

DOI Address: https://doi.org/10.25923/pg8c-rq34

UNITED STATES DEPARTMENT OF COMMERCE National Oceanic and Atmospheric Administration NATIONAL MARINE FISHERIES SERVICE West Coast Region 1201 NE Lloyd Boulevard, Suite 1100 Portland, Oregon 97232-1274

Refer to NMFS No: WCRO-2023-02656

January 22, 2024

Brian Daily U.S. Department of Agriculture, Rural Development 1220 SW 3rd Avenue, Suite 1801 Portland, OR 97204

Re: Endangered Species Act Section 7(a)(2) Biological Opinion for the City of John Day Wastewater System Improvement Project, Dog Creek – John Day River (HUC 170702010608) and Luce Creek – John Day River (HUC 170702010902) Grant County, Oregon.

Dear Mr. Daily:

This letter responds to your October 24, 2023, request for initiation of consultation with National Marine Fisheries Service (NMFS) pursuant to section 7 of the Endangered Species Act (ESA) for the subject action. Your request qualified for our expedited review and analysis because it met our screening criteria and contained all required information on, and analysis of, your proposed action and its potential effects to listed species and designated critical habitat.

On July 5, 2022, the U.S. District Court for the Northern District of California issued an order vacating the 2019 regulations that were revised or added to 50 CFR part 402 in 2019 ("2019 Regulations," see 84 FR 44976, August 27, 2019) without making a finding on the merits. On September 21, 2022, the U.S. Court of Appeals for the Ninth Circuit granted a temporary stay of the district court's July 5 order. On November 14, 2022, the Northern District of California issued an order granting the government's request for voluntary remand without vacating the 2019 regulations. The District Court issued a slightly amended order two days later on November 16, 2022. As a result, the 2019 regulations remain in effect, and we are applying the 2019 regulations here. For purposes of this consultation and in an abundance of caution, we considered whether the substantive analysis and conclusions articulated in the biological opinion and incidental take statement would be any different under the pre-2019 regulations. We have determined that our analysis and conclusions would not be any different.

We reviewed the U.S. Department of Agriculture–Rural Development (USDA–RD) consultation request and related initiation package. The proposed action will receive additional funding towards the project from the U.S. Department of Housing & Urban Development (HUD) through Business Oregon. The City of John Day has been designated the "Responsible Entity" for consultation under USDA–RD Assumption Authority and HUD (CFR § 58.18).



Where relevant, we have adopted the information and analyses you have provided and/or referenced but only after our independent, science-based evaluation confirmed they meet our regulatory and scientific standards. We adopt by reference the following sections of the City of John Day's biological assessment (BA), prepared by Mason, Bruce, and Girard, Inc. for the City of John Day (City of John Day 2023): Section 2.0 Project Background, Section 4.0 Project Description and Action Area, Section 5.0 Natural History and Species Occurrence, Section 6.0 Environmental Baseline Conditions, Section 7.0 Analysis of Effect of the Action, Section 8.0 Finding of Effect, and Appendix C Groundwater and Surface Water Monitoring Plans.

The USDA–RD initially submitted a request for informal consultation, including a BA, to NMFS on September 13, 2022 (WCRO-2022-02176). We reviewed the submitted BA and provided a letter of insufficient information on October 13, 2022, to the USDA–RD, the City of John Day, and their consultants. The Services (NMFS and the USFWS) corresponded and participated in multiple virtual meetings and provided comments on the Draft BA during the winter of 2022–2023. On February 16, 2023, the USDA–RD submitted an updated Draft BA and request for consultation to the Services. After our review of the updated Draft BA, NMFS requested additional information by email on March 9, 2023. NMFS closed the informal consultation on October 18, 2023, due to nonreceipt of requested information. NMFS continued to coordinate with the USDA–RD, the USFWS, the City of John Day, and their consultants regarding the proposed action. The USDA–RD submitted an updated letter and revised consultation initiation package to the Services on October 24, 2023. We reviewed the complete package and initiated consultation on October 24, 2023.

As described in the BA's description of the proposed action, the City of John Day will construct a new Wastewater Treatment Facility (WWTF) and groundwater discharge system, upgrade the existing effluent collection system, demolish the existing WWTF, and conduct groundwater and surface water quality monitoring. The proposed action includes construction activities on approximately 10 acres of land located near John Day, Oregon. The construction is planned to commence in 2024 and will be completed in 2025. A consequence of the proposed action will be the ongoing discharge of treated wastewater into the groundwater discharge system. The new WWTF will improve wastewater treatment, which will allow the City of John Day to meet more stringent standards for effluent criteria. Surface and ground water quality monitoring will be conducted to confirm water quality meets or exceeds appropriate State and Federal standards.

We examined the status of the species that would be adversely affected by the proposed action to inform the description of the species' "reproduction, numbers, or distribution" as described in 50 CFR 402.02. We also examined the condition of critical habitat throughout the designated area and discuss the function of the physical or biological features essential to the conservation of the species that create the conservation value of that habitat. Section 5.1 of the BA covers the status of the species and designated critical habitat, in this case, Middle Columbia River (MCR) steelhead and their designated critical habitat in the Project's action area. NMFS has published a 5-year review for MCR steelhead updating their status and limiting factors (NMFS 2022), and that review is adopted here.

"Action area" means all areas to be affected directly or indirectly by the Federal action and not merely the immediate area involved in the action (50 CFR 402.02). Section 4.7 of the BA

provides a detailed description of the action area and NMFS incorporates the BA description. However, we further clarify the action area to extend into the upland areas where construction occurs within the floodplain of the John Day River, and also include 100 feet upstream and 1 mile downstream of the John Day River adjacent to the groundwater release site location.

The "environmental baseline" refers to the condition of the listed species or its designated critical habitat in the action area, without the consequences to the listed species or designated critical habitat caused by the proposed action. 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 consultations, and the impact of State or private actions which are contemporaneous with the consultation in process. The consequences to listed species or designated critical habitat from ongoing agency activities or existing agency facilities that are not within the agency's discretion to modify are part of the environmental baseline (50 CFR 402.02). Section 6.0 of the BA describes the environmental baseline and is being adopted here.

The action area supports migration, rearing, and spawning of MCR steelhead from the Upper John Day population. This population is one of four in the John Day River Major Population Group (MPG). Critical habitat for MCR steelhead has been designated in the action area. Important physical and biological features (PBFs) in the action area include water quantity and quality, substrate, floodplain connectivity, forage, natural cover; freedom from obstruction and excessive predation. The ability of critical habitat within the action area to support the PBFs is primarily limited by degraded floodplain and channel structure (habitat quantity/diversity), altered sediment routing, altered hydrology, and high water temperature. Adult MCR steelhead are anticipated to be in the action area from March through June, migrating to their spawning areas. Juvenile MCR steelhead are present year round throughout the action area when water temperature is suitable for salmonids.

Under the ESA, "effects of the action" are all consequences to listed species or critical habitat that are caused by the proposed action, including the consequences of other activities that are caused by the proposed action. A consequence is caused by the proposed action if it would not occur but for the proposed action and it is reasonably certain to occur. Effects of the action may occur later in time and may include consequences occurring outside the immediate area involved in the action (see 50 CFR 402.17). In our analysis, which describes the effects of the proposed action, we considered 50 CFR 402.17(a) and (b).

An assessment of the effects of the proposed action are included in Section 7.0 of the BA, and is adopted here (50 CFR 402.14(h)(3)). NMFS has evaluated this section and after our independent, science-based evaluation determined that it meets our regulatory and scientific standards. The USDA–RD proposes to authorize the construction of the new WWTF for the City of John Day. The short-term and long-term effects of this proposed action are:

- Short-term effects resulting from construction of the new WWTF, demolishing the current WWTF, and upgrading the effluent discharge infrastructure.
- Long-term effects of adding 2.28 acres of impervious surface.
- Long-term effects from altered water quality from effluent infiltrated into groundwater into the surface waters of the John Day River, and its consequences.

• Long-term beneficial effects from improved water quality from treatment of wastewater effluent prior to drainage into the surface waters of the John Day River.

Individual fish from the Upper John Day population of MCR steelhead will be affected by the proposed action. However, because there will be no in-water work, activities will not occur in areas with riparian vegetation, most of the construction activities will occur outside of the 100year floodplain, and measures to address stormwater runoff are robust, construction-related effects on steelhead are likely to be very small and short duration and unlikely to affect juvenile MCR steelhead or critical habitat. Likewise, because measures to address stormwater runoff from the additional impervious surface are robust and meet on-site stormwater infiltration requirements, effects due to existence of the new WWTF are likely to be very small, infrequent, and of short duration. Although we anticipate that effects related to the construction of the WWTF are unlikely, adverse effects associated with the operation of the WWTF are reasonably likely to occur. Because treated wastewater will be discharged into the groundwater near the John Day River for many years, exposure to treated wastewater is likely to harm steelhead in the action area. Surface and ground water quality monitoring will be conducted to confirm that concentrations of metals (As, Cu, Cr, Al, Cd, Ni, Zn) and polycyclic aromatic hydrocarbons (PAH) and total petroleum hydrocarbons (TAH) will be within Oregon's toxicity limits. Sublethal effects from discharge of pollutants at low concentrations are expected to be minor, particularly because extensive mixing will occur with groundwater prior to reaching surface water. Although a large number of fish will be exposed over time, only a small number of these fish will be so severely affected that their fitness will be reduced. The modeling described in the BA indicates that warmer ground water discharged into the John Day River during winter months would have a very small effect on water temperature, and discharges during summer would have little or no effect on stream temperature. We anticipate this small change will be localized and have minor effects to any individual fish in the action area.

Critical habitat includes Physical and Biological Features (PBFs) necessary to support various life stages of listed fish and include good water quality, appropriate substrate, good riparian conditions, and sufficient prey. Water quality and forage are the PBFs of critical habitat that will be affected by this project. Water quality effects of the proposed action include temporary effects that will occur during the construction phase of the WWTP upgrade, and long-term effects associated with the post-upgrade effluent and potential contaminants present in groundwater hydrologically connected with the surface flows of the John Day River. Beneficial effects to water quality are likely to occur from improvements to wastewater treatment before infiltrated into groundwater prior to release into the John Day River. Water quality will improve, compared to current conditions. Because ongoing discharge of treated wastewater is a consequence of the proposed action overall, the water quality PBF will be slightly degraded over the long term.

"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 and 402.17(a)). Future Federal actions that are unrelated to the proposed action are not considered in this section because they require separate consultation pursuant to section 7 of the ESA. The City of John Day has a 2019 Comprehensive Plan and Innovation Gateway Area Plan that includes upgrades to park, recreation, and multi-modal improvements and developments in and immediately adjacent to the John Day River in the action

area. NMFS anticipates these potential future activities included in the City's Innovation Gateway Area Plan and future development may include Federal permits, funding through a Federal agency and/or a Federal nexus that would be considered in a separate future ESA consultation.

The Integration and Synthesis section is the final step in our assessment of the risk posed to species and critical habitat as a result of implementing the proposed action. In this section, we add the effects of the action to the environmental baseline and the cumulative effects, taking into account the status of the species and critical habitat to formulate the agency's biological opinion as to whether the proposed action is likely to: (1) reduce appreciably the likelihood of both the survival and recovery of a listed species in the wild by reducing its numbers, reproduction, or distribution; or (2) appreciably diminish the value of designated or proposed critical habitat as a whole for the conservation of the species.

The status of the MCR steelhead distinct population segment (DPS) is generally poor as a result of a combination of effects outside the action area, the existence and operation of Columbia River dams, and historic and ongoing land management and anthropogenic activities impairing habitat in the action area. Cumulative effects are expected to cause a slight degradation of habitat conditions in the action area. As described above, construction-related effects and the small increase in impervious area are not expected to harm MCR steelhead, but the reduction in water quality due to ongoing operation of the new WWTF will likely cause a slight increased risk of sublethal effects for juvenile MCR steelhead that rear in the action area. The adverse effects will be entirely confined to the Upper John Day River population, which is currently at moderate risk of extinction for abundance/productivity and spatial structure and diversity. This discharge will result in harm to a small number of Upper John Day steelhead, which will not meaningfully reduce the abundance/productivity of the population. Because mortality of less than one juvenile steelhead is anticipated, viability of MCR steelhead will not be meaningfully affected at the population scale and will also not affect the MPG or the DPS scale.

The action area is entirely within the Upper John Day River steelhead critical habitat. There will be a very small long-term adverse effect on water quality due to the proposed action. However, compared to the current baseline, water quality may improve slightly due to improved wastewater treatment. These effects will therefore not meaningfully degrade the ability of critical habitat to support recovery of the Upper John Day River steelhead population. Because the proposed action will not meaningfully reduce the conservation value of critical habitat within the Upper John Day River steelhead population area, it also will not meaningfully affect the conservation value of critical habitat at the scale of the designation.

After reviewing and analyzing the current status of the listed species and critical habitat, the environmental baseline within the action area, the effects of the proposed action, the effects of other activities caused by the proposed action, and cumulative effects, it is NMFS' biological opinion that the proposed action is not likely to jeopardize the continued existence of MCR steelhead or destroy or adversely modify its designated critical habitat.

INCIDENTAL TAKE STATEMENT

Section 9 of the ESA and Federal regulations pursuant to section 4(d) of the ESA prohibit the take of endangered and threatened species, respectively, without a special exemption. "Take" is defined as to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture or collect, or to attempt to engage in any such conduct. "Harm" is further defined by regulation to include significant habitat modification or degradation that actually kills or injures fish or wildlife by significantly impairing essential behavioral patterns, including breeding, spawning, rearing, migrating, feeding, or sheltering (50 CFR 222.102). "Harass" is further defined by interim guidance as to "create the likelihood of injury to wildlife by annoying it to such an extent as to significantly disrupt normal behavioral patterns which include, but are not limited to, breeding, feeding, or sheltering." "Incidental take" is defined by regulation as takings that result from, but are not the purpose of, carrying out an otherwise lawful activity conducted by the Federal agency or applicant (50 CFR 402.02). Section 7(b)(4) and section 7(o)(2) provide that taking that is incidental to an otherwise lawful agency action is not considered to be prohibited taking under the ESA if that action is performed in compliance with the terms and conditions of this ITS.

Amount or Extent of Take

In the biological opinion, NMFS determined that incidental take is reasonably certain to occur as harm from discharge of pollutants in wastewater effluent and groundwater discharge into surface waters of the John Day River.

NMFS anticipates the proposed action will result in harm (sublethal effects) to fish in the action area caused by discharge of pollutants from the wastewater discharge into groundwater that will subsequently flow into steelhead habitat. Estimating the specific number of animals harmed is not possible because of the range of responses that individual fish will have, because the numbers of fish present at any time is highly variable, and because it is not possible to observe fish being affected. While this uncertainty makes it difficult to quantify take in terms of numbers of individuals harmed, our best estimate is that a large number of individuals will be exposed to low concentrations of pollutants, causing a small number of individuals to be so severely affected that their fitness is reduced.

Harm caused to fish in the action area is expected to directly relate to the concentrations of pollutants present in effluent and groundwater discharged into the John Day River. Generally, concentrations of various pollutants are correlated because their concentrations are directly related to the intensity and extent of pollution-generating activities and treatment technologies applied. Some of these pollutants are more readily monitored than others,, thus we use the quarterly concentration of the monitored contaminants in the surface water and groundwater monitoring plan for metals (As, Cu, Cr, Al, Cd, Ni, Zn), PAH and TAH described in the BA's Appendix C as a surrogate for harm. The proposed surrogate is causally linked to anticipated take because it describes conditions that will cause take due to pollutant discharge into the surface waters of the John Day River. Surface water sampling results from the John Day River will be compared to aquatic health standards for fish as determined by Oregon's state toxicity

limits for metals and petroleum.¹ Specifically, NMFS will consider the extent of take exceeded if the sampled concentration of metals (As, Cu, Cr, Al, Cd, Ni, Zn), PAHs, and TAH discharged into the surface waters is elevated when compared to background upstream monitored levels. The surrogate described above is measurable, and thus can be monitored and reported. For this reason, the surrogate functions as an effective reinitiation trigger.

Effect of the Take

In the biological opinion, NMFS determined that the amount or extent of anticipated take, coupled with other effects of the proposed action, is not likely to result in jeopardy to the species or destruction or adverse modification of critical habitat.

Reasonable and Prudent Measures

"Reasonable and prudent measures" (RPMs) are measures that are necessary or appropriate to minimize the impact of the amount or extent of incidental take (50 CFR 402.02).

- 1. Monitor the project to ensure that the measures are meeting the objective of minimizing take and that the amount or extent of take is not exceeded.
- 2. Prepare and provide NMFS with water quality monitoring plan and an annual report describing how impacts of the incidental take on listed species in the action area would be monitored and documented.

Terms and Conditions

In order to be exempt from the prohibitions of section 9 of the ESA, the Federal action agency must comply (or must ensure that any applicant complies) with the following terms and conditions. The USDA–RD or any applicant has a continuing duty to monitor the impacts of incidental take and must report the progress of the action and its impact on the species as specified in this ITS (50 CFR 402.14). If the entity to whom a term and condition is directed does not comply with the following terms and conditions, protective coverage for the proposed action would likely lapse.

- 1. The following terms and conditions implement RPM 1:
 - a. After the new WWTF and infrastructure is in operation, the City of John Day shall notify NMFS when or if either of the following results from surface water monitoring sampling:
 - i. Quarterly groundwater or surface water monitoring samples results in downgradient water monitoring with concentration of metals (As, Cu, Cr, Al, Cd, Ni, Zn), PAH and TAH elevated above the upstream or background monitoring.

¹ Established Aquatic Life Water Quality Criteria for Toxic Pollutants for Freshwater (OAR 340-041-8033 (Table 30)).

- ii. Quarterly groundwater or surface water monitoring samples results in surface water sampling results that exceed the established Aquatic Life Water Quality Criteria for Toxic Pollutants for freshwater (see OAR 340-041-8033) identified in the BA's Appendix C.
- 2. The following terms and conditions implement RPM 2:
 - a. The City of John Day shall provide to NMFS an annual report following the monitoring plan protocol in the BA's Appendix C. This will detail the quarterly water quality monitoring data and results, as well as what remedies are being undertaken to reduce pollutant concentrations in effluent, and groundwater discharge to the John Day River.
 - Annual reports should be electronically delivered to: <u>crbo.consultationrequest.wcr@noaa.gov</u> The report should include in the subject the project name and NMFS Tracking No: WCRO-2023-02656 City of John Day Wastewater Project.

Conservation Recommendations

Section 7(a)(1) of the ESA directs Federal agencies to use their authorities to further the purposes of the ESA by carrying out conservation programs for the benefit of the threatened and endangered species. Specifically, conservation recommendations are suggestions regarding discretionary measures to minimize or avoid adverse effects of a proposed action on listed species or critical habitat or regarding the development of information (50 CFR 402.02).

1. Engage in early coordination with NMFS during future project development and planning of potential projects within the action area considered for development and activities within floodplains and riparian areas of John Day River and tributaries.

Reinitiation of Consultation

Under 50 CFR 402.16(a): "Reinitiation of consultation is required and shall be requested by the Federal agency or by the Service where discretionary Federal agency involvement or control over the action has been retained or is authorized by law and: (1) If the amount or extent of taking specified in the incidental take statement is exceeded; (2) If new information reveals effects of the agency action that may affect listed species or critical habitat in a manner or to an extent not previously considered; (3) If the identified action is subsequently modified in a manner that causes an effect to the listed species or critical habitat that was not considered in the biological opinion or written concurrence; or (4) If a new species is listed or critical habitat designated that may be affected by the identified action."

This letter underwent pre-dissemination review using standards for utility, integrity, and objectivity in compliance with applicable guidelines issued under the Data Quality Act (section 515 of the Treasury and General Government Appropriations Act for Fiscal Year 2001, Public Law 106-554). The biological opinion will be available through NOAA's Institutional Repository [https://repository.library.noaa.gov/welcome]. A complete record of this consultation is on file at the Columbia Basin Office in Ellensburg, Washington.

Please direct questions regarding this letter to Rebecca Viray, Fish Biologist, Columbia Basin Office, La Grande, Oregon, at <u>rebecca.viray@noaa.gov</u> or 541-786-5177.

Sincerely,

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Nancy L. Munn, Ph.D. Acting Assistant Regional Administrator Interior Columbia Basin Office

cc: Laura Navarrete, U.S. Fish and Wildlife Casey Myers, City of John Day Kimberley Young, USDA–Rural Development

References

- Mason, Bruce and Girard Natural Resource Consultants. 2023. City of John Day Wastewater System Improvements Project Biological Assessment. Prepared for the City of John Day, Project number 0104397. Portland, OR.
- NMFS. 2022. 2022 5-year review: Summary and evaluation of Middle Columbia River steelhead. NMFS, West Coast Region, Portland, OR.