

APPENDIX 8.2B

## Qualifications and Resumes of Field Surveyors

# Russell T Huddleston

Associate Biologist

## Education

M.S., Ecology, University of California at Davis, 2001

B.S., Biology, Southern Oregon University, 1998

## Professional Registrations

Endangered Species Act Section 10 Scientific Take Permit for Threatened and Endangered Vernal Pool Crustaceans (Permit TE-054230-0)

California Department of Fish and Game Scientific Collectors Permit for Threatened and Endangered Vernal Pool Crustaceans (Permit 5934)

California Department of Fish and Game Scientific Collectors Permit for Threatened and Endangered Plants (Permit 05073)

Oregon Department of Agriculture Permit to Collect State-Listed Plant Species

## Distinguishing Qualifications

- Over six years experience working with vernal pool ecosystems in Oregon and California
- Expertise in biological habitat assessment, mapping, botanical inventories and rare plant surveys
- Expertise in wetland delineation and assessment
- Experience in preparing biological sections of environmental documents to fulfill CEQA, NEPA and other resource agency requirements

## Relevant Experience

Mr. Huddleston is an associate biologist and plant ecologist in the Environmental Business Group in CH2M HILL's Sacramento office. He has more than 6 years of experience in plant community classification, habitat assessment, special-status species surveys, and wetland delineations. His specific expertise is in vernal pool ecosystems. He is also experience in Global Positioning System Technology (GPS) to map vegetation types, wetlands and other habitat features. He has experience in preparation of biological resources reports, wetland delineations and other environmental documents. Prior to joining CH2M HILL he worked with the Nature Conservancy in Southern Oregon conducting rare plant monitoring for Cook's desert parsley (*Lomatium cookii*) and the large flowered wooly meadowfoam (*Limnanthes floccosa ssp. grandiflora*) on the Agate Desert in Southern Oregon. In addition Mr. Huddleston's undergraduate and graduate research projects included studies of the Agate Desert vernal pool and grassland plant communities.

## Representative Projects

**Vernal pool mapping and habitat assessment for Travis Air Force Base, Fairfield, California.** Vernal pool mapping, habitat assessment and rare plant surveys were conducted as part of the

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Base natural resource inventory program. Vernal pool habitats and rare plant occurrences were mapped using Trimble® global positioning system technology and incorporated into a Geographic Information System database.

**Roseville Energy Center, California.** Rare plant surveys and wetland delineation of the approximately 70-acre vernal pool and annual grassland study area were conducted to determine if special-status plant species occur onsite and map the extent of jurisdictional wetlands found on the site. Rare plant surveys were floristic in nature and followed California Department of Fish and Game rare plant survey guidelines. Wetland delineation was conducted according the U.S. Army Corps of Engineers 1987 Wetland Delineation Manual.

**California Oregon Border Power Plant, Bonanza, Oregon.** Habitat mapping and evaluation, rare plant surveys and wetland delineations were conducted as part of the Site Certificate Application through the Oregon Office of Energy. Natural habitats included sagebrush steppe, juniper woodland, ponderosa pine forest and seasonal wetlands. Vegetation within each habitat was characterized and the habitat was evaluated based on Oregon Department of Fish and Wildlife's Habitat Classification System.

**Fort Ord Operable Unit 01, Monterey, California.** Conducted surveys for two federally listed plant species, Monterey Spineflower (*Chorizanthe pungens* var. *pungens*) and sand gilia (*Gilia tenuiflora* ssp. *arenaria*). Project involved identification and mapping of all populations of these species in an approximately 590-acre site. Plant populations were identified and mapped using global positioning system technology.

**California State Route 79, Riverside, California.** Protocol level presence/absence surveys were conducted for federally listed vernal pool crustaceans near the townships of Hemet and San Jacinto as part of the State Route 79 realignment project.

**Napa River Flood Protection Project, Napa, California.** Vegetation monitoring and habitat mapping for the 835-acre south wetlands opportunity area. Establishment of permanent transects and vegetation monitoring plots, general habitat mapping and data analysis were conducted to assess the conditions of the restored wetland/floodplain area along the Napa River.

**Sacramento Municipal Utility District's Cosumnes Power Plant, California.** Conducted rare plant surveys and wetland delineation for the proposed energy facility site, laydown area and 26-mile natural gas supply pipeline. Habitat types included annual grassland, seasonal wetlands, vernal pools, and riparian areas.

**Sierra Army Depot, U.S. Army Corps of Engineers, Sacramento, California.** An assessment of jurisdictional waters of the U.S. (including wetlands) was conducted on approximately 110-acre site of the Sacramento Army Depot in southern Sacramento County, California. Wetland types included vernal pools and intermittent creeks.

**State Route 153 Roadway Improvement Project, Federal Highway Administration, Beaver, Utah.** An assessment of jurisdictional waters of the U.S. (including wetlands) was conducted for approximately 766 acres along Utah State Highway 153. Wetland delineation was conducted along 11.5 miles of roadway.

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**In-Delta Storage Project, California Department of Water Resources, Sacramento and Contra Costa Counties.** Assisted DWR botanists with rare, threatened and endangered plant surveys in the Sacramento-San-Joaquin Delta. Habitat types included inter-tidal areas, annual grassland, riparian areas and agricultural lands.

**Pipeline/Transmission Line Alternatives Study, Calpine Teayawa Energy Center, California.** Provided habitat mapping along several proposed pipeline and transmission line alternatives in the Coachella Valley. Habitat types included Sonoran Desert creosote scrub, alkali scrub, desert riparian areas, palm oases, and tamarisk woodlands.

**Pipeline Transmission Line Alternatives Study, Calpine East Altamont Energy Center, California.** Provided habitat mapping and evaluation of suitability for special-status plant and wildlife species along several proposed pipeline alternatives in the San Joaquin Valley. Natural habitat types included annual grassland, alkali meadow, and seasonal wetlands.

**Proposed Sewer Alignment, Vallejo Flood and Sanitation District, California.** Conducted preconstruction plant surveys for special status plant species along a proposed sewer pipeline alignment. Habitat types included inter-tidal marsh, annual grasslands, wet meadows, riparian areas, and wetlands.

**Pacific Gas and Electric Line 401 Capacity Loops Project.** Conducted biological resource surveys including rare, threatened and endangered plant species. Habitat types included mixed conifer forest, sagebrush steppe, seasonal wetlands and riparian areas.

**Kesterson Reservoir, California, U.S. Bureau of Reclamation.** Vegetation monitoring as part of long-term monitoring program at Kesterson Reservoir. Projected included estimates of vegetative cover at fixed plot locations in the former retention pond areas and data analysis of long term trends in changes of the plant community. Habitat types included annual grassland and alkali scrub.

**Bunker Hill, Idaho, U.S. Environmental Protection Agency.** Monitoring of hillside vegetation following restoration efforts involving seeding of grasses and forbs and planting of tree and shrubs seedlings. Involved vegetation cover estimates at fixed quadrat and transect plot locations, evaluation of community growth, successional trends and vegetative recruitment.

## *Experience Prior to CH2M HILL*

**The Nature Conservancy; Medford, Oregon; 1999-2000.** Field steward for southwestern Oregon. Responsibilities included measuring and monitoring rare plant populations and vegetation communities, habitat assessments, botanical surveys, weed management, and habitat restoration. Habitat types included grasslands, oak savannas, vernal pools, and serpentine forests.

## Professional Organizations/Affiliations

Ecological Society of America  
Society of Wetland Scientists  
California Botanical Society  
California Native Plant Society

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## Honors and Awards

Phi Kappa Phi – Honor Society, Southern Oregon University Chapter  
Hollenbeck Fellowship in Biology – Southern Oregon University  
Jean Davis Memorial Scholarship – Native Plant Society of Oregon

## Professional Development

Soil Morphology Workshop; Corvallis, Oregon 2004  
Applied Hydric Soils; Sacramento, California 2003  
Identification of Plants from Vernal Pools and other Seasonal Wetland; Chico, California 2003  
Introduction to Keying Carex, Chico; California 2003  
Army Corps of Engineers Wetland Delineation Training, Sacramento; California 2002  
Identification of Fairy Shrimp and Tadpole Shrimp; Sacramento, California 2002  
Field Indicators of Hydric Soils; Sacramento, California 2002  
Identification of Mosses; Chico, California 2002  
Introduction to the Poaceae; Davis, California 2001

## Publications and Presentations

2001. *Vernal Pool Plant Community Composition and Diversity on the Agate Desert in Southwestern, Oregon*. Presentation at the 22<sup>nd</sup> Annual Conference of the Society of Wetland Scientists, Chicago, Illinois May 27-June 1.
2001. With T.P. Young and J.M. Chase. *A comparison and synthesis of community succession and assembly as conceptual bases for restoration ecology*. *Ecological Restoration* 19:1.
2000. With Borgias, D., R. Dovel, N. Rudd and D. Salzer.. *Management and monitoring of Elytrigia repens (L.) Nevski [quack grass], invading the habitat of Astragalus applegatei [Applegate's milkvetch], a listed endangered species, on Ewauana Flat Preserve, Klamath County, Oregon*. U.S. Department of Fish and Wildlife Contract #14-48-0001-96700.
1997. *Plant Ecology of the Vernal Pools on the Nature Conservancy's Agate Desert Preserve*. Poster Presentation at the First Conference on Siskiyou Ecology. Siskiyou Regional Education Project, Cave Junction, Oregon.

## Supplemental Information

Years Experience Prior to CH2M HILL: 2  
CH2M HILL Hire Date: 7/10/2000

*Last Employee Update: 00/00/XXXX*

# Marjorie A. Eisert

## Senior Wildlife Biologist

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### Education

B.S., Wildlife and Fisheries Biology, University of California, Davis

### Relevant Experience

Ms. Eisert is a senior wildlife biologist in our Sacramento, California office with over 16 years of experience working on applied environmental problems in terrestrial habitats. Ms. Eisert's duties include performing general and special-status wildlife surveys and census techniques and has conducted studies in California, Nevada, Oregon, Washington, and Alaska. Her expertise includes knowledge of invertebrate and vertebrate natural history, handling and restraint of herpetile, bird, and mammalian species, experience with vertebrate and invertebrate collection methodologies and techniques, and identification of herpetile, bird, and mammalian species. She is familiar with state and federal regulations pertaining to both wetland and wildlife issues. She prepares biological assessments for endangered species and develops mitigation plans for Section 7 and 10(a) under the Endangered Species Act. Ms. Eisert prepares Integrated Natural Resource Management Plans for several military installations in the United States and overseas. Ms. Eisert is also a project manager, with experience managing water delivery, environmental, and transportation projects.

### Selected Project Experience

Project Manager/Project Biologist, Kinder Morgan On-Call Biological Services Program. Provide on-call biological surveys in support of Kinder Morgan's pipeline maintenance program. Conducted biological surveys, including valley elderberry longhorn beetle, burrowing owl, and raptor surveys. Provide permitting support when necessary, including consultation with U.S. Fish and Wildlife Service for Section 7 of the Endangered Species Act, preparation of Streambed Alteration Agreements for the California Department of Fish and Game, Section 404 applications for the U.S. Army Corps of Engineers, and Section 401 applications to the Regional Water Quality Control Board.

Project Biologist, Biological Surveys, COB Energy Facility, Oregon. Evaluated ecological resources including wetlands and threatened and endangered species for the development of a 46-acre project site and associated transmission, gas, and water utility lines. Conducted bald eagle and amphibian surveys as well as general reconnaissance of the project vicinity. Coordinated Section 7 consultation with the U.S. Fish and Wildlife Service as well as the Oregon Department of Fish and Game and the Bureau of Land Management.

Task Manager, Hickman Bridge Scour Countermeasures Project at Waterford, County of Stanislaus, California. Prepared a Natural Environmental Study document for Stanislaus County to implement emergency stabilization measures for the Hickman Bridge. Evaluated project impacts to special-status species and consulted with the U.S. Fish and Wildlife Service to determine appropriate mitigation measures.

Task Manager, Hyampom Road Improvement Project, Trinity County, California. Responsible for managing biological studies, including northern spotted owl surveys, raptor surveys, amphibian surveys, rare plant surveys, and wetlands delineation. Conducted biological surveys, Section 7 consultation, and prepared Biological Assessment for the proposed project. The project consisted of approximately 8.6 miles of improvements along Hyampom Road, including widening lanes and smoothing of curves.

Project Biologist, Biological Surveys, Pacific Gas Transmission Company. Evaluated ecological resources including wetlands and threatened and endangered species along an 85-mile proposed natural gas pipeline route in southern Oregon for Pacific Gas Transmission Company. Surveys included owl calling, herpetile ground searches, amphibian surveys, and use of the Pathfinder Global Positioning System, as well as management of the collected field data. Senior wildlife biologist for the PGT Medford Extension natural gas transmission line routing studies in Oregon. Involved in the initial alternative route selection for this project and responsible for coordinating the data for the geographical information system (GIS) used. This information was added to the GIS database so that historical and current information could be viewed with the proposed alignment to determine alignment changes cost-effectively and to minimize environmental effects of construction.

Project Manager, Kinder Morgan Energy Partners Nellis Air Force Base Fuel System Upgrade, Nevada. Project manager for new pipeline and jet fuel storage project including environmental baseline survey (EBS), environmental assessment (EA), air permitting, Section 7 consultation, and coordination with the U.S. Air Force.

Project Biologist, Ecological Risk Assessment, Weapons Support Facility, Seal Beach, California. Collected mammal, fish, invertebrate, and plant samples for assessment of toxicity and exposure, and evaluation of potential stratum-specific risks to potential receptors.

Project Biologist, Ecological Risk Assessment, Marine Corps Base Camp Pendleton, California. Conducted bird surveys, small mammal trapping, invertebrate and plant sample collections to identify potential contaminant exposure routes. Conducted endangered species surveys for a biological assessment for site remediation on the base. Assisted in the preparation of a basewide ecological risk assessment for selected sites at Marine Corps Base Camp Pendleton in California, including modeling food chain bioaccumulation of selected metals and pesticides, developing preliminary remediation goals for ecological receptors, and evaluating potential risks to plants, invertebrates, mammals, birds, and fish.

Project Biologist, Impact Analysis for Water Projects, Eastern Utah. Conducted HEP data collection over 12 sites throughout eastern Utah. Measured 45 biological variables including tree height and density, snag quality, and plant identification. Results of the data collection were input into HEP for analysis of potential impacts of proposed water projects.

Conducted wildlife surveys and collected waterfowl and shorebird eggs to evaluate trace metal contamination, salinity, and bioaccumulation (emphasis on selenium effects) in a wide variety of freshwater habitats.

Project Biologist, Knauf Fiberglass Manufacturing Facility, City of Shasta Lake, California. Conducted biological surveys and wetlands delineation in support of environmental documentation (EIR) for a proposed fiberglass manufacturing facility. Prepared permit documentation for the U.S. Army Corps of Engineers and the California Department of Fish and Game.

Project Biologist, Arden Garden Connector, City of Sacramento, California. Conducted biological surveys, including valley elderberry longhorn beetle and giant garter snake surveys, and an inventory of trees occurring in the project corridor. Studies were conducted to support environmental documentation for the construction of the Arden Garden Connector. Project responsibilities included preparation of permit documentation for the U.S. Army Corps of Engineers, California Department of Fish and Game, Regional Water Quality Control Board and Section 7 consultation with the U.S. Fish and Wildlife Service. Preparation of a mitigation plan for the removal of several elderberry shrubs as well as procurement of off-site mitigation was also required for this project.

Project Manager, Biological Monitoring Program, U.S. Bureau of Reclamation. Project Manager from 1994 to present. Conduct bird surveys, San Joaquin kit fox surveys, small mammal trapping, invertebrate and plant sample collection as part of the ongoing Biological Monitoring Program at Kesterson Reservoir in the Central San Joaquin Valley, California. Present results of the monitoring in an annual report that is used to determine risks to wildlife and the success or failure of cleanup procedures at the Reservoir.

Field Team Leader, Confirmatory Sampling and Ecological Risk Assessment for Bolsa Chica Lowlands, U.S. Fish and Wildlife Service, California. Field Team Leader for field investigations of surface water, sediment, surface and subsurface soil, and aquatic and terrestrial biota. Sample management responsibilities included implementation of an in-house sample tracking system and laboratory coordination for sample analysis and shipping. The focus of this ongoing project is to conduct sampling and to perform an ecological risk assessment for an active 1,200-acre oil production field in Orange County.

Project Manager, Ecological Risk Assessment, Unocal Guadalupe Oil Field. Responsible for managing the production of the preliminary ecological risk assessment for Unocal's Guadalupe Oil Field in Santa Maria. The purpose of the study was to identify the risks to wildlife from releases of diluent from leaking pipelines in the oil distribution system.

Project Manager, Habitat Mitigation Plan for Special-status Species, Sacramento County Department of Airports. Conducted wetland delineations of areas scheduled for development. Prepared permit documentation for the U.S. Army Corps of Engineers and the California Department of Fish and Game. Performed rare plant and special-status wildlife species surveys. Results of the project were used for the development of a habitat mitigation plan for special-status species at the Sacramento International Airport.

Project Biologist, Chevron Richmond Refinery, Richmond, California. Performed surveys of shorebirds nesting in constructed wetlands at a constructed wetland at a Chevron refinery in Richmond, California. Conducted nest searches, monitoring of incubating eggs, collection

of egg samples, and collection of fail-to-hatch and predated eggs. Data on selenium and mercury bioaccumulation were used with survey results to develop a management plan for the wetlands. The focus of these surveys were to determine if treated effluent from refinery operations were detrimental to wildlife using the treatment ponds.

Project Biologist, Integrated Natural Resource Management Plans, USAFE Air Bases in the United Kingdom and Turkey. Prepared Integrated Natural Resource Management Plans (INRMP) for several Air Force Bases in Europe. The purpose of the INRMP is to organize and direct the management of natural resources on an active military base without obstructing the base mission. Developed management plans for special-status plant and wildlife species as well as determined mitigation measures for future development on base.

Project Biologist, Ecological Risk Assessment, Marine Corps Base Camp Pendleton, California. Conducted bird surveys, small mammal trapping, invertebrate and plant sample collections to identify potential contaminant exposure routes. Conducted endangered species surveys for a biological assessment for site remediation on the base. Assisted in the preparation of a basewide ecological risk assessment for selected sites at Marine Corps Base Camp Pendleton in California, including modeling food chain bioaccumulation of selected metals and pesticides, developing preliminary remediation goals for ecological receptors, and evaluating potential risks to plants, invertebrates, mammals, birds, and fish.

## Specialized Training

OSHA-SARA 40-hour Health and Safety Course

OSHA 8-hour Supervisor Training

CPR Certification, American Red Cross

Standard First Aid Certification, American Red Cross

U.S. Army Corps of Engineers 40-hour Jurisdictional Delineation of Wetlands