notice of Intent to prepare an EIS would be prepared for publication in the Federal Register.

Within approximately one year after the NOI is published, a Draft EIS Notice of Availability (NOA) would be published in the Federal Register. During this timeframe, the required field studies would be completed (if required), and consultation with agencies with jurisdiction for permitting, sensitive species and cultural resources would be conducted and concluded. During this timeframe Terracon will work with NeDNR and USACE to develop the preferred alternative, describe the affected environment, analyze environmental consequences for each alternative, and develop mitigation measures agreeable to NeDNR and USACE.

## Project Reporting

Project reporting will occur through various mechanisms, including the Project kick-off meeting, EIS Team meetings, conference calls, meeting minutes, and schedule reporting. Each meeting will be summarized appropriately with recorded Project minutes and emails and Project communication will be maintained as part of the overall administrative record. The key NEPA leads will monitor key milestones and ensure deliverables maintain scope and schedule requirements. Potential changes that could impact scope and schedule will be clearly identified and communicated to NEDNR when they are identified.



# TECHNICAL APPROACH

## Work Scope Changes

The current scope of work is based on the information available for the Project, potential Project locations, and Terracon's understanding of the requirements to comply with the NEPA scope of work. Terracon makes every effort to ensure that anticipated scope items are covered; however, the potential always remains that there will be need for a revision to a scope of work or a change order based on unforeseen circumstances or changes to the Project. In the event that these situations occur, Terracon will clearly communicate with NeDNR and USACE regarding the work scope changes and provide cost and scope for the additional services required.

## Risk Management Plan

Terracon manages risk through its Authorized Project Reviewer (APR) Program to implement a quality assurance (QA) and quality control (QC) system. Under the APR Program, Terracon utilizes secondary review and dual signatures as a quality control mechanism. In addition, this review allows an opportunity for qualified APRs to coach and mentor junior professionals. The APR Program establishes guidelines for the level of review required on a given Project and selection of appropriate APRs to perform the review function as well as other specific responsibilities of the APR—e.g., proposal reviews, risk identification and mitigation, maintaining certifications, and continuing education. The APR reviews Project deliverables prior to submittal to NeDNR for consistency with guidance documents, scope of work, and regulatory requirements. Additional risk management mechanisms include strict adherence to a cadence of client communication and meetings, clear communication via meeting minutes and recorded emails, and identification and discussion of potential red flags as they are identified.

## Deliverables and Due Dates (Proposed Project Schedule)

### SCHEDULE OF SERVICES - ENVIRONMENTAL IMPACT STATEMENT

#### Task 1 - Project Management

Terracon will provide a qualified Project Manager and Assistant Project Manager (as needed) on this SOW. The Terracon Project Manager will serve as the primary point of contact responsible for coordinating with NeDNR, USACE and stakeholders for the duration of the Project. This task also includes Project tracking, staff and deliverables/document management, financials tracking and invoicing, meeting attendance and documentation, and client correspondence. Upon receipt of the notice to proceed (NTP), Terracon will prepare a Project Management Plan or Work Plan providing a summary of the Project background, describing data management and quality control strategies, and will provide an organizational chart and contact information for the Terracon team, along with contact information for NeDNR's Project team.

Terracon will submit progress reports with updates on Project schedule milestones, potential Project risks, Project budget, spending forecast, and percent complete. Terracon will provide these reports on a bi-weekly basis. Progress reports will include a Project status update, highlights, hard spots, future activities planned, cost to date and schedules showing planned versus actual.

Terracon will submit monthly invoices along with a progress report briefly describing monthly progress by task and/or deliverable and will identify upcoming deliverables and identify Project risk items.

#### Task 2 - Kickoff Meeting/Cooperating Agency Meetings/Scoping Meetings/Project Meetings

Terracon would coordinate and attend an initial kick-off meeting with USACE and NeDNR. Terracon would organize and attend public scoping meetings as determined necessary by USACE. Meetings would be located in cities near the Project location in Keith and Perkins Counties and in Lincoln and Omaha, to be determined by USACE. The meetings are intended to inform the public and seek input to guide the scope of analysis and alternatives. Terracon would keep minutes of all scoping meetings. Terracon would assist USACE with sorting, categorizing and responding to public comments.

Terracon would coordinate and attend regularly scheduled Project update meetings with USACE and NeDNR. These meetings would provide updates, deliverables, and identify data gaps, and additional resources that may be required to keep the Project on schedule.



# TECHNICAL APPROACH

## Task 3 – Public Involvement and Participation Plan

Terracon will develop a plan with the intent to provide pertinent, clear and concise information to the public and solicit comments. We anticipate that USACE and NeDNR will hold at least one joint public hearing prior to finalizing the permit decision. Terracon would work with NeDNR and USACE to develop a schedule for public information meetings in 2026 and 2027. Terracon would assist USACE with hearing logistics, and would arrange for recording an official transcript of public hearing proceedings and listening sessions. In preparation for public meetings, Terracon would prepare handouts, posters, exhibits, fact sheets among other informational items. Terracon will cooperate with NeDNR and USACE to maintain existing web pages or develop new web sites, depending on agency preferences. Documents to be posted to agency websites will be vetted and approved by NeDNR and USACE prior to posting.

## Task 4 – Data Collection/Record Maintenance

Terracon would collect and catalog previously prepared studies and correspondence organized by subject matter and sorted by date. We understand NeDNR will provide the relevant studies and correspondence for the Administrative Record. Terracon would continue maintaining the administrative record based on protocols, acceptable file formats and naming conventions already being utilized by NeDNR and USACE as described in RFP NDNR25-01. Terracon would develop a platform that would be accessible to NeDNR, USACE and Terracon team members, but not to the public. We understand that there will likely be Freedom of Information Act (FOIA) requests throughout the Project lifespan, and Terracon would assist USACE and NeDNR with fulfilling those requests.

## Task 5 - Preparation of the Draft Environmental Impact Statement

**5.1 Purpose and Need** - Terracon will work closely with NeDNR and USACE to draft the purpose and need statement, which Terracon understands will drive the alternatives to be considered in the EIS. Ultimately, the lead federal agency determines the P&N with assistance from the applicant. Terracon would support this conversation and with input from the agencies.

**5.2 Alternatives Analysis** - The Proposed Action, no action and at least two additional action-alternatives will be analyzed in the EIS. Terracon will communicate with NeDNR, and the design team to develop alternatives that will be described and evaluated in the EIS.

Terracon will prepare a screening report that supports the rationale for choosing the preferred alternative and for ruling out other alternatives. The Guidelines will be referenced and considered in the selection of the preferred alternative and supporting documentation on how the Guidelines guided the selection of alternatives will be provided in the screening report.

**5.3 Affected Environment** - Terracon would prepare this section in the EIS for all of the resource areas listed on pages 28 – 30 of the RFP. We understand that the list may change, and some resource areas may be removed from consideration depending on the alternatives to be discussed. We also understand that because of the Executive Orders issued in early 2025, some evaluations may be removed from consideration altogether (greenhouse gas emissions, environmental justice). The USACE will determine which resources/topics will be retained and which will be de-emphasized, if any.





# TECHNICAL APPROACH

**5.4 Environmental Consequences** – For each resource area retained for evaluation, Terracon would assess those impacts that are direct and indirect; temporary and permanent; and would work closely with NeDNR regarding measures to avoid and minimize adverse impacts to the evaluated resources. Terracon would coordinate with USACE to define a scale of impacts (severe, moderate, minimal) to assess and describe the degree, magnitude or severity of the impact being discussed.

**5.5 Mitigation and Monitoring** – Throughout the preparation of the DEIS, Terracon will explore mitigation opportunities based on the specific resources being evaluated. Mitigation measures can include avoiding a resource, minimizing exposure of the impact to the resource (e.g. through construction timing restrictions) and compensating for unavoidable lost resources. Terracon will develop mitigation measures to be included in the DEIS with coordination with the NeDNR and USACE. Mitigation measures should be compatible with surrounding land uses, and commensurate with the anticipated degree of resource impacts. Monitoring of resources after the Project is implemented/constructed may be a condition of the USACE permit, and NeDNR. Compensatory Mitigation for permanent wetland losses (should any be incurred by the Project) would be coordinated by Terracon through local mitigation banks. USACE determines appropriate mitigation for lost aquatic resources. USFWS determines appropriate mitigation for impacts to listed species. Other mitigation opportunities or concerns may be raised during public scoping, public comment periods or during the USACE's public interest review. The Record of Decision (ROD) will describe what mitigation measure will be incorporated into the Project designs and plans to ensure compliance with NEPA, the 404 (b) (1) Guidelines, Section 106 NHPA and Section 7 ESA.

## Task 6 – Biological Assessment

Based on the most recent biological studies, Terracon would prepare a Biological Assessment (BA) to support consultation that will be required to comply with Section 7 of the Endangered Species Act. Terracon's biologists include former US Forest Service scientists with expertise BA preparation and consultations with US Fish and Wildlife Service (USFWS). We understand that Nebraska Game and Parks Commission works closely with the USFWS on consultations, and Terracon has experience with coordination protocols between the agencies. Terracon would prepare the BA with the understanding that it will provide the basis for both the Section 7 consultation and the NGPC requirements under the Nongame and Endangered Species Conservation Act.

## Task 7 – National Historic Preservation Act Section 106

Terracon understands that NeDNR will provide current Cultural and Paleontological surveys necessary to conduct Section 106 consultation with the Colorado and Nebraska State Historic Preservation Officers (SHPOs). Terracon has in-house registered professional archeologists and Secretary of the Interior (SOI) qualified professionals that would assist with eligibility determinations, tribal coordination, mitigation plans, and development of Programmatic Agreements (if necessary).

## Task 8 – Draft Environmental Impact Statement (DEIS) and Supporting Documents

Terracon's team would prepare the DEIS in accordance with the requirements of NEPA, the 404 (b) (1) Guidelines and USACE's public interest review. The DEIS would include, as appendices, items a – I listed in the RFP pages 33-34. Terracon would review all material to be included as appendices and would alert NeDNR should deficiencies become apparent (missing data or out-of-date reports).

Terracon will prepare a Preliminary Draft EIS for submittal to the NeDNR and USACE for comments and revisions, followed by a round of revisions by Terracon. Terracon will then prepare a revised draft EIS for submittal for NeDNR and USACE review and comments, followed by one round of revisions by Terracon, and the document will then be finalized for public review. Terracon will prepare geospatial maps and figures to support the analyses and findings of the draft EIS. Terracon will also compile an appendix with agency coordination and technical reports, as relevant. Technical editing and quality control reviews will be completed by Terracon for the preliminary, revised, and final version of the draft EIS documentation.

Terracon will follow US Environmental Protection Agency's Environmental Impact Statement Filing Guidance (dated January 4, 2021) regarding PDF format, metadata, and key word requirements.



# TECHNICAL APPROACH

## Cover Sheet

Terracon will prepare a cover sheet for the draft EIS, describing the proposed action, agency contact information, and an Abstract.

## Summary

An executive summary of the draft EIS, including a brief description of the Project Purpose and Need for Action, Affected Environment, and Environmental Consequences.

## Purpose and Need for Action

This chapter of the document will describe the Project purpose and need for the action, scoping and public involvement, required permits (local, state, federal) and agency coordination, and scope of the EIS.

## Alternatives Description and Analysis

To be developed through coordination with agencies, public scoping, and purpose and need statement.

## Affected Environment/Environmental Consequences

This chapter will provide a summary of potentially affected resources and identify resources considered but determined not to require further discussion. This chapter will also be a discussion of the environmental consequences of implementing the alternatives.

This chapter will be based on technical studies, to be provided by NeDNR and Terracon, as listed below:

- Land use and Prime Farmland
- Geology and Soils
- Air Quality/Climate Change
- Groundwater
- Surface Water
- Floodplains
- Aquatic Resources (Wetlands, Streams, and Other Aquatic Features)
- Vegetation
- Wildlife
- Aquatic Ecology
- Threatened and Endangered Species
- Wetlands
- Socioeconomics and Environmental Justice
- Natural Areas, Parks, and Recreation
- Transportation
- Visual
- Noise
- Archaeological and Architectural Cultural and Historic Resources
- Solid and Hazardous Waste
- Public Health and Safety

For the technical studies led by NeDNR or others, Terracon staff will incorporate the resource area sections provided by NeDNR and will standardize these data according to the larger document and review for conciseness and one voice through the EIS package. Terracon subject matter experts (SMEs) will analyze the affected environment based on readily available desktop data and results from field study reports, as relevant. Terracon staff will incorporate final field study results into the Draft EIS and the final study reports will be provided as appendices to the Draft EIS.



# TECHNICAL APPROACH

## Land Use, Natural Areas, Parks, and Recreation

Terracon will evaluate land uses and structures within the Project area and provide a discussion of the anticipated impact on land use both within the Project area and in the surrounding radius of the Project area. Terracon will additionally review and consider existing local and regional land use plans, assess the compatibility of the Project with those land use plans, describe the Project's potential impact on regional development, and provide population counts and proposed development plans for the region inclusive of the Project site. Terracon's evaluation will also include agricultural considerations and land use impacts. Lastly, Terracon will evaluate existing Natural areas and Recreation areas surrounding the Project area. Natural areas evaluated will include the following ecologically significant areas: federal, stated, local park lands, national or state forests, wilderness areas, scenic areas, conservation easements, wildlife management areas, recreational areas, greenways, trails, Nationwide Rivers Inventory (NRI) streams, and Wild and Scenic Rivers.

## Geology and Soils

Terracon will provide an analysis of the Project site's geological resources to include geology, paleontology, soils, geological hazards, and prime farmland evaluations. Findings of these subsurface studies will be included in the EIS, as applicable.

## Prime Farmland

Terracon, with prior approval from NeDNR, will coordinate with the US Department of Agriculture, Natural Resources Conservation Service (USDA, NRCS) regarding Prime Farmland and will complete Form AD-1006, and use the final form in the prime farmland analysis in the Draft EIS.

## Water Resources (Groundwater, Surface Water, Floodplains, Wetlands)

Terracon will provide hydrogeological and groundwater impact analysis as needed for the preparation of the EIS. Terracon will provide knowledge on federal, state, and local environmental regulations associated with groundwater and the potential impact of NeDNR actions to the surrounding areas. Terracon will review and provide discussion of one percent-annual-chance (100-year) and 0.2-percent-annual-change (500-year) flood elevation and floodplain as found on Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps (FIRMs) and within FEMA Flood Insurance Studies, or as provided by other federal, state, and local agencies. In addition, Terracon will evaluate the Project in relation to the 100-year and 500-year flood elevation and corresponding floodplain.

Additionally, considering the recent United States Supreme Court decision in the Sackett vs. Environmental Protection Agency (EPA) case on May 25, 2023, wetlands and waters identified in the completed field studies will need to reflect the Court's current interpretation of Waters of the US (WOTUS). Based on the ruling, WOTUS are now limited to streams, rivers, lakes, oceans, relatively permanent water bodies that are connected to navigable waters that are navigable in fact, and wetlands that have a continuous surface connection with navigable waters; provided the relatively permanent water bodies and wetlands constitute WOTUS in their own right and are "indistinguishable from" those waters.

The results of research, wetland delineations, and aquatic studies will be incorporated into the Draft EIS document for analysis.

## Natural Resources (Vegetation, Wildlife, Threatened & Endangered Species, Aquatics)

Terracon will coordinate with NeDNR prior to initiating these biological (wildlife/terrestrial zoology, or vegetation/botany) surveys to confirm scope and appropriate survey methods. The vegetation survey will be completed by an accredited NeDNR approved botanist.

## Protected Bat Studies

The site lies within the predicted range of the proposed federally endangered Northern long-eared bat (*Myotis septentrionalis*). Terracon has USFWS-permitted biologists to conduct mist-netting and acoustic surveys for this species. Surveys would be conducted between March and November to comply with USFWS survey protocols. The results of the surveys would be incorporated into the BA for Section 7 ESA consultation.



# TECHNICAL APPROACH

## Cultural Resources (Archaeological and Architectural Cultural & Historic Resources)

The results and conclusions of the cultural services and agency coordination will be incorporated into the EIS. The EIS will summarize documented archaeological and historic architectural resources within the Project APE reviewed for cultural resources and will identify methods for avoidance, minimization, or mitigation, as reviewed and approved by regulatory agencies. The EIS will include a comparison of the anticipated impacts from the no action alternative to the proposed action alternatives.

## Noise and Visual Resources

Construction activities can involve noise emissions associated with additional traffic to the site, site preparation (clearing, excavation, etc.), establishment of contractor area (storage, laydown area, etc.), construction of the infrastructure and facilities. Noise emissions would vary with each phase of construction depending on the construction activity, equipment, location of equipment and level of activity. Typical construction equipment noise emissions for each phase will be used to estimate construction noise influences at the nearest sensitive receptors. Noise mitigation will be evaluated where noise impacts are identified.

## Transportation

Terracon will utilize available data collected from the Nebraska Department of Transportation (NDOT) and other entities to assess the existing roadway networks around the Project location and impact that may be likely due to the development of this Canal Project. This could include information relating to existing and Projected traffic volumes, heavy vehicle volumes, and general capacity of intersections and roadway segments in the vicinity of the Project. Terracon has assumed that a detailed technical capacity analysis of intersections or roadway segments will not be required as part of this SOW. However, Terracon can provide these services, as needed, under supplemental scope.

## Air Quality

Terracon will provide an overview of the existing air quality and regulated air emissions within the Project area and assess the potential impacts on air emissions and air quality associated with the Project alternatives evaluated for the proposed Project. Terracon will provide NeDNR with Clean Air Act (CAA) compliance support to ensure compliance with federal, state, and/or local air pollution regulations. Terracon's air impact analysis will be developed to comply with CAA requirements and applicable air Emission Standards.

Terracon has assumed that the proposed Canal Project would not result in air emissions that require a Title V permit and a comparative analysis of forecasted emissions under the proposed action and action alternatives.

## Public Health & Safety

Terracon will provide an overview of the existing public health and safety infrastructure within the Project area and the potential impacts to this resource from the proposed Project. Public health issues will include emergency response and preparedness to ensure the construction and operation related to the Project do not pose a threat to public health and safety. In addition, safety protocols including occupational safety will be discussed in compliance with Occupational Safety and Health Administration (OSHA) standards.

## Solid Waste & Hazardous Waste

Terracon will provide an overview of the existing waste management within the Project area and provide NeDNR with federal, state and/or local environmental regulations associated with hazardous and solid waste. Terracon will analyze solid waste and hazardous waste impacts to the environment in the EIS.

## Socioeconomics

Terracon will perform a socioeconomic impact analysis to include a description of total and minority populations, labor force, employment statistics, income, and poverty levels for the Project area. Impacts from each Project alternative will be assessed and the most recent data available will be used. Data from the American Community Survey and US Census Bureau statistics will be utilized in Terracon's assessment. Previously prepared economic benefits analyses will also be incorporated.

Environmental Justice/Climate Change/Green House Gases



# TECHNICAL APPROACH

Although the RFP indicates climate change and environmental justice as potential resource topics for the EIS, Terracon understands they are no longer requirements of the NEPA process due to early 2025 executive orders that significantly impact NEPA and NEPA implementation. Terracon would seek clarification from USACE on the extent to which these factors should be discussed in the EIS and at what level of detail.

Terracon will ensure that items a - I listed on pages 33 and 34 of the RFP are included as attachments to the DEIS.

## **Task 9 - Printing and Distribution of the DEIS**

The 508 compliant DEIS and appendices would be mailed to USACE's and NeDNR's distribution list. If the files are too large to email, a secure file sharing platform developed by Terracon will be used for the distribution. We will also assist with publishing the DEIS Notice of Availability in the Federal Register.

## **Task 10 - Review of Comments Received on the DEIS**

It is anticipated that the DEIS will generate a considerable amount of public interest and comments. Terracon would collect and categorize all comments received and create an index summarizing the commentor's affiliation, topic of main concern, and a recommendation of the entity most appropriate to respond. All comments would be shared with cooperating agencies.

## **Task 11 - Preparation of Responses to Comments Received on the DEIS**

Terracon will assist with responses to comments, which would be reviewed and approved by USACE and NeDNR. Based on the index produced from Task 10. Comments identified as substantive, will require additional effort and Terracon staff will collaborate with agency team members to respond to substantive public comments. Terracon would use the index to track the responses to comments and keep a running index for agency review. In some instances, the need for additional studies or information comes to light through the public comment process. If data gaps are identified, the USACE and NeDNR would determine if additional studies are warranted.

## **Task 12 - Final Environmental Impact Statement (FEIS) and Supporting Documents**

Terracon would compile the results of public and agency comments, previous studies and relevant analyses into the FEIS to be submitted to USACE, NeDNR and cooperating agencies. The responses to comments will be incorporated into the FEIS and the comment index (Task 10) with the actual comment letters included in the FEIS appendices.

## **Task 13 - Printing and Distribution of the FEIS**

Terracon would provide printed copies of the FEIS based on the mailing list provided by NeDNR and USACE. We would assist with posting the FEIS on Terracon's file sharing sites and support agency efforts to post the FEIS on their own websites as appropriate. Terracon would assist with electronic filing with the USEPA and publishing the Notice of Availability in the Federal Register.

## **Task 14 - Record of Decision (ROD)**

Terracon will assist with preparation of a draft ROD for NeDNR and USACE's review, incorporating pertinent studies, analyses, consultation results and public/agency comments. The ROD is the culmination of the NEPA process and is the document supporting USACE's decision to issue or deny the permit along with a completed 404(b)(1) alternatives analysis and public interest review following USACE's Section 404(b)(1) Guidelines for Specification of Disposal Sites for Dredged or Fill Material.. The ROD is fundamentally an agency decision document; however, Terracon has the experience to assist USACE with preparing a defensible 508 compliant ROD and Administrative Record.

Terracon will follow US Environmental Protection Agency's Environmental Impact Statement Filing Guidance (dated January 4, 2021) regarding PDF format, metadata, and key word requirements, including 508 compliance.



# TECHNICAL APPROACH



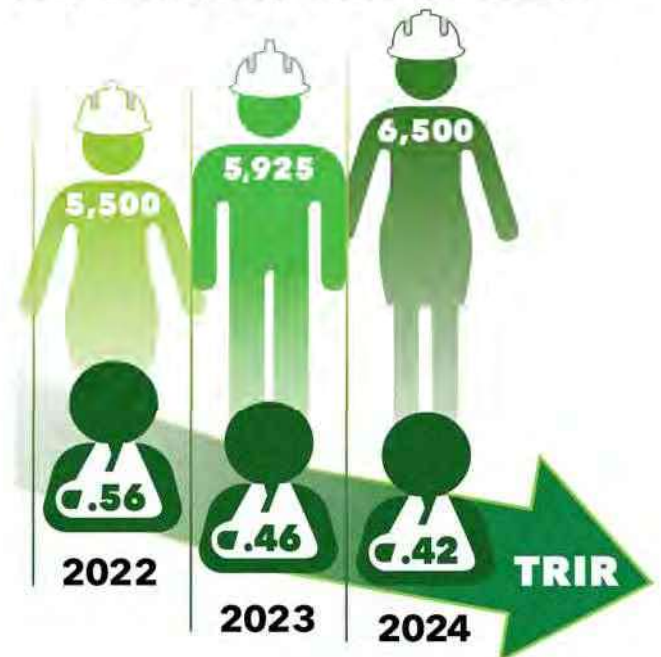
## Safety is a Core Value of Terracon

Safety is one of Terracon's core values as evidenced by our commitment to an "Injury and Incident Free (IIF)" culture. Successful execution and delivery includes the need to work safely and keep our employees and the public safe every day. IIF is about care and concern for people. It is our personal and organizational commitment at all levels of the company to everyone going home safe to their family every day. Working safely is an inseparable part of working correctly, just as much as other operational priorities, in particular quality, budget and schedule. IIF is our commitment to our people, who we value for who they are and what they do. IIF is about developing a mindset intolerant of any incidents or injuries no matter how minor or infrequent.

Developing an IIF culture is a journey that starts on day one with new employees and continues throughout their careers. All employees attend a 4-hour training session

called "Introduction to IIF." This training introduces IIF as a commitment—both personal and organizational—to create a culture intolerant of any injury. The training introduces pre-task planning, near miss reporting, and taking responsibility for one's own safety as well as the safety of those around you. In addition, supervisors attend an 8-hour supervisor skills workshop, which introduces the concepts of: Assigning work in an IIF manner, seeing and stopping unsafe behavior, seeing and redirecting less safe behavior and supporting/rewarding more safe behavior. In 2014, Terracon introduced its core rules with updated training for all employees; based on experience and employee feedback, Terracon updated its core rules in May 2016, and Terracon employees now refrain from mobile device use while driving. Pulling into a safe location to return a call is the right thing to do. Additionally, managers perform regular safety checks on staff while in the field with a custom smartphone application, and we utilize pre-task planning to identify hazards and PPE prior to leaving the office with a safety review onsite before beginning work in case conditions are not as originally expected.

## AVG. NO. OF EMPLOYEES



# TECHNICAL APPROACH

## Anticipated EIS Schedule

Task	Activity Name	Duration (Total Days)	Start Date	End Date
<b>Project Scoping</b>				
	Terracon Project Initiation - Client involved Kickoff Meeting	11	18-Aug-25	29-Aug-25
	Develop Project Management Plan w/Org Chart and Team Contact Info (PMP)	11	1-Sep-25	12-Sep-25
	Client Review of Draft PMP	11	15-Sep-25	26-Sep-25
	Finalize PMP and Provide to Client	11	29-Sep-25	10-Oct-25
	Develop Request for Information (RFI) and submit to Client	11	15-Sep-25	26-Sep-25
	Client Responds to RFI	25	29-Sep-25	24-Oct-25
	Prepare draft Notice of Intent (NOI) for client review	11	15-Sep-25	26-Sep-25
	Client Review Draft NOI	14	29-Sep-25	10-Oct-25
	Incorporate Core Team NOI Comments	11	13-Oct-25	24-Oct-25
	USACE Issues NOI to Federal Register	4	27-Oct-25	31-Oct-25
	Federal Register Issue NOI	4	3-Nov-25	7-Nov-25
	30-day Public Scoping Period	32	10-Nov-25	12-Dec-25
	Terracon compile and summarize comments and submit summary to agency	25	15-Dec-25	9-Jan-26
	Initiate Scoping Report Development	1	12-Jan-26	12-Jan-26
	Terracon coordinate with USACE to develop DOPAA (Purpose/Need/Alternatives)	38	12-Jan-26	19-Feb-26
	Agency Review Draft Scope Report Document	11	22-Feb-26	5-Mar-26
	Address Core Team/Management Review Scoping Report Document Comments	11	8-Mar-26	19-Mar-26
	Prepare to Issue Scoping Report Document	11	22-Mar-26	2-Apr-26
	Issue Scoping Report Document	1	2-Apr-26	3-Apr-26
<b>Agency Coordination</b>				
	Section 7 Consultation with USFWS	120	3-Apr-26	1-Aug-26
	Section 106 Consultation with TN SHPO	120	3-Apr-26	1-Aug-26
<b>Prepare Draft EIS</b>				
	Terracon Prepare Draft EIS	160	6-Apr-26	13-Sep-26
	Client/agencies review Draft EIS	11	16-Sep-26	27-Sep-26
	Terracon Address Reviewer Comments on Draft EIS	11	30-Sep-26	11-Oct-26
	Final client/agency review of draft EIS	11	14-Oct-26	25-Oct-26
	Terracon Addresses final edits and preps Draft EIS package for agency to release	11	28-Oct-26	8-Nov-26
	Client/Agency Issues Draft EIS to Public and EPA	3	11-Nov-26	14-Nov-26
	EPA Prepare Notice of Availability	3	19-Nov-26	22-Nov-26
	EPA Publishes Notice of Availability	1	23-Nov-26	23-Nov-26



# TECHNICAL APPROACH

Task	Activity Name	Duration	Start Date	End Date
<b>Public Comment EIS</b>				
	Prepare for Public Comment Period	10	19-Nov-26	29-Nov-26
	Public Comment Period 45 Calendar Days	45	2-Dec-26	16-Jan-27
	Respond to Public Comments	90	17-Jan-27	17-Apr-27
<b>Final EIS Document and Deliverables</b>				
	Terracon Prepare Final EIS	109	18-Apr-27	5-Aug-27
	client/agencies Review Preliminary Final EIS	33	8-Aug-27	10-Sep-27
	Terracon addresses reviewer comments on preliminary Final EIS	11	13-Sep-27	24-Sep-27
	Client/agencies review Final EIS Package	11	27-Sep-27	8-Oct-27
	Terracon addresses final edits, packages for EPA compliant submittal , submit to client/agencies	11	11-Oct-27	22-Oct-27
	Client/agency submits final package to EPA/Federal Register	3	26-Oct-27	29-Oct-27
	EPA Prepare Notice of Availability	5	1-Nov-27	6-Nov-27
	Waiting Period for Final EIS Review	30	9-Nov-27	9-Dec-27
	Terracon Prepare Draft Record of Decision (ROD)	120	12-Dec-27	10-Apr-28
	Client/agencies Review Draft ROD	45	13-Apr-28	28-May-28
	Terracon Incorporate Comments for ROD	30	31-May-28	30-Jun-28
	USACE Publishes ROD	20	3-Jul-28	23-Jul-28
	NEPA Document Complete		26-Jul-28	26-Jul-28
	Client/agencies Submit ROD to Federal Register		29-Jul-28	29-Jul-28
	Transmittal Letter to Public and Agencies	11	1-Aug-28	12-Aug-28
	Federal Register Issue ROD	30	15-Aug-28	14-Sep-28
	Agency Completes Administrative File	90	17-Sep-28	16-Dec-28
	Terracon Project Close Out	30	19-Dec-28	18-Jan-29

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