

EID NMFS Supplement Elk Bend Sewer District November 2015

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Threatened/Endangered Species and Essential Fish Habitat Determinations, final submittal to NMFS,
October 27, 2015

NMFS concurrence letter, November 24, 2015

Idaho Department of Environmental Quality





STATE OF IDAHO
DEPARTMENT OF
ENVIRONMENTAL QUALITY

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C.L. "Butch" Otter, Governor
John H. Tippetts, Director

October 28, 2015

Certified Mail No.: 7013 1710 0000 9751 7726

Mr. David Mabe
National Marine Fisheries Service
800 East Park Blvd, Suite 220
Boise, Idaho 83712

Re: Threatened/Endangered Species and Essential Fish Habitat Determination - Elk Bend Water & Sewer District Wastewater Improvements

Dear Mr. Mabe:

Enclosed with this letter is a copy of the memo with the Department of Environmental Quality (DEQ) determination of threatened/endangered species and essential fish habitat, for the Elk Bend Water & Sewer District Wastewater Improvements project. The project will be financed by federal funds through the USDA Rural Utilities Service and the Idaho Department of Commerce.

Much of the project activity will occur within 300' of the main stem Salmon River, but no work will be done within the channel or tributaries. It is our opinion that the project will have **No Effect** on endangered species, and **May Affect, But Is Not Likely to Adversely Affect** Essential Fish Habitat. Please review the document and provide concurrence or comment. A Portable Document Format copy has been emailed to you and to Kimberly Murphy of the Salmon Field Office.

Thank you for your assistance in this matter. If you have any comments or questions, please contact me at Michael.May@deq.idaho.gov or (208) 373-0406.

Sincerely,

A handwritten signature in blue ink that reads "Michael May".

Michael May
Sr. Water Quality Specialist

Enclosure: One (1) – Copy of Memo: Elk Bend Water & Sewer District Wastewater Improvements Threatened/Endangered Species and Essential Fish Habitat Determination

MLM:dls

c: MaryAnna Peavey, DEQ State Office (TRIM)
Skyler Allen, Keller Associates (sallen@kellerassociates.com)
Kimberly Murphy, NOAA Fisheries West Coast Region, (Kimberly.Murphy@noaa.gov)

MEMO

TO: Skyler Allen, Keller Associates
Kimberly Murphy, National Marine Fisheries Service

FROM: Mike May, DEQ Grant and Loan Program

SUBJECT: Elk Bend Water & Sewer District Wastewater Improvements
Threatened/Endangered Species and Essential Fish Habitat Determination

DATE: October 27, 2015

The Elk Bend Water & Sewer District (EBW&SD) is proposing upgrades to their wastewater system. The District currently serves two small residential areas on Elk Bend and Salmon Bend of the Salmon River. EBW&SD serves approximately 138 residences, a few cabins, a 20-space RV park and a restaurant. The existing wastewater facilities consist of two extended aeration package plants discharging to large soil absorption systems. These facilities were constructed in the 1970s and are in poor condition. At least one incident involving sewage overflow to the ground surface has occurred.

FEDERAL NEXUS

The proposed project is expected to be financed by the Idaho Clean Water State Revolving Fund (SRF), which is ultimately funded through the Environmental Protection Agency. Additional financing is being provided by a Community Development Block Grant using federal funds administered by the Idaho Department of Commerce and by funds from the U.S. Department of Agriculture Rural Utilities Service. Construction is expected to be completed during 2016.

PROJECT SCOPE PROPOSED ACTION

The proposed wastewater improvements include:

- Construct a new recirculating gravel filter (RGF) wastewater treatment facility (WWTF) and pressure sewer line at Elk Bend; Replace the existing large soil absorption system (LSAS) with a new LSAS at Elk Bend;
- Rehabilitate the existing WWTF at Steelhead Bend; and
- Rehabilitate Steelhead Bend Lift Station and Elk Bend Lift Station #1 with new pumps and electrical equipment; and

The lift station rehabilitation includes removal of worn equipment and piping, rehabilitating the wet well, installing new pumps and piping, new electrical and control equipment, and weather protection. The RGF system should be sized for the treatment of 26,000 gallons per day average and 40,000 gallons per day peak. Elk Bend annual average flows are estimated to increase from 16,000 gpd currently to 20,000 gpd in 20 years and 24,000 gpd in 40 years. Steelhead Bend annual averages flows are estimated to increase from 5,000 gpd currently to 6,000gpd in 20 years and 7,500 gpd in 40 years.

The proposed project will improve water quality because no waste water discharge to the Salmon River will occur. In addition, the project does not involve any water withdrawal from or discharge to the Salmon River or any of its tributaries. No ground disturbance or riparian vegetation removal within 100 feet of the river or its tributaries is anticipated, with the exception of the Steelhead Bend lift station. Ground disturbance for rehabilitation of this lift station will extend to within 75 feet of the river bank. The U.S. Army Corps of Engineers issued an Approved Jurisdictional Determination (AJD) on May 22, 2014, stating that all project work is in uplands not containing waters of the U.S., including wetlands. Project features are presented on the attached map based on an underlying aerial photograph.

EBW&SD's engineers prepared a nutrient-pathogen evaluation to estimate the effects of the new LSAS on groundwater and surface water quality, in accordance with Idaho rules¹ and guidance^{2,3} for subsurface sewage disposal. Modeling projected that the ground water nitrate/nitrite concentration at the riverbank would not exceed 1.3 mgN/L, and in-stream total phosphorus would be less than 0.4 µgP/L under annual low streamflow of 900 cfs and 20,000 gpd sanitary flow.⁴ Even allowing for larger wastewater flows of 25,550 gpd would not raise in-stream concentrations above 0.5 µgP/L and 0.1 µgN/L.⁵

PROJECT ACTION AREA

EBW&SD is located on the main stem Salmon River, extending from approximately river mile (RM) 285 to just below RM 283, which places it approximately 24 miles south of Salmon, Idaho (RM 260) in Lemhi County. The Salmon River originates to the southwest in the Sawtooth and Salmon River Mountains and the Sawtooth Valley and flows north through Elk Bend. The project area is located within the Middle Salmon-Panther watershed (hydrologic unit code 17060203), more specifically within the "12-digit HUC" 170602030304 (main stem Salmon River between Iron Creek and Twelvemile Creek).⁶ This reach of the main stem Salmon River has been assigned the following beneficial uses by the Idaho Department of Environmental Quality (DEQ): cold water aquatic life, salmonid spawning, primary contact recreation, drinking water supply, wildlife habitat and aesthetics.⁷ It is on the 303(d)/305(b) list as not meeting the cold water aquatic life beneficial use, but the pollutant of concern has not been identified.⁸ It is part of a long stretch of river with very limited shade, so high temperatures due to natural conditions may be a concern.

The project site is located in the Dry Gneissic-Schistose-Volcanic Hills ecoregion, a rugged valley in the rain shadow of the Salmon River Mountains of central Idaho with sagebrush grassland native vegetation.⁹ The attached project map shows that bushes and shrubs are sparse on the canyon walls, and there are a few irrigated fields in low areas. The populated zones are in relatively flat strips, no wider than about 1,000 feet, between US-93 and the Salmon River. The January average snow depth at the Salmon weather station is 4 inches, with less snow cover in December and February, based on data from 1905 to 2015.¹⁰

Elk Bend contains approximately 100 residences. There are also a few small cabins, a 20 space RV park with showers and a small convenience store/restaurant. It is estimated that about 20-30% of the residences are occupied throughout the year with higher seasonal occupancy. The average household size in Lemhi County per the 2010 Census is 2.2 persons per household. The Elk Bend system is estimated to serve approximately 60-75 people year round and up to 200 people at peak times.

Steelhead Bend is located approximately 1-mile downriver of Elk Bend and contains approximately 38 residences, most of which are only seasonally occupied. It is estimated that approximately 20-26 people reside year round. The Steelhead Bend system is estimated to serve a peak of approximately 50 people. There are no commercial enterprises located at Steelhead Bend.

Elk Bend and Steelhead Bend are anticipated to have a similar population growth as Salmon, Idaho over the next 20-years. The town of Salmon has seen a growth rate of -0.98% from 2010 to 2013. A growth rate of 1% is utilized for the purpose of this study, which will provide reasonable flow estimates for system improvements.

CONSERVATION MEASURES AND BEST MANAGEMENT PRACTICES

It is understood that the main stem of the Salmon River is designated critical habitat for Snake River Basin **Steelhead** (*Oncorhynchus mykiss*)¹¹ and Snake River spring/summer **Chinook Salmon** (*Oncorhynchus tshawytscha*),¹² with designated critical habitat for Chinook salmon extending 300 feet from either edge of the stream. Both species are listed under the Endangered Species Act (ESA) as threatened and are present in the Salmon River. **Bull trout** (*Salvelinus confluentus*), another threatened species, are also present in the Salmon River (see below). Based on these site conditions, the following conservation measures and best management practices (BMPs) are proposed during construction:

- Prior to beginning work, project sites should be surveyed for noxious weeds and appropriate measures taken to either avoid existing infestations or treat infestations to prevent a local expansion or off-site transport.
- Where construction activities occur within 75 feet of stream channels or standing water, or in areas where water may concentrate during snowmelt periods, standard sediment and pollutant prevention and retention practices will be utilized (e.g., silt fence, wattles) and appropriately maintained.
- Fuel storage will occur only within staging areas, and refueling will not occur within 150 feet of streams. If fueling must occur at less than 150 feet, it will occur inside an impervious containment structure with a volumetric holding capacity equal to at least 110 percent of the fueling tank. Engine and hydraulic fluids will be monitored for leaks. Spill packs will also be on hand for minor leaks/spills.
- Washing of tools and equipment will occur only within staging areas, or other areas approved by DEQ, where there is no potential for rinsate to reach surface waters.
- To minimize the potential for introducing hazardous material to the aquatic system, a spill prevention and control countermeasures plan will be prepared by the contractor and approved by DEQ prior to project.
- No construction will occur within wetland or riparian conditions.
- Equipment and material staging areas should be located in areas lying outside of resource conservation areas (RCAs), in areas requiring the least amount of new soil disturbance, and outside topographic lows where water may concentrate during snowmelt or storm events.
- Equipment should be cleaned of all dirt, mud, seeds, and vegetative matter prior to arriving on site to reduce risk of invasive species introduction. The same equipment should be cleaned again prior to leaving, if warranted.
- Materials resulting from demolition or site preparation should be removed to an appropriate disposal site.

- RCA vegetation should be protected to the extent possible, and disturbed areas promptly rehabilitated.
- No trees will be removed
- To avoid inadvertent water contamination, ensure that sewage is successfully delivered to established treatment areas where it may be properly treated throughout construction; establishment of temporary lift stations/delivery systems may be necessary.
- Consider establishing a water quality monitoring plan to assure sewage treatment successfully prevents contaminating the Salmon River for the life expectancy of the project.
- If poured in place concrete is used ensure that measures are taken to prevent green concrete from entering the Salmon River or any other body of water.
- Vibratory compaction will be used, but vibratory or impact hammers will not be used.

ALL SURPLUS EXCAVATED MATERIAL WILL BE REMOVED FROM THE SITE TO A DESIGNATED UPLAND SITE(S) AWAY FROM ANY WATERCOURSES, RENDERING THEM UNAVAILABLE TO ENTER THE STREAM CHANNEL AS A RESULT OF STORM RUNOFF OR A HIGH WATER EVENT.

USF&WS THREATENED, ENDANGERED AND CANDIDATE SPECIES

The U.S. Fish and Wildlife Service (USF&WS) revised its threatened and endangered species list¹³ during the history of this project. The final revision referenced in this memo and attached was issued on August 14, 2014 and was downloaded July 9, 2015. The list was refined and species were assessed using telephone conversations and email correspondence with the USF&WS Eastern Idaho Field Office and the National Marine Fisheries Service, as well as publically available documents.

The following species are listed as threatened and under the jurisdiction of USF&WS within Lemhi County:

1. **Canada Lynx** (*Lynx canadensis*) – The Canada Lynx reside in boreal forest landscapes and provide one or more of the following beneficial habitat elements including snowshoe hares for prey, abundant, large, woody debris piles that are used as dens, and winter snow conditions that are generally deep and fluffy for extended periods of time.¹⁴ The proposed project is located in a narrow riverine valley with adjacent steep canyon walls nearly denuded of trees (see map). It is not typical of boreal forests and has shallow winter snow depths. The only proposed critical habitat in Idaho is in the northeast corner of Boundary County, and reflects actual distribution¹⁵. **The proposed project will have NO EFFECT on the Canada Lynx.**
2. **Bull Trout** (*Salvelinus confluentus*) –The Salmon River in the vicinity of the project site is designated bull trout critical habitat.¹⁶ Bull trout are cold water fish. The species must have: cold water; clean stream substrates for spawning and rearing; complex habitats with deep pools, undercut banks and lots of large logs; and lake and river connectivity to headwater streams for annual spawning and feeding migrations. The species is sensitive to sediment. Due to the proximity of the proposed improvements, USF&WS has requested that the following measures be implemented with the primary goal of ensuring that absolutely no sediment enters the Salmon

River. DEQ is requiring that these measures are strictly followed. By following these measures, the project will have “NO EFFECT” on Bull Trout.

- a. Implementation of best management practices to avoid and minimize the introduction of sediment into the river.
 - i. Erosion control wattles, sediment drift fences or other barriers to sediment traveling off the project area.
 - ii. Equipment staging areas or construction area for the two lift stations must be slanted away from the river, towards the road, to minimize sediment delivery to the Salmon River.
 - iii. Any other practices that would minimize the possibility of sedimentation should be incorporated into the project plans and specifications to avoid the possibility of adverse effects to bull trout.

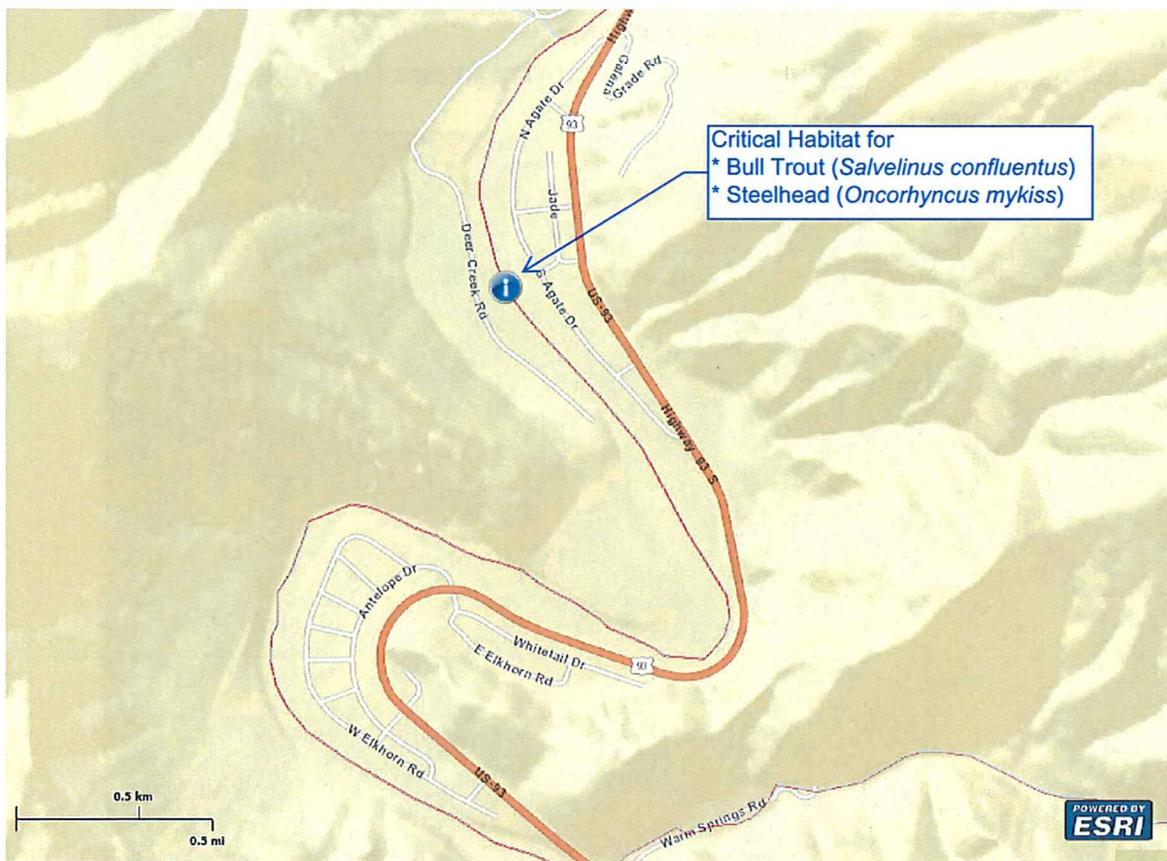


Figure 1. Critical habitat in the project area (USF&WS Critical Habitat Mapper 3.0)¹⁷

The following have been listed as Candidate Species within Custer County:

1. **Whitebark Pine** (*Pinus albicaulis*) – The Whitebark pine is a 5 needle conifer species that occurs from approximately 2,950 feet at its northern limit in British Columbia up to 12,000 feet in the Sierra Nevada. The Whitebark Pine is typically found at or slightly lower than alpine timberline in the upper montane zone. In the U.S. it is primarily found on public lands.¹⁸ The proposed

project is located in an arid, nearly treeless environment unsuited to Whitebark Pine. **The project will have NO EFFECT on whitebark pine.**

- Greater Sage-Grouse (*Centrocercus urophasianus*)** – Grouse reside in Sagebrush Steppe environments, and prefer slightly elevated features surrounded by flat terrain, but not lower portions of hillsides beneath areas that could contain raptors or other predators. The preferred Best Management Practice is avoidance: if construction activity must occur during lekking season, work should be postponed until after 10:30 a.m. As shown on the map below, the proposed project is not located in a priority area or general area for sage-grouse management (it is between areas Y and BB). All project work is proposed to be limited to lowlands within 1,000 feet of U.S. Highway 93. This makes it extremely unlikely that leks are present near the project area, since paved roads and primary and secondary routes are believed to cause adverse effects on leks at a distance of 1.6 miles.¹⁹ **The proposed project will have NO EFFECT on the Greater Sage Grouse.**

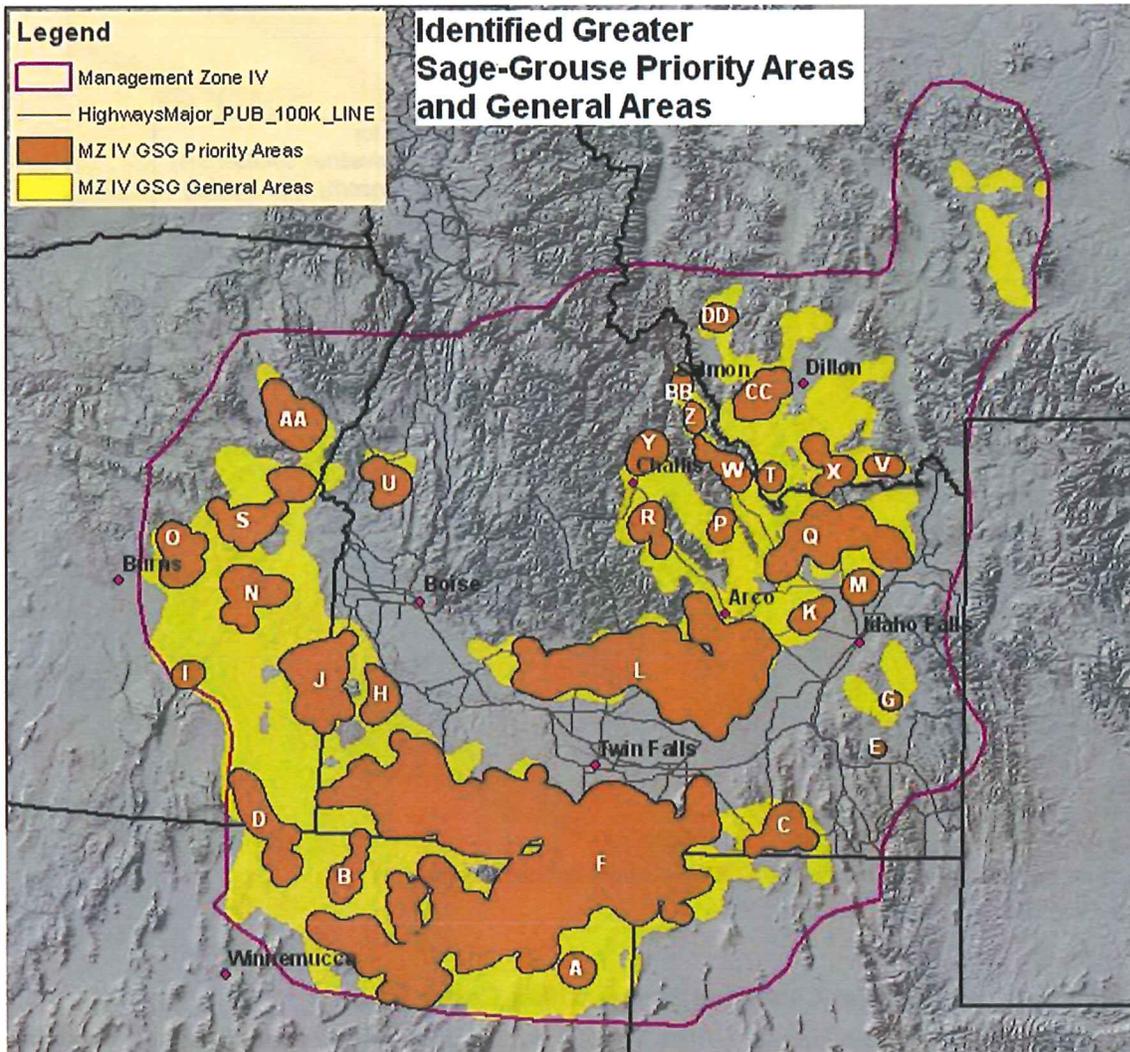


Figure 2. Greater Sage-Grouse Priority Areas and General Areas (BLM 2011)²⁰

The following species are listed as a Proposed Threatened Species within Custer County:

1. **North American Wolverine** (*Gulo gulo luscus*) - The North American Wolverine was a proposed species which is not expected to be found in the proposed project planning area. The proposed project is located in suburban and arid foothills environments. Wolverine distribution is restricted to high elevation areas of deep, persistent and reliable spring snow cover (April 15 to May 14) is the best overall predictor of wolverine occurrence in the contiguous U.S.²¹ Wolverines are known to travel long distances, so any individuals that may be encountered are almost certain to be travelling between other suitable habitats. January is the snowiest month for Salmon is deepest in January, with an average snow depth of 4 inches over 101 years of data.¹⁰ This is insufficient snow depth at the project site for wolverine dens, therefore **the proposed project will have NO EFFECT on the wolverine species.**²²

2. **Yellow-Billed Cuckoo** (*Coccyzus americanus*) –Western cuckoos breed in large blocks of riparian habitats, particularly woodlands with cottonwoods and willows. Dense understory foliage is believed to be important for nesting sites. They are generally local and uncommon in scattered drainages of the arid and semiarid portions of western Colorado, western Wyoming, Idaho, The Yellow-billed Cuckoo is not shown as “known or believed to be present” in the near vicinity of the project area, according to the USF&WS Environmental Conservation Online System (ECOS).²³ This is consistent with the 2014 proposed critical habitat designation,²⁴ which indicated that floodplains at least 325 feet wide with dense canopy closure greater than 200 acres in extent are generally required to support more than a single breeding pair. The critical habitat proposal includes all known nesting areas greater than 200 acres, based on breeding records between 1998 and 2012, and no such areas were identified in Lemhi County. The proposed project is in an area absent of woodlands with cottonwood and willows. **The proposed project will have NO EFFECT on the Yellow-billed cuckoo.**

NMFS THREATENED, ENDANGERED AND CANDIDATE SPECIES

The following salmonid species or evolutionarily significant units are listed as threatened and under the jurisdiction of NMFS within Lemhi County:

1. **Snake River spring/summer chinook salmon** (*Oncorhynchus tshawytscha*). The Snake River spring/summer run of chinook salmon is listed as threatened,²⁵ and the main stem Salmon River is critical habitat within the project HUC.²⁶

2. **Snake River fall chinook salmon** (*Oncorhynchus tshawytscha*). The Snake River fall run of chinook salmon is listed as threatened,²⁷ but the Middle Salmon-Panther watershed does not contain critical habitat for this run.²⁸

3. **Snake River sockeye salmon** (*Oncorhynchus nerka*). Snake River sockeye are listed as endangered²⁹ and the main stem Salmon River is critical habitat within the project HUC.³⁰

4. **Snake River Basin steelhead** (*Oncorhynchus mykiss*). Snake River Basin steelhead are listed as threatened,³¹ and the main stem Salmon River is critical habitat within the project HUC.³²

Pacific salmon and steelhead are anadromous fish,³³ meaning that they hatch and spend the first part of their lives in fresh water, spend their adult lives at sea, and return to fresh water to spawn. Pacific salmon make the round trip only once. Females build their nests (redds) by agitating bottom gravels with her fins and tail, creating a depression in which to lay her eggs. Pacific salmon die within a few days of spawning, but steelhead do not necessarily die and may spawn more than once.³⁴

All salmonids require pure, well-oxygenated cold water during the freshwater phases of their life cycles. Excessive sediment interferes with spawning.

The expected effects of the project are summarized in Table 1_ below. The effects analysis was performed according to NMFS guidance.³⁵ The table is presented as a matrix of pathways and indicators (MPI) with the criteria replaced by expected effects. The full MPI is presented as an appendix to this document, and was adapted from the one published in the Pacific Salmon Management Plan³⁶ by eliminating pathways and indicators pertaining to “west side” and estuarine environments. **In summary, the project is Not Likely to Adversely Affect (NLAA) salmonids.**

Table 1. Expected effects of the project on salmonids

Pathway	Indicators	Effect
Water Quality	Temperature	NLAA: Recirculating Gravel Filter treatment and LSAS disposal are below-ground and will moderate temperatures
	Sediment	NLAA: sediments in runoff will be contained
	Chemical Contaminants/Nutrients	NLAA: nutrient-pathogen study predicts groundwater concentrations at bank of N<1.3mg/L, P~12mg/L; in-stream N<0.1µg/L P< 0.4µg/L
Habitat Access	Physical Barriers	NO EFFECT: project does not involve in-channel work
Habitat Elements	Substrate Large Woody Debris Pool Frequency Pool Quality Off-channel Habitat Refugia	NO EFFECT: project does not involve in-channel work; sediments in runoff will be contained
Channel Condition & Dynamics	Width/Depth Ratio Streambank Condition Floodplain Connectivity	NO EFFECT: project does not involve in-channel work
Flow/Hydrology	Peak/Base Flows Drainage Network Increase	NO EFFECT: project does not involve in-channel work or earthwork that would significantly alter runoff
Watershed Conditions	Road Density & Location Disturbance History Riparian Reserves	NO EFFECT: no roads will be built, modified or reclaimed; no ground disturbance will occur within 75 feet of bank
Estuarine Conditions		NOT APPLICABLE

Pathway	Indicators	Effect
Estuarine Water Quality		NOT APPLICABLE

ESSENTIAL FISH HABITAT

The Elk Bend Water & Sewer District wastewater improvement project is located within Essential Fish Habitat (EFH) for **Chinook Salmon** (*Oncorhynchus tshawytscha*) but not **Coho Salmon** (*Oncorhynchus kisutch*) as identified in the attached EFH map. “All those water bodies occupied or historically accessible” in the identified hydrologic units are considered EFH, according to 50 CFR 660.412. Because the SRF project will not include work in the Salmon River channel, and the conservation measures and BMPs identified above are protective of the stream, any potential effects are insignificant in size or discountable. **The SRF project “May Affect, but Is Not Likely to Adversely Affect” Essential Fish Habitat.**

MLM

Attachments: Project Map
 Nutrient Pathogen Evaluation
 U.S. Army Corps of Engineers Approved Jurisdictional Determination, May 22, 2014
 Idaho Species List, last downloaded July 9, 2015
 Critical Habitat for Bull Trout Map (Unit 27)
 DEQ, Chinook Salmon Essential Fish Habitat in Idaho (map)
 USF&WS consultation, 2014
 NMFS consultation, 2014-2015

References

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- ¹ *Individual/Subsurface Disposal Rules*, IDAPA 58.01.03.
² Idaho Department of Environmental Quality, *Technical Guidance Manual for Individual and Subsurface Sewage Disposal Systems*.
³ *Nutrient-Pathogen Evaluations*, www.deq.idaho.gov/water-quality/wastewater/septic-systems/nutrient-pathogen-evaluations/
⁴ Keller Associates, *Elk Bend Sewer District Level 1 Nutrient-Pathogen Evaluation Report*, April 2015.
⁵ Paul Scoresby, P.E., Schiess & Associates, personal communication September 1, 2015.
⁶ US EPA, Grants Reporting and Tracking System, <http://iaspub.epa.gov/pls/grts/f?p=110:1>, accessed August 28, 2005.
⁷ *Water Quality Standards*, IDAPA 58.01.02, April 11, 2015, §100 and §130.05.
⁸ Idaho Department of Environmental Quality, *Idaho’s 2012 Integrated Report*, approved by EPA on July 11, 2014.
⁹ McGrath, et al., 2002, *Ecoregions of Idaho*, EPA Western Ecology Division, Corvallis, Oregon, www.epa.gov/wed/pages/ecoregions/id_eco.htm.
¹⁰ Western Regional Climate Center, *Salmon Lemhi Co AP, Idaho (108076) Monthly Climate Summary, 11/5/1905 to 1/20/2015*, <http://www.wrcc.dri.edu/cgi-bin/cliMAIN.pl?id8076>

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- ¹¹ *Federal Register*, Vol. 65, Page 7764, February 16, 2000.
- ¹² *Federal Register*, Vol. 70, Page 52630, September 2, 2005.
- ¹³ USF&WS, August 14, 2014, *Idaho Species List*, www.fws.gov/idaho/Species.htm, last downloaded July 9, 2015.
- ¹⁴ USF&WS Species Profile: Canada Lynx (*Lynx canadensis*),
ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=A073
- ¹⁵ *Federal Register*, Vol. 78, Page 59430, September 23, 2013.
- ¹⁶ *Federal Register*, Vol. 75, Page 64054, October 28, 2010.
- ¹⁷ USF&WS Critical Habitat Mapper 3.0, ecos.fws.gov/crithab/flex/crithabMapper.jsp, accessed July 17, 2015.
- ¹⁸ USF&WS Species Profile: Whitebark pine, ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=R00E
- ¹⁹ *Draft Idaho and Southwestern Montana Sub-Region Greater Sage-Grouse LUPA/EIS, Vol. II §4.2.1*
- ²⁰ BLM, 2011, *Idaho Sage-grouse Priority Areas White Paper, September 27, 2011 FINAL*,
www.blm.gov/pgdata/etc/medialib/blm/id/wildlife/sensitive_species/sg_scoping_meeting.Par.67149.File.dat/Idaho_Sage-grouse_Priority_Areas_White_Paper_September_27_2011_FINAL_508.pdf
- ²¹ USF&WS Species Profile: North American wolverine (*Gulo gulo luscus*),
ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=A0FA
- ²² USF&WS withdrew its proposal to list the North American wolverine as threatened with the contiguous United States; *Federal Register*, Vol. 79, Page 47521, August 13, 2014.
- ²³ USF&WS Species Profile: Yellow-Billed Cuckoo (*Coccyzus americanus*),
ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=B06R#candidate.
- ²⁴ *Federal Register*, Vol. 79, Page 48547, August 15, 2014.
- ²⁵ *Federal Register*, Vol. 70, Page 37160, June 28, 2005.
- ²⁶ 50 CFR 226.205
- ²⁷ *Federal Register*, Vol. 70, Page 37160, June 28, 2005.
- ²⁸ 50 CFR 226, §205 and Table 3.
- ²⁹ *Federal Register*, Vol. 70, Page 37160, June 28, 2005.
- ³⁰ *Federal Register*, Vol. 58, Page 68543, December 28, 1993.
- ³¹ *Federal Register*, Vol. 71, Page 834, January 5, 2006.
- ³² *Federal Register*, Vol. 70, Page 52630, September 2, 2005.
- ³³ USF&WS Species Profile: Pacific Salmon, (*Oncorhynchus spp.*),
www.fws.gov/species/species_accounts/bio_salm.html
- ³⁴ USF&WS Species Profile: steelhead (*Oncorhynchus (=salmo) mykiss*),
ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=E08D
- ³⁵ National Marine Fisheries Service, *Making Endangered Species Act Determination of Effect for Individual or grouped Actions at the Watershed Scale*, August 1996.
- ³⁶ Pacific Fishery Management Council, "Description of Adverse Effects on Pacific Salmon Essential Fish Habitat and Actions to Encourage the Conservation and Enhancement of Essential Fish Habitat," Appendix A, Chapter 3 in *Amendment 14 to the Pacific Coast Salmon Fishery Plan*, August 1999.

Table 2. Habitat Objectives from Amendment 14 to the Pacific Coast Salmon Plan, App. A (1999)

Pathway	Indicators	Properly Functioning	At Risk	Not Properly Functioning
Water Quality:	Temperature	50-57°F ^{1/}	57-60°F (spawning) 57-64°F (migration & rearing) ^{2/}	> 60°F (spawning) > 64°F (migration & rearing) ^{2/}
	Sediment/Turbidity	< 12% fines (<0.85mm) in gravel ^{3/} , turbidity low	12-20% (east-side) ^{2/} , turbidity moderate	>20% (east side) ^{2/} fines at surface or depth in spawning habitat ^{2/} , turbidity high
	Chemical Contamination/ Nutrients	low levels of chemical contamination from agricultural, industrial and other sources, no excess nutrients, no CWA 303d designated reaches ^{5/,13/}	moderate levels of chemical contamination from agricultural, industrial and other sources, some excess nutrients, one CWA 303d designated reach ^{5/}	high levels of chemical contamination from agricultural, industrial and other sources, high levels of excess nutrients, more than one CWA 303d designated reach ^{5/}
Habitat Access:	Physical Barriers	any man-made barriers present in watershed allow upstream and downstream juvenile and adult fish passage at all flows	any man-made barriers present in watershed do not allow upstream and/or downstream fish passage at base/low flows	any man-made barriers present in watershed do not allow upstream and/or downstream fish passage at a range of flows
Stream Habitat Elements:	Substrate	dominant substrate is gravel or cobble (interstitial spaces clear), or embeddedness <20% ^{3/}	gravel and cobble is subdominant, or if dominant, embeddedness 20-30% ^{3/}	bedrock, sand, silt or small gravel dominant, or if gravel and cobble dominant, embeddedness >30% ^{2/}
	Large Woody Debris quantity of key pieces	East-side: >20 pieces/mile >12" diameter >35 ft. length ^{2/} ; and adequate sources of woody debris recruitment in riparian areas.	currently meets standards for properly functioning, but lacks potential sources from riparian areas of woody debris recruitment to maintain that standard	does not meet standards for properly functioning and lacks potential large woody debris recruitment
	Pool Frequency <u>channel width,</u> <u>pools/mile</u> ^{6/} 5 feet 184 10 " 96 15 " 70 20 " 56 25 " 47 50 " 26 75 " 23 100 " 18	meets pool frequency standards (left) and large woody debris recruitment standards for properly functioning habitat (above)	meets pool frequency standards but large woody debris recruitment inadequate to maintain pools over time	does not meet pool frequency standards
	Pool Quality	pools >1 meter deep (holding pools) with good cover and cool water ^{3/} , minor reduction of pool volume by fine sediment	few deeper pools (>1 meter) present or inadequate major reduction of pool volume by fine sediment cover/temperature ^{3/} , moderate reduction of pool volume by fine sediment	no deep pools (>1 meter) and inadequate cover/temperature ^{3/} , Major reduction of pool volume by fine sediment
	Off-channel Habitat	backwaters with cover, and low energy off-channel areas (ponds, oxbows, etc.) ^{3/}	some backwaters and high energy side channels ^{3/}	few or no backwaters, no off-channel ponds ^{3/}

Pathway	Indicators	Properly Functioning	At Risk	Not Properly Functioning
	Refugia (important remnant habitat for sensitive aquatic species)	habitat refugia exist and are adequately buffered (e.g., by intact riparian reserves); existing refugia are sufficient in size, number and connectivity to maintain viable populations or sub-populations ⁷	habitat refugia exist but are not adequately buffered (e.g., by intact riparian reserves); existing refugia are insufficient in size, number and connectivity to maintain viable populations or sub-populations ⁷	adequate habitat refugia do not exist ⁷ :
Channel Condition & Dynamics	Width/Depth Ratio	<10 ^{2,4/}	>10	>10
	Streambank Condition	>90% stable; i.e., on average, less than 10% of banks are actively eroding ^{2/}	80-90% not eroding	<80% not eroding
	Floodplain Connectivity	off-channel areas are frequently hydrologically linked to main channel; overbank flows occur and maintain wetland functions, riparian vegetation and succession	reduced linkage of wetland, floodplains and riparian areas to main channel; overbank flows are reduced relative to historic frequency, as evidenced by moderate degradation of wetland function, riparian vegetation/succession	severe reduction in hydrologic connectivity between off-channel, wetland, floodplain and riparian areas; wetland extent drastically reduced, riparian vegetation/succession altered significantly, and channel degradation apparent
Flow/Hydrology:	Change in Peak/Base Flows	watershed hydrograph indicates peak flow, base flow and flow timing characteristics comparable to an undisturbed watershed of similar size, geology and geography	some evidence of altered peak flow, baseflow and/or flow timing relative to an undisturbed watershed of similar size, geology and geography.	pronounced changes in peak flow, baseflow and/or flow timing relative to an undisturbed watershed of similar size, geology and geography
	Increase in Drainage Network	zero or minimum increases in drainage network density from roads ^{8/,9/}	moderate increases in drainage network density from roads (e.g., about 5%) ^{8/,9/}	significant increases in drainage network density from roads (e.g., 20-25%) ^{8/,9/}
Watershed Conditions:	Road Density & Location	<2 mi/mi ² ^{11/} , no valley bottom roads	2-3 mi/mi ² , some valley bottom roads	>3 mi/mi ² , many valley bottom roads
	Disturbance History	<15% ECA** (entire watershed) with no concentration of disturbance in unstable or potentially unstable areas, and/or refugia, and/or riparian area; and for NWFP area (except AMAs**), }15% retention of LSOG in watershed ¹⁰	<15% ECA** (entire watershed) but disturbance concentrated in unstable or potentially unstable areas, and/or refugia, and/or riparian area; and for NWFP area (except AMAs), }15% retention of LSOG in watershed ¹⁰	>15% ECA** (entire watershed) and disturbance concentrated in unstable or potentially unstable areas, and/or refugia, and/or riparian area; does not meet NWFP standard for LSOG retention

Pathway	Indicators	Properly Functioning	At Risk	Not Properly Functioning
	Riparian Reserves	the riparian reserve system provides adequate shade, large woody debris recruitment, and habitat protection and connectivity in all subwatersheds, and includes known refugia for sensitive aquatic species (>80% intact), and/or for grazing effects: percent similarity of riparian vegetation to the potential natural community/composition >50% ^{12/}	moderate loss of connectivity or function (shade, LWD recruitment, etc.) of riparian reserve system, or incomplete protection of habitats and refugia for sensitive aquatic species (>70-80% intact), and/or for grazing effects: percent similarity of riparian vegetation to the potential natural community/composition 25-50% or better ^{12/}	riparian reserve system is fragmented, poorly connected, or provides inadequate protection of habitats and refugia for sensitive aquatic species (<70% intact), and/or for grazing effects: percent similarity of riparian vegetation to the potential natural community/composition <25% ^{12/}
Estuarine Conditions	Habitat quantity/quality	The estuarine system provides for adequate, prey production, cover, and habitat complexity, for both smolts and returning adults.	Moderate loss of prey production, cover, and habitat complexity	Gross loss of prey production, cover, and habitat complexity
	Aerial extent	Estuary provides for most (i.e., greater than 80% intact) of its historical areal extent and diversity of shallow water habitat types including vegetated wetlands and marshes, tidal channels, submerged aquatic vegetation, tidal flats, and large woody debris.	50-80% of pre-modification area or volume and diversity of habitats	< 50% of pre-modification area or volume; low diversity of habitats
	Hydrologic conditions/sediment/nutrient input	Fresh water inflow and other hydrologic circulation patterns and sediment and nutrient inputs are similar to historic conditions.	Moderate interruption of estuarine circulation and nutrient and sediment delivery	Gross interruption of estuarine circulation and nutrient and sediment delivery
Estuarine Water Quality	Dissolved Oxygen, Temperature, Nutrients, Chemical Contamination	Water quality standards for aquatic life protection met	Water quality standards are not met intermittently when salmon are present	Water quality standards are consistently not met when salmon are present
	Sediments	Sediments have low levels of chemical contamination, especially of persistent aromatic hydrocarbons, heavy metals, or other compounds known to bio-accumulate.	Sediments have moderate levels of chemical contaminants	Sediments have high levels of chemical contaminants
	Exotic species that are non-indigenous aquatic nuisance species	Exotic species that are non-indigenous and aquatic nuisance species are at low and decreasing levels and not interfering with estuarine system functions.	Sustained presence of multiple exotic species that are non-indigenous and aquatic nuisance species in significant abundance	Predominance of exotic species that are non-indigenous and aquatic nuisance species, low abundance of many native species with some low or extirpated.

* This table is adapted from an August 1996 NMFS report entitled: Making Endangered Species Act Determinations of Effect for INDIVIDUAL or Grouped Actions at the Watershed Scale. Target conditions to account for specific conditions in various areas have been developed, including, but not limited to: Oregon Coast Province, Southwest Province Tye Sandstone, Western Cascades Physiographic Region, High Cascades Physiographic Region, Klamath Province/Siskiyou Mountains.

** ECA= Equivalent Clear-Cut Area; AMA = Adaptive Management Area

1/ Bjornn, T. and D. Reiser. 1991. Habitat Requirements of Salmonids in Streams. American Fisheries Society Special Publication 19:83-138. Meehan, W.R., ed.

2/ Biological Opinion on Land and Resource Management Plans for the: Boise, Challis, Nez Perce, Payette, Salmon, Sawtooth, Umatilla, and Wallowa-Whitman National Forests. March 1, 1995.

3/ Washington Timber/Fish Wildlife Cooperative Monitoring Evaluation and Research Committee, 1993. Watershed Analysis Manual (Version 2.0). Washington Department of Natural Resources.

4/ NMFS Biological Opinion on Implementation of Interim Strategies for Managing Anadromous Fish-producing Watersheds in Eastern Oregon and Washington, Idaho, and Portions of California (PACFISH).

5/ A Federal Agency Guide for Pilot Watershed Analysis (Version 1.2), 1994.

6/ USDA Forest Service, 1994. Section 7 Fish Habitat Monitoring Protocol for the Upper Columbia River Basin.

7/ Frissell, C.A., Liss, W.J., and David Bayles, 1993. An Integrated Biophysical Strategy for Ecological Restoration of Large Watersheds. Proceedings from the Symposium on Changing Roles in Water Resources Management and Policy, June 27-30, 1993 (American Water Resources Association), p. 449-456.

8/ Wemple, B.C., 1994. Hydrologic Integration of Forest Roads with Stream Networks in Two Basins, Western Cascades, Oregon. M.S. Thesis, Geosciences Department, Oregon State University.

9/ e.g., see Elk River Watershed Analysis Report, 1995. Siskiyou National Forest, Oregon.

10/ Northwest Forest Plan, 1994. Standards and Guidelines for Management of Habitat for Late-Successional and Old-Growth Forest Related Species Within the Range of the Northern Spotted Owl. USDA Forest Service and USDI Bureau of Land Management.

11/ USDA Forest Service, 1993. Determining the Risk of Cumulative Watershed Effects Resulting from Multiple Activities.

12/ Winward, A.H., 1989 Ecological Status of Vegetation as a base for Multiple Product Management. Abstracts 42nd annual meeting, Society for Range Management, Billings, MT, Denver CO: Society for Range Management: p277.



UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
West Coast Region
7600 Sand Point Way N.E., Bldg. 1
Seattle, WA 98115

Refer to NMFS No: 2015-3698

November 24, 2015

Bryan Fiedorczyk
U.S. Environmental Protection Agency, Region 10
Clean Water State Revolving Fund
1200 Sixth Avenue, Suite 900
Seattle, Washington 98101-3140

Mike May
Idaho Department of Environmental Quality
Senior Water Quality Specialist
1410 North Hilton
Boise, Idaho 83706

Re: Endangered Species Act Section 7(a)(2) Concurrence Letter and Magnuson-Stevens Fishery Conservation and Management Act Essential Fish Habitat Response for the Elk Bend Water & Sewer District Wastewater Improvement Project; Salmon River-Rattlesnake Creek (171602030301), Lemhi County, Idaho (One Project)

Dear Mr. Fiedorczyk and Mr. May:

On November 2, 2015, NOAA's National Marine Fisheries Service (NMFS) received your request for a written concurrence that the Elk Bend Water & Sewer District Wastewater Improvement Project is not likely to adversely affect (NLAA) species listed as threatened or endangered or critical habitats designated under the Endangered Species Act (ESA). This response to your request was prepared by NMFS pursuant to section 7(a)(2) of the ESA, implementing regulations at 50 CFR 402, and agency guidance for preparation of letters of concurrence.

NMFS also reviewed the proposed action for potential effects on essential fish habitat (EFH) designated under the Magnuson-Stevens Fishery and Conservation Management Act (MSA), including conservation measures and any determination that you made regarding the potential effects of the action. This review was 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 that the action would not adversely affect EFH. Thus, consultation under the MSA is not required for this 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 concurrence letter will be available through NMFS' Public Consultation Tracking System [<https://pcts.nmfs.noaa.gov>]. A complete record of this consultation is on file at the Snake Basin Area Office, Boise, Idaho.

Proposed Action and Action Area

The proposed project is expected to be financed by the Idaho Clean Water State Revolving Fund, which is funded through the U.S. Environmental Protection Agency (EPA) (Federal nexus and lead action agency). Additional financing is being provided by a Community Development Block Grant using Federal funds administered by the Idaho Department of Commerce and by funds from the U.S. Department of Agriculture Rural Utilities Service. The Idaho Department of Environmental Quality (IDEQ) is the Federal grant recipient. The project will upgrade the existing wastewater systems that serve two small residential areas in Elk Bend and Salmon Bend near the city of Elk Bend, Idaho. The current systems were constructed in the 1970s, and are in poor condition. At least one incident involving sewage overflow to the ground surface has occurred. The project is designed to improve water quality because no wastewater discharge to the Salmon River will occur. Construction is expected to be completed during the summer of 2016; however, a construction schedule has not been determined and could occur at a later time.

Activities associated with this project include: (1) Construction of a new recirculating gravel filter (RGF) wastewater treatment facility (WWTF) and pressure sewer line at Elk Bend; (2) replacement of the existing large soil absorption system (LSAS) with a new LSAS at Elk Bend; (3) rehabilitation of the existing WWTF at Steelhead Bend; and (4) rehabilitation of the Steelhead Bend Lift Station and Elk Bend Lift Station #1 with new pumps and electrical equipment; removal of worn equipment and piping, rehabilitating the wet well, installing new piping, new electrical and control equipment, and weather protection (Figure 1). The RGF system would be sized for the treatment of 26,000 gallons per day (gpd) average and 40,000 gpd peak. Elk Bend annual average flows are estimated to increase from 16,000 gpd currently, to 20,000 gpd in 20 years, and 24,000 gpd in 40 years. Steelhead Bend annual average flows are estimated to increase from 5,000 gpd currently, to 6,000 gpd in 20 years, and 7,500 gpd in 40 years.

The project does not involve any water withdrawal from or discharge to the Salmon River or any of its tributaries. No ground disturbance or riparian vegetation removal within 100 feet of the river or its tributaries is anticipated, with the exception of the Steelhead Bend lift station. Ground disturbance for rehabilitation of this lift station will extend to within 75 feet of the Salmon River. The U.S. Army Corps of Engineers (COE) issued an Approved Jurisdictional Determination on May 22, 2014, stating that all project work is in uplands not containing waters of the U.S., including wetlands. Therefore, no COE permit is required.

A nutrient-pathogen evaluation to estimate the effects of the new LSAS on groundwater and surface water quality was conducted in accordance with Idaho Individual Subsurface Sewage

Disposal rules and guidance. Modeling projected that the ground water nitrate/nitrite concentration at the riverbank would not exceed 1.3 mg N/L, and instream total phosphorus would be less than 0.4 µg P/L under annual low streamflow of 900 cubic feet per second and 20,000 gpd sanitary flow. Even allowing for larger wastewater flows of 25,550 gpd would not raise instream concentrations above 0.5 µg P/L and 0.1 µg N/L.

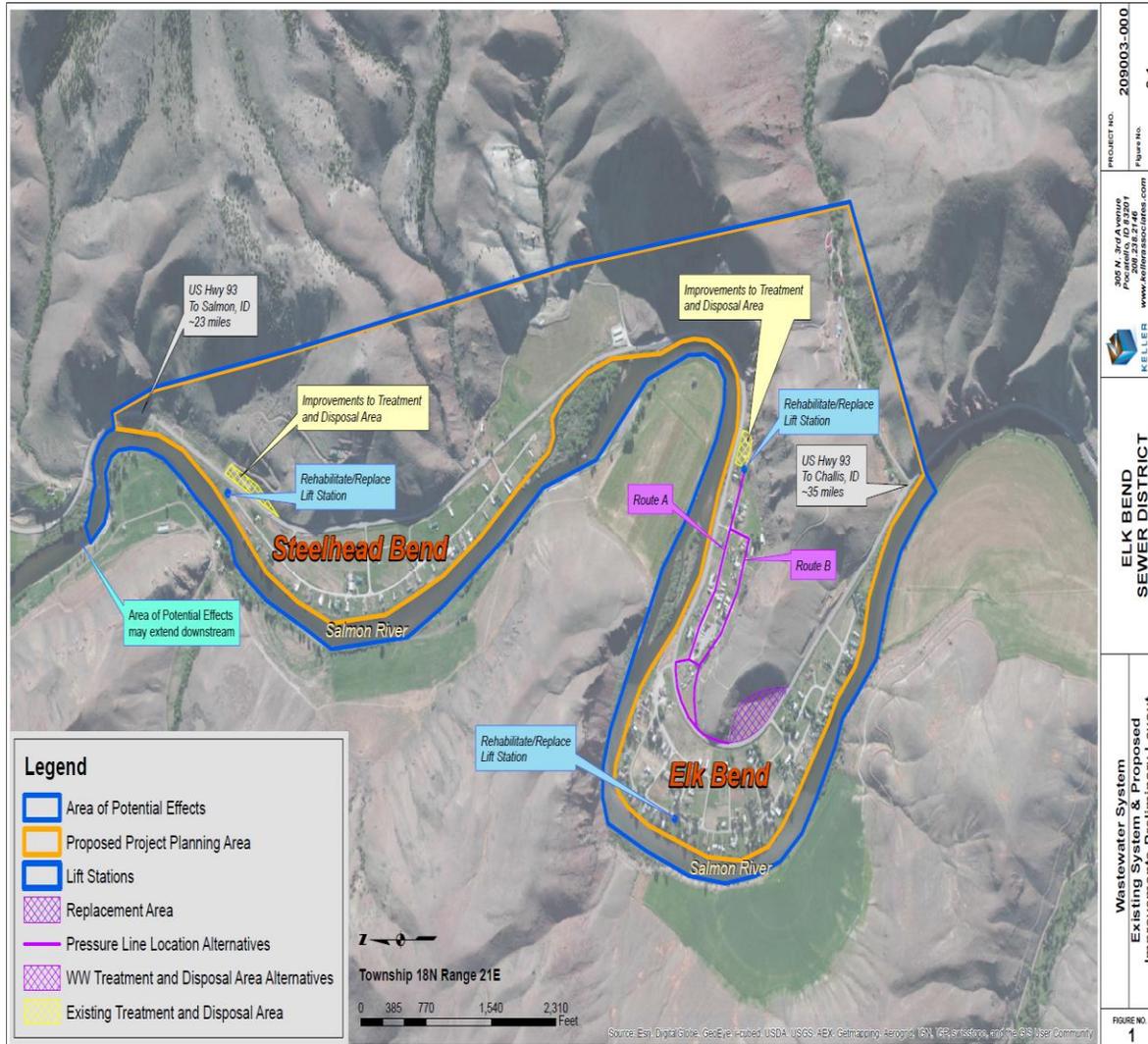


Figure 1. Elk Bend Water & Sewer District Wastewater Improvement Project.

The following notable project design criteria (PDC) are incorporated into the proposed action and will be employed to minimize and avoid the risk of adverse effects:

1. Prior to beginning work, project sites will be surveyed for noxious weeds and appropriate measures taken to either avoid existing infestations or treat infestations to prevent a local expansion or off-site transport.
2. Where construction activities occur within 75 feet of stream channels or standing water, or in areas where water may concentrate during snowmelt periods, standard sediment and pollutant prevention and retention practices will be utilized (e.g., silt fence, wattles) and appropriately maintained.
3. Fuel storage will occur only within staging areas, and refueling will not occur within 150 feet of streams. If fueling must occur at less than 150 feet, it will occur inside an impervious containment structure with a volumetric holding capacity equal to at least 110% of the fueling tank. Engine and hydraulic fluids will be monitored for leaks. Spill packs will also be on hand for minor leaks/spills.
4. Washing of tools and equipment will occur only within staging areas, or other areas approved by IDEQ, where there is no potential for rinsate to reach surface waters.
5. To minimize the potential for introducing hazardous material to the aquatic system, a spill prevention and control countermeasures plan will be prepared by the contractor and approved by IDEQ prior to project initiation.
6. No construction will occur within wetland or riparian conditions.
7. Equipment and material staging areas should be located in areas lying outside of resource conservation areas (RCAs), in areas requiring the least amount of new soil disturbance, and outside topographic lows where water may concentrate during snowmelt or storm events.
8. Equipment staging or construction areas for the two lift stations must be slanted away from the river, towards the road, to minimize sediment delivery to the Salmon River.
9. Equipment should be cleaned of all dirt, mud, seeds, and vegetative matter prior to arriving on site to reduce risk of invasive species introduction. The same equipment should be cleaned again prior to leaving, if warranted.
10. Materials resulting from demolition or site preparation should be removed to an appropriate disposal site.
11. RCA vegetation should be protected to the extent possible and disturbed areas promptly rehabilitated.
12. No trees will be removed.

13. To avoid inadvertent water contamination, sewage shall be successfully delivered to established treatment areas where it may be properly treated throughout construction; establishment of temporary lift stations/delivery systems may be necessary.
14. Establish groundwater quality monitoring requirements in the LSAS permit to ensure sewage treatment successfully prevents contaminating the Salmon River for the life expectancy of the project. NMFS will be provided a copy of the permit, and will be notified if results of water quality monitoring indicate any type of contamination to the Salmon River is occurring.
15. If poured-in-place concrete is used, measures shall be taken to prevent green concrete from entering the Salmon River or any other body of water.
16. Vibratory compaction will be used, but vibratory or impact hammers will not be used.
17. All surplus excavated material will be removed from the site to a designated upland site(s) away from any watercourses, rendering them unavailable to enter the stream channel as a result of storm runoff or a high water event.

Action Agency's Effects Determination

Snake River sockeye salmon, Snake River spring/summer Chinook salmon, and Snake River Basin steelhead are likely to occur within the action area. The action is within designated critical habitat for all three species (Table 1). This reach of river serves primarily as a migratory corridor for Chinook salmon and steelhead, and no spawning activities or redds are expected either in or downstream of the action area. Similarly, this river reach is only utilized by sockeye as they migrate to and from the Salmon River headwaters, near Stanley, Idaho. All sockeye reproduction and rearing occurs upstream of the proposed project area. No sockeye spawning activities or redds are expected either in or downstream of the action area. Juvenile steelhead, Chinook salmon, and sockeye salmon could be migrating past the project area during the proposed timing of the project.

The Federal grant recipient, IDEQ, made a NLAA effects determination for the project on Snake River sockeye salmon, Snake River spring/summer Chinook salmon, Snake River Basin steelhead, and designated critical habitat for each of the three species. They also made a no adverse effect determination for EFH. The IDEQ made this determination because the project will occur outside of the ordinary high water mark (OHWM), approximately 75 to 100 feet from the Salmon River, and has the potential for short term, temporary effects on water quality (i.e., temperature, sediment, chemical contaminants/nutrients).

Table 1. Federal Register notices for final rules that list threatened and endangered species, designated critical habitat, or apply protective regulations to listed species considered in this consultation.

Species	Listing Status	Critical Habitat	Protective Regulations
Chinook salmon (<i>Oncorhynchus tshawytscha</i>)			
Snake River spring/summer run	T 8/15/11; 76 FR 50448	12/28/93; 58 FR 68543 10/25/99; 64 FR 57399	6/28/05; 70 FR 37160
Sockeye salmon (<i>O. nerka</i>)			
Snake River	E 8/15/11 76 FR 50448	12/28/93; 58 FR 68543	ESA Section 9 applies
Steelhead (<i>O. mykiss</i>)			
Snake River Basin	T 8/15/11; 76 FR 50448	9/02/05; 70 FR 52630	6/28/05; 70 FR 37160

Note: Listing status: ‘T’ means listed as threatened under the ESA; ‘E’ means listed as endangered

Consultation History

The IDEQ submitted a request for consultation on this action in an email dated July 17, 2015. NMFS requested additional information in an e-mail dated July 21, 2015. NMFS and IDEQ corresponded on edits to the proposed action by e-mail. On November 2, 2015, NMFS received a revised request for a written concurrence that the proposed Elk Bend Water & Sewer District Wastewater Improvement Project is NLAA ESA-listed species or designated critical habitats. On November 13, 2015, IDEQ sent an email to NMFS confirming that groundwater quality monitoring requirements would be included in the LSAS permit.

ENDANGERED SPECIES ACT

Effects of the Action

Under the ESA, “effects of the action” means the direct and indirect effects of an action on the listed species or critical habitat, together with the effects of other activities that are interrelated or interdependent with that action (50 CFR 402.02). The applicable standard to find that a proposed action is NLAA listed species or critical habitat is that all of the effects of the action are expected to be discountable, insignificant, or completely beneficial. Beneficial effects are contemporaneous positive effects without any adverse effects to the species or critical habitat. Insignificant effects relate to the size of the impact and should never reach the scale where take occurs. Discountable effects are those extremely unlikely to occur. The IDEQ did not identify any interrelated and interdependent actions associated with this proposed action.

Species Determination

The proposed action has the potential to affect juvenile ESA-listed Snake River spring/summer Chinook salmon, Snake River sockeye salmon, and Snake River Basin steelhead. Adult steelhead are spring spawners, and may also still be within the action area when project work begins. Adult Chinook salmon and sockeye are fall spawners, and could

also be present during project implementation depending on when the project is completed. As previously stated, this reach of river serves primarily as a migratory corridor for all three ESA-listed fish species, and no spawning activities or redds are expected either in or downstream of the action area. There is limited rearing habitat for steelhead and Chinook salmon in the action area. The proposed action could potentially affect ESA-listed fish species through habitat-related effects to water quality (i.e., increased turbidity and/or introduction of toxic chemicals) or substrate composition.

The proposed action has the potential to affect water quality by generating minor amounts of turbidity due to project-associated soil disturbance. The timing, duration, and sediment concentrations that are likely to occur in the action area from project activities are not likely to cause harm or lethal effects to juvenile fish that may be present because of the low magnitude, infrequent, and discontinuous nature of the expected turbidity pulses. The risk that ESA-listed fish will be affected by turbidity is further minimized because all construction activities will occur 75 to 100 feet or more from the Salmon River within the existing access area footprint, no inwater work will occur, and silt fencing will be installed between the project area and the Salmon River as part of this action. Therefore, turbidity pulses will be small and localized, should they occur, and will not reach levels that will extend across the entire width of the Salmon River. If any pulses do occur, ESA-listed fish present will be readily able to move without harm to less turbid waters much as they would avoid any natural perturbation. Because PDC should effectively avoid and minimize sediment introductions from upland construction activities and the amount of sediment mobilized, effects from suspended sediment on ESA-listed fish present are expected to be insignificant.

The proposed action also has the potential to affect water quality through temporary toxic chemical contamination of the Salmon River from uncured concrete and/or petroleum-based fuels and lubricants. However, chemical contamination due to uncured concrete is extremely unlikely due to PDC that ensure concrete will be poured offsite or above the OHWM, and because sediment retention structures (in place between the pour sites and the river) will ensure that no uncured concrete reaches the river. The PDC will ensure that all equipment will be free from leaks and drips prior to arriving onsite; and will require refueling at least 150 feet from the river. In addition, due to the short duration of the project, it is unlikely that antifreeze, brake, or transmission fluid will be present onsite or spilled in volumes or concentrations large enough to harm salmonids in or downstream from the project site. Therefore, NMFS believes the potential for adverse effects from toxic chemical inputs to water quality and any ESA-listed fish present will be minimized to a discountable level with implementation of the proposed PDC.

The proposed action also has the potential to affect water quality through improved sewage and wastewater treatment, which reduces the potential for chemical contamination and nutrient releases to the Salmon River. The PDC will require that no direct discharge to the Salmon River occurs. In addition, routine groundwater quality monitoring will be conducted to ensure the sewage treatment facility prevents contamination of the Salmon River for the life expectancy of the project. NMFS will be notified if results of water quality monitoring indicate any type of contamination to the Salmon River is occurring. Therefore, NMFS believes the potential for adverse effects from chemical contamination and increased

nutrient inputs to water quality from sewage treatment and any ESA-listed fish present will be minimized to a discountable level with implementation of the proposed PDC.

Project-generated sediment also has the potential to affect ESA-listed fish by filling pools and increasing substrate fine sediment levels. However, with ground-disturbing activities taking place no closer than 75 feet to the Salmon River, combined with the anticipated effectiveness of proposed sediment control PDC, very little sediment is expected to be delivered to the river as a result of the project. Also, any sediment that is delivered to the river is not expected to remain in the substrate very long, likely remaining in place only until the next high flow event, when high flows are expected to flush out project-generated sediment. Therefore, project-generated sediment delivery is expected to be insignificant and not at a scale that is likely to affect fish use of the action area.

Critical Habitat Determination

The action as proposed has the potential to affect the following essential physical and biological features (Chinook and sockeye salmon) or primary constituent elements (PCEs) (steelhead) of designated critical habitat (hereinafter collectively referred to as PCEs): (1) Water quality; and (2) substrate/spawning gravel (Table 2). Any modification of these PCEs may affect freshwater rearing or migration in the action area. Proper function of these PCEs is necessary to support successful adult and juvenile migration, adult holding, rearing, and growth and development of juvenile fish. All remaining PCEs would not be affected by the proposed action.

The proposed action has the potential to affect water quality by generating minor amounts of turbidity due to project associated soil disturbance. However, as previously described in the species effects section, proposed PDC are expected to effectively limit sediment delivery to very low levels. Therefore, effects of the action on turbidity (water quality parameter) will be insignificant.

The proposed action also has the potential for temporary toxic chemical contamination of the Salmon River from uncured concrete and/or petroleum-based fuels and lubricants. However, as described in the species effects section, the risk of chemical contamination occurring is discountable considering implementation of the proposed PDC.

The proposed action also has the potential to affect water quality through improved sewage and wastewater treatment, which reduces the potential for chemical contamination and nutrient releases to the Salmon River. The PDC will ensure sewage treatment successfully prevents contaminating the Salmon River for the life expectancy of the project. Therefore, NMFS believes the potential for adverse effects from chemical contamination and nutrient inputs to water quality will be minimized to a discountable level with implementation of the new sewage treatment facility and proposed PDC.

As proposed, the action also has the potential to affect instream sediment levels, affecting substrate composition and spawning gravels. No ESA-listed fish spawn in this stream reach, meaning no spawning gravels will be affected. And, as described in the species effects

section, only small amounts of sediment are expected to be delivered to the river because of the anticipated effectiveness of the sediment control PDC. Because only minor amounts of sediment are expected to be delivered to the stream, effects to substrate/spawning gravel will be insignificant.

Table 2. Types of sites and essential physical and biological features designated as PCEs, and the species life stage each PCE supports.

Site	Essential Physical and Biological Features/PCEs	ESA-listed Species Life Stage
Snake River Basin Steelhead^a		
Freshwater Spawning	Water quality, water quantity, and substrate.	Spawning, incubation, and larval development
Freshwater Rearing	Water quantity & floodplain connectivity to form and maintain physical habitat conditions	Juvenile growth and mobility
	Water quality and forage ^b	Juvenile development
	Natural cover ^c	Juvenile mobility and survival
Freshwater Migration	Free of artificial obstructions, water quality and quantity, and natural cover ^c	Juvenile and adult mobility and survival
Spring/summer Chinook Salmon		
Spawning and Juvenile Rearing	Spawning gravel, water quality and quantity, cover/shelter, food, riparian vegetation, and space	Juvenile and adult
Migration	Substrate, water quality and quantity, water temperature, water velocity, cover/shelter, food ^d , riparian vegetation, space, safe passage	Juvenile and adult
Snake River Sockeye Salmon		
Spawning and Juvenile Rearing	Spawning gravel, water quality and quantity, water temperature, food, riparian vegetation, and access.	Juvenile and adult
Migration	Substrate, water quality and quantity, water temperature, water velocity, cover/shelter, food ^d , riparian vegetation, space, safe passage	Juvenile and adult

^aAdditional PCEs pertaining to estuarine, nearshore, and offshore marine areas have also been described for Snake River Basin steelhead. These PCEs will not be affected by the proposed action and have therefore not been described in this letter of concurrence.

^bForage includes aquatic invertebrate and fish species that support growth and maturation.

^cNatural cover includes shade, large wood, log jams, beaver dams, aquatic vegetation, large rocks and boulders, side channels, and undercut banks.

^dFood applies to juvenile migration only.

Conclusion

Based on this analysis, NMFS concurs with EPA and the IDEQ that the proposed action is NLAA the subject listed species and designated critical habitats.

Reinitiation of Consultation

Reinitiation of consultation is required and shall be requested by EPA, IDEQ, or by NMFS, where discretionary Federal involvement or control over the action has been retained or is authorized by law, and: (1) 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; (2) 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 concurrence letter; or (3) if a new species is listed or critical habitat designated that may be affected by the identified action (50 CFR 402.16). This concludes the ESA portion of this consultation.

Section 7(a)(1) of the ESA directs Federal agencies to utilize their authorities to further the purposes of the ESA by carrying out conservation programs for the benefit of threatened and endangered species. The EPA and IDEQ also have the same responsibilities, and informal consultation offers action agencies an opportunity to address their conservation responsibilities under section 7(a)(1).

Please direct questions regarding this letter to Mrs. Kimberly Murphy (208) 756-5180 and Mr. Bill Lind (208) 378-5697.

Sincerely,


R William W. Stelle, Jr.
Regional Administrator

cc: R. Holder – USFWS
T. Curet – IDFG
N. LaRoque – USDA
D. Porter – IDOC

bcc: SBAO – File copy; Read file
SSBO – K. Murphy; B. Lind (*electronic*)

Murphy:Lind:ElkBendSewerImprovements:am:20151124:2015-3698

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