

## **Appendix D. USFWS Mortality Monitoring Recommendations**

24 August, 2015

**U.S. Fish and Wildlife Service (USFWS) Recommendations to PacifiCorp for Post-Construction Mortality Monitoring at Wyoming Wind Energy Facilities in the December 19, 2014 Settlement**

The following are recommendations from the USFWS Region 6, Migratory Bird Management Office and Wyoming Ecological Services Office (USFWS) to PacifiCorp (PCE) for post-construction mortality monitoring. These recommendations are for the four PCE wind energy facilities covered in the Migratory Bird Compliance Plan for the December 19, 2014 settlement to include: Glenrock Rolling Hills (GRRH), Seven Mile Hill (SMH), High Plains McFadden Ridge (HPMR), and Dunlap. The USFWS believes both efficiencies and increased confidence, specific to eagle mortality monitoring, can be gained by both expanding the coverage of turbines at two facilities and lengthening the time between search intervals at all four facilities.

1. Post settlement, post-construction mortality monitoring, as described in this document, should be conducted for 2 consecutive years at the GRRH, SMH, HPMR, and Dunlap wind facilities to establish a baseline for eagle mortalities using a consistent and statistically robust protocol (please note if a permit is issued for any of these aforementioned wind facilities, post-construction monitoring will be required for the life of the permit). After 2 years of mortality monitoring, USFWS and PCE will review the results and determine whether additional mortality monitoring is needed at these wind facilities.
2. For the GRRH and SMH facilities all wind turbines should be systematically searched at both projects (per the criteria listed below) instead of the current approach of searching approximately 1/3 of the turbines at these facilities.
3. For HPMR and Dunlap continue the approach of searching the approximately 1/3 of the wind turbines currently monitored at these facilities.
4. For GRRH, SMH, HPMR, and Dunlap wind facilities, given that all wind turbines will be searched per #2 above, protocol mortality monitoring searches can be conducted once per month/ once every 30 days (compared to the current approach of searching every two weeks).
5. For GRRH, SMH, HPMR, and Dunlap wind facilities individual mortality searches at wind turbines the search plot size should be 160 meters by 160 meters with search transects spaced 20 meters apart (which is the standard currently in use).
6. For the GRRH, SMH, HPMR, and Dunlap wind facilities searcher efficiency trials should be conducted at all facilities unless PCE feels they have already collected adequate data to

determine searcher efficiency rates for observers conducting the post construction fatality monitoring. If these data exist for the respective wind sites, please submit those data to USFWS. Carcass removal trials could also be conducted at all of these wind facilities if PCE is interested in doing these. USFWS may be able to supply some raptor carcasses to PacifiCorp for use in carcass removal trials.

7. Incidental eagle carcass finds: If eagle carcasses are found incidentally and are removed under authorization from the USFWS via a MBTA 21.27 Special Purpose Utility Permit, those carcasses should be replaced with a Turkey Skinz or other hawk carcasses (if authorized or provided by USFWS) for availability to be discovered during subsequently scheduled carcass searches.