



ENVIRONMENTAL & STATISTICAL CONSULTANTS

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March 25, 2011

Greg Concannon
Fish and Wildlife Resources Mgr.
Portland General Electric
726 SW Lower Bend Rd.
Madras, Oregon 97741

RE: Addendum - Biglow Canyon Phase I – Year 2 Report

Mr. Concannon,

In accordance with your request, WEST has prepared this addendum to the Biglow Canyon Wind Farm Phase I-Year 2 report. Specifically, this addendum presents a summary of the threshold of concern analyses conducted for Phase I, including Year 1, Year 2 and 2-year average fatality estimates. The Biglow Canyon Wind Farm: Wildlife Monitoring and Mitigation Plan (WMMP) establishes fatality thresholds of concern for five species groups: Raptors, Raptor species of special concern, Target Grassland Songbirds, State Sensitive Avian Species, and All Bats. Table 1 presents the Year 1 and Year 2 fatality estimates for these groups, as well as a 2-year average. The table also presents standard errors and 90% confidence intervals for all estimates, as well as the established thresholds of concern for reference.

As evidenced by the table, thresholds were not exceeded for any of the target species groups in either Year 1 or Year 2, and the 2-year averages do not exceed thresholds. It should also be noted that none of the 90% confidence intervals included the threshold level for any species group, with the exception of year 1 bat fatality estimates (upper confidence interval included threshold value). Based on this analysis, it is clear that Biglow Canyon Phase I did not exceed any thresholds of concern during the two-year monitoring period. These data do not indicate any biological concerns relative to observed and estimated fatality rates documented at Biglow Canyon Phase I.

Sincerely,

Terry Enk, Project Manager
Western EcoSystems Technology, Inc.



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Table 1. Year 1, Year 2, and 2-year average fatality estimates and thresholds of concern for Biglow Canyon Wind Farm - Phase I

	Year 1 Estimate	Yr 1 se	Yr 1 90 % CI	Year 2 Estimate	Yr 2 se	Yr 2 90% CI	2-year average Estimate	2-year se	2-year 90% CI	WMMP Threshold of Concern ¹
<u>Fatality Estimates</u> <u>(#/MW/yr)</u>										
Raptors	0.03	0.02	0.00-0.07	0.04	0.02	0.00-0.08	0.04	0.02	0.01-0.07	0.09
Raptor species of special concern ²	0.00	0.00	0.00-0.00	0.00	0.00	0.00-0.00	0.00	0.00	0.00-0.00	0.06
Target Grassland Songbirds	0.13	0.10	0.00-0.33	0.10	0.70	0.02-0.22	0.12	0.06	0.04-0.24	0.59
State Sensitive Avian Species	0.00	0.00	0.00-0.00	0.00	0.00	0.00-0.00	0.00	0.00	0.00-0.00	0.20
Bats	1.99	0.49	1.38-2.94	0.58	0.18	0.35-0.90	1.29	0.26	0.97-1.80	2.50

¹ Thresholds of concern as listed in the Biglow Canyon Wind Farm: Wildlife Monitoring and Mitigation Plan (BCWF: WMMP)).

² Raptor species of special concern include: Swainson’s hawk, ferruginous hawk, peregrine falcon, golden eagle, bald eagle, burrowing owl and any federal threatened or endangered raptor species (BCWF: WMMP).