Section 4.4

Biological Resources

4.4.1 Introduction

This section describes effects on biological resources that would result from implementation of the North Sky River Project (NSRP) and Jawbone Wind Energy Project (JWEP) (collectively “project”). The project consists of two applications proposed by separate project proponents that are collectively addressed in this EIR. The NSRP is proposed by North Sky River Energy, LLC and the JWEP is proposed by Jawbone Wind Energy, LLC.

The following discussion addresses existing environmental conditions in the affected area, identifies and analyzes environmental impacts for the project, and recommends measures to reduce or avoid significant impacts anticipated from project construction and operation. In addition, existing laws and regulations relevant to biological resources are described. In some cases, compliance with these existing laws and regulations would serve to reduce or avoid certain impacts that might otherwise occur with the implementation of the project.

The information and analysis that is presented in this section has been derived from the following sources:

- North Sky River Wind Energy Project Biological Resources Report (CH2MHill, 2010; Appendix E-1)
- Jawbone Wind Energy Project Biological Resources Technical Report (Sapphos, 2010; Appendix E-2)
- Supplemental memoranda and assessments submitted by the project proponents (CH2MHill, 2011, 2011b; Chatfield and Bay, 2011a and 2011b; Appendices E-1 and E-2)
- Project proponents’ responses to Data Requests (Sapphos and CH2MHill, 2011)
- Final Environmental Impact Report for the Pacific Wind Energy Project, Kern County, CA
- Final Environmental Impact Report for the Alta-Oak Creek Mojave Project, Kern County, CA
- Environmental Impact Report for the PdV Wind Energy Project
- California Department of Fish and Game (CDFG) California Natural Diversity Data Base (CNDDB) (CNDDB, 2011)
- California Wildlife Habitat Relationships (CDFG, 2008)
- State and federally listed endangered and threatened animals of California and Special Animals list (CDFG, 2011a; 2011b)
- Special Vascular Plants, Bryophytes, and Lichens List (CDFG, 2011c)
- Inventory of Rare and Endangered Vascular Plants of California (online, 8th Ed.). (California Native Plant Society (CNPS), 2011)
- Field evaluations conducted by CH2M Hill for the NSRP beginning in fall 2009
- Field evaluations conducted by Sapphos Environmental, Inc. (Sapphos) in 2007 and earlier for the previously proposed Hoffman Summit Wind Energy Project, which included the project area for the JWEP
- Site investigation conducted by Aspen Environmental Group (Aspen) on February 15 and 16, 2011.
- Review of relevant literature on biological resources in and around the project area.
• Review of maps and aerial photographs

Information from the sources listed above was used to generate a list of special-status plant and animal species that may have the potential to occur within the project area. For the purposes of this assessment, special-status species are defined as plants or animals that:

• Have been designated as either rare, threatened, or endangered by CDFG or the U.S. Fish and Wildlife Service (USFWS), and are protected under either the California or federal Endangered Species Act (ESA); or
• Are candidate species being considered or proposed for listing under these same acts; or
• Are considered Species of Special Concern by CDFG; or
• Are fully protected by the California State Fish and Game Code, Sections 3511, 4700, 5050, or 5515; or
• Are classified as List 1, 2, 3, or 4 by CNPS; or
• Are of express concern to resource/regulatory agencies, or local jurisdictions.

4.4.2 Environmental Setting

The project area consists of 13,535 acres of undeveloped land in the unincorporated southeastern portion of Kern County (Figure 4.4-1). The project site is located sixteen miles northeast of the city of Tehachapi and sixteen miles north of the unincorporated community of Mojave and lies within a transition zone between the Tehachapi and Piute mountain ranges within the southern Sierra Nevada Mountains. The western project boundary is adjacent to the Kelso Valley in the Piute Mountain Range, and the eastern boundary of the project area is adjacent to the western margin of the Mojave Desert. Elevations in the region range between 2,500 and 7,000 feet above mean sea level and include several prominent ridgelines, stretching northeast toward Butterbredt Peak. The project area is rugged and characterized primarily by woodland and desert scrub habitat. As noted above, the following analysis includes data from field evaluations and surveys that were conducted on both the NSRP and JWEP sites, collectively referred to as the project study area.

Baseline Data Collection Methodology

Surveys for the project sites were conducted to map plant communities, to determine the presence/absence of special-status species of wildlife, and to determine the location and jurisdictional status of wetlands. Survey methods generally followed guidelines and protocols recognized by state and federal resource agencies.

Field surveys and studies on the NSRP site were initiated in fall of 2009 and are currently ongoing; results of studies conducted to date were included in the proponent’s North Sky River Wind Energy Project Biological Resources Report (CH2MHill, 2010) and supplemental reports (CH2MHILL, 2011, 2011b; Chatfield and Bay, 2011a, 2011b; Pandion, 2011), and are included in this analysis. Field evaluations covered a larger area that encompasses the proposed 6,150-acre NSRP layout as of May 24, 2010. The current survey area reflects ongoing engineering refinements so that some areas initially surveyed are no longer part of the site plan, while new areas have been added. The 2011 survey effort is focused on evaluating areas now included in the site plan that were not previously surveyed, as well as concluding ongoing avian and bat baseline surveys initiated in 2010 and 2009, respectively. Surveys completed to date include general reconnaissance and habitat assessment, a wetland identification, rare plant and vegetation mapping, avian baseline study (bird