

DRAFT ENVIRONMENTAL IMPACT REPORT

# Humboldt Wind Energy Project

SCH No. (201872076)

APRIL 2019



PREPARED FOR



Humboldt County Planning and Building Department  
3015 H Street  
Eureka, CA 95501

WITH ASSISTANCE FROM

**AECOM**

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- Appendix C Aesthetics: Visual Resources Technical Report
- Appendix D Biological Resources: *Administrative Draft Humboldt Wind Energy Project Biological Resources Work Plan, Humboldt County, California*
- Appendix E Biological Resources: *Humboldt Wind Energy Project Eagle and Raptor Aerial Nest Survey Report, Humboldt County, California, Spring 2018*
- Appendix F Biological Resources: *Humboldt Wind Energy Project Aquatic Resources Survey Report, Humboldt County, California, Summer and Fall 2018*
- Appendix G Biological Resources: *Humboldt Wind Energy Project Botanical Resources Report, Humboldt County, California, Spring and Summer 2018*
- Appendix H Biological Resources: *Humboldt Wind Energy Project Eagle Use Survey Report, Humboldt County, California, October 2017–October 2018*
- Appendix I Biological Resources: *Humboldt Wind Energy Project Northern Spotted Owl Habitat Assessment and Auditory and Visual Disturbance Analysis Report, Humboldt County, California, Summer 2018*
- Appendix J Biological Resources: *Humboldt Wind Energy Project Bird Use Count Report, Humboldt County, California, October 2017–October 2018*
- Appendix K Biological Resources: *Humboldt Wind Energy Project Marbled Murrelet Habitat Assessment and Auditory and Visual Disturbance Analysis Report, Humboldt County, California, Summer and Fall 2018*
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- Appendix M Biological Resources: *Humboldt Wind Energy Project Wildlife Assessment, Humboldt County, California*
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## ACRONYMS AND ABBREVIATIONS

°F	degrees Fahrenheit
µg/m <sup>3</sup>	micrograms per cubic meter
2007 SIP	<i>State Strategy for the State Implementation Plan for Federal PM<sub>2.5</sub> and 8-Hour Ozone Standards</i>
2014 Scoping Plan Update	<i>First Update to the Climate Change Scoping Plan: Building on the Framework</i>
2017 Scoping Plan Update	<i>California's 2017 Climate Change Scoping Plan: The Strategy for Achieving California's 2030 Greenhouse Gas Target</i>
AB	Assembly Bill
ac	acre(s)
ADT	average daily traffic
AE	Agriculture Exclusive zoning designation
AEP	annual exceedance probability
afy	acre-feet per year
Alquist-Priolo Act	Alquist-Priolo Earthquake Fault Zoning Act
ALUCP	Airport Land Use Compatibility Plan
ANSI	American National Standards Institute
APCO	Air Pollution Control Officer
applicant	Humboldt Wind, LLC
AQMP	air quality management plan
ARB	California Air Resources Board
AVWS	Audio Visual Warning System
BAAQMD	Bay Area Air Quality Management District
BACT	best available control technology
basin plan	water quality control plan
BGEPA	Bald and Golden Eagle Protection Act
BMP	best management practice
Btu	British thermal unit(s)
CAA	Clean Air Act
CAAA	Clean Air Act Amendments of 1990
CAAQS	California ambient air quality standards
cal B.C.	calibrated years B.C.
CAL FIRE	California Department of Forestry and Fire Protection
CalEEMod	California Emission Estimator Model
CALGreen Code	California Green Building Standards Code
CalRecycle	California Department of Resources Recycling and Recovery
Caltrans	California Department of Transportation
CAP	Climate Action Plan
CBC	California Building Code
CC&Rs	covenants, conditions, and restrictions
CCAA	California Clean Air Act
CCC	California Coastal Commission
CCR	California Code of Regulations
CCS	cryptocrystalline
CDFAs	California Department of Food and Agriculture

CDFG	California Department of Fish and Game
CDFW	California Department of Fish and Wildlife
CDPH	California Department of Public Health
CEC	California Energy Commission
CEQ	Council on Environmental Quality
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act of 1970
CFR	Code of Federal Regulations
CHRIS	California Historical Resources Information System
cm	centimeter(s)
CNDDDB	California Natural Diversity Database
CNEL	community noise equivalent level
CNPS	California Native Plant Society
CO	carbon monoxide
CO <sub>2</sub>	carbon dioxide
CO <sub>2</sub> e	carbon dioxide equivalent
collection system	34.5-kilovolt collection lines
Construction General Permit	General Permit for Storm Water Discharges Associated with Construction Activity
County	Humboldt County
CPUC	California Public Utilities Commission
CRHR	California Register of Historic Resources
CRPR	California Rare Plant Rank
CCS	cryptocrystalline
CUP	conditional use permit
CWA	Clean Water Act
dB	decibel(s)
dBA	A-weighted decibel(s)
dBC	C-weighted decibel(s)
dbh	diameter at breast height
DEIR	draft environmental impact report
DEMO-left	Demonstration Forest Road–Left
DPM	diesel particulate matter
DPS	Distinct Population Segment
DTSC	California Department of Toxic Substances Control
DWQ	Division of Water Quality
EIR	environmental impact report
EIS	environmental impact statement
EPA	U.S. Environmental Protection Agency
EPRI	Electric Power Research Institute
ESA	environmental site assessment
ESU	Evolutionarily Significant Unit
EV	electric vehicle
FAA	Federal Aviation Administration
Farmland	Prime Farmland, Unique Farmland, or Farmland of Statewide Importance
FEIR	final environmental impact report
FEMA	Federal Emergency Management Agency

FHWA	Federal Highway Administration
FHWA-RD-77-108	Federal Highway Administration Highway Noise Prediction Model
FIRM	Flood Insurance Rate Map
FMMP	California Farmland Mapping and Monitoring Program
FPA	Forest Practice Act
FSZ	Farmland Security Zone
FTA	Federal Transit Administration
General Permit	State Water Resources Control Board General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Order 2009-0009-Division of Water Quality)
General Plan	<i>Humboldt County General Plan</i>
gen-tie	generation transmission line
GHG	greenhouse gas
GIS	geographic information system
gpm	gallon(s) per minute
GWh	gigawatt-hour(s)
GWP	global warming potential
HAP	hazardous air pollutant
HCP	habitat conservation plan
HRC	Humboldt Redwood Company
HSC	Health and Safety Code
Humboldt Redwood Company HCP	<i>Habitat Conservation Plan for the Properties of the Pacific Lumber Company, Scotia Pacific Holding Company, and Salmon Creek Corporation</i>
Humboldt Wind	Humboldt Wind, LLC
HVAC	heating, ventilation, and air conditioning
HCWMA	Humboldt County Weed Management Area
HSC	Health and Safety Code
HWMA	Humboldt Waste Management Authority
Hz	hertz
in/sec	inch(es) per second
IPCC	Intergovernmental Panel on Climate Change
ITP	incidental take permit
kBtu	thousand British thermal units
KOP	key observation point
kV	kilovolt(s)
kWh	kilowatt-hour
lb/day	pound(s) per day
LCP	local coastal program
LDL	Larson Davis Laboratories
L <sub>dn</sub>	day-night noise level
LEED	Leadership in Energy and Environmental Design
L <sub>eq</sub>	equivalent noise level
LID	Low Impact Development
L <sub>max</sub>	maximum noise level
L <sub>min</sub>	minimum noise level
L <sub>n</sub>	statistical descriptor of noise level
LOS	level of service
LRA	Local Responsibility Area

MACT	maximum available control technology
MBTA	Migratory Bird Treaty Act
MCL	maximum contaminant level
MET	meteorological tower
mg/m <sup>3</sup>	milligrams per cubic meter
mgd	million gallons per day
MLD	Most Likely Descendent
MMBtu	one million British thermal units
MMRP	mitigation monitoring and reporting program
MMT	million metric tons
MPO	metropolitan planning organization
MRZ	mineral resource zone
MS4	Municipal Separate Storm Sewer System
MT	metric ton(s)
MTBE	methyl tertiary butyl ether
MT CO <sub>2</sub> e	metric tons of carbon dioxide equivalent emissions
MTP	Metropolitan Transportation Plan
Municipal Code	Humboldt County Municipal Code
MW	megawatt(s)
NA	not applicable
NAAQS	national ambient air quality standards
NAHC	Native American Heritage Commission
NCAB	North Coast Air Basin
NCRP	North Coast Resource Partnership
NCUAQMD	North Coast Unified Air Quality Management District
NEHRP	National Earthquake Hazards Reduction Program
NEHRPA	National Earthquake Hazards Reduction Program Act
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NHTSA	National Highway Traffic Safety Administration
NMFS	National Marine Fisheries Service
NO	nitric oxide
NOAA	National Oceanic and Atmospheric Administration
NO <sub>2</sub>	nitrogen dioxide
NOI	notice of intent
NOP	notice of preparation
North Coast IRWMP	North Coast Integrated Regional Watershed Management Plan
NO <sub>x</sub>	oxides of nitrogen
NPDES	National Pollutant Discharge Elimination System
NPS	National Park Service
NRCS	U.S. Natural Resources Conservation Service
NRHP	National Register of Historic Places
NSR	New Source Review
NWIC	Northwest Information Center
O&M	operations and maintenance
O <sub>3</sub>	ozone
OPR	California Governor's Office of Planning and Research

OWTS	On-site Wastewater Treatment Systems
OWTS Policy	Water Quality Control Policy for Siting, Design, Operation, and Maintenance of On-site Wastewater Treatment Systems
PAH	polycyclic aromatic hydrocarbon
PALCO	Pacific Lumber Company
PCE	perchloroethene
PG&E	Pacific Gas and Electric Company
PM	particulate matter
PM <sub>10</sub>	respirable particulate matter with an aerodynamic diameter of 10 micrometers or less
PM <sub>2.5</sub>	fine particulate matter with an aerodynamic diameter of 2.5 micrometers or less
Porter-Cologne Act	Porter-Cologne Water Quality Control Act
ppb	parts per billion
ppm	parts per million
PPV	peak particle velocity
PRC	California Public Resources Code
project applicant	Humboldt Wind, LLC
project, proposed project	Humboldt Wind Energy Project
PSD	Prevention of Significant Deterioration
psi	pound(s) per square inch
PVC	polyvinyl chloride
RCEA	Redwood Coast Energy Authority
REC	recognized environmental condition
Reporting Rule	Greenhouse Gas Reporting Rule
RH	High Density Residential (zoning)
RMS	root-mean-square
ROG	reactive organic gases
RUCS	Rural-Urban Connection Strategy
R-Value	energy efficiency rating
RWQCB	regional water quality control board
SB	Senate Bill
SCADA	Supervisory Control and Data Acquisition
SCAQMD	South Coast Air Quality Management District
Scoping Plan	<i>Climate Change Scoping Plan</i>
Scoping Plan Update	<i>First Update to the Climate Change Scoping Plan: Building on the Framework</i>
Scotia DRC	Scotia Design Review Committee
SCS	Sustainable Communities Strategy
SEL	sound equivalent level
SHPO	State Historic Preservation Officer
SIP	state implementation plan
SMA	Streamside Management Area
SMAQMD	Sacramento Air Quality Management District
SMARA	Surface Mining and Reclamation Act
SO <sub>2</sub>	sulfur dioxide
SOD	sudden oak death
SO <sub>x</sub>	oxides of sulfur



State SIP Strategy	Revised Proposed 2016 State Strategy for the State Implementation Plan
SWPPP	storm water pollution prevention plan
SWRCB	State Water Resources Control Board
TAC	toxic air contaminant
TCP	Timber Conversion Permit
TCR	tribal cultural resource
THP	timber harvest plan
THPO	Tribal Historic Preservation Officer
TMDL	total maximum daily load
tpy	tons per year
TPZ	Timberland Production Zone zoning designation
U.S. 101	U.S. Highway 101
UBC	Uniform Building Code
UCCE	University of California Cooperative Extension
UCMP	University of California Museum of Paleontology
USACE	U.S. Army Corps of Engineers
USC	United States Code
USDA	U.S. Department of Agriculture
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
UST	underground storage tank
UWMP	urban water management plan
VdB	vibration decibel(s)
VMT	vehicle miles traveled
VOC	volatile organic compound
WBWG	Western Bat Working Group
WDR	waste discharge requirement
WTG	wind turbine generator

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