MARTIN & NICHOLSON
ENVIRONMENTAL CONSULTANTS

R. Spencer Martin
Principal Ecologist/Project Director

Education

- MEM, Resource Ecology/Conservation Biology, Duke University, 1991

-BA Biology, University of California, San Diego, 1988

Years of Experience

29

Training/Certification

- National Wind Coordinating Collaborative/American Wind Wildlife Institute Wildlife Research Meeting Participant: 2006 – 2018

-USFWS Western Yellow-billed Cuckoo and Southwestern Willow Flycatcher Survey Trainings, 2018

-Wind and Wildlife Workshop, Bat Conservation International and National Renewable Energy Lab/National Wind Technology Center, 2017

-USFWS ESA Section 7 Consultation Training, 2015

-USFWS Wind Turbine Siting Guidelines, 2012

-USFWS Mexican Spotted Owl Survey Training, 2003

-Habitat Evaluation Procedures Training, 1995

Expertise

-Avian Use Surveys, Data Analysis & Reporting

-Raptor Nest Surveys

-Wildlife Habitat Assessments

-Environmental Assessments & Impact Statements

-Endangered Species Act Compliance

-Major Capital Projects Permitting

-Project Feasibility, Siting & Planning

-Project Quality Assurance/Quality Control

-Wetlands Delineation & Permitting

Professional Affiliations

-Ecological Society of America

-Society for Conservation Biology

Mr. Martin's academic and professional work has focused on community and landscape ecology, avian biology, wildlife/habitat relationships, conservation biology, environmental planning, wetlands ecology, and environmental regulatory compliance related to the Endangered Species Act (ESA), Clean Water Act (CWA), National Environmental Policy Act (NEPA), Migratory Bird Treaty Act (MBTA), Bald and Golden Eagle Protection Act (BGEPA) and a variety of state and local permit processes.

Mr. Martin has 29 years of experience in natural resources research and consulting, including extensive fieldwork (wildlife, vegetation, and/or wetland surveys) throughout the U.S. Intermountain West and portions of the Southwest. Mr. Martin has completed vegetation and wildlife surveys, wildlife/biodiversity technical reports, biological evaluations, biological assessments, management indicator species reports, and NEPA, ESA, CWA, and MBTA documentation for power generation, transmission, and utility line projects in Utah, Idaho, Wyoming, Colorado, Arizona and Nevada. Mr. Martin has conducted numerous avian surveys, big game surveys, identified mule deer and elk seasonal movement corridors, developed habitat mitigation plans, and written guidelines for minimizing impacts to wildlife associated with development at the wildland-urban interface.

Mr. Martin is currently permitted through the U.S. Fish and Wildlife Service (Service) to conduct presence-absence surveys for the endangered southwestern willow flycatcher (*Empidonax traillii extimus*) and threatened western distinct population segment of the yellow-billed cuckoo (*Coccyzus americanus*). He previously has been permitted by the Service to conduct surveys for the threatened Mexican spotted owl (*Strix occidentalis lucida*) and has extensive experience leading migratory bird surveys and aerial (helicopter) raptor nest surveys.

Representative Experience

Quicksilver Solar Project; Utah County, UT (Ongoing). M&N has been retained by Quicksilver Solar, LLC to prepare an environmental assessment (EA) under 3rd party contract with the U.S. Department of Interior Bureau of Land Management (BLM). Mr. Martin is managing the EA, which will analyze the impacts associated with constructing and operating an overhead electrical collector system and gen-tie transmission line from the solar photovoltaic project area (located on private land) across BLM-administered and Utah School and Institutional Trust Lands Administration (SITLA) lands to the project's substation and point of interconnect. Preparation of the EA will require an air quality analysis and natural and cultural resource field surveys to be completed in 2020.

Echo Divide Wind Project, Summit County, UT. (Ongoing). M&N is conducting large- and small-bird avian use studies, aerial eagle and other raptor nest surveys, ground-based eagle nest monitoring, and acoustic bat monitoring for this proposed 100-MW wind energy project located on approximately 10,300 acres in Summit County, Utah. M&N's Project Director, Spencer Martin, managed and contributed to a wildlife habitat assessment of the project area, which included delineating and mapping habitats based on vegetation type and documenting common/characteristic wildlife and special status species known or having potential to occur on the site. Mr. Martin conducted field work for the habitat assessment and small-bird surveys, is overseeing completion of the large-bird surveys, lead the raptor nest survey effort, and managed, contributed to, and edited the CUP application.

Elektron and Horseshoe Solar Projects; Tooele County, UT (Ongoing). M&N was contracted by Elektron Solar, LLC and Horseshoe Solar, LLC to conduct resource surveys and assist with permitting of these two proposed 75-megawatt solar photovoltaic power generation facilities located in Tooele County, Utah (approximately 1,900 acres). Spencer Martin served as Project Director and oversaw preparation of the aquatic resources inventory and Phase I ESA for the Horseshoe project, conducted fieldwork for both projects' habitat assessments, reviewed and edited the associated reports, and compiled the conditional use permit (CUP) applications prepared for each project. CUPs for both projects were granted by the Tooele County Planning Commission in December 2018. M&N is currently initiating systematic wildlife surveys within the two project areas to identify raptor nest locations and other breeding bird "hot spots" to facilitate compliance with the MBTA when construction of the projects begins in 2021.

Horse Butte Wind Project Eagle Fatality Monitoring (Ongoing). M&N has been issued a 3-year contract by Utah Associated Municipal Power Systems (UAMPS) to conduct eagle fatality monitoring, searcher efficiency studies, carcass persistence studies and associated data analysis and reporting for the 57.6-MW Horse Butte Wind Project located on approximately 17,800 acres east of Idaho Falls in Bonneville County, Idaho. M&N's Project Director, Spencer Martin, is overseeing implementation of the contracted scope of work and serving as the principal client contact for the project.

Dinosolar Project; Natrona County WY (Ongoing). M&N has been contracted by a renewable energy developer to prepare a natural resources assessment, visual simulations, and conditional use permit application for a proposed 240-MW solar photovoltaic power generation facility proposed for location on approximately 3,600 acres of private land in north-central Wyoming. Spencer Martin is serving as Project Director and is managing the project's engineering, GIS, and socioeconomic contractors and leading the preparation of a conditional use permit (CUP) application for the project.

Bureau of Reclamation, Navajo Generating Station and Kayenta Mine Complex Permit Renewal Environmental Impact Statement, Coconino and Navajo Counties, Arizona. (2013-2016). Prior to co-founding M&N, Spencer Martin worked as a project manager with AECOM Technical Services, Inc., which was selected as the third-party NEPA contractor to develop an EIS on behalf of the Bureau of Reclamation (lead agency) and the Salt River Project and Peabody Western Coal Company (Applicants). The project analyzed potential impacts associated with continued operation of the NGS-KMC and its transmission systems from 2019-2044, including eventual decommissioning and restoration activities. Mr. Martin's responsibilities included providing technical support to Bureau of Reclamation biologists, facilitating and documenting biological resource coordination efforts with cooperating agencies, assisting Reclamation with the ESA section 7 consultation, and overseeing preparation of and editing the terrestrial biological sections of the EIS and biological assessment. (Prior to joining M&N)

BLM, TransWest Express 600-kV Transmission Project EIS, Wyoming to Nevada. (2012 - 2015). Spencer Martin served as a senior ecologist with AECOM Technical Services, Inc. where he worked as a third-party contractor to the BLM, Western Area Power Administration, and U.S. Forest Service to complete an EIS for the TransWest Express Transmission Project, a proposal to construct and operate a 600-kV DC transmission line from Rawlins, Wyoming to Boulder City, Nevada. The EIS evaluated 730 miles of proposed corridor, the majority of which is in Utah, and approximately 1,400 miles of alternative corridors. The project required collaborative participation among over 50 cooperating agencies, and other county and local entities. Mr. Martin oversaw all aspects of the biological resource components of the project and provided senior review of associated EIS sections. Mr. Martin also served as editor and primary author of the TransWest Express Biological Assessment, which was submitted to the U.S. Fish and Wildlife Service as part of the Project's ESA section 7 consultation process. (Prior to joining M&N)

Kennecott Land Amenities, Resources, and Connections (ARC) Plan, Salt Lake County, Utah (2006–2008). Mr. Martin was the principal ecologist/project manager and technical/regulatory lead responsible for assessing effects of community development on threatened, endangered, and sensitive species, big game, vegetation and wetlands. He provided oversight for biological (avian point count surveys, aerial big game and raptor nest surveys), cultural, and social (i.e., recreation and visual) resource inventories and impact assessments. He oversaw a multidisciplinary effort to determine environmental impacts, identify suitable mitigation measures, and develop a resource management plan for a 75,000-acre project area proposed for development over the next 50 years. (Prior to joining M&N)