**Position Title:** CE Specialist, Endangered Species – Management and Mitigation

**Position:** The CE Specialist will serve as an expert on the biology, management, and conservation of endangered species and their habitats in California, including regulations, policies as appropriate, and mitigation of conflicts with a diverse range of stakeholders. Requirements include a Ph.D. in wildlife management, ecology, natural resources management, fisheries, conservation science, freshwater or aquatic ecology, or a closely related field, preferably with an emphasis on rare or endangered species. Field experience and/or course work in endangered species management, wildlife or fisheries management, aquatic ecology, habitat management, conservation, or human-wildlife conflict are desirable.

The Endangered Species Specialist will conduct applied field and lab research designed to develop management tools or frameworks for minimizing or mitigating human-endangered species conflicts while also promoting endangered species conservation. Key to the position is the development of extension outreach methodologies that lead to adoption of practices that minimize impacts to endangered species and ensuing conflicts that can occur for human uses of land and water resources. The Endangered Species Specialist will be supported by the Department of Wildlife, Fish, and Conservation Biology (WFCB) within the College of Agricultural and Environmental Sciences (CAES) at UC Davis. Office and lab space, as well as administrative support will be provided by WFCB and CAES. The Specialist will collaborate with AES faculty, CE Specialists, and Advisors throughout the state to build a collaborative network that will maximize benefits for Californians.

**Justification:** California has a diverse and world-leading economy with the largest population of any state in the US. Maintaining a vibrant economy while supporting this population creates unprecedented natural resource conflicts. For example, California has more protected and endangered species than any other state. The presence of endangered species can create restrictions via policies or legislation on valued human activities such as farming, ranching, fishing, forestry, and land development, among others. A recent example has been the rapid expansion of utility-scale solar energy developments in southern California to meet increasing renewable energy mandates. Developing renewable energy projects has been hampered by concerns over impacts to endangered species and the regulatory challenges they present. Another constant challenge involves the sustainable use of freshwaters throughout California. Water security is core to myriad agricultural and municipal interests but is simultaneously needed to conserve many endangered aquatic species and populations, especially in Central California. The Endangered Species Specialist would assist in developing new tools and frameworks to proactively minimize conflicts both to, and arising from, endangered species.

The lack of extensive endangered species management and conflict expertise in the UC ANR is a conspicuous gap. There are few other CE specialists working on biodiversity or conservation issues in California (Adina Merenlender and Tom Scott at UC Berkeley are notable exceptions). It is the intent of this request to address this limitation and to have UC ANR provide statewide leadership in this critical arena. It is noteworthy that a critical need for endangered species expertise at land grant universities was recently expressed by the Western Governors Association and in the Recommendations from the W506 Western Development Committee to the Western Association of Agricultural Experiment Station Directors and the Western Extension Directors Association of March 14, 2017. This position supports multiple ANR Strategic Initiatives, including Sustainable Food Systems, Sustainable Natural Ecosystems, and Water Quality, Quantity and Security.

**Extension:** Specialists in Cooperative Extension are the primary liaison between University research units and the public. This Specialist will provide leadership, facilitate teamwork, develop collaborative relationships with colleagues, and ensure appropriate external input into the planning of research and educational programs by the University. The incumbent’s extension program is also expected to support the needs of a diverse clientele, while providing programming to target audiences through print and popular media, social networks, public presentations, field days, and web-based media. The Specialist will be expected to interface with State (Fish & Wildlife, Food & Agriculture, Water Resources) and Federal (Forest Service, Fish & Wildlife, Energy Commission, EPA) agencies as well as private consultant agencies and NGOs. The Specialist will work closely with wildlife-focused Specialists in ANR (e.g., T. Scott, UCB, B. Tietje, UCB) to link UCCE Advisors, county agricultural commissioners, private consultants, wildlife organizations & associations, and related groups. The Specialist is expected to be central to statewide dissemination of relevant materials and educating stakeholders on the ecology and biology of endangered wildlife and their habitats, and on resolution of conservation threats to these species and their habitats.

**Research:** The Endangered Species Specialist will be expected to conduct collaborative and independent applied research. This research will be issue-based, directed toward pragmatic solutions to endangered species management and conflicts. Whenever possible, the Specialist is encouraged to use field research opportunities for hands-on teaching through CE Advisor collaboration. Examples of key research areas could include mitigation of endangered species conflicts to agricultural, natural resource, and urban environments, and minimizing impacts of human activities on endangered species. Outputs from research will include peer-reviewed journal articles, *Cal Ag* articles, technical reports, articles for newsletters, special publications such as identification and pictorial guides, and web-site posting, journals, and blogs.

**ANR Network:** The Specialist will work closely with faculty (e.g., Todd, Fangue, Karp, Sollmann, Kelt, Van Vuren, Eadie, Rypel), Campus Centers (e.g., Center for Watershed Sciences, John Muir Institute of the Environment), other Extension Specialists (e.g., Baldwin) within WFCB, as well as other faculty (e.g., Boyce, Foley, Sacks, UCD Vet Med) and Extension Specialists (e.g., Atwill, Pitesky, Roche, Merenlender) across the UC system. County-based and Area Advisors (e.g., Kocher, Lile) will serve as important collaborators and multipliers of applied research outcomes from the Specialist’s program.

**Network External to ANR:** The Specialist will network with both academic (e.g., WFCB and appropriate UC and university departments) and non-academic clientele and serve as an educator at workshops and symposia. Management of endangered species rests largely with public fisheries and wildlife agencies. However, research on endangered species is performed largely by university researchers. This creates a tremendous opportunity for the Endangered Species Specialist to provide a conduit for translating university research to actionable outcomes with federal and state agencies like California Department of Fish and Wildlife, California Energy Commission, California Department of Pesticide Regulation, California Department of Food and Agriculture, California Department of Water Resources, US Fish and Wildlife Service, Bureau of Reclamation, Bureau of Land Management, US Forest Service, National Park Service among others, through both extension and research activities to minimize land and water impacts to endangered species.

**Support:** WFCB and CAES will provide administrative support and funding for general programmatic needs and travel. WFCB will also provide an office, laboratory, phone, internet access, and IT support.

**Other Support:** Financial support will be competitively available from various sources including US Fish and Wildlife Service, Bureau of Reclamation, Bureau of Land Management, California Energy Commission, California Department of Water Resources, California Department of Fish and Wildlife, various non-governmental and non-profit organizations, and gifts in support of research.

**Location:** WFCB, UC Davis. This location provides laboratory and office space required for the applied research. A related Specialist and faculty are on site to support and mentor.

**Developed and proposed by:** Position developed and proposed by WFCB and CAES. Former Associate Vice President-DANR provided initial input into the potential need and desired role of such a position. The Western Governor’s Association and W506 Western Development Committee for the Western Association of Agricultural Experiment Station Directors and the Western Extension Directors Association have all expressed an interest in this position.