

**From:** "Louis Bridges" <LBridges@kleinfelder.com>  
**To:** "Ron Linton" <RCL1@nrc.gov>  
**Date:** 05/08/2007 9:57:52 PM  
**Subject:** RE: Affects on listed species/critical habitat

40-8903

Ron

As a follow-up to your request. I did evaluate Alternatives B & C for potential T & E species and critical habitat. Please see Sections 3.11, 4.3.1, 4.4.1, and 4.7.3. Kleinfelder did contact the USFWS and NMG&F for input and current lists of T&E species. The ER determined that no impacts to T&E or critical habitat were associated with the reasonable range of alternatives evaluated for this project. However, Kleinfelder did not preform specie level field surveys (biological assessments) for each T&E specie or critical habitat. Field level specie surveys (biological assessments) were considered outside the scope of this project due to past reclamation activities and lack of native habitats.

Also attached is my resume for your review. I am currently on travel. I can be reach on my cell phone should you have additional questions

Louis J. Bridges Ph.D.

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>>> "Cox, Al (Grants)" <ACox@barrick.com> 05/07/07 9:09 PM >>>

Ron,

I will have Lou Bridges contact you regarding this. If any field verification, or other work, needs to be done on this topic - it will need to be done ASAP. I believe that the T&E issue was examined to the extent necessary, but I will await the results of your discussions with Lou B. I will be in touch with Lou as soon as I can reach him - I am in RSO re-certification class this week and can communicate during breaks only.

Thanks.....Al

**From:** Ron Linton [mailto:RCL1@nrc.gov]  
**Sent:** Monday, May 07, 2007 9:07 AM  
**To:** Cox, Al (Grants)  
**Subject:** Affects on listed species/critical habitat

Al:

As a follow-up to our discussion on the 4/25, did Kleinfelder review the species of concern list obtained from NMG&F or USF&W and determine whether listed species or critical habitat could be located within the area in and around Alternatives B & C? Specifically, did they do an evaluation to determine if the proposed action could adversely affect a listed species or critical habitat? If they did, I need to know the qualifications for the individual (s) that did the survey. If available, please forward that information to me. If not, we will likely need them to do an evaluation within the "action area" in and around the Alternatives for B & C by persons qualified to do so. This question came up in the review of the Evaporation Pond #3 Environmental

Report.

Call me, or have Kleinfelder personnel call me, at 301-415-7777, if you have questions.

Ron C. Linton  
Senior Groundwater Hydrologist/Project Manager  
U.S. Nuclear Regulatory Commission  
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and Environmental Management Programs  
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**CC:** "Al Cox" <ACox@barrick.com>, <dkump@barrick.com>, "Alan Kuhn" <AKuhn@kleinfelder.com>

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**Subject:** RE: Affects on listed species/critical habitat  
**Creation Date** 05/08/2007 9:56:52 PM  
**From:** "Louis Bridges" <LBridges@kleinfelder.com>

**Created By:** LBridges@kleinfelder.com

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<b>Files</b>	<b>Size</b>	<b>Date &amp; Time</b>
MESSAGE	3280	05/08/2007 9:56:52 PM
TEXT.htm	4402	
Louis Bridges Resume.pdf	267298	
Mime.822	375919	

**Options**

**Expiration Date:** None  
**Priority:** Standard  
**ReplyRequested:** No  
**Return Notification:** None

**Concealed Subject:** No  
**Security:** Standard

## LOUIS J. BRIDGES, PH.D.

Central Division Environmental Planning and Permitting Manager

### Summary of Experience

Dr. Bridges has over 20 years experience in environmental consulting, including program design, data collection and analysis, report preparation, project management, regulatory analysis and permit preparation. In addition, Dr. Bridges has over 10 years of experience teaching environmental science and natural resource management. This experience has been gained with a variety of public and private sector clients and institutions, including the USFWS, USFS, USACE, various state regulatory agencies such as the Colorado Division of Wildlife and New Mexico Game & Fish Department.

### Education

Fort Lewis College, Durango, CO, Biology/Natural History, B.S., 1982

University of Colorado, Colorado Springs, CO, Science Education, M.A., 1992

University of Denver, Denver, CO, Administration, Ph.D., 2004

### Certifications

1993/40-Hour HAZWOPER Health and Safety Training (OSHA 29 CFR 1910.120)

1996/Professional Wetland Scientist #0000276

2003/USEPA: Certified Pesticide Applicator

2006 Colorado Department of Transportation Erosion Control Supervisor and Stormwater Management Planning

### Select Project Experience

#### General

*Boulder Community Hospital, Boulder CO.* Boulder Community Hospital a LEEDs certified organization located in Boulder, CO solicited Kleinfelder Inc. to be their Trusted Advisor for their Environmental Planning and Permitting needs. Dr. Louis J. Bridges provided project oversight, field methodology expertise, and coordination and consultation efforts for the project. The scope of the project was to develop a mitigation and relocation plan for the removal of Black-tailed Prairie Dogs that have encroached within the perimeter of the hospital. According to the hospital the prairie dogs were a health hazard to visitors and patients of the hospital.

As part of the permitting process with the City of Boulder, CO and the provisions of the Boulder Community Hospitals LEEDs certification, no prairie dogs were to be destroyed. Therefore, Kleinfelder lead the mapping, permitting, consultation and coordination efforts with federal, state and local agencies along with stakeholders, to develop a black-tailed prairie dog mitigation and relocation plan. The plan was required to be was compliant with the provisions of the LEEDs certification. Field efforts included population counts, coterie boundary determination, vegetation status, geology, and viability of the relocation sites.

As part of the provisions of the LEEDs certification the viability of the relocated black-tailed prairie dogs and maintaining intact family units was paramount. Therefore, with the assistance of a licensed prairie dog relocation contractor, relocation sites were evaluated for sustainability of the prairie dog populations and artificial burrow placement. Artificial burrows were constructed as per the guidance of the Colorado Division of Wildlife. Upon approval and acceptance of the mitigation and relocation plan the relocation permit was signed by local entities and the relocation was completed.

*Homestake Mine of California, Grants NM.* Dr. Bridges provided project oversight for the Cultural/Archeological Survey completed at Homestake Mine (HMC) located near Grants, NM. The survey consisted of a cultural resource investigation of a road/utility corridor and two 160-acre parcels of private land located within the property boundaries of the HMC facility.

A review of the state archaeological site files, the New Mexico State Register of Cultural Properties, and the National Register of Historic Places, was completed to determine whether any previously recorded sites or historic properties were present within the proposed project area. A 100-percent coverage pedestrian cultural resource survey of the proposed project areas [320 acres] was completed.

Consultation with the appropriate Native American Tribal Governments on behalf of the U.S. Nuclear Regulatory Commission was completed regarding potential project effects to any National Register eligible properties or Traditional Cultural Properties located within the proposed project area as required by the National Historic Preservation Act of 1966, as amended through 1992, and applicable regulations. A requirement consultation with the New Mexico State Historic Preservation Officer (SHPO) occurred regarding potential project effects to any National Register eligible properties documented within the proposed project area. Twelve sites were recorded as findings and reported to the SHPO.

*Homestake Mine of California, Grants NM.* Dr. Bridges was the senior project manager for an Environmental Assessment (EA) to evaluate the effects of constructing an additional evaporation pond and expanding the license operations boundary at the HMC project located near Grants, NM.

The purpose and need for the project was to maintain the current rate of remediation activities at the HMC project that are associated with groundwater contamination and groundwater remediation. The construction of a third evaporation pond was required to meet HMC reclamation timelines and the current licensed operational boundary was expanded to accommodate the placement of the evaporation pond. As part of the NEPA process Kleinfelder was provided guidance based on the requirements of the Nuclear Regulatory Commission's guidance document NUREG-1748 "Environmental Review Guidance for Licensing Actions Associated with NMSS Programs" dated August 2003.

*Premier Pacific Vineyards, Sonoma County, CA.* Dr. Bridges served as the Senior Project Manager for the 404 Clean Water Act Permitting and Wetland delineation effort. The project encompassed delineating over 200 jurisdictional wetlands along with over 20 miles of drainages associated with the delineation effort. The effort included 12 weeks of field work with two teams of two wetland delineators.

*Wetland Delineation, New Castle, Colorado.* Dr. Bridges served as the Senior Project Manager for the New Castle Properties wetland delineation effort. The New Castle Property effort consisted of delineating 229 acres of riparian habitat according to the 1987 Army Corps of Engineers Wetland Delineation Manual.

*Wetland Delineation, Town of Milliken Colorado.* Dr. Bridges served as the Senior Project Manager for the delineation of wetlands located within the 640 acre planned community development. The delineations were completed according to the Army Corps of Engineers 1987 manual.

*Colorado City Municipal Airport Biological Assessment, Colorado City, Arizona.* Dr. Bridges served as the Senior Project Manager for the Threatened and Endangered species field survey

and Section 7 US Fish and Wildlife consultation. The proposed project at the Colorado City Municipal Airport was to expand the airports capabilities to service a wider range and size of aircraft. The Biological Assessment involved completing 3 meter transects for threatened and endangered species that potentially occur in the impacted area. One species, the Yellow beaver-tailed cactus was identified during the previous BA completed in 2001. However, no positive identification of the cactus was confirmed during the 2006 field survey.

*City of Boulder, Black-tailed Prairie Dogs Relocation at Foothills Parkway and Arapahoe Boulevard Interchange Expansion, Boulder, Colorado:* Dr. Bridges served as the Senior Project Manager to capture and relocate 65 Black-tailed Prairie dogs located on a property owned by the Colorado Department of Transportation (CDOT) where the City of Boulder and CDOT plan to expand the Foothills Parkway and Arapahoe Boulevard interchange. Dr. Bridges coordinated and provided project supervision, along with permitting for the capture and relocation of the prairie dogs to other areas and western states. Dr. Bridges also implemented protocols for the burrowing owl survey working in close cooperation with the USFWS Ecological Services division.

*Mesa Verde National Park Environmental Assessment, Mesa Verde, Colorado:* Dr. Bridges served as the Project Manager and Senior Scientist for the Mesa Verde National Park Entrance Station. Environmental Assessment. Working in close cooperation with the NPS and stakeholders including the City of Cortez, CO, Dr. Bridges analyzed the impacts of constructing two new entrance stations and staff offices. Dr. Bridges also assisted with realigning dangerous curves, dips, and blind corners along Colorado State Highway 160 while preserving the natural landscapes, natural environments, and historic sites located throughout the Park and along Highway 160.

*Comprehensive Conservation Plan (CCP) and Environmental Impact Statement (EIS), Texas Chenier Plains National Wildlife Refuge (TCPNWR) Complex, Anahuac, Texas:* Dr. Bridges serves as the Senior Scientist and provides NEPA Compliance review. A CCP is the management planning document which implements step-down management planning for the NWR over a 15 year period with planned revisions on a 5 year basis. In addition, all CCP's are required to be NEPA compliant either by completing an EA or EIS. The TCPNWF includes Anahuac NWR, McFaddin NWR, Texas Point NWR, and Moody NWR. Dr. Bridges has been involved in this project beginning in 2001 where the TCPNWF began completing the mandated CCP. Along with the CCP the refuge included a proposed boundary expansion that increased the size of the refuge complex from approximately 73,000 acres to 130,000 acres. Dr. Bridges has completed public scoping, biological impact analyses and reviewed other sections of the EIS for NEPA compliance. Over three quarters of the 130,000 acres of NWR lands were jurisdictional wetlands.

*Wilderness Analysis, Texas Chenier Plains National Wildlife Refuge Complex Environmental Impact Statement (EIS), Anahuac, Texas:* Dr. Bridges was the Project Manager for the Wilderness Analysis which evaluated 130,000 acres of land within the wildlife refuge complex to determine if any of the land qualified as wilderness under the Wilderness Act of 1964 as amended for inclusion into the National Wilderness Preservation System. The project involved identifying parcels of land within the refuge complex that met the minimum 5,000 acre size requirement then evaluating each parcel for its outstanding qualities. Six Wilderness Study Areas (WSA) were evaluated for inclusion into the National Wilderness Preservation System.

*Environmental Assessment, Cactus Forest Drive Road Rehabilitation, Saguaro National Park, Tucson, Arizona:* Dr. Bridges served as the Project Manager and Senior Scientist for the Cactus Forest Drive rehabilitation for the Saguaro National Park. Working in close cooperation with the NPS and stakeholders including the City of Tucson, AZ, Dr. Bridges analyzed the

impacts of rehabilitating the road surface and realigning dangerous curves, dips, and blind corners along Cactus Forest Drive while preserving the natural landscapes, natural environments, and historic sites located throughout the Park and along Cactus Forest Drive.

*Environmental Assessment and Biological Assessment (EA/BA), Hurricane Ridge Road Rehabilitation Olympic National Park, Port Angeles, Washington:* Dr. Bridges served as the Senior Scientist for the EA and the Project Manager for the BA. The purpose of this project was to determine the effects of rehabilitating the road for public transportation safety on the natural environs including the Northern Spotted Owl and the Marbled Murrelet both endangered species. Additionally, the project included the completion of an informal consultation with the US Fish and Wildlife Service to determine impacts to Federal Threatened and Endangered species located adjacent or near the project sites. Additionally, and Essential Fish Habitat evaluation was completed to determine if the proposed project would impact fish habitats within or adjacent to the project area.

*Species Survey, Homestead Air Force Base, Homestead, Florida:* Dr. Bridges served as a Senior Wildlife Biologist in collecting empirical species data at Homestead AFB. Species inventory information was collected for birds, mammals, plants, fish, reptiles, invasive species and sensitive species. Dr. Bridges also completed wetland function analysis for wetland located within the AFB perimeter.

*Categorical Exclusion and Biological Assessment (BA), Sol Duc Road Rehabilitation Olympic National Park, Port Angeles, Washington:* Dr. Bridges served as the Project Manager/ Senior Scientist for this project. The Sol Duc Road Rehabilitation Categorical Exclusion was originally classified as a major federal action which under the National Environmental Policy Act (NEPA) and required the National Park Service (NPS) to evaluate the impact of rehabilitating 6 sites along the Sol Duc road. Additionally, the project included the completion of an informal consultation with the US Fish and Wildlife Service to determine impacts to Federal Threatened and Endangered species located adjacent or near the project sites. Additionally, and Essential Fish Habitat evaluation was completed to determine if the proposed project would impact fish habitats within or adjacent to the project area.

*Environment Assessment (EA), Fielding of a CH-47 Chinook Platoon and Conversion to a Support Aviation Battalion at Buckley Air Force Base, Colorado Army National Guard (COARNG), Aurora, Colorado:* Dr. Bridges served as the Lead Project Manager for the EA which analyzed the impacts of converting the COARNG to a Support Aviation Battalion. COARNG planned to field 14 CH-47 Chinook helicopters and remove 31 UH-1 Huey helicopters and add 10 UH-60 Black Hawk helicopters under this project. Dr. Bridges along with other scientist analyzed the impacts of this project on air quality due to increased flight operations, noise impacts to sensitive noise receptor, and safety associated with increases in flight operations. All other impact areas were dismissed.

*Air Installation Compatible Use Zone Study (AICUZ), United States Air Force Academy, Colorado Springs, Colorado:* Dr. Bridges served the Assistant Project Manager on this AICUZ study which analyzed the aircraft flight path noise levels on the surrounding communities and natural environs. Dr. Bridges worked closely with stakeholders and surrounding city and county governments to analyze noise impacts on residential and commercial areas located throughout the Colorado Springs area including El Paso County.

*Biological Report, Denver Water Board Bypass Flow Reduction Plan, Pike & San Isabel National Forest and Cimarron and Comanche National Grasslands, South Platte District:* Dr. Bridges served as the Project Manager for the project. The purpose of the Biological Report was to determine if bypass flow reductions on the South Platte River located near Denver CO

during extreme drought conditions would affect natural resources located along the river corridor that reached into the state Nebraska.

*Biological Report and Environmental Assessment, Fraser Experimental Forest Road Closure, Sulphur Ranger District, Arapaho-Roosevelt National Forest and Pawnee National Grassland:* Dr. Bridges served as the Wildlife Biologist and NEPA compliance specialist for the project. Dr. Bridges was a subcontractor to Grand Environmental. The purpose of the project was to analyze the impacts associated with closing roads within the Fraser Experimental Forest. Both a Biological Report and an Environmental Assessment were completed for this project.

*Biological Report, C Lazy U USFS Easement, Sulphur Ranger District, Arapaho-Roosevelt National Forest and Pawnee National Grassland:* Dr. Bridges served as the Wildlife Biologist and NEPA compliance specialist for the project. Dr. Bridges was a subcontractor to Grand Environmental. The purpose of the project was to grant an easement to the C Lazy U Preserves for access along an existing road from County Road 40 at Willow Creek Dam to the property boundary. Dr. Bridges along with the interdisciplinary team analyzed the impacts of the project on natural resources found within the project area.

*Predator Survey, Fort Chaffee Maneuver Training Center, Fort Chaffee, Arkansas, FCMTC-ARARNG:* Mr. Bridges served as Project Manager for this project. Dr. Bridges developed and performed survey protocols for FCMTC-ARNG to complete a predator survey for 17,000 acres of land located on the FCMTC installation. The primary objective of this project was to survey and collect information on the predators located on the FCMTC installation. Additionally, of primary interest was to collect evidence that would support the presence of a relic population of Florida panthers that are suspected to occur within the geographic region of the installation.

*Environmental Assessment, Fort Chaffee Maneuver Training Center, Cantonment Expansion, Fort Chaffee, Arkansas, FCMTC-ARARNG:* Dr. Bridges serves as Project Manager for this project. Dr. Bridges was task by the FCMTC located at Fort Chaffee, AR to evaluate the construction and operational impacts to the environs associated with the expansion of the cantonment facilities that would potentially house 15,000 troops along with the required support facilities. The EA evaluated 283 acres of potential impact area.

*Colorado Christian Living Association, Black-tailed Prairie Relocation and Burrowing Owl Survey, Englewood, Colorado:* Dr. Bridges served and the Program Manager and Lead Senior Scientist to capture and relocate 2,500 Black-tailed Prairie dogs located on a property where an adult assisted living community was to be constructed. Dr. Bridges coordinated and provided project supervision along with permitting for the capture and relocation of the prairie dogs to other western states. Dr. Bridges also implemented protocols for the burrowing owl survey working in close cooperation with the USFWS Ecological Services division.

*Wetland Construction, Preserve at Weaver Creek, Littleton, Colorado:* Dr. Bridges served as the lead Program Manager for this project. Dr. Bridges was tasked to complete the wetland construction for the Preserve at Weaver Creek Development. Dr. Bridges completed jurisdictional wetland delineations, provided public scoping and presentations to local communities, county and city governments. Dr. Bridges assisted with and completed permitting for rezoning of the property from an agricultural status designation to a high-density residential community status. Dr. Bridges also provided regulatory compliance to preserve and transfer the wetlands over the community managers. Dr. Bridges designed and provided project over-site for the reconstruction of the wetlands and pond area where over 30,000 native plants were to be located along with developing a fishery within the wetland area where over 9,000 fish were stocked.

*Environmental Assessment, Lake Texoma Water Reallocation, USACE Tulsa District, Dennison Texas:* Dr. Bridges served as Project Manager for this project. The Lake Texoma Reallocation EA was classified as a major federal action which under the National Environmental Policy Act (NEPA) require the USACE (Tulsa District) to evaluate the impact of the 450,000 acre feet of water reallocation on the surrounding area and included the analysis of impacts on the natural habitat found throughout the area along with the social and economic impacts associated with the action.

*Environmental Impact Statement (EIS), United States Fish and Wildlife Service, Douglas County Preble's Meadow Jumping Mouse Habitat Conservation Plan, , DOI-USFWS-DCHCP-EIS, Denver, Colorado:* Dr. Bridges served as Program Manager for this project. Dr. Bridges assisted the agency with the NEPA compliance for the Preble's Meadow Jumping Mouse Environmental Impact Statements for four (4) counties located along the Front Range of CO. Douglas County, CO was the first of the four counties to begin the EIS process, followed by Boulder, El Paso, and Livermore County. Dr. Bridges represented the USFWS throughout the EIS review process and coordination of the four counties, along with impact analysis and public involvement processes.

*Army Training and Testing Carrying Capacity (ATTAC) study for the Kansas Army National Guard, Kansas Regional Training Center, Salina, KS, KSARNG-KSRTC:* Dr. Bridges served as Project Manager for this project. Dr. Bridges assisted the KSARNG in analyzing the impacts of maneuver training at the KSRTC located at Salina, KS. Along with the analysis Dr. Bridges assisted with the development of GIS modeling techniques to analyze the erosion potential of the training facility and the cost to rehabilitate the natural environs upon completion of the maneuver training exercises.

#### Other Related Experience

In compliance with requirements of the Endangered Species Act, Dr. Bridges has conducted investigations and prepared biological assessments for a number of plant and animal species on federal and state endangered species lists. These biological assessments have occurred in the states of California, Arizona, New Mexico, Texas, Colorado, Kansas, Texas, Oklahoma, and Florida. The representative species have included the Canada Lynx, Colorado Pikeminnow, Preble's meadow jumping mouse, Southern and Northern Spotted Owls, Marbled Murrelet, Desert Tortoise, Florida Panther, and Sonoran pronghorn to name a few. Additionally, ecological investigations were required to meet permit requirements for the USACE and USFWS.

*Comprehensive Conservation Plans, U.S. Fish and Wildlife Service, Region 2, Albuquerque, New Mexico:* Dr. Bridges developed or assisted with 13 CCP's at the following NWR's located in Region 2.

- Bitter Lake NWR, New Mexico
- San Andres NWR, New Mexico
- Sevilleta NWR, New Mexico
- Las Vegas NWR, New Mexico
- Maxwell NWR, New Mexico
- Muleshoe/Grulla NWR, New Mexico
- Salt Plains NWR, Oklahoma
- Sequoyia NWR, Oklahoma
- Washita, NWR, Oklahoma
- Chenier Plains NWR Complex, Texas
- Hagerman, NWR, Texas
- Laguna Atascosa NWR, Texas
- Tishomingo NWR, Oklahoma

*Comprehensive Conservation Plans, U.S. Fish and Wildlife Service, Region 4, Atlanta, Georgia:*

Dr. Bridges developed and assisted with 2 CCP's at the following NWR's located in Region 4.

- Ten Thousand Island NWR, Florida
- Florida Panther NWR, Florida

*Comprehensive Conservation Plans, U.S. Fish and Wildlife Service, Region 6, Denver, Colorado:* Dr. Bridges developed one CCP for Region 6 at Flint Hills NWR located Kansas.

Other agencies and efforts that Dr. Bridges has managed include the Bighorn National Forest Management Plan located in Wyoming. Cabeza Prieta NWR, Arizona ASRS retrofit for the Federal Aviation Administration.