State of California – Natural Resources Agency
DEPARTMENT OF FISH AND WILDLIFE
Region 1 – Northern
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Redding, CA 96001
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EDMUND G. BROWN JR., Governor
CHARLTON H. BONHAM, Director

July 8, 2014

Mr. Tom J. Paul, Acting Director
Oregon Water Resources Department
725 Summer Street NE, Suite A
Salem, OR 97301

Sent via email to Director@wrd.state.or.us

Subject: Limited License Application LL1533 and Cleopatra Check Drilling Program

Dear Mr. Paul:

The California Department of Fish and Wildlife (CDFW) recently became aware of the Red Flat Nickel Corporation (RFNC) Plan of Operations, Cleopatra Check Drilling Program (Project), submitted to the United States Forest Service (USFS) Rogue River-Siskiyou National Forest on October 26, 2012. The Oregon Water Resources Department is now reviewing, with a two week public comment period, Limited License Application LL1533 for diverting water from an unnamed tributary to Taylor Creek, thence Baldface Creek, thence North Fork Smith River. Water diverted from the tributary would be used to facilitate drilling 59 exploratory boreholes to characterize mineral resources. Since this portion of the National Forest is roadless, the drill platform and appurtenant components would be moved from each borehole location by helicopter. The ultimate goal of the RFNC is to operate a nickel, cobalt, and chromium strip mine on a 3,980 acre mineral claim.

As the trustee for California's fish and wildlife resources, CDFW has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and the habitat necessary to sustain their populations. The Smith River is California's fourth largest coastal river, with a watershed area of approximately 610 square miles in California and 115 square miles in Oregon (DFG 2004). The Smith River is unmatched in California for its free-flowing status, highly dynamic flow-rate, botanical diversity, renowned anadromous fisheries, and Wild and Scenic status. A large portion of the Smith River watershed supports a unique flora, which exists on unusual soils derived from ultramafic parent material (DFG 2004).

Biological Significance of the Smith River Watershed and Baldface Creek

The Smith River is one of two watersheds in California described as "irreplaceable" with respect to salmonid population resiliency and biodiversity (Wild Salmon Center 2012). Chinook salmon (*Oncorhynchus tshawytscha*), steelhead (*O. mykiss*), and coastal cutthroat trout (*O. clarki clarki*) are abundant throughout the watershed and are of great ecological and economic benefit to California and Oregon. Coho salmon (*O. kisutch*) also occur in the Smith River watershed but have declined significantly in California,

which has led to federal and State listing pursuant to their respective Endangered Species Acts. The California coho salmon population has declined by 70% during the last 40 years (DFG 2004). CDFW has identified the Smith River coho salmon as a key population to maintain or improve as part of the *Recovery Strategy of California Coho Salmon* (DFG 2004).

Since coho salmon use a variety of habitat features and depend on many different parts of the watershed, from upper reaches to estuaries, they are an indicator of watershed health (DFG 2007). CDFW scientists have documented a remote inland sub-population of coho salmon in Baldface Creek, 85 km from the confluence of the Pacific Ocean (Garwood and Larson 2014). The headwaters of Baldface Creek near Frantz meadow is low gradient, contains high-quality spawning gravel, and has an abundance of large woody debris recruited from the surrounding old-growth Douglas fir (*Pseudotsuga menziesii*) forest. Since low densities of coho salmon where observed throughout this index reach, adults could be migrating further up the drainage, and further investigation will likely discover more vital information regarding coho salmon spatial structure and habitat preferences in Baldface Creek and the greater Smith River watershed (Garwood and Larson 2014).

Metal Mining

The U.S. Environmental Protection Agency (USEPA) is responsible for the Toxics Release Inventory (TRI) which tracks the management of certain toxic chemicals that may pose a threat to human health and the environment (see http://www2.epa.gov/toxics-release-inventory-tri-program/2012-tri-national-analysis-overview for additional information). According to the USEPA, the extraction and beneficiation of minerals associated with metal mining generates large amounts of waste and the industry's total disposal or other releases reflect the high volume of materials managed on-site at metal mines (USEPA 2012). Out of all reporting sectors in 2012 (latest available data) tracked by the TRI, the metal mining sector reported the largest disposal or other releases of toxic chemicals, representing 40% of the releases for all industries.

The southern terminus of the Project is just two miles north of the Oregon/California border. Based on our initial evaluation within the time available for comment, large-scale industrial metal mining appears to be the most impactful of all the extraction industries with legacy issues that can continue in perpetuity. CDFW is very concerned this Project will have significant irreversible effects on the Smith River watershed in California and on the fish and wildlife that depend upon it.

Recommendation

CDFW recommends denial of Limited License Application LL1533, because all subsequent phases of this Project beyond exploratory drilling are likely to have significant environmental impacts on the Smith River in California.

If you have any questions or comments regarding this matter, please contact Michael van Hattem, Environmental Scientist, at (707) 445-5368, or 619 Second Street, Eureka, California 95501.

Sincerely,

for **NEIL MANJI**
Regional Manager
Region 1 – Northern

References

Department of Fish and Game. 2004. Recovery Strategy for California Coho Salmon. Report to the California Fish and Game Commission. Sacramento, CA.

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