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UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
West Coast Region
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Refer to NMFS No.:
WCRO-2021-02375

October 19, 2021

Kris Gilson
United States Maritime Administration (MARAD)
Environmental Protection Specialist
1200 New Jersey Avenue, SE
Washington, D.C. 20590

Re: Endangered Species Act Section 7(a)(2) Biological Opinion and Magnuson-Stevens Fishery Conservation and Management Act Essential Fish Habitat Response for the United States Maritime Administration Build Grant for the Coos Bay Rail Line

Dear Kris Gilson:

This letter responds to your request for initiation of consultation with the 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. As the U.S. Army Corps of Engineers (Corps) will be issuing a permit, this biological opinion and the incidental take statement (ITS) and Essential Fish Habitat (EFH) recommendations extends to the Corps.

We reviewed the United States Maritime Administration's (MARAD) consultation request and related initiation package. 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 here sections 1.0, 2.0, 3.0, and 4.0 of the Biological Assessment (BA) covering the proposed project. The information being incorporated includes the environmental baseline and effects analysis. The BA attached meets 508 requirements given it may be disseminated to the public in ECO (LOCs) or NOAA IR (BiOps).

In 2020, MARAD and NMFS conducted a Section 7 consultation for the Coal Bank Slough Bridge Replacement Project that did not include the use of an impact hammer within the Coal Bank Slough water column. As part of that consultation (refer to NMFS No. WCRO-2020-01551), MARAD determined that the bridge repairs to be conducted under the MARAD Build 2019 Grant (Grant) would not likely adversely affect (NLAA) species listed under the ESA. NMFS responded with a Letter of Concurrence (LOC) dated June 30, 2020. The Oregon International Port of Coos Bay (Port) received the LOC for the replacement of the Coal Bank Slough Bridge and at the time, engineers believed they could complete the pile work without proofing the piles.

Following the Geotechnical work conducted in early 2021, the soil conditions were found to be extremely poor and the slope of the existing mudstone at depth, from the north end to the south, is steep. Mudstone was found at 170 feet at the north end and 70 feet at the south end. This slope creates an opportunity for piling to kick-out if they are not embedded deep enough into the mudstone (5ft). Therefore, some proofing of piles will be required within the Coal Bank Slough water column using an impact hammer and therefore, the BA was developed as part of the ongoing Section 7 consultation between NMFS and MARAD for the changes in the potential construction related impacts to ESA listed species and EFH.

NMFS calculations regarding the acoustic/noise impacts of using an impact hammer and stationary fish within 10 meters of each impact hammer strike estimate that with 250 impact hammer strikes per day, the cumulative effect that would cause the onset of physical damage to fish for both fish greater than/equal to 2 g and fish less than 2 g would be less than the threshold of causing such physical damage to fish. Given the proposed project would include less than 250 impact hammer strikes per day, the proposed project would result in having a cumulative effect that would not cause the onset of physical damage to fish.

The Port developed a BA for the proposed project and laydown areas to be included in the Grant for the Coos Bay Rail Line, located between Danebo, Milepost 652.11 (in west Eugene, Lane County), and Coquille, MP 785.60 (Coos County), Oregon. Two of the project components are subject to regulation under the Clean Water Act Section 404, requiring a Nationwide Permit coverage from the Corps given they will include potential fill and dredge material being placed within a “waters of the United States.” However, only one of the bridges will be constructed within a waterway that contains suitable habitat for species listed under the ESA and regulated by National Marine Fisheries Service (NMFS, Coal Bank Slough Bridge Replacement Project). Additionally, the project will be required to be approved through the National Environmental Policy Act with MARAD as the federal lead agency for the Grant. Therefore, the focus of this BA is for the Coal Bank Slough Bridge Replacement Project given no other proposed improvements will have an impact on any ESA species regulated by NMFS.

We examined the status of each species that would likely 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. See Section 3.0 of the attached BA that describes the status of the species and critical habitat and that are being 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). See Section 1.3 of the BA that describes the action area and is being adopted here.

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). See Section 2.1 of the BA that describes the Environmental Baseline and that is being adopted here.

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).

"The biological assessment provides a detailed discussion and comprehensive assessment of the effects of the proposed action in Section 3.1 of the initiation package and is adopted here (50 CFR 402.14(h)(3)). NMFS has evaluated this section and after our independent, science-based evaluation determined it meets our regulatory and scientific standards. The temporary and long-term effects of this proposed action are:

- Minor impacts from underwater sound, including behavioral changes, caused by pile driving with a vibrational hammer,
- Interference with life history functions,
- Turbidity effects from the removal of old pilings and constructing new pilings,
- Turbidity effects from temporary in-water construction,
- Introduction of exotic, invasive species from in-water equipment, and
- Acoustic effects during in-water pile installation if an impact hammer is required and other in- water project related activities.

Based on our review, and as identified below, the project may affect and is likely to adversely affect (LAA) 3 listed fish species (green sturgeon, eulachon, coho salmon Oregon Coast ESU) and may affect and is LAA designated critical habitat for two of the fish species/populations (green sturgeon and coho salmon Oregon Coast ESU). Additionally, the project is NLAA designated critical habitat for the humpback whale and Southern Resident killer whale.

For green sturgeon, the proposed action will result in a net reduction in the number of piles at the entrance to Coal Bank Slough, old abandoned piles within the Coal Bank Slough Bridge footprint will be removed from the channel, and creosote treated wood will not be used as part of the construction of the new bridge crossing, thus removing such treated wood from Coal Bank Slough and Coos Bay at the proposed crossing location. Therefore, there will be an overall long-term net benefit to critical habitat for green sturgeon (Southern DPS) at the Coal Bank Slough Bridge Replacement Project location where in-water work is proposed. However, if the impact hammer is required, this could have a short-term adverse effect on a few individuals of the species and would not be expected to create a change at the population level.

The project effects to the Southern DPS of Pacific eulachon will result in a net reduction in the number of piles at the entrance to Coal Bank Slough, old abandoned piles within the Coal Bank Slough Bridge footprint will be removed from the channel, and creosote treated wood will not be used as part of the construction of the new bridge crossing, thus removing such treated wood from Coal Bank Slough and Coos Bay at the proposed crossing location. However, if the impact hammer is required, this could have a short-term adverse effect on a few individuals of the species and would not be expected to create a change at the population level. Critical habitat has been designated for this species, but none occurs within any of the action area. No critical habitat would be affected by the proposed action.

The project effects to Coho Salmon (Oregon Coast ESU) will result in a net reduction in the number of piles at the entrance to Coal Bank Slough, old abandoned piles within the Coal Bank Slough Bridge footprint will be removed from the channel, and creosote treated wood will not be used as part of the construction of the new bridge crossing, thus removing such treated wood from Coal Bank Slough and Coos Bay at the proposed crossing location. Therefore, there will be an overall long-term net benefit to critical habitat for Coho Salmon (Oregon Coast ESU) at the Coal Bank Slough Bridge Replacement Project location where in-water work is proposed. However, if the impact hammer is required, this could have a short-term adverse effect on a few individuals of the species and would not be expected to create a change at the population level.

The project effects to humpback whale will result in a net reduction in the number of piles at the entrance to Coal Bank Slough, old abandoned piles within the Coal Bank Slough Bridge footprint will be removed from the channel, and creosote treated wood will not be used as part of the construction of the new bridge crossing, thus removing such treated wood from Coal Bank Slough and Coos Bay at the proposed crossing location. Therefore, there will be an overall long-term net benefit to designated critical habitat for humpback whale at the Coal Bank Slough Bridge Replacement Project location where in-water work is proposed. Furthermore, because humpback whales are foraging generalists and the proposed action will not substantially change the availability of humpback prey items within the action area, the proposed action is not expected to diminish the value of designated critical habitat. Additionally, if the impact hammer is required, humpback whales have been found to move away from noise sources in response to noise and therefore, this effect on any individuals of the species would be de minimis given they would move away from noise associated with the use of an impact hammer.

The project effects to Southern Resident killer whales will result in a net reduction in the number of piles at the entrance to Coal Bank Slough, old abandoned piles within the Coal Bank Slough Bridge footprint will be removed from the channel, and creosote treated wood will not be used as part of the construction of the new bridge crossing, thus removing such treated wood from Coal Bank Slough and Coos Bay at the proposed crossing location. Therefore, there will be an overall long-term net benefit to the prey species of the Southern Resident killer whale at the Coal Bank Slough Bridge Replacement Project location where in-water work is proposed. Southern Resident killer whales would not be found within the Coal Bank Slough Bridge Replacement Project location and any anticipated reduction of salmonids associated with the proposed action would result in an insignificant reduction in adult equivalent prey resources for Southern Resident killer whales and an insignificant effect on proposed Southern Resident killer whale designated critical habitat. Thus, the proposed action would not change the quality and function

of the prey designated critical habitat essential feature for Southern Resident killer whales. Nor would the loss of juvenile Chinook salmon from the proposed action cause a meaningful effect to any Southern Resident killer whale individuals or the species as a whole. Therefore, the effects of the proposed action is de minimus and NLAA Southern Resident killer whales or their designated critical habitat.

"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. See Section 3.3 within the BA that describes the cumulative effects and that is incorporated by reference here.

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. See Section 3.0 for the integration and synthesis of the effects of the action to the environmental baseline and the cumulative effects. The determination for each of the five ESA-listed species with potential to occur within the action area are as follows:

There will be an overall long-term net benefit to critical habitat for green sturgeon (Southern DPS), Coho Salmon (Oregon Coast ESU), and humpback whale at the Coal Bank Slough Bridge Replacement Project location where in-water work is proposed. The action area does not contain critical habitat for the Southern DPS of Pacific eulachon or the Southern Resident killer whale. However, if the impact hammer is required, this could have a short-term adverse effect on a few individuals of the three listed fish species, if present during construction; however, the short-term adverse effect on a few individuals would not be expected to create a change at the population level. The use of an impact hammer would not have an adverse impact on the humpback whale given the species would move away from such noise if it were to occur within the project area.

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 green sturgeon, Southern DPS of Pacific eulachon, coho salmon Oregon Coast ESU and may affect and is LAA designated critical habitat for two of the fish species/populations, green sturgeon and coho salmon Oregon Coast ESU. Additionally, it is NMFS' biological opinion that the proposed action would NLAA humpback whale or designated critical habitat for the humpback whale and it would NLAA the Southern Resident killer whale or the designated critical habitat for Southern Resident killer whale.

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). "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 has been minimized, however, a low level of incidental take may occur due to the potential use of an impact hammer.

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 nondiscretionary measures that are necessary or appropriate to minimize the impact of the amount or extent of incidental take (50 CFR 402.02).

1. Minimize impact of construction and post-construction revegetation.
2. Minimize use of the impact hammer, as possible.

Terms and Conditions

The terms and conditions described below are non-discretionary, and MARAD, the Corps or any applicant must comply with them in order to implement the RPMs (50 CFR 402.14). MARAD, the Corps, 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 proposed project does not comply with the following terms and conditions, protective coverage for the proposed action would likely lapse.

1. Dispose of removed treated wood in upland disposal site that can adequately address treated wood contaminant issues.

2. Re-vegetate area with native seed and vegetation. Ensure non-native vegetation does not get established within the project area.

3. Minimize impacts through implementation of best management practices (BMPs):
    a. Concrete filled pipe piles for the substructure are proposed.
    b. Abutments will be the same design as the intermediate bents but will have a concrete or steel backwall and wingwall attached to them. Banks around the abutments would be armored (if required) and no rip-rap would be located within the existing rip-rap area for the existing bridge design and layout.
    c. Existing piles and concrete would be removed to at least 1 foot below mudline.
    d. New piles will be driven with a vibratory hammer. An impact hammer would be used only if there is a constraint to finalizing the driving of an individual pile with the vibratory hammer. If an impact hammer is required, a bubble curtain will be used for that individual pile to mitigate potential vibratory impacts to fish.
    e. The Port proposes to conduct all impact hammering 1 hour before and 1 hour after low water. The drawing in the BA shows the width of the slough and tide levels. This is a 30% design drawing showing 4 pile bents. With the updated design and embedment of the piles, engineers are able to reduce the number of piles for the project by 25% (from 40 piles to 30 piles).
    f. Fifteen of the pilings can be impacted in the dry at low water. The remaining piles will be in less than 10 feet of water.
    g. The Port proposes the use of an unconfined bubble curtain while impacting piling in the water. The unconfined curtain should be very effective due to the depth of water and water velocity in this area.
    h. All pile driving will be conducted during the authorized in-water work window (Oct. 1 to Feb. 15).
    i. Construction will be implemented from barges, and, if needed, with assistance from the side of either or both sides of the bridge right of way.
    j. No treated wood will be used for new bridge decking or pilings and all existing treated wood will be removed.

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).

No Conservation recommendations are suggested.

Reinitiation of Consultation

Reinitiation of consultation is required and shall be requested by MARAD, the Corps, or by NMFS, where discretionary Federal involvement or control over the action has been retained or is authorized by law and (1) The amount or extent of incidental taking specified in the ITS is exceeded, (2) new information reveals effects of the action that may affect listed species or critical habitat in a manner or to an extent not previously considered; (3) 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 this biological opinion; or if (4) a new species is listed or critical habitat designated that may be affected by the identified action.

NMFS also reviewed the proposed action for potential effects on EFH designated under the Magnuson-Stevens Fishery Conservation and Management Act (MSA), including conservation measures and any determination you made regarding the potential effects of the action. This review was conducted pursuant to section 305(b) of the MSA, implementing regulations at 50 CFR 600.920, and agency guidance for use of the ESA consultation process to complete EFH consultation. In this case, NMFS concluded the action would adversely affect EFH, the list below includes a brief explanation of all adverse effects on EFH:

- Effects to freshwater Pacific Coast Salmon EFH by the project **may adversely affect** estuarine habitats by impacting substrates and suspended sediment water quality over the short-term. Also, juvenile coho or Chinook salmon entrapped in isolated areas during construction would result in minor fish mortalities. Short-term loss of benthic food resources would also occur from construction.

- Short-term loss of benthic food resources would also result from construction. The project **may adversely affect** EFH for coastal pelagic species in the short-term due to construction related disturbance impacts to estuarine habitats within the action area. These impacts would be short-term until the disturbed estuarine habitat are naturally restored and recover.

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 Institutional Repository. A complete record of this consultation is on file at the NMFS Roseburg, Oregon office.

Please direct questions regarding this letter to Tere O'Rourke, Oregon Coast Branch Chief, therese.orourke@noaa.gov (office: 541-957-3385, cell: 541-243-3902).

Sincerely,

Kim W. Kratz, Ph.D.
Assistant Regional Administrator
Oregon Washington Coastal Office

cc: Mike Dunning, International Port of Coos Bay
Tyler Krug, U.S. Army Corps of Engineers

REFERENCES

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