

Appendix 5.2A

## Resumes of Field Surveyors

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**Todd Ellwood**  
**Project Biologist**  
CH2M HILL  
33 New Montgomery, Suite 2000  
San Francisco, Ca  
(415) 541-7220

## **Education**

B.S., Renewable Natural Resources (Emphasis in Wildlife and Fisheries Science), University of Arizona, 1997

## **Professional Registrations**

Department of Fish and Game Scientific Collecting Permit, #SC-006065, 2011

## **Distinguishing Qualifications**

- Expertise in biological resource construction mitigation monitoring
- Knowledgeable with California wildlife natural history including identifying herpetile, mammalian, and bird species

## **Relevant Experience**

As a project biologist, Mr. Ellwood's experience includes performing general and special-status wildlife surveys. He is familiar with California and federal regulations pertaining to both wetland and wildlife issues. He prepares biological assessments for special-status species and conducts habitat surveys. Mr. Ellwood also has experience performing mitigation monitoring for wetlands. He has more than 9 years experience working on applied environmental problems in terrestrial and aquatic habitats in the greater San Francisco bay area.

## **Project Experience with Special-Status Species**

California red-legged frog (*Rana draytoni*)  
California tiger salamander (*Ambystoma californiense*)  
San Francisco garter snake (*Thamnophis sirtalis tetrataenia*)  
Giant garter snake (*Thamnophis gigas*)  
California horned lizard (*Phrynosoma coronatum frontale*)  
California legless lizard (*Anniella pulchra*)  
Western pond turtle (*Clemmys marmorata*)  
Steelhead (*Oncorhynchus mykiss*)  
Vernal pool branchiopods  
Bay checkerspot butterfly (*Euphydryas editha bayensis*)  
San Francisco dusky-footed woodrat (*Neotoma fuscipes annectens*)  
San Joaquin kit fox (*Vulpes macrotis mutica*)  
Western burrowing owl (*Athene cunicularia hypugea*)

## **Representative Projects**

**Biological Monitor, Electrical Power Plants (Metcalf Energy Center, Los Esteros Critical Energy Facility, Gilroy Energy Center, Walnut Energy Center, Sutter Energy Center), Northern California.** Coordinated daily biological monitoring of project construction activities as the CEC-approved biologist. Performed biological

surveys to determine suitable habitat for sensitive plant and wildlife species. Performed breeding bird surveys during construction. Post-construction conducted avian collision survey along the new electrical transmission lines. Performed protocol-level surveys for Western burrowing owl. Performed focused surveys (non-protocol) for California red-legged frog, American bullfrog (*Rana catesbeiana*), California tiger salamander, Western pond turtle, and the Bay Checkerspot butterfly. Verified compliance with the project's SWPPP. Submitted a monthly Environmental Compliance Report to the CEC.

**Biologist, East Altamont Energy Center, Alameda County, California.** Assisted with preparation of the Biological Resource Mitigation Implementation and Monitoring Plan, Erosion Control and Revegetation Plan, Avian Collision Monitoring Plan and Horizontal Directional Drilling Inadvertent Returns Contingency Plan.

**Task Leader/Biologist, Caltrans District 4 Pigeon Pass Roadway Realignment Project, Alameda County, California.** Managed team of field biologists during the construction phase of the project. Field tasks included preconstruction surveys for California tiger salamander, California red-legged frog, and San Joaquin kit fox. Under conditional approval by USFWS, conducted burrow surveys for aestivating California red-legged frog and California tiger salamander using a peeper scope and hand excavation. Also captured and relocated San Francisco dusky-footed woodrat under authorization by CDFG. Field duties also included surveys for active bird nests and biological construction monitoring.

**Associate Scientist, Caltrans District 4 Oncall Environmental Services, Solano County, California.** Provided technical peer review of various environment documents including NESs, Biological Assessments, and Initial Studies/Negative Declarations. Attended Project Delivery Team (PDT) meetings on an as-needed basis in lieu of Caltrans Project Biologist. Provided general biological oversight of Caltrans local assistance projects in Solano County.

**Associate Scientist, Caltrans District 4 Red Top Road Truck Climbing Lane Project, Solano County, California.** Prepared and submitted applications for state and federal permits under Section 7 of the Federal Endangered Species Act; CDFG Lake and Streambed Alteration; and Clean Water Act, Sections 401 and 404. Mapped locations of sensitive habitats, which included Waters of the U.S. and habitat for California red-legged frog.

**Biologist, Pacific Gas and Electric's Vaca-Dixon Transmission Line Project, Solano County, California.** Under direction of a permitted biologist, performed weekly wet season sampling for state and federally listed Branchiopods including vernal pool fairy shrimp (*Branchinecta lynchi*) and tadpole shrimp (*Lepidurus packardii*).

**Biologist, California Water Company Bear Gulch Creek Fish Screen Project, San Mateo County, California.** Conducted preconstruction surveys for California red-legged frog, San Francisco garter snake, and steelhead. Captured and relocated steelhead from within project site using seines and dip nets as authorized by National Marine Fisheries Service biological opinion. Monitored construction activities for compliance with state and federal permits.

**Biologist, Army Corps of Engineers, Fort Ord Natural Reserve, Groundwater Extraction Treatment System Expansion Project, Former Fort Ord, Monterey County, CA.** Ensured protection of the Reserve's special-status plants and wildlife through implementation of applicable environmental mitigation guidelines. Assisted in identifying and clearly delineating the least damaging access routes and staging areas

through the local chaparral habitat. Advised project personnel on how to protect special-status wildlife including California black legless lizard, Monterey ornate shrew (*Sorex ornatus salarii*), and coast horned lizard and special-status plants including sand gilia (*Gilia tenuiflora arenaria*), Monterey spineflower (*Chorizanthe pungens pungens*), and sandmat manzanita (*Arctostaphylos pumila*).

**Biologist, Caltrans District 4 Devil's Slide Project, San Mateo County, California.** Member of field team that conducted bird nest and San Francisco dusky-footed woodrat surveys for the Devil's Slide Tunnel Project; and biological monitoring for California red-legged frog during construction of the project's Charthouse Mitigation Site.

**Biologist, Santa Clara Valley Water District's Lower Silver Creek Flood Protection Construction Project, Santa Clara County, California.** Performed capture/relocation of native vertebrates, reaches 1, 2 and 3 of Lower Silver Creek. Capture techniques included use of seines, dip nets, and electroshock.

**Biologist, Olivehurst Wastewater Treatment Plant, Yuba County, California.** Conducted aquatic vertebrate salvaging using seines and giant garter snake preconstruction surveys prior to installation of the Project's stormwater outfall into a nearby canal.

**Field Team Member, Western Area Power Authority, Northern California.** Conducted surveys for threatened and endangered wildlife along an electrical transmission line. Also used a habitat classification system to map (using Trimble GPS) sensitive areas including seasonal wetlands and vernal pools.

**Biologist, Santa Clara Valley Water District's Lower Silver Creek Flood Protection Project, Santa Clara County, California.** Implemented a Mitigation Monitoring Plan annually for created wetlands, riparian/stream-riverine, and upland habitats. Also coordinated periodic environmental compliance monitoring of project's construction activities. Verified compliance with the project's SWPPP. Administered the project's environmental awareness training.

**Biologist, Pacific Gas and Electric, Jefferson Martin 230kV Project-San Mateo County; TriValley Project, Contra Costa County, California.** Coordinated and conducted field assignments related to the San Francisco dusky-footed woodrat, a California species of special concern. Also conducted SWPPP performance verification inspections.

**Team Member, United States Fish and Wildlife Service, Upper Penitencia Creek Habitat Evaluation Procedures, Santa Clara County, California.** Conducted a habitat evaluation of the Penitencia Creek Riparian Corridor. Collected data using a hypsometer, spherical densiometer and other data collection tools. Assessed general habitat suitability for fish and wildlife species against community-based models.

**Biologist, City of San Jose Water Company, Lexington Reservoir Main Feed Reconstruction Project, Santa Clara County, California.** Performed reconnaissance-level survey to assess general habitat value for sensitive wildlife species along the proposed pipeline alignment. Assisted with project's application for a California Department of Fish and Game Streambed Alteration Agreement under a Categorical Exemption.

**Biologist, Geothermal Inc. Landfill Closure, Lake County, California.** Performed an emergence count of Yuma myotis (*Myotis yumanensis*) and Mexican free-tailed bat

(*Tadarida brasiliensis*) using ambient light. Observed acoustic monitoring using an ultrasonic detection system (e.g., Anabat). Performed species identification using a suite of morphological and physiological characteristics.

**Biologist, Saratoga Water District, Santa Clara County, California.** Performed a tree survey of the proposed water treatment plant modification project. Data collected included species, diameter at breast height (dbh), and relative condition.

**Associate Scientist, Town of Windsor Eastside Road Storage Project, Sonoma County, California.** Performed periodic Stormwater Pollution Prevention Plan (SWPPP) site inspections. Also prepared an application for Lake or Streambed Alteration with the California Department of Fish and Game.

### ***Experience Prior to CH2M HILL***

**Staff Biologist, Wetlands, Drainages, and Waters of the U.S. Delineation, Williams' Communications Fiber Optic Cable Project, Jones and Stokes Associates.** Assisted with waters of the United States (including wetlands) delineations (non-protocol) for a linear fiber optic installation project throughout several western states (Oregon, New Mexico, and Arizona). Mapped and described jurisdictional waters along the proposed project route.

**Environmental Field Inspector, Williams' Communications Fiber Optic Cable Project, Jones and Stokes Associates.** Ensured that all construction activities were in accordance with applicable laws, ordinances, restrictions, and standards. Duties also included delineating waters of the United States, maintaining daily summary reports and administering the environmental training program. This linear project included extensive segments transecting central and coastal Oregon.

### **Professional Organizations/Affiliations**

The Wildlife Society, Western Section

### **Professional Development**

- Surveying and Identification Techniques Workshop-Amphibians of the San Francisco Bay Area, The Wildlife Society, 2002.
- Environmental Avoidance and Mitigation training related to Telecommunications projects, Jones and Stokes Associates, March 2000.
- 40-hour Hazardous Waste Operations and Emergency Response Training, 8-hour Refresher Course, 2004.

### **Employment History**

CH2M HILL; Project Biologist; San Francisco, CA; May 2001 to present

Jones and Stokes Associates; Biological Monitor; Sacramento, CA; October 1999 to January 2001

# Russell Huddleston

## Associate Biologist

### Education

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

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

### Professional Registrations

Certified Professional Wetland Scientist

### Distinguishing Qualifications

- Specialized experience in wetland delineation and assessment
- Specialized experience in conducting rare plant surveys and habitat characterization
- Specialized experience in conducting surveys for listed vernal pool invertebrates

### Relevant Experience

Mr. Huddleston is a wetland ecologist/botanist in the Environmental Business Group in CH2M HILL's Sacramento office. He has more than 10 years of professional experience in plant community classification, habitat assessment, wetland science and special-status species surveys. His specific expertise is in vernal pool ecosystems. In addition, he is experienced in global positioning system (GPS) technology used for habitat mapping, wetland delineation, and special status species surveys.

Mr. Huddleston has conducted numerous protocol surveys for federally-listed vernal pool crustaceans for many clients, including Travis Air Force Base, Camp Pendleton Marine Corps Base, the California Department of Transportation and the Riverside County Transportation Commission. In addition, he has been involved in long-term population monitoring projects for vernal pool species in the Greater Jepson Prairie ecosystem in Solano County, California.

Mr. Huddleston has previous experience with the Agate Desert and vernal pools in Southern Oregon as an undergraduate student, a masters student, and while working for the Southwest Oregon office of the Nature Conservancy. He has experience with rare plants and vernal pool crustaceans in the area. In addition, Mr. Huddleston has conducted numerous wetland delineations in vernal pool ecosystems throughout the California.

### Representative Projects

**Project Biologist, Update to Natural Resource Management Plan, Travis Air Force Base, Solano County, California.** Conducted an assessment and evaluation of basewide natural resources, including vernal pool habitats, rare plants, and special-status species. Various projects for the Base included vernal pool habitat mapping and assessment, protocol-level surveys for federally-listed vernal pool crustaceans, rare plant surveys, and wetland habitat mitigation monitoring.

# Russell Huddleston

**Project Biologist, California State Highway 12 Roadway Improvement Project, California Department of Transportation, Solano County, California.** Conducted vernal pool invertebrate surveys and wetland delineations for Highway 12 roadway improvement Projects.

**Project Biologist, On-call Environmental Services, Sacramento Municipal Utility District, California.** Provided a range of environmental services, including wetland delineations, special-status species surveys, habitat assessment and compliance monitoring as part of the on-call environmental services contract.

**Project Biologist, Forest Highway 114/Hyampom Road Reconstruction, U.S. Federal Highway Administration, Trinity County, California.** As part of the environmental review process, consulted with federal resource agency staff, assisting with rare plant surveys and habitat mapping and classification. Habitat types included Douglas-fir forest, oak woodland and riparian ecosystems. The U.S. Federal Highway Administration in cooperation with the U.S. Forest Service and Trinity County proposed to reconstruct approximately 8.5 miles of Forest Highway in Trinity County, California.

**Project Biologist, California-Oregon Border Power Plant, People's Energy Resources, Bonanza, Oregon.** CH2M HILL was contracted by the California-Oregon Border Power Plant to prepare the Site Certificate Application for submittal to the Oregon Office of Energy. Project related facilities included a nominal 1,150-megawatt generating facility, a 7.2-mile electric transmission line, a 4.1-mile natural gas supply pipeline and a 2.8-mile water supply pipeline. Responsible for coordinating with state and federal resources agencies and conduction habitat mapping, rare plant surveys, and wetland delineations for the proposed project. 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 the Oregon Department of Fish and Wildlife's Habitat Classification System.

**Wetland Ecologist, Sierra Army Depot, U.S. Army Corps of Engineers, Sacramento, California.** Conducted an assessment of jurisdictional waters of the U.S. (including wetlands) on an approximately 110-acre site at the Sacramento Army Depot in southern Sacramento County, California. This assessment includes lands to be transferred to the City of Sacramento as part of the Base Realignment and Closure Act.

**Wetland Ecologist, State Route 153 Roadway Improvement Project, Federal Highway Administration, Beaver, Utah, September 2003.** Conducted an assessment of jurisdictional waters of the U.S. (including wetlands for approximately 766 acres along Utah State Highway 153. Wetland delineation was conducted along 11.5 miles of roadway.

**Botanist, 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.

**Project Biologist, Sacramento Municipal Utility District's Cosumnes Power Plant, California.** Conducted a 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.

**Project Biologist, 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.

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

## Experience Prior to CH2M HILL

**Field Steward, 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

Society of Wetland Scientists (President Elect, Western Chapter)

California Botanical Society

California Native Plant Society (Vice President, Sacramento Chapter)

## 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

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 State-listed Threatened and Endangered Plants (Permit 5073)

Fundamentals of soil Morphology, Corvallis, Oregon 2004

Introduction to Lichen Identification, Davis, California 2004

Applied Hydric Soils, Sacramento, California 2003

# Russell Huddleston

Identification of Plants from Vernal Pools and other Seasonal Wetlands, 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

Huddleston, J.H. and R. T. Huddleston. 2005. *Hydric Soils of Seasonal Pools in Semiarid Parts of Oregon and California*. Platform Presentation at the National Soil Science Society of America. (Meeting, Salt Lake City, Utah, November 6 through 10.)

Young, T. P. and R. T. Huddleston. 2005. *Weed Control and Soil Amendment Effects on Restoration Plantings in an Oregon Grassland*. *Western North American Naturalist* 65(4) 507-515.

Young, T. P. and R. T. Huddleston. 2004. "Spacing and competition between planted grass plugs and pre-existing perennial grasses." *Restoration Ecology*. 12:546-551

Huddleston, R.T. 2001. *Vernal Pool Plant Community Composition and Diversity on the Agate Desert in Southwestern, Oregon*. Platform Presentation at the 22nd Annual Conference of the Society of Wetland Scientists, Chicago, Illinois. May 27 through June 1.

Young, T. P., J.M. Chase, and R.T. Huddleston. 2001. "A comparison and synthesis of community succession and assembly as conceptual bases for restoration ecology." *Ecological Restoration*. 19:1.

Huddleston, R.T. 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.