

Biological Evaluation for Friedman Memorial Airport (SUN) Flying Hat Ranch Land Acquisition and Development of a 10.4-acre Parcel, Blaine County, Idaho

Technical Memorandum

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Introduction

This technical memorandum documents the desktop review and biological reconnaissance survey conducted on the Eccles Flying Hat Ranch (Ranch), south of Friedman Memorial Airport (SUN) in Blaine County (County), Idaho.

SUN is in Blaine County south of the City of Hailey (City), Idaho. The Friedman Memorial Airport Authority (FMAA), through a Joint Powers Agreement between the City and County, operates and manages SUN, which serves several commercial airlines and a variety of general aviation traffic.

The project survey area (**Attachment 1, Project Overview**) is located directly south of SUN in the Wood River Valley of Central Idaho. The project survey area includes the active cattle ranch, Cove Canal, several ranch outbuildings and storage areas. A 10.4-acre portion of this area is proposed for aviation development. This memorandum identifies State and Federal sensitive species, suitable habitat, and biological resources. The results from pedestrian surveys and potential impacts to biological resources resulting from the proposed land acquisition and parcel development follow.

This biological evaluation was prepared on behalf of SUN to address the assessment of current Endangered Species Act (ESA) listings by the US Fish and Wildlife Service (USFWS) and National Marine Fisheries Service (NMFS). The project is receiving funding from the Federal Aviation Administration (FAA), which provides the federal nexus for the project. The ESA requires federal agencies to ensure that their actions do not jeopardize the continued existence of threatened or endangered species or their critical habitats. The purpose of this evaluation is to determine if the proposed action may affect species or habitat protected under Section 7 of the ESA (United States Code, 19 USC 1536 (c)). The absence of Habitat Areas of Particular Concern (HAPC) and Essential Fish Habitat (EFH), due to the inland location of the project, ends the consultation requirements under the Magnuson Stevens Fishery Conservation and Management Act.

Project Description

The project location is in the US Geological Survey (USGS) 7.5-minute Bellevue quadrangle, in the northwest ¼ of the southwest ¼ of Section 23 Township 2N Range 18E (latitude 43°29'50.43"/ longitude - 114°17'37.49").

The project area extends from the southern property line of SUN to the south and includes the Cove Canal and grazed pastures (**Attachment 1, Project Overview**). The proposed actions being evaluated in this technical memorandum includes purchase of approximately 386 acres of property south of SUN and west of State Highway 75. The proposed actions also include development of aviation hangars and parking apron on 10.4 acres of the acquired property adjacent to the existing airport general aviation facilities. Construction haul routes and staging areas will be on existing roads and disturbed lands.

The acquisition of the property, a portion of which is transferred from a larger property known as the Eccles Flying Hat Ranch, will require the approval of the Airport Layout Plan (ALP) by the FAA. FMAA is seeking federal funding to assist with the acquisition of the property.

Impact Avoidance and Minimization Measures

The impact minimization measures and appropriate Best Management Practices (BMPs) that will be applied as part of the proposed project include the following:

- No in-water work will occur within or adjacent to any stream.
- No removal of riparian vegetation will occur, and the project does not involve clearing of trees or shrubs.
- Construction staging and stockpile areas will be located within previously disturbed areas and outside sensitive areas, such as wetlands and streams.

Action Area

The potential effects on listed or proposed endangered and threatened species will be evaluated in relation to the extent of the area potentially influenced by the proposed action (the Action Area) (50 Code of Federal Regulations Part 402.02). The Action Area is determined by the geographic extent of the physical, chemical, and biological effects resulting from the proposed action, including direct, indirect, interrelated, and interdependent effects of the action. The Action Area has been identified for evaluation of potential direct impacts to a terrestrial zone, associated with the construction and development of a 10.4-acre parcel. The primary driver of the terrestrial zone of effect is new impervious surfaces on agricultural land. The project area is located within a rural setting and will require the use of heavy machinery during construction. This Action Area represents an area in which increased noise and human presence during construction may cause disturbance, in a relatively noisy, airport environment adjacent to a major highway and airport runway. The 386 acres have been surveyed for protected species; however, this area has not been included in the Action Area, as land acquisition alone is not considered to have a biological impact. Any additional proposed development of the 386-acre Ranch will need to be analyzed in subsequent environmental analysis as appropriate.

Biological Evaluation Methods

The potential impacts of the proposed project on federally listed fish, wildlife, and plants were assessed in accordance with the ESA of 1973, Fish and Wildlife Coordination Act, Executive Order 13112-Invasive Species, and the Migratory Bird Treaty Act (MBTA) of 1918. A Mead & Hunt biologist conducted a desktop review and a field assessment.

Desktop Review

Mead & Hunt conducted a desktop review of publicly available data pertaining to special-status species including federally listed species (endangered, threatened, candidate, or proposed), MBTA species, and Idaho special-status species. This review also identified designated or proposed critical habitat for federally listed species. The following resources were reviewed:

- Publicly available data sets of sensitive biological resources including the Idaho Department of Fish and Wildlife (IDFW) special status species occurrence data (**Attachment 2, IDFW Species Occurrence and Correspondence**), Blaine County species list of occupied and estimated range, and the US Fish and Wildlife Service (USFWS) critical habitat mapper and species data for the survey area (**Attachment 3, IPaC**).
- USGS topographic maps, National Hydrography Dataset (USGS, 2020), and National Wetlands Inventory (USFWS, 2020) maps in the vicinity for assessing presence of mapped aquatic resources.

Onsite Field Assessment

The Mead & Hunt biologist conducted a 3-day field evaluation of the survey area between October 28 and 30, 2020, to assess biological resources including the presence of suitable habitat for special-status species. The field assessment and surveys included an onsite biological pedestrian surveys documenting habitat characteristics and any observed special status species. To assess the potential presence of biological resources onsite, biologists utilized aerial imagery, binoculars, and onsite observations, as well as representative site photographs.

Existing Conditions

The Ranch is located in the Camas Prairie (Level IV ecoregion 12c) subsection of the Idaho Snake River Plain (Level III ecoregion; 12) (US EPA, 2020). The Snake River Plain is characterized by sagebrush steppe with intermittent barren lava fields and saltbush–greasewood. The prairie is strongly influenced by flanking foothills that trap mountain surface water and storm water runoff. Alluvial fans and terraces are covered by grasses and sagebrush.

The survey area is several pastures with a western downslope gradient that form the Big Wood River floodplain (Hydrologic Unit Code 17040219). Regional drainage is connected to the Big Wood River through a network of constructed (irrigation features) and natural watercourses. Cove Canal is an excavated irrigation canal that transports surface water diagonally southeast across the Upper Pasture from the Big Wood River to irrigators.

Vegetative communities are predominantly managed areas of irrigated pasture, and two 30-foot-wide riparian corridors associated with Cove Canal, the irrigated swale, and the Big Wood River. Common vegetation includes: barnyard grass (*Dactylis glomerata*), smooth brome (*Bromus inermis*), rabbit brush (*Chrysothamnus viscidiflorus*), tall sagebrush (*Artemisia tridentata*), bluebunch wheatgrass (*Agropyron spicatum*), alkali mallow (*Malvella leprosa*), common canary grass (*Phalaris canariensis*), bull thistle (*Cirsium vulgare*), Italian thistle (*Caardus pycnocephalus*), milk thistle (*Silybum marianum*), curly dock (*Rumex crispus*), dogwood (*Cornus sericea*), Western chokecherry (*Prunus virginiana*), goldenrod (*Solidago spp.*), and stinging nettle (*Urtica dioica*).

Results of Desktop Review

No designated or proposed critical habitat was identified within the survey area (USFWS, 2020). No occurrences or presence of state or federal special status species have been reported within a 2-mile buffer of the site (IDFW-CDC, 2020). No watercourses with the potential to support fish species of concern were identified within the survey area (IDFW-CDC-2017). The National Wetlands Inventory (NWI) and National Hydrography Dataset identify three freshwater emergent wetlands (PEM1A, PEM1C, PEM1Cx), four freshwater forested/shrub wetlands (PSSC, PFOA, PSSA, PFOAx), two freshwater ponds (PUBFh, PUBF)

and four riverine wetlands (R3UBH, R3USC, R4SBC, R5UBH) within the Ranch boundaries.

The desktop review identified a three federally endangered, threatened, or candidate species (**Table 1. ESA Species That May Occur in the Project Area**). State occurrence data reported numerous bird species protected under the MBTA within the three-mile radius of the project area (**Attachment 2, IDFW Species Occurrence**).

Table 1. ESA Species That May Occur in the Project Area

Species	Status	Habitat Requirements
Canada lynx (<i>Lynx canadensis</i>)	Threatened	Engelmann spruce above 4,000 feet in elevation, and boreal forest of typically sub-alpine fir.
North American wolverine (<i>Gulo gulo luscus</i>)	Proposed Threatened	Tundra with heavy snowpack above 7,000 feet in elevation and alpine/boreal forests of typically whitebark pine, douglas fir or lodgepole pine.
Yellow-billed cuckoo (<i>Coccyzus americanus</i>)	Threatened	Thick, closed canopy riparian forest of mostly cottonwood-willow with dense shrub understory.

Results of Field Survey

No federally or state listed species were observed during any of the field visits. Several red-tailed hawks (*Buteo jamaicensis*) were observed in flight above cottonwood trees near Wood River riparian areas each day. Tracks and signs of coyote(s) (*Canus latrans*) were observed at Cove Canal each day. A summary table of wildlife observed during the field assessments is provided in **Table 2**.

Table 2. Wildlife Species Observed within the Flying Hat Ranch

Common Name	Species Name
Red-winged blackbird	<i>Agelaius phoeniceus</i>
Red-tailed hawk	<i>Buteo jamaicensis</i>
Steller's jay	<i>Cyanocitta stelleri</i>
Northern flicker	<i>Colaptes auratus</i>
American kestrel	<i>Falco sparverius</i>
White-tailed jackrabbit	<i>Lepus townsendii</i>
Cliff swallow	<i>Petrochelidon pyrrhonota</i>
Black-billed magpie	<i>Pica hudsonia</i>

Previous evaluations have determined that the Cove Creek riparian corridor is unsuitable for Yellow-billed cuckoo nesting (SUN EA, Biological Memorandum, 2017). No evidence of their presence was observed during this 2020 field visit.

Suitable nesting habitat for birds subject to the MBTA is present within and adjacent to the 386-acre land acquisition; however, no suitable nesting habitat exists in the 10.4-acre development parcel. The trees and standing snags in the Big Wood River riparian corridor, Cove Canal, and adjacent irrigated swale and pastures are considered suitable for MBTA nesting birds. If areas in the Ranch are to be developed outside of the 10.4-acre development area, impacts to MBTA protected species should be evaluated.

The NWI database identified a 0.66 acre freshwater forested/shrub wetland, classified as a PSSC. During the field survey, this area was identified as an agricultural wheel line without wetland features. It appears that the NWI photo interpretation methodology using color infrared imagery from 1984 has misidentified this feature (**Attachment 4, Site Photographs**).

Impact Analysis

Threatened and Endangered Species

Based upon the data sources noted above, we conclude that development of the 10.4-acre parcel and acquisition of the 386-acre Ranch will have no effect on federally listed Canada lynx, Yellow-billed cuckoo, or North American wolverine. These species have no past evidence of occurrence nor suitable habitat in the project area.

State Sensitive Species and Migratory Birds

The 10.4-acre conversion of agricultural land into paved development will result in the loss of habitat for small mammals and other raptor prey species. In a February 2022 correspondence with IDFG, the agency was not aware of the project area providing appropriate habitat for SGCN (Species of Greatest Conservation Need) or other sensitive raptors. There is no proposed removal of trees or reduction of potential nesting and perching habitat. The 10.4-acres of pastureland has not been previously utilized by long-billed curlews and is not considered suitable habitat. MBTA habitat along the Big Wood River, Cove Canal, the irrigation swale, and the lower pastures should be reevaluated if development of these areas occurs. This project will have as less than significant impact on Red-tailed hawks, and no impact on the Olive-sided flycatcher, or other MBTA species.

Several Species of Greatest Conservation Need (SGCN) Tier 1 species (Morrison's, Western, and Suckley's Cuckoo Bumble Bee) may occur at the project site if flowering resources are available nearby, particularly near riparian areas; the Western and Morrison's bumble bee have been observed within 2 miles of the project area as recently as 2020 and 2021 (**Attachment 2, IDFW Species Occurrence and Correspondence**).

Aquatic Habitats

No fish, including ESA-listed species, occur within streams in the Action Area due to habitat conditions, small channel size and lack of gravels, low summer flows, and downstream water quality issues, including low dissolved oxygen. The closest waterbody supporting fish species is Big Wood River, approximately 0.3 miles from the project site, where no listed species are reported to exist (IPaC, 2020). The project does not include in-water work and appropriate sediment and erosion controls will be incorporated into clearing or

grading work. Sediment and erosion controls will likely include the use of silt fencing, straw bales, and straw wattles, among other measures to minimize the potential for direct effects related to increased turbidity and sedimentation of receiving waters from construction-related soil-disturbing activities. No negative changes in water quality are expected because of project construction.

No loss of riparian vegetation will occur, and no riparian functions will be impacted, including large woody debris (LWD) recruitment, sediment filtration, leaf litter production, and shade/stream temperature functions.

The project will result in the addition of 10.4 acres of impervious surface area. All vegetation disturbances would be minimal and would occur in maintained grass areas. No shrubs or trees will be removed in the riparian area of any stream. Based on the lack of riparian disturbance and location of the disturbance, no riparian functions will be impacted, including LWD recruitment, sediment filtration, leaf litter production, and shade/stream temperature functions. In addition, with the implementation of sediment and erosion control and a Spill Prevention, Control, and Countermeasure Plan, no sedimentation or contaminants from project construction runoff would enter fish-bearing surface waters.

The proposed project will not increase air traffic at SUN, is consistent with existing land use patterns, and does not add transportation capacity (new roadway or lane capacity). The project has independent utility and will not induce growth in the project vicinity. Therefore, based on the scope and scale of the proposed project, there are no anticipated land use related effects of the project that could impact any listed species or designated critical habitat. There are no other actions related to, or dependent upon, the proposed project.

Attachments

Attachment 1, Project Overview Map

Attachment 2, Idaho Department of Fish and Wildlife Species Occurrence and Correspondence

Attachment 3, IPaC species and critical habitat mapper from U.S. Fish and Wildlife Service Attachment 4, Site Photographs

References

City of Hailey, Transportation Master Plan. 2007.

https://www.haileycityhall.org/publicworks/street/TransMasterPlan/Hailey_Transportation_Plan.pdf

eBird. 2020. Blaine County Species Occurrence Data 1900-2020. Accessed October 2020.

<http://ebird.org/ebird/barchart?byr=1900&eyr=2017&bmo=1&emo=12&r=US-ID-013>

Idaho Fish and Wildlife (IDFW). 2020. Blaine County species list of occupied and estimated range. Accessed May 3, 2017.

<https://idfg.idaho.gov/species/taxa/county-lists>

Idaho Fish and Wildlife Conservation Data Center (IDFW-CDC). 2020. Species Occurrence Data for SUN Airport EA. Accessed October 2020.

U.S. EPA. 2020. Ecoregions of Idaho (poster): U.S. Geological Survey Open-File Report 2016–1021.

ftp://newftp.epa.gov/EPADataCommons/ORD/Ecoregions/id/id_front.pdf

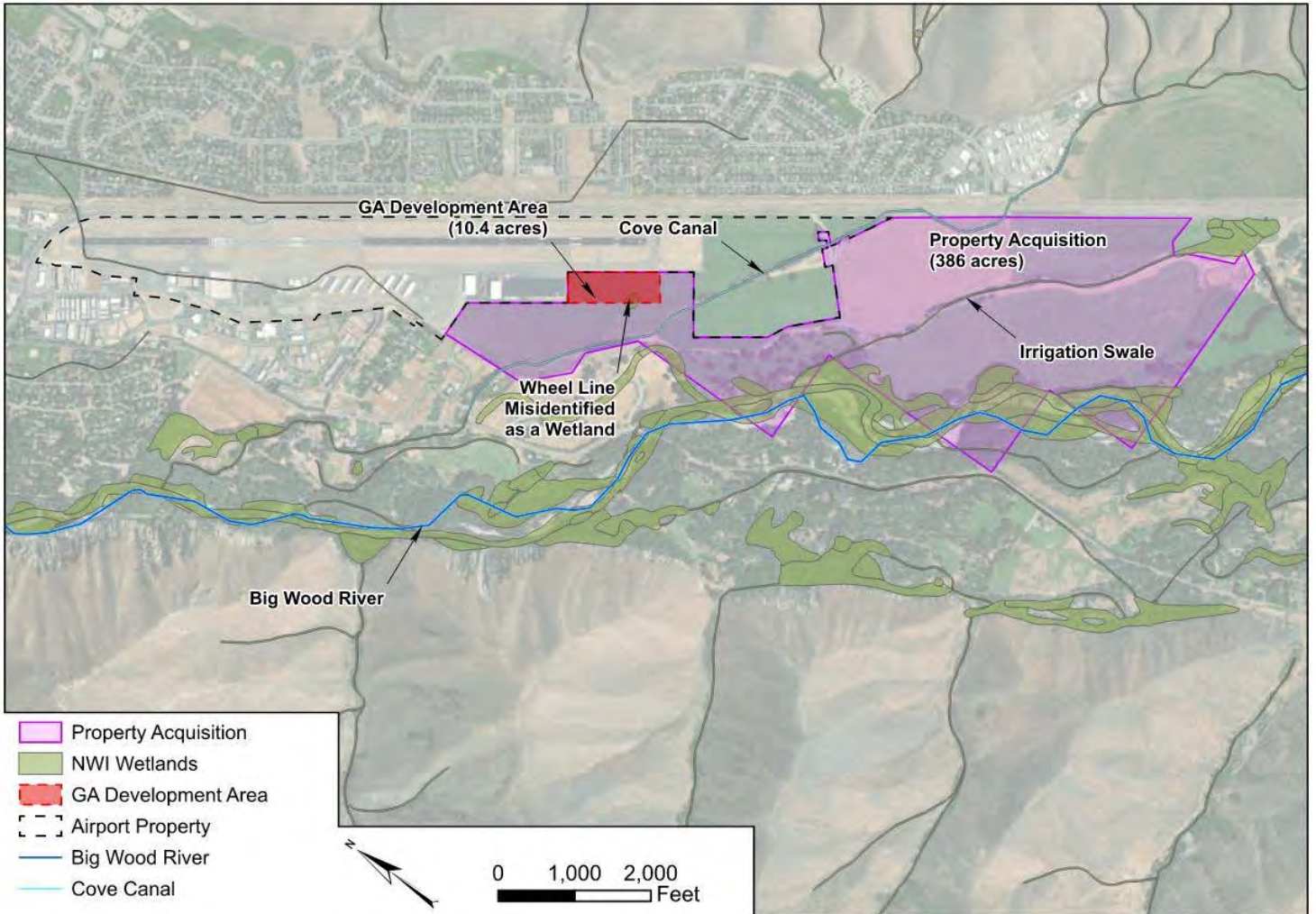
U.S. Fish and Wildlife Service (USFWS). 2020. Information for Planning and Conservation (IPaC). Accessed May 2017.

<http://ecos.fws.gov/ipac/>

National Wetlands Inventory Data, October 2020. Accessed October 2020.

<https://www.fws.gov/wetlands/data/data-download.html>

U.S. Geological Survey (USGS). 2017. National Hydrography Dataset. Accessed October 2020. <http://nhd.usgs.gov/>



**Friedman Memorial Airport (SUN)
Attachment 1 – Project Overview**

Attachment 2

**IDFG Consultation Correspondence
Feb 14, 2022**

Hi Aaron,

Thanks for reaching out and for giving IDFG the opportunity to comment on the biological evaluation; IDFG's mission is to preserve, protect, perpetuate, and manage Idaho's fish and wildlife resources for the public interest (Idaho Code § 36103(a)). To that end, the following comments are intended to aid the decision-making entity in avoiding, minimizing and mitigating effects to wildlife:

- We concur with the Biological Evaluation's assessment that the airport expansion will not have an effect on federally listed species (Canada lynx, Yellow-billed cuckoo, North American wolverine).
- It is unlikely that the project "will have no impact on red-tailed hawks" (p. 5; "State Sensitive Species and Migratory Birds") or other raptors that may inhabit the area. The conversion of agricultural land into paved development will result in the loss of habitat for small mammals and other prey species. However, IDFG is not aware of the project area providing appropriate habitat for SGCN (Species of Greatest Conservation Need) or other sensitive raptors.
- Several Species of Greatest Conservation Need (SGCN) Tier 1 species (Morrison's, Western, and Suckley's Cuckoo Bumble Bee) may occur at the project site if flowering resources are available nearby, particularly near riparian areas; the Western and Morrison's bumble bee have been observed within 2 miles of the project area as recently as 2020 and 2021. If the project will include any post-construction site stabilization/restoration with reseeded or revegetation, please incorporate native flowering plants that are beneficial for pollinators (e.g., bumble bees and butterflies).

Please let me know if you have any further questions.

Best,

Bradley Dawson
Environmental Staff Biologist
208-644-6310

**Idaho Diversity Database
Fish and Wildlife Species Occurrence**

County	Scientific Name	Common Name	GRank	SRank	USFS_R1	USFS_R4	USFS_R6	BLM	USESA	IDAPA	SGCN	Category
Blaine	<i>Pinus albicaulis</i>	Whitebark Pme	G3G4	S3	Sensitive	Sensitive	Sensitive	2	Candidate		No	Plant
Blaine	<i>Falco peregrinus</i>	Peregrine Falcon	G4	S2B					Delisted	Protected Nongame	Yes	Bird
Blaine	<i>Haliaeetus leucocephalus</i>	Bald Eagle	G5	S5	Sensitive	Sensitive		2	Delisted	Protected Nongame	Yes	Bird
Blaine	<i>Ursus arctos</i>	Grizzly Bear or Brown Bear	G4	S2				1	Delisted	Big Game	Yes	Mammal
Blaine	<i>Gulo gulo</i>	Wolverine	G4	S1	Sensitive	Sensitive		2	Proposed	Protected Nongame	Yes	Mammal
Blaine	<i>Coccyzus americanus</i>	Yellow-billed Cuckoo	G5	S1B		Sensitive		1	Threatened	Protected Nongame	Yes	Bird
Blaine	<i>Lynx canadensis</i>	Canada Lynx	G5	SNA		Threatened		1	Threatened	Threatened	Yes	Mammal
Blaine	<i>Acanthis flammea</i>	Common Redpoll	G5	S3N						Protected Nongame	No	Bird
Blaine	<i>Acanthis hornemanni</i>	Hoary Redpoll	G5	SNA						Protected Nongame	No	Bird
Blaine	<i>Accipiter</i>	Bird Hawks									No	Bird
Blaine	<i>Accipiter cooperii</i>	Cooper's Hawk	G5	S4						Protected Nongame	No	Bird
Blaine	<i>Accipiter gentilis</i>	Northern Goshawk	G5	S3		Sensitive		2		Protected Nongame	No	Bird
Blaine	<i>Accipiter striatus</i>	Sharp-shinned Hawk	G5	S4				0		Protected Nongame	No	Bird
Blaine	<i>Actitis macularia</i>	Spotted Sandpiper	G5	S3B						Protected Nongame	No	Bird
Blaine	<i>Aechmophorus clarkii</i>	Clark's Grebe	G5	S2B				0		Protected Nongame	Yes	Bird
Blaine	<i>Aechmophorus occidentalis</i>	Western Grebe	G5	S2B				0		Protected Nongame	Yes	Bird
Blaine	<i>Aegolius acadicus</i>	Northern Saw-whet Owl	G5	S4				0		Protected Nongame	No	Bird
Blaine	<i>Aegolius funereus</i>	Boreal Owl	G5	S1		Sensitive				Protected Nongame	Yes	Bird
Blaine	<i>Agelaius phoeniceus</i>	Red-winged Blackbird	G5	S5				0		Protected Nongame	No	Bird
Blaine	<i>Aix sponsa</i>	Wood Duck	G5	S4B,S4N						Game Bird Migratory	No	Bird
Blaine	<i>Alces americanus</i>	Moose	G5	S3						Big Game	No	Mammal
Blaine	<i>Alectoris chukar</i>	Chukar	G5	SNA				0		Upland Game Bird	No	Bird
Blaine	<i>Ambystoma macrodactylum</i>	Long-toed Salamander	G5	S5						Protected Nongame	No	Amphibian
Blaine	<i>Ameletus sparsatus</i>	A Mayfly	G4	S3							Yes	Arthropod
Blaine	<i>Ammodramus saviannarum</i>	Grasshopper Sparrow	G5	S3B				2		Protected Nongame	Yes	Bird
Blaine	<i>Amphispiza bilineata</i>	Black-throated Sparrow	G5	S2B						Protected Nongame	No	Bird
Blaine	<i>Anas - Teal spp.</i>	Unclassified Teal									No	Bird
Blaine	<i>Anas acuta</i>	Northern Pintail	G5	S4B,S4N						Game Bird Migratory	Yes	Bird
Blaine	<i>Anas americana</i>	American Wigeon	G5	S4B,S4N				0		Game Bird Migratory	No	Bird
Blaine	<i>Anas clypeata</i>	Northern Shoveler	G5	S4B,S4N				0		Game Bird Migratory	No	Bird
Blaine	<i>Anas crecca</i>	Green-winged Teal	G5	S4B,S3N						Game Bird Migratory	No	Bird
Blaine	<i>Anas cyanoptera</i>	Cinnamon Teal	G5	S3B				0		Game Bird Migratory	No	Bird
Blaine	<i>Anas discors</i>	Blue-winged Teal	G5	S2B				0		Game Bird Migratory	No	Bird
Blaine	<i>Anas penelope</i>	Eurasian Wigeon	G5	S1N						Game Bird Migratory	No	Bird
Blaine	<i>Anas platyrhynchos</i>	Mallard	G5	S4B,S4N						Game Bird Migratory	No	Bird
Blaine	<i>Anas strepera</i>	Gadwall	G5	S3				0		Game Bird Migratory	No	Bird
Blaine	<i>Anatidae - Duck spp.</i>	Unclassified Duck									No	Bird
Blaine	<i>Anaxyrus boreas</i>	Western Toad	G4	S2	Sensitive	Sensitive		2		Protected Nongame	No	Amphibian
Blaine	<i>Anser albifrons</i>	Greater White-fronted Goose	G5	S4M				0		Game Bird Migratory	No	Bird
Blaine	<i>Antennaria arcuata</i>	Meadow Pusytoes	G3	S1				0			No	Plant
Blaine	<i>Anthus rubescens</i>	American Pipit	G5	S3B						Protected Nongame	No	Bird
Blaine	<i>Antilocapra americana</i>	Pronghorn	G5	S3						Big Game	No	Mammal
Blaine	<i>Aphelocoma californica</i>	Western Scrub-Jay	G5	S3				0		Protected Nongame	No	Bird
Blaine	<i>Aquila chrysaetos</i>	Golden Eagle	G5	S3				2		Protected Nongame	No	Bird
Blaine	<i>Archilochus alexandri</i>	Black-chinned Hummingbird	G5	S5B				0		Protected Nongame	No	Bird
Blaine	<i>Ardea alba</i>	Great Egret	G5	S2B						Protected Nongame	Yes	Bird
Blaine	<i>Ardea herodias</i>	Great Blue Heron	G5	S5B				0		Protected Nongame	No	Bird

County	Scientific_Name	Common Name	GRank	SRank	USFS_R1	USFS_R4	USFS_R6	BLM	USESA	IDAPA	SGCN	Category
Blaine	Cicindela arenicola	Idaho Dune Tiger Beetle	G1G2	S2				2			Yes	Arthropod
Blaine	Cinclus mexicanus	American Dipper	G5	S3				0		Protected Nongame	No	Bird
Blaine	Circus cyaneus	Northern Harrier	G5	S4				0		Protected Nongame	No	Bird
Blaine	Cistothorus palustris	Marsh Wren	G5	S5B,S5N				0		Protected Nongame	No	Bird
Blaine	Clangula hyemalis	Long-tailed Duck	G5	S1N				0		Game Bird Migratory	No	Bird
Blaine	Coccythraustes vespertinus	Evening Grosbeak	G5	S4				0		Protected Nongame	No	Bird
Blaine	Coccyzus erythrophthalmus	Black-billed Cuckoo	G5	SNA				0		Protected Nongame	No	Bird
Blaine	Colaptes auratus	Northern Flicker	G5	S5				0		Protected Nongame	No	Bird
Blaine	Coluber constrictor	North American Racer	G5	S5				0		Protected Nongame	No	Reptile
Blaine	Coluber taeniatus	Striped Whipsnake	G5	S4				0		Protected Nongame	No	Reptile
Blaine	Columba livia	Rock Pigeon	G5	SNA				0			No	Bird
Blaine	Contopus cooperi	Olive-sided Flycatcher	G4	S3B				2		Protected Nongame	No	Bird
Blaine	Contopus sordidulus	Western Wood-Pewee	G5	S5B				0		Protected Nongame	No	Bird
Blaine	Corvus brachyrhynchos	American Crow	G5	S5				0		Game Bird	No	Bird
Blaine	Corvus corax	Common Raven	G5	S5				0		Protected Nongame	No	Bird
Blaine	Corynorhinus townsendii	Townsend's Big-eared Bat	G4	S3	Sensitive	Sensitive		2		Protected Nongame	Yes	Mammal
Blaine	Crotalus oreganus	Western Rattlesnake	G5	S4				0		Protected Nongame	No	Reptile
Blaine	Crotalus viridis	Prairie Rattlesnake	G5	S4				0		Protected Nongame	No	Reptile
Blaine	Cyanocitta cristata	Blue Jay	G5	S1N				0		Protected Nongame	No	Bird
Blaine	Cyanocitta stelleri	Steller's Jay	G5	S5				0		Protected Nongame	No	Bird
Blaine	Cygnus	Swan									No	Bird
Blaine	Cygnus buccinator	Trumpeter Swan	G4	S1B,S4N		Sensitive		2		Game Bird Migratory	Yes	Bird
Blaine	Cygnus columbianus	Tundra Swan	G5	S4M,S4N				0		Game Bird Migratory	No	Bird
Blaine	Cyprripedium parviflorum var. pubescens	Small Yellow Lady's-slipper	G5T5	S1	Sensitive			0			No	Plant
Blaine	Dendragapus obscurus	Dusky Grouse	G5	S5				0		Upland Game Bird	No	Bird
Blaine	Dipodomys ordii	Ord's Kangaroo Rat	G5	S4				0			No	Mammal
Blaine	Dolichonyx oryzivorus	Bobolink	G5	S2B				0		Protected Nongame	No	Bird
Blaine	Draba incerta	Yellowstone Draba	G5	S2				0			No	Plant
Blaine	Dryocopus pileatus	Pileated Woodpecker	G5	S4				0		Protected Nongame	No	Bird
Blaine	Dumetella carolinensis	Gray Catbird	G5	S5B				0		Protected Nongame	No	Bird
Blaine	Egretta thula	Snowy Egret	G5	S1B				0		Protected Nongame	Yes	Bird
Blaine	Empidonax										No	Bird
Blaine	Empidonax hammondi	Hammond's Flycatcher	G5	S5B				0		Protected Nongame	No	Bird
Blaine	Empidonax minimus	Least Flycatcher	G5	S2B				0		Protected Nongame	No	Bird
Blaine	Empidonax oberholseri	Dusky Flycatcher	G5	S4B				0		Protected Nongame	No	Bird
Blaine	Empidonax occidentalis	Cordilleran Flycatcher	G5	S5B				0		Protected Nongame	No	Bird
Blaine	Empidonax traillii	Willow Flycatcher	G5	S4B		Endangered		2		Protected Nongame	No	Bird
Blaine	Empidonax wrightii	Gray Flycatcher	G5	S4B				0		Protected Nongame	No	Bird
Blaine	Ephemerella alleni	A Mayfly	G4	S2				0			No	Arthropod
Blaine	Eptesicus fuscus	Big Brown Bat	G5	S3				2		Protected Nongame	No	Mammal
Blaine	Eremophila alpestris	Horned Lark	G5	S5				0		Protected Nongame	No	Bird
Blaine	Erethizon dorsatum	North American Porcupine	G5	S5				0			No	Mammal
Blaine	Euphagus carolinus	Rusty Blackbird	G4	SNA				0		Protected Nongame	No	Bird
Blaine	Euphagus cyanocephalus	Brewer's Blackbird	G5	S4				0		Protected Nongame	No	Bird
Blaine	Falcipectus canadensis	Spruce Grouse	G5	S3				0		Upland Game Bird	No	Bird
Blaine	Falco columbarius	Merlin	G5	S4				0		Protected Nongame	Yes	Bird
Blaine	Falco mexicanus	Prairie Falcon	G5	S4				0		Protected Nongame	No	Bird
Blaine	Falco rusticolus	Gyrfalcon	G5	SNA				0		Protected Nongame	No	Bird
Blaine	Falco sparverius	American Kestrel	G5	S4				0		Protected Nongame	No	Bird
Blaine	Flummicola	Flummicola sp.									No	Mollusc
Blaine	Flummicola coloradoensis	Green River Pebblesnail	G3G4	S3							Yes	Mollusc
Blaine	Flummicola fuscus	Ashy Pebblesnail	G2	S3				2			No	Mollusc
Blaine	Fringilla montifringilla	Brambling	G5	SNA				0			No	Bird
Blaine	Fulica americana	American Coot	G5	S4B,S4N				0		Game Bird Migratory	No	Bird
Blaine	Galba obrussa	Golden Fossaria	G5	S4				0			No	Mollusc
Blaine	Gallinago delicata	Wilson's Snipe	G5	S3N,S4B				0		Game Bird Migratory	No	Bird
Blaine	Gambelia wislizenii	Long-nosed Leopard Lizard	G5	S4				0		Protected Nongame	No	Reptile
Blaine	Gavia	Gavia sp.									No	Bird
Blaine	Gavia adamsii	Yellow-billed Loon	G4	SNA				0		Protected Nongame	No	Bird
Blaine	Gavia immer	Common Loon	G5	S1B,S2N	Sensitive	Sensitive		0		Protected Nongame	Yes	Bird
Blaine	Geothlypis tolmiei	MacGillivray's Warbler	G5	S5				0		Protected Nongame	No	Bird
Blaine	Geothlypis trichas	Common Yellowthroat	G5	S5B				0		Protected Nongame	No	Bird
Blaine	Glaucidium gnoma	Northern Pygmy-Owl	G4G5	S3				0		Protected Nongame	No	Bird
Blaine	Glaucomyx sabrinus	Northern Flying Squirrel	G5	S4				0		Protected Nongame	No	Mammal
Blaine	Grus canadensis	Sandhill Crane	G5	S3B				0		Game Bird Migratory	Yes	Bird
Blaine	Gyraulus parvus	Ash Gyro	G5	S5				0			No	Mollusc
Blaine	Haemorhous cassinii	Cassin's Finch	G5	S4				2		Protected Nongame	No	Bird
Blaine	Haemorhous mexicanus	House Finch	G5	S4				0		Protected Nongame	No	Bird
Blaine	Himantopus mexicanus	Black-necked Stilt	G5	S4B				0		Protected Nongame	Yes	Bird
Blaine	Hirundo rustica	Barn Swallow	G5	S5B				0		Protected Nongame	No	Bird
Blaine	Hydroprogne caspia	Caspian Tern	G5	S1B				0		Protected Nongame	Yes	Bird
Blaine	Hypsiglena chlorophaea	Desert Nightsnake	G5	S3				0		Protected Nongame	No	Reptile
Blaine	Icteria virens	Yellow-breasted Chat	G5	S4B				0		Protected Nongame	No	Bird
Blaine	Icterus bullockii	Bullock's Oriole	G5	S4B				0		Protected Nongame	No	Bird
Blaine	Isoperla bifurcata	Forked Stripetail	G3	S1				0			Yes	Arthropod
Blaine	Ixoreus naevius	Varied Thrush	G5	S4				0		Protected Nongame	No	Bird
Blaine	Junco hyemalis	Dark-eyed Junco	G5	S5				0		Protected Nongame	No	Bird
Blaine	Lanius excubitor	Northern Shrike	G5	S3N				0		Protected Nongame	No	Bird
Blaine	Lanius ludovicianus	Loggerhead Shrike	G4	S3				2		Protected Nongame	No	Bird
Blaine	Laridae - Tern spp.	Unclassified Tern									No	Bird
Blaine	Larus										No	Bird
Blaine	Larus argentatus	Herring Gull	G5	S2N				0		Protected Nongame	No	Bird
Blaine	Larus californicus	California Gull	G5	S3B, S2N				0		Protected Nongame	Yes	Bird
Blaine	Larus delawarensis	Ring-billed Gull	G5	S2B,S2N				0		Protected Nongame	No	Bird
Blaine	Lemmisacus curtatus	Sagebrush Vole	G5	S5				0			No	Mammal
Blaine	Lepus americanus	Snowshoe Hare	G5	S3				0		Upland Game Animal	No	Mammal
Blaine	Lepus californicus	Black-tailed Jackrabbit	G5	S4				0		Predatory	No	Mammal
Blaine	Lepus townsendii	White-tailed Jackrabbit	G5	S4				0		Predatory	No	Mammal
Blaine	Leucophaeus pipitcan	Franklin's Gull	G4G5	S3B				0		Protected Nongame	Yes	Bird
Blaine	Leucosticte										No	Bird
Blaine	Leucosticte atrata	Black Rosy-Finch	G4	S2				0		Protected Nongame	Yes	Bird
Blaine	Leucosticte tephrocotis	Gray-crowned Rosy-Finch	G5	S4				0		Protected Nongame	No	Bird
Blaine	Limenitis archippus	Viceroy	G5	S3				0			No	Arthropod
Blaine	Limnodromus scolopaceus	Long-billed Dowitcher	G5	S4M				0		Protected Nongame	No	Bird
Blaine	Limosa fedoa	Marbled Godwit	G5	S2M				0		Protected Nongame	No	Bird
Blaine	Lithobates pipiens	Northern Leopard Frog	G5	S2				2		Protected Nongame	Yes	Amphibian
Blaine	Lontra canadensis	Northern River Otter	G5	S4				0		Furbearing Animals	No	Mammal
Blaine	Lophodytes cucullatus	Hooded Merganser	G5	S2B,S2N				0		Game Bird Migratory	Yes	Bird
Blaine	Loxia curvirostra	Red Crossbill	G5	S4				0		Protected Nongame	No	Bird
Blaine	Loxia leucoptera	White-winged Crossbill	G5	S4				0		Protected Nongame	Yes	Bird
Blaine	Lymnaea stagnalis	Swamp Lymanea	G5	S4				0			No	Mollusc
Blaine	Lynx rufus	Bobcat	G5	S4				0		Furbearing Animals	No	Mammal
Blaine	Malenka tina	Tiny Forestfly	G3	S2				0			Yes	Arthropod
Blaine	Marmota flaviventris	Yellow-bellied Marmot	G5	S4				0			No	Mammal
Blaine	Martes americana	American Marten	G5	S5				0		Furbearing Animals	No	Mammal
Blaine	Megaceryle alcyon	Belted Kingfisher	G5	S4				0		Protected Nongame	No	Bird
Blaine	Megascops kennicottii	Western Screech-Owl	G5	S1				0		Protected Nongame	No	Bird
Blaine	Melanerpes erythrocephalus	Red-headed Woodpecker	G5	SNA				0		Protected Nongame	No	Bird
Blaine	Melanerpes lewis	Lewis's Woodpecker	G4	S3B				2		Protected Nongame	Yes	Bird
Blaine	Melospiza lincolni	Lincoln's Sparrow	G5	S5B				0		Protected Nongame	No	Bird

County	Scientific_Name	Common Name	GRank	SRank	USFS_R1	USFS_R4	USFS_R6	BLM	USESA	IDAPA	SGCN	Category	
Blaine	Melospiza melodia	Song Sparrow	G5	S5				0			Protected Nongame	No	Bird
Blaine	Mephitis mephitis	Striped Skunk	G5	S4				0			Predatory	No	Mammal
Blaine	Mergus merganser	Common Merganser	G5	S3				0			Game Bird Migratory	No	Bird
Blaine	Mergus serrator	Red-breasted Merganser	G5	S1M				0			Game Bird Migratory	No	Bird
Blaine	Microtus longicaudus	Long-tailed Vole	G5	S5				0			Protected Nongame	No	Mammal
Blaine	Microtus montanus	Montane Vole	G5	S4				0				No	Mammal
Blaine	Microtus richardsoni	North American Vole or Water Vole	G5	S4				0				No	Mammal
Blaine	Mimus polyglottos	Northern Mockingbird	G5	S1B				0			Protected Nongame	No	Bird
Blaine	Molothrus ater	Brown-headed Cowbird	G5	S5B				0			Protected Nongame	No	Bird
Blaine	Mus musculus	House Mouse	G5	SNA				0				No	Mammal
Blaine	Mustela erminea	Ermine or Short-tailed Weasel	G5	S4				0			Predatory	No	Mammal
Blaine	Mustela frenata	Long-tailed Weasel	G5	S5				0			Predatory	No	Mammal
Blaine	Myadestes townsendi	Townsend's Solitaire	G5	S5				0			Protected Nongame	No	Bird
Blaine	Myodes gapperi	Southern Red-backed Vole	G5	S4				0				No	Mammal
Blaine	Myotis ciliolabrum	Western Small-footed Myotis	G5	S3				2			Protected Nongame	No	Mammal
Blaine	Myotis evotis	Long-eared Myotis	G5	S3				2			Protected Nongame	No	Mammal
Blaine	Myotis lucifugus	Little Brown Myotis	G3	S3				2			Protected Nongame	No	Mammal
Blaine	Myotis volans	Long-legged Myotis	G4G5	S3				2			Protected Nongame	No	Mammal
Blaine	Neotoma cinerea	Bushy-tailed Woodrat	G5	S5				0				No	Mammal
Blaine	Nucifraga columbiana	Clark's Nutcracker	G5	S2				0			Protected Nongame	No	Bird
Blaine	Numenius americanus	Long-billed Curlew	G5	S2B				2			Protected Nongame	Yes	Bird
Blaine	Numenius phaeopus	Whimbrel	G5	SNA				0			Protected Nongame	No	Bird
Blaine	Nycticorax nycticorax	Black-crowned Night-Heron	G5	S2B,S2N				0			Protected Nongame	Yes	Bird
Blaine	Ochotona princeps	American Pika	G5	S3				0			Protected Nongame	No	Mammal
Blaine	Ondatra zibethicus	Common Muskrat	G5	S4				0			Furbearing Animals	No	Mammal
Blaine	Onychomys leucogaster	Northern Grasshopper Mouse	G5	S4				0				No	Mammal
Blaine	Oreohelix	Oreohelix sp.										No	Mollusc
Blaine	Oreortyx pictus	Mountain Quail	G5	S2	Sensitive	Sensitive		2			Upland Game Bird	Yes	Bird
Blaine	Oreoscoptes montanus	Sage Thrasher	G5	S3B				2			Protected Nongame	No	Bird
Blaine	Oreothlypis celata	Orange-crowned Warbler	G5	S4B							Protected Nongame	No	Bird
Blaine	Oreothlypis ruficapilla	Nashville Warbler	G5	S4B							Protected Nongame	No	Bird
Blaine	Oxyura jamaicensis	Ruddy Duck	G5	S2							Game Bird Migratory	No	Bird
Blaine	Pandion haliaetus	Osprey	G5	S4B				0			Protected Nongame	No	Bird
Blaine	Parameletus columbiae	A Mayfly	G2	S1								Yes	Arthropod
Blaine	Parkesia noveboracensis	Northern Waterthrush	G5	S4B							Protected Nongame	No	Bird
Blaine	Passer domesticus	House Sparrow	G5	SNA				0				No	Bird
Blaine	Passerculus sandwichensis	Savannah Sparrow	G5	S5B				0			Protected Nongame	No	Bird
Blaine	Passerella iliaca	Fox Sparrow	G5	S4B				0			Protected Nongame	No	Bird
Blaine	Passerina amoena	Lazuli Bunting	G5	S4B				0			Protected Nongame	No	Bird
Blaine	Passerina cyanea	Indigo Bunting	G5	SNA				0			Protected Nongame	No	Bird
Blaine	Patagioenas fasciata	Band-tailed Pigeon	G4	SNA							Protected Nongame	No	Bird
Blaine	Pekania pennanti	Fisher	G5	S2				2			Furbearing Animals	Yes	Mammal
Blaine	Pelecanus erythrorhynchos	American White Pelican	G4	S3B							Protected Nongame	Yes	Bird
Blaine	Perdix perdix	Gray Partridge	G5	SNA				0			Upland Game Bird	No	Bird
Blaine	Perisoreus canadensis	Gray Jay	G5	S2				0			Protected Nongame	No	Bird
Blaine	Perognathus parvus	Great Basin Pocket Mouse	G5	S5				0				No	Mammal
Blaine	Peromyscus maniculatus	North American Deermouse	G5	S5				0				No	Mammal
Blaine	Petrochelidon pyrrhonota	Cliff Swallow	G5	S5B							Protected Nongame	No	Bird
Blaine	Phacelia inconspicua	Obscure Phacelia	G2	S1		Sensitive		2				No	Plant
Blaine	Phalacrocorax auritus	Double-crested Cormorant	G5	S4B				0			Protected Nongame	No	Bird
Blaine	Phalaenoptilus nuttallii	Common Poorwill	G5	S4B				0			Protected Nongame	No	Bird
Blaine	Phalaropus lobatus	Red-necked Phalarope	G4G5	S3M				0			Protected Nongame	No	Bird
Blaine	Phalaropus tricolor	Wilson's Phalarope	G5	S4B				0			Protected Nongame	Yes	Bird
Blaine	Phasianus colchicus	Ring-necked Pheasant	G5	SNA							Upland Game Bird	No	Bird
Blaine	Phenacomys intermedius	Western Heather Vole	G5	S5				0				No	Mammal
Blaine	Pheucticus ludovicianus	Rose-breasted Grosbeak	G5	SNA				0			Protected Nongame	No	Bird
Blaine	Pheucticus melanocephalus	Black-headed Grosbeak	G5	S5B				0			Protected Nongame	No	Bird
Blaine	Phycodes mylitta	Mylitta Crescent	G5	S5								No	Arthropod
Blaine	Physa											No	Mollusc
Blaine	Physella propinqua	Rocky Mountain Physa	G5Q	S5								No	Mollusc
Blaine	Pica hudsonia	Black-billed Magpie	G5	S5				0			Protected Nongame	No	Bird
Blaine	Picoides arcticus	Black-backed Woodpecker	G5	S4	Sensitive						Protected Nongame	No	Bird
Blaine	Picoides dorsalis	American Three-Toed Woodpecker	G5	S4		Sensitive		0			Protected Nongame	Yes	Bird
Blaine	Picoides pubescens	Downy Woodpecker	G5	S4				0			Protected Nongame	No	Bird
Blaine	Picoides villosus	Hairy Woodpecker	G5	S4				0			Protected Nongame	No	Bird
Blaine	Pictetiella expansa	Autumn Springfly	G3G4	S2								Yes	Arthropod
Blaine	Pimicola enucleator	Pine Grosbeak	G5	S4				0			Protected Nongame	No	Bird
Blaine	Pipilo chlorurus	Green-tailed Towhee	G5	S4B				2			Protected Nongame	No	Bird
Blaine	Pipilo maculatus	Spotted Towhee	G5	S4				0			Protected Nongame	No	Bird
Blaine	Piranga ludoviciana	Western Tanager	G5	S5B				0			Protected Nongame	No	Bird
Blaine	Pisidium	Pisidium sp.										No	Mollusc
Blaine	Pituophis catenifer	Gophersnake	G5	S5							Protected Nongame	No	Reptile
Blaine	Planorbella binneyi	Coarse Rams-horn	G4G5Q	SNA								No	Mollusc
Blaine	Planorbella subcrenata	Rough Rams-horn	G5	S5								No	Mollusc
Blaine	Plectrophenax nivalis	Snow Bunting	G5	S4N				0			Protected Nongame	No	Bird
Blaine	Plegadis chihi	White-faced Ibis	G5	S2B							Protected Nongame	Yes	Bird
Blaine	Plestiodon skiltonianus	Western Skink	G5	S4							Protected Nongame	No	Reptile
Blaine	Pluvialis squatarola	Black-bellied Plover	G5	S1M				0			Protected Nongame	No	Bird
Blaine	Poa abbreviata ssp. marshii	Marsh's Bluegrass	G5T2	S1		Sensitive		0				No	Plant
Blaine	Podiceps auritus	Horned Grebe	G5	S2N				0			Protected Nongame	No	Bird
Blaine	Podiceps grisegena	Red-necked Grebe	G5	S2B				0			Protected Nongame	Yes	Bird
Blaine	Podiceps nigricollis	Eared Grebe	G5	S1N,S2B				0			Protected Nongame	No	Bird
Blaine	Podilymbus podiceps	Pied-billed Grebe	G5	S3				0			Protected Nongame	No	Bird
Blaine	Poocile atricapillus	Black-capped Chickadee	G5	S4				0			Protected Nongame	No	Bird
Blaine	Poocile gambeli	Mountain Chickadee	G5	S4				0			Protected Nongame	No	Bird
Blaine	Poliopitila caerulea	Blue-gray Gnatcatcher	G5	S5B				0			Protected Nongame	No	Bird
Blaine	Polygona gracilis	Hoary Comma	G5	S5								No	Arthropod
Blaine	Poocetes gramineus	Vesper Sparrow	G5	S5B				0			Protected Nongame	No	Bird
Blaine	Porzana carolina	Sora	G5	S1N,S4B							Protected Nongame	No	Bird
Blaine	Procyon lotor	Northern Raccoon	G5	S5				0			Predatory	No	Mammal
Blaine	Prunella montanella	Siberian Accentor	G5	SNA				0				No	Bird
Blaine	Pseudacris maculata	Boreal Chorus Frog	G5	S4				0			Protected Nongame	No	Amphibian
Blaine	Pseudacris sierra	Sierra Treefrog	G5	S5				0			Protected Nongame	No	Amphibian
Blaine	Psiloscops flammeolus	Flammulated Owl	G4	S3B	Sensitive	Sensitive		2			Protected Nongame	Yes	Bird
Blaine	Puma concolor	Mountain Lion, Cougar, or Puma	G5	S5							Big Game	No	Mammal
Blaine	Pyrocoma insecticurius	Bugle Goldenweed	G3	S3		Sensitive		3				No	Plant
Blaine	Quiscalus mexicanus	Great-tailed Grackle	G5	S1B				0			Protected Nongame	No	Bird
Blaine	Quiscalus quiscula	Common Grackle	G5	S1B				0			Protected Nongame	No	Bird
Blaine	Rallus limicola	Virginia Rail	G5	S2N,S3B				0			Protected Nongame	No	Bird
Blaine	Rana luteiventris	Columbia Spotted Frog	G4	S4		Sensitive					Protected Nongame	No	Amphibian
Blaine	Ranunculus gelidus	Arctic Buttercup	G5	S1				0				No	Plant
Blaine	Recurvirostra americana	American Avocet	G5	S3B,S3M				0			Protected Nongame	Yes	Bird
Blaine	Regulus calendula	Ruby-crowned Kinglet	G5	S4				0			Protected Nongame	No	Bird
Blaine	Regulus satrapa	Golden-crowned Kinglet	G5	S5				0			Protected Nongame	No	Bird
Blaine	Reithrodontomys megalotis	Western Harvest Mouse	G5	S4				0				No	Mammal
Blaine	Riparia riparia	Bank Swallow	G5	S4B							Protected Nongame	No	Bird
Blaine	Salix pseudomonticola	False Mountain Willow	G4G5	S1				3				No	Plant
Blaine	Salpinctes obsoletus	Rock Wren	G5	S5B				0			Protected Nongame	No	Bird
Blaine	Saxifraga adscendens var. oregonensis	Wedge-leaf Saxifrage	G5T4T5	S2			Sensitive					No	Plant
Blaine	Saxifraga cernua	Nodding Saxifrage	G5	S2				0				No	Plant

County	Scientific_Name	Common Name	GRank	SRank	USFS_R1	USFS_R4	USFS_R6	BLM	USESA	IDAPA	SGCN	Category
Blaine	Sayornis saya	Say's Phoebe	G5	S5B				0		Protected Nongame	No	Bird
Blaine	Sceloporus graciosus	Common Sagebrush Lizard	G5	S5						Protected Nongame	No	Reptile
Blaine	Scopelidae - Sandpiper spp.	Unclassified Sandpiper									No	Bird
Blaine	Selasphorus calliope	Calliope Hummingbird	G5	S4B						Protected Nongame	No	Bird
Blaine	Selasphorus platycercus	Broad-tailed Hummingbird	G5	S5B				0		Protected Nongame	No	Bird
Blaine	Selasphorus rufus	Rufous Hummingbird	G5	S4B						Protected Nongame	No	Bird
Blaine	Setophaga coronata	Yellow-rumped Warbler	G5	S5						Protected Nongame	No	Bird
Blaine	Setophaga magnolia	Magnolia Warbler	G5	SNA						Protected Nongame	No	Bird
Blaine	Setophaga nigrescens	Black-throated Gray Warbler	G5	S4B						Protected Nongame	No	Bird
Blaine	Setophaga pensylvanica	Chestnut-sided Warbler	G5	SNA						Protected Nongame	No	Bird
Blaine	Setophaga petechia	Yellow Warbler	G5	S5B						Protected Nongame	No	Bird
Blaine	Setophaga ruticilla	American Redstart	G5	S2B				0		Protected Nongame	No	Bird
Blaine	Setophaga townsendi	Townsend's Warbler	G5	S5B						Protected Nongame	No	Bird
Blaine	Setvena bradleyi	Alberta Springfly	G4	S3							No	Arthropod
Blaine	Sialia currucoides	Mountain Bluebird	G5	S5B				0		Protected Nongame	No	Bird
Blaine	Silene uralensis ssp. montana	Petalless Campion	G4G5TNR	S1				0			No	Plant
Blaine	Sitta canadensis	Red-breasted Nuthatch	G5	S4				0		Protected Nongame	No	Bird
Blaine	Sitta carolinensis	White-breasted Nuthatch	G5	S4				0		Protected Nongame	No	Bird
Blaine	Sorex	Long-tailed Shrews									No	Mammal
Blaine	Sorex cinereus	Cinereus or Masked Shrew	G5	S5							No	Mammal
Blaine	Sorex monticolus	Dusky or Montane Shrew	G5	S5							No	Mammal
Blaine	Sorex palustris	American Water Shrew	G5	S4				0			No	Mammal
Blaine	Sorex vagrans	Vagrant Shrew	G5	S5				0			No	Mammal
Blaine	Spea intermontana	Great Basin Spadefoot	G5	S4						Protected Nongame	No	Amphibian
Blaine	Sphyrapicus nuchalis	Red-naped Sapsucker	G5	S4B						Protected Nongame	No	Bird
Blaine	Sphyrapicus thyroideus	Williamson's Sapsucker	G5	S4B						Protected Nongame	No	Bird
Blaine	Spilogale gracilis	Western Spotted Skunk	G5	S4						Predatory	No	Mammal
Blaine	Spinus pinus	Pine Siskin	G5	S4						Protected Nongame	No	Bird
Blaine	Spinus psaltria	Lesser Goldfinch	G5	S5						Protected Nongame	Yes	Bird
Blaine	Spinus tristis	American Goldfinch	G5	S5						Protected Nongame	No	Bird
Blaine	Spizella arborea	American Tree Sparrow	G5	S3N				0		Protected Nongame	No	Bird
Blaine	Spizella breweri	Brewer's Sparrow	G5	S4B				2		Protected Nongame	Yes	Bird
Blaine	Spizella passerina	Chipping Sparrow	G5	S5B				0		Protected Nongame	No	Bird
Blaine	Stelgidopteryx serripennis	Northern Rough-winged Swallow	G5	S4B						Protected Nongame	No	Bird
Blaine	Sterna forsteri	Forster's Tern	G5	S2B				0		Protected Nongame	Yes	Bird
Blaine	Sterna hirundo	Common Tern	G5	SNA				0		Protected Nongame	No	Bird
Blaine	Streptopelia decaecto	Eurasian Collared-Dove	G5	SNA				0			No	Bird
Blaine	Sturnella neglecta	Western Meadowlark	G5	S5				0		Protected Nongame	No	Bird
Blaine	Sturnus vulgaris	European Starling	G5	SNA				0		Predatory	No	Bird
Blaine	Surmia ulula	Northern Hawk-Owl	G5	SNA						Protected Nongame	No	Bird
Blaine	Sylvilagus nuttalli	Mountain Cottontail	G5	S4				0		Upland Game Animal	No	Mammal
Blaine	Tachycineta bicolor	Tree Swallow	G5	S5B				0		Protected Nongame	No	Bird
Blaine	Tachycineta thalassina	Violet-green Swallow	G5	S5B				0		Protected Nongame	No	Bird
Blaine	Tamias amoenus	Yellow-pine Chipmunk	G5	S5						Protected Nongame	No	Mammal
Blaine	Tamias minimus	Least Chipmunk	G5	S5						Protected Nongame	No	Mammal
Blaine	Tamiasciurus hudsonicus	Red Squirrel	G5	S5				0		Protected Nongame	No	Mammal
Blaine	Taxidea taxus	American Badger	G5	S4						Furbearing Animals	No	Mammal
Blaine	Thamnophis elegans	Terrestrial Gartersnake	G5	S5						Protected Nongame	No	Reptile
Blaine	Thamnophis sirtalis	Common Gartersnake	G5	S3						Protected Nongame	No	Reptile
Blaine	Thomomys talpoides	Northern Pocket Gopher	G5	S5				0			No	Mammal
Blaine	Tringa	Redshanks									No	Bird
Blaine	Tringa flavipes	Lesser Yellowlegs	G5	S2M				0		Protected Nongame	No	Bird
Blaine	Tringa melanoleuca	Greater Yellowlegs	G5	S3M						Protected Nongame	No	Bird
Blaine	Tringa semipalmata	Willet	G5	S3B						Protected Nongame	No	Bird
Blaine	Tringa solitaria	Solitary Sandpiper	G5	S1M				0		Protected Nongame	No	Bird
Blaine	Troglodytes aedon	House Wren	G5	S4B				0		Protected Nongame	No	Bird
Blaine	Troglodytes pacificus	Pacific Wren	G5	S5						Protected Nongame	No	Bird
Blaine	Turdus migratorius	American Robin	G5	S5						Protected Nongame	No	Bird
Blaine	Tyrannidae - Flycatcher spp.	Unclassified Flycatcher									No	Bird
Blaine	Tyrannus savana	Fork-tailed Flycatcher	G5	SNA				0			No	Bird
Blaine	Tyrannus tyrannus	Eastern Kingbird	G5	S5B				0		Protected Nongame	No	Bird
Blaine	Tyrannus verticalis	Western Kingbird	G5	S5B				0		Protected Nongame	No	Bird
Blaine	Urocyon v. columbianus	Columbian Ground Squirrel	G5	S5							No	Mammal
Blaine	Urocyon v. mollis	Pute Ground Squirrel	G5	S4				2		Protected Nongame	Yes	Mammal
Blaine	Ursus americanus	American Black Bear	G5	S4						Big Game	No	Mammal
Blaine	Valvata humeralis	Glossy Valvata	G5Q	S3							No	Mollusc
Blaine	Valvata utahensis	Desert Valvata	G2	S2							Yes	Mollusc
Blaine	Vireo cassinii	Cassin's Vireo	G5	S5B				0		Protected Nongame	No	Bird
Blaine	Vireo gilvus	Warbling Vireo	G5	S5B						Protected Nongame	No	Bird
Blaine	Vireo olivaceus	Red-eyed Vireo	G5	S4B				0		Protected Nongame	No	Bird
Blaine	Vireo plumbeus	Plumbeous Vireo	G5	S2B				0		Protected Nongame	No	Bird
Blaine	Vireo solitarius	Blue-headed Vireo	G5	SNA						Protected Nongame	No	Bird
Blaine	Vison vison	American Mink	G5	S3						Furbearing Animals	No	Mammal
Blaine	Vulpes macrotis	Kit Fox	G4	S2				2		Protected Nongame	Yes	Mammal
Blaine	Vulpes vulpes	Red Fox	G5	S4				0		Furbearing Animals	No	Mammal
Blaine	Xanthocephalus xanthocephalus	Yellow-headed Blackbird	G5	S4B				0		Protected Nongame	No	Bird
Blaine	Xema sabini	Sabine's Gull	G5	SNA				0		Protected Nongame	No	Bird
Blaine	Zapus princeps	Western Jumping Mouse	G5	S4				0			No	Mammal
Blaine	Zenaidura macroura	Mourning Dove	G5	S5				0		Game Bird Migratory	No	Bird
Blaine	Zonotrichia albicollis	White-throated Sparrow	G5	S1N				0		Protected Nongame	No	Bird
Blaine	Zonotrichia atricapilla	Golden-crowned Sparrow	G5	SNA				0		Protected Nongame	No	Bird
Blaine	Zonotrichia leucophrys	White-crowned Sparrow	G5	S5				0		Protected Nongame	No	Bird
Blaine	Zonotrichia querula	Harris's Sparrow	G5	SNA						Protected Nongame	No	Bird

IPaC

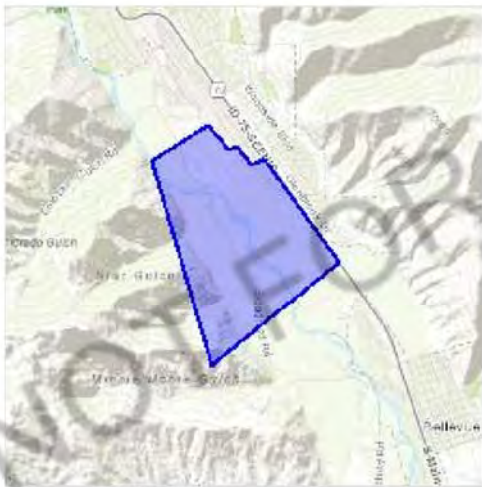
IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as **trust resources**) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

Location

Blaine County, Idaho



Local office

Idaho Fish And Wildlife Office

- ☐ (208) 378-5243
- ☐ (208) 378-5262

1387 South Vinnell Way, Suite 368
Boise, ID 83709-1657

Endangered species

This resource list is for informational purposes only and does not constitute an analysis of project level impacts.

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population, even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

1. Draw the project location and click CONTINUE.
2. Click DEFINE PROJECT.
3. Log in (if directed to do so).
4. Provide a name and description for your project.
5. Click REQUEST SPECIES LIST.

Listed species¹ and their critical habitats are managed by the [Ecological Services Program](#) of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries²).

Species and critical habitats under the sole responsibility of NOAA Fisheries are **not** shown on this list. Please contact [NOAA Fisheries](#) for [species under their jurisdiction](#).

1. Species listed under the [Endangered Species Act](#) are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the [listing status page](#) for more information.
2. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

The following species are potentially affected by activities in this location:

Mammals

NAME

STATUS

North American Wolverine *Gulo gulo luscus*

Proposed Threatened

No critical habitat has been designated for this species.

<https://ecos.fws.gov/ecp/species/5123>

Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

THERE ARE NO CRITICAL HABITATS AT THIS LOCATION.

Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act¹ and the Bald and Golden Eagle Protection Act².

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described [below](#).

1. The [Migratory Birds Treaty Act](#) of 1918.
2. The [Bald and Golden Eagle Protection Act](#) of 1940.

Additional information can be found using the following links:

- Birds of Conservation Concern <http://www.fws.gov/birds/management/managed-species/birds-of-conservation-concern.php>
- Measures for avoiding and minimizing impacts to birds <http://www.fws.gov/birds/management/project-assessment-tools-and-guidance/conservation-measures.php>
- Nationwide conservation measures for birds <http://www.fws.gov/migratorybirds/pdf/management/nationwidestandardconservationmeasures.pdf>

The birds listed below are birds of particular concern either because they occur on the [USFWS Birds of Conservation Concern](#) (BCC) list or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ [below](#). This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the [E-bird data mapping tool](#) (Tip: enter your location, desired date range and a species on your list). For projects that occur on the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found [below](#).

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

NAME

BREEDING SEASON (IF A BREEDING SEASON IS INDICATED FOR A BIRD ON YOUR LIST, THE BIRD MAY BREED IN YOUR PROJECT AREA SOMETIME WITHIN THE TIMEFRAME SPECIFIED, WHICH IS A VERY LIBERAL ESTIMATE OF THE DATES INSIDE WHICH THE BIRD BREEDS ACROSS ITS ENTIRE RANGE. "BREEDS ELSEWHERE" INDICATES THAT THE BIRD DOES NOT LIKELY BREED IN YOUR PROJECT AREA.)

Bald Eagle *Haliaeetus leucocephalus*

Breeds Jan 1 to Aug 31

This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in o"shore areas from certain types of development or activities.

<https://ecos.fws.gov/ecp/species/1626>

Black Rosy-finch *Leucosticte atrata*

Breeds Jun 15 to Aug 31

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

<https://ecos.fws.gov/ecp/species/9460>

Cassin's Finch *Carpodacus cassinii*

Breeds May 15 to Jul 15

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

<https://ecos.fws.gov/ecp/species/9462>

Golden Eagle *Aquila chrysaetos*

Breeds Jan 1 to Aug 31

This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in o"shore areas from certain types of development or activities.

<https://ecos.fws.gov/ecp/species/1680>

Olive-sided Flycatcher *Contopus cooperi*

<https://ecos.fws.gov/ecp/species/3914>

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Breeds May 20 to Aug 31

Rufous Hummingbird *selasphorus rufus*

Breeds Apr 15 to Jul 15

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

<https://ecos.fws.gov/ecp/species/8002>

Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read and understand the FAQ "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (▢)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is $0.25/0.25 = 1$; at week 20 it is $0.05/0.25 = 0.2$.
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

Breeding Season (🟡)

Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort (|)

Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

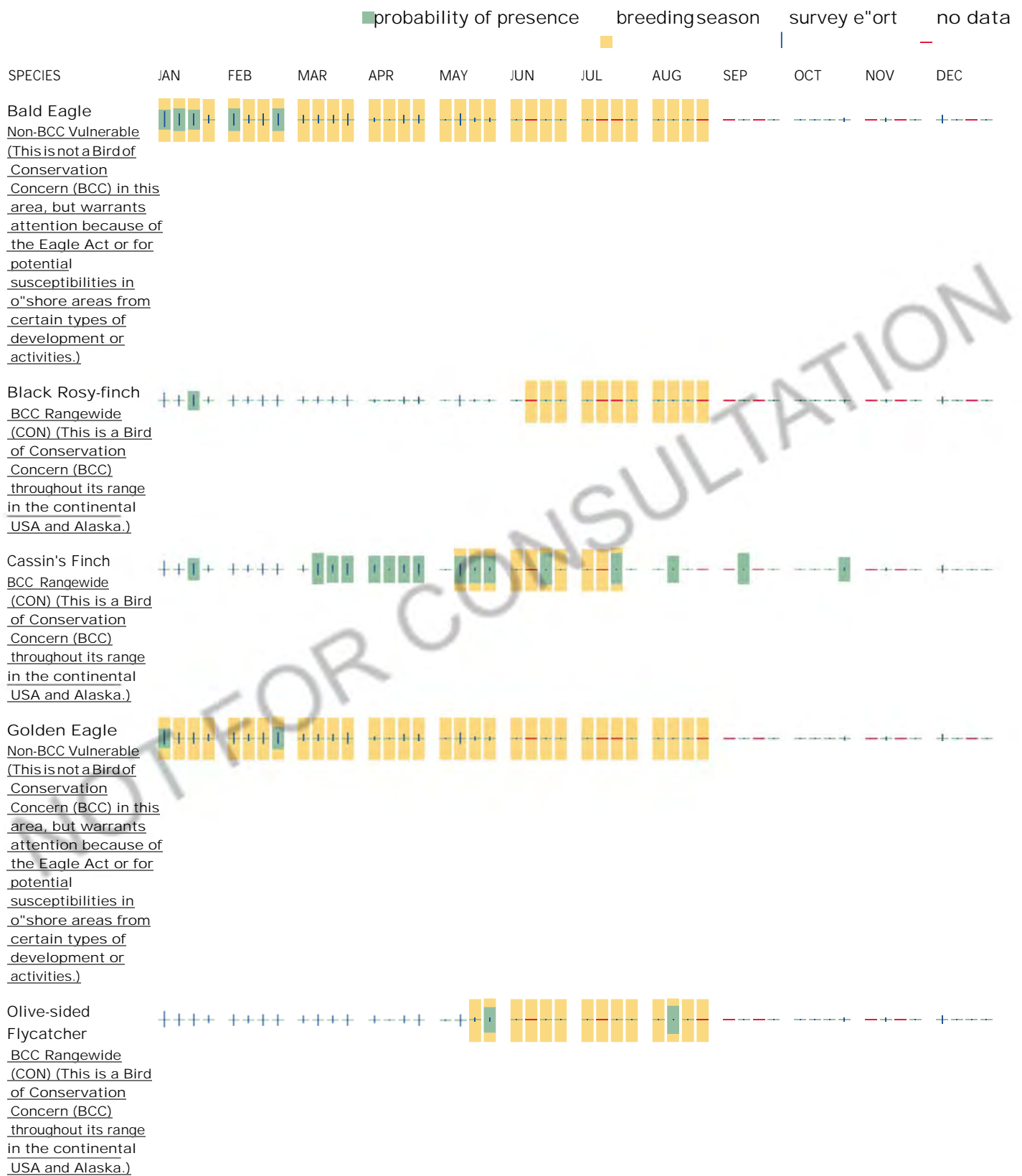
To see a bar's survey effort range, simply hover your mouse cursor over the bar.

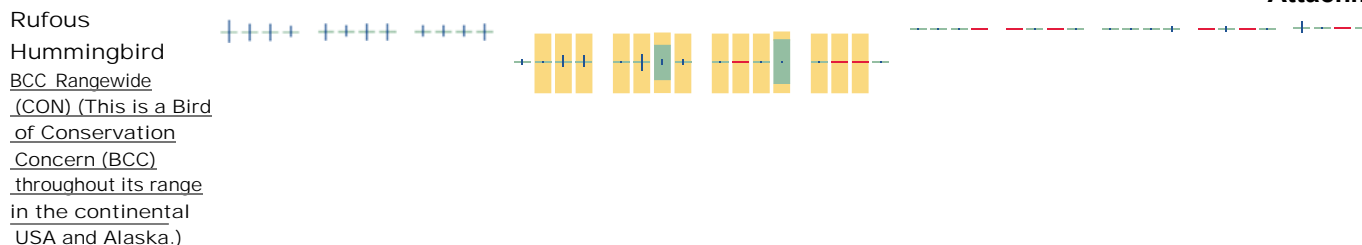
No Data (→)

A week is marked as having no data if there were no survey events for that week.

Survey Timeframe

Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas o" the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.





Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.

[Nationwide Conservation Measures](#) describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. [Additional measures](#) and/or [permits](#) may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the migratory birds potentially occurring in my specified location?

The Migratory Bird Resource List is comprised of USFWS [Birds of Conservation Concern \(BCC\)](#) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the [Avian Knowledge Network \(AKN\)](#). The AKN data is based on a growing collection of [survey, banding, and citizen science datasets](#) and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle ([Eagle Act](#) requirements may apply), or a species that has a particular vulnerability to "shore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the [AKN Phenology Tool](#).

What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the [Avian Knowledge Network \(AKN\)](#). This data is derived from a growing collection of [survey, banding, and citizen science datasets](#).

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

How do I know if a bird is breeding, wintering, migrating or present year-round in my project area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may refer to the following resources: [The Cornell Lab of Ornithology All About Birds Bird Guide](#), or (if you are unsuccessful in locating the bird of interest there), the [Cornell Lab of Ornithology Neotropical Birds guide](#). If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

What are the levels of concern for migratory birds?

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are [Birds of Conservation Concern](#) (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the [Eagle Act](#) requirements (for eagles) or (for non-eagles) potential susceptibilities in "shore areas from certain types of development or activities (e.g. "shore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the [Northeast Ocean Data Portal](#). The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the [NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf](#) project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the [Diving Bird Study](#) and the [nanotag studies](#) or contact [Caleb Spiegel](#) or [Pam Loring](#).

What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to [obtain a permit](#) to avoid violating the Eagle Act should such impacts occur.

Proper Interpretation and Use of Your Migratory Bird Report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no data" indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

Facilities

National Wildlife Refuge lands

Any activity proposed on lands managed by the [National Wildlife Refuge](#) system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS AT THIS LOCATION.

Fish hatcheries

THERE ARE NO FISH HATCHERIES AT THIS LOCATION.

Wetlands in the National Wetlands Inventory

Impacts to [NWI wetlands](#) and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local [U.S. Army Corps of Engineers District](#).

Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

This location overlaps the following wetlands:

FRESHWATER EMERGENT WETLAND

[PEM1A](#)

[PEM1C](#)

[PEM1Cx](#)

FRESHWATER FORESTED/SHRUB WETLAND

[PSSC](#)

[PFOA](#)

[PSSA](#)

[PFOAx](#)

FRESHWATER POND

[PUBFh](#)

[PUBF](#)

RIVERINE

[R3UBH](#)

[R3USC](#)

[R4SBCx](#)

[R4SBC](#)[R5UBH](#)[R5UBFx](#)

A full description for each wetland code can be found at the [National Wetlands Inventory website](#)

Data limitations

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

Data exclusions

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tubercid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

Data precautions

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.



Figure 1, 10-.4-Acre Parcel Looking North



Figure 2, Big Wood River Looking North



Figure 3, Wheel Line at NWI Wetland Location



Figure 4, Irrigated Swale Looking North



Figure 5, Irrigated Swale Looking North