



April 24, 2019

Acting State Supervisor  
U.S. Fish & Wildlife Service  
Washington Fish and Wildlife Office  
510 Desmond Drive SE, Suite 102  
Lacey, Washington 98503-1263

Attn: Liaisons

**Re: US 395 North Spokane Corridor – Spokane River Bridge Project – Request to Initiate Informal Consultation with the USFWS.**

<b>Consultation:</b>	Individual Informal	<b>County:</b>	Spokane
<b>Pre-BA:</b>	February 28, 2019	<b>WRIA:</b>	Middle Spokane (57)
<b>Federal Nexuses</b>	FHWA, ACOE	<b>6<sup>th</sup>-Field HUC:</b>	Chester Creek – Spokane River
<b>IPaC Code:</b>	01EWF00-2019-SLI-0731	<b>Water Body:</b>	Spokane River
<b>IPaC Date:</b>	March 25, 2019	<b>Location (PLSS):</b>	T25N-R43E-S10

**Not Likely to Adversely Affect:** bull trout

Liaisons:

The Federal Highway Administration (FHWA) is providing funds to the Washington State Department of Transportation (WSDOT) to construct a new bridge over the Spokane River, adjacent to the existing East Greene Street Bridge, within the city limits of Spokane, in Spokane County, Washington.

A temporary work platform (TWP) will be constructed, from which the new bridge will be built. The TWP will require 161 24-inch steel piles to be driven into the riverbed. Disturbance to the shoreline includes riparian vegetation removal and fill below the OHWM. Once the new bridge is complete, all temporary infrastructure will be removed, and disturbed areas of the riverbank restored.

A teleconference to discuss the project was held on February 28, 2019, attended by the United States Fish and Wildlife Service (USFWS) and WSDOT.

The enclosed biological assessment (BA) evaluates potential project impacts to USFWS-listed species as required under Section 7(c) of the Endangered Species Act (ESA). The species and/or critical habitats listed under the ESA for the project action area (PAA) includes the **Columbia River Distinct Population Segment bull trout** (bull trout), yellow-billed cuckoo, and water howellia.

The BA concludes that the project **may affect, but is not likely to adversely affect** bull trout. Therefore, we are requesting **informal consultation** on bull trout.<sup>1</sup>

It is our understanding that following the completion of informal consultation, our responsibilities under Section 7(c) of the Endangered Species Act will be satisfied.

We will continue to monitor changes to the project and/or regulations that may result in the need to re-assess project impacts.

Please contact Mark Norman (509-573-8324, [normanm@wsdot.wa.gov](mailto:normanm@wsdot.wa.gov)) if you require additional information or have any questions about the project.

cc: Mark Norman, WSDOT South Central Region  
Tammie Williams, WSDOT Eastern Region

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<sup>1</sup> The project will **not affect** yellow-billed cuckoo or water howellia.

# Biological Assessment



## US 395 North Spokane Corridor Spokane River Bridge Project

Spokane County, Washington

Prepared by:

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**April 24, 2019**

# Executive Summary

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*The North Spokane Corridor (NSC) is a new 10-mile divided highway to connect Interstate 90 with US 395. A 6.1-mile section of highway, from Columbia Avenue to US 395, is already completed. The remaining 3.9 miles is divided into five individual projects, one of which proposes a new bridge over the Spokane River. The bridge project is the subject of this biological assessment report.*

The Washington State Department of Transportation (WSDOT) is proposing to construct a new bridge over the Spokane River adjacent to the existing East Greene Street Bridge, including six 12-foot lanes, four 10-foot shoulders, and a traffic barrier between the opposing lanes. The bridge will clear-span the river. A temporary work platform (TWP) will be first constructed across the river from which construction of the new bridge will proceed.

Disturbance includes 161 24-inch steel piles to be driven into the riverbed for the TWP, resulting in terrestrial and aquatic noise over baseline. Riparian vegetation on both banks will be permanently removed. The new bridge will require fill below the OHWM to install bridge footings armored with rip rap, the construction of which will require the use of sheet piles below the OHWM.

The primary federal nexus of the project is established via funding provided by the Federal Highway Administration. On February 28, 2019, a pre-BA teleconference was held between the United States Fish and Wildlife Service (Dee Dee Jones) and WSDOT.

The species and/or critical habitats listed under the ESA for the project action area (PAA) includes **Columbia River Distinct Population Segment bull trout** (bull trout).

In consideration of the project scope, environmental baseline conditions, ambient disturbance, and minimization measures implemented during construction, it is determined that the project **may affect, but is not likely to adversely affect** bull trout.

The PAA lies outside regulatory limits of all species administered by the National Marine Fisheries Service (NMFS), and no Essential Fish Habitat (EFH) is present.

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# 1 Consultation History

The primary federal nexus for this project is established via funding by the Federal Highway Administration (FHWA), and the Washington State Department of Transportation (WSDOT) has prepared this biological assessment (BA) on its behalf. A second federal nexus exists via a permit issued by the United States Army Corps of Engineers (USACE).

A pre-Biological Assessment (pre-BA) meeting to introduce and discuss the project was held between the United States Fish and Wildlife Service (USFWS) (Dee Dee Jones) and WSDOT on February 28, 2019. Given the existing precedent set by multiple consultations for similar bridge projects on the Spokane River, the USFWS agreed that the project, as proposed and given existing science on bull trout in the Spokane River, is **not likely to adversely affect bull trout**. Notes on these discussions are included in **Appendix A**.

Since the project action area falls outside the jurisdictional limits of all species administered by the NMFS, this Biological Assessment will only discuss USFWS-listed species.

## 2 Project Description

WSDOT is proposing to construct a new bridge over the Spokane River adjacent to the existing East Greene Street Bridge (**Figures 1 and 2**). The bridge design includes six 12-foot lanes, four 10-foot shoulders, and a traffic barrier between the opposing lanes. The bridge will clear-span the river with footings and rip rap armoring installed below the OHWM. Riparian vegetation must be removed from the riverbanks. The TWP will be constructed across the river, from which the new bridge will be built, requiring 161 24-inch steel piles to be driven into the riverbed. Once the new bridge is complete, the TWP will be removed and disturbed areas restored with native vegetation. Photos of the bridge crossing vicinity are included in **Appendix B**.

### 2.1 Proposed Work, Phasing, and Schedule

Work is scheduled for 2.5 years, from May 2021 to November 2023. Proposed construction phasing is as follows:

**May 2021** – Begin construction. No formal detour is required since the East Green Street Bridge will remain open to traffic.

**June 2021 to June 2022** – Install piles, construct TWP and bridge footings.

**July 2022 to August 2023** – Construct bridge superstructure.

**August 2023 to November 2023** – Remove TWP, open completed bridge to traffic, restore disturbed areas.

### 2.2 Construction Footprint

A typical project footprint incorporates the total surface area to be disturbed during construction by, but not limited to, equipment operation, access, staging, material storage/stockpiling, cut or fill, and foot traffic.

As such, the footprint for this project includes existing paved and landscaped areas within the city limits, the riverbank and riverbed (**Figures 3 and 4**).

Figure 1. Project Location.

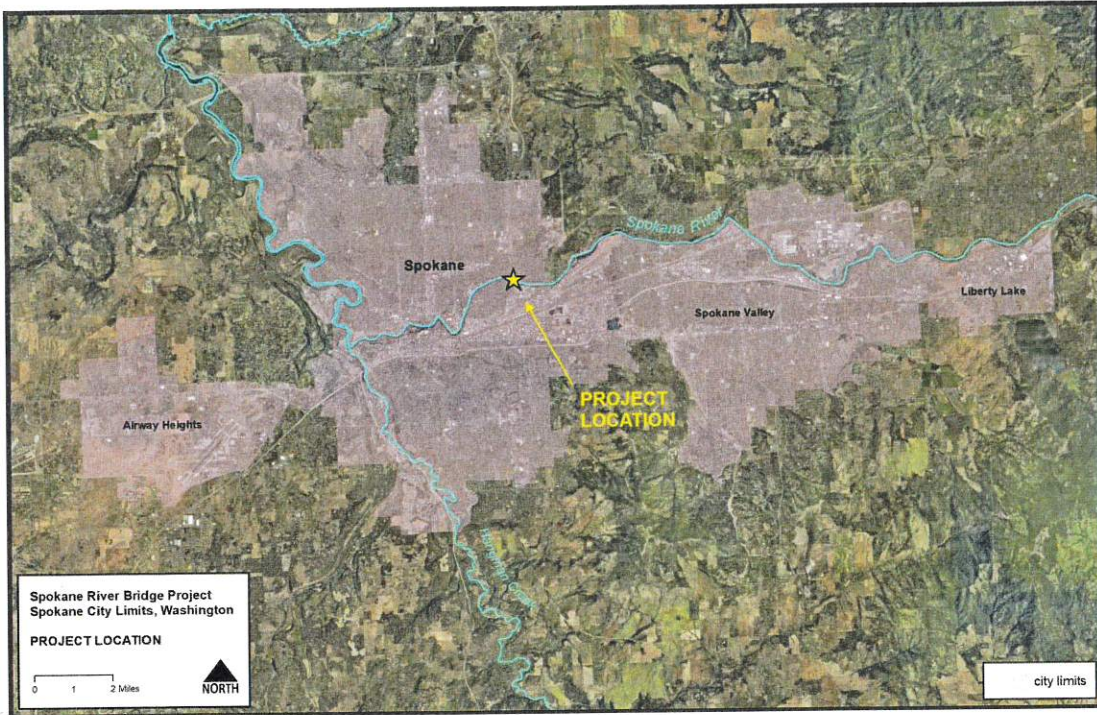


Figure 2. Project Vicinity

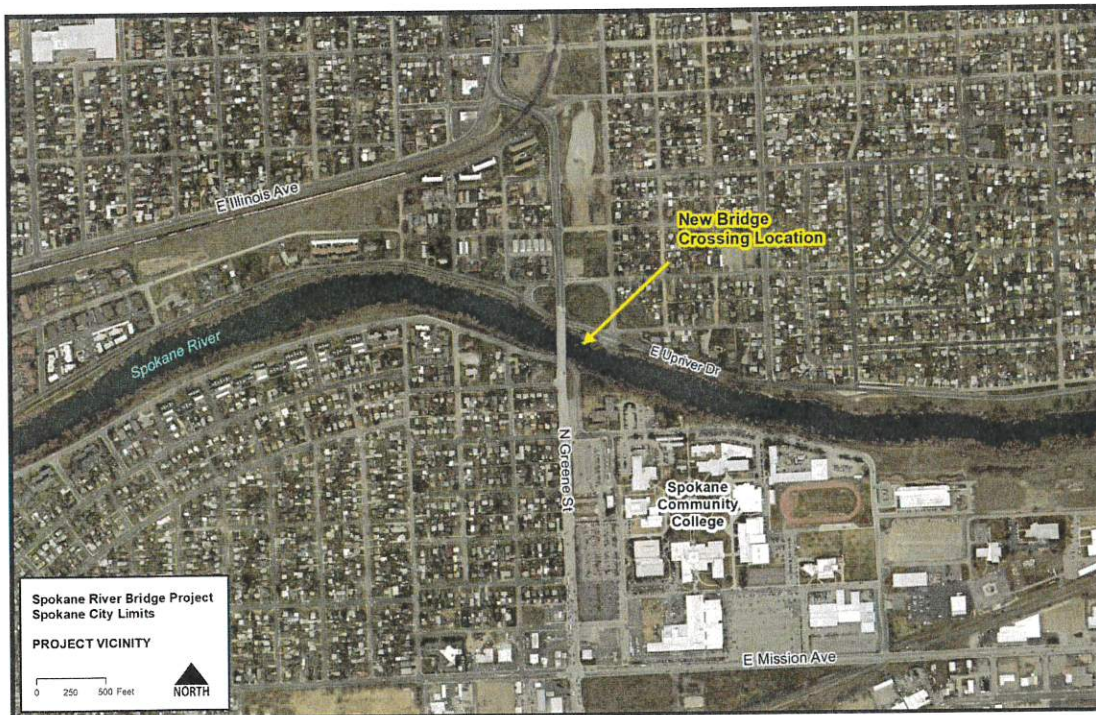
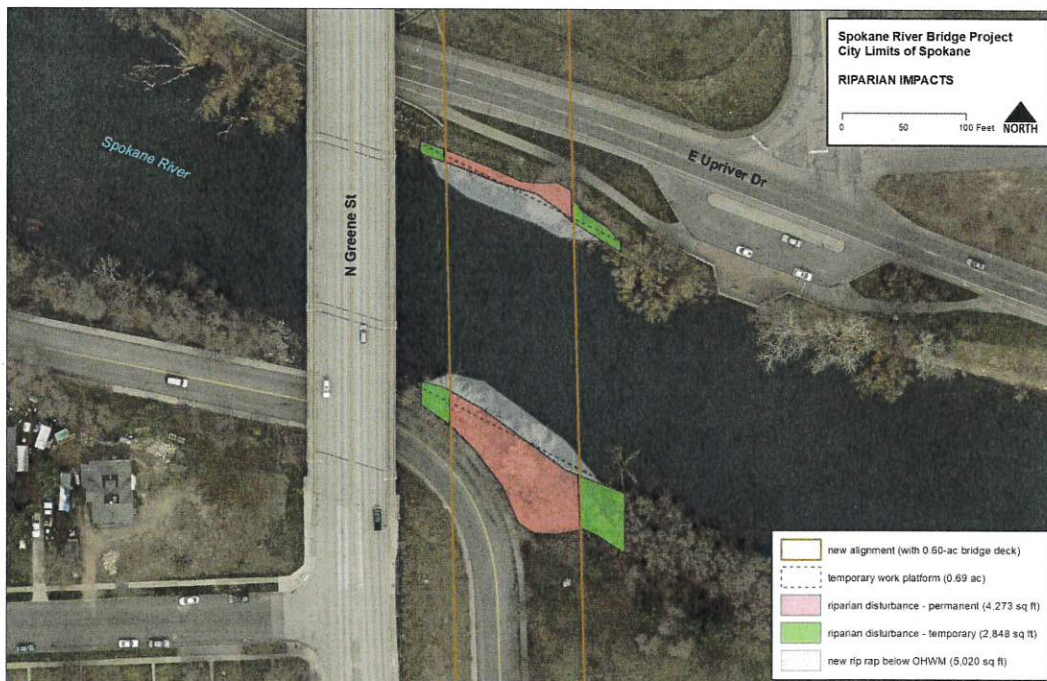




Figure 3. Project Footprint Overview



Figure 4. Riparian Impacts



## 2.3 Specifications for the Temporary Work Platform and New Bridge

The metrics for the TWP and new bridge are presented in **Table 1**.

Table 1. TWP and New Bridge Specifications

Specification	TWP	New Bridge
Structure Length	175 ft	230 ft
Structure Width	170 ft	114 ft
Structure Area	0.69 ac	0.60 ac
Number of piles	161	----
Pile description	24-inch steel	----
Pile spacing between bents	25-ft on center/8-ft between piles	----
Pile installation/removal method	impact driven in/vibed out	----
Aquatic ensonification area	22.4 ac	----
Aquatic turbidity area	2.4 ac	----
Riverbed disturbed - temporary	506 ft <sup>2</sup>	----
New IS (entire project)	----	2.61 ac
Replaced IS (entire project)	----	0
Treated IS (entire project)	----	2.61 ac
Cut above OHWM		6,000 ft <sup>2</sup>
Cut below OHWM		0
Fill above OHWM		2,000 ft <sup>2</sup>
Fill below OHWM		5,020 ft <sup>2</sup> (see rip rap/footing below)
Riparian Disturbance - Temporary		2,848 ft <sup>2</sup>
Riparian Disturbance - Permanent		4,273 ft <sup>2</sup>
Riparian Planting		2,848 ft <sup>2</sup>
Permanent shading on water	----	26,220 ft <sup>2</sup>
Temporary shading on water	29,750 ft <sup>2</sup>	----
New rip rap/footing below OHWM - area	----	5,020 ft <sup>2</sup>
New rip rap/footing below OHWM - volume	----	1,500 cy
New rip rap below OHWM - length	----	150 ft per bank

## 2.4 Cut and Fill for Bridge Footings

Approximately 6,000 square feet (ft<sup>2</sup>) of cut and 2000 ft<sup>2</sup> of fill is required on the riverbanks and below the OHWM to accommodate the new bridge footings. Best Management Practices (BMPs) will be in place to ensure that water quality in the river is protected, including installation of sheet piles to isolate the work area from the river. Equipment to be utilized includes, but is not limited to, vibratory pile driver, chain saw, excavator with thumb bucket, dump truck, bulldozer, concrete truck, and pneumatic hand tools.

## **2.5 Temporary Work Platform**

The TWP will be constructed across the river below the new bridge alignment, supported by 161 24-inch-diameter steel piles driven into the riverbed<sup>1</sup>. Equipment to be utilized includes, but is not limited to, impact pile driver, crane, pneumatic tools, flatbed truck, and hand tools.

## **2.6 New Bridge Construction**

The new bridge will be constructed from the deck of the TWP. To protect water quality, BMPs will be installed to prevent materials from falling into the water. Equipment to be utilized includes, but is not limited to, crane, concrete truck, flatbed truck, paver, roller, striping, and pneumatic hand tools.

## **2.7 Remove Temporary Work Platform**

Once the new bridge is completed, the TWP will be removed with BMPs in place to protect water quality. Equipment to be utilized includes, but is not limited to, vibratory pile driver, crane, flatbed truck, and pneumatic hand tools.

## **2.8 Riverbank Restoration**

All disturbed bank areas will be secured against erosion and restored with native vegetation, where practicable.

# **3 Environmental Setting**

## **3.1 Spokane City Limits**

The project footprint lies entirely within the city limits of Spokane. Land use in surrounding area is completely urbanized, dominated by city neighborhoods and the Spokane Community College.

## **3.2 Spokane River**

The Spokane River flows 112 miles from Lake Coeur d'Alene in Idaho to the upper Columbia River in Washington. Seven hydroelectric dams span the river, all installed between 1890 and 1922. The Upriver Dam is owned and operated by the City of Spokane Water Department, while the others are owned by Avista Corp., an electricity and natural gas utility based in Spokane.

All the dams on the river lack fish-passage facilities (NPCC 2008). Little Falls Dam, the dam furthest downstream, was constructed in 1911 at river mile (RM) 29. The much larger Long Lake Dam, five miles upstream at RM 34, was completed in 1915 and has no fish ladder.

The new bridge will span the river at RM 78, approximately two miles downstream of the Upriver Dam (RM 80), operated by the City of Spokane. Post Falls Dam (RM 102) is also located further upstream, at the outlet of Lake Coeur d'Alene.

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<sup>1</sup> Piles will be driven in quick succession, with rapid progress forward across the riverbed anticipated. Due to the impracticality of installing BMPs across the river, as well as low habitat quality in this stretch of river for fish, no BMPs are proposed, other than observance of an in-water fish window and water quality monitoring.

Seven municipal and industrial dischargers have permits to run wastewater into the river (Spokane River Forum 2017). A fish consumption advisory is in place for the river reach between Post Falls Dam and the Upriver Dam (no fish consumption allowed) and the reach between the Upriver Dam and Nine Mile Dam (Do not eat largescale sucker, all other fish, one meal per month) (Spokane River Forum 2017).

The flow of the river is highly regulated by the presence of dams. Banks are very steep, and in many places oversteepened with imported fill material to allow development to encroach to the river's edge. The narrow bands of vegetation on the banks is comprised of a mix of native and ornamental woody species.

Summer temperatures in the river commonly exceed 15° C (59 °F) during the summer months (USFWS 2013). Furthermore, the river is on the Department of Ecology 303(d) list for exceeding the water quality for PCBs.

### **3.3 Wetlands and Other Waters of the United States**

No wetlands are present within the project footprint. The banks are too steep for water to remain long enough to develop wetland characteristics. The Spokane River is a non-wetland Other Water of the United States, the OHWM of which is located at elevation 1,876 feet in the project vicinity.

## **4 Project Effects on the Environment**

This section discusses the physical, biological, and chemical effects of the project on the environment, including direct effects, indirect effects, and the effects of interdependent or interrelated activities.

### **4.1 Direct Effects**

Direct effects are the immediate effects of the project on the environment. Those direct effects expected to occur during construction are listed below.

#### **4.1.1 Construction Noise**

Construction activity, especially pile driving, is likely to elevate noise above baseline levels. Elevated terrestrial noise is estimated to occur within a 3,000-foot radius of the project footprint, while 22.4 ac of the river's aquatic area is modeled to be ensonified above baseline. The estimated time required for pile driving is 50 days<sup>2</sup>.

#### **4.1.2 Increased Impervious Surface and Aquatic Shading**

The project will increase impervious surface by 2.61 ac, with 26,220 ft<sup>2</sup> of this area located on the new bridge deck. However, all stormwater will be captured and infiltrated and/or directed into the city sewer system. Temporary shade cast by the TWP will be 29,750 ft<sup>2</sup> while permanent shade resulting from the new bridge will be 26,220 ft<sup>2</sup>.

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<sup>2</sup> Based on an average pile driving production rate of 200-ft per hammer per day. One hammer is assumed, due to restricted work areas and average pile lengths of 60-70 feet.

### 4.1.3 Riparian Vegetation Disturbance

Due to the steep riverbanks and encroachment by urban development, the riparian zones along the river are very narrow, rooted upon fill material, and dominated by Siberian elm (*Ulmus pumila*) and black cottonwood (*Populus balsamifera*). The project will temporarily disturb 2,848 ft<sup>2</sup> of riparian vegetation, while 4,273 ft<sup>2</sup> will be permanently removed.

### 4.1.4 Riverbed Disturbance

The placement of 161 24-inch piles will temporarily occupy 506 ft<sup>2</sup> of riverbed. In order to protect the new bridge footings against scour, rip rap will be placed within the OHWM, covering 5,020 ft<sup>2</sup> in area, occupy a volume of 1,500 cubic yards (cy), and be placed along 150 linear feet of each bank (300 linear feet total).

### 4.1.5 Increased Turbidity

The river is approximately 160 feet wide within the project footprint. Due to the difficulty in maintaining water quality BMPs during pile driving/removal, sheet pile driving/removal, and rip rap placement, no physical BMPs are proposed, other than turbidity monitoring. It is expected that in-water work will result in a temporary sediment plumes. However, any sediment plumes would occupy a relatively small proportion of the river's width.

Nevertheless, the maximum, worst-case estimate for increased sedimentation, including all aquatic areas within 300 feet downstream of the bridge, is 2.4 acres (ac).

## 4.2 Avoidance and Minimization Measures

This section presents measures to be incorporated into the project contract to avoid or minimize impacts to listed species and critical habitats.

### 4.2.1 In-water Work Window

According to Gold and Fish (WDFW 2015), in-water work is allowed from June 16 to August 31. This project is expected to need the work window extended into the fall, potentially to November 30, in order to accommodate the project scope and schedule. The official in-water work window will be outlined in a Hydraulic Project Approval (HPA) issued by the Washington Department of Fish and Wildlife (WDFW).<sup>3</sup>

### 4.2.2 Water Quality Monitoring

To minimize impacts to water quality, turbidity will be monitored during construction.

## 4.3 Indirect Effects

Indirect effects are caused by the proposed action but are reasonably certain to occur later in time. The project will not alter transportation capacity, affect land use decision-making in the local area, or result in indirect loss

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<sup>3</sup> The HPA issued for the SR 290 East Trent Bridge project (#2018-1-26+01) authorized work in water from June 1 to November 30 for calendar years 2019-2023.

of habitat utilized by Threatened and Endangered species. However, two indirect effects caused by in-water work and footing/rip rap placement have been identified.

#### **4.3.1 Displacement of Prey**

The driving and presence of piles (round and sheet piles) will temporarily displace benthic invertebrates and forage fish that occur there. However, these prey species are expected to rapidly recolonize the area once construction is complete. During the recolonization period, prey will be available in other portions of the river. Furthermore, the placement of rip rap on the riverbanks to protect bridge footings will offer refuge for fish and forage species in a reach relatively devoid of cover.

#### **4.3.2 Bank Stabilization**

The placement of rip rap material along both banks will introduce 1,500 cy of material below the OHWM, affecting a total of 300 linear feet of riverbank. Although the indirect effects of this modification will be permanent, they are considered to be insignificant given a) the high level of existing disturbance to the bank and vegetation near the bridge footings and b) the lack of channel diversity and refuge for fish in the local river reach.

### **4.4 Effects of Interrelated and Interdependent Actions**

The North Spokane Corridor (NSC) is a new 10-mile divided highway that connects Interstate 90 to US 395. A 6.1-mile section of highway from Columbia Ave. to US 395 is already complete. The remaining 3.9 miles is divided into five projects, one of which proposes a new bridge over the Spokane River. The remaining four projects (“actions”) will be constructed away from the Spokane River within existing urbanized areas of Spokane. For this reason, there is no anticipated effects to ESA-listed species resulting from these interrelated and interdependent actions.

## **5 Project Action Area**

The project action area (PAA) includes the geographic extent of all physical, biological, and chemical impacts of the project, including areas impacted by equipment staging and access, cut or fill, increased sedimentation, disposal areas, and/or areas subjected to elevated noise levels. Consequently, the PAA is typically larger than the project footprint, but the size of the PAA can also be reduced by surrounding baseline disturbance, implementation of minimization measures, and BMPs. The limit of the PAA includes both terrestrial and aquatic zones of impact.

### **5.1 Terrestrial Zone of Impact**

The outer boundary of the terrestrial zone of impact is defined at the point where construction noise attenuates to ambient urban baseline levels, which, for the purpose of this report, is considered to be 65 decibels (dBA) (FTA 2006 cited in WSDOT 2015). With the loudest construction noise produced by steel pile driving (up to 110 dBA), construction noise is modeled to attenuate to urban baseline levels within a 3,000-ft radius of the project footprint (**Figure 5**). This distance is likely an overestimate, given the sound attenuation model does not include sound dampening variables like surrounding structures, baseline noise spikes in urban areas, wind, and humidity, all of which are present in the project vicinity.

## 5.1 Aquatic Zone of Impact

Pile driving is expected to elevate aquatic noise within a 22.4-ac zone in the Spokane River (**Figure 6**). In addition, intermittent and relatively small plumes of increased turbidity may result during in-water work. The maximum, worst-case estimated extent of increased sedimentation, including all aquatic areas within 300 feet downstream of in-water work, is 2.4 ac.

## 6 Occurrence of Federally Listed and Proposed Species in the Project Action Area

Species protected under the ESA that may be present within the PAA (**Table 2**) were obtained from online resources made available by the USFWS<sup>4</sup> (**Appendix C**). Not all species demonstrate a reasonable potential to occur within the PAA, so those excluded from further consideration (shaded rows in **Table 2**) are addressed in **Table 3**.

Table 2. Species and Critical Habitats Listed under the ESA as Potentially Occurring in the PAA

Listed Species Common Name ( <i>Scientific Name</i> )	ESA Status
Columbia River DPS bull trout ( <i>Salvelinus confluentus</i> )	Threatened
water howellia ( <i>Howellia aquatilis</i> )	Threatened
yellow-billed cuckoo ( <i>Coccyzus americanus</i> )	Threatened
Critical Habitat	
none	n/a

Note: species and habitats in shaded rows are removed from consideration and are discussed in **Table 3**. Species and habitats in clear rows are potentially present within the PAA and are discussed in **Section 6**.

Table 3. Species Excluded from Further Consideration

Species Excluded	Rationale
water howellia ( <i>Howellia aquatilis</i> )	No habitat suitable for water howellia is present within the project footprint, nor will this plant be otherwise impacted within the PAA.
yellow-billed cuckoo ( <i>Coccyzus americanus</i> )	No habitat suitable for yellow-billed cuckoo is present within the project footprint, nor will this plant be otherwise impacted within the PAA.

Figure 5. Project Action Area

<sup>4</sup> Official USFWS ESA list for the PAA obtained 3/25/2019 online at <http://ecos.fws.gov/ipac/>. IPaC Consultation Code: 01EWF00-2019-SLI-0731, Event Code: 01EWF00-2019-E-01518.



Figure 6. Aquatic Zone of Impact





## 7.1 Listed Species in the PAA

The species discussed in this section are those that are documented, or demonstrate the potential to occur, within the PAA.

### 7.1.1 Columbia River DPS Bull Trout

The Columbia River Distinct Population Segment bull trout (bull trout) was listed as Threatened under the Endangered Species Act (ESA) in 1998. **Only one bull trout in the Spokane River has been documented in the past 25 years** (USFWS 2013) with the single sighting made below Post Falls Dam near Sullivan Road (USFWS 2019). There have been no observations in downtown Spokane.

The nearest bull trout population to the PAA is present in the Lake Coeur D'Alene system. However, the presence of Post Falls Hydroelectric Project dams makes movement between the lake and the Spokane River difficult for downstream migration<sup>5</sup> and impossible for upstream migration since the dams are not designed with upstream passage facilities.

Summer water temperatures in the Spokane River commonly exceed 15°C, the upper preferred limit for bull trout, which precludes the river as habitat suitable for any individuals that happen to move downstream.

## 8 Impacts to Listed Species and Critical Habitats in the PAA

### 8.1 Columbia River DPS Bull Trout

#### 8.1.1 Direct Effects

##### 8.1.1.1 Displacement and Foraging Habitat Effects

In-water work has the potential to temporarily disturb and displace fish, cause physical injury, and prevent access to foraging habitat. However, it is anticipated that the disturbance of splashing and movement during in-water work will alert fish to vacate the immediate vicinity where mechanical injury might occur. As a result, the risk of direct, physical injury or mortality to bull trout is expected to be minimal.

##### 8.1.1.2 Turbidity and Noise

Pile driving and removal has the potential to release temporary plumes of turbidity. For the purpose of this report, the worst-case, maximum aquatic area exposed to temporary turbidity is 2.4 acres, not all of which will be turbid at the same time. Areas of clear water will be available for fish to move away from turbidity.

Driving of 161 24-inch diameter steel piles will generate an in-water sound peak of 207 dBA (USFWS 2013)<sup>6</sup>, sufficient to cause effects to aquatic organisms to a distance of 40 feet and physiological effects may occur to

<sup>5</sup> Fish can only pass downstream by washing over spillways or surviving a pass through generator turbine blades.

<sup>6</sup> All values in this noise section are unattenuated, derived from USFWS (2013) – Letter of Concurrence for the Sullivan Road West Bridge Replacement Project.

fish heavier than two grams to a distance of 1,788 feet<sup>7</sup>. Increased underwater sound (above 150 dBA) may also result in behavioral changes to fish within 13,061 feet of the proposed bridge during impact driving.

Due to sinuosity of the Spokane River near the project, potential behavioral modification of fish would be limited to within approximately 3,400 feet upstream and 2,200 feet downstream of pile driving (**Figure 8**).

### 8.1.2 Effects of Interrelated and Interdependent Actions

No effects to bull trout from interrelated or interdependent actions are anticipated.

### 8.1.3 Indirect Effects

Indirect effects include short-term displacement of benthic invertebrates and forage fish by 161 24-inch piles, sheet piles, and 300 linear feet of rip rap. However, disturbed areas are expected to be recolonized quickly once construction is complete.

## 9 Effect Determination

### 9.1 Columbia River DPS Bull Trout

We have determined that the project **may affect** bull trout because:

- bull trout is documented in the Spokane River,
- in-water work will occur during construction, and
- in-water sound pressure levels from driving steel piles will exceed injury and behavioral thresholds for fish.

However, the project is **not likely to adversely affect** bull trout because:

- summer temperatures in the aquatic zone of impact typically exceed 15°C during the summer,
- hydroelectric dams both upstream and downstream of the bridge are not fish-passible,
- only one bull trout has been documented in the Spokane River within the past 25 years, and thus
- the opportunity of exposing bull trout to project disturbance is discountable.

## 10 Cumulative Effects

Cumulative effects are “those effects of future state or private activities, not involving Federal activities, that are reasonably certain to occur within the action area of the federal action subject to consultation” (50 CFR 402.02).

It is the responsibility of the USFWS to review all federal actions and the cumulative effects of all state and private actions when making a jeopardy/no jeopardy call on a species and preparing their biological opinion.

The conclusions of this BA are based on direct and indirect effects and the interrelated and interdependent activities of the project, but not the cumulative effects. The possible effects in this section are provided for federal agency information only. Cumulative effects that reduce the capacity of listed species to meet their

<sup>7</sup> The conservative assumption made for the purpose of this report is that most fish near the bridge will weigh more than two grams.

biological requirements in the action area increase the risk that the effects of the proposed action on the species or its habitat will result in jeopardy.

Although the WSDOT plans on completing the North Spokane Corridor (NSC), comprised of multiple individual projects covering the remaining 3.9 miles, all work falls within the developed urban city limits of Spokane. As such, it is not anticipated that completion of the NSC will contribute toward a cumulative effect on ESA-listed species.

No other state or private actions are known that may contribute toward cumulative effect.

# 11 References

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- NPCC. 2019. Spokane River. Available online: <https://www.nwcouncil.org/reports/columbia-river-history/spokaneriver>
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- USFWS. 2018. Letter of Concurrence #01EWF00-2018-I-0502 (February 15, 2018) issued during informal consultation for potential effects to bull trout – State Route 290 East Trent Bridge Replacement Project, Spokane County.
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- WDFW. 2018. Hydraulic Project Approval for the WSDOT East Trent Bridge Project. Permit Number: 2018-1-26+01
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## Appendix A – Pre-BA Meeting Notes

**Pre-BA Notes, February 28, 2019**

**Project Name:** US 395 Spokane River Bridge (XL5855)

**Anticipated BA Submittal Date:** 5/1/2019

**AD:** 3/1/2021

**Construction Timeline:** Two seasons (5/2021 – 11-2023) – will follow in-water work guidance per WDFW.

**Project Proponent:** WSDOT. Federal nexuses are FHWA and Corps.

**Contact for requesting changes to this submittal:** Geoffrey Gray (WSDOT) grayg@wsdot.wa.gov

**Federal Action Agency:** FHWA

**Pre-BA Meeting Date:** February 28, 2019

**Pre-BA Meeting attendees:** Geoffrey Gray (SC Region biology), Dustin Vaughn (ER), Tammie Williams (Eastern Region), DeeDee Jones (WSDOT Liaison to U.S. Fish and Wildlife Service and National Marine Fisheries Service), Mark Bakeman (WSDOT HQ Fish and Wildlife)

**Project Description:** The North Spokane Corridor (NSC) is a new 10 mile long divided highway that connects Interstate 90 to US 395. Approximately 60 percent has been completed and is open to traffic. Construction for the remaining 3.9 miles has been divided into five projects, including this project calling for a new bridge over the Spokane River (the BA will only cover this bridge project).

The proposed 96-ft wide bridge will clear-span the ~190-ft wide river with footings above the OHWM. In order to construct the new bridge, a temporary work platform (TWP) will be constructed across the river on piles driven into the riverbed. No detour will be required.

The TWP will require temporary riparian vegetation impacts (0.4 ac) while the new bridge will result in permanent impacts (0.4 ac). The new bridge will increase permanent shading (~18,000 sq ft) on the water, which, for this stretch of the river that has limited riparian cover, would be a project benefit. All disturbed areas will be replanted to meet local Shoreline requirements.

The project action area (PAA) falls entirely within the urban/industrial zone of Spokane. The only listed species listed per IPaC in the action area is bull trout. *Unofficial IPaC attached.*

Two similar bridge projects have been completed in the vicinity: (1) Sullivan Road West Bridge Replacement Project (2013 consultation resulted in NLTAA call for bull trout) and (2) SR 290 East Trent Bridge Replacement Project (2018 consultation resulted in NLTAA or bull trout). *Both consultation documents attached.*

**Species Listed in the Action Area:** IPaC unofficial list dated 2/20/2019.

Species	Provisional Effect Determination/Rationale
yellow-billed cuckoo	NE (no suitable habitat present)
bull trout	NLTAA (discountable chance of exposure to disturbance)
water howellia	NE (no suitable habitat present)

## Pre-BA Meeting Notes February 28, 2019

Dustin Vaughn with Eastern Region began the discussion by describing the project. The project will build a new bridge on a new alignment over the Spokane River as part of the north Spokane corridor project. This will be part of a new 1.7 mile highway from I-90 to Spokane, although the new bridge will be the only portion of the project for this consultation. The bridge will be a pre-cast girder design with footings on the upper river banks to minimize aquatic impacts. Sheet piles may be needed to pour the footings, and a temporary work bridge will be needed for construction, supported by hollow steel piles. The pre-cast girders are not long enough to span the river so shorter girders will be used and are later tied together. The project will not affect the existing Greene Street Bridge that is just west of the new alignment.

The Spokane River has a thin band of riparian vegetation on the banks and impacts to vegetation will be minimized to the extent feasible. The project will develop a revegetation plan. Dustin had a rough estimate of about 0.5 acre of riparian impact (for both the new and temporary bridges), which will be refined as the design is developed. The team does not have information on pier protection and rip-rap use at this time. The USFWS has a limit of 0.5 acre of riparian impact for a programmatic project, but DeeDee indicated this limit is usually associated with higher quality bull trout habitat.

DeeDee Jones discussed the type of consultation – it will be informal because the presence of bull trout in the Spokane River is discountable (this was reaffirmed in an email prior to the meeting from the USFWS bull trout lead Erin Britton-Kuttel). The project will be no effect for all other USFWS species and no effect for all NMFS species.

There was discussion on whether this could be a programmatic submittal – the USFWS allows a new bridge to be covered under the programmatic provided the piers and pier protection are above the ordinary high water mark. DeeDee mentioned additional restrictions for a programmatic submittal:

- The project cannot have major indirect effects;
- The project must treat stormwater from all new pollution generating impervious surface (PGIS), and if the new PGIS is > 2 acres, then stormwater from the entire project area must be treated; and
- New PGIS cannot exceed 5 acres.

DeeDee indicated that if an individual BA is needed, then the programmatic Project Notification Form (PNF) can be filled out as a reference BA.

To determine if the project will have indirect Effects, Geoff will need to answer the questions in Chapter 10 (Indirect Effects) in the BA Manual.

There was some additional discussion on stormwater treatment; the project will collect and treat all stormwater. The amount of new PGIS is not known at this time. There was a question on how far beyond the ends of the bridge the new PGIS would extend? DeeDee said that the new PGIS should extend to the logical termini identified in the NEPA documentation.

Dustin Vaughn indicated that he may use the work from the nearby Trent Street Bridge to help estimate some of the project impacts for this project, including the dimensions of the temporary work bridge.

The review period for either an individual or programmatic submittal will be very similar – about 30 days for either, so a programmatic submittal does not save much time for this project. G. Gray indicated that the submittal will be around May 1, but that will be flexible as a NEPA reevaluation is being completed now. Project staff will be looking for a 30-day turnaround after submittal – DeeDee indicated that the team should check with the liaisons prior to submittal to check on the schedule, as the 30-day estimation is general and does not account for immediate workload.

## Appendix B – Photos

*All photos taken April 23, 2019.*

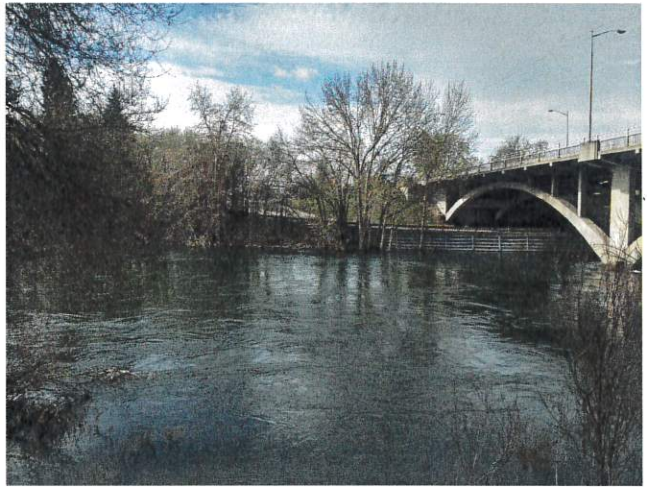
**Photo 1.**

Right bank crossing point for new bridge (view toward west).



**Photo 2.**

Left bank crossing point for new bridge (view toward south).



**Photo 3.**

Left bank crossing point for new bridge (view toward north).



**Photo 4.**

Right bank crossing point for new bridge (view toward north).



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## Appendix C – IPaC List

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## United States Department of the Interior



FISH AND WILDLIFE SERVICE  
Washington Fish And Wildlife Office  
510 Desmond Drive Se, Suite 102  
Lacey, WA 98503-1263  
Phone: (360) 753-9440 Fax: (360) 753-9405  
<http://www.fws.gov/wafwo/>

In Reply Refer To:

March 25, 2019

Consultation Code: 01EWF00-2019-SLI-0731

Event Code: 01EWF00-2019-E-01518

Project Name: Spokane River Bridge Project (XL5855)

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 enclosed species list identifies threatened, endangered, and proposed species, designated and proposed critical habitat, and candidate species 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 (Act) of 1973, as amended (16 U.S.C. 1531 et seq.).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. The species list is currently compiled at the county level. Additional information is available from the Washington Department of Fish and Wildlife, Priority Habitats and Species website: <http://wdfw.wa.gov/mapping/phs/> or at our office website: [http://www.fws.gov/wafwo/species\\_new.html](http://www.fws.gov/wafwo/species_new.html). Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, 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 enclosed list.

The purpose of the Act 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 Act 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 (or other undertakings having similar physical impacts) 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 or not the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal 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>

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.). You may visit our website at <http://www.fws.gov/pacific/eagle/for> information on disturbance or take of the species and information on how to get a permit and what current guidelines and regulations are. Some projects affecting these species may require development of an eagle conservation plan: ([http://www.fws.gov/windenergy/eagle\\_guidance.html](http://www.fws.gov/windenergy/eagle_guidance.html)). Additionally, wind energy projects should follow the wind energy guidelines (<http://www.fws.gov/windenergy/>) for minimizing impacts to migratory birds and bats.

Also be aware that all marine mammals are protected under the Marine Mammal Protection Act (MMPA). The MMPA prohibits, with certain exceptions, the "take" of marine mammals in U.S. waters and by U.S. citizens on the high seas. The importation of marine mammals and marine mammal products into the U.S. is also prohibited. More information can be found on the MMPA website: <http://www.nmfs.noaa.gov/pr/laws/mmpa/>.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. 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.

Related website:

National Marine Fisheries Service: [http://www.nwr.noaa.gov/protected\\_species/species\\_list/species\\_lists.html](http://www.nwr.noaa.gov/protected_species/species_list/species_lists.html)

Attachment(s):

- Official Species List

## 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:

**Washington Fish And Wildlife Office**

510 Desmond Drive Se, Suite 102

Lacey, WA 98503-1263

(360) 753-9440

## Project Summary

Consultation Code: 01EWF00-2019-SLI-0731

Event Code: 01EWF00-2019-E-01518

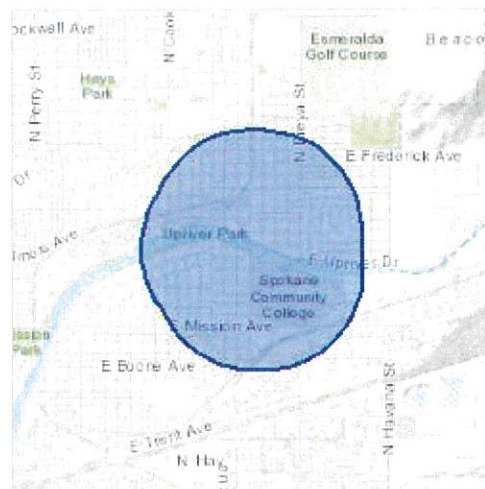
Project Name: Spokane River Bridge Project (XL5855)

Project Type: TRANSPORTATION

Project Description: Construct new bridge across the Spokane River within the city limits of Spokane.

Project Location:

Approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/place/47.67803335478137N117.36335107743632W>



Counties: Spokane, WA

## 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 Fisheries<sup>1</sup>, 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. [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.

### Birds

NAME	STATUS
Yellow-billed Cuckoo <i>Coccyzus americanus</i> Population: Western U.S. DPS There is <b>proposed</b> critical habitat for this species. Your location is outside the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/3911">https://ecos.fws.gov/ecp/species/3911</a>	Threatened

### Fishes

NAME	STATUS
Bull Trout <i>Salvelinus confluentus</i> Population: U.S.A., conterminous, lower 48 states There is <b>final</b> critical habitat for this species. Your location is outside the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/8212">https://ecos.fws.gov/ecp/species/8212</a>	Threatened

### Flowering Plants

NAME	STATUS
Water Howellia <i>Howellia aquatilis</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/7090">https://ecos.fws.gov/ecp/species/7090</a>	Threatened

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### **Critical habitats**

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