



VIA USPS Return Receipt and Electronic Mail

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January 10, 2017

Re: 60 Day Notice of Intent to Sue for Violations of Section 9 of the Endangered Species Act and Notice of Violations of Section 301 of the Federal Clean Water Act.

Dear Messrs. Unsworth, Bellon, and Inslee:

We are writing to request that you take immediate action to remedy the Washington Department of Fish and Wildlife's (WDFW) serious and ongoing violations of the Endangered Species Act (ESA),¹ and WDFW's and the Washington Department of Ecology's (Ecology) violations of the federal Clean Water Act (CWA).² These violations result from WDFW's issuance of permits authorizing suction dredge mining operations and Ecology's broad failure to enforce the CWA in Washington state.

This letter serves as an official sixty-day notice under the ESA's citizen suit provision³ of our intent to file suit in federal court to enforce the ESA if you do not act within the next sixty

¹ 16 U.S.C. § 1531-1544.

² 33 U.S.C. §§ 1251-1387.

³ 16 U.S.C. § 1540(g).

days to remedy the on-going violations of the prohibition against “take” and the destruction of critical habitat of threatened and endangered species under section 9 of the ESA.⁴ Specifically, suction dredge mining operations authorized by the WDFW Gold and Fish Pamphlet and individual Hydraulic Project Approval (HPA) permits, result in the death, injury, or impairment of essential behavioral patterns of chinook, sockeye, coho, and chum salmon, steelhead and bull trout, green sturgeon, and eulachon— species that are protected under federal and state law. Further, WDFW’s authorization of suction dredge mining results in the unpermitted discharge of pollutants in violation of the CWA.

This notice is submitted on behalf of the Center for Biological Diversity (Center) and Cascadia Wildlands. The Center is a national, nonprofit conservation organization with more than one million members and online activists dedicated to the protection of endangered species and wild places. The Center is the nation’s leader in preserving endangered species, having secured Endangered Species Act protection for hundreds of species and hundreds of millions of acres of land and water. The Center has offices throughout the United States, including offices in Washington.

Cascadia Wildlands is a non-profit, public interest environmental organization headquartered in Eugene, Oregon. Cascadia Wildlands educates, agitates, and inspires a movement to protect and restore Cascadia's wild ecosystems, including the species therein. We envision vast old-growth forests, rivers full of wild salmon, wolves howling in the backcountry, and vibrant communities sustained by the unique landscapes of the Cascadia bioregion.

Immediate and robust restrictions on suction dredge mining operations, such as those enacted in California and Oregon, are necessary to fully address the harmful effects of suction dredge mining on water quality, fish populations, and the environment across Washington.

I. FACTUAL BACKGROUND

Suction dredge mining is pervasive throughout Washington State, particularly in critical habitat for listed species. Watersheds such as the Methow, Nooksack, Wenatchee, Yakima, Lewis, Okanogan, and Similkameen are of particular interest to the mining community and, as a consequence, these watersheds evidence significant impacts from suction dredge mining. Because suction dredge miners can rely on the general Gold and Fish Pamphlet, a pamphlet permit that does not require reporting,⁵ WDFW is not able to track the total number or whereabouts of most mining activity. However, miners also seek individual HPA permits to mine outside the suction dredge work windows of the Gold and Fish Pamphlet which indicates the number of small scale miners concentrated in these critical watersheds is enormous. Currently, numerous individual HPA permits have been issued in total. If all suction dredge mining could be accounted for, the total number of miners would likely be an order of magnitude

⁴ *Id.* § 1538(a)(1).

⁵ Other statutory requirements do require reporting, but these are ignored by miners, and the overseeing agencies systemically fail to enforce them. Suction dredge miners ignore Clean Water Act permitting requirements, discussed *infra* section III.B., and U.S. Forest Service notice of intent requirements. Therefore, there is no mechanism to properly monitor the scale and scope of suction dredge mining in the state.

greater because the total number of miners without individual HPAs operating in conformance, or in contravention of, with the Gold and Fish Pamphlet is unknown.

Small-scale mineral prospecting is conducted in a variety of ways with the use of different equipment. The Gold & Fish pamphlet groups prospecting methods into four classes of equipment: non-motorized panning (Class 0); non-motorized panning and small sluice boxes (Class 1); motorized suction dredges under 4" dbh and highbankers under 2.5" dbh intake (Class II); and highbankers with greater than 2.4" dbh intake (Class III). Specifically, panning is the use of a handheld or motorized open dish used to wash aggregate.⁶ A sluice box is a trough equipped with riffles across its bottom over which water is washed in order to recover gold and other minerals, which settle behind the riffles due to their high densities.⁷ A suction dredge is a motorized machine, powered either by an internal combustion engine or an electric motor, that powers a water pump to move streambed materials using hydraulic suction.⁸ These materials are passed over a sluice box, to sort gold and other minerals, before the water and discarded materials are returned to the stream as tailings.⁹ Dredge capacity is dependent on the diameter of the hose, ranging from 2 to 10 inches, and the power of the engine.¹⁰ Suction dredges often float on the water's surface, but operations extend to the streambed where materials are removed.¹¹ Highbankers are a stationary device, consisting of a sluice box, hopper, and water supply, operated outside the wetted perimeter of the water body, which are used to separate gold and other minerals from aggregate.¹²

These small-scale mineral prospecting activities typically involve excavating streambed sediments, often down to the bedrock, by lifting alluvial substrate out of the channel, processing it in the mining device, and *discharging* the material downstream.¹³ Dredging results in the substrates as mine tailings being returned to the stream.¹⁴ Cobbles and boulders too large for processing are often piled alongside the hole or on the bank.¹⁵ Of the processed materials, coarse sediments (small cobbles, large gravel, and sands) are deposited closest to the dredge, and fine sediments settle some distance downstream of the dredge – the distance traveled being a function of sediment size and weight, and stream channel hydrology.¹⁶

⁶ R2 RESOURCE CONSULTANTS, SMALL-SCALE MINERAL PROSPECTING WHITE PAPER PREPARED FOR WASHINGTON DEPARTMENT OF FISH AND WILDLIFE 4-1 (Dec. 2006) [hereinafter SMALL-SCALE MINERAL PROSPECTING WHITE PAPER].

⁷ *Id.*; Cal. Dep't of Fish & Game, Suction Dredge Permitting Program, Literature Review on the Impacts of Suction Dredge Mining in California 2-4 (Sept. 2009) [hereinafter CAL. SUCTION DREDGE REPORT].

⁸ SMALL-SCALE MINERAL PROSPECTING WHITE PAPER, *supra* note 8, at 4-1.

⁹ *Id.*

¹⁰ CAL. SUCTION DREDGE REPORT, *supra* note 9, at 2-4-2-6.

¹¹ *Id.*

¹² SMALL-SCALE MINERAL PROSPECTING WHITE PAPER, *supra* note 8, at 4-2.

¹³ *Id.* at 7-3-7-4.

¹⁴ *Id.* at 7-4.

¹⁵ *Id.*

¹⁶ *Id.*

Operations that require mechanized processing, such as water pumping for sluice boxes and suction dredges, also have the potential risk of gasoline spills and equipment leaks, which can introduce hydrocarbons to the stream and adjacent riparian area.¹⁷

The focus of this notice letter is on Class II and III motorized operations involving motorized suction dredges. In regards to small-scale mining operations generally, most of the scientific literature addresses suction dredge operations, which involve the highest risk to potentially covered species.¹⁸ Although other small-scale mineral prospecting extraction methods involve the removal of water and aggregate from the channels and the return of tailings to the streambed, the volume of material processed is typically far less than the material removed during suction dredging.¹⁹

Many of the negative environmental impacts of suction dredge mining are well known. In 2006, WDFW commissioned a report, entitled “Small-Scale Mineral Prospecting White Paper” (“WDFW White Paper”), to analyze the impacts of mineral prospecting and small scale mining on the environment in order to evaluate the development of a Habitat Conservation Plan under the ESA.²⁰ The report summarizes the direct and indirect impacts of small-scale mining, and concludes that there is presently a potential take of listed species.²¹ Furthermore, Ecology has also acknowledged that there are substantial environmental impacts to the waters of the state from suction dredging projects.²²

The most comprehensive environmental review of suction dredge mining was conducted by the state of California in analyzing its suction dredge permitting system.²³ The California Department of Fish and Wildlife (CDFW) sought to analyze the impacts of approximately 3,650 individual miners operating suction dredges throughout California.²⁴ The environmental review found that suction dredge mining would have a range of potential environmental impacts including negative effects on biological resources, hazards and hazardous materials, cultural resources, hydrology and water quality, noise, recreation, aesthetics, and air quality.²⁵ Even after developing a program to minimize and avoid many impacts, CDFW found that significant impacts to water quality, cultural and historic resources, biological resources, and noise could not be avoided if suction dredge mining was allowed to continue in California.²⁶ Suction dredging is

¹⁷ *Id.* at 7-25.

¹⁸ *Id.* at 9-16.

¹⁹ *Id.*

²⁰ SMALL-SCALE MINERAL PROSPECTING WHITE PAPER, *supra* note 8.

²¹ *Id.*

²² Letter from John Glynn, Wash. Dep’t of Ecology Nw. Regional Office, to Bob Newman, regarding Mineral Extraction in Streams (April 24, 1995).

²³ CAL. DEP’T OF FISH & WILDLIFE, SUCTION DREDGE PERMITTING PROGRAM, FINAL SUBSEQUENT ENVIRONMENTAL IMPACT REPORT (March 2012), *available at* <https://www.wildlife.ca.gov/Licensing/Suction-Dredge-Permits> [hereinafter SUCTION DREDGE FSEIR].

²⁴ *Id.* at 1-1.

²⁵ CAL. DEP’T OF FISH & WILDLIFE, SUCTION DREDGE PERMITTING PROGRAM, DRAFT SUBSEQUENT ENVIRONMENTAL IMPACT Report app. B, p. 28 (Feb. 2011), *available at* <https://www.wildlife.ca.gov/Licensing/Suction-Dredge-Permits> [hereinafter SUCTION DREDGE DSEIR].

²⁶ *Id.* at ES-11-ES-14.

now prohibited in California because the significant impacts of the activity have not been mitigated.²⁷

Similarly, the Oregon Legislature passed Senate Bill 838 in 2013, imposing a moratorium on suction dredge mining in biologically sensitive areas between January 2, 2016 and January 2, 2021.²⁸ The legislature cites “significant risks to Oregon’s natural resources, including fish and other wildlife, riparian areas, water quality, the investments of this state in habitat enhancement and areas of cultural significance to Indian tribes.”²⁹

A. Suction Dredge Mining Activities Contribute to Fish Mortality and Impact Fish Habitat.

Suction dredge mining and other small-scale mining activities can cause fish mortality and directly impact fish habitat. Because of the potential overlap between spawning fish and WDFW’s permitted mining activities, small-scale mining is most likely to impact several life-history stages of fish, including spawning, egg incubation, adult migration, and emergence of early fall-spawning salmon and char species.³⁰ Impacts to fish species can result from entrainment, wading, substrate modification, and water quality modifications.

There are still significant gaps in available scientific information to fully understand the impacts of suction dredge mining on Washington’s streams and fish life, highlighting the need for caution.³¹ As WDFW staff have recognized, “the federal courts have consistently required that risk not be placed on ESA species when science is lacking or inconclusive.”³²

i. Geomorphology

Suction dredge mining requires the excavation of stream bed sediments, sometimes down to bedrock.³³ The alluvial substrate is removed from the channel, processed through the suction dredge, and returned to the stream.³⁴ Material that is too large to pass through the intake nozzle of a suction dredge is piled adjacent to the operation.³⁵ The removal of rocks, stones, or wood debris results in the loss of habitat for instream organisms.³⁶ Together, these actions create a pattern of scour holes (where the excavated material was removed from) and piles of large material.³⁷ These streambed alterations can change channel flow, possibly resulting in further erosive processes and even the removal of naturally formed riffles and gravel bars.³⁸

²⁷ SUCTION DREDGE FSEIR, *supra* note 25, at 1-4.

²⁸ S.B. 838, 77th Leg., Reg. Sess. (Or. 2013).

²⁹ *Id.* at § 1(4).

³⁰ SMALL-SCALE MINERAL PROSPECTING WHITE PAPER, *supra* note 8, at 9-14.

³¹ CAL. SUCTION DREDGE REPORT, *supra* note 9, at 4.1-10, 4.2-6, 4.3-5, 4.3-22.

³² Letter from Steve Landino, Washington State Director for Habitat Conservation, to Lisa Wood, Habitat Program, Washington Department of Fish and Wildlife (Jan. 15, 2008) (on file with petitioner).

³³ SMALL-SCALE MINERAL PROSPECTING WHITE PAPER, *supra* note 8, at 7-4.

³⁴ *Id.*

³⁵ CAL. SUCTION DREDGE REPORT, *supra* note 9, at 4.1-4.

³⁶ SMALL-SCALE MINERAL PROSPECTING WHITE PAPER, *supra* note 8, at 7-9.

³⁷ CAL. SUCTION DREDGE REPORT, *supra* note 9, at 4.1-4.

³⁸ *Id.* at 4.1-4-4.1-5.

Channel morphology can be directly altered when suction dredge mining is conducted close to streambanks.³⁹ This erosion, often in the form of undercutting banks, can destroy riparian vegetation.⁴⁰ The loss of this vegetation results in the loss of cover, the discharge of fine sediments, and possibly the creation of downed trees and coarse woody debris.⁴¹ Channel morphology is also altered when large rocks and woody debris are moved, so that miners can access the desirable substrate.⁴² The removal of this structure can result in flow channelization - causing the flow to increase in power and erosive force, shortening and steepening the channel through straightening, reducing the ability of the stream to meander over time, and reducing channel complexity necessary for habitat.⁴³

In small streams, coarse woody debris is a major factor influencing pool formation in plane-bed and step-pool channels.⁴⁴ Juvenile salmonid abundance in winter, particularly juvenile coho salmon, is positively correlated to abundance of coarse woody debris and pools.⁴⁵ Coarse woody debris provides cover and foraging opportunities for fish, and the removal of woody debris in the aquatic environment can limit habitat complexity, foraging opportunities, and predator avoidance, thus reducing productivity and survival of potentially covered fish species.⁴⁶ While some coarse woody debris might be created by the erosion of streambanks, much is removed or displaced as miners access the desired substrate or as increased flows erode structures formed by woody debris in the channel.

Geomorphology is also impacted downstream: “[t]he deposition of coarse material immediately downstream of dredging rigs, the downstream transport of sands that potentially cover and embed downstream riffles, and the filling of downstream pools through the mobilization and retransport of dredged sediment can all potentially negatively affect aquatic habitats.”⁴⁷

ii. Water Quality and Toxicology

Suction dredge mining also impacts the water column itself as digging and tailings discharge suspends finer sediments into the water column. Suction dredge mining results in the resuspension of sediments and pollutants.⁴⁸ Studies have showed increased turbidity and suspended sediment levels up to several hundred meters immediately downstream, or even several miles when improper mining practices are used.⁴⁹ One study found turbidity and

³⁹ SMALL-SCALE MINERAL PROSPECTING WHITE PAPER, *supra* note 8, at 7-9.

⁴⁰ CAL. SUCTION DREDGE REPORT, *supra* note 9, at 4.1-5.

⁴¹ *Id.*

⁴² SMALL-SCALE MINERAL PROSPECTING WHITE PAPER, *supra* note 8, at 7-9.

⁴³ *Id.*

⁴⁴ *Id.* at 7-11.

⁴⁵ *Id.*

⁴⁶ *Id.*

⁴⁷ CAL. SUCTION DREDGE REPORT, *supra* note 9, at 4.1-8.

⁴⁸ *Id.* at 4.2-1.

⁴⁹ *Id.* at 4.2-1-4.2-2.

suspended sediment levels to be 2 to 3 times higher than background levels.⁵⁰ When comparing the recent studies on increases in turbidity to Washington's water quality standards, it is clear that suction dredge mining has the potential to exceed these standards.⁵¹

Mercury is commonly found in these sediments, and is therefore also resuspended.⁵² Mercury may become "floured," or broken into small particles, that float easily on the surface of the water, allowing them to travel far downstream before resettling on the streambed.⁵³ Flouring also increases the surface area of mercury, enhancing oxidation necessary for methylation.⁵⁴ Flouring can directly cause mercury to convert to methylmercury that is absorbed by fatty tissues and biomagnified in food chains – affecting animal and human health.⁵⁵ The extent that suction dredge mining contributes to methylation has not yet been quantified.⁵⁶ The mercury levels in fish taken from streams and rivers where historic mining occurred, and where suction dredge mining is conducted today, are generally above critical threshold levels under state regulations for toxics and human health.⁵⁷

Suction dredge mining also carries a risk of petroleum chemical contamination, through gasoline spills and equipment leaks, that can introduce hydrocarbons to the channel and adjacent riparian area.⁵⁸

The Washington Department of Ecology has noted that the issuance of any permits or approvals need to take into consideration the size of the waterbody where the operations are proposed because most dredge operators want to operate in the upper watershed areas where gold will initially settle.⁵⁹ These small upper reaches are very susceptible to damage, which will exacerbate water quality problems downstream and cause more streams to be listed as water quality limited.⁶⁰ While there are timing restrictions for mining activities in the summer months, these upper reaches are quite often still in the anadromous zone where the discharge of even 5 cubic yards of "fill" material will have extreme impacts on the stream and associated biota.⁶¹

⁵⁰ G. Stern, Effects of Suction Dredge Mining on Anadromous Salmonid Habitat in Canyon Creek, Trinity County, California (1988) (unpublished M.S. thesis, Humboldt State University); CAL. SUCTION DREDGE REPORT, *supra* note 9, at 4.2-1.

⁵¹ SMALL-SCALE MINERAL PROSPECTING WHITE PAPER, *supra* note 8, at 7-14.

⁵² CAL. SUCTION DREDGE REPORT, *supra* note 9, at 4.2-3; JACOB A. FLECK ET AL., U.S. GEOLOGICAL SURVEY, THE EFFECTS OF SEDIMENT AND MERCURY MOBILIZATION IN THE SOUTH YUBA RIVER AND HUMBURG CREEK CONFLUENCE AREA, NEVADA COUNTY, CALIFORNIA: CONCENTRATIONS, SPECIATION, AND ENVIRONMENTAL FATE – PART 1: FIELD CHARACTERIZATION, OPEN-FILE REPORT 2010-1325A (2011), *available at* <http://pubs.usgs.gov/of/2010/1325A/pdf/ofr20101325a.pdf> [hereinafter USGS, THE EFFECTS OF SEDIMENT AND MERCURY MOBILIZATION].

⁵³ CAL. SUCTION DREDGE REPORT, *supra* note 9, at 4.2-4.

⁵⁴ *Id.*

⁵⁵ *Id.* at 4.2-4-4.2-5.

⁵⁶ *Id.* at 4.2-5.

⁵⁷ SUCTION DREDGE DSEIR, *supra* note 27, at 4.2-51, 53; USGS, THE EFFECTS OF SEDIMENT AND MERCURY MOBILIZATION, *supra* note 54, at 5.

⁵⁸ SMALL-SCALE MINERAL PROSPECTING WHITE PAPER, *supra* note 8, at 7-25.

⁵⁹ Letter from John Glynn, Wash. Dep't of Ecology Nw. Regional Office, to Bob Newman, regarding Mineral Extraction in Streams (Apr. 24, 1995).

⁶⁰ *Id.*

⁶¹ *Id.*

Furthermore, during the summer months, lowland streams become very susceptible to damage because of low flows, and impacts on rearing salmonids can be severe in these conditions.⁶² In addition, since WDFW routinely issues HPAs, allowing miners to dredge outside the so-called “work windows,” it is highly likely that the mining has significant impacts on the redds and spawning native fish.

iii. Biological Resources

a. Fish Spawning and Early Life Stages

Many of the listed species “spawn” (reproduce) in the same gravel substrates that are excavated by minders. Exact timing and behavior vary, but general fish will dig a “redd” in the streambed gravel, laying fertilized eggs. After a period the eggs hatch (fry emergence). Timing of spawning and fry emergence vary with species and location. While all named species are vulnerable to destruction of spawning habitat, most sensitive are species like Coho salmon and Bull trout whose spawning and rearing behavior overlaps directly with mining activities.

Suction dredge mining alters spawning habitat, potentially affecting survival and reproductive success of fish species. As miners remove substrate (sometimes spawning grounds themselves) from the streambed and release it back into the channel, the tailings rearrange in a manner that is undesirable for spawning.⁶³ The new arrangements tend to be loose, unstable and exposed to greater scouring in the channel.⁶⁴ Studies have shown that spawning grounds created by suction dredge mining are associated with compromised reproductive success.⁶⁵

Other impact mechanisms also harm fish spawning and sensitive early life stages. The direct excavation and displacement of eggs, fry, and larvae can result in entrainment and death.⁶⁶ If they survive, they might suffer from abrasions and increased predation.⁶⁷

One study found 100 percent mortality of uneyed eggs after their experimental entrainment through a dredge.⁶⁸ The study also found 83 percent mortality of rainbow trout sac-fry after passage through a dredge.⁶⁹ Wading required to suction dredge might also directly cause mortality of eggs, fry, and larvae.⁷⁰ One study found that the mortality of salmonid eggs and fry increased as a result of wading associated with mining operations, and that stepping on redds twice a day throughout the period of egg fertilization to fry emergence killed 83 percent of

⁶² *Id.*

⁶³ CAL. SUCTION DREDGE REPORT, *supra* note 9, at 4.3-2.

⁶⁴ *Id.* at 4.3-2-4.3-3. SMALL-SCALE MINERAL PROSPECTING WHITE PAPER, *supra* note 8, at 7-6.

⁶⁵ CAL. SUCTION DREDGE REPORT, *supra* note 9, at 4.3-2-4.3-3.

⁶⁶ *Id.* at 4.3-5; SMALL-SCALE MINERAL PROSPECTING WHITE PAPER, *supra* note 8, at 7-3; Bret C. Harvey & Thomas E. Lisle, *Effects of Suction Dredging on Streams: A Review and an Evaluation Strategy*, 23 FISHERIES HABITAT 8, 8 (1998).

⁶⁷ CAL. SUCTION DREDGE REPORT, *supra* note 9, at 4.3-5.

⁶⁸ *Id.*; J.S. Griffith & D.A. Andrews, *Effects of a Small Suction Dredge on Fishes and Aquatic Invertebrates in Idaho Streams*, 1 N. AM. J. FISHERIES MGMT. 21 (1981).

⁶⁹ Griffith & Andrews, *supra* note 70.

⁷⁰ SMALL-SCALE MINERAL PROSPECTING WHITE PAPER, *supra* note 8, at 7-4.

cutthroat trout eggs and pre-emergent fry.⁷¹

The resuspension of toxic substances, like mercury, can also harm the survival of fish species during their early life stages or might impact the reproduction of fish who were exposed to methylmercury at a young age through the suppression of sex hormones, among other impacts.⁷²

b. Juvenile and Adult Fishes

After fry have emerged from eggs they remain vulnerable to harm from mining. Juvenile fish live in fresh water, often seeking out smaller streams, pool, over-hanging banks, and food. Suction dredge mining results in take of juvenile protected species in several ways.

Most directly, juvenile and adult fishes can be entrained and suffer from disorientation, abrasions, and secondary infections as a result.⁷³ Movement of rocks and substrate can remove necessary pools.⁷⁴ Increased stream channelization can cause greater erosion and wash-outs of pools.⁷⁵ The creation of new pools can result in the stranding of fish due to adjacent dewatering.⁷⁶ Mining activities can also change the natural sorting of sediment, leaving “areas of unnaturally-clean coarse material and a layer of fine sediment on top of the bed further downstream.”⁷⁷ This sedimentation can destroy microhabitats on stream beds and impact growth due to the harm to benthic prey species.⁷⁸

Increased suspended sediment in particular is harmful to juvenile and adult fishes. “Indirect effects include reduction in light input and occlusion of gravel interstices for hiding places and food. Direct effects include abrading or clogging delicate membranes, skin irritation and abrasions, and facilitation of infections.”⁷⁹ Fine sediment has been recognized as detrimental to the reproductive success of salmonid fishes since the early 1920s.⁸⁰

Researchers have determined that elevated levels of turbidity can cause chronic, sublethal effects to fish species such as loss or reduction of foraging capability, reduced growth, resistance to disease, increased stress, and interference with cues necessary for orientation in homing and migration.⁸¹ Sublethal threats of elevated turbidity also include harassment, as feeding patterns may be affected and fish are likely to avoid areas of increased turbidity.⁸²

⁷¹ *Id.*; B. Roberts & R. White, *Effects of Angler Wading on Survival of Trout Eggs and Pre-Emergent Fry*, 12 N. AM. J. FISHERIES MGMT. 450 (1992).

⁷² CAL. SUCTION DREDGE REPORT, *supra* note 9, at 4.3-4.

⁷³ *Id.* at 4.3-7.

⁷⁴ *Id.*

⁷⁵ *Id.*

⁷⁶ SMALL-SCALE MINERAL PROSPECTING WHITE PAPER, *supra* note 8, at 7-5.

⁷⁷ CAL. SUCTION DREDGE REPORT, *supra* note 9, at 4.3-8.

⁷⁸ *Id.*

⁷⁹ *Id.* at 4.3-12.

⁸⁰ SMALL-SCALE MINERAL PROSPECTING WHITE PAPER, *supra* note 8, at 7-17.

⁸¹ *Id.* at 7-15.

⁸² *Id.* at 7-17.

c. Benthic Communities and Prey Species

The benthic communities reside at the lowest level of a streams and rivers, including the sediment surface and some sub-surface layers. Benthic macroinvertebrates have many important ecological functions, such as regulating the flow of materials and energy in river ecosystems through their food web linkages and influence food resources on fish and other organisms in aquatic ecosystems. Harm to benthic communities “can affect higher trophic levels (e.g., fish production) and other stream processes (e.g., organic matter processing).”⁸³ Benthic species can be harmed by the sedimentation of microhabitats or entrainment.⁸⁴

The Washington Department of Ecology has found that aquatic invertebrates, potential prey species to listed fish, and their environment are disturbed by dredging.⁸⁵ Certain aquatic invertebrates eat periphyton, which is removed from the stream environment during dredging activity.⁸⁶ In addition, aquatic invertebrates get crushed in dredging operations, and whatever invertebrates are not crushed get eaten by fish.⁸⁷

B. Legally Protected Wildlife is Killed and Injured by Suction Dredge Mining Activities.

Permitted suction dredge mining activities in Washington State lead to lethal and sub-lethal harm to protected species. Indeed, this has been recognized by Washington agencies for many years. Data from the WDFW White Paper indicates that suction dredge mining activities impact federally endangered Chinook salmon and Sockeye salmon species, as well as federally threatened Steelhead species, among others. In 1995, a Washington State Department of Ecology letter noted that in light of the status of salmon and steelhead stocks in Washington State, the amount of aquatic disturbance a mechanical gold dredging operation would have on the anadromous zone of any stream is substantial.⁸⁸ The letter also provides that with the potential listing of numerous salmonid stocks the allowance of stream bed disturbance activities, such as gold dredging, in the anadromous reaches of any stream is “ludicrous.”⁸⁹

i. Affected Species

Chinook salmon (*Oncorhynchus tshawytscha*) is a federally listed endangered and threatened fish species that is harmed by all impact mechanisms (excavation and entrainment, wading, substrate modification, water quality, dewatering and obstructions, harm to prey, and other disturbance) of small-scale mining activities during its spawning and incubation periods.⁹⁰ The Upper Columbia spring-run Chinook salmon evolutionarily significant unit (ESU) is listed

⁸³ CAL. SUCTION DREDGE REPORT, *supra* note 9, at 4.3-13.

⁸⁴ *Id.* at 4.3-8, 4.3-15.

⁸⁵ Letter from John Glynn, Wash. Dep’t of Ecology Nw. Regional Office, to Bob Newman, regarding Mineral Extraction in Streams (April 24, 1995).

⁸⁶ *Id.*

⁸⁷ *Id.*

⁸⁸ *Id.*

⁸⁹ *Id.*

⁹⁰ SMALL-SCALE MINERAL PROSPECTING WHITE PAPER, *supra* note 8, at 5-4, 9-3.

as endangered under the ESA.⁹¹ The following ESUs are listed as threatened: the Puget Sound ESU, the Snake River fall-run ESU, the Snake River spring/summer-run ESU, Lower Columbia River ESU, Puget Sound ESU, and the lower Columbia River ESU.⁹² “Spring Chinook are especially dependent on high water quality and good access to spawning areas as they move upstream during periods of lower flow and hold in rivers for extended periods of time before spawning.”⁹³

The sockeye salmon (*Oncorhynchus nerka*) Snake River ESU is a federally listed endangered fish species that is harmed by all impact mechanisms of small-scale mining activities during its spawning and incubation periods.⁹⁴

The steelhead trout (*Oncorhynchus mykiss*) is a federally listed threatened species to which National Marine Fisheries Service has extended the section 9 take prohibition.⁹⁵ The listed distinct population segments (DPS) are the Lower Columbia River DPS, Middle Columbia River DPS, Puget Sound DPS, Snake River Basin DPS, and Upper Columbia River DPS.⁹⁶

The green sturgeon (*Acipenser medirostris*) is listed as threatened under the ESA.⁹⁷ Possible take of the species could result from substrate modification and water quality degradation.⁹⁸ The species is “[m]ost vulnerable to projects that limit availability of deep pools and lead to scour of substrate holding incubating eggs.”⁹⁹

The chum salmon (*Oncorhynchus keta*) Columbia River ESU and Hood Canal summer-run ESU are listed as threatened under the ESA.¹⁰⁰ The species is vulnerable to take from all impact mechanisms.¹⁰¹

The coho salmon (*Oncorhynchus kisutch*) lower Columbia River ESU is listed as threatened under the ESA.¹⁰² The species is vulnerable to take from all impact mechanisms.¹⁰³ “[S]pawning occurs in gravel free of heavy sedimentation.”¹⁰⁴

⁹¹ Env'tl. Conservation Online Sys. (ECOS), *Species Profile for Chinook Salmon*, U.S. FISH & WILDLIFE SERV., https://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=E06D#crithab. See 50 C.F.R. § 224.101.

⁹² ECOS, *Species Profile for Chinook Salmon*, *supra* note 93. See 50 C.F.R. § 223.102.

⁹³ SMALL-SCALE MINERAL PROSPECTING WHITE PAPER, *supra* note 8, at 5-9.

⁹⁴ *Id.* at 5-4, 9-3; ECOS, *Species Profile for Sockeye Salmon*, U.S. FISH & WILDLIFE SERV., <http://ecos.fws.gov/ecp0/profile/speciesProfile?spcode=E06Y>. See 50 C.F.R. § 224.101.

⁹⁵ 50 C.F.R. § 223.203(a).

⁹⁶ ECOS, *Species Profile for Steelhead*, U.S. FISH & WILDLIFE SERV., <http://ecos.fws.gov/ecp0/profile/speciesProfile?spcode=E08D>. See 50 C.F.R. §§ 223.103.

⁹⁷ ECOS, *Species Profile for Green Sturgeon*, U.S. FISH & WILDLIFE SERV., <http://ecos.fws.gov/ecp0/profile/speciesProfile?spcode=E09K>. See 50 C.F.R. § 223.102.

⁹⁸ SMALL-SCALE MINERAL PROSPECTING WHITE PAPER, *supra* note 8, at 9-2.

⁹⁹ *Id.*

¹⁰⁰ ECOS, *Species Profile for Chum Salmon*, U.S. FISH & WILDLIFE SERV., <https://ecos.fws.gov/ecp0/profile/speciesProfile?sId=8494>; 50 C.F.R. § 223.102.

¹⁰¹ SMALL-SCALE MINERAL PROSPECTING WHITE PAPER, *supra* note 8, at 9-3.

¹⁰² ECOS, *Species Profile for Coho Salmon*, U.S. FISH & WILDLIFE SERV., <http://ecos.fws.gov/ecp0/profile/speciesProfile?spcode=E08A>; 50 C.F.R. § 223.102.

¹⁰³ SMALL-SCALE MINERAL PROSPECTING WHITE PAPER, *supra* note 8, at 9-3.

¹⁰⁴ *Id.* at 5-8.

The bull trout (*Salvelinus confluentus*) is listed as threatened under the ESA.¹⁰⁵ The species is vulnerable to take from all impact mechanisms.¹⁰⁶

Eulachon (*Thaleichthys pacificus*) is listed as threatened under the ESA.¹⁰⁷ Possible take of the species could result from substrate modification and water quality degradation.¹⁰⁸ The species is “[m]ost vulnerable to projects that impair water quality and availability of sandy habitats in marine, estuarine, and lower rivers.”¹⁰⁹

II. LEGAL BACKGROUND

A. **WDFW Hydraulic Project Approval Program**

WDFW holds the authority to implement regulations related to fish life.¹¹⁰ The Washington State Hydraulic Code, administered by WDFW, requires anyone planning certain construction projects or activities in or near state waters – including suction dredge mining - to obtain an environmental permit commonly known as a Hydraulic Project Approval (HPA).¹¹¹ The purpose of the Hydraulic Code is “to ensure that construction or performance of work [“that will use, divert, obstruct, or change the natural flow or bed of any of the salt or fresh waters of the state”] is done in a manner that protects fish life.”¹¹² There are six categories of HPAs: standard, emergency, imminent danger, chronic danger, expedited, and pamphlet.¹¹³

Suction dredge mining is authorized under a pamphlet HPA, whereby a person must merely abide by the provisions set forth in the Gold and Fish Pamphlet in order to comply with the Hydraulic Code.¹¹⁴ These rules “were developed to protect fish and their habitats.”¹¹⁵ If a suction dredge operator wishes to operate outside of the restrictions set forth in the Gold and Fish Pamphlet, they may apply for a standard individual HPA.¹¹⁶

¹⁰⁵ ECOS, *Species Profile for Bull Trout*, U.S. FISH & WILDLIFE SERV., <http://ecos.fws.gov/ecp0/profile/speciesProfile?slid=8212>.

¹⁰⁶ SMALL-SCALE MINERAL PROSPECTING WHITE PAPER, *supra* note 8, at 9-4.

¹⁰⁷ ECOS, *Species Profile for Eulachon*, U.S. FISH & WILDLIFE SERV., <http://ecos.fws.gov/ecp0/profile/speciesProfile?spcode=E0BJ>; 50 C.F.R. § 223.102.

¹⁰⁸ SMALL-SCALE MINERAL PROSPECTING WHITE PAPER, *supra* note 8, at 9-4.

¹⁰⁹ *Id.*

¹¹⁰ “[T]he department shall preserve, protect, perpetuate, and manage the wildlife and food fish, game fish, and shellfish in state waters and offshore waters.” RCW 77.04.012. *See also* RCW 77.04.020, 77.12.047.

¹¹¹ *Hydraulic Project Approval (HPA)*, Wash. Dep’t of Fish & Wildlife, *available at* <http://wdfw.wa.gov/licensing/hpa/>.

¹¹² WAC 220-660-010.

¹¹³ WAC 220-660-050.

¹¹⁴ WAC 220-660-050(8)(a); Wash. Dep’t of Fish & Wildlife, *Gold and Fish: Rules for Mineral Prospecting and Placer Mining* (4th ed., July 2015), *available at* <http://wdfw.wa.gov/publications/01729/wdfw01729.pdf> [hereinafter *Gold and Fish*].

¹¹⁵ *Id.* at 1.

¹¹⁶ WAC 220-660-050(8)(e). *See Hydraulic Project Approval (HPA) – Applying for an HPA*, WDFW Licensing & Permits, <http://wdfw.wa.gov/licensing/hpa/>.

The Gold and Fish Pamphlet restricts suction dredge mining by equipment type, general location within streams, and timing.¹¹⁷ The Pamphlet provides a table listing Washington county and state waters, and timing and equipment restrictions for each.¹¹⁸ When relying on this pamphlet HPA, the permittee must have the pamphlet with them on the job site while suction dredge mining, and the pamphlet must be immediately available for inspection by WDFW.¹¹⁹

It is a gross misdemeanor to conduct suction dredge mining activities without an HPA, or in violation of any requirements or conditions of the HPA.¹²⁰ The maximum penalty for a gross misdemeanor is imprisonment for one year and a fine of \$5000.¹²¹ Violations of the Gold and Fish Pamphlet can also result in a civil penalty of up to \$100 per day.¹²²

B. Endangered Species Act

The Endangered Species Act was enacted by Congress in 1973 to “provide a means whereby ecosystems upon which endangered species and threatened species depend may be conserved, [and] to provide a program for the conservation of such endangered species and threatened species.”¹²³

Washington state is home to three species of fish listed as endangered, eighteen species of fish listed as threatened under the federal Endangered Species Act, including numerous anadromous fish and the native bull trout.¹²⁴ These species are also listed under Washington’s endangered and threatened species laws. Suction dredge mining activities overlap with the federally designated critical habitat for these species. (See Exhibit 1. Steelhead critical habitat with suction dredge mining, Exhibit 2. North American green sturgeon and eulachon critical habitat with suction dredge mining, Exhibit 3. Bull trout critical habitat with suction dredge mining, Exhibit 4. Chinook salmon critical habitat with suction dredge mining, Exhibit 5. Sockeye and chum salmon critical habitat with suction dredge mining).

The Endangered Species Act (ESA) prohibits the take of any federally listed species.¹²⁵ To take is defined as “to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect. . .”¹²⁶ Harm is defined to “include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding or sheltering.”¹²⁷ Take includes both direct and indirect harm, need not be purposeful, and can be the result of an accidental act.¹²⁸

¹¹⁷ *Gold and Fish*, *supra* note 116.

¹¹⁸ *Id.* at 18-41.

¹¹⁹ WAC 220-660-050(8)(c).

¹²⁰ RCW 77.15.300; *Gold and Fish*, *supra* note 116, at 42.

¹²¹ *Gold and Fish*, *supra* note 116, at 42.

¹²² RCW 77.55.291; *Gold and Fish*, *supra* note 116, at 42.

¹²³ 16 U.S.C. § 1531(b).

¹²⁴ Wash. Dep’t of Fish & Wildlife, *Washington State Species of Concern Lists*, <http://wdfw.wa.gov/conservation/endangered/list/Fish/>.

¹²⁵ 16 U.S.C. § 1538(a)(1).

¹²⁶ *Id.* § 1532(19).

¹²⁷ 50 C.F.R. § 17.3. See also *Babbitt v. Sweet Home Chapter of Communities for a Great Or.*, 515 U.S. 687, 697 (holding that the “definition [of take] naturally encompasses habitat modification that results in actual injury or

“Any person” may file a citizen suit against any person, governmental instrumentality, or agency alleged to be in violation of the ESA, the Secretary for the failure to “perform any act or duty under section 4 which is not discretionary,” or the Secretary for certain enforcement action, pursuant to section 11(g) of the ESA.¹²⁹ Citizens can seek to enjoin both present activities that constitute an ongoing take and future activities that are reasonably likely to result in take.¹³⁰ Notice must be provided to the Secretary and the alleged violator, and the plaintiff must then wait at least sixty days before the commencement of the action.¹³¹ However, an action can be commenced immediately after notification is provided “in the case of an action under this section respecting an emergency posing a significant risk to the well-being of any species of fish or wildlife or plants.”¹³² District courts have jurisdiction over ESA citizen suits.¹³³

i. WDFW’s Incomplete ESA Habitat Conservation Plan

Under section 10 of the ESA, non-federal entities can avoid liability for the take of a listed species if they obtain an incidental take permit (ITP).¹³⁴ In order to obtain an ITP, the applicant must commit to a Habitat Conservation Plan (HCP), that “conserv[es]” – *i.e.*, facilitates the recovery of – the species.¹³⁵ The HCP must delineate “the impact which will likely result from such taking” and the “steps the applicant will take to minimize and mitigate such impacts . . .”¹³⁶ WDFW never completed the HCP that it initiated, which was intended to avoid, minimize, or compensate for the incidental take of species resulting from the implementation of permits issued under its HPA authority. Therefore, WDFW is still liable for the take of listed species under the ESA.

In 2006, WDFW initiated an ESA HCP, responding to the findings of the WDFW White Paper, to assure that its HPA permitting actions did not violate the take provision of the ESA, and to provide assurances to permit holders for activities conducted under an HPA.¹³⁷ From 2006 to 2012, WDFW received grants from the U.S. Fish and Wildlife Service (USFWS) to develop the HCP for its HPA program.¹³⁸ However, when support for the HCP waned in spring 2012, WDFW discontinued its efforts.¹³⁹

death to members of an endangered or threatened species”).

¹²⁸ *Sweet Home*, 515 U.S. at 704; *Nat’l Wildlife Fed’n v. Burlington N.R.R.*, 23 F.3d 1508, 1512 (9th Cir. 1994).

¹²⁹ 16 U.S.C. § 1540(g)(1)(A)-(C).

¹³⁰ See *Nat’l Wildlife Fed’n*, 23 F.3d at 1511; *Marbled Murrelet v. Babbitt*, 83 F.3d 1060, 1069 (9th Cir. 1996).

¹³¹ 16 U.S.C. § 1540(g)(2)(A)(i).

¹³² *Id.* § 1540(g)(2)(C).

¹³³ *Id.* § 1540(g)(1).

¹³⁴ *Id.* § 1539(a)(1)(B).

¹³⁵ *Id.* §§ 1539(a)(1)(B), (a)(2)(A); see also *Sierra Club v. U.S. Fish & Wildlife Serv.*, 245 F.3d 434, 441-42 (5th Cir. 2001) (“‘[c]onservation’ is a much broader concept than mere survival” because the “ESA’s definition of ‘conservation’ speaks to the recovery of a threatened or endangered species”).

¹³⁶ 16 U.S.C. § 1539(a)(2)(A).

¹³⁷ *Archive- Habitat Conservation Plan (HCP)*, Washington Department of Fish and Wildlife Licensing & Permits, available at <http://wdfw.wa.gov/licensing/hpa/hcp/>.

¹³⁸ *Id.*

¹³⁹ *Id.*

The National Marine Fisheries Service (NMFS) worked with WDFW on its HCP. NMFS provided WDFW with comments regarding WDFW's new proposed Hydraulic Code rules, which were being prepared in conjunction with the HCP, and which were supposed to include the HCP's conservation measures.¹⁴⁰ One of NMFS's comment letters provides:

We continue to have concerns regarding the potential for concentrated and frequent mining activity in sensitive areas. While NMFS is generally supportive of the proposed rule package, it does not include a change from the existing rules that gives us some concern, particularly as WDFW has yet to implement any monitoring. Monitoring is needed to confirm the adequacy or inadequacy of the rules, including extent of mining activities that occur under the Gold and Fish pamphlet across the state, as well as compliance with the rules.¹⁴¹

As of the completion of this notice letter, WDFW still has not implemented any systematic monitoring of suction dredge mining activities. Furthermore, NMFS commented:

In the proposed rule package, while collection would still be prohibited, processing within the wetted perimeter would still be allowed year-round with both pans and sluices. That processing would be authorized in all state waters regardless of whether those waters are not authorized under the Gold and Fish Pamphlet. NMFS fails to recognize how this liberalization of activity occurring year-round within the wetted perimeter provides adequate resources protection to ESA-listed salmonids.¹⁴²

In addition, NMFS expresses the need for precaution in permitting small-scale mining activities, stating:

The science... remains at best inconclusive relative to impacts of mineral prospecting on fish habitat. In that regard, the federal courts have consistently required that risk not be placed on ESA species when science is lacking or inconclusive. NMFS urges that less stringent proposals, including potential processing of aggregate during spawning and incubation periods, not be considered unless specific studies indicate that they would not impact ESA species. At a minimum, NMFS urges WDFW to develop and implement a monitoring strategy to assess the efficacy of the proposed rules in protecting fish resources.¹⁴³

NMFS has concluded that WDFW's Gold and Fish Pamphlet permitting program impacts protected species, and that the agency must change its practices surrounding the regulation of small-scale mining activities in Washington State.

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¹⁴⁰ *Archive- Habitat Conservation Plan (HCP)*, supra note 139.

¹⁴¹ Letter from Steve Landino, Washington State Director for Habitat Conservation, to Lisa Wood, Habitat Program, Washington Department of Fish and Wildlife (Jan. 15, 2008) (on file with petitioner).

¹⁴² *Id.*

¹⁴³ *Id.* (emphasis added).

C. Clean Water Act

Section 301 of the CWA prohibits any discharge of a pollutant into navigable waters without a permit.¹⁴⁴ A “discharge” is defined as “any addition of any pollutant to navigable waters from any point source.”¹⁴⁵ Both redeposition or resuspension of material that originated in the water body have been found to satisfy the above definition.¹⁴⁶ The definition of “pollutant” includes: “dredged spoil, . . . chemical wastes, biological materials, . . . rock, [and] sand.”¹⁴⁷ “Navigable waters” is defined as “the waters of the United States”¹⁴⁸

Permits may either be issued under section 402, as a National Pollution Discharge Elimination System (NPDES) permit issued by the EPA or state program,¹⁴⁹ or section 404, issued by the Army Corps of Engineers,¹⁵⁰ of the Clean Water Act. The two permitting schemes are mutually exclusive.¹⁵¹

Authority over the discharges resulting from suction dredge mining might be segmented, so as to fall under the authority of both the EPA, or state program, and the Army Corps, requiring both section 402 and 404 permits.¹⁵² However, this notice letter focuses solely on the discharge of pollutants under the jurisdiction of the NPDES permit program, namely the redeposition of fine sediment, the resuspension of mercury and other chemicals, and the possible discharge of gasoline.

A citizen suit can be brought under the CWA “(1) against any person . . . who is alleged to be in violation of (A) an effluent standard or limitation under this chapter . . . or (2) against the Administrator where there is alleged a failure of the Administrator to perform any act or duty under this chapter which is not discretionary. . . .”¹⁵³ There must be a reasonable likelihood that the alleged violator will continue to violate the CWA in the future.¹⁵⁴ Notice must be provided to

¹⁴⁴ 33 U.S.C. § 1311(a), 1362(12).

¹⁴⁵ *Id.* § 1362(12)(A).

¹⁴⁶ *See, e.g., Avoyelles Sportsmen's League, Inc. v. Marsh*, 715 F.2d 897, 923 (5th Cir. 1983) (finding “redeposition” of dredge material to be an “addition”); *Rybachek v. U.S. E.P.A.*, 904 F.2d 1276, 1285-86 (9th Cir. 1990) (finding resuspension of material after processing through a sluice constituted an “addition”).

¹⁴⁷ 33 U.S.C. § 1362(6).

¹⁴⁸ *Id.* § 1362(7). *See also* Clean Water Rule: Definition of “Waters of the United States”; Final Rule, 80 Fed. Reg. 37054 (June 29, 2015).

¹⁴⁹ 33 U.S.C. § 1342.

¹⁵⁰ *Id.* § 1344.

¹⁵¹ *Id.* § 1342(a)(1) (“Except as provided in sections 318 and 404 of the Act. . . .”); *Coeur Alaska, Inc. v. Se. Alaska Conservation Council*, 557 U.S. 261 (2009).

¹⁵² *Coeur Alaska, Inc. v. Se. Alaska Conservation Council*, 557 U.S. 261 (2009) (holding that the discharge of a rock and water mixture, or slurry, from an Alaskan gold mine fell under the jurisdiction of the Army Corps and section 404); *Nat'l Env'tl. Def. Ctr. v. Env'tl. Quality Comm'n*, 223 P.3d 1071, 1084 (Or. Ct. App. 2009) (distinguishing between the jurisdiction over different discharged materials in stating: “On the one hand, the Corps has determined that “spoil” and “tailings”—which, when placed back in the water, have the potential to form piles and hence affect navigation—come within its exclusive jurisdiction. On the other hand, the EPA has regulated wastewater effluent, or turbid water containing resuspended solids.”)

¹⁵³ 33 U.S.C. § 1365(a)(1), (2).

¹⁵⁴ *Gwaltney of Smithfield, Ltd. v. Chesapeake Bay Found.*, 484 U.S. 49, 58 (1987).

the alleged violator, the Administrator, and the State in which the violation occurs 60 days prior to the commencement of the suit.¹⁵⁵

i. State Delegation of NPDES Program

The authority for the regulation of water quality remains with the Washington Department of Ecology (Ecology): “The department shall have the jurisdiction to control and prevent the pollution of streams, lakes, rivers, ponds, inland waters, salt waters, water courses, and other surface and underground waters of the state of Washington.”¹⁵⁶ Ecology has been granted the authority to administer the CWA NPDES permit program under section 402(b).¹⁵⁷ Under this authority, Ecology must issue, monitor, and enforce permits that comply with the NPDES program.¹⁵⁸ If the EPA Administrator finds that Ecology cannot ensure compliance or abate violations through enforcement, the EPA shall suspend the grant of authority.¹⁵⁹

Unlike neighboring states, Washington has not developed a general NPDES permit for suction dredge mining.¹⁶⁰ In practice, and as a matter of policy, Ecology has used compliance with WDFW’s Gold & Fish pamphlet as a surrogate for NPDES permitting.

III. LEGAL VIOLATIONS

A. **WDFW’s Endangered Species Act Violations**

Suction dredge mining activities permitted under the Gold and Fish Pamphlet, and individually issued HPAs, result in the take of listed species. The direct injury or death of listed species falls within the most basic definition of “take.”¹⁶¹ The mining activities cause direct mortality and harm through entrainment of eggs, larvae, and emergent fry as they pass through dredging devices; from direct trampling by miners; and through excavations with shovels and other equipment.¹⁶² Elevated turbidity can also result in the direct mortality of listed species.¹⁶³

Suction dredge mining also indirectly takes listed species through the alteration and destruction of habitat and spawning grounds, through water quality degradation and changes to

¹⁵⁵ 33 U.S.C. § 1365(b).

¹⁵⁶ RCW 90.48.030. *See also* RCW 90.48.010.

¹⁵⁷ 33 U.S.C. § 1342(b); WAC 173-220-010. *See also* National Pollutant Discharge Elimination System, Memorandum of Agreement Between the Washington Department of Ecology and the United States Environmental Protection Agency, Region 10 (Aug. 15, 1989), available at <https://www.epa.gov/sites/production/files/2013-09/documents/wa-moa-npdes.pdf>.

¹⁵⁸ 33 U.S.C. § 1342(b).

¹⁵⁹ 33 U.S.C. §§ 1342(b), (c)(1).

¹⁶⁰ *See* Idaho Small Suction Dredge Mining General Permit No. IDG370000, available at https://www3.epa.gov/region10/pdf/permits/npdes/id/IDG37_final_permit_mod_2014.pdf; Oregon DEQ NPDES General Permit 700PM (available at <http://www.deq.state.or.us/wq/wqpermit/docs/General/npdes700pm/permit.pdf>).

¹⁶¹ To take is defined as “to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect. . . .” 16 U.S.C. § 1532(19).

¹⁶² *See supra* section I.

¹⁶³ *Id.*

the geomorphology and stream structure.¹⁶⁴ These changes impact listed species' ability to grow, access food sources, and breed successfully.¹⁶⁵

This indirect harm, too, falls within the definition of “take” under the ESA. Harm is defined to “include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding or sheltering.”¹⁶⁶ By impairing these essential behavioral patterns, the recovery of a certain species, or ESUs, can be precluded.¹⁶⁷ As the Ninth Circuit noted, “Congress was aware that the primary threat to endangered species was destruction of habitat. Thus, one of the main purposes of the Act was conservation and preservation of the ecosystems upon which endangered species depend.”¹⁶⁸

Section 9 of the ESA states that “[i]t is unlawful for any person . . . [to] cause to be committed” a prohibited take.¹⁶⁹ WDFW is violating section 9 by proximately causing continuous direct and indirect harm of listed species in Washington, including Chinook salmon, sockeye salmon, steelhead, green sturgeon, chum salmon, coho salmon, bull trout, and eulachon.¹⁷⁰

The ESA “not only prohibits the acts of those parties that directly exact the taking, but also bans those acts of a third party that bring about the acts exacting a taking. . . . [A] governmental third party pursuant to whose authority an actor directly exacts a taking . . . may be deemed to have violated the provisions of the ESA.”¹⁷¹ Consequently, courts have consistently found that the authorization of actions by state or federal agencies that result in the take of listed species constitutes a violation of the take prohibition – even though the final action was conducted by a separate entity or individual.¹⁷² Here, like past cases, “a regulatory agency . . .

¹⁶⁴ *Id.*

¹⁶⁵ *Id.*

¹⁶⁶ 50 C.F.R. § 17.3. *See Sweet Home Chapter of Communities for a Great Or.*, 515 U.S. at 708; *Marbled Murrelet*, 83 F.3d at 1065.

¹⁶⁷ *See, e.g., Palila v. Haw. Dep't of Land & Natural Res.*, 852 F.2d 1106, 1077 (9th Cir. 1988).

¹⁶⁸ *Id.* at 1076.

¹⁶⁹ 16 U.S.C. § 1538(g).

¹⁷⁰ The ESA defines “person” to include “any officer, employee, agent, department, or instrumentality . . . of any State, municipality, or political subdivision of a State, . . . [or] any State, municipality, or political subdivision of a State.” *Id.* § 1532(13).

¹⁷¹ *Strahan v. Coxe*, 127 F.3d 155, 163 (1st Cir. 1997).

¹⁷² *See, e.g., Loggerhead Turtle v. Cnty. Council of Volusia Cnty.*, Fla., 148 F.3d 1231, 1251-52 (11th Cir. 1998) (finding the regulation of street lighting by the county to be the proximate cause of the incidental take of sea turtles sufficient to render the county liable under the ESA); *Strahan*, 127 F.3d at 158, 163 (1st Cir. 1997) (finding that the licensure and permitting of gillnet and lobster pot fishing by a state agency proximately caused the take of right whales); *Defenders of Wildlife v. Admin. Envtl. Prot. Agency*, 882 F.2d 1294, 1300-01 (8th Cir. 1989) (finding a federal agency proximately caused the take of black-footed ferret through its registration of pesticides); *Sierra Club v. Lyng*, 694 F. Supp. 1260 (E.D.Tex. 1988), *aff'd by Sierra Club v. Yeutter*, 926 F.2d 429 (5th Cir. 1991) (holding the U.S. Forest Service liable for take because its even-aged management plan allowed private companies to harvest timber in a way that degraded the habitat of the endangered red-cockaded woodpecker); *U.S. v. Town of Plymouth, Mass.*, 6 F. Supp. 2d 81 (D. Mass. 1998) (holding the Town liable for the take of endangered piping plovers that had either been run over or isolated from their food source by off-road vehicles, which were allowed on the beach under the Town's policies); *Seattle Audubon Soc'y v. Sutherland*, No. 06-1608MJP, 2007 U.S. Dist. LEXIS 31880 (W.D.

exerts control over the use of something that allegedly takes protected wildlife [T]he regulatory entity purports to make lawful an activity that allegedly violates the ESA.”¹⁷³ In other words, “a governmental third party pursuant to whose authority an actor directly exacts a taking of an endangered species may be deemed to have violated the provisions of the ESA. . . . The causation . . . , while indirect, is not so removed that it extends outside the realm of causation as it is understood in the common law.”¹⁷⁴

By issuing HPAs for suction dredge mining activities with restrictions that are not sufficient to avoid take, WDFW is itself liable for the take, as they have exerted control over and enabled the harmful activities despite a third-party, the suction dredge miner, physically exacting the taking.¹⁷⁵

i. The Gold and Fish Pamphlet is Not Sufficient to Avoid Take

The Gold and Fish Pamphlet does not provide adequate restrictions to avoid take of listed species. Suction dredge miners who fully comply with the permit’s provisions are still highly likely to exact a take.

The WDFW White Paper concluded that *all* small-scale mineral prospecting activities have the potential for some “take” under the ESA, unless none of the potentially covered species occur in a project area, including the areas upstream and downstream that may be impacted by the mining operations.¹⁷⁶ A comparison of the critical habitat of listed species in the state and the streams where suction dredge mining is permitted by the Gold and Fish Pamphlet shows extensive overlap. (*See* Exhibits 1-5).

The report found that the restrictions in the 1999 Gold and Fish Pamphlet were insufficient to avoid take. The two updates to the pamphlet have since been published (2009 and 2015) have not changed this conclusion. The latest edition of the Gold and Fish Pamphlet still did not incorporate the recommendations that would be necessary to preclude take of listed species. In some instances, the new editions have eased restrictions on suction dredge mining.

The WDFW White Paper concludes that the 1999 Gold and Fish Pamphlet “does not provide detailed information concerning potential impacts, such as how to recognize and avoid fish spawning areas [which is necessary to take certain steps to properly comply with the restrictions and avoid take], how to recognize when impacts are occurring, or how violating the prospecting rules could affect aquatic organisms and their habitat. . . . For the uninitiated, the pamphlet lacks clarity and the trail of thought is not clear.”¹⁷⁷ The 2015 Gold and Fish Pamphlet similarly lacks such necessary detailed information, providing only that, “[y]ou may not disturb

Wash. May 1, 2007) (“the [ESA] not only prohibits a party from directly causing take, but also prohibits a party, including state officials, from bringing about the acts of another party that exact a taking”).

¹⁷³ *Loggerhead Turtle*, 148 F.3d at 1251.

¹⁷⁴ *Strahan*, 127 F.3d at 163-64. *See also Sweet Home Chapter of Communities for a Great Or.*, 515 U.S. at 700 n. 13.

¹⁷⁵ *Defenders of Wildlife*, 882 F.3d at 1294.

¹⁷⁶ *Id.* at 9-6 (emphasis added).

¹⁷⁷ SMALL-SCALE MINERAL PROSPECTING WHITE PAPER, *supra* note 8, at 9-6.

fish life or redds within the bed. If you observe or encounter fish life or redds, within the bed, or actively spawning fish when collecting or processing aggregate, you must relocate your operation.”¹⁷⁸ It is important to note that the Gold and Fish Pamphlet does not require miners to avoid spawning areas, only eggs or actively spawning fish.¹⁷⁹

Suction dredge mining in listed species habitat could result in a taking through entrainment, trampling, abrasions, and harmful effects from changes to water quality, as described above. “The effects of [total suspended solids] normally observed during mineral prospecting activities are sublethal, but are still considered take under the ESA.”¹⁸⁰ These instructions are not sufficient to address the fact that proper compliance with the Gold and Fish Pamphlet, and in turn avoidance of take, *requires* proper identification of spawning areas and redds – for which the pamphlet provides no guidance. As Perry Harvester, WDFW Yakima Regional Habitat Manager, noted in the November 16, 2007 Gold and Fish Rulemaking Workgroup: “the Gold and Fish Pamphlet must address impacts from every level of prospecting skills, not just the experts.”¹⁸¹ Numerous suction dredge miners have been observed operating in fish spawning areas with redds present, indicating that the restrictions do not provide sufficient guidance (See Figures 1-5; Exhibit 6).

The suction dredge work windows provided in the pamphlet are not sufficient to avoid take. The WDFW White Paper noted:

[b]ecause of the potential overlap between fall spawning fish and permitted mining activities, small-scale mining is most likely to impact several life-history stages of fish, including spawning, egg incubation, adult migration, and emergency of early fall-spawning salmon and char species. . . . Egg incubation life-history stages of non-salmonid fishes like sturgeon . . . could also be potentially exposed to activities during the work window. . . . The relative level of risk is directly related to species presence. . . . Although the Gold and Fish pamphlet is designed to avoid peak spawning and incubation periods as much as practical, overlap occurs between the timing of allowable mining activities and incubation/emergence periods for various potentially covered species.¹⁸²

The suction dredge work windows effectively do not provide the necessary protections and avoidance of spawning that they purport to. Furthermore, the suction dredge work windows were

¹⁷⁸ *Gold and Fish*, *supra* note 116, at 11.

¹⁷⁹ *Id.* See also WDFW, PEER REVIEW OF WHITE PAPERS PREPARED IN 2006 FOR HYDRAULIC PROJECT APPROVAL HABITAT CONSERVATION PLAN: SMALL-SCALE MINERAL PROSPECTING OVERWATER STRUCTURES AND NON-STRUCTURAL PILINGS BANK PROTECTION/STABILIZATION WATER CROSSINGS 13, 26 (Dec. 2007).

¹⁸⁰ SMALL-SCALE MINERAL PROSPECTING WHITE PAPER, *supra* note 8, at 9-15.

¹⁸¹ GOLD AND FISH RULEMAKING WORKGROUP, SESSION TEN – MEETING NOTES 5 (Nov. 16, 2007). A notation in the meeting notes from the fourth workgroup meeting, on March 13, 2007, echoed the need for sufficient information so that miners can comply with restrictions, stating: “EDUCATION is key. Maybe we can explain and show photo that explains what a red looks like.” (Here, this comment specifically referred to panning – but was applicable to the need to properly identify redds during any prospecting or mining operation). GOLD AND FISH RULEMAKING WORKGROUP, SESSION 4 – MEETING NOTES 4 (Mar. 13, 2007). In the fifth workgroup meeting, the meeting notes explain: “Perry [Harvester] presented multiple photos of bull trout and steelhead redds from several locations that demonstrated how difficult they can be to identify and how vulnerable they could be to in-water work and wading.” GOLD AND FISH RULEMAKING WORKGROUP, SESSION 5 – MEETING NOTES 5 (Mar. 27, 2007).

¹⁸² SMALL-SCALE MINERAL PROSPECTING WHITE PAPER, *supra* note 8, at 9-14-9-15.

based off the phenology of hatchery fish, which results in further misalignment with the spawning activities of listed species and the provided suction dredge work windows.

The WDFW White Paper concludes that bull trout, spring and summer Chinook, and Sockeye salmon are the listed fish species most likely to be influenced by small-scale mining activities during their spawning and incubation periods, if they are distributed in the areas where the Gold and Fish Pamphlet allows small-scale mineral prospecting.¹⁸³

Suction dredge mining during any time of year, within the habitat of listed species, could result in a take because of habitat modification. “[T]ake can occur as a result of changes to channel morphology and habitat conditions,” as described above.¹⁸⁴ These habitat modifications can have a significant effect on listed species in smaller streams and where suction dredge operations are concentrated.¹⁸⁵ Suction dredge work windows or other restrictions in the Gold and Fish Pamphlet do not prevent changes to spawning habitat, whereby fish rely on less stable streambeds for spawning or streams are left with stronger currents through erosion and other changes to channel morphology.¹⁸⁶

Deposition of dredge tailings also may affect fish reproduction by inducing fish to spawn on unstable material. Substrate stability is critical to spawning success of fall-spawning species because the weeks or months of embryo development in the gravel commonly coincide with the season of high flows that mobilize streambeds. . . . Dredge tailings may be attractive to salmonids as site for red (nest) construction because tailings are often located near riffle crests where fish frequently spawn, and they provide relatively loose, appropriately sized substrate. However, dredge tailings may reduce embryo survival because they tend to be less stable than natural spawning gravels. Embryos in tailings may suffer high mortality [and] the population-level consequences of dredging could be negative.¹⁸⁷

The closer in time these effects are caused to spawning, the greater their impact, as the streambed will not have time to “reset.” The Gold and Fish Pamphlet, similarly, allows suction dredge miners to undermine stable woody debris or rocks from shorelines or within the stream, which degrades stream habitat structure, cover, and pools necessary for ESA listed salmon.¹⁸⁸

Some restrictions have been weakened over time. A provision of the 1999 Gold and Fish Pamphlet provides, “[i]ncubating fish eggs or fry shall not be disturbed. If fish eggs or fry are encountered during excavation of the bed, operations shall immediately cease and WDFW shall be notified immediately. Further approval shall be required by WDFW prior to resuming mineral prospecting or placer mining activities in that stream.”¹⁸⁹ In the 2015 Gold and Fish Pamphlet,

¹⁸³ *Id.* at 5-4.

¹⁸⁴ *Id.* at 9-16.

¹⁸⁵ *Id.*

¹⁸⁶ See Harvey & Lisle, *supra* note 68.

¹⁸⁷ *Id.* at 11.

¹⁸⁸ *Id.* 11-3-11-4.

¹⁸⁹ *Gold and Fish: Rules and Regulations for Mineral Prospecting and Placer Mining in Washington State* 31 (Jan. 1999), available at <http://wdfw.wa.gov/publications/00291/wdfw00291.pdf> [hereinafter 1999 *Gold and Fish*].

WDFW must only be notified if you “observe a fish kill or fish life in distress.”¹⁹⁰ Similarly, the 1999 edition prohibits mining activities from “creat[ing] a blockage or hindrance to either the upstream or downstream passage of fish.”¹⁹¹ There is no such prohibition in the 2015 edition.¹⁹²

Furthermore, the Gold and Fish Pamphlet does not require adequate notice to WDFW to properly track when and where suction dredge mining is conducted. This undermines the necessary monitoring and enforcement. WDFW’s existing program lacks adequate monitoring and enforcement mechanisms to ensure that the restrictions set forth in the Gold and Fish Pamphlet are being followed or, even if all restrictions are followed, whether the expected protections are achieved. As NMFS emphasized, effective monitoring is the minimum, preliminary step to ensuring that permitted activities do not result in a take.

Numerous examples of take of listed species have been observed throughout Washington, where Gold and Fish Pamphlet and other WDFW restrictions were not sufficient. For example, during the summer of 2015, the Peshastin Creek in Chelan County was reduced to record low flows. Peshastin Creek is a tributary of the Wenatchee River, in which steelhead and bull trout can be found, with a suction dredge work window between August 15 and February 15. WDFW closed several streams and rivers to angling due to these conditions, but waited several weeks to eventually place restrictions on suction dredge mining, closing the daily suction dredge work window at 2:00PM. A week after these emergency rules went into effect, holes were observed in the creek, where steelhead fingerlings were stranded (see Figure 1). These holes had no riparian cover from high temperatures, no cover from predators, and no access to the mainstem of the stream.

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¹⁹⁰ *Gold and Fish*, *supra* note 116, at 15.

¹⁹¹ *1999 Gold and Fish*, *supra* note 192, at 32.

¹⁹² *Gold and Fish*, *supra* note 116.



Figure 1. Hole left in Peshastin Creek during emergency record low flow.

An abandoned (for over 24 hours) suction dredge was also observed on Peshastin Creek, notably before the suction dredge work window had opened for the year on August 15 (see Figure 2).

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Figure 2. Abandoned suction dredge in Peshastin Creek.

Actual and likely take of listed species was observed in Scotty Creek in the summer of 2015. Scotty Creek is a tributary of the Peshastin and Wenatchee in Chelan County, and a heavily used stream for suction dredge mining. Steelhead and bull trout are found in this creek. An angler observed dead steelhead just below a hole left behind by suction dredge miners (see Figure 3). The angler also observed significant erosion to the bank, which could result in further stream erosion and increased suspended sediment (see Figure 4).



Figure 3. Hole left in Scotty Creek, dead steelhead found below.



Figure 4. Bank erosion at Scotty Creek.

Similarly, a hole was left by suction dredge miners on the Swauk Creek in late September 2016, below which Redds were discovered (see Figure 5). Swauk Creek is a tributary of the Yakima River and has resident bull trout and Coho salmon. The suction dredge work window runs between July 1 and September 30.



Figure 5. Hole left in Swauk Creek, redds found below.

Even if suction dredge miners were to seek advice of WDFW staff in determining where redds were located so as to avoid them and in turn comply with the Gold and Fish Pamphlet, as many miners are likely unable to make this determination on their own, it is possible that an accurate assessment could not be obtained.

ii. *Individual HPAs are Readily Available to Miners*

Not only is compliance with the Gold and Fish Pamphlet not sufficient to avoid take of listed species, but WDFW regularly grants individual HPAs to suction dredge miners who wish to work outside of the suction dredge work windows or other restrictions in the Gold and Fish Pamphlet. Of the numerous individual HPAs issued, WDFW rarely denies permits even when there are impacts to endangered species habitat.¹⁹³ The swift rubberstamping of these individual HPAs raises concerns that they likely continue to sidestep the already weak protections of the Gold and Fish Pamphlet.

iii. *WDFW Must Amend the Gold and Fish Pamphlet and Initiate Monitoring and Enforcement.*

If WDFW continues to permit suction dredge mining through its Gold and Fish Pamphlet, further violations of the ESA section 9 take prohibition will occur through the harm, harassment, injury, and death of listed species, and WDFW can be held liable. The Gold and Fish Pamphlet must be amended to be more restrictive and resolve any uncertainties in the current scientific understanding of the impacts of suction dredge mining in favor of the listed species. Until it does so in a manner that prevents take of listed species, WDFW must either cease permitting suction dredge mining through the pamphlet, or obtain an incidental take permit (which would involve completing the unfinished habitat conservation plan).

Pursuant to ESA section 11 and its implementing regulations, the above-described violations of the ESA subject WDFW to a penalty of up to \$25,000 in civil penalties, and up to \$50,000, or imprisonment up to one year, or both, as criminal penalties.¹⁹⁴

B. Clean Water Act Violations

WDFW is complicit in the violation of section 301 of the CWA, through the agency's authorization of suction dredge mining activities. There is little to no evidence that suction dredge miners in Washington obtain individual NPDES permits, nor is there an applicable general NPDES permit under which they could operate. Yet the mining activities invariably result in discharge of pollutants into navigable waters. WDFW issues one of the necessary permits for suction dredge mining, but does not require assurance that other laws are complied with.

The EPA and other state agencies have found that suction dredge mining falls within the scope of the NPDES permit program. General NPDES general permits for suction dredge mining have been issued in Idaho (under the authority of the EPA directly),¹⁹⁵ Oregon (under the

¹⁹³ See *Beatty v. Wash. Dep't of Fish & Wildlife*, PCHB No. 11-043 (Nov. 30, 2011) (legal challenge against conditions of individual HPA permit).

¹⁹⁴ 16 U.S.C. §§ 1540(a)(1), (b)(1).

¹⁹⁵ Authorization to Discharge Under the National Pollutant Discharge Elimination System for Small Suction Dredge Places Miners in Idaho, General Permit No. IDG370000 (2013), available at https://www3.epa.gov/region10/pdf/permits/npdes/id/IDG37_final_permit_mod_2014.pdf.

authority of the Oregon Department of Environmental Quality),¹⁹⁶ and Alaska (originally under the authority of the EPA, now under the Alaska Department of Environmental Conservation).¹⁹⁷

The CWA defines “pollutant” to include “dredged spoil,” “chemical wastes,” “biological materials,” and “rock, sand, industrial, municipal, and agricultural waste” discharged into water.¹⁹⁸ Regulations define conventional pollutants to include suspended sediment,¹⁹⁹ and toxic pollutants to include mercury, copper, lead, and zinc.²⁰⁰ After substrate is processed through the suction dredge and sluice, rock, coarse and fine sediment, and water is released back into the stream. The pollutants discharged from suction dredges are: suspended sediment, nutrients, pathogens, trash, mercury, trace metals such as copper, cadmium, lead, and zinc, and synthetic organic compounds such as pesticides, gasoline, solvents, and oil, and inorganic materials

A discharge is understood to require an “addition.”²⁰¹ In *Rybachek v. U.S. Environmental Protection Agency*, the Ninth Circuit held that material collected and processed through a sluice during placer mining operations, and subsequently discharged into a water body constitutes an “addition.”²⁰² The court explains that even if the material originated in the streambed and is then processed through the sluice and returned to the waterbody, the “resuspension may be interpreted to be an addition of a pollutant.”²⁰³ In *Trustees for Alaska v. Environmental Protection Agency*, the Ninth Circuit again held that NPDES permits were required for the activities of gold placer miners.²⁰⁴ Similarly, in *Avoyelles Sportsmen’s League, Inc. v. Marsh*, the Fifth Circuit held that the “redeposit” of materials may constitute an “addition.”²⁰⁵ This dredged material was removed by construction equipment and redeposited into a wetland – with no transformation of the pollutant.²⁰⁶

The Eleventh Circuit, in *United States v. M.C.C. of Florida, Inc.*, also held that the redeposition of a pollutant constitutes an “addition.”²⁰⁷ Here, the court emphasized the importance of interpreting “addition” in light of the objective of the Clean Water Act – that is, “the restoration and maintenance of the chemical, physical, and biological integrity of the

¹⁹⁶ See, e.g., Or. Dep’t of Env’tl. Quality, General Permit, National Pollution Discharge Elimination System, Wastewater Discharge Permit (2015), available at <http://www.deq.state.or.us/wq/wqpermit/docs/general/npdes700pm/permit.pdf>

¹⁹⁷ See, e.g., Alaska Dep’t of Env’tl. Conservation, Division of Water, Wastewater Discharge Authorization Program, Medium-Size Suction Dredge General Permit (AKG371000) (2014), available at http://dec.alaska.gov/water/compliance/documents/akg371000_ar_form_141212.pdf.

¹⁹⁸ 33 U.S.C. § 1362(6).

¹⁹⁹ 40 C.F.R. § 401.16.

²⁰⁰ *Id.* § 401.15.

²⁰¹ 33 U.S.C. § 1362(12).

²⁰² *Rybachek v. U.S. E.P.A.*, 904 F.2d 1276, 1285-86 (9th Cir. 1990).

²⁰³ *Id.* (emphasis added). See also *Borden Range P’ship v. U.S. Army Corps of Eng’rs*, 261 F.3d 810, 814 (9th Cir. 2001); *Wash. Wilderness Coal. v. Hecla Mining Co.*, 870 F. Supp. 983, 988 (E.D. Wash. 1994).

²⁰⁴ *Trustees for Alaska v. EPA*, 749 F.2d 549, 552, 558 (9th Cir. 1984).

²⁰⁵ *Avoyelles Sportsmen’s League, Inc. v. Marsh*, 715 F.2d 897, 923 (5th Cir. 1983).

²⁰⁶ *Id.* at 920-21.

²⁰⁷ *United States v. M.C.C. of Fla., Inc.*, 772 F.2d 1501, 1506 (11th Cir. 1985) (judgment vacated on other grounds) (In this case, sea grass and sediment were dredged from the bottom of a channel and redistributed in adjacent areas – the facts of the case do not clarify whether this material was first removed from the water before being redistributed.).

Nation's waters.”²⁰⁸ The court found that the removal and redeposition of this material was severe enough to compromise the integrity of the waterway, so that “nature [would not] be able to restore them to their natural condition herself.”²⁰⁹

A point source is defined as “any discernible, confined and discrete conveyance. . . .”²¹⁰ The point source “need not be the original source of the pollutant; it need only convey the pollutant.”²¹¹ The suction dredge itself serves as a point source, bringing the activity under the coverage of the NPDES program.

The discharge must be into navigable waters. The term “navigable waters” broadly encompasses “the waters of the United States, including the territorial seas.”²¹² Suction dredge mining is conducted in rivers and streams. These bodies of water are, by definition, categorically within the jurisdiction of the CWA, and do not require a further significant nexus analysis.²¹³

Finally, section 402 of the CWA does not provide an exemption for a de minimis discharge of pollutants.²¹⁴ The language of the CWA clearly states that *any* discharge of a pollutant into navigable waters requires a permit – with no qualification of size or potential harm.

Despite the requirement that suction dredge operators obtain a NPDES permit, WDFW continues to issue the Gold and Fish Pamphlet or individual HPAs fully aware that the permittees broadly fail to comply with the CWA. The Gold and Fish Pamphlet generally indicates that other laws must be followed,²¹⁵ but does nothing to ensure compliance.

WDFW must amend its HPA permitting scheme to ensure compliance with the CWA. WDFW should require that any HPA permittee, even those proceeding with a pamphlet HPA, obtain a NPDES permit prior to any operations in waterways. In order to implement this program effectively HPAs should, therefore, be issued individually, also providing the opportunity for WDFW to actually track and monitor suction dredge mining, as well as conduct necessary enforcement.

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²⁰⁸ *Id.*; 33 U.S.C. § 1251(a).

²⁰⁹ *M.C.C. of Fla., Inc.*, 772 F.2d at 1506.

²¹⁰ 33 U.S.C. § 1362(14).

²¹¹ *S. Fla. Water Mgmt. Dist. v. Miccosukee Tribe of Indians*, 541 U.S. 95, 105 (2004).

²¹² 33 U.S.C. § 1362(7).

²¹³ *Moses v. United States*, 496 F.3d 984 (9th Cir. 2007). *See also* Clean Water Rule: Definition of “Waters of the United States”; Final Rule, 80 Fed. Reg. 37054 (June 29, 2015).

²¹⁴ *Sierra Club v. Union Oil Co.*, 813 F.2d 1480, 1490-91 (9th Cir. 1986), *rev'd on other grounds*, *Union Oil Co. v. Sierra Club*, 485 U.S. 931 (1988).

²¹⁵ The Gold and Fish Pamphlet only indirectly notes Ecology's jurisdiction over the NPDES permit program: “Ecology also administers water quality standards to prevent interference with or harm to beneficial uses of state waters in lakes, streams, rivers, and marine areas. . . . Ecology checks complaints of water quality violations and can prosecute offenders.” *Gold and Fish*, *supra* note 116, at 4. The Hydraulic Code states: “HPAs do not exempt a person from obtaining other necessary permits and following the rules and regulations of local, federal, and other Washington state agencies.” WAC 220-660-050(1)(a).

IV. CONCLUSION

Due to the overwhelming harm to fish species, we urge WDFW to cancel its Gold and Fish Pamphlet permitting program in Washington. Simply regulating small-scale mining activities further by developing a system for tracking small-scale mining impacts or restricting the type of mining equipment allowed, as WDFW's white paper recommends, still results in take of ESA protected species.

WDFW is also allowing an ongoing violation of the Clean Water Act by permitting small-scale mining operations that discharge pollutants into Washington State waters in the absence of an NPDES permit.

Therefore, should WDFW continue to allow small-scale mining activities under existing regulations that allow for take of ESA listed species and continue to completely disregard its duty to enforce the requirements of the NPDES permit program, we intend to file suit in federal district court. We will further seek an award for any costs and fees associated with the litigation, including reasonable attorney and expert fees.

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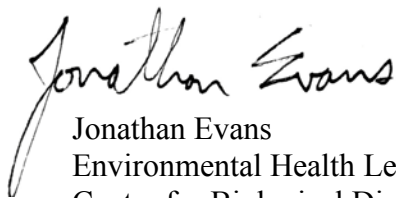
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Please do not hesitate to contact us should you wish to discuss this matter and opportunities to address WDFW's legal violations outside of litigation. The parties providing notice can be reached at the address and contact information below:

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Sincerely,



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Exhibit 1

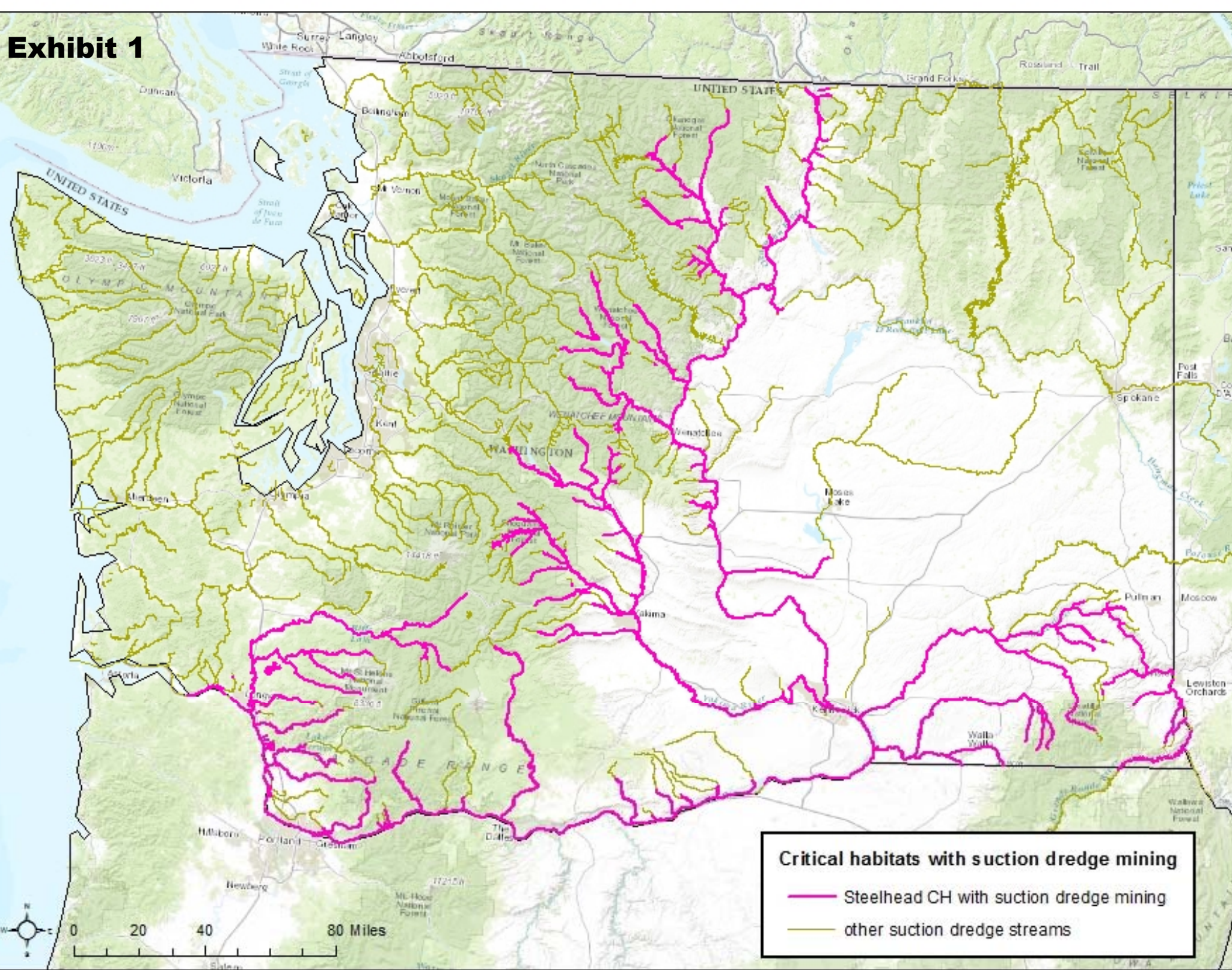


Exhibit 2

Critical habitats with suction dredge mining

- North American green sturgeon CH with suction dredge mining
- Eulachon CH with suction dredge mining
- other suction dredge streams



Exhibit 3

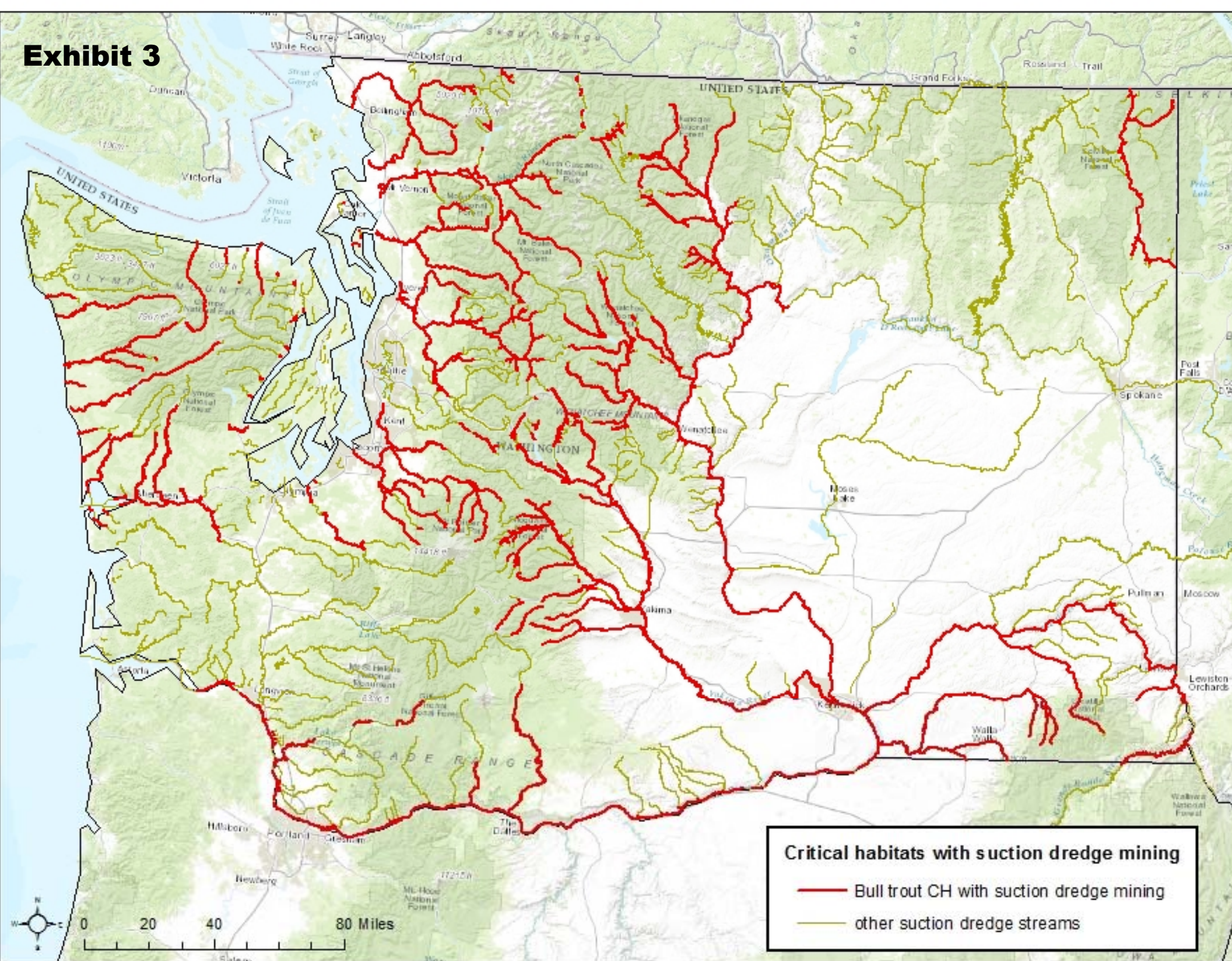


Exhibit 4

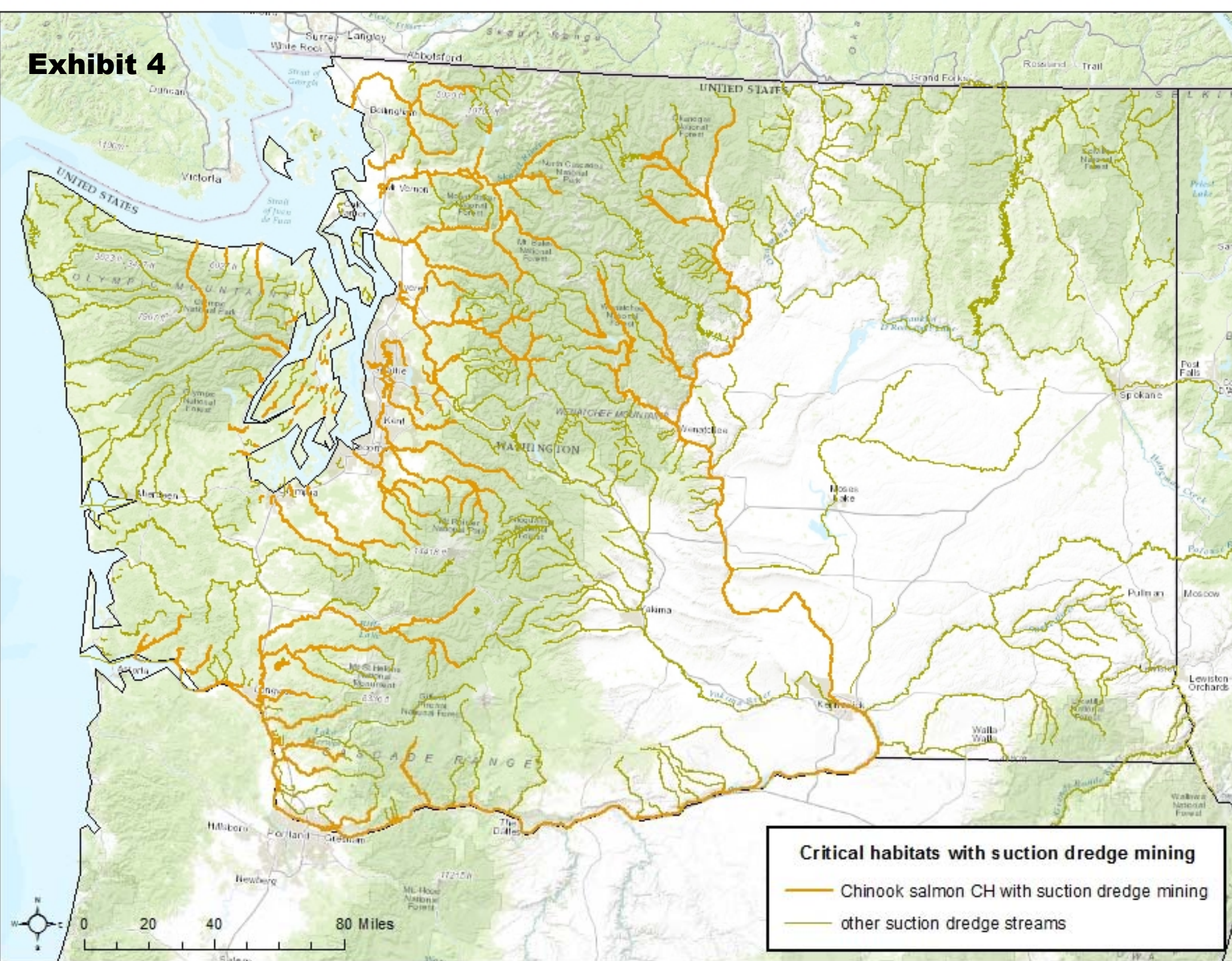


Exhibit 5

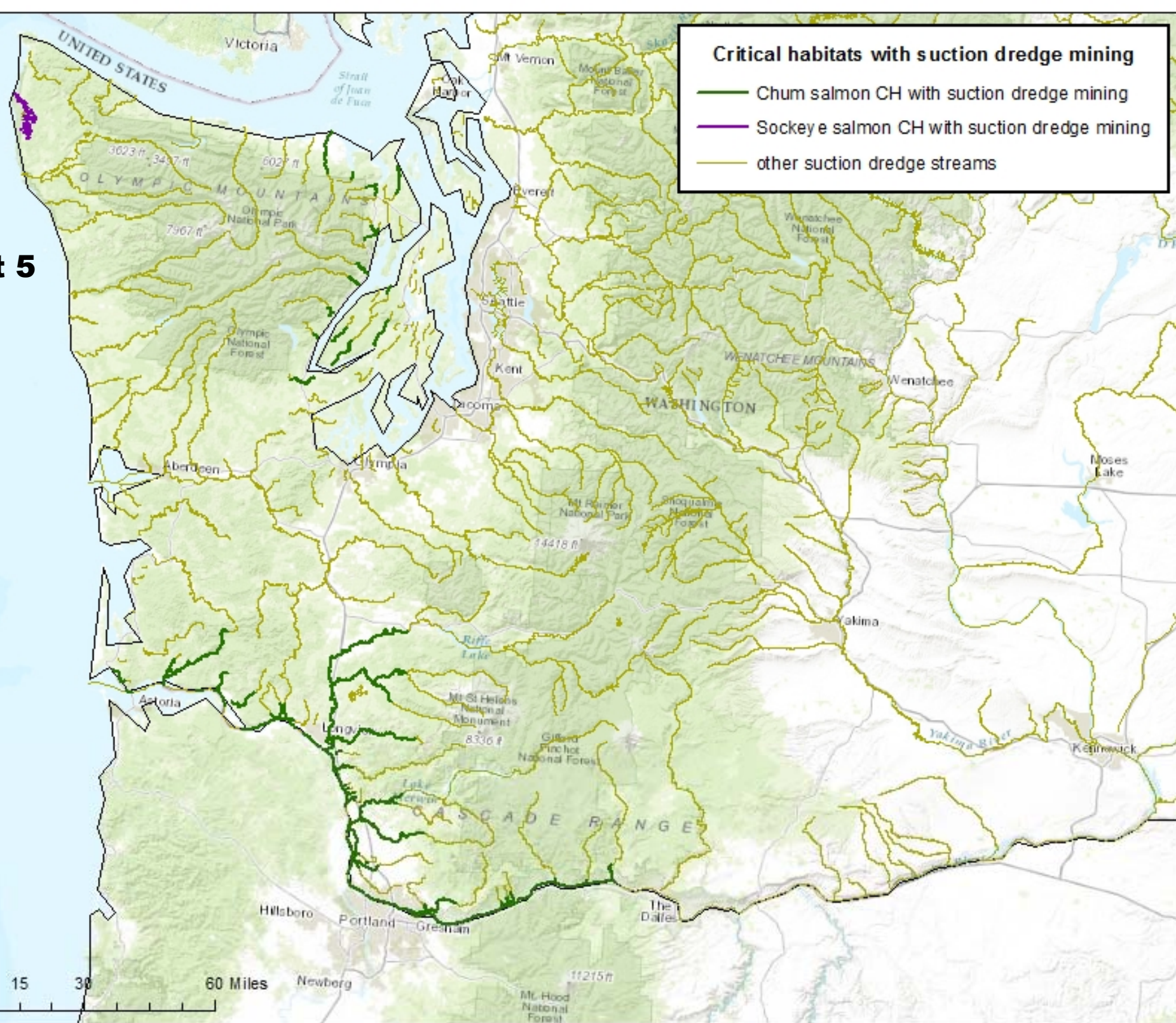


Exhibit 6

