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FISH AND WILDLIFE SERVICE
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Standing Analysis for the Reissuance of National Pollutant Discharge Elimination System Permits in Montana by the Environmental Protection Agency

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1 INTRODUCTION

1.1 Purpose of a Standing Analysis

This standing analysis provides an optional, streamlined alternative consultation process for federal action agencies to address potential effects of future actions, pursuant to section 7 of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*), to the following species and critical habitat(s) (see Table 1). The U.S. Fish and Wildlife Service (Service) developed this standing analysis to streamline the process of reviewing actions that would result in a “may affect, not likely to adversely affect” (NLAA) determination for the subject species and critical habitat(s). This standing analysis also provides proactive technical assistance to federal action agencies in making a “no effect” (NE) determination.

Table 1. Species and Critical Habitats Covered in Montana

Species	Status
Black-footed Ferret (<i>Mustela nigripes</i>)	Experimental 10(j)
Canada Lynx (<i>Lynx canadensis</i>)	Threatened
Grizzly Bear (<i>Ursus arctos horribilis</i>)	Threatened
North American Wolverine (<i>Gulo gulo luscus</i>)	Threatened
Northern Long-eared Bat (<i>Myotis septentrionalis</i>)	Endangered
Piping Plover (<i>Charadrius melodus</i>)	Threatened
Rufa Red Knot (<i>Calidris canutus rufa</i>)	Threatened
Whooping Crane (<i>Grus americana</i>)	Endangered
Yellow-billed Cuckoo (<i>Coccyzus americanus</i>)	Threatened
Bull Trout (<i>Salvelinus confluentus</i>)	Threatened
Pallid Sturgeon (<i>Scaphirhynchus albus</i>)	Endangered
White Sturgeon (<i>Acipenser transmontanus</i>)	Endangered
Meltwater Lednian Stonefly (<i>Lednia tumana</i>)	Threatened
Western Glacier Stonefly (<i>Zapada glacier</i>)	Threatened
Monarch Butterfly (<i>Danaus plexippus</i>)	Proposed Threatened
Suckley’s Cuckoo Bumble Bee (<i>Bombus suckleyi</i>)	Proposed Endangered
Western Regal Fritillary (<i>Argynnis idalia occidentalis</i>)	Proposed Endangered
Spalding's Catchfly (<i>Silene spaldingii</i>)	Threatened
Ute Ladies'-tresses (<i>Spiranthes diluvialis</i>)	Threatened
Whitebark Pine (<i>Pinus albicaulis</i>)	Threatened
Critical Habitat	
Canada Lynx	
Piping Plover	
Bull Trout	

This standing analysis provides an optional consultation process that is available to federal agencies for federal actions that meet the criteria described below as delivered through a

Determination Key (DKey) in the Services Information for Planning and Consultation (IPaC) application. To obtain consultation documents, including technical assistance for NE and concurrence with NLAA determinations, federal agencies may use the associated DKey in IPaC to answer questions about the proposed action. By screening the proposed action through the DKey, the standing analysis is adopted by the federal action agency and used to submit a concurrence request to support their NLAA determination. It also provides technical information to help agencies determine whether an action will have no effect on the species or critical habitat. Formal consultation under ESA Section 7(a)(2) is required for actions that “may affect” a listed species and critical habitat, unless the Service concurs in writing that actions are “not likely to adversely affect” listed species and critical habitat. Actions that an action agency determines will have “no effect” on species or critical habitat do not require submittal to the Service.

With the IPaC DKey established for a standing analysis, the action agency may receive a letter of concurrence for eligible projects by providing specific information requested by the DKey. Throughout the remainder of this document, statements regarding this standing analysis refer to both the standing analysis and the associated DKey.

1.2 Benefits of the Standing Analysis

For those federal actions that the Service has accumulated significant knowledge in analyzing previously, the Service is able to develop a standing analysis to streamline the consultation process for eligible federal actions. The streamlined process facilitated by this standing analysis will reduce the amount of Service staff time necessary to review actions requesting consultation and provide federal agencies, consultants, and other project proponents a predictable, consistent, and timely response for qualified actions. In addition, development of a standing analysis to assess the impacts of individual projects allows the Service to more efficiently track multiple independent actions on listed species and critical habitat.

1.3 Eligibility for use of the Standing Analysis

A standing analysis does not convey concurrence with NLAA determinations for individual projects. Rather, it serves as a streamlining tool. Action agencies may use it to develop their request for concurrence from the Service and support their finding that the action is not likely to adversely affect species and critical habitat. The standing analysis also allows the Service to quickly evaluate an action agency’s analysis of effects to listed species and critical habitat. If the action agency’s proposed action is consistent with covered¹ area and covered activities, including any required conservation measures in the standing analysis, that the action will have insignificant, discountable, or completely beneficial effects on the relevant listed species and critical habitat (i.e., NLAA).

¹ The term “covered” is used throughout this document to define the limits of use of a standing analysis. However, although the area, activities, and species are “covered” by the standing analysis, the future activities themselves are not “covered” by the standing analysis; there are additional steps (with or without a DKey) that take place for an action agency to utilize the information in the standing analysis and to request FWS concurrence that their proposed action is NLAA for listed species and critical habitat.

This standing analysis is the analytical basis for the National Pollutant Discharge Elimination System (NPDES) Determination Key (DKey) available to the Environmental Protection Agency (EPA) for federal actions in Montana that meet the criteria as described below. The DKey is delivered by the Service's online Information for Planning and Consultation (IPaC) planning tool. The DKey is an optional tool developed by the Service's Montana Ecological Field Office (ESFO) to streamline the process of evaluating potential impacts associated with the reissuance of existing NPDES permits in Montana by the EPA to the species and critical habitats listed in Table 1. This standing analysis only applies to federal permitting actions on Tribal Lands in Montana that are carried out by the EPA under the NPDES program. The standing analysis may also provide technical information to help the EPA identify actions that will have no effects to listed species and critical habitat. For actions that do not qualify to use the standing analysis, the EPA should coordinate directly with the Montana Ecological Services Field Office and address any consultation requirements, as appropriate. A DKey is established for this standing analysis, and by providing specific information requested by the DKey when using IPaC, the EPA may receive a letter of concurrence for eligible actions. The Montana Ecological Services Field Office will review those actions within 14 days and will contact the EPA if it is determined that the action does not meet the criteria for NLAA determination. Throughout the remainder of this document, statements regarding this standing analysis refer to both the standing analysis and the associated DKey.

1.4 Ensuring Accurate Determinations

As is true in all consultation procedures, the Service relies on complete and accurate information provided by federal action agencies during consultation. To apply this standing analysis to a project, it is the responsibility of the EPA to provide information that is truthful and accurate and that fully represents the entire scope of the project in order to comply with the Act.

Where appropriate in our analysis, we make note of which activities are expected to have no effects² on a species or critical habitat. This information is provided as technical assistance to action agencies making no effect/may affect determinations.

1.5 Updates to the Standing Analysis

This standing analysis will be reviewed annually and updated as needed to ensure the analysis contains the best scientific and commercial data available. This update process will include regular reviews to ensure that the analysis is accurate and valid, and that the standing analysis still meets the Act's requirements. All updates will also ensure that the logic is sound and determinations are appropriate for covered activities. Updates will be signed under an updated cover.

² A "no effect" determination is appropriate when either the species is not present in the action area or is not exposed to any possible stressors or impacts from the proposed action, or the proposed action would not result in any physical, chemical, biotic changes to the environment that are reasonably certain to occur and would not occur but for the action (i.e., no action area can be defined).

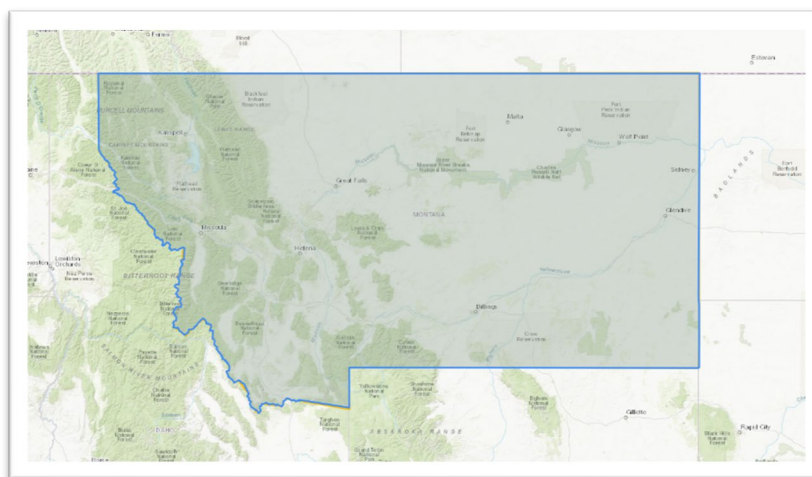
Projects reviewed under this standing analysis must rely on the version that is current on the date consultation is completed. The most current version of the standing analysis will be available through IPaC (refer to section 6). For reference, both current and previous versions of the standing analysis will be maintained by the Montana ESFO. If the standing analysis is revised and it is determined that reinitiation is required for any ongoing activities that used the previous standing analysis, the Service will contact the EPA and advise them of their need to reinitiate.

The EPA and the Service will be in regular communication and will make each other aware of any substantial changes that may warrant an update to this standing analysis. Such substantial changes could include, but are not limited to, listing of new species, designation of new critical habitat, substantial new information on existing listed species or designated critical habitats that reveal effects not considered in this standing analysis, or changes to treatment standards or technology that would substantially alter the chemistry or volume of effluent treated (refer to section 3). If either agency believes that updates are needed, they will notify the other and work cooperatively to make any needed changes.

2 COVERED AREA

This standing analysis applies within the area described below unless otherwise excluded (refer to section 3). In delineating the geographic scope of this standing analysis (i.e., coverage area), the Service determined the appropriate extent based on the species and critical habitat(s) included and the activities covered herein. To qualify to use this standing analysis, a proposed project's action area must fall completely within the covered area. The coverage area is limited to the state of Montana (Figure 1).

Figure 1. Map of the Covered Area – the State of Montana



3 COVERED ACTIVITY DESCRIPTION

The covered activities described herein include all activities addressed as such in this standing analysis. The activity description, conservation measures, and covered area inform the standing analysis and describe which specific activities are appropriate for NE or NLAA outcomes under this analysis. The description of activities and their inclusion in the standing analysis should not be construed to indicate that these activities will always result in effects to the species or critical habitat, nor is it meant to cover activities that fall outside the analysis as described below. Action agencies are not required to use this standing analysis; they continue to have the option to request individual consultation on a project; however, in most cases, we anticipate use of the standing analysis will substantially decrease consultation timeframes.

The covered activity is the reissuance of existing NPDES discharge permits by the EPA within Montana. The EPA issues NPDES discharge permits in Indian country and Lands of Exclusive Federal Jurisdiction within the state of Montana. Currently, there are 22 existing NPDES permits have been issued in the past and continue to be issued by the EPA exclusively to 22 individual facilities in Montana; 14 are Publicly Owned Treatment Works (POTWs) or similar facilities that treat domestic wastewater and the remaining 8 include two oil and gas sites, two hot springs facilities, a coal mine, a groundwater remediation site, a fish hatchery, and a confined animal feeding operation. Federal actions that have undergone section 7 consultations are considered part of the environmental baseline. Relevant to these 22 facilities, the Service has conducted previous intra-service consultations on the effects of EPA permitting these facilities. Those consultations have resulted in the Service's concurrence that the effects are *not likely to adversely affect* or there is *no effect* on the listed species in Table 1.

The covered activity can be broken down into one primary activity (1) the discharge of effluent, and two associated activities, (A) facility operations and (B) water sample collection (Table 2).

Table 2. Deconstruction of Covered Activities

Action	Activities	Potential stressors
Federal reissuance of an existing NPDES permit	Primary Activity: (1) Effluent discharge	Increase stream flow
		Change in water temperature
		Increased pollutant load
	Associated Activities: (A) Facility operations (B) Water sampling	Increase in dust
		Increase in human presence
		Increase in noise
		Increase in off-road vehicle use
		Increase in vehicle traffic
		Decrease in streambank stability and increase in water turbidity

The composition of the effluent, the effluent volume, and discharge frequency are specific to each facility. Regardless of frequency or volume, effluent is required to meet limits that protect the designated uses of the receiving water. As determined under the authority of the Clean Water Act, designated uses generally include aquatic life, recreation, and others. Facilities are required

to collect discharge samples, complete regular inspections, operations and maintenance, and perform corrective measures as part of the federal NPDES permit terms and conditions. Sample collection will primarily be the effluent samples collected from the discharge point; however, they may also include instream samples collected from a predetermined monitoring location.

3.1 Limits and Sideboards

To assist the EPA in determining whether a proposed project meets the requirements of this standing analysis, a series of questions (see Appendix A) were developed and are provided in the DKey to assess whether the action is not likely to adversely affect listed species or critical habitat because the impacts are either unable to be meaningfully measured, detected, or evaluated and, therefore, insignificant; or extremely unlikely to occur and, therefore, discountable. Any actions that are likely to adversely affect a listed species or critical habitat do not qualify under this standing analysis and require separate individual project review and consultation by Montana ESFO.

The EPA currently issues 22 NPDES permits to individual facilities in Montana; therefore, the reissuance of existing permits that are expected to be covered under this standing analysis are expected to be limited to only these existing facilities. Excluded actions (see below), “may affect” determinations, and/or actions that occur outside of the covered area will not be eligible to use this standing analysis. Therefore, the action agency or project proponent must contact Montana ESFO directly to complete their consultation requirements.

Exclusions

To receive the Services technical assistance acknowledgment of the EPA’s NE determination or the Service’s concurrence for an NLAA determination, based on this standing analysis, actions and activities may not include the following:

- Any NPDES permit not issued by the EPA.
- Any first issuance of a federally issued NPDES permit for that specific facility, unless agreed upon with a contaminant specialist from the Montana ESFO.
- Any federally issued NPDES permit renewal that includes construction activities from the previous permit cycle that may affect listed species or designated critical habitat, unless agreed upon with the contaminant specialist from the Montana ESFO.
- Any federally issued NPDES permit renewal that includes substantial changes to the effluent chemistry from the previous permit cycle, unless agreed upon with a contaminant specialist from the Montana ESFO.
- Any federally issued NPDES permit renewal with an IPaC species list that has changed from the previous permit cycle, unless agreed upon with a contaminant specialist from the Montana ESFO.

4 COVERED SPECIES AND CRITICAL HABITAT

The following section includes a summary of relevant background information on the species and critical habitat(s) used to develop this standing analysis. A complete description of species can be found on the Services website (www.fws.gov/species). This overview is included to inform the reader of the species prior to the analysis of the effects of the action presented below.

Species and critical habitat(s) within a project's action area that may be affected by the proposed action, but are not covered by this standing analysis, will require individual consultation with the Montana ESFO.

Federal action agencies are not required to consult on effects on a population designated under section 10(j) of the Act as a Non-essential Experimental Population (NEP) from proposed actions, except: 1) when proposed on National Wildlife Refuge System or National Park System lands, where NEPs are treated as threatened species, or 2) when the proposed action could jeopardize the continued existence of the NEP species. Because NEPs are, by definition, not essential to the continued existence of the species, effects of proposed actions affecting a NEP will generally not rise to the level of jeopardizing the continued existence of the species. Therefore, NEPs are not covered by this DKey.

Black-footed Ferret

The black-footed ferret was listed as endangered on June 2, 1970 (35 FR 8491). The four primary stressors to black-footed ferrets are disease, drought, declining genetic fitness including increased inbreeding and a reduction in genetic diversity, and prairie dog poisoning and shooting. Black-footed ferrets inhabit the intermountain prairies and grasslands and are primarily influenced by the presence of prairie dogs over vegetation composition. The most up to date information on the current condition and threats to the species can be found at <https://www.fws.gov/species/black-footed-ferret-mustela-nigripes>

Canada Lynx

Ecological and management differences between the southern habitats in the contiguous United States and those in Canada and Alaska lead the U.S. Fish and Wildlife Service to designate lynx in the contiguous United States as a distinct population segment (DPS) and listed it as threatened under the Endangered Species Act in 2000, primarily due to inadequate regulatory mechanisms on some Federal lands at that time (March 24, 2000; 65 FR 16052). Since then, U.S. Forest Service and Bureau of Land Management have implemented science-based conservation measures, substantially reducing this regulatory threat. However, global climate change now poses the greatest challenge to lynx conservation, as warming temperatures, reduced snow cover, increased wildfire, and forest insect activity are projected to degrade habitat quality and connectivity, leading to smaller, more isolated populations. Despite ongoing recovery efforts, the long-term viability of lynx in the contiguous United States remains highly vulnerable to climate-driven habitat loss. The threats may be exacerbated by other factors capable of exerting population-level influences on DPS populations, including vegetation management, wildland fire management, and habitat loss and fragmentation. The distribution of Canada lynx in North America is closely associated with the distribution of North American boreal forest. Canada lynx are most likely to persist in areas that receive deep snow and have high-density populations of snowshoe hares (*Lepus americanus*).

Canada Lynx Designated Critical Habitat

The Primary Constituent Elements (PCEs) identified as Canada lynx critical habitat comprise the features of boreal forest landscapes that support a mosaic of differing successional forest stages and containing:

- a. Presence of snowshoe hares and their preferred habitat conditions, which include dense understories of young trees, shrubs or overhanging boughs that protrude above the snow, and mature multi-storied stands with conifer boughs touching the snow surface.
- b. Winter snow conditions that are generally deep and fluffy for extended periods of time.
- c. Sites for denning that have abundant coarse woody debris, such as downed trees and root wads.
- d. Matrix habitat (e.g., hardwood forest, dry forest, non-forest, or other habitat types that do not support snowshoe hares) that occurs between patches of boreal forest in close juxtaposition (at the scale of a Canada lynx home range) such that Canada lynx are likely to travel through such habitat while accessing patches of boreal forest within a home range.

The most up to date information on the current condition and threats to the species can be found at <https://www.fws.gov/species/canada-lynx-lynx-canadensis>

Grizzly Bear

In the contiguous United States grizzly bears were listed as threatened on July 28, 1975 (40 FR 3173). The six ecosystems in the contiguous United States where grizzly bears occur are in mountainous ecoregions that provide the habitat heterogeneity necessary for adequate food, denning, and cover resources. Because there are limited opportunities to increase or control these habitat components, the objective is to reduce or mitigate the risk of human-caused mortality and displacement. An effective habitat management tool for reducing grizzly bear mortality risk on public lands is managing motorized access to ameliorate the impacts of human interaction, mortality risk, and habitat displacement. The most up to date information on the current condition and threats to the species can be found at <https://www.fws.gov/species/grizzly-bear-ursus-arctos-horribilis>

North American Wolverine

The North American wolverine, listed as threatened on November 30, 2023 (88 FR 83726), is a snow-adapted animal with expansive territories and habitat needs characterized by the presence of persistent spring snow for survival and reproduction. Warming temperatures and the loss of snowpack was identified as the most significant stressor to the North American wolverine. The most up to date information on the current condition and threats to the species can be found at <https://www.fws.gov/species/north-american-wolverine-gulo-gulo-luscus>

Northern Long-eared Bat

The northern long-eared bat was listed as threatened on April 2, 2015, and uplisted to endangered on November 29, 2022. After a delay to finalize conservation tools and guidance, the listing was made effective on March 31, 2023 (88 FR 4908). While white-nose syndrome, a fungal disease known to affect bats, is currently the predominant threat to this bat, other sources of mortality (wind energy-related, summer and winter habitat loss, winter habitat disturbance, and climate change) are important factors to address until ways to prevent or treat white-nose syndrome are found. This bat has a diverse diet that includes caddisflies, which have an aquatic larval life-stage. They use forested areas for roosting, foraging, and commuting between summer and winter habitat. The most up to date information on the current condition and threats to the species can be found at <https://www.fws.gov/species/northern-long-eared-bat-myotis->

Piping Plover

The Northern Great Plains piping plover population was listed as threatened on December 11, 1985 (50 FR 50626). This population of piping plovers' nest on the unvegetated shorelines of alkaline lakes, reservoirs, or river sandbars and forage on a variety of invertebrates from the substrate. Destruction and modification of reservoirs, channelization and modification of rivers, agricultural development, insecticides, and increase in invasive species have negative impacts to piping plovers.

Piping Plover Designated Critical Habitat

Four specific geographic areas, recognized as providing critically important habitat and identified as essential for the conservation of the species, have been designated as "Critical Habitat Units" in Montana. The four units include prairie alkali wetlands and surrounding shoreline, river channels and associated sandbars and islands, and reservoirs and inland lakes with associated shorelines, peninsulas, and islands. Piping plovers rely on these places for courtship, nesting, foraging, and brood rearing. The greatest threat to nesting plovers is the loss of nesting sites by high water levels at any time of the year, but especially during the nesting season. Rising water levels later in the nesting season result in decreasing overall island size and may assist avian predators to locate nests more easily.

The Primary Constituent Elements (PCEs) identified as piping plover critical habitat are those physical and biological components essential for their biological needs. The overarching primary biological PCE that must be present in all areas is the *dynamic ecological processes* that create and maintain piping plover habitat. This **biological primary constituent element** (the dynamic ecological processes) creates different physical primary constituent elements on the landscape. These **physical primary constituent elements** exist in different habitat types found in the northern Great Plains, including mixosaline to hypersaline wetlands and are described as follows:

- 1) Prairie alkali lakes and wetlands:
 - a) Shallow, seasonally to permanently flooded, mixosaline to hypersaline wetlands with sandy to gravelly, sparsely vegetated beaches, salt-encrusted mud flats, and/or gravelly salt flats,
 - b) springs and fens along edges of alkali lakes and wetlands; and
 - c) adjacent uplands 200 ft (61 m) above the high-water mark of the alkali lake or wetland.
- 2) Rivers: sparsely vegetated channel sandbars, sand and gravel beaches on islands, temporary pools on sandbars and islands, and the interface with the river.
- 3) Reservoirs: sparsely vegetated shoreline beaches, peninsulas, islands composed of sand, gravel, or shale, and their interface with the water bodies.
- 4) Inland Lakes: sparsely vegetated and windswept sandy to gravelly islands, beaches, and peninsulas, and their interface with the water body.

The most up to date information on the current condition and threats to the species can be found at <https://www.fws.gov/species/piping-plover-charadrius-melodus>

Rufa Red Knot

The rufa red knot was listed as a threatened species on December 11, 2014 (79 FR 73705). It is a migratory shorebird that breeds in the Canadian Arctic and winters in parts of the United States, the Caribbean, and South America. The species primarily uses well-known spring and fall stopover areas on the Atlantic coast of the United States, although some follow a midcontinental migratory route. Rufa red knots may use inland saline lakes as stopover habitat in the Northern Great Plains and small numbers may sometimes use manmade freshwater habitats (e.g., impoundments) along inland migration routes. The most up to date information on the current condition and threats to the species can be found at <https://www.fws.gov/species/rufa-red-knot-calidris-canutus-rufa>

Whooping Crane

Whooping cranes were listed as endangered on March 11, 1967 (32 FR 4001) and are a rare migrant in Montana. Historically the species was hunted to near extinction for its feathers. Current populations are low but stable and recovery efforts are ongoing. The whooping crane breeds, migrates, winters and forages in a variety of habitats, including coastal marshes and estuaries, inland marshes, lakes, open ponds, shallow bays, salt marsh and sand or tidal flats, upland swales, wet meadows and rivers, pastures, and agricultural fields. Whooping cranes face ongoing threats due to potential habitat loss from a warming climate and exposure to agricultural chemicals. The loss of wetlands to cropland conversion, urbanization, roads and powerlines, and wind farms, are significant negative impacts to the whooping crane migratory corridor. Decreases in river flows have degraded riverine migration habitat and development is encroaching on winter salt marsh habitat. The most up to date information on the current condition and threats to the species can be found at <https://www.fws.gov/species/whooping-crane-grus-americanus>

Yellow-billed Cuckoo

The western distinct population segment of the yellow-billed cuckoo was listed as threatened on October 3, 2014 (79 FR 59992). Yellow-billed cuckoos use wooded habitat with dense cover and water nearby, including woodlands with low, scrubby, vegetation, overgrown orchards, abandoned farmland and dense thickets along streams and marshes. However, in the west, much of the riparian habitat that is preferred by the species has been converted to farmland and housing. As long-distance, nocturnal migrants, yellow-billed cuckoos are also vulnerable to collisions with tall buildings, cell towers, radio antennas, wind turbines and other structures. The most up to date information on the current condition and threats to the species can be found at <https://www.fws.gov/species/yellow-billed-cuckoo-coccyzus-americanus>

Bull Trout

Bull trout is species of char in the family Salmonidae (U.S. Fish and Wildlife Service 2024). Bull trout were listed as threatened in the coterminous United States on November 1, 1999 (64 FR 58910), and are native to Washington, Oregon, Idaho, Nevada, and Montana. Bull trout exist as both smaller resident and larger migratory forms with some migratory individuals reaching 40 inches in length and weighing more than 30 pounds. Compared to other salmonids, bull trout have specific habitat requirements that appear to influence their distribution and abundance. Bull trout require cold water (less than 59 degrees F [15 degrees C]), complex habitat (e.g., large-woody debris, boulder/cobble/gravel substrates, groundwater exchange), and connected systems

of waterways to support migration and genetic exchange. Because they need cold water to survive, they are seldom found in waters where temperatures exceed 59 to 64 degrees F. They also require stable stream channels, clean spawning and rearing gravel, complex and diverse cover, and unblocked migratory corridors.

The 2015 recovery plan for bull trout identifies six proposed recovery units within the listed range of the species (U.S. Fish and Wildlife Service 2015). Each of the recovery units are further organized into multiple bull trout core areas, which are mapped as non-overlapping watershed-based polygons, and each core area includes one or more local populations. Within the coterminous United States, we currently recognize 109 occupied core areas, which comprise 600 or more local populations of bull trout (Ibid). Core areas are functionally similar to bull trout metapopulations, in that bull trout within a core area are much more likely to interact, both spatially and temporally, than are bull trout from separate core areas. The Service has also identified a number of marine or mainstem riverine habitat areas outside of bull trout core areas that provide foraging, migration, and overwintering (FMO) habitat that may be shared by bull trout originating from multiple core areas. These shared FMO areas support the viability of bull trout populations by contributing to successful overwintering survival and dispersal among core areas (Ibid).

The primary threats to bull trout are habitat degradation, migration barriers, non-native fish species, warming water temperatures, and alterations in water flow. However, since the listing of bull trout, there has been very little change in the general distribution of bull trout in the coterminous United States, and we are not aware that any known, occupied bull trout core areas have been extirpated (Ibid).

For a more detailed account of bull trout biology, life history, threats, demography, and conservation needs, see the bull trout recovery plan (U.S. Fish and Wildlife Service 2015) and Species Status Assessment (U.S. Fish and Wildlife Service 2024).

Bull Trout Designated Critical Habitat

On October 18, 2010, the Service issued a final revised critical habitat designation for bull trout (75 FR 63898; Service 2010). The critical habitat designation includes 32 critical habitat units in six recovery units located throughout the coterminous range of the bull trout in Washington, Oregon, Idaho, Montana, and Nevada. Designated bull trout critical habitat is of two primary use types: (1) spawning and rearing, and (2) foraging, migratory, and overwintering habitat. The conservation role of bull trout critical habitat supports viable core area populations (75 FR 63943; Service 2010). Critical habitat units generally encompass one or more core areas and may include foraging, migrating, and overwintering areas, outside of core areas, that are important to the survival and recovery of bull trout.

The final rule excludes some critical habitat segments. Critical habitat does not include: (1) waters adjacent to non-federal lands covered by legally operative incidental take permits for Habitat Conservation Plans issued under the Act, in which bull trout is a covered species on or before the publication of the final rule; (2) waters within or adjacent to Tribal lands subject to

certain commitments to conserve bull trout or a conservation program that provides aquatic resource protection and restoration through collaborative efforts, and where the Tribes indicated that inclusion would impair their relationship with the Service; or, (3) waters where impacts to National security have been identified (75 FR 63898; Service 2010).

Bull trout have more specific habitat requirements than most other salmonids (Service 2010). The predominant habitat components influencing their distribution and abundance include water temperature, cover, channel form and stability, spawning and rearing substrate conditions, and migratory corridors. The PCEs of bull trout critical habitat, as revised in 2010, are (Service 2010):

1. Springs, seeps, groundwater sources, and subsurface water connectivity (i.e., water quality, quantity, and thermal refugia).
2. Migration habitats with minimal physical, biological, or water quality impediments between spawning, rearing, overwintering.
3. An abundant food base, including terrestrial organisms of riparian origin, aquatic macroinvertebrates, and forage fish.
4. Complex river, stream, lake, and reservoir including the processes that establish and maintain these aquatic environments to provide a variety of depths, gradients, velocities, and structure.
5. Water temperatures ranging from 2 °Celsius (C) to 15 °C (36 °F to 59 °F), with adequate thermal refugia available for temperatures that exceed the upper end of this range.
6. Sufficient substrate in spawning and rearing areas.
7. A natural hydrograph with base flows within, or have minimal departure from, a natural hydrograph.
8. Water quality and quantity where normal reproduction, growth, and survival are not inhibited.
9. Sufficiently low levels of occurrence of non-native predatory, interbreeding, or competing species.

The most up to date information on the current condition and threats to the species can be found at <https://www.fws.gov/species/bull-trout-salvelinus-confluentus>

Pallid Sturgeon

The pallid sturgeon was listed as endangered on September 6, 1990 (55 FR 36641). Pallid sturgeon occur in the Missouri and Yellowstone Rivers; however, they are scarce in the upper Missouri River above the Fort Peck Reservoir and the lower Yellowstone River between Fort Peck Dam and Lake Sakakawea in North Dakota. They are also rare in the other Missouri River reservoir reaches. They primarily utilize main channel, secondary channel, and channel border habitats throughout their range. Threats to the species primarily stem from habitat alterations resulting from dam construction, river channelization, and navigation maintenance along major waterways. These modifications detrimentally impact spawning grounds, diminish food availability or accessibility, and impede the pallid sturgeon's movement within river systems. Water pollution stemming from rural and urban development along riverbanks further compounds threats to pallid sturgeon populations. A more recent concern with potential implications for the species' future is the phenomenon of hybridization with shovelnose sturgeon.

The most up to date information on the current condition and threats to the species can be found at <https://www.fws.gov/species/pallid-sturgeon-scaphirhynchus-albus>

White Sturgeon

The Kootenai River white sturgeon is a land-locked population of white sturgeon known to occur in Idaho, Montana, and British Columbia, Canada. They were listed as endangered on September 6, 1994 (59 FR 45989). This population of white sturgeon is restricted to approximately 168 river miles of the Kootenai River from the Kootenai Falls, Montana to the Corra Linn Dam in British Columbia, Canada and migrate within this restricted portion of the Kootenai River system. The primary threats to the Kootenai River white sturgeon are dam operations that have altered river flow, temperature, and flood events necessary for successful reproduction and recruitment. Other impacts include habitat fragmentation, altered nutrients, and water quality. The most up to date information on the current condition and threats to the species can be found at <https://www.fws.gov/species/white-sturgeon-acipenser-transmontanus>

Meltwater Lednian Stonefly

The meltwater lednian stonefly was listed as threatened on November 21, 2019 (84 FR 64210). This aquatic stonefly species can be found in alpine streams and springs in Montana and Canada. The most significant threat to the meltwater lednian stonefly is habitat destruction from the loss of alpine glaciers and snowfields linked to climate change. The most up to date information on the current condition and threats to the species can be found at <https://www.fws.gov/species/meltwater-lednian-stonefly-lednia-tumana>

Western Glacier Stonefly

The western glacier stonefly was listed as threatened on November 21, 2019 (84 FR 64210). This aquatic stonefly species can be found in alpine streams and springs in Montana and Wyoming. The most significant threat to the western glacier stonefly is habitat destruction from the loss of alpine glaciers and snowfields linked to climate change. The most up to date information on the current condition and threats to the species can be found at <https://www.fws.gov/species/western-glacier-stonefly-zapada-glacier>

Monarch Butterfly

The monarch butterfly was proposed for listing as a threatened species on December 12, 2024 (89 FR 100662). North American migratory monarchs are divided into eastern and western populations, with the Rocky Mountains dividing these two populations and limiting their contact. The western North American migratory monarch population is generally found west of the Rocky Mountains, and can annually migrate 300 to 1,000 miles. The most significant threats to monarch butterflies are the availability of milkweed plants for both food and reproduction, as well as other nectar resources during breeding and migration, overwintering habitat, insecticides, and climate change. The most up to date information on the status and threats to the species can be found at <https://www.fws.gov/species/monarch-danaus-plexippus>

Suckley's Cuckoo Bumble Bee

The Suckley's cuckoo bumble bee was proposed for listing as an endangered species on December 17, 2024 (89 FR 102074). This bumble bee species is an obligate social parasite that lacks the mechanism to carry pollen and are unable to produce worker bees and therefore is

entirely dependent on social bumble bee hosts to collect pollen to rear their young. The most significant threats to Suckley's cuckoo bumble bee are from host species decline, pathogens, pesticides, habitat fragmentation and conversion, and climate change. The most up to date information on the status and threats to the species can be found at

<https://www.fws.gov/species/suckley-cuckoo-bumble-bee-bombus-suckleyi>

Western Regal Fritillary

This regal fritillary subspecies was proposed for listing as a threatened species on August 6, 2024 (89 FR 63888). Western regal fritillary subspecies is a large butterfly found in the native grasslands of the central and northern Great Plains and portions of the Midwest. The drivers for the western regal fritillary subspecies are landscape-level, and dependent on a shifting mosaic of suitable habitat resulting from periodic grassland disturbances; grassland conversion, herbicide application, climate change factors, particularly drought, invasive grasses and woody encroachment (succession), and periodic disturbances from fire, haying, and grazing. The most up to date information on the status and threats to the species can be found at

<https://www.fws.gov/species/regal-fritillary-speyeria-idalia>

Spalding's Catchfly

Spalding's catchfly was listed as a threatened species on October 10, 2001 (66 FR 51597). This species is an herbaceous perennial endemic to the Palouse region of southeast Washington and adjacent Oregon and Idaho, and is disjunct in northwestern Montana and British Columbia, Canada. The species is found predominantly in the Pacific Northwest bunchgrass grasslands and sagebrush-steppe, and occasionally in open-canopy pine stands. Spalding's catchfly reproduces solely by seed as it lacks rhizomes or other means of reproducing vegetatively. Habitat loss and degradation have resulted in populations becoming fragmented and isolated, primarily due to agriculture, urban development, invasive species, herbicides, altered fire regimes, and prolonged drought. The most up to date information on the current condition and threats to the species can be found at <https://www.fws.gov/species/spaldings-catchfly-silene-spaldingii>.

Ute Ladies'-tresses

Ute ladies'-tresses was listed as a threatened species on January 17, 1992 (57 FR 2048), and occurs in Colorado, Idaho, Montana, Nebraska, Nevada, Utah, Washington, and Wyoming. The species can be found in moist meadows, seasonally flooded river terraces, sub-irrigated or spring-fed abandoned stream channels and valleys, and lakeshores. They also have been discovered along irrigation canals, berms, levees, irrigated meadows, excavated gravel pits, roadside borrow pits, reservoirs, and other human-modified wetlands. Over one-third of all known Ute ladies'-tresses populations are found on alluvial banks, point bars, floodplains, or oxbows associated with perennial streams. The primary threats to this orchid species include habitat loss and degradation from agriculture, urbanization, and water development, as well as competition from invasive plants, disruption of natural hydrologic cycles by dams and irrigation, and direct impacts from recreation, grazing, and mowing during the flowering and seed-setting period. Other stressors are reduced pollinator populations, herbicide use, and drought. The most up to date information on the current condition and threats to the species can be found at

<https://www.fws.gov/species/ute-ladies-tresses-spiranthes-diluvialis>.

Whitebark Pine

Whitebark pine was listed as threatened on December 15, 2022 (87 FR 76882). The species is a high-elevation tree species found across western North America, typically found growing at subalpine treeline or with other high-mountain conifers below the treeline, subalpine zone. Whitebark pine is almost exclusively dependent upon Clark's nutcracker (*Nucifraga columbiana*) for seed dispersal. The primary threats to whitebark pine are white pine blister rust, mountain pine beetle, altered fire regimes, and climate change. The most up to date information on the current condition and threats to the species can be found at <https://www.fws.gov/species/whitebark-pine-pinus-albicaulis>

5 EFFECTS OF COVERED ACTIVITIES

This section covers the effects of the anticipated activities covered in this standing analysis to the covered species and critical habitat (above). Where appropriate in our analysis, we make note of which activities are expected to have no effect on a species and critical habitat. This information is provided as helpful technical assistance to those who may be unfamiliar with the species and activities and can be incorporated by reference by the EPA when making an NE determination.

Effects of the action refers to the direct and indirect effects of an action (on the species or critical habitat) together with the effects of other activities that are interrelated or interdependent with that action, that will be added to the environmental baseline. The environmental baseline includes the past and present impacts of all Federal, State, or private actions and other human activities in the action area, the anticipated impacts of all proposed Federal projects in the action area that have already undergone formal or early section 7 consultation, and the impact of State or private actions which are contemporaneous with the consultation in process. Indirect effects are those that are caused by the proposed action and are later in time but still are reasonably certain to occur. Interrelated actions are those that are part of a larger action and depend on the larger action for their justification. Interdependent actions are those that have no independent utility apart from the action under consideration (50 CFR 402.02).

A project's action area must include all areas affected (i.e., modifications to land, air, or water) by the proposed action, and not merely the immediate area involved in the action. To qualify for use of this standing analysis, a project's action area must be wholly encompassed by the coverage area for this standing analysis, as described above, and all activities within the proposed action must fit within the scope of this standing analysis. Qualifying actions typically involve one or more of the stressors addressed below.

Potential impacts associated with the federal reissuance of a NPDES permit by the EPA include the discharge of effluent, facility operations, and water sample collection. Federally reissued NPDES discharge permits by the EPA are only an authorization to discharge treated wastewater and are not an authorization for other activities (e.g., construction related activities).

Effects to Terrestrial, Avian, and Plant Species, and their Designated Critical Habitats

The potential stressors associated with operations and water sampling activities (Table 2) at each of the existing facilities are expected to be negligible and therefore result in no effects to non-aquatic species. General facility operations might produce small amounts of dust, will have the presence of humans, produce some level of noise, and have a low level of vehicular traffic. Each of these facilities are small with a low number of staff for operations, and associated vehicular traffic would be limited to existing roadways by a limited number of staff. Any off-road vehicle use, which could be utilized for water sample collection, could result in an increase in dust, ruts, soil compaction, and a decrease in vegetation within the existing boundary of facility operations. However, effects of the proposed NPDES permitted action are more likely to be associated with aquatic species, therefore any effects to entirely non-aquatic species are not anticipated. Furthermore, discharges that meet EPA permitted limitations, and the Confederated Salish and Kootenai Tribes standards (in the Flathead River Drainage), are not expected to have significant impacts on water quality in the receiving waters. Therefore, discharges from existing permitted facilities are not anticipated to cause any effects to receiving waters that will impact non-aquatic species. Some non-aquatic species may use receiving waters for short periods of time throughout any given year. However, due to permit limitations, significant changes in water quality are not anticipated.

To receive the Services technical assistance acknowledgment of the EPA's NE determination for non-aquatic species through the DKey, first issuance of a NPDES permit by the EPA or EPA NPDES reissuance permits that include substantive changes to effluent chemistry must be first approved by the MTFO contaminants specialist (see *exclusions* section on page 8). Therefore, unless new major construction or facility modifications are planned for a new or previously permitted facility, no effects of effluent discharge on non-aquatic species are anticipated.

Effects to Aquatic Species

Bull Trout

As an aquatic species, bull trout may be exposed to effluent from the proposed federal action. However, the exposure risk is minimal due to the stringent effluent limits included in EPA-issued NPDES permits. The effluent limits are derived to be protective of the receiving waters and aquatic species.

There are 5 facilities that discharge to waters that contain bull trout habitat or are upstream of bull trout habitat:

- 3 POTWs, or similar facilities, that treat domestic sewage (City of Polson, St. Ignatius-Southside, and Flathead Lake Biological Station)
- Fish hatchery (Jocko River Trout Hatchery)
- Groundwater remediation site (Keller Transport Spill Site)

None of these sites discharge to spawning and rearing (SR) habitat. Therefore, any exposure should be limited to adult and juvenile bull trout life stages in foraging, migration, overwintering (FMO) habitats.

Primary Activity: 1. Discharge of Effluent

Stream Flow

Bull trout need stable and persistent flows throughout the development of the egg and alevin life stages. Stream flow amounts and timing are influenced by geomorphic complexity of the streambed, surface water/groundwater interaction, hydrograph dynamics, watershed condition, and road densities. Spawning areas are often associated with cold-water springs, glacial and snow melt, or groundwater upwelling (Rieman *et al.* 1997, p. 1121). Effluent discharged from wastewater treatment facilities would contribute to existing stream flow in downstream receiving waters. The amount varies based on whether the facilities discharge continuously (3 of 5 facilities) or intermittently (2 of 5 facilities) and is a factor of the size of the receiving water. Two of the facilities (i.e., Keller Transport Spill Site and Flathead Lake Biological Station) discharge small volumes to Flathead Lake and will have a negligible effect on receiving water flows due to the dilution ratio, and the 3 remaining facilities discharge to lotic waters. One of the facilities that discharge to lotic waters (St. Ignatius-Southside), the receiving stream does not have bull trout habitat, therefore effects downstream of discharge would be insignificant due to the size of receiving waters and dilution. The City of Polson POTW discharges to the Flathead River immediately below the outlet of Flathead Lake. Due to the size of the receiving water, effluent flows from the City of Polson POTW will have a negligible effect on stream flow. The Jocko River Trout Hatchery discharges to a holding pond then to the Jocko River, which has an average flow of approximately 136 cubic feet per second (cfs), as reported at a water quality sampling station (JCK-JKC4059) upstream of the Jocko River Trout Hatchery outfall. The outfall discharges at an average rate of 7 cfs, which represents approximately 1:18 ratio of effluent to stream flow and represents a negligible contribution of stream flow fluctuations. Overall, the discharges would contribute flows to receiving water bodies, however the increases are expected to have insignificant effects to this species.

Water Temperature

Bull trout have low tolerance for warm water temperatures, especially in SR habitat. Thermal tolerances are narrowest during egg incubation, when warm water reduces egg survival rates and size at hatching. Optimum water temperatures for juvenile rearing are about 7 to 8 °C (44 to 46 °F) and optimum water temperatures for egg incubation are 2 to 4 °C (35 to 39 °F) (Goetz 1989, pp. 22–32).

Similar to the discussion on flow contributions, effluent from wastewater treatment facilities will have an insignificant effect on the water temperature of bull trout habitat. All 5 facilities that discharge in or near bull trout habitat (as described above) are subject to the Confederated Salish and Kootenai Tribes' (CSKT) water quality standards. These CSKT standards only allow discharges to cause a 1° Fahrenheit or less increase in stream temperatures for all streams that support salmonids. Additionally, discharge volume, discharge frequency, and the size of the receiving water with bull trout habitat are all factors that will mitigate effluent temperature effects to receiving water. Two facilities (Keller Transport Spill Site and Flathead Lake Biological Station) discharge to Flathead Lake, and the City of Polson POTW discharges to the Flathead River, immediately below Flathead Lake. These discharges will have minimal effect on receiving water temperature based on the receiving water size and dilution. St. Ignatius-Southside discharges to a smaller tributary that is upstream of bull trout habitat. The Jocko River Trout Hatchery that discharges water that should be comparable in temperature to the receiving water due to water usage and treatment occurring outdoors. None of these facilities discharge

into SR habitat, where the most sensitive life stages occur. Therefore, these facilities will have negligible impact on water temperatures in FMO habitat with little to no exposure to SR habitat.

Treated Wastewater

Bull trout need clean water over extended timeframes during development of early life stages. When fine sediments enter streams, they can accumulate within spawning gravels and reduce survival of eggs and embryos by impairing their access to oxygenated water, as well as negatively affecting juveniles and adults by interfering with foraging, clogging gills, physically abrading tissues, and disrupting orientation and movement patterns (Pratt 1992, pp. 5–6). Accumulation of sediment can degrade stream structure by filling in pools and changing substrate composition rendering it useless for bull trout of various life stages.

Streams receiving effluent from a wastewater treatment facility will see an increase in constituents associated with the effluent. The constituents in the effluent are strictly limited by the permit with allowable concentrations, or effluent limits, that are either water quality- or technology-based. The water quality-based effluent limits are established to be protective of aquatic life, including bull trout, while the technology-based limits are based on the most current feasible treatment technologies. The permit implements the more stringent of the water quality - and technology-based effluent limits. Furthermore, water quality-based effluent limits are calculated so they can be met at low flow (i.e., critical) conditions. Therefore, the constituents from the wastewater treatment plant effluent will likely be at levels that would not result in an adverse effect on bull trout.

Effluent contributions to bull trout habitat are anticipated to have an insignificant effect to bull trout and their habitat for the same reasons as discussed above. Two of the existing facilities (Keller Transport Spill Site and Flathead Lake Biological Station) discharge to Flathead Lake and City of Polson POTW discharges to the Flathead River, immediately below Flathead Lake. These discharges will have minimal effect on receiving water quality based on the receiving water size and dilution. St. Ignatius-Southside discharges to a smaller tributary that is upstream of bull trout habitat. And the Jocko River Trout Hatchery discharges water after sitting in a holding pond. Toxic pollutants such as ammonia in the trout hatchery effluent are at levels that are protective of salmonids and within normal background levels. None of these facilities discharge into SR habitat, where the most sensitive life stages occur. Therefore, these facilities will have negligible impact in FMO habitat with little to no exposure to SR habitat.

Associated Activities: A) Facility Operations, and B) Water Sample Collection

Dust

Wastewater treatment facilities that intersect bull trout habitat may contribute dust. The dust contributed by the wastewater treatment facility is from general facility operation and is likely to be a negligible amount. The facilities that are adjacent to potential bull trout habitat (City of Polson, Flathead Lake Biological Station, Jocko River Trout Hatchery, Keller Transport Spill Site) are small and not likely to produce sufficient dust to result in adverse effects to bull trout.

Human Presence

Wastewater treatment facilities that intersect bull trout habitat (City of Polson, Flathead Lake Biological Station, Jocko River Trout Hatchery, Keller Transport Spill Site) are likely to have an

increase in human presence. The increase in human presence associated with the wastewater treatment facility is from general facility operation. However, each of these facilities are small and the staff to operate them would be limited. The increase in human presence is not anticipated to have an adverse effect on bull trout.

Noise

Wastewater treatment facilities that intersect bull trout habitat (City of Polson, Flathead Lake Biological Station, Jocko River Trout Hatchery, Keller Transport Spill Site) are likely to contribute noise. The noise contributed by the wastewater treatment facility is from general facility operation. However, each of these facilities are small and the noise associated with operation would be limited. The increase in noise is not anticipated to have an adverse effect on bull trout.

Vehicle Traffic

Wastewater treatment facilities that intersect bull trout habitat (City of Polson, Flathead Lake Biological Station, Jocko River Trout Hatchery, Keller Transport Spill Site) are likely to have an increase in vehicle traffic. The increase in vehicle traffic is from the employees working at the facilities. However, each of these facilities are small and the staff to operate them would be limited. The increase in vehicle traffic is not anticipated to have an adverse effect on bull trout.

Off-road Vehicle Use

Wastewater treatment facilities that intersect bull trout habitat may have an increase in off-road vehicle use. The increase in off-road vehicle use would be associated with sample collection and general facility maintenance and could result in an increase in ruts, soil compaction, and a decrease in vegetation. The only facility that intersects bull trout habitat *and* has an instream monitoring requirement is the Jocko River Trout Hatchery. The Jocko River Trout Hatchery requires temperature and pH to be measured quarterly, and nutrient levels to be measured annually in July, August, and September. The instream monitoring location for Jocko River Trout Hatchery is adjacent to the facility and does not require an off-road vehicle. As a result, impacts associated with off-road vehicle use are not anticipated and impacts to bull trout would be insignificant.

Streambank Stability and Water Turbidity

Wastewater treatment facilities that intersect bull trout habitat may have a decrease in streambank stability and an increase in water turbidity associated with receiving water monitoring. However, the only facility that intersects bull trout habitat *and* has instream monitoring is the Jocko River Trout Hatchery. As mentioned above, this facility requires temperature and pH to be measured quarterly, and nutrient levels to be measured annually in July, August, and September. Due to the limited sample frequencies and limited parameters, receiving water monitoring is not anticipated to have an adverse effect on bull trout.

Bull Trout Designated Critical Habitat

Bull trout critical habitat could be exposed to effluent from the existing permitted wastewater treatment facilities. However, likelihood of exposure to adverse conditions is minimal due to significant dilution, limited pollutant loading, distance to critical habitat, and stringent effluent limits included in the NPDES permits that authorize discharges to bull trout critical habitat.

The 3 existing facilities that discharge *upstream* of bull trout critical habitat are 2 POTWs, or similar facilities, that treat domestic sewage (City of Polson and Flathead Lake Biological Station), and a groundwater dewatering site (Keller Transport Spill Site). A fourth facility, the Jocko River Trout Hatchery, discharges directly to bull trout critical habitat. Potential impacts associated with the reissuance of an NPDES permit by the EPA include the discharge of effluent, facility operations, and water sample collection. Federally reissued NPDES discharge permits by the EPA are only an authorization to discharge treated wastewater and are not an authorization for other activities (e.g., construction related activities).

The PCEs for bull trout are those habitat components that are essential for the primary biological needs of foraging, reproducing, rearing of young, dispersal, genetic exchange, or sheltering. However, none of these facilities discharge to spawning and rearing (SR) habitat. Therefore, any exposure should be limited to adult and juvenile bull trout life stages in foraging, migration, and overwintering (FMO) habitats. This Standing Analysis covers the re-issuance of surface water discharge permits regulated by the NPDES. Discharges that meet permitted limitations are not expected to have significant impacts on water quality in the receiving waters.

PCE 1: Springs, seeps, groundwater sources, and subsurface water connectivity (hyporheic flows) to contribute to water quality and quantity and provide thermal refugia.

No springs or seeps are known to occur in areas affected by the existing permits addressed by this analysis. This Standing Analysis covers the re-issuance of surface water discharge permits regulated by the NPDES. Discharges that meet permitted limitations are not expected affect springs, seeps, groundwater sources, or subsurface water connectivity. No affects to this PCE is expected.

PCE 2: Migration habitats with minimal physical, biological, or water quality impediments between spawning, rearing, overwintering, and freshwater and marine foraging habitats, including but not limited to permanent, partial, intermittent, or seasonal barriers.

This Standing Analysis covers the re-issuance of surface water discharge permits regulated by the NPDES. Discharges that meet permitted limitations are anticipated to have insignificant effects on this PCE.

PCE 3: An abundant food base, including terrestrial organisms of riparian origin, aquatic macroinvertebrates, and forage fish.

Nutrients released into the receiving waters may slightly increase primary productivity on a localized scale. However, because the effluent is treated to surface water standards before discharge and the amount of discharge is a small fraction of the volume of the receiving waters, effects are anticipated to be insignificant.

PCE 4: Complex river, stream, lake, reservoir, and marine shoreline aquatic environments, and processes that establish and maintain these aquatic environments, with features such as large wood, side channels, pools, undercut banks and unembedded substrates, to provide a variety of depths, gradients, velocities, and structure.

This Standing Analysis covers the re-issuance of surface water discharge permits regulated by the NPDES. Discharges that meet permitted limitations are anticipated to have no effect on this PCE.

PCE 5: Water temperatures ranging from 2° to 15 °C (36 to 59 °F), with adequate thermal refugia range will depend on bull trout life-history stage and form; geography; elevation; diurnal and seasonal variation; shading, such as that provided by riparian habitat; streamflow; and local groundwater influence available for temperatures that exceed the upper end of this range. Specific temperatures within this range will depend on bull trout life-history stage and form; geography; elevation; diurnal and seasonal variation; shading, such as that provided by riparian habitat; streamflow; and local groundwater influence.

This standing analysis covers the reissuance of permits to discharge effluent to surface waters. Effluent discharge from wastewater treatment facilities will have an insignificant effect on the water temperature of bull trout habitat. All 4 facilities that discharge in or near bull trout habitat (as described above) are subject to the Confederated Salish and Kootenai Tribes' (CSKT) water quality standards. These CSKT standards only allow discharges to cause a 1° Fahrenheit or less increase in stream temperatures for all streams that support salmonids. Additionally, discharge volume, discharge frequency, and the size of the receiving water with bull trout habitat are all factors that will mitigate effluent temperature effects to receiving water. Two facilities (Keller Transport Spill Site and Flathead Lake Biological Station) discharge to Flathead Lake, and the City of Polson POTW discharges to the Flathead River, immediately below Flathead Lake. These discharges will have minimal effect on receiving water temperature based on the receiving water size and dilution. St. Ignatius-Southside discharges to a smaller tributary that is upstream of bull trout habitat. The Jocko River Trout Hatchery that discharges water that should be comparable in temperature to the receiving water due to water usage and treatment occurring outdoors. None of these facilities discharge into SR habitat, where the most sensitive life stages occur. Therefore, these facilities will have negligible impact on water temperatures in FMO habitat with little to no exposure to SR habitat.

PCE 6: In spawning and rearing areas, substrate of sufficient amount, size, and composition to ensure success of egg and embryo overwinter survival, fry emergence, and young-of-the-year and juvenile survival. A minimal amount of fine sediment, generally ranging in size from silt to coarse sand, embedded in larger substrates, is characteristic of these conditions. The size and amounts of fine sediment suitable to bull trout will likely vary from system to system.

None of the existing facilities discharge to spawning and rearing habitat, therefore there no effects are anticipated to this PCE.

PCE 7: A natural hydrograph, including peak, high, low, and base flows within historic and seasonal ranges or, if flows are controlled, minimal flow departure from a natural hydrograph.

Discharge volumes are low relative to the volume of water passing downstream through the Flathead River system (for all 4 existing permits) and as a result, covered projects will have no measurable effect on the system's natural hydrograph.

PCE 8: Sufficient water quality and quantity such that normal reproduction, growth, and survival are not inhibited.

Nutrients released into the receiving waters under the permit may slightly increase primary productivity on a localized scale. However, because the effluent is treated to surface water standards before discharge and the amount of the discharge is a small fraction of the volume of the receiving waters, insignificant effects are anticipated.

PCE 9: Sufficiently low levels of occurrence of nonnative predatory (e.g., lake trout, walleye, northern pike, smallmouth bass); interbreeding (e.g., brook trout); or competing (e.g., brown trout) species that, if present, are adequately temporally and spatially isolated from bull trout.

This standing analysis covers issuance of waste-water discharge permits and any effects of covered projects on this PCE relative to non-native fish would be limited to potential localized sites where nutrients and water temperatures may be slightly elevated and attract non-native fish species (e.g. smallmouth bass in Flathead Lake). However, due to the limited potential for effects at a large spatial extent, insignificant effects are anticipated.

Pallid Sturgeon

As an aquatic species, pallid sturgeon may be exposed to effluent from the proposed federal action. However, the exposure risk is minimal due to the stringent effluent limits included in NPDES permits. The effluent limits are derived to be protective of the receiving waters and all aquatic species. There are 2 facilities that discharge to waters directly upstream of pallid sturgeon habitat, the City of Wolf Point POTW and City of Poplar POTW.

Primary Activity: 1. Discharge of Effluent

Stream Flow

The pallid sturgeon is native to the Missouri and Mississippi rivers and adapted to the pre-development habitat conditions that historically existed in these rivers. These conditions generally can be described as large, free flowing, warm-water, and turbid rivers with a diverse assemblage of dynamic physical habitats. Pallid sturgeon primarily utilize main channel, secondary channel, and channel border habitats throughout their range. Juveniles and adults are rarely observed in backwaters and sloughs. Spawning appears to occur between March and July, with adults moving long distances upstream prior to spawning. Spawning appears to occur adjacent to or over coarse substrate or bedrock, in deeper water with relatively fast converging flows, and is driven by environmental stimuli including day length, water temperature, and flow. Incubation rates are governed by and dependent upon water temperature. Newly hatched larvae

are predominantly pelagic, drifting in the currents and likely dispersing several hundred km downstream from spawn and hatch locations.

Effluent discharged from wastewater treatment facilities would contribute to existing stream flow in receiving water (Missouri River) downstream. The amount varies based on whether the facilities discharge continuously (City of Poplar) or intermittently (City of Wolf Point discharges twice per year) and is a factor of the size of the receiving water. Both facilities discharge small volumes directly upstream of pallid sturgeon habitat and result in minimal effects on receiving water flows due to the dilution ratio; City of Wolf Point's dilution ratio is 870 to 1, while City of Poplar's is 5,000 to 1. Neither facility discharges into spawning habitat, where the most sensitive life stages occur. The potential small increases in water flow are expected to have insignificant effects to this species.

Water Temperature

The Pallid Sturgeon is ectothermic, that is its body temperature is dependent on water temperatures. As a result, water temperatures influence nearly every aspect of the Pallid Sturgeon's life history requirements. As described previously, water temperatures affect rates of sexual maturity, spawning migrations, gonad development, rates of embryonic development, larval drift distances, and habitat quality. The primary causes of changes to historical water temperatures are bottom release dams and shifts in runoff patterns, where timing may result in late season river flow changes and increases in water temperatures.

Similar to the discussion on flow contributions, effluent from wastewater treatment facilities will have an insignificant effect on the water temperature of pallid sturgeon habitat. Discharge volume, discharge frequency, and the size of the receiving water are all factors that will mitigate effluent temperature effects to receiving water. Both facilities discharge just upstream of pallid sturgeon habitat, however both are short distances directly upstream (on a tributary and a ditch). Neither facility discharge into spawning habitat, where the most sensitive life stages occur. This is resulting in minimal temperature related effects to receiving water (Missouri River) based on size and dilution. Therefore, potential changes in water temperature due to discharges are expected to have insignificant effects to this species.

Treated Wastewater

Pallid sturgeon appear to be highly adapted to low visibility environments. High turbidity levels in the Missouri river were a component of the natural ecological processes under which the species evolved. Thus, rivers defined by high turbidity levels that fluctuate seasonally and annually are considered important and reduced sediment transport and the associated decrease in turbidity could affect Pallid Sturgeon recruitment and feeding efficiency.

Streams receiving effluent from a wastewater treatment facility will see an increase in constituents associated with the effluent. The constituents in the effluent are strictly limited by the permit with allowable concentrations, or effluent limits, that are either water quality- or technology-based. The water quality-based effluent limits are established to be protective of aquatic life, including pallid sturgeon, while the technology-based limits are based on the most current feasible treatment technologies. The permit implements the more stringent of the water quality - and technology-based effluent limits. Furthermore, water quality-based effluent limits

are calculated so they can be met at low flow (i.e., critical) conditions. Therefore, the constituents from the wastewater treatment plant effluent will likely be at levels that would not result in an adverse effect on pallid sturgeon.

Effluent contributions to pallid sturgeon habitat are anticipated to have an insignificant effect to pallid sturgeon and their habitat for the same reasons as discussed above. City of Poplar and City of Wolf Point POTWs discharge to waters that flow into the Missouri River. These discharges will have minimal effect on receiving water quality based on the receiving water size and dilution. Neither facility discharges into spawning habitat, where the most sensitive life stages occur. Therefore, discharges from these facilities are anticipated to result in insignificant effects to pallid sturgeon.

Associated Activities: A) Facility Operations and B) Water Sample Collection

Dust

Wastewater treatment facilities that intersect Pallid habitat (City of Poplar, City of Wolf Point) may contribute dust as a result from general facility operations and is likely to be a negligible amount. Each of these facilities are small therefore dust is not anticipated to have an adverse effect on pallid sturgeon.

Human Presence

Wastewater treatment facilities that intersect pallid sturgeon habitat (City of Poplar, City of Wolf point) are likely to have an increase in human presence. The increase in human presence associated with the wastewater treatment facility is from general facility operation. However, each of these facilities is small and the staff to operate them would be limited. The increase in human presence is not anticipated to have an adverse effect on pallid sturgeon.

Noise

Wastewater treatment facilities that intersect pallid sturgeon habitat (City of Poplar, City of Wolf Point) are likely to contribute noise. The noise contributed by the wastewater treatment facility is from general facility operation. However, each of these facilities is small and the noise associated with operation would be limited. The increase in noise is not anticipated to have an adverse effect on Pallid sturgeon.

Vehicle Traffic

Wastewater treatment facilities that intersect pallid sturgeon habitat (City of Poplar, City of Wolf Point) are likely to have an increase in vehicle traffic. The increase in vehicle traffic is from the employees working at the facilities. However, each of these facilities are small and the staff to operate them would be limited. The increase in vehicle traffic is not anticipated to have an adverse effect on Pallid sturgeon.

Off-road Vehicle Use

Wastewater treatment facilities that intersect pallid sturgeon habitat (City of Poplar, City of Wolf Point) may have an increase in off-road vehicle use. The increase in off-road vehicle use would be associated with sample collection and general facility maintenance and could result in an increase in ruts, soil compaction, and a decrease in vegetation. However, effects associated with any off-road vehicle use are anticipated to be insignificant to pallid sturgeon.

Streambank Stability and Water Turbidity

Wastewater treatment facilities that intersect pallid sturgeon habitat may have a decrease in streambank stability and an increase in water turbidity associated with receiving water monitoring. However, the City of Wolf Point discharges into a ditch 325 feet from the Missouri River and the City of Poplar discharges into an unnamed tributary of the Missouri River. Due to the limited sample frequencies and distances to pallid sturgeon habitat, receiving water monitoring is not anticipated to have an adverse effect on pallid sturgeon.

White Sturgeon

The Kootenai River white sturgeon is only known to occur within the restricted portion of the Kootenai River System from the Kootenai Falls in northwestern Montana to the Corra Linn Dam in British Columbia, Canada (approximately 168 river miles). The EPA has not issued any existing NPDES discharge permits in Montana where the Kootenai River white sturgeon occurs. Therefore, there are no anticipated effects to the species as a result of the permitted action.

Meltwater Lednian Stonefly

Effects of the permitted action are expected to be associated with aquatic species that live in or near receiving waters. Therefore, any effects to aquatic species that do not live in or near receiving waters are not anticipated. The meltwater lednian stonefly is found in alpine streams and springs linked to alpine glaciers and snowfields, therefore there are no anticipated effects to the species as a result of the permitted action.

Western Glacier Stonefly

Effects of the permitted action are expected to be associated with aquatic species that live in or near receiving waters. Therefore, any effects to aquatic species that do not live in or near receiving waters are not anticipated. The western glacier stonefly is found in alpine streams and springs linked to alpine glaciers and snowfields, therefore there are no anticipated effects to the species as a result of the permitted action.

Aquatic Species Summary

To receive the Services technical assistance acknowledgment of the EPA's NE determination or to receive the Services concurrence for aquatic species through the DKey, first issuance of a NPDES permit by the EPA or EPA NPDES reissuance permits that include substantive changes to effluent chemistry must be first approved by the MTFO contaminants specialist (see *exclusions* section on page 8). Therefore, unless new major construction or facility modifications are planned for a new or previously permitted facility, effects of effluent discharge on to the above aquatic species, except for bull trout and bull trout designated critical habitat and pallid sturgeon, *are not anticipated*. Impacts to bull trout and bull trout designated critical habitat and pallid sturgeon are expected to *not likely to adversely affect* the species.

6 SUMMARY AND CONCLUSION

After considering the relevant information pertaining to the species and critical habitat, and reviewing the covered activities and evaluating their anticipated effects, we conclude that the actions subject to this standing analysis will support the EPA's determination of NE or support a determination of NLAA, as appropriate, for the subject species and critical habitat as described above. This standing analysis is based on the consultation provisions of section 7(a)(2) of the Act, the information cited, and will undergo review and revision, as needed, if any of the following conditions have been met: 1) If new information reveals the effects of the covered action(s) to the covered species or critical habitat are occurring in a manner or to an extent not considered in this standing analysis based on applied use; or 2) If the species or critical habitat covered by the standing analysis change status.

This standing analysis will be provided through IPaC via a link within the DKey output letter.

7 LITERATURE CITED

- Goetz, F. 1997. Biology of the Bull Trout *Salvelinus confluentus*; a literature review. Willamette National Forest. Eugene Oregon. 58 pp.
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- U.S. Environmental Protection Agency. 2022. Statement of Basis, Jocko River Trout Hatchery, MT-0030546. Drafted by EPA Region 8. Accessed August 2025.
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- U.S. Fish and Wildlife Service. 2024. Species Status Assessment for the Coterminous Distinct Population Segment of Bull Trout (*Salvelinus confluentus*). Version 1.1, September 3, 2024. Boise, Idaho. 182 pp.
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- U.S. Fish and Wildlife Service 2010. Endangered and threatened wildlife and plants; revised designation of critical habitat for bull trout in the coterminous United States; final rule. October 18, 2010. Federal Register 75:63898-64070.

8 APPENDIX A – STRUCTURED QUESTIONS FOR SCREENING A PROJECT VIA A DKEY TO DETERMINE WHETHER IT IS APPLICABLE FOR USE UNDER THIS STANDING ANALYSIS

Potential questions in this key

The following is a comprehensive list of all questions that are part of this determination key. Based on the answers provided, only appropriate follow-up questions will be asked.

1. Are you an Environmental Protection Agency (EPA) employee or designated non-federal representative?
2. Is the proposed action the issuance of a National Pollutant Discharge Elimination System (NPDES) permit by EPA?
3. Is this issuance the first Federally issued NPDES permit for this facility?
4. Have you consulted with a contaminant specialist from the local Fish and Wildlife Service Office?
5. Has the contaminant specialist determined that this issuance of the NPDES permit falls under the Montana EPA NPDES Standing Analysis?
If so, please upload proof of correspondence when prompted
6. Does the action include any construction activities which may affect listed species or designated critical habitat?
7. Have you consulted with a contaminant specialist from the local Fish and Wildlife Service Office?
8. Has the contaminant specialist determined that this issuance of the NPDES permit falls under the Montana EPA NPDES Standing Analysis?
If so, please upload proof of correspondence when prompted
9. Will the effluent chemistry be consistent with the previous permit cycle?
10. Have you consulted with a contaminant specialist from the local Fish and Wildlife Service Office?
11. Has the contaminant specialist determined that this issuance of the NPDES permit falls under the Montana EPA NPDES Standing Analysis?
If so, please upload proof of correspondence when prompted
12. Have there been any changes to species or critical habitat since the previous permit was issued?
13. The proposed action intersects a black-footed ferret 10(j) experimental population. Federal action agencies are required to confer with FWS if a proposed action is likely to jeopardize the continued existence of the species. The Federal action agency is responsible for making that determination. Is the proposed action likely to jeopardize the continued existence of the black-footed ferret?
14. Does the proposed action have the potential to jeopardize the existence of, or prevent the recovery of, the monarch butterfly at the species level?
15. Does the proposed action have the potential to jeopardize the existence of, or prevent the recovery of, the Suckley's cuckoo bumble bee at the species level?

16. Does the proposed action have the potential to jeopardize the existence of, or prevent the recovery of, the western regal fritillary at the species level?