Appendix B7 Biological and Aquatic Resources



Memorandum



50 West Liberty Street, Suite 205 Reno, Nevada 89501 United States T +1.775.360.7215 www.jacobs.com

1

Subject Biological and Aquatic Resource Assessment, Arlington Avenue Bridges Project, Washoe

County, Nevada

Attention Judy Tortelli / Regional Transportation Commission (RTC)

From Jessica Baldridge / Jacobs Engineering Group Inc. (Jacobs)

Date February 16, 2021

Copies to Brian Boyd / Jacobs

Kaci Stansbury / Jacobs

1. Introduction

This Technical Memorandum (TM) documents the biological and water resources review conducted for the Arlington Avenue Bridges Project (Project) in Reno, Nevada. This TM identifies state and federally protected biological and water resources with potential to occur within the proposed Project area, describes aquatic resources (waters and potential wetlands) within the Project area, and suggests best management practices (BMPs) for avoiding impacts to biological resources.

The following attachments are provided:

- Attachment 1 Figures
- Attachment 2 Special-status Species and Biological Resources Summary Tables
- Attachment 3 Site Photographs
- Attachment 4 Information for Planning and Consultation Search Results (U.S. Fish and Wildlife Service [USFWS])

2. Project Description

The Arlington Avenue Bridges Project is located on the U.S. Geological Survey (USGS) 7.5-minute Reno quadrangle in Section 11, Township 19 North, Range 19 East, (latitude 39°31'26.69"N; longitude - 122.348000 119°48'59.14"W) (USGS, 1967). The Project is located within the City of Reno, Washoe County, Nevada. The Project scope includes rehabilitation and/or replacement of the two Arlington Avenue Bridges which cross the Truckee River. The Project area is located on Arlington Avenue between Island Avenue and West First Street (Attachment 1, Figure 1).

3. Landscape Setting and Existing Conditions

The Project area is situated within the urbanized landscape of Downtown Reno, Nevada. Topography in the Project area is predominantly hilly, sloping south toward the Truckee River. The average annual total precipitation in the Project vicinity is 7.7 inches. The average winter low temperature is 28 degrees Fahrenheit, and the average high summer temperature is 87 degrees Fahrenheit (WRCC, 2019).

The Project area is located within the Truckee watershed (Hydrologic Unit Code 16050102). The main aquatic resource in the region is the Truckee River, which runs through the Project area. The National



Hydrography Dataset (NHD) identifies the Truckee River within the Project area (USGS, 2019, Attachment 1, Figure 3). The National Wetlands Inventory (NWI) identifies one riverine feature, the Truckee River, within the Project area (USFWS, 2019a, Attachment 1, Figure 3). The land immediately surrounding the Project area consists of residential and commercial development, and transportation corridors.

4. Methods

A desktop review of publicly available data pertaining to special-status species (i.e., state or federally listed endangered, threatened, or candidate species) and aquatic resources within the Project area was conducted in support of environmental permitting. To assess existing biological conditions and potential project permit requirements, the following was conducted:

- A review of publicly available data sets for identifying designated critical habitat and the potential
 presence of special-status species and species protected under the Migratory Bird Treaty Act
 (MBTA). Datasets reviewed included the Nevada Natural Heritage Programs records of occurrence
 (NNHP, 2019) (Attachment 1, Figure 2; Attachment 2) and the USFWS critical habitat mapper and
 species data (USFWS, 2019b).
- A review of USGS topographic maps (USGS, 1967), National Hydrography Dataset (USGS, 2019), and National Wetlands Inventory (USFWS, 2019a) maps in the vicinity for assessing presence of mapped aquatic resources (Attachment 1, Figure 3).

A Jacobs biologist conducted a field evaluation of the Project area on July 14, 2019 to assess the presence of protected biological resources, including suitable habitat for special-status species and aquatic resources. The Project area (Attachment 1, Figure 1) encompasses all areas of proposed disturbance including temporary work areas and extends approximately 50 feet east and west from the roadway centerline. Utilizing a combination of aerial imagery and observations made from publicly accessible locations, a 250-foot Project area buffer was evaluated for suitable habitat and biological resources. Potential bird nest sites were evaluated to the extent possible based on accessibility.

Methods for identifying water resources, including potential wetlands, utilized the U.S. Corps of Engineers (USACE) Wetlands Delineation Manual (USACE, 1987) and the Arid West Regional Supplement to the USACE Wetland Delineation Manual (USACE, 2008a). Methods for identifying non-tidal stream or river boundaries utilized Ordinary High Water Mark (OHWM) Regulatory Guidance Letter No. 05-05 (USACE, 2005), as well as A Field Guide to the Identification of the OHWM in the Arid West Region of the Western United States (USACE, 2008b).

5. Results

The desktop review identified 11 special-status species (i.e., state or federally listed endangered, threatened, or candidate species) with some potential to occur within or adjacent to the Project area. Species with potential to occur onsite are listed in Attachment 2. A summary table of observed plant and wildlife species are provided in Attachment 2. Site photographs are included in Attachment 3.

Although no special status species or nesting birds were observed during the field visit, suitable habitats for the following special-status species were observed within and adjacent to the Project area:

- Suitable nesting habitat for birds subject to the MBTA (federally protected) is present within and
 adjacent to the Project area. No nesting bird activity was observed during the survey. Nesting birds
 identified near the Project area are expected to be acclimated to disturbance from pedestrian activity,
 as well as adjacent commercial and residential activities.
- The Truckee River was originally home to Lahontan cutthroat trout (*Oncorhynchus clarkii henshawi*) and Cui-ui sucker (*Chasmistes cujus*), which are federally listed species. Potential project impacts to the two species would be addressed within a Biological Assessment submitted to USFWS.



The field survey identified a single perennial waterway, the Truckee River, within the Project area, confirming NWI and NHD datasets (Attachment 1, Figure 3). The Truckee River flows west to east through the Project area. The river is approximately 193 feet wide as it enters the Project area from the west, breaking into two channels on either side of Wingfield Park before converging into one channel approximately 230 feet wide at the east end of the Project. Within the Project area the Truckee River is highly modified with most of its banks fully stabilized with rip rap and/or cement fill (photographs 2 and 5, Attachment 3). No potential wetlands were identified within the Project area.

6. Conclusion and Recommendations

6.1 Water Resources

The Truckee River is a USACE-regulated aquatic resource as it is considered a Traditional Navigable Water (TNW) and thus is subject to regulation under Clean Water Act (CWA) Section 404; therefore, the proposed Project will require a CWA - Section 404 Permit with Section 401 Water Quality Certification. As part of the CWA permit process, the Project will need to analyze potential impacts upon biological and cultural resources (Wetland Delineation, Biological Assessment, and Cultural Resources Report) to support the USACE Endangered Species Act and the National Historic Preservation Act consultation.

6.2 Special-status Bird Species (MBTA)

Potentially suitable nesting habitat is present for birds protected under the MBTA. To ensure that impacts to special-status species are minimized, avoidance measures include the following:

If construction will occur during the nesting season, a qualified biologist will conduct a preconstruction
nesting bird survey within 14 days of any ground disturbance or construction activity. Any clearing and
grubbing must be completed within 1 week of the initial survey or a follow-up survey must be
conducted.

The following additional BMPs are recommended:

- Preconstruction nesting bird surveys should be conducted by a qualified biologist within 14 days of construction, covering a radius of 25 feet, or appropriate distance from construction activity.
- Before nesting season, suitable MBTA nesting habitat features should be removed from the Project area/construction footprint. Management activity should include vegetation removal before nesting season to minimize nesting habitat.
- If federally listed avian species are located in the Project area, appropriate avoidance buffers should be established from suitable habitat. If construction activities must occur in avoidance buffers, a qualified biologist should monitor the birds for signs of distress and make recommendations for additional measures intended to reduce the potential direct and indirect effects on the nesting species. Coordination with USFWS may be required.

The following BMPs are recommended to avoid or minimize effects to the nesting birds identified in Section 5 with potential to occur onsite. Table 1 summarizes survey requirements, avoidance buffers, and work windows for each species.



Table 1. Survey Requirements, Avoidance Buffers, and Work Windows for Species Biological Resources and Habitat Assessment, Arlington Bridge Project, Washoe County, Nevada

Biological Resource	Avoidance Buffer	Preconstruction Survey Information	Published Avoidance and Minimization Measures
Special-status Bird Species (MBTA)	Minimum 25 feet	Conduct nest survey 14 days before construction during nesting season.	Yes.
Special-status Fish Species	Not applicable	Not applicable.	Conduct all in-water work during the July 1 to September 30 work window.
(Lahontan cutthroat trout)			Incorporate pertinent BMPs to reduce transfer of sediment into flowing water and minimize potential effects on fish.

6.3 Special-status Fish Species (Lahontan cutthroat trout)

The Project area provides potentially suitable and accessible habitat for special-status fish. All work below the ordinary high-water mark should be conducted during the specified work window to avoid the transport of sediment-laden water downstream into waters where listed fish may occur. Furthermore, all in-stream construction activities (including work area isolation measures) will be completed within a single work season. To avoid and minimize potential effects on downstream fish during in-water work activities, the following measures should be implemented:

- Restrict in-water work to the proposed work window of July 1 to September 30 (USFWS, 2003) when water flows in the Truckee River are likely to be the lowest.
- Implement appropriate pollution and erosion control measures.
- Isolate the work area as necessary to protect listed fish.
- Minimize in-water noise and vibratory impacts to the extent feasible.

7. References

7.1 The following references were consulted in writing this technical memorandum.

Nevada Natural Heritage Program (NNHP). 2019. Records within 5 miles of the Oddie Boulevard and Wells Avenue Project. March 4.

U.S. Army Corp of Engineers (USACE). 1987. Environmental Laboratory - Wetland Delineation Manual.

USACE. 2005. Ordinary High Water Mark Regulatory Guidance Letter No. 05-05.

USACE. 2008a. Arid West Regional Supplement to the USACE Wetland Delineation Manual.

USACE. 2008b. A Field Guide to Identifying the Ordinary High Water Mark in the Arid West Region.

United States Fish and Wildlife Service (USFWS). 2003. Short-term action plan for Lahontan cutthroat trout (*Oncorhynchus clarki henshawi*) in the Truckee River basin. Reno, Nevada. August.

USFWS. 2019a. National Wetlands Inventory Data, October 10, 2014. Accessed January 2018. https://www.fws.gov/wetlands/data/data-download.html.

USFWS. 2019b. Information for Planning and Consultation. Accessed March 2018. http://ecos.fws.gov/ipac/.



U.S. Geological Survey (USGS). 1967. 7.5-minute quadrangle topographic map; Reno, Nevada (photo revised 1982).

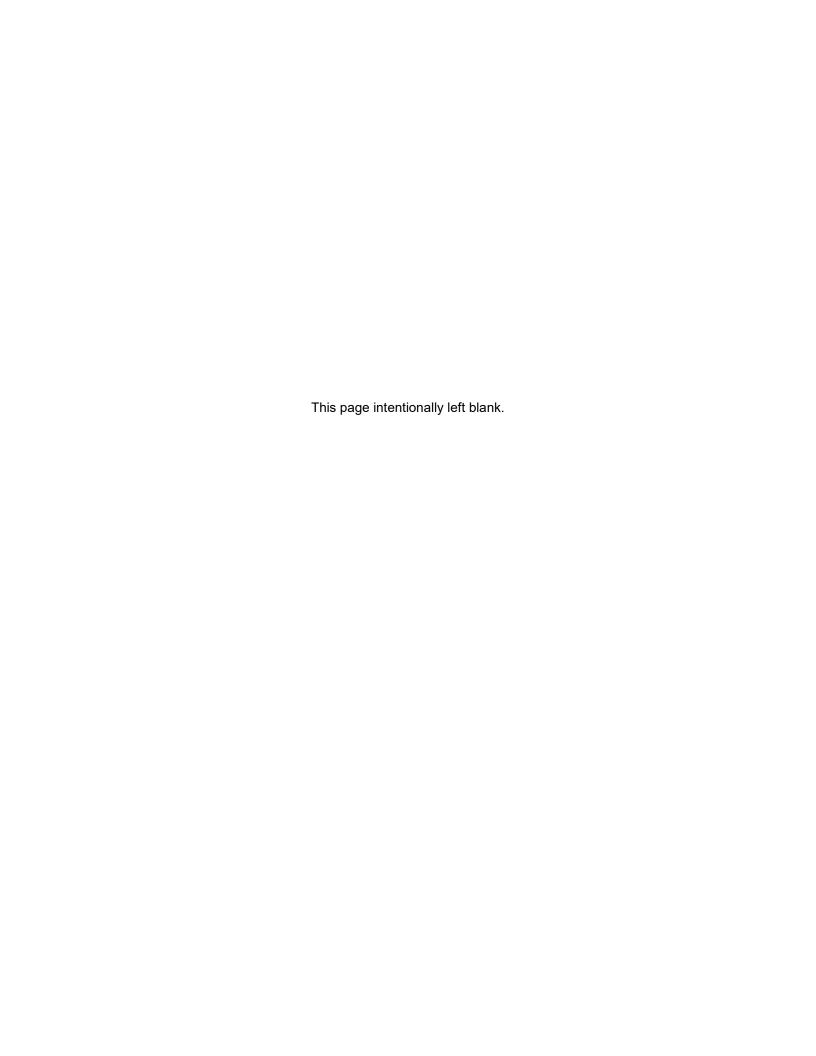
USGS. 2019. High Resolution National Hydrography Dataset (NHD) Home Page. GIS data. Accessed January 2019. http://nhd.usgs.gov/.

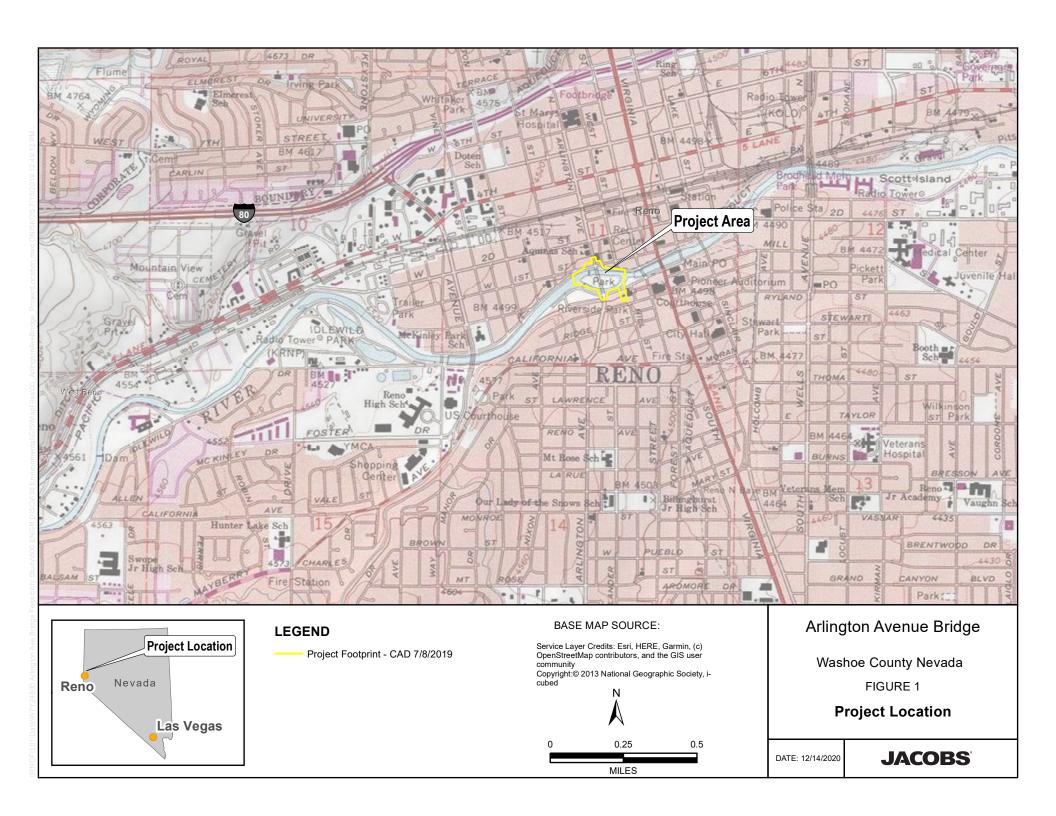
Western Regional Climate Center (WRCC). 2019. Climatological Summary Reno, Nevada (266791). Accessed July 10, 2019. https://wrcc.dri.edu/cgi-bin/cliMAIN.pl?nv6791.

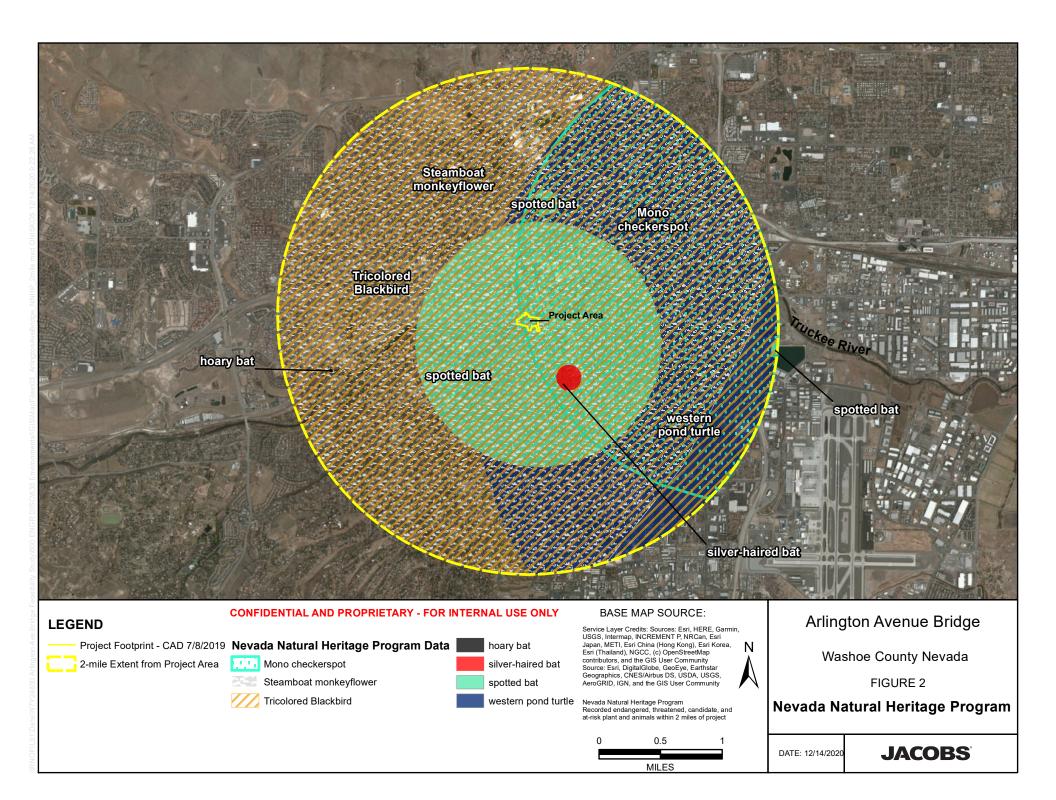


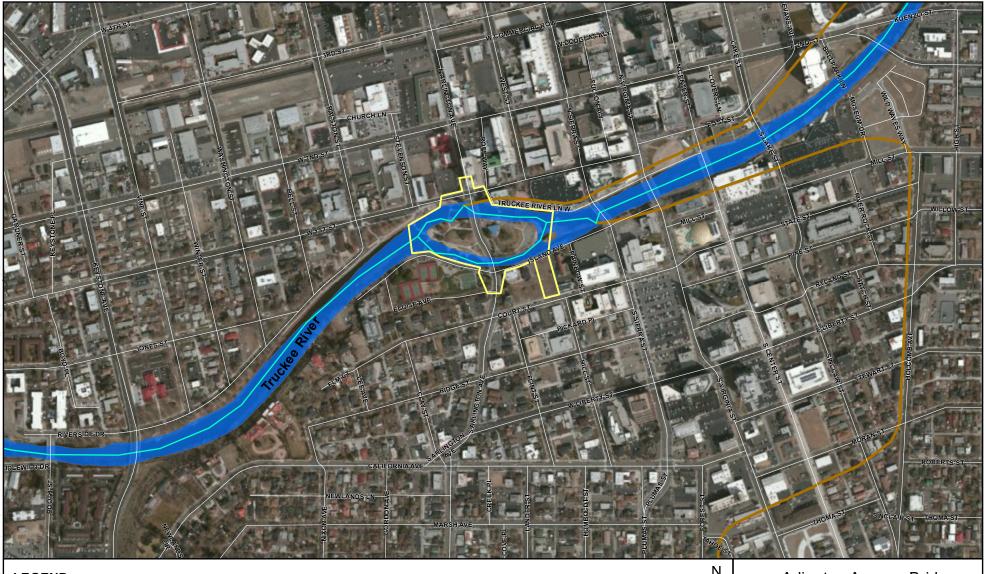
This page intentionally left blank.

Attachment 1 Figures









LEGEND

Project Footprint - CAD 7/8/2019

National Wetland Inventory (NWI)



Riverine

National Hydrography Dataset (NHD)

Stream/River

Pipeline

BASE MAP SOURCE:

Service Layer Credits: Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community

Source: Esri, DigitalGlobe, GeoEye, Earthstar

0.125 0.25

MILES

Arlington Avenue Bridge

Washoe County Nevada

FIGURE 3

NHD/NWI

DATE: 12/14/2020

JACOBS



LEGEND



Ordinary High Water Mark (OHWM) point

Project Footprint - CAD 7/8/2019

BASE MAP SOURCE:

Service Layer Credits: Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Arlington Avenue Bridge

Washoe County Nevada

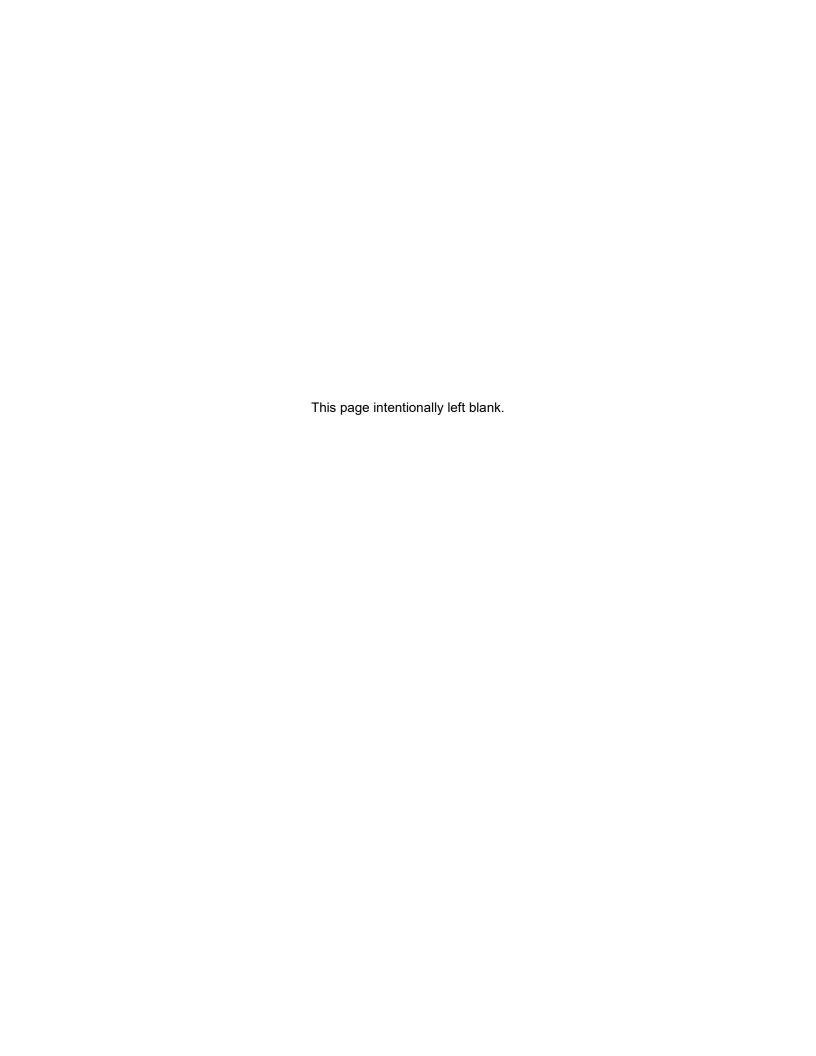
FIGURE 4

Field Collection

75 150 FEET

DATE: 12/14/2020 **JACOBS**°

Attachment 2 Special-status Species Table and Biological Resources Summary Tables





Attachment 2a. Species Identified from Nevada Natural Diversity Database and U.S. Fish and Wildlife Service Biological Resources and Habitat Assessment, Arlington Bridge Project, Washoe County, Nevada

	Status			Habitat Requirements	Potential for Occurrence	
Scientific Name	Common Name	Federal- USFWS	State- NNHP	BLM		
Plants (3)						
Mimulus ovatus	Steamboat monkey-flower	1	AR	-	Dry to somewhat moist, often barren, loose, sandy to gravelly slopes by hot springs in the sagebrush zone, or from highly acidic hydrothermally altered sparse yellow pine woodlands within the pinyon-juniper zone, or possibly on sandy alkaline valley floor deposits in the sagebrush zone, sometimes on adjacent roadsides or washes.	None: Suitable habitat is not present within the Project area. Occurrences of species have been reported within 2 miles of the Project area (NNHP, 2019).
Ivesia webberi	Webber's ivesia**	Т	-	-	Requires shallow shrink-swell clay soil with a gravel surface layer over volcanic, generally andesitic bedrock, on mid-elevation benches and flats.	None: Suitable habitat is not present within the Project area. No occurrences of species have been reported within a 2-mile radius of the Project area (NNHP, 2019).
Invertebrates (1)						
Euphydryas editha monoensis	Mono checkerspot	Е	AR	-	Wet meadows and pine forests along the east slope of the Sierra Nevada and extreme western edge of the Great Basin (Pine Nut and Sweetwater mountains) from near Walker, Mono County, CA north to near Reno, Washoe County, NV.	Unlikely to occur: Suitable habitat is rare within the Project area. Occurrences of species have been reported within 2 miles of the Project area (NNHP, 2019).
Amphibians/Rept	tiles (1)					
Actinemys marmorata	Western pond turtle	-	WL		A thoroughly aquatic turtle of ponds, marshes, rivers, streams and irrigation ditches, usually with aquatic vegetation.	Unlikely to Occur: Potentially suitable aquatic habitat is within the Project area. Species occurs within 2 miles of the Project area (NNHP, 2018).
Birds (1)						
Agelaius tricolor	Tricolored blackbird	-	AR	-	Breeds in freshwater marshes of cattails, tule, bulrushes and sedges. Historically strongly tied to emergent marshes; in recent decades much nesting has shifted to non-native vegetation.	Unlikely to Occur: Suitable nesting habitat is rare within the Project area. Species is known to occur within 2 miles of the Project area (NNHP, 2019).
Fish (2)						
Chasmistes cujus	Cui-ui	E	EF- AR	S	Only known to occur in Pyramid Lake and the lower Truckee River.	None: Suitable habitat is not present in the Project area. The species is also not known to occur within 2 miles of the Project area (NNHP, 2019).

PPS0218211317DEN Att 2-1



1BAttachment 2 Special-status Species Table and Biological Resources Summary Tables

		Status			Habitat Requirements	Potential for Occurrence
Scientific Name	Common Name	Federal- USFWS	State- NNHP	BLM		
Oncorhynchus clarkii henshawi	Lahontan cutthroat trout	Т	AR	S	Lakes and streams with cool, well-oxygenated water. spawning and nursery habitat is characterized by cool water, approximate 1:1 pool-riffle ratio, well-vegetated and stable stream banks, and relatively silt-free rocky substrate in riffle-run areas.	Potential to Occur: Suitable habitat is marginal in the Project area due to there being little emergent or riparian vegetation present. The species is not known to occur within 2 miles of the Project area (NNHP, 2019). Barriers to fish passage (hydro diversions) are present upstream and downstream of the Project area, making it less likely species would be enter into Project area.
Mammals (2)						
Lasionycteris noctivagans	silver-haired bat	-	AR	S	Higher latitudes and altitudes in coniferous and mixed deciduous/coniferous forests of pinyon-juniper, subalpine fir, white fir, limber pine, aspen, cottonwood, and willow.	None: Suitable habitat is not present within the general Project area. Species occurs within 2 miles of project area (NNHP, 2019).
Lasiurus cinereus	hoary bat	-	AR	S	Hoary bats are a tree-roosting species, found primarily in forested upland habitats such as pinyon-juniper and conifers, as well as in gallery forest riparian zones. Hoary bats day roost in trees 3-12 m above ground and are protected by good leaf cover, but open below to facilitate flying in/out of the roost.	None: Suitable habitat is not present within the Project area. Species occurs within 2 miles of the project area (NNHP, 2019).
Reithrodontomys raviventris	spotted bat	-	AR	S	Spotted bats are found in a wide variety of habitats from low elevation desert scrub to high elevation coniferous forests if suitable roosting habitat exists. This species primarily roosts in cracks and crevices associated with cliff faces but there is some indication that mines and caves may be occasionally used, especially in winter. Spotted bats have occasionally been found roosting on or in buildings elsewhere in their range, but their reliance on such roosts is not well understood.	Unlikely to Occur: Suitable habitat is not present within the Project area. Species occurs within 2 miles of the project area (NNHP, 2019).

Notes: Status:

Federal Designations: State/NNHP Designations:

C = candidate for listing
D = delisted
EF = federally endangered
WI = Watch list

E = federally endangered WL=Watch list
T = federally threatened BLM Designations:
MBTA = Migratory Bird Treaty Act S = Sensitive

Source:

Nevada Natural Heritage Program (NNHP). 2019. Records within 5 miles of the Oddie Boulevard and Wells Avenue Project. March 4. BLM = U.S. Bureau of Land Management

Att 2-2 PPS0218211317DEN



Attachment 2b. Plant Species Observed within the Arlington Bridge Project Area

Biological Resources and Habitat Assessment, Arlington Bridge Project, Washoe County, Nevada

Scientific Name	Common Name	Growth Habitat	Indicator Status ^a			
Amaranthaceae						
Salsola tragus	Russian thistle	Shrub	NL			
Asteraceae	Asteraceae					
Helminthotheca echioides	bristly ox-tongue	Herb	NL			
Lactuca serriola	prickly lettuce	Herb	FACU			
Caprifoliaceae						
Sonchus asper	spiny sow thistle	Herb	FAC			
Pinaceae						
Abies concolor	white fir	tree	UNK			
Poaceae						
Bromus madritensis var. rubens	Red brome	Herb	FACU			
Bromus tectorum	cheatgrass	Herb	FACU			
Salicaceae						
Populus deltoides var. fremontii	Fremont cottonwood	Tree	FAC			
Populus trichocarpa	Black cottonwood	tree	NL			
Salix laevigata	Red willow	shrub	FACW			

^a Indicator status determined using The National Wetland Plant List (Lichvar et al., 2016).

FAC = Facultative status species; Estimated probability of 33 to 67 percent chance of occurring in wetlands.

FACU = Facultative upland species not considered to be typically adapted for life in anaerobic soil conditions. FACW = Facultative wetland status; Estimated probability of 67 to 99 percent chance of occurring in wetlands. NL = Not included on the 1988 list.

OBL = Obligate species; Estimated probability of 99 percent chance of occurring in wetlands. UNK = Status is unknown.

Lichvar, R.W., D.L. Banks, W.N. Kirchner, and N.C. Melvin. 2016. "The National Wetland Plant List: 2016 Wetland Ratings." *Phytoneuron* 2016-30: 1-17. Published April 28, 2016. ISSN 2153 733X. http://wetland-plants.usace.army.mil/.

PPS0218211317DEN Att 2-3



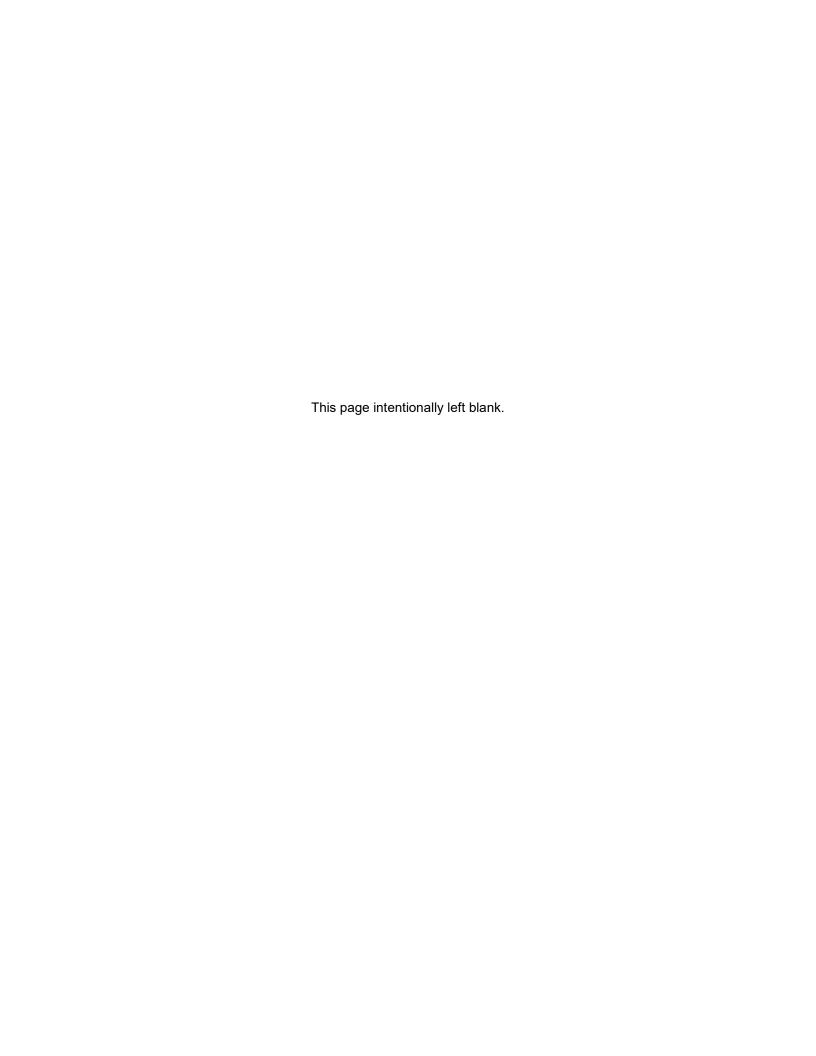
Attachment 2c. Wildlife Species Observed within the Arlington Bridge Project Area

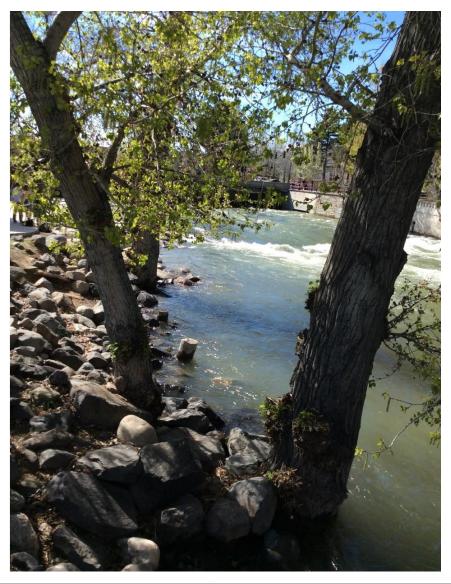
Biological Resources and Habitat Assessment, Arlington Bridge Project, Washoe County, Nevada

Scientific Name	Common Name		
Birds			
Charadrius vociferus	killdeer		
Corvus corax	common raven		
Zenaida macroura	mourning dove		

Att 2-4 PPS0218211317DEN

Attachment 3 Site Photographs





Arlington Avenue Bridge Field Photo Log Washoe County, Nevada

ID: Photo 1

Date: 4/23/2019

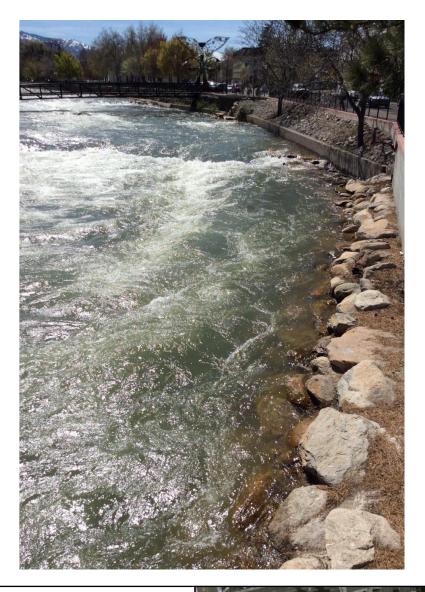
Photo taken from northeast Notes: portion of Project survey area looking west at southern bank of Truckee River.

Legend

Photo Location







Arlington Avenue Bridge

Field Photo Log Washoe County, Nevada

ID: Photo 2

Date: 4/23/2019

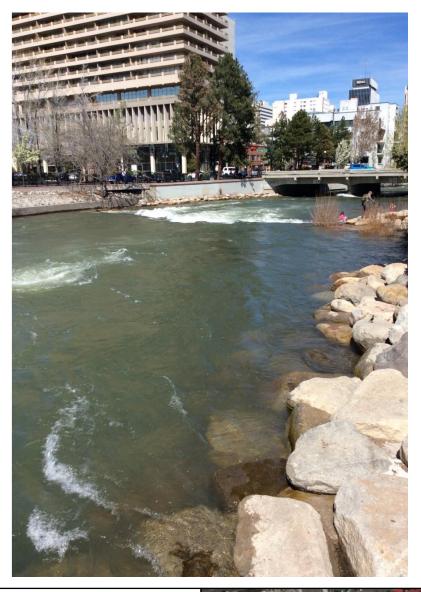
Photo taken from northern portion
Notes: of Project survey area looking
west at southern bank of Truckee west at southern bank of Truckee
River. Shows highly modified
banks of the river fully cemented or rip rap/cement fill.

Legend

Photo Location







Arlington Avenue Bridge Field Photo Log

Washoe County, Nevada

ID: Photo 3

Date: 4/23/2019

Photo taken from northwest Notes:

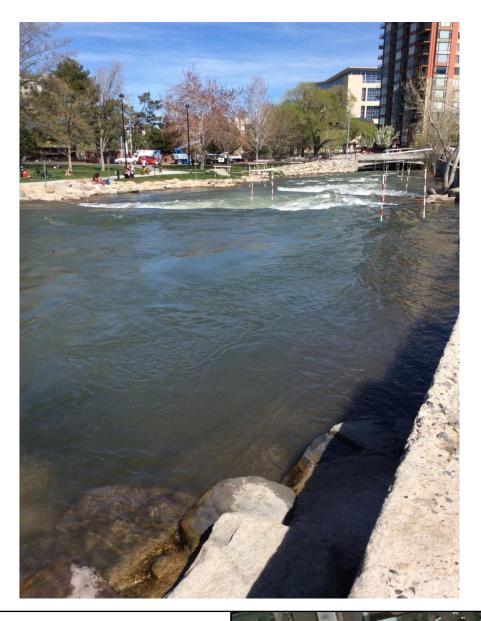
portion of Project survey area looking east at Truckee River.

Legend

Photo Location







Arlington Avenue BridgeField Photo Log
Washoe County, Nevada

ID: Photo 4

Date: 4/23/2019

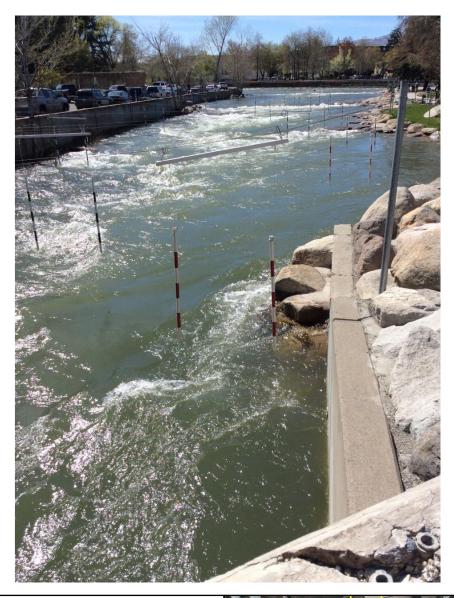
Photo taken from southwest portion of Project survey area looking east at Truckee River. Notes:

Legend

Photo Location







Arlington Avenue Bridge

Field Photo Log Washoe County, Nevada

ID: Photo 5

Photo taken from sothern portion

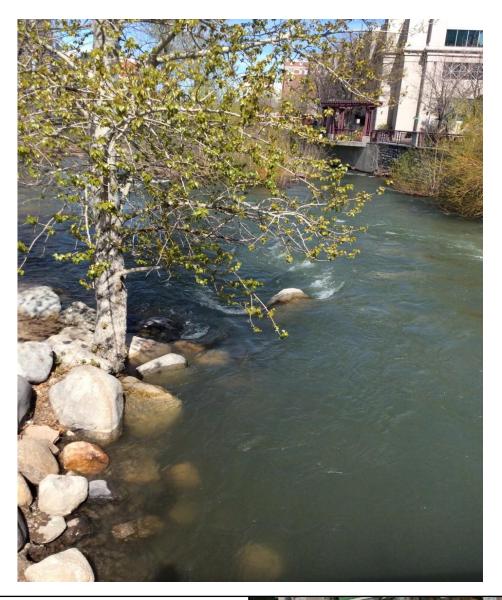
Notes: of Project survey area looking
northwest at Truckee River.
Shows highly modified banks of
-----the-river-fully-cemented-or-rip----rap/cement fill.

Legend

Photo Location







Arlington Avenue Bridge Field Photo Log

Washoe County, Nevada

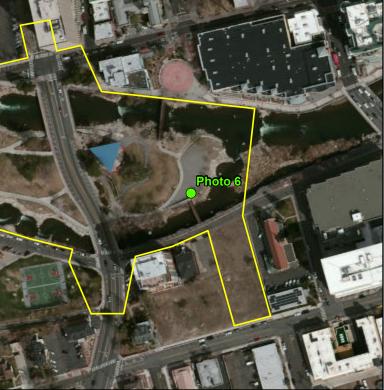
ID: Photo 6

Date: 4/23/2019

Notes: Photo taken from southeast portion of Project survey area looking east at Truckee River.

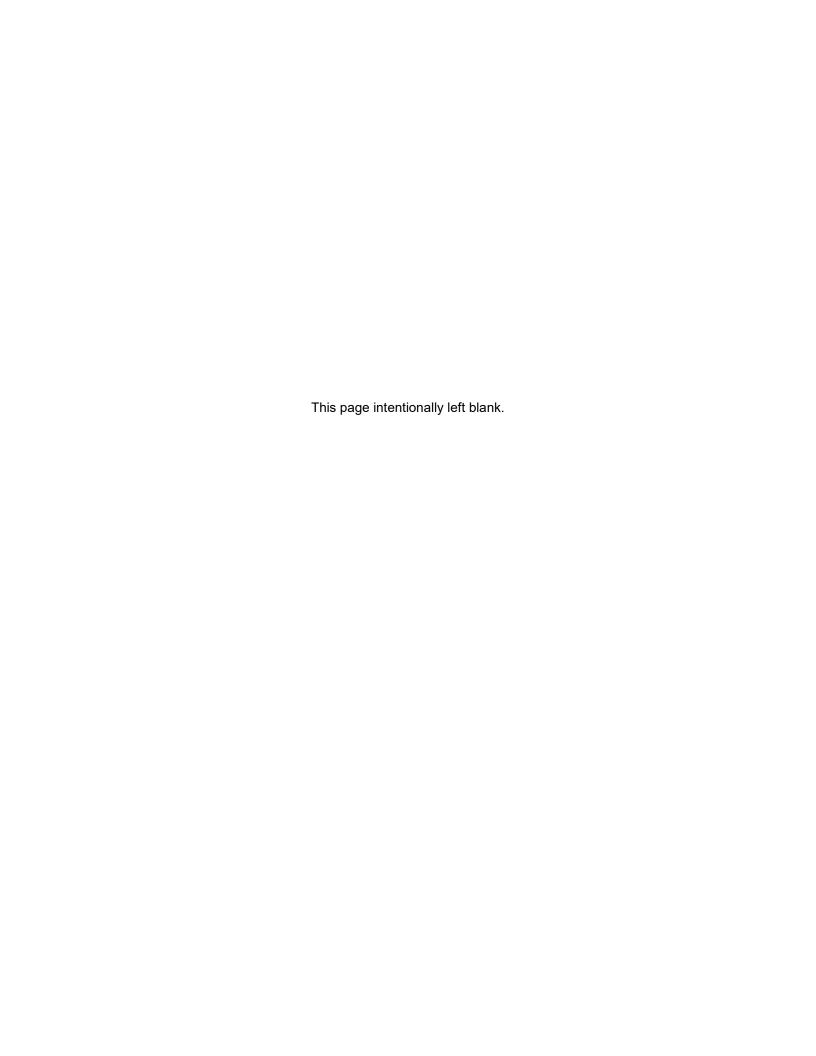
Legend

Photo Location





Attachment 4 Information for Planning and Consultation Search Results





United States Department of the Interior

FISH AND WILDLIFE SERVICE

Reno Fish And Wildlife Office 1340 Financial Boulevard, Suite 234 Reno, NV 89502-7147 Phone: (775) 861-6300 Fax: (775) 861-6301

http://www.fws.gov/nevada/



In Reply Refer To: May 26, 2019

Consultation Code: 08ENVD00-2019-SLI-0434

Event Code: 08ENVD00-2019-E-01110 Project Name: Arlington Avenue Bridges

Subject: List of threatened and endangered species that may occur in your proposed project

location, and/or may be affected by your proposed project

To Whom It May Concern:

The attached species list indicates threatened, endangered, proposed, and candidate species and designated or proposed critical habitat that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act of 1973, as amended (ESA, 16 U.S.C. 1531 *et seq.*), for projects that are authorized, funded, or carried out by a Federal agency. Candidate species have no protection under the ESA but are included for consideration because they could be listed prior to the completion of your project. Consideration of these species during project planning may assist species conservation efforts and may prevent the need for future listing actions. For additional information regarding species that may be found in the proposed project area, visit http://www.fws.gov/nevada/es/ipac.html.

The purpose of the ESA is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the ESA and its implementing regulations (50 CFR 402 et seq.), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2) (c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or

designated or proposed critical habitat. Guidelines for preparing a Biological Assessment can be found at: http://www.fws.gov/midwest/endangered/section7/ba_guide.html.

If a Federal action agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species, and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF.

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this species list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally listed, proposed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the ESA, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally, as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation, for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the attached list.

The Nevada Fish and Wildlife Office (NFWO) no longer provides species of concern lists. Most of these species for which we have concern are also on the Animal and Plant At-Risk Tracking List for Nevada (At-Risk list) maintained by the State of Nevada's Natural Heritage Program (Heritage). Instead of maintaining our own list, we adopted Heritage's At-Risk list and are partnering with them to provide distribution data and information on the conservation needs for at-risk species to agencies or project proponents. The mission of Heritage is to continually evaluate the conservation priorities of native plants, animals, and their habitats, particularly those most vulnerable to extinction or in serious decline. In addition, in order to avoid future conflicts, we ask that you consider these at-risk species early in your project planning and explore management alternatives that provide for their long-term conservation.

For a list of at-risk species by county, visit Heritage's website (http://heritage.nv.gov). For a specific list of at-risk species that may occur in the project area, you can obtain a data request form from the website (http://heritage.nv.gov/get_data) or by contacting the Administrator of Heritage at 901 South Stewart Street, Suite 5002, Carson City, Nevada 89701-5245, (775) 684-2900. Please indicate on the form that your request is being obtained as part of your coordination with the Service under the ESA. During your project analysis, if you obtain new information or data for any Nevada sensitive species, we request that you provide the information to Heritage at the above address.

Furthermore, certain species of fish and wildlife are classified as protected by the State of Nevada (http://www.leg.state.nv.us/NAC/NAC-503.html). You must first obtain the appropriate license, permit, or written authorization from the Nevada Department of Wildlife (NDOW) to take, or possess any parts of protected fish and wildlife species. Please visit http://www.ndow.org or contact NDOW in northern Nevada (775) 688-1500, in southern Nevada (702) 486-5127, or in eastern Nevada (775) 777-2300.

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 *et seq.*), and projects affecting these species may require development of an eagle conservation plan (http://www.fws.gov/windenergy/ eagle guidance.html). Additionally, wind energy projects should follow the Service's wind energy guidelines (http://www.fws.gov/windenergy/) for minimizing impacts to migratory birds and bats.

The Service's Pacific Southwest Region developed the *Interim Guidelines for the Development of a Project Specific Avian and Bat Protection Plan for Wind Energy Facilities* (Interim Guidelines). This document provides energy facility developers with a tool for assessing the risk of potential impacts to wildlife resources and delineates how best to design and operate a bird-and bat-friendly wind facility. These Interim Guidelines are available upon request from the NFWO. The intent of a Bird and Bat Conservation Strategy is to conserve wildlife resources while supporting project developers through: (1) establishing project development in an adaptive management framework; (2) identifying proper siting and project design strategies; (3) designing and implementing pre-construction surveys; (4) implementing appropriate conservation measures for each development phase; (5) designing and implementing appropriate post-construction monitoring strategies; (6) using post-construction studies to better understand the dynamics of mortality reduction (*e.g.*, changes in blade cut-in speed, assessments of blade "feathering" success, and studies on the effects of visual and acoustic deterrents) including efforts tied into Before-After/Control-Impact analysis; and (7) conducting a thorough risk assessment and validation leading to adjustments in management and mitigation actions.

The template and recommendations set forth in the Interim Guidelines were based upon the Avian Powerline Interaction Committee's Avian Protection Plan template (http://www.aplic.org/) developed for electric utilities and modified accordingly to address the unique concerns of wind energy facilities. These recommendations are also consistent with the Service's wind energy guidelines. We recommend contacting us as early as possible in the planning process to discuss the need and process for developing a site-specific Bird and Bat Conservation Strategy.

The Service has also developed guidance regarding wind power development in relation to prairie grouse leks (sage-grouse are included in this). This document can be found at: http://www.fws.gov/southwest/es/Oklahoma/documents/te_species/wind%20power/prairie%20grouse%20lek%205%20mile%20public.pdf.

Migratory Birds are a Service Trust Resource. Based on the Service's conservation responsibilities and management authority for migratory birds under the Migratory Bird Treaty Act of 1918, as amended (MBTA; 16 U.S.C. 703 *et seq.*), we recommend that any land clearing or other surface disturbance associated with proposed actions within the project area be timed to

avoid potential destruction of bird nests or young, or birds that breed in the area. Such destruction may be in violation of the MBTA. Under the MBTA, nests with eggs or young of migratory birds may not be harmed, nor may migratory birds be killed. Therefore, we recommend land clearing be conducted outside the avian breeding season. If this is not feasible, we recommend a qualified biologist survey the area prior to land clearing. If nests are located, or if other evidence of nesting (*i.e.*, mated pairs, territorial defense, carrying nesting material, transporting food) is observed, a protective buffer (the size depending on the habitat requirements of the species) should be delineated and the entire area avoided to prevent destruction or disturbance to nests until they are no longer active.

Guidance for minimizing impacts to migratory birds for projects involving communications towers (*e.g.*, cellular, digital television, radio, and emergency broadcast) can be found at: http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html.

If wetlands, springs, or streams are are known to occur in the project area or are present in the vicinity of the project area, we ask that you be aware of potential impacts project activities may have on these habitats. Discharge of fill material into wetlands or waters of the United States is regulated by the U.S. Army Corps of Engineers (ACOE) pursuant to section 404 of the Clean Water Act of 1972, as amended. We recommend you contact the ACOE's Regulatory Section regarding the possible need for a permit. For projects located in northern Nevada (Carson City, Churchill, Douglas, Elko, Esmeralda, Eureka, Humboldt, Lander, Lyon, Mineral, Pershing, Storey, and Washoe Counties) contact the Reno Regulatory Office at 300 Booth Street, Room 3060, Reno, Nevada 89509, (775) 784-5304; in southern Nevada (Clark, Lincoln, Nye, and White Pine Counties) contact the St. George Regulatory Office at 321 North Mall Drive, Suite L-101, St. George, Utah 84790-7314, (435) 986-3979; or in California along the eastern Sierra contact the Sacramento Regulatory Office at 650 Capitol Mall, Suite 5-200, Sacramento, California 95814, (916) 557-5250.

We appreciate your concern for threatened and endangered species. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

The table below outlines lead FWS field offices by county and land ownership/project type. Please refer to this table when you are ready to coordinate (including requests for section 7 consultation) with the field office corresponding to your project, and send any documentation regarding your project to that corresponding office. Therefore, the lead FWS field office may not be the office listed above in the letterhead.

Lead FWS offices by County and Ownership/Program

County Ownership/Program Species Office Lead*

Alameda	Tidal wetlands/marsh adjacent to Bays	Salt marsh species, delta smelt	BDFWO
Alameda	All ownerships but tidal/estuarine	All	SFWO
Alpine	Humboldt Toiyabe National Forest	All	RFWO
Alpine	Lake Tahoe Basin Management Unit	All	RFWO
Alpine	Stanislaus National Forest	All	SFWO
Alpine	El Dorado National Forest	All	SFWO
Colusa	Mendocino National Forest	All	AFWO
Colusa	Other	All	By jurisdiction (see map)
Contra Costa	Legal Delta (Excluding ECCHCP)	All	BDFWO
Contra Costa	Antioch Dunes NWR	All	BDFWO
Contra Costa	Tidal wetlands/marsh adjacent to Bays	Salt marsh species, delta smelt	BDFWO
Contra Costa	All ownerships but tidal/estuarine	All	SFWO
Del Norte	All	All	AFWO
El Dorado	El Dorado National Forest	All	SFWO
El Dorado	LakeTahoe Basin Management Unit		RFWO
Glenn	Mendocino National Forest	All	AFWO
Glenn	Other	All	By jurisdiction (see map)
Humboldt	All except Shasta Trinity National Forest	All	AFWO

Humboldt	Shasta Trinity National Forest	All	YFWO
Lake	Mendocino National Forest	All	AFWO
Lake	Other	All	By jurisdiction (see map)
Lassen	Modoc National Forest	All	KFWO
Lassen	Lassen National Forest	All	SFWO
Lassen	Toiyabe National Forest	All	RFWO
Lassen	BLM Surprise and Eagle Lake Resource Areas	All	RFWO
Lassen	BLM Alturas Resource Area	All	KFWO
Lassen	Lassen Volcanic National Park	All (includes Eagle Lake trout on all ownerships)	SFWO
Lassen	All other ownerships	All	By jurisdiction (see map)
Marin	Tidal wetlands/marsh adjacent to Bays	Salt marsh species, delta smelt	BDFWO
Marin	All ownerships but tidal/estuarine	All	SFWO
Mendocino			
Mendoemo	Russian River watershed	All	SFWO
Mendocino	Russian River watershed All except Russian River watershed	All All	SFWO AFWO
	All except Russian River		
Mendocino	All except Russian River watershed	All	AFWO
Mendocino Modoc	All except Russian River watershed Modoc National Forest	All	AFWO KFWO

Modoc	All other ownerships	All	By jurisdiction (See map)
Mono	Inyo National Forest	All	RFWO
Mono	Humboldt Toiyabe National Forest	All	RFWO
Napa	All ownerships but tidal/estuarine	All	SFWO
Napa	Tidal wetlands/marsh adjacent to San Pablo Bay	Salt marsh species, delta smelt	BDFWO
Nevada	Humboldt Toiyabe National Forest	All	RFWO
Nevada	All other ownerships	All	By jurisdiction (See map)
Placer	Lake Tahoe Basin Management Unit	All	RFWO
Placer	All other ownerships	All	SFWO
Sacramento	Legal Delta	Delta Smelt	BDFWO
Sacramento	Other	All	By jurisdiction (see map)
San Francisco	Tidal wetlands/marsh adjacent to San Francisco Bay	Salt marsh species, delta smelt	BDFWO
San Francisco	All ownerships but tidal/estuarine	All	SFWO
San Mateo	Tidal wetlands/marsh adjacent to San Francisco Bay	Salt marsh species, delta smelt	BDFWO
San Mateo	All ownerships but tidal/estuarine	All	SFWO
San Joaquin	Legal Delta excluding San Joaquin HCP	All	BDFWO

San Joaquin	Other	All	SFWO
Santa Clara	Tidal wetlands/marsh adjacent to San Francisco Bay	Salt marsh species, delta smelt	BDFWO
Santa Clara	All ownerships but tidal/estuarine	All	SFWO
Shasta	Shasta Trinity National Forest except Hat Creek Ranger District (administered by Lassen National Forest)	All	YFWO
Shasta	Hat Creek Ranger District	All	SFWO
Shasta	Bureau of Reclamation (Central Valley Project)	All	BDFWO
Shasta	Whiskeytown National Recreation Area	All	YFWO
Shasta	BLM Alturas Resource Area	All	KFWO
Shasta	Caltrans	By jurisdiction	SFWO/AFWO
Shasta	Ahjumawi Lava Springs State Park	Shasta crayfish	SFWO
Shasta	All other ownerships	All	By jurisdiction (see map)
Shasta	Natural Resource Damage Assessment, all lands	All	SFWO/BDFWO
Sierra	Humboldt Toiyabe National Forest	All	RFWO
Sierra	All other ownerships	All	SFWO
Siskiyou	Klamath National Forest (except Ukonom District)	All	YFWO
Siskiyou	Six Rivers National Forest and Ukonom District	All	AFWO
Siskiyou	Shasta Trinity National Forest	All	YFWO

Siskiyou	Lassen National Forest	All	SFWO
Siskiyou	Modoc National Forest	All	KFWO
Siskiyou	Lava Beds National Volcanic Monument	All	KFWO
Siskiyou	BLM Alturas Resource Area	All	KFWO
Siskiyou	Klamath Basin National Wildlife Refuge Complex	All	KFWO
Siskiyou	All other ownerships	All	By jurisdiction (see map)
Solano	Suisun Marsh	All	BDFWO
Solano	Tidal wetlands/marsh adjacent to San Pablo Bay	Salt marsh species, delta smelt	BDFWO
Solano	All ownerships but tidal/estuarine	All	SFWO
Solano	Other	All	By jurisdiction (see map)
Sonoma	Tidal wetlands/marsh adjacent to San Pablo Bay	Salt marsh species, delta smelt	BDFWO
Sonoma	All ownerships but tidal/estuarine	All	SFWO
Tehama	Mendocino National Forest	All	AFWO
Tehama	Shasta Trinity National Forest except Hat Creek Ranger District (administered by Lassen National Forest)	All	YFWO
Tehama	All other ownerships	All	By jurisdiction (see map)
Trinity	BLM	All	AFWO
Trinity	Six Rivers National Forest	All	AFWO
Trinity	Shasta Trinity National Forest	All	YFWO

Trinity	Mendocino National Forest	All	AFWO
Trinity	BIA (Tribal Trust Lands)	All	AFWO
Trinity	County Government	All	AFWO
Trinity	All other ownerships	All	By jurisdiction (See map)
Yolo	Yolo Bypass	All	BDFWO
Yolo	Other	All	By jurisdiction (see map)
All	FERC-ESA	All	By jurisdiction (see map)
All	FERC-ESA	Shasta crayfish	SFWO
All	FERC-Relicensing (non-ESA)	All	BDFWO

*Office Leads:

AFWO=Arcata Fish and Wildlife Office

BDFWO=Bay Delta Fish and Wildlife Office

KFWO=Klamath Falls Fish and Wildlife Office

RFWO=Reno Fish and Wildlife Office

YFWO=Yreka Fish and Wildlife Office

Attachment(s):

- Official Species List
- USFWS National Wildlife Refuges and Fish Hatcheries
- Migratory Birds
- Wetlands

Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Reno Fish And Wildlife Office 1340 Financial Boulevard, Suite 234 Reno, NV 89502-7147 (775) 861-6300

Project Summary

Consultation Code: 08ENVD00-2019-SLI-0434

Event Code: 08ENVD00-2019-E-01110

Project Name: Arlington Avenue Bridges

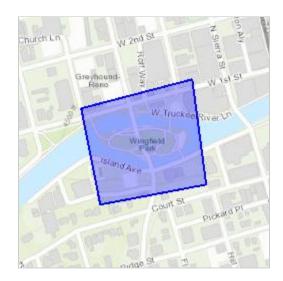
Project Type: TRANSPORTATION

Project Description: over the Truckee River for the Regional Transportation Commission of

Washoe County.

Project Location:

Approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/place/39.524153692018174N119.81643070388623W



Counties: Washoe, NV

Endangered Species Act Species

There is a total of 3 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries¹, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

1. <u>NOAA Fisheries</u>, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

Fishes

NAME STATUS

Cui-ui *Chasmistes cujus*

Endangered

No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/456

Lahontan Cutthroat Trout Oncorhynchus clarkii henshawi

Threatened

No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/3964

Species survey guidelines:

https://ecos.fws.gov/ipac/guideline/survey/population/233/office/14320.pdf

Flowering Plants

NAME STATUS

Webber's Ivesia *Ivesia webberi*

Threatened

There is **final** critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/4682

Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

USFWS National Wildlife Refuge Lands And Fish Hatcheries

Any activity proposed on lands managed by the <u>National Wildlife Refuge</u> 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 OR FISH HATCHERIES WITHIN YOUR PROJECT AREA.

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 <u>below</u>.

- 1. The Migratory Birds Treaty Act of 1918.
- 2. The <u>Bald and Golden Eagle Protection Act</u> of 1940.
- 3. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

MIGRATORY BIRD INFORMATION WAS NOT AVAILABLE WHEN THIS SPECIES LIST WAS GENERATED. PLEASE CONTACT THE FIELD OFFICE FOR FURTHER INFORMATION.

Migratory Birds FAQ

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 <u>Birds of Conservation Concern</u> (<u>BCC</u>) 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 <u>Avian Knowledge Network (AKN)</u>. The AKN data is based on a growing collection of <u>survey</u>, <u>banding</u>, <u>and citizen science datasets</u> 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 (<u>Eagle Act</u> requirements may apply), or a species that has a particular vulnerability to offshore 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 <u>AKN Phenology Tool</u>.

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 <u>Avian Knowledge Network (AKN)</u>. This data is derived from a growing collection of <u>survey</u>, <u>banding</u>, <u>and citizen science datasets</u>.

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 <u>Birds of Conservation Concern</u> (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 <u>Eagle Act</u> requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore 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 Project Mapping of Marine Bird Distributions and 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 <u>Diving Bird Study</u> and the <u>nanotag studies</u> or contact <u>Caleb Spiegel</u> or <u>Pam Loring</u>.

What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to <u>obtain a permit</u> 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.

Wetlands

Impacts to <u>NWI wetlands</u> 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>U.S. Army Corps of</u> 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.

RIVERINE

- <u>R5UBH</u>
- R3UBH