

Table of Contents

Chapter 7.0 Glossary 7-1

This page intentionally left blank

Chapter 7.0 Glossary

A	
accipiters	Small to medium-sized agile hawks most frequently found in forested areas.
activity areas	Locations, particularly near the wind turbine sites, where grasses may be mowed and shrubs may be cut or partially cut for a short period during construction, but no clearing or grading would occur.
advanced conservation practices (ACPs)	“Scientifically supportable measures that are approved by the [U.S. Fish and Wildlife] Service [USFWS] and represent the best available techniques to reduce eagle disturbance and ongoing mortalities to a level where remaining take is unavoidable” (50 Code of Federal Regulations [CFR] 22.3).
aeries	Highly elevated nests of raptors, which are typically substantial structures built in inaccessible locations such as cliffs, mountaintops, or the tops of tall, isolated trees, and which are used year after year.
agency	An organization, company, or bureau that provides some service for another; an administrative division of a government. The ability to act out of free will.
alluvium	A deposit of clay, silt, sand, and gravel left by flowing streams.
apex predators	Predators at the top of the food chain, with no natural predators of their own.
applicant committed measures (ACMs)	Measures to which the Power Company of Wyoming LLC (PCW) has committed that are intended to avoid, minimize, rectify, reduce, or eliminate potential environmental impacts to the extent possible.
B	
best management practice (BMP)	A practice, or combination of practices, that is determined to be an effective and practicable (including technological, economic, and institutional considerations) means of preventing or reducing environmental impacts.

Bird and Bat Conservation Strategy (BBCS)	A document referenced in the USFWS' land-based wind energy guidelines wherein project proponents document their strategies and commitments to avoid and minimize impacts on migratory birds and bats during construction, operation, maintenance, and decommissioning. PCW submitted a BBCS for the Chokecherry and Sierra Madre (CCSM) Phase I Project to USFWS in August 2015 (see Attachment B).
Bird Conservation Regions (BCRs)	Ecologically distinct regions in North America with similar bird communities, habitats, and resource management issues established by the North American Bird Conservation Initiative.
Birds of Conservation Concern (BCCs)	Species, subspecies, and populations of all migratory nongame birds that, without additional conservation actions, are likely to become candidates for listing under the Endangered Species Act (ESA). BCCs are identified by the USFWS in accordance with the 1988 amendment to the Fish and Wildlife Conservation Act.
BLM FEIS and ROD	The Bureau of Land Management (BLM) developed a programmatic Environmental Impact Statement (EIS) analyzing the proposed CCSM Project. The Final EIS (FEIS) was released on July 3, 2012. The Record of Decision (ROD) was signed on October 9, 2012. The term "BLM FEIS and ROD" is used to reference these documents collectively. Otherwise, the terms "BLM FEIS" and "BLM ROD" are used.
buteos	Hawks with robust bodies, long, broad wings, and relatively short, fan-shaped tails.
C	
carrion	The dead and decaying flesh of an animal.
CCSM Phase I Project	A wind energy project with 500 turbines and a variety of supporting infrastructure, to be located in two wind development areas (WDAs): Chokecherry and Sierra Madre. The CCSM Phase I Project would be sited in the western portions of the Chokecherry and Sierra Madre WDAs and is the focus of PCW's Eagle Take Permit (ETP) applications that have triggered this EIS.
CCSM Phase II Project	A separate wind energy project consisting of 500 additional turbines, which may be proposed by PCW in a reasonably foreseeable time period. The CCSM Phase II Project would be sited in the eastern portions of the Chokecherry and Sierra Madre WDAs. The CCSM Phase II Project is considered as a reasonably foreseeable future action in the cumulative impacts analysis, but would require a separate permitting process and National Environmental Policy Act (NEPA) analysis.

CCSM Project	A proposed 1,000-turbine wind energy project located in Carbon County, Wyoming, south of the city of Rawlins. The CCSM Project is divided into two projects. The CCSM Phase I Project, the subject of this EIS, would consist of 500 wind turbines capable of producing 1,000 to 1,500 megawatts (MW) of wind energy and a variety of supporting infrastructure. The CCSM Phase II Project, which could be developed at a later date, would consist of an additional 500 wind turbines capable of producing 1,000 to 1,500 MW of wind energy.
Chokecherry Wind Development Area (WDA)	The northern portion of the proposed project. The Chokecherry WDA is located entirely east of Wyoming State Highway (WYO) 71. Under the development scenario proposed by PCW, the Chokecherry WDA would be divided east-west by a haul road that would be built to serve construction and operation of the CCSM Project. The Chokecherry WDA includes 202 of the 500 turbines proposed for the CCSM Phase I Project.
compensatory mitigation	Actions to reduce eagle mortality or increase carrying capacity to a no-net-loss standard, meaning that the actions either reduce another ongoing form of mortality to a level equal to or greater than the unavoidable mortality, or lead to an increase in carrying capacity that allows the eagle population to grow by an equal or greater amount.
conifers	Cone-bearing trees and shrubs, chiefly evergreens.
cryptogamic crusts	Thin crusts made up of mosses, lichens, algae, and bacteria that promote the germination of potential forage plants.
D	
disjunct seasonal ranges	Areas of habitat that are separated by areas of non-habitat or less favorable habitat.
disturb	As defined under the Bald and Golden Eagle Protection Act (BGEPA), “to agitate or bother a bald or golden eagle to a degree that causes, or is likely to cause, based on the best scientific information available, (1) injury to an eagle, (2) a decrease in its productivity, by substantially interfering with normal breeding, feeding, or sheltering behavior, or (3) nest abandonment, by substantially interfering with normal breeding, feeding, or sheltering behavior” (50 CFR 22.3).

E	
EA1	The first Environmental Assessment (EA) prepared by BLM for the CCSM Project and tiered to the 2012 BLM FEIS. EA1 is titled “Environmental Assessment for Infrastructure Components: Phase I Haul Road and Facilities, West Sinclair Rail Facility, and Road Rock Quarry,” and was finalized in December 2014 (BLM 2014).
EA2	The second EA prepared by BLM for the CCSM Project and tiered to the 2012 BLM FEIS. EA2 is titled “Environmental Assessment for Phase I Wind Turbine Development” and is a draft dated March 2016 (BLM 2016a). EA2 analyzes the 500 wind turbines and pads, access roads, and associated components for the CCSM Phase I Project.
Eagle Conservation Plan (ECP)	A plan that documents how an applicant intends to comply with the regulatory requirements for a programmatic ETP and the associated NEPA process by avoiding and minimizing the risk of taking eagles up front, and formally evaluating possible alternatives in siting, configuration, and operation of wind energy projects. Preparation of an ECP is voluntary. For the CCSM Phase I Project, the ECP was prepared to address both the standard and programmatic ETPs.
eagle management units (EMUs)	Regional eagle population management areas defined in the Final EA for the eagle take permit rule (USFWS 2009). For bald eagles, EMUs largely follow USFWS regional boundaries. For golden eagles, EMUs follow BCRs.
eagle productivity	The number of fledglings produced.
eagle take	To “pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, destroy, molest, or disturb” a bald or golden eagle (50 CFR 22.3).
Eagle Take Permit (ETP)	A permit issued by the USFWS that could authorize take of bald and golden eagles or their nests when the take is associated with, but not the purpose of, an otherwise lawful activity and cannot practicably be avoided. <i>See also</i> standard ETP <i>and</i> programmatic ETP.
ecoregion	An area within which ecosystems (and the type, quality, and quantity of environmental resources) are generally similar. Also known as an ecological region.
emergent	Type of wetland characterized by rooted herbaceous and grasslike plants and in which vegetation is present for most of the growing season in most years.

experimental advanced conservation practices (EACPs)	ACPs implemented at wind energy facilities on an experimental basis. The USFWS has not currently approved any ACPs for wind energy projects. <i>See also</i> advanced conservation practices (ACPs).
F	
fatality	Death or the occurrence of death.
footprint	The amount of space that is covered by something, such as the initial clearing and grading area, construction activities, or project components.
H	
hibernacula	Caves and mines where bats hibernate.
HUC-12 sub-watershed	The smallest type of watershed identified by the U.S. Geological Survey (USGS) and assigned a 12-digit unique identification number known as a hydrologic unit code (HUC).
I	
impaired waterbody	A waterbody that does not attain water quality standards (that is, designated uses, numeric and narrative criteria, and anti-degradation requirements defined at 40 CFR 131).
infrastructure area	The area that encompasses the infrastructure components that would be built for Phase I development.
infrastructure components	Infrastructure needed to support wind energy development for the CCSM Phase I Project. Components include the Phase I Haul Road and Facilities, West Sinclair Rail Facility, and Road Rock Quarry, along with other utilities as described in EA1.
initial clearing and grading area	The total area that would be cleared for construction of the CCSM Phase I Project, including long-term modification areas and areas that would be revegetated and reclaimed following construction.
invasive plant species	A species that is not native to the ecosystem under consideration and whose introduction causes or is likely to cause economic or environmental harm or harm to human health (Executive Order [EO] 13112).
L	
lacustrine	Wetland system associated with open water bodies such as lakes, reservoirs, and impounded rivers.
lek	Area where birds gather during the breeding season for community courtship displays to attract mates.
local area population (LAP)	The eagle population within the average natal-dispersal distance from a project footprint. This distance is 43 miles for bald eagles and 140 miles for golden eagles (USFWS 2009).

long-term modification areas	Areas within the initial clearing and grading areas that would be maintained throughout operation of the CCSM Phase I Project and rehabilitated during project decommissioning. Long-term modification areas include areas where aggregate fill material would be placed for wind turbine sites, roads, laydown yards, and other sites that would be used during project operation.
M	
mean inter-nest distance (MIND)	The mean distance between nests of the same eagle species in and near a proposed wind energy project. This distance is used to evaluate which nesting pairs of eagles use the project footprint regularly and are at risk of collision with wind turbines.
mesic	Characterized by the presence of a moderate amount of moisture or water.
meteorological tower	Tower erected to measure meteorological events such as wind speed, direction, and air temperature.
mortality	The death of a large number of individuals.
N	
natal dispersal	The movement between hatching location and first breeding or potential breeding location. The natal dispersal distance is 43 miles for bald eagles and 140 miles for golden eagles (USFWS 2009).
no-net-loss standard	The requirement that compensatory mitigation actions either reduce another existing cause of mortality to a level equal to or greater than the unavoidable mortality, or lead to an increase in carrying capacity that allows the eagle population to grow by an equal or greater amount (USFWS 2013b).
noxious weed	“A plant species designated by federal or state law as generally possessing one or more of the following characteristics: aggressive and difficult to manage; parasitic; a carrier or host of serious insects or disease; or non-native, new, or not common to the United States” (BLM 2007).
O	
obligate	A species that is dependent on a specific habitat for all or a portion of its lifecycle.
Occupied nest	A nest that was occupied at least once during the last 5 years or last 5 years of field surveys, specifically between 2008 and 2012.

occupied nest	A nest used for breeding in the current breeding season by a pair of raptors (particularly eagles). Presence of an adult, eggs, or young, freshly molted feathers or plucked down, or current year's mutes (whitewash) suggest nest occupancy. In years when food resources are scarce, it is not uncommon for a pair of eagles to occupy a nest yet never lay eggs; such nests are considered occupied.
orographic lift	An air mass forced from a low elevation to a high elevation as it moves over rising terrain.
P	
paleontological resources	Fossil evidence of plants and animals.
palustrine	A broad category of freshwater wetlands (such as marshes, bogs, and swamps) dominated by trees, shrubs, emergent herbaceous plants, floating leaved and submergent plants, or mosses and lichens.
parasite	A species that benefits from another species at the expense of the second.
passerines	Perching birds.
Power Company of Wyoming LLC (PCW)	The project proponent and the applicant for the ETPs that have triggered this EIS.
Programmatic Agreement	An agreement developed by the BLM for the CCSM Project in consultation with the Wyoming State Historic Preservation Office, the Advisory Council on Historic Preservation, PCW, and other interested parties. The Programmatic Agreement formalizes the BLM's obligations for identifying and evaluating historic resources, addressing inadvertent discoveries, and mitigating impacts.
programmatic Eagle Take Permit (ETP)	A permit issued by the USFWS for eagle take that may recur through the life of a project and is applicable where the location, timing, and amount of take are all unknown. Issuance of a programmatic ETP requires implementation of conservation measures, and potentially compensatory mitigation, to reduce the potential for eagle take and to meet the no-net-loss standard for eagles within a designated area. The programmatic ETP may be issued for a maximum of a 5-year period. PCW applied for a programmatic ETP for operation of the CCSM Phase I Project.
promontory	Raised mass of land declining abruptly from one side.
Proposed Action in this EIS	The USFWS' decision on whether to issue standard and programmatic ETPs for the CCSM Phase I Project.

R	
raptors	Birds of prey.
right-of-way (ROW) grant	An authorization to use a specific piece of public land for certain specified purposes, such as roads, pipelines, telephone lines, electric lines, and reservoirs, for a specific period of time.
riparian	Relating to or living or located on the bank of a natural watercourse such as a river or stream.
riparian/mesic lowland communities	Areas along the bank of a river or stream that have a moderate or well-balanced supply of moisture.
riverine	Relating to, formed by, or resembling a river; living or situated on the banks of a river or stream.
rotor-swept zone	The airspace through which wind turbine blades spin.
S	
scrub-shrub	Wetland areas dominated by woody vegetation less than 20 feet tall.
secondary food source	A food source used when primary food sources are not available.
Sierra Madre Wind Development Area (WDA)	The southern portion of the proposed project. The Sierra Madre WDA is divided by WYO 71, and the majority of the wind development acreage would be located west of the highway. The Sierra Madre WDA includes 298 of the 500 turbines proposed for the CCSM Phase I Project.
site-specific plan of development (SPOD)	A document that discusses detailed plans to develop a project or a portion of a project. This document is required by BLM as part of a ROW grant application for wind energy projects on lands administered by BLM.
species of concern	“For a particular wind energy project, any species which 1) is either a) listed as an endangered, threatened or candidate species under the Endangered Species Act, subject to the Migratory Bird Treaty Act or Bald and Golden Eagle Protection Act; b) is designated by law, regulation, or other formal process for protection and/or management by the relevant agency or other authority; or c) has been shown to be significantly adversely affected by wind energy development, and 2) is determined to be possibly affected by the project” (USFWS 2012a).

Species of Greatest Conservation Need (SGCN)	Species identified in Wyoming’s State Wildlife Action Plan as those “whose conservation status warrants increased management attention, and funding, as well as consideration in conservation, land use, and development planning in Wyoming. SGCN designation can be derived from known population or habitat threats or a lack of sufficient information to adequately assess a species’ status” (Wyoming Game and Fish Department [WGFD] 2010b).
stakeholders	Members of the public, non-governmental agencies, and elected officials who may or do have a stake in a proposed action.
standard Eagle Take Permit (ETP)	A permit issued by the USFWS that authorizes individual instances of take (including nest disturbance during construction activities) where the location, timing, and amount of take are all known. PCW applied for a standard ETP for construction of the CCSM Phase I Project.
T	
take	As defined under BGEPA, to “pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, destroy, molest, or disturb” (50 CFR 22.3). <i>See also</i> eagle take. As defined under the Migratory Bird Treaty Act (MBTA), “to pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to pursue, hunt, shoot, wound, kill, trap, capture or collect” a migratory bird (50 CFR 10.12). As defined under the ESA, “to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct” a species protected under the ESA (16 United States Code [U.S.C.] 1532).
temporal patterns	Time-based patterns.
thermal convection	Vertical atmospheric currents produced by solar heating of the ground, also known as thermals.
traditional cultural property (TCP)	A property that has significance to a community of people, including Native Americans, based on beliefs and customs passed on over time.
turbine hazardous area	Calculated as the 3-dimensional cylindrical volume around a turbine from ground level to a height of 200 meters (650 feet).
U	
undulating	Having a wavy form or surface.
ungulate	Mammal with hooves.
Unoccupied nest	A nest that was not occupied between 2008 and 2012.

unoccupied nest	A nest not selected by a pair of raptors (particularly eagles) for use in the current breeding season. The nest is determined unoccupied by the continuing absence of any adult, egg, or dependent young at the nest over the course of repeated observations during the breeding season. An unoccupied eagle nest may be used by eagles in future nesting seasons and remains protected under BGEPA.
W	
watershed	An area of land where all of the water (rainfall and snowmelt) drains to a common outlet.
wetland	Lands where the water table is usually at or near the surface or the land is covered by shallow water. Wetlands have one or more of the following three attributes: 1) at least periodically, the land supports predominantly hydrophytes (plants specifically adapted to live in wetlands); 2) the substrate is predominantly undrained hydric (wetland) soil; and 3) the substrate is nonsoil and is saturated with water or covered by shallow water at some time during the growing season of each year.
white-nose syndrome (WNS)	A disease caused by a fungus that affects cave-hibernating bats. WNS is estimated to have killed up to 6.7 million bats in the eastern United States and Canada (USFWS 2012d; Reeder and Moore 2013).
Wind Development Area (WDA)	The area surrounding and including the wind turbines. The CCSM Phase I Project includes two WDAs. Within the Chokecherry WDA, the CCSM Phase I Project would include 202 turbines, primarily located west of the Phase I Haul Road. Within the Sierra Madre WDA, the CCSM Phase I Project would include 298 turbines in the areas occurring west of WYO 71.
X	
xeric	Characterized by, relating to, or requiring only a small amount of moisture.