



Kalmiopsis Audubon Society  
P.O. Box 1265 Port Orford OR 97465

May 4, 2009

Mr. Benny Dean, Jr.  
U.S. Army Corps of Engineers  
1600 Executive Parkway, Suite 210  
Eugene, OR 97401-2156

Dear Mr. Dean:

I am writing on behalf of the Kalmiopsis Audubon Society in Curry County, Oregon. Our group has over 175 members--including several who live on or near Elk River, and who guide on Elk River--who are concerned about habitat for fish, birds and wildlife and so we are very concerned about NWP-1999-1114/2, the proposal by Tidewater Contractors to remove 12,000 cubic yards of gravel from the Elk River.

Given that the Elk is a superlative river with a very high quality fishery based on the excellent habitat it affords, gravel extraction activities that could harm the fish habitat and water quality need to be considered with extreme precaution and care.

***PRIMARY CONCERNS***

We have several concerns about this proposal:

**1) Impacts to premier fish habitat of Elk River**

The Elk River is one of the premier salmon and steelhead strongholds on the West Coast of the United States. **The area proposed for gravel mining is located in an area known as spawning and rearing habitat for fall Chinook salmon and as spawning and rearing for steelhead**, both species favored by local (and visiting) anglers, hundreds of whom come each year to catch fish. The area proposed for mining accounts for 6 percent of the mileage used for spawning by Chinook and steelhead in the main stem (based on Streamnet database figures for spawning reaches). The river is also habitat for sea run cutthroat trout.

The Elk River in the proposed mining area is also used for rearing and migration by and is considered **Essential Fish Habitat (EFH) for the Southern Oregon/Northern California Coastal (SONCC) Coho, a federally threatened run of coho**. The Elk River SONCC coho population is considered the strongest that remains; the other significant SONCC coho population on the Chetco River has been "extremely depressed," which makes protecting this run on the Elk especially crucial. The area proposed for mining would account for 11 percent of mileage used by coho for rearing in the mainstem.

The economy of our local community, Port Orford, is based largely on fish, with both sportfishing and commercial fishing--and associated businesses--accounting for a significant local employment and revenues. In addition to anglers, local residents and visitors enjoy the opportunity to go up to the Elk River and see salmon swimming upstream and to see bald eagles and osprey flying overhead.

The Elk River is widely recognized for the value of its fishery. Based on pioneering survey work of Dr. Gordon Reeves, the Elk River has been considered the finest remaining salmon stream of its size on the West Coast south of Canada. In 1988, an upstream reach of the Elk was designated as a Wild and Scenic owing to its excellent water quality and fishery. More recently, the Elk has been recognized as a "salmon stronghold" by the North American Salmon Stronghold Partnership owing to its robust salmon runs compared to so many other streams' declining runs. Just this year, the U.S. Congress created the Copper Salmon Wilderness recognizing the importance of the Elk River fishery to our community. The Wilderness designation aimed to safeguard the cool headwaters of the North Fork of the Elk River to provide for clear, cold-water flows for fish spawning and also for rearing habitat downstream.

The Curry County-based South Coast Watershed Council has spent hundreds of thousands of dollars on efforts to restore fish habitat in the lower Elk River, by adding large wood and planting trees to increase complexity and shade that fish need and to reduce polluted runoff and sediments entering the river.

All these efforts and public funds directed at conserving and restoring fish habitat in the basin should be taken into account when considering that gravel extraction could have deleterious impacts on Chinook and steelhead spawning habitat.

Given growing recognition that instream and stream-side gravel extraction operations degrade spawning and rearing habitat for fish, we believe that recommendations of fisheries agencies should be considered carefully.

According to a National Marine Fisheries letter dated 9/28/08 from Kim Kratz to Bob Lobdell regarding the parallel DSL application for this proposal, "The NMFS believes the proposed action will adversely affect designated EFH for Pacific salmon."

The tributary Indian Creek flows into the Elk River downstream from and directly across from one of the large gravel bars identified for mining (Bar #3). Indian Creek--in its lowermost ¼ mile--is an area known for spawning and rearing of Chinook. It is also used by SONCC coho and steelhead for spawning and rearing. We are concerned about effects that removal and rearrangement of gravel on Bar #3 could have for the mouth of this tributary spawning and rearing stream.

While we appreciate that the applicant has planned to use bar retention design techniques that will lessen damage to fish habitat, we remain concerned that such mitigation techniques will nevertheless result in damage to this small and very valuable river.

Although the application indicates that there could be additional mitigation to offset losses, we believe that no mitigation plan would be of sufficient value to offset a loss in Elk River of SONCC coho. Moreover given the recent collapse of Chinook salmon populations on the West Coast, we think that it is important to take a very careful look before allowing actions in waterways that could damage spawning habitat for Chinook.

## 2) Elk is a small river

One of the key recommendations of the National Marine Fisheries Service *National Gravel Extraction Policy* (<http://swr.nmfs.noaa.gov/hcd/gravelsw.htm>) is that “**Larger rivers and streams should be used preferentially to small rivers and streams**” for gravel extraction. In Curry County, we have two larger rivers, the Chetco and the Rogue, where there are already ample gravel extraction sites that can provide for our region’s gravel and asphalt needs. These larger rivers, especially the Rogue, drain much larger areas, carry much larger flows of water and sediment, and have more gravel and wider floodplains. In these larger systems, the impact of gravel extraction is proportionally smaller on fish and the river system.

The Elk River drains an area of only 90 square miles. By comparison, the Rogue drains an area of 5,160 square miles (more than 50 times larger than the Elk!) and has an annual mean flow of 5,967 cfs; while the Chetco drains an area of 359 square miles (nearly three times larger than the Elk) and has an annual mean flow of 2,301 cfs. The Elk flows at only a fraction of the Chetco’s volume.

In addition, it is important to note that there are alternative sources for gravel in the north county. There are local upland gravel extraction operations that remove fossil river gravels from fields distant from the channel of the Elk and then restore the land surface with best practices. There are ample gravels in these deposits to meet local needs.

## 3) Gravel budget of Elk River unknown

Emerging science is showing that removal of too much gravel in a river can be damaging to fish habitat. Recent evidence suggests that taking more than 30 to 50 percent of annual gravel recruitment can be destabilizing to an estuary downstream because gravels get significantly rearranged too frequently with degrading impacts to streambed habitat. [Church, “How Do Rivers Provide Gravel?” and Cluer and Mullan, “Gravel Mining and Salmon Habitat” in *Regional Symposium on In-Stream Gravel Extraction and its Effect on Fisheries* (2006)].

According to “*Sediment Removal From Active Stream Channels In Oregon: Considerations for Federal Agencies for the Evaluation of Sediment Removal Actions from Oregon Streams*,” [2006] (p. 45), one of the most crucial aspects of conserving fish habitat is to conserve the processes that create fish habitat—and one of the key elements of doing that is to maintain positive sediment budget.

Extraction of too much gravel extraction can result in riverbed degradation, bank erosion, channel and habitat simplification, reduction in large woody debris, and loss of riparian zones. Adverse biological impacts may include reduced primary productivity and invertebrate populations, reduced ability for fish to avoid predators, reduced fish growth and success, reduced riparian vegetation, reduced water quality, and direct mortality of fish. As a result of the proposed mining, we are concerned that, over the long term, pool habitat in the lower river could be reduced, reducing rearing habitat for coho, Chinook, and steelhead.

However, there is still no credible, scientifically derived figure for gravel recruitment on the Elk River. Without knowledge of gravel recruitment, we have no way of knowing if removal of 12,000 cubic yards of gravel would exceed a sustainable level of gravel extraction.

According to the *Oregon Sediment Removal Considerations*, the vertical trend of a river must be determined by a fluvial geomorphologist before a permit decision is made. In the case of the Elk River, the vertical trend of the river--to our best understanding-- has not been established.

The applicant suggests that the apparent replenishment of local bars over time is a sufficient measure of the ample gravel supplies in the river and that this traditional method of assessing gravel is adequate. However, studies show that gravel removal from one area can have impacts in other areas downstream. In other words, the replenishment of gravel at a particular bar location does not mean that there are not structural changes to the riverbed downstream, in the estuary, for instance.

#### **4) Damage related to proposed future in-stream crossings of equipment**

According to the National Gravel Policy, "operation of heavy equipment in the channel bed can directly destroy spawning habitat, and produce increased turbidity and suspended sediment downstream." We are concerned that the contractor's crossing of the main channel to work and transport gravel back across the river from gravel bars #1 and #4 would have serious impacts to known Chinook and steelhead spawning and rearing habitat. The applicant states that "there are no plans to mine Bar Complexes #1 and #4, but it [sic] is included in the project for possible future mining." We are concerned that these bars are included in the project for future mining because of the problems stated. For this reason, we think that any permits considered or given for mining Bar complexes #2 and #3 should not apply to Bar complexes #1 and #4.

#### **5) Water quality degradation**

The Elk in its lower reaches, including the reach where the gravel extraction is proposed, is "water-quality limited" under the Clean Water Act and is included on the 303(d) list. The water quality concerns in this reach include habitat modification and elevated temperature -- which would likely be exacerbated by gravel mining. In particular, sediments released into the water in association with gravel extraction would reflect light and increase the water temperature in the shallow channel. We are concerned that gravel extraction activities in this reach of river would further elevate water temperatures in the river.

The requirement that the gravel be processed into asphalt on site to prevent the spread of noxious weeds (see below) poses an additional concern for water quality. Asphalt Plants use diesel fuel, oil, or gas to power their burners, and they require petroleum distillates to perform the alchemy that converts aggregate into asphalt. Storing or restocking these hazardous substances on the floodplain of the Elk River poses a risk for spillage that--while low--could be devastating to the small flow.

#### **6) Contractor's record of violations**

Tidewater Contractors operates on larger rivers in Curry County, including the Chetco and Rogue. In 2007, the contractor illegally removed 60,000 cubic yards of gravel from the Rogue River estuary. Two years later, this violation with DOGAMI remains unresolved according to Curry County Planning Department records as of 4/23/09. Although the contractor has stated a desire to operate in an environmentally friendly manner in applications for gravel extraction, the record indicates inconsistency between the contractor's words and actions. We are concerned about the contractor's apparent disregard for laws intended to protect fish habitat given the high-value fish-spawning habitat that will be adjacent to the proposed mining area.

In addition, it is recognized that there is a tendency among gravel operators to not follow through on permit conditions and on requirements for restoration and mitigation because there is no monitoring for compliance and no active enforcement of permit conditions. Given the remote location of this site, we are particularly concerned about compliance with permit conditions and mitigation requirements.

### **7) Spread of noxious weeds**

The gravel in the area proposed from mining is heavily contaminated with gorse seed. The gorse was accidentally brought into the Elk River in the 1950s with gravels imported to build the road. Since then, gorse has spread rampantly from the road up into the hillsides causing damage to thousands of acres of private property and degrading habitat for birds and wildlife for miles around. This contamination and degradation of the lower Elk basin is widely regarded as one of the worst infestations on the coast. It would be unconscionable to infest other areas of the region and state with gorse seeds that were so tragically introduced to the Elk through the same means of gravel transport and truck traffic.

To address this concern, Curry County in granting Conditional Permit C-8715 for gravel mining on this site has required conditions for killing of gorse seeds. The county clarified this matter in a letter dated 2/14/96 from then Planning Director, Chuck Nordstrom, which stated:

*“the intent of this condition is to have all gravel removed from this site processed through an asphalt plant to elevate the temperature of the material in order to kill any gorse seed. This is necessary in order to comply with a county ordinance, which prohibits the spreading of gorse as a noxious weed. And further you will have to process the gravel through the asphalt plant at the site before removing it because moving the raw gravel to a different processing site could result in the gorse being spread....”*

The applicant proposes to meet this requirement by baking the gorse seeds in an A/C burner (asphalt plant) onsite. Knowing that gorse seeds have a reputation for being particularly durable and tough--lasting decades in a seedbed, we raise the question of whether baking the seeds truly kills their potential to spread? It is locally known that when the Forest Service repaired the Elk River Rd. with gravel from this location several years ago that gorse did in fact sprout along the new asphalt road bed and would have colonized up the Elk River if not for volunteer hand pulling of thousands of small gorse plants.

In addition, we are concerned that trucks moving in and out of the site on a regular basis will inadvertently transport gorse seeds to new roadside locations where asphalt will be used, spreading the scourge of this noxious weed to new areas, putting additional private and public properties at risk of infestation.

### **CONCLUSION AND RECOMMENDATIONS**

Given that the Pacific Coast salmon fishery shut down last summer owing to collapse of Chinook runs on the Sacramento, we believe that the matter of conserving spawning habitat for Chinook may no longer be regarded solely on a watershed scale. The need to conserve Chinook runs is important for the whole west coast, and indeed has become a matter of national significance. The matter of conserving habitat for threatened SONCC coho is also a matter of national significance.

**Given our concerns for the small-sized Elk River, its premier fishery, and our evidence that gravel extraction poses a threat to spawning habitat for Chinook and**

**Steelhead and rearing habitat for threatened SONCC coho, the lack of a gravel budget, the river's water-quality-limited status in this particular reach, and the contractor's record of violation, we urge you to deny this application.**

**At the very minimum, we urge you to delay decision until after the forthcoming publication of Interagency Gravel Team report.** Because scientific understanding of the impacts of gravel extraction on rivers and fish habitat have grown in recent years, an interagency task force was convened to figure out a better, science-based manner of permitting gravel extraction on the Chetco River that could be used as a model for all our south coast rivers. The final report and regulatory guidelines of this interagency team are expected to be published soon. We urge the Corps of Engineers to delay its decision on this permit until the information in the new guidelines can be evaluated and appropriate new science and policy can be applied to the Elk River and the current mining proposal.

If you decide to grant a permit for removal of stockpiled gravel or stream-side gravel on Bars #2 and #3, we strongly urge you to require best practices in terms of bar excavation design and restoration and also substantial mitigation. We also urge you to require a bond to accomplish mitigation and restoration if the applicant fails to comply with the conditions of the permit.

Finally, we request that a public hearing be held locally to inform the public about this proposal because we believe there are very serious issues to be aired and discussed.

Thank you for considering our comments.

Cordially,

*/Ann Vileisis/*

President