



Bringing back the birds

30 August 2018

To: Cliff Johnson, Senior Planner
County of Humboldt Planning & Building Department
3015 H Street
Eureka, CA 95501
CJohnson@co.humboldt.ca.us

RE: Notice of preparation of environmental impact report for Humboldt Wind Energy Project

Dear Mr. Johnson:

Thank you for the opportunity to comment publicly on the notice of preparation (NOP) of a draft environmental impact report (EIR) for the Humboldt Wind Energy Project, with respect to potentially harmful impacts to birds.

American Bird Conservancy is a 501(c)(3), non-profit membership organization whose mission is to conserve native birds and their habitats, working throughout the Americas to safeguard the rarest bird species, restore habitats, and reduce threats. ABC would like to ensure that the scope and content of the EIR contains sufficient information to address the potential environmental effects of the project on birds, and that it additionally makes a reasonable attempt to plan for impact minimization and mitigation.

American Bird Conservancy has developed a "Bird-Smart" wind energy policy, which states that wind power should employ careful siting, operation and construction mitigation, monitoring, and compensation¹. The purpose of this approach is to reduce and redress any unavoidable bird mortality and habitat loss from wind energy development. American Bird Conservancy recommends that the Humboldt Wind project and other wind energy projects employ Bird-Smart principles.

Further, we would like to highlight that the project must comply with relevant state and federal wildlife protection laws, including the Endangered Species Act (ESA), Migratory Bird Treaty Act (MBTA), The Bald and Golden Eagle Protection Act (Eagle Act), and the National Environmental Policy Act. And, based on the available information, incidental take permits should be required.

The Humboldt Wind Energy Project is planned in the vicinity of two Globally Important Bird Areas (IBA), Humboldt Bay and Cape Mendocino Grasslands. Both IBAs are important to several bird species along the Pacific Flyway² managed under the MBTA, including raptors protected by the Eagle Act.

¹ <https://abcbirds.org/program/wind-energy-and-birds/learn-more/>

² <https://www.fws.gov/birds/management/flyways.php>

The area is within Critical Habitat for the Marbled Murrelet (*Brachyramphus marmoratus*). This rare bird species is listed as “Threatened” under the ESA, as well as in the state of California, and “Endangered” according to Canada Species at Risk Act (SARA) and the International Union for Conservation of Nature (IUCN) global Red List. It is very unique in that it breeds in specific old-growth, late-successional forest habitat, yet feeds at-sea³. The Marbled Murrelet is highly sensitive to anthropogenic impacts both offshore and terrestrial, in particular, habitat fragmentation, disturbance at nest sites, and predation (which is exacerbated by disturbed habitat)⁴.

ABC recommends that the following information be included in the Humboldt EIR to elucidate and address the Humboldt Wind Energy Project’s potential impacts on birds:

1. Siting Location

- Conduct multiple years of scientifically rigorous study (e.g., before-after-control-impact) to assess the level of risk that this site presents to birds and to take any necessary measures to avoid siting of wind infrastructure within known flyways.
- Identify precisely where and when the project will impinge upon Marbled Murrelet critical habitat,^{5 6} particularly suitable,⁷ and known⁸ nest locations.
- Quantify the vulnerability of the Marbled Murrelet to the development with respect to
 - protecting nesting sites from disturbance and
 - avoiding collisions with turbines along travel routes between nesting sites and coastal foraging areas used to feed young.
- Provide sufficient pre-construction assessment data to:
 - assist with micro-siting (e.g., by use of radar to detect local bird movements)

³ Falxa, G.A. and M.G. Raphael. (2016) Northwest Forest Plan - the first 20 years (1993-2013): Status and trends of Marbled Murrelet populations and nesting habitat. USDA Gen. Tech Report PNW-GTR-933.

https://www.fs.fed.us/pnw/pubs/pnw_gtr933.pdf

⁴ Nelson, S. K. (1997) Marbled Murrelet (*Brachyramphus marmoratus*), version 2.0. In *The Birds of North America* (A. F. Poole and F. B. Gill, Editors). Cornell Lab of Ornithology, Ithaca, NY, USA. <https://doi.org/10.2173/bna.276>

⁵ https://www.fws.gov/arcata/es/birds/mm/m_murrelet.html

⁶ <https://abcbirds.org/program/wind-energy-and-birds/wind-risk-assessment-map/>

⁷ Falxa and Raphael 2016, Fig. 2-11

⁸ Falxa and Raphael 2016, Fig. 2-2

- create an annual baseline against which post-construction studies can be evaluated
- use all existing available bird study data
- quantify vulnerability throughout the year, especially during months when bird use can be expected to peak at the selected site.

2. Operation and Construction Mitigation

- Implement the best (tested and verified) technology and management practices to avoid and minimize harm to birds.
- Identify high-risk areas that require the burial of transmission lines, potentially in addition to “boring under” the Eel River to align the proposed general transmission line (Gen-Tie), as needed to minimize potential impacts to Marbled Murrelets.
- Follow Avian Power Line Interaction Committee⁹ standards for above-ground transmission lines.
- Use lighting that minimizes nighttime migratory bird collision mortality (such as strobe lights).
- Use un-guyed rather than guyed meteorological towers.
- Restore habitat disturbed by construction, e.g., re-compacting soils disturbed by construction and replanting native vegetation (or restoring the site if the wind facility is decommissioned).
- Ascertain that any construction activities or “tree clearing” will avoid direct and indirect disturbance to Marbled Murrelet nesting habitat.

3. Monitoring

- Quantify the magnitude of potential bird take using the best available tools and techniques. Murrelets are active during dawn and dusk, so surveys need to be conducted at appropriate times of day and seasons. Proven techniques for monitoring activity include audiovisual surveys, remote sensing with radar, and automatic song meter technology.

⁹ <https://www.aplic.org/>



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- Monitor impacts from bird strikes against wind infrastructure and supporting infrastructure (transmission lines, building and lights, communications towers).
- Conduct at least two years of post-construction study (long enough to determine the efficacy of, and make needed revisions to, operational mitigation measures).
- Implement mathematical models that best account for variation in local conditions and the relative difficulty of locating bird carcasses in different habitats, as well as any scavenging by predators that may reduce the number of carcasses found.

4. Compensation

- Ensure that mitigation will be scaled appropriately to levels of take.
- Redress the loss of any birds or habitat unavoidably harmed by construction and operation to a net benefit standard. This includes bird deaths caused by collisions with turbines and their associated power lines, and lost or degraded habitat (e.g., areas of abandoned habitat).
- Mitigate impacts to murrelets, for example by habitat acquisition and protection, as well as predator (e.g., corvids) and waste management (e.g., Redwoods Parks, CA state parks). Such compensation could include acquiring additional land under protection of the National Wildlife Refuge system or other off-site habitat conservation projects.
- Specify how compensation will offset or mitigate any habitat or bird losses/displacement from the project's cumulative impacts.

We encourage the EIR to specify how the project will follow American Bird Conservancy's Bird-Smart Wind Energy policy, including each of these aforementioned four strategies. The primary goal should be to minimize impacts (for example, proper siting, burying transmission lines, etc.), as offset mitigation is rarely as effective as we would like. Please do not hesitate to contact us with any questions on how best to achieve a Bird-Smart Wind Energy approach.

Sincerely,

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