### BEFORE THE WATER RESOURCES COMMISSION

### OF THE STATE OF OREGON

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In the Matter of the Withdrawal From Appropriations of the Smith River, its tributaries and its Groundwater in Oregon PETITION FOR WITHDRAWAL FROM APPROPRIATIONS

### INTRODUCTION

The undersigned conservation and fishing organizations, representing many thousands of

members (collectively "Petitioners") file this petition for withdrawal of all unappropriated waters

of the Smith River watershed in Oregon, including both surface water and groundwater, from

any further appropriations including exempt uses (except for the establishment of instream water

rights).<sup>1</sup> This petition is filed pursuant to ORS 536.410, which provides:

"When the Water Resources Commission determines that it is necessary to insure compliance with the state water resources policy or that it is otherwise necessary in the public interest to conserve the water resources of this state for the maximum beneficial use and control thereof that any unappropriated waters of this state, including unappropriated waters released from storage or impoundment into the natural flow of a stream for specified purposes, be withdrawn from appropriation for all or any uses including exempt uses under ORS 537.545, the commission, on behalf of the state, may issue an order of withdrawal."

ORS 536.410(1). Petitioners also request, in accordance with ORS 536.410(2), that prior to

issuing an order of withdrawal the Commission advertise and hold a public hearing on the

necessity for the withdrawal.

<sup>&</sup>lt;sup>1</sup> The Petitioners ask that the following streams or portions thereof that are located in Oregon be withdrawn from appropriation: Streams in the North Fork Smith River watershed being North Fork Smith River, Wimer Creek, McGee Creek, Cabin Creek, Baldface Creek, Taylor Creek, Biscuit Creek, Diamond Creek, North Fork Diamond Creek, Chrome Creek, Spokane Creek, Fall Creek, Cedar Creek, Horse Creek, Packsaddle Creek and their springs and tributaries (HUC 1801010101); Rowdy Creek, which flows from Oregon and then into the mainstem Smith River (HUC 1801010104); and Shelly Creek, which flows from Oregon and then into Patrick Creek then into the Middle Fork Smith River (HUC 1801010102).

Withdrawal of the Smith River waters from appropriation is necessary to protect the public's interest in preserving the maximum beneficial use and control of the unappropriated waters. The Smith River watershed in Oregon encompasses approximately 59,200 acres (98% of which is within the North Fork Smith River watershed) and—with the exception of 555 acres of Oregon Common School Trust lands—lies entirely within the Rogue River-Siskiyou National Forest.<sup>2</sup> The waters of the Smith River watershed in Oregon are critical to supporting the basin's exceptional water quality, a vast array of unique and important aquatic and wetland communities, world-class fisheries, rare plant wetlands, drinking water for downstream communities, and outstanding recreation and tourism dependent on all these values. Because of the unique setting of the watershed in Oregon, with 99% of the area on U.S. Forest Service land with no private land, there is also no land base giving rise to any typical competing water uses such as irrigation, domestic, or municipal.

#### BACKGROUND ON THE SMITH RIVER WATERSHED

The Smith River watershed lies within the Klamath-Siskiyou Mountain Province—a unique region of high biological diversity and great national significance in southwest Oregon and northwest California.<sup>3</sup> The Smith River Basin includes three major forks: the Middle Fork, South Fork, and North Fork. The North Fork Smith River begins in Oregon and drains an area of approximately 101,180 acres, or 19.8 percent of the Smith River watershed. The Smith River watershed in Oregon includes 57 percent of the North Fork Smith River watershed (57,990 acres), and also two much smaller headwater areas of the Middle Fork and mainstem Smith River (encompassing an additional 1,210 acres). Together, these 59,200 acres constitute the Smith River watershed in Oregon that is the subject of this petition.

<sup>&</sup>lt;sup>2</sup> Oregon Common School Trust lands acreage from Curry County Assessor Plat Map 41S11W (4/17/2008).

<sup>&</sup>lt;sup>3</sup> See: <u>http://www.dfw.state.or.us/conservationstrategy/docs/document\_pdf/b-eco\_km.pdf</u>

## Smith River Watershed, Oregon

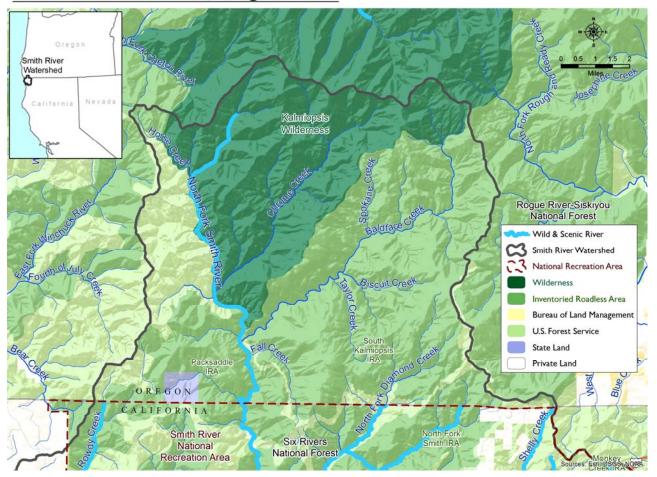


Figure 1- Though the Smith River enters the Pacific Ocean in California, 11.6 % of its watershed, or 59,200 acres, lies in Oregon. Of this area, 98% lies within the North Fork Smith watershed. Map courtesy of Trout Unlimited.

From rugged mountain headwaters in Oregon, the North Fork Smith flows south to join the mainstem Smith River, which winds through Del Norte County in northwest California and then flows into the Pacific Ocean at the community of Smith River, approximately 10 miles north of Crescent City and three miles south of the Oregon border. The highest point in the North Fork Smith River's watershed is Chetco Peak in the Kalmiopsis Wilderness at an elevation of 4,672 feet. Only one percent of the watershed lies in the snow pack zone, with 46 percent of the watershed in the transient snow zone (2,500 to 4,000 ft.).<sup>4</sup> Owing to strong orographic effects and proximity to the Pacific Ocean, the North Fork Smith's watershed receives high rainfall.<sup>5</sup> Most of the basin's 100 to 150 inches of annual precipitation falls as rain.<sup>6</sup>

The Smith River and its tributaries are nationally renowned for their clear waters. The North Fork Smith River is considered to have the most outstanding water clarity in the system.<sup>7</sup> The North Fork Smith's waters clear quickly after storms, and even during moderately high winter flows between storms the clarity is exceptional.<sup>8</sup> (Attachment 1, Photos 1 and 2). The North Fork Smith River's outstanding water quality is a reflection of the integrity and intactness of its watershed. In Oregon, 88 percent of the river's watershed lies within the Kalmiopsis Wilderness and two U.S. Forest Service Inventoried Roadless Areas.<sup>9</sup>

The U.S. Congress has recognized the Smith River's outstanding values by designating 338 miles of the river and its tributaries as National Wild and Scenic Rivers, making it one of the

<sup>&</sup>lt;sup>4</sup> U.S. Forest Service, 1995, "North Fork of the Smith River Watershed Analysis," Iteration 1.0, Rogue River-Siskiyou National Forest, Chetco Ranger District.

<sup>&</sup>lt;sup>5</sup> U.S. Forest Service, 1996, "Ecosystem Analysis of the Smith River at the Basin and Subbasin Scales," Six Rivers National Forest, Version 1.0.

<sup>&</sup>lt;sup>6</sup> U.S. Forest Service, 1995, "North Fork of the Smith River Watershed Analysis."

<sup>&</sup>lt;sup>7</sup> U.S. Forest Service, 1996, "Ecosystem Analysis of the Smith River at the Basin and Subbasin Scales."

<sup>&</sup>lt;sup>8</sup> *Id.*, p. 142.

<sup>&</sup>lt;sup>9</sup> Of the 57,990 acres of the North Fork Smith River's watershed in Oregon, 19,180 acres lie within the Kalmiopsis Wilderness. In addition, 24,780 acres of the watershed are located within the Inventoried South Kalmiopsis Roadless Area, and 6,890 acres are within the Inventoried Packsaddle Roadless Area. The Roadless Areas are subject to the U.S. Forest Service's Roadless Area Conservation Rule at <u>36 CFR Part 294</u>, which prohibits new road construction but allows mining and access to mining claims.

most comprehensively protected Wild and Scenic River systems in the nation.<sup>10</sup> Congress added the North Fork Smith River to the National Wild and Scenic River System in two separate acts. Thirteen miles of the North Fork Smith River in Oregon were designated "Wild and Scenic" by Congress in 1988. The designation was based on the river's nationally outstanding water quality, fisheries, and scenic values.<sup>11</sup> In 1990, Congress passed the Smith River National Recreation Area Act, formally adding the North Fork Smith River and its tributaries in California to the National Wild and Scenic River System.<sup>12</sup> According to the U.S. Forest Service's Wild and Scenic River Management Plan for Oregon's North Fork Smith River, the outstanding water quality of the river in Oregon is "an integral part of the Smith River system overall."<sup>13</sup> The plan also found that the North Fork Smith River in Oregon is outstandingly remarkable "due to its substantial contribution to the world-class fishery of the greater Smith River."<sup>14</sup>

The U. S. Forest Service has also found Baldface Creek—a major, pristine-quality Oregon tributary of the North Fork Smith River—eligible to be added to the National Wild and Scenic River System.<sup>15</sup> The agency, in its wild and scenic river eligibility assessment, specifically noted the importance of the Baldface Creek's high quality water and fish habitat to the North Fork Smith River, and the Smith River system as a whole.<sup>16</sup> The agency also found all of Baldface Creek's perennial tributaries to be eligible for designation as wild and scenic rivers, with the highest potential classification of "Wild."<sup>17</sup> The exceptional value of the remote area is

<sup>&</sup>lt;sup>10</sup> See: <u>http://www.rivers.gov/rivers/smith.php</u>

<sup>&</sup>lt;sup>11</sup> See: <u>http://www.rivers.gov/rivers/smith-nf.php</u>

<sup>&</sup>lt;sup>12</sup> See: http://www.rivers.gov/rivers/smith.php

 <sup>&</sup>lt;sup>13</sup> U.S. Forest Service, 2003, "North Fork Smith Wild and Scenic River Management Plan," Siskiyou National Forest. Available at: <u>http://www.fs.usda.gov/Internet/FSE\_DOCUMENTS/stelprdb5315366.pdf</u>
 <sup>14</sup> Id.

<sup>&</sup>lt;sup>15</sup> U.S. Forest Service, 1993, "Wild and Scenic River Eligibility Study for Baldface Creek and Its Tributaries," Siskiyou National Forest; and "Wild and Scenic River Eligibility Findings," Michael J. Lunn, Supervisor, Siskiyou National Forest, February 14, 1994.

<sup>&</sup>lt;sup>16</sup> The U.S. Forest Service "Wild and Scenic River Eligibility Study for Baldface Creek" states: "Baldface Creek provides some of the best water quality and fisheries habitat known on the Siskiyou National Forest. The worldclass fishery on the Smith River depends on the water and fish produced in the Baldface Creek drainage . . . The combination of key fishery attributes and limited access contributes to the high quality environment. This watershed could be used as a model of the desired conditions for restoration projects in other watershed."

<sup>&</sup>lt;sup>17</sup> Id. and "Wild and Scenic River Eligibility Findings."

also highlighted by a 2004 recommendation by then Secretary of Agriculture Ann Veneman to Congress to add 64,000 acres of the North and South Kalmiopsis Roadless Areas to the Kalmiopsis Wilderness.<sup>18</sup> The watershed of Baldface Creek comprises a significant part of this recommended South Kalmiopsis Wilderness Addition.<sup>19</sup>

The North Fork Smith River watershed in Oregon is considered in near-pristine condition.<sup>20</sup> Because of its high fisheries values, the entire North Fork Smith River watershed (including Baldface Creek) is designated a Tier-One Key Watershed under the Northwest Forest Plan.<sup>21</sup> U.S. Forest Service land allocations include Wilderness, Wild and Scenic River, Research Natural Area, Late-Successional Reserve and Inventoried Roadless Area.<sup>22</sup> There are only approximately 2,200 acres of managed forest stands in the watershed,<sup>23</sup> and road densities are low.<sup>24</sup> In California, the Smith River is also the state's only major river system that flows freely throughout its entire length without the impediment of dams.<sup>25</sup> As the California Department of Fish and Wildlife explained in a July 8, 2014 letter to the Oregon Water Resources Department (OWRD), "[t]he 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." (Attachment 2, p. 1).

In recognition of the watershed's exceptional values, all federal lands in the Smith River basin in California are protected under the 1990 Smith River National Recreation Area Act. One of the protective provisions of the Act was to withdraw federal lands in the Smith River watershed in California from entry and location of new mining claims under the mining laws of

<sup>23</sup> Id.

<sup>&</sup>lt;sup>18</sup> See: <u>http://www.usda.gov/wps/portal/usda/usdahome?contentidonly=true&contentid=2004/07/0279.xml</u>

<sup>&</sup>lt;sup>19</sup> See: http://kalmiopsisrivers.org/2004-proposed-kalmiopsis-wilderness-additions/

<sup>&</sup>lt;sup>20</sup> The U.S. Forest Service's "Watershed Analysis for the North Fork Smith River" notes that: "The undisturbed wilderness parts of the basin could be considered representative of the reference condition landscape."

<sup>&</sup>lt;sup>21</sup> U.S. Forest Service, 2005, "Baldface Creek Level II Stream Survey," Siskiyou Research Group, July 2005. Available on request from the petitioners.

<sup>&</sup>lt;sup>22</sup> U.S. Forest Service, 1995, "North Fork of the Smith River Watershed Analysis."

<sup>&</sup>lt;sup>24</sup> *Id.* Road densities range from 0 to 1.1 miles per square mile.

<sup>&</sup>lt;sup>25</sup> See: <u>http://www.rivers.gov/rivers/smith.php</u>

the United States.<sup>26</sup> The Act also required the promulgation of some of the strongest surface mining regulations for National Forest lands in the Nation.<sup>27</sup>

In sum, the Smith River watershed—including the critical portion located in Oregon—is an extraordinary place characterized by rivers and streams of exceptionally high quality that are widely recognized and prized for the public benefits supported by their pure waters.

### ARGUMENT

I. Withdrawing the waters of the Smith River from appropriation is necessary in the public interest to conserve the waters for the maximum beneficial use and to insure compliance with state water resources policy.

Pursuant to ORS 536.410, the Commission should withdraw the waters of the Smith River watershed in Oregon from appropriation in order to conserve the waters for the maximum beneficial use and to insure compliance with state water resources policy. The maximum beneficial uses of the water, described in detail below, all derive from keeping the water instream and maintaining the watershed's intact hydrology to support a vast array of unique and important ecosystems and species, to provide clean drinking water supplies to downstream communities, and to support the extensive recreation-, tourism-, and fishery-based economies of the area. Withdrawing the waters is also necessary to insure compliance with state water resources policies, emphasizing instream values, allocation of water within the capacity of the resource and consistent with the principle that water belongs to the public to be used beneficially without waste, and valuing Oregon's fishery resources. Highlighting the watershed's unique setting in Oregon, there is not a single competing water permit in the area.

However, the maximum beneficial uses of the waters are now threatened with water use proposals, and associated impacts, from a foreign-owned nickel mining company. These water use proposals have highlighted the unique challenges of water management in this area, the lack

 <sup>&</sup>lt;sup>26</sup> Smith River National Recreation Area Act of 1990, Pub. L. No. 101-612, 104 Stat. 3209 (1990). Available at: <a href="http://www.gpo.gov/fdsys/granule/STATUTE-104/STATUTE-104-Pg3209/content-detail.html">http://www.gpo.gov/fdsys/granule/STATUTE-104/STATUTE-104-Pg3209/content-detail.html</a>
 <sup>27</sup> See: <a href="http://www.gpo.gov/fdsys/pkg/FR-1996-04-03/html/96-8097.htm">http://www.gpo.gov/fdsys/granule/STATUTE-104/STATUTE-104-Pg3209/content-detail.html</a>

of adequate management tools to address those challenges, and therefore the critical need to withdraw the waters from appropriation. Petitioners urge the Commission to grant this petition and withdraw the Smith River waters from further appropriation to allow the state to conserve the maximum beneficial uses of the waters.

A. The Smith River watershed's location in Oregon on National Forest land drives the high instream value of the water and its maximum beneficial uses while also resulting in none of the usual competing uses.

In Oregon, the Smith River system and its tributaries lie completely within publicly held lands. The entire watershed in Oregon is within the Rogue River-Siskiyou National Forest, with the exception of 555 acres abutting the state line that are designated as Oregon Common School Trust lands.<sup>28</sup> This remote, public lands setting drives the critical importance of these waters in supporting aquatic and wetland ecosystems, pure drinking water supplies, and recreation-, tourism-, and fishery-based economies, as detailed below. The Smith River watershed in Oregon presents a rare opportunity to protect nationally outstanding surface waters in the State of Oregon and a unique groundwater regime upon which the surface waters are dependent.

The setting of these waters wholly on public lands also means that other water uses such as irrigation, domestic or municipal—that are typically present in other basins are not competing beneficial uses of the water. This is shown by the fact that there is not a single currently held water right of record on these lands in Oregon (according to OWRD's Water Rights Inventory System).

These characteristics emphasize the conclusion that the highest beneficial uses of the waters derive from maintaining instream flows and the area's intact hydrology to protect exceptional water quality, world-class fisheries, rare plant wetlands, drinking water for downstream communities, and the extensive recreation and tourism dependent on the Smith River watershed's world class rivers. This petition details both the need for and the

<sup>&</sup>lt;sup>28</sup> Oregon Common School Trust lands acreage from Curry County Assessor Plat Map 41S11W (4/17/2008).

appropriateness of withdrawing all unappropriated waters from appropriation due to unique aspects of the river system.

B. The maximum beneficial uses of the Smith River waters are to support aquatic and wetland ecosystems; to provide clean, sustainable drinking water supplies; and to support tourism and recreation that depend on the water.

The unique setting of the Smith River watershed in Oregon and the exceptional quality of its surface and groundwater resources drive the maximum beneficial uses of the waters, which are to support fish, fish habitat and fishing economies; rare wetland ecosystems and plant species; downstream drinking water supplies; and important tourism and recreational resources as described in this section.

1. Supporting aquatic ecosystems and the salmon, steelhead, and other native fish that rely on them is a critical maximum beneficial use of the Smith River waters.

The Smith River and its tributaries provide pristine habitat for multiple fish populations, producing high numbers of Chinook, steelhead, anadromous sea-run cutthroat trout and resident rainbow and cutthroat trout.<sup>29</sup> The river is recognized as one of the premier salmon strongholds along the entire Pacific Coast.<sup>30</sup> A world-class salmon and steelhead river,<sup>31</sup> the Smith River fishery contributes significantly to the economy of northwest California and southwest Oregon, an area known as the Wild Rivers Coast.<sup>32</sup> Oregonians and Californians have worked for decades to protect the watershed's vital role in providing salmon and trout habitat.

According to the U.S. Forest Service, the North Fork Smith River watershed in Oregon has fish habitat in near-pristine condition and functions to produce high numbers of anadromous fish.<sup>33</sup> The North Fork Smith River is a relatively low-gradient river, dropping approximately 1,800 feet from an elevation of 2,900 feet in its headwaters in the Kalmiopsis Wilderness to

 <sup>&</sup>lt;sup>29</sup> U.S. Forest Service, 1995, "North Fork of the Smith River Watershed Analysis," p.12.
 <sup>30</sup> North American Salmon Stronghold Partnership, June 2010 Assessment, Available at: http://www.wildsalmoncenter.org/pdf/CA Stronghold map - June 2010 Approved.pdf

http://www.wildsalmoncenter.org/pdf/CA Stronghold map - June 2010 Approved.pdf <sup>31</sup> U.S. Forest Service, 2003, "North Fork Smith Wild and Scenic River Management Plan."

<sup>&</sup>lt;sup>32</sup> See, for example, <u>"Salmon Run Spawns Profits," *Wall Street Journal*, February 7, 2011</u>. See also note no. 39.

<sup>&</sup>lt;sup>33</sup> USDA Forest Service, 1995, "North Fork of the Smith River Watershed Analysis."

1,100 feet at the Oregon-California border.<sup>34</sup> Its larger tributaries, Chrome and Baldface Creeks (both located in Oregon), are also low gradient systems offering complex, near-pristine fish habitat with no barriers to fish migration.<sup>35</sup> Some of the most productive salmon, steelhead and cutthroat trout habitat in the whole Smith River Basin is found in the North Fork Smith River watershed in Oregon.<sup>36</sup> Coho salmon exist in the upper reaches of the North Fork Smith River, above Chrome Creek and in Baldface Creek.<sup>37</sup> At Baldface Creek and downstream, spring chinook and summer steelhead occur.<sup>38</sup>

The Smith River watershed lies within the range of the Southern Oregon and Northern California Coast coho ("SONCC coho") that are listed as threatened under the federal Endangered Species Act.<sup>39</sup> In the federal Recovery Plan for the SONCC coho, the Smith River's population is identified as a "core functionally independent unit" that is at high risk of extinction.40

The California Department of Fish and Wildlife, in a July 8, 2014 letter to OWRD opposing issuance of a limited license to supply water for exploratory drilling for the proposed nickel strip mine detailed the high biological significance of the Smith River, including its "renowned anadromous fisheries." (Attachment 2). The limited license is discussed in further detail in Section II below. The California Department of Fish and Wildlife letter provides the following overview of the importance of the Smith River watershed for fishery resources:

"[t]he Smith River is one of two watersheds in California described as "irreplaceable" with respect to salmonid population resiliency and biodiversity (Wild Salmon Center

<sup>&</sup>lt;sup>34</sup> See: http://www.rivers.gov/rivers/smith-nf.php

<sup>&</sup>lt;sup>35</sup> U.S. Forest Service, 2005, "Baldface Creek Level II Stream Survey," and personal communication with Steve Brazier, Rogue River-Siskiyou National Forest biologist, December 3, 2014.

<sup>&</sup>lt;sup>36</sup> U.S. Forest Service, 1993, "Wild and Scenic River Eligibility Study Baldface Creek," and "Wild and Scenic River Eligibility Findings."

<sup>&</sup>lt;sup>37</sup> U.S. Forest Service, 1996, "Ecosystem Analysis of the Smith River at the Basin and Subbasin Scales," p. 144.  $^{38}$  Id.

<sup>&</sup>lt;sup>39</sup> NOAA Fisheries, "Southern Oregon Northern California Coast Coho Recovery Plan," 2014. Available at: http://www.westcoast.fisheries.noaa.gov/protected species/salmon steelhead/recovery planning and implementati on/southern\_oregon\_northern\_california\_coast/SONCC\_recovery\_plan.html <sup>40</sup> For Smith River's population, see:

http://www.westcoast.fisheries.noaa.gov/publications/recovery planning/salmon steelhead/domains/southern orego n northern california/SONCC%20Final%20Sept%202014/sonccfinal ch15 smithriver.pdf

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 Californian 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). CFDW 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)."

The letter discusses, in particular, the Oregon portion of the watershed, stating that:

"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."

The California Department of Fish and Wildlife letter also explains that the coho salmon

observed in this reach indicates that "adults could be migrating further up the drainage . . . "

Supported by the high quality waters, the recreational and sport fisheries industry in southern Oregon, and specifically Curry County, is an important part of the local economy, with anglers coming from around the nation to experience a unique fishing experience. Several rivers having prime salmon and steelhead habitat, including the North Fork Smith River, contribute to this economy. According to the 2009 Oregon Department of Fish and Wildlife Report *Fishing, Hunting, Wildlife Viewing and Shellfishing in Oregon*, in 2008 alone, anglers made roughly 87,000 fishing trips, and freshwater sport fishing activities brought approximately \$9 million into the South Coast region's economy.<sup>41</sup> A letter from the Curry County Board of Commissioners to the Forest Service's Gold Beach Ranger District opposing permit issuance to Red Flat Nickel Corp. for a mining project at the headwaters of Hunter Creek and Pistol River also attests to the importance of recreation and fisheries to Curry County. (Attachment 6).

<sup>&</sup>lt;sup>41</sup> "Fishing, Hunting, Wildlife Viewing, and Shellfishing in Oregon: 2008 State and County Expenditure Estimates," 2009, prepared for Oregon Department of Fish and Wildlife and Travel Oregon, by Dean Runyan Associates. Table 8 and Table C-1.

Withdrawing waters of the Smith River in Oregon from further appropriation will ensure the flows necessary to support the watershed's renowned fishery resources will be maintained.

2. Protecting and maintaining the Smith River watershed's globally significant wetlands and the botanical resources dependent on them is a maximum beneficial use of the Smith River waters.

The North Fork Smith River watershed hosts some of the rarest plant species in Oregon. Many of these are water-dependent species that grow in wetland areas such as wet meadows, riparian zones, fens, springs, and seeps. They are dependent on free flowing surface waters and groundwater. A large portion of the Smith River watershed supports unique flora that exists on unusual soils derived from ultramafic parent material. Especially important are the plant communities of the serpentine *Darlingtonia* wetland environments. The hydrological regime of the *Darlingtonia* wetland environment is considered perhaps the most critical component of these wetlands and their associated rare plant habitat.<sup>42</sup>

The term "serpentine" is commonly used to describe the two types of ultramafic rocks: serpentinite and peridotite.<sup>43</sup> The U.S. Forest Service and geo-ecologists also use the term "serpentine" to refer the unique landscape resulting from the interaction of vegetation with the unusual mineral and chemical composition of ultramafic soils.<sup>44</sup> The low ratio of exchangeable calcium to magnesium, low levels of essential nutrients, and unusually high levels of nickel, chromium cobalt and other toxic metals give rise to distinct communities of unique plants that

<sup>&</sup>lt;sup>42</sup> U.S. Forest Service, U.S. Bureau of Land Management, U.S. Fish and Wildlife Service, 2006, "Conservation Agreement for *Hastings bracteosa, H. atropurpurea, Gentiana setigera, Epilobium oreganum,* and *Viola primulifolia* ssp. *occidentalis* and serpentine *Darlingtonia* wetlands and fens from Southwestern Oregon and Northwestern California," hereafter referred to as "Serpentine *Darlingtonia* Fen Conservation Agreement." Available at:

https://www.fws.gov/oregonfwo/ToolsForLandowners/HabitatConservationPlans/ConsvAgreements/SerpentineFen-CA\_6-2006.pdf

<sup>&</sup>lt;sup>43</sup> See: <u>http://www.fs.fed.us/wildflowers/beauty/serpentines/adaptations.shtml</u>

<sup>&</sup>lt;sup>44</sup> See: <u>http://www.fs.fed.us/wildflowers/beauty/serpentines/</u> and Earl B. Alexander, *et al.*, *Serpentine Geoecology of Western North America* (Oxford University Press, 2006, see: <u>http://books.google.com/books?id=-3F5FAy8-VoC&pg=PA34&lpg=PA34&dq=Robert+G.+Coleman,+serpentine&source=bl&ots=vna9SaPavI&sig=laJH4OWoF mej0h7E8h8VqJLnG74&hl=e</u>

are able to tolerate these harsh environments.<sup>45</sup> (Attachment 1, Figure 3). According to the U.S. Forest Service, "[t]he distinctiveness of serpentine environments and the high concentration of rare flora warrant special management considerations."<sup>46</sup>

The water-dependent, globally-rare plant species in the Smith River watershed in Oregon exist primarily due to large amounts of rainfall on soils that are ultramafic or serpentine in origin resulting in a perennial flow of surface and subsurface water. The Josephine ophiolite, a formation that produces ultramatic soils, underlays roughly half of the North Fork Smith River's watershed.<sup>47</sup> (Attachment 1, Figure 2). Owing to strong orographic effects and proximity to the Pacific Ocean, the watershed also has high annual rainfall.<sup>48</sup> This particular geologic and hydrologic combination in the North Fork Smith River watershed is unusual and creates conditions necessary for development of serpentine *Darlingtonia* wetlands, also called fens.

These densely-vegetated, wetland plant communities are one of North America's rarest vegetation types<sup>49</sup> and are named for the remarkable insectivorous plant species that inhabits them, *Darlingtonia californica*, commonly referred to as "California pitcher plant" or "Cobra lily." (Attachment 1, Photos 4, 5, 6, and 7). These unusual and beautiful plants trap insects to essentially make their own nitrogen fertilizer as an adaptation that allows them to thrive in nutrient poor soils. *Darlingtonia* wetlands have been described as follows:

*"Darlingtonia* wetlands, locally known as bogs or fens, are areas with a perennial flow of cold water that is either surface or sub-surface, and whose soils are derived from a parent material that is of ultramafic (serpentine) geology."<sup>50</sup>

 <sup>&</sup>lt;sup>45</sup> U.S. Forest Service, 1995, A Field Guide to Serpentine Plant Associations and Sensitive Plants in Northwestern California, R5-ECOL-TP-006, Pacific Southwest Region.
 <sup>46</sup> Id.

<sup>&</sup>lt;sup>47</sup> U.S. Forest Service, 1995, "North Fork Smith Watershed Analysis," p. 9.

<sup>&</sup>lt;sup>48</sup> U.S. Forest Service, 1996, "Ecosystem Analysis of the Smith River at the Basin and Subbasin Scales."

<sup>&</sup>lt;sup>49</sup> See: http://harvardforest.fas.harvard.edu/ellison/current-research/summary-mechanisms

<sup>&</sup>lt;sup>50</sup> "Serpentine *Darlingtonia* Fen Conservation Agreement," p. 3.

It is important to underscore that the presence of *Darlingtonia californica* both requires and indicates a perennial supply of cool water.<sup>51</sup> Water temperatures, particularly where groundwater is being discharged, are generally cold to cool.<sup>52</sup>

On the serpentine terrain, the springs that form the rare *Darlingtonia* wetlands can occur at elevations as high as 3,800 feet but are most prevalent as at lower elevations and along the streams.<sup>53</sup> The springs that form the wetlands also contribute to streamflows and help lower stream temperatures—especially from early to late summer.<sup>54</sup> (Attachment 1, Photos 3 and 8). There has been no formal survey and mapping of springs and serpentine *Darlingtonia* wetlands in the North Fork Smith River watershed in Oregon, but the U.S. Forest Service's Wild and Scenic River Eligibility Study for Baldface Creek and its tributaries confirms there are "numerous small wetland seeps, *Darlingtonia* bogs and springs that aid in maintaining lower stream temperatures."<sup>55</sup>

Due to the ecological significance of these wetland plant communities in southwest Oregon and northwest California, the serpentine *Darlingtonia* wetlands, including five, associated rare-plant species, are subject to an interagency conservation agreement, revised and signed by three federal agencies and six offices in 2006.<sup>56</sup> The cooperating federal offices include the Rogue River-Siskiyou National Forest, Six Rivers National Forest, Bureau of Land Management Medford District, Bureau of Land Management Coos Bay District, U.S. Fish & Wildlife Service Roseburg Field Office, and U.S. Fish & Wildlife Service Arcata Fish and Wildlife Office. Interested parties to the Serpentine *Darlingtonia* Fen Conservation Agreement

<sup>54</sup> *Id.; see* "Hydrology/Channel Morphology," p. 5.

<sup>&</sup>lt;sup>51</sup> *Id*.

<sup>&</sup>lt;sup>52</sup> E.J. Frost and E.S. Jules, 2007, "Draft Conservation Strategy for Oregon Fireweed (*Epilobium oreganum*), Mendocino Gentian (*Gentiana setigera*), Large-Flowered Rush-Lily (*Hastingsia bracteosa* var. *bracteosa*), Purple-Flowered Rush Lily (*H. bracteosa* var. *atropurpurea*), Western Bog Violet (*Viola lanceolata* ssp. *occidentalis*) in Serpentine *Darlingtonia* Wetlands of Southwest Oregon and Northwest California," Report prepared for the U.S. Forest Service and Bureau of Land Management and submitted by Wildwood Consulting, hereafter referred to as: Frost and Jules, 2007, "Draft Conservation Strategy." Available on request.

<sup>&</sup>lt;sup>53</sup> U.S. Forest Service 1993, "Wild and Scenic River Eligibility Study for Baldface Creek."

<sup>&</sup>lt;sup>55</sup> U.S. Forest Service 1993, "Wild and Scenic River Eligibility Study for Baldface Creek," p. 10.

<sup>&</sup>lt;sup>56</sup> "Serpentine Darlingtonia Fen Conservation Agreement."

include the Oregon Division of State Lands, Oregon Department of Agriculture, and the Oregon Biodiversity Information Center of Portland State University. The goals of the Conservation Agreement include identifying the essential serpentine *Darlingtonia* fens that support the sensitive species of concern and locally rare and endemic plant species, identifying and inventorying important new habitat, and coordinating future research to understand the ecology of these systems (e.g., plant community, fire ecology, etc.) for the protection of these rare plant species and their habitat into the future.

The Conservation Agreement covers the geographic area known as the western Siskiyou Mountains, which includes the North Fork Smith River watershed and surrounding watersheds in Curry, Josephine, and Del Norte (CA) counties. Included in the region are several Forest Service Botanical Areas and Bureau of Land Management Areas of Critical Environmental Concern. For example, the North Fork Smith River Botanical Area is located in California and abuts Oregon. The region covered by the Conservation Agreement has not been thoroughly surveyed for the plant species of concern especially in the Oregon portion of the North Fork Smith River watershed. However, the east side of McGrew Hill (Taylor Creek drainage) was surveyed by a U.S. Forest Service botanist in 2014, and the local "water loving" endemics Carex mendocinensis, Castilleja miniata ssp. elata, Cypripedium californicum, Darlingtonia californica, Lathyrus delnortensis, Lilium pardalinum ssp. vollmeri, Chamaecyparis lawsoniana, Pinguicula vulgaris ssp. macroceras were documented. Many stands of very large old growth Port Orford cedar (*Chamaecyparis lawsoniana*) trees were also noted.<sup>57</sup> More plant surveys of the North Fork Smith River watershed in Oregon are needed in order to fully assess the presence and extent of the water-dependent, endemic species identified in the Conservation Agreement.

Because *Darlingtonia* fens and bogs are surface water- and groundwater-dependent ecosystems, a primary threat to the associated rare and endemic wetland species is altered

<sup>&</sup>lt;sup>57</sup> Personal communication by phone; G. Lyford, February 2015.

hydrology. Alteration of the hydrology has the potential to dewater *Darlingtonia* fens and to thereby damage or destroy the wetland ecosystems and their associated rare plants.<sup>58</sup> Hydrology is a critical component supporting *Darlingtonia* wetland communities and the rare plant habitats.<sup>59</sup>

Four of the five rare plant species subject to the federal Conservation Agreement are also state listed species: *Epilobium oreganum Greene, Hastingsia bracteosa* S. Wats. var. *atropurpurea, Hastingsia bracteosa* S. Wats. var. *bracteosa, Viola primulifolia L.* ssp. *occidentalis* (Gray).<sup>60</sup> While Oregon does not have authority over management activities on federal lands where the endangered plants and their wetland habitats are found, the State does have—and should exercise—authority to protect the hydrological regime of the serpentine wetlands that is critical to maintaining these unique plant species and communities.

In sum, closing the North Fork Smith River watershed in Oregon to surface water and groundwater appropriations is critical to protect the area's unique, water-dependent, endemic plant species. The withdrawal would be consistent with the goals of the interagency Serpentine *Darlingtonia* Fen Conservation Agreement and would be in the public interest in protecting a critical beneficial use of the water—sustaining the area's rare and unique, water-dependent botanical resources.

# 3. Providing clean and sustainable drinking water supplies to downstream communities is a maximum beneficial use of the Smith River waters.

The Smith River is of great importance as a municipal drinking water supply to several communities in California. This maximum beneficial use of the water was identified in letters sent to the OWRD from Del Norte County (CA), the Mayor of Crescent City, and California's North Coast Regional Water Quality Control Board, among others.

<sup>&</sup>lt;sup>58</sup> "Serpentine *Darlingtonia* Fen Conservation Agreement," p. 6.

<sup>&</sup>lt;sup>59</sup> Id.

<sup>&</sup>lt;sup>60</sup> Oregon Biodiversity Information Center, Institute for Natural Resources, Portland State University, "Rare, Threatened and Endangered Species of Oregon," July, 2013. Available at: <u>http://orbic.pdx.edu/documents/2013-rtebook.pdf</u>

The Mayor of Crescent City, Richard Holley, submitted a July 8, 2014 letter to the OWRD opposing the limited license application (LL-1533) to divert water for exploratory drilling associated with a larger nickel strip mining proposal. (Attachment 3). Mayor Holley's letter highlights the gravity of the issue for the city's water supply in stating:

"The Smith River is the source for Crescent City's municipal water system, which serves approximately 14,000 resident year-round and tens of thousands of visitors throughout the year. The quality of the water extracted by the City from below the bed of the Smith River as well as the quantity of water in the Smith River are of paramount importance to providing safe, reliable drinking water. The appropriation and use of water . . . from tributaries to the North Fork Smith River raises significant concerns for the City as to the project's impacts on both the quality and quantity of the water in the Smith River."

Conservation of the Smith River waters as the municipal supply for the City of Crescent City warrants withdrawal of the waters from further appropriation.

In a separate letter to the OWRD, the Del Norte County (CA) also opposed issuance of the mining limited license, explaining that the Smith River is the "indirect source for many water users in Del Norte County, the largest being the City of Crescent City." (Attachment 4). The Del Norte County letter reports that "residents have expressed their concerns . . . at separate public meetings and it is obvious [the application for a Limited Water Use License for the Cleopatra Check Drilling Program] is not in the public interest."

California's North Coast Regional Water Quality Control Board also submitted a detailed letter to OWRD opposing the mining company's limited license. (Attachment 5). Among its critical points, the letter explains that the California State Water Resources Control Board declared the Smith River system to be fully appropriated, year round, in 1998. This declaration specifically stated that a stream system declared "fully appropriated should encompass all upstream sources which contribute to the identified stream if, and to the extent that, such sources are hydrologically continuous to the identified stream system." Thus protecting the downstream beneficial use—including the critical drinking water supplies—requires a withdrawal of the waters from appropriation in Oregon. On July 2, 2015, the California Legislature voted for final approval of Senate Joint Resolution 3 (SJR-3) titled "Smith River watershed protection." (Attachment 7). It resolved that "the Legislature urges the President of the United States and Congress to permanently safeguard the currently unprotected North Fork of the Smith River watershed in Oregon from any mining activities that would have potential impacts on water supplies, economies, or the environment in California's portion of the Smith River watershed." The author of the bill, California State Senator Mike McGuire, issued a press release on July 9, 2015 to celebrate the passage of SJR-3. (Attachment 8). Senator McGuire stated: "Mining of any kind in the Smith River Watershed is simply unacceptable. I will work tirelessly to protect our river, which is one of the premier salmon fisheries in the lower 48 states and the source of drinking water for tens of thousands of residents in Del Norte County, including Crescent City." He went on to say that "[s]upport for the resolution is broad and includes the United States Department of the Interior, California State Parks, the Crescent City Council, Del Norte Board of Supervisors, the Smith River and Elk Valley Rancherias, Trout Unlimited and many more."

These letters highlight the interstate nature of the Smith River Basin, which presents a unique challenge regarding the need to recognize California's municipal drinking water supply uses when OWRD considers water appropriation requests for the upstream waters of the Smith River watershed in Oregon. Because California and Oregon lack an interstate water compact to ensure the coordinated management of waters in the Smith River Basin, these concerns are best addressed by a withdrawal of the Smith River system from further appropriation to ensure that the waters are conserved for the beneficial use of providing clean, sustainable drinking water supplies. 4. Maintaining the water instream to support the area's world-class water related recreation and tourism is a maximum beneficial use of the Smith River waters.

The Smith River watershed provides exceptional water related tourism and recreational opportunities. Many communities depend significantly on recreational tourism generated by the quality and quantity of water in the Smith River watershed. Use of the Smith River waters to support recreation and tourism—both in Oregon and in California—is a maximum beneficial use of the water. Beyond the extensive fishing related activities and their associated economic value discussed in Section (I)(B)(1) above, kayakers and whitewater rafters from across the nation also use the Smith River system, including the North Fork Smith River in Oregon. In addition, camping, swimming, and hiking draw many more people to the watershed's rivers and streams. Moreover, because of its unique geology and plants, the watershed attracts a variety of people interested in natural history and botany, including those with professional scientific interests.

As the Mayor of Crescent City explained in his letter to OWRD (Attachment 3),

"In addition to providing drinking water to the City's municipal water users, the Smith River offers a multitude of recreational activities including kayaking, rafting, swimming, and fishing. The Smith River and its tributaries are the spawning grounds and habitat for a world-class fishery (salmon, steelhead, cutthroat trout). These recreational and fishing opportunities are not only enjoyed and valued by local residents, they are also an important feature of the region's tourist industry."

The U.S. Forest Service reports that in California, recreation is the primary use of the North Fork Smith River and that the majority of the recreation takes place near, on, or in the water, with sport fishing an increasing draw.<sup>61</sup> Both the Smith River National Recreation Area Act, permanently protecting all federal lands of the Smith River watershed within California,<sup>62</sup> and the U.S. Congress's designation of 338 miles of rivers and stream as National Wild and Scenic Rivers are testament to the importance of these waterways to providing nationally significant

 <sup>&</sup>lt;sup>61</sup> U.S. Forest Service, 1996, "Ecosystem Analysis of the Smith River at the Basin and Subbasin Scales," p. 140.
 <sup>62</sup> Smith River National Recreation Area Act of 1990, Pub. L. No. 101-612, 104 Stat. 3209 (1990).

recreational opportunities. In addition, when the state of California designated the California portion of the Smith River in its state wild and scenic river system, it recognized "the value of the beneficial uses to the local culture, environment and economy . . ." declaring "certain rivers which possess extraordinary scenic, recreational, fishery, or wildlife values shall be preserved in their free-flowing state, together with their immediate environments, for the benefit and enjoyment of the people of the state."<sup>63</sup> As California's North Coast Regional Water Control Board letter to OWRD notes " . . . it is clear that the value of the beneficial uses to the local culture, environment and economy associated with the 1990 designation of the North Fork Smith River as a wild and scenic river far outweigh those of an industrial water supply" (a use identified by the Board in the 1970s). (Attachment 5).

In sum, the Commission should grant the petition in order to conserve the maximum beneficial use of the waters by keeping the Smith River's water instream to support the remarkable, nationally significant recreational activities and local and regional economies supported by those activities.

C. Withdrawal from appropriation provides the tool necessary to insure compliance with State water resources policy.

Withdrawal of the Smith River surface water and groundwater from appropriation is necessary to ensure compliance with Oregon water resources policy. Regarding instream flows, the State has declared that "benefits are provided by water remaining where it naturally occurs. Protecting streamflows needed to support public uses is a high priority for the state." OAR 690-410-0030(1). The State's allocation policy also states that "when instream flow needs are not protected by instream water rights, new out of stream allocations may be limited or conditioned to meet public uses." OAR 690-410-0780(2)(h). Furthermore it is state policy that "the waters of the state shall be allocated within the capacity of the resource and consistent with the principle that water belongs to the public to be used beneficially without waste." OAR 690-410-0070(1).

<sup>&</sup>lt;sup>63</sup> State of California, Public Resources Code §5093.50.

Because of the unique conditions and context of the Smith River watershed, withdrawal from appropriation is the right tool to insure that these important state water resources policies are met.

Oregon also has specific policies and goals regarding anadromous and resident fish resources. Oregon considers the recovery and maintenance of fish populations to be of high priority: "... it is declared to be the goal of the people of the State of Oregon to restore native stocks of salmon and trout to their historic levels of abundance." ORS 496.435. The state also recognizes that "[t]he fishery resource of the state is an important economic and recreational asset." ORS 536.310(4). Permitting new appropriations of water in this setting and for the proposed use would lead to a reduction in flows and instream habitat needed to support the fishery resource, in contradiction to these state policies.

Moreover, withdrawal of the waters ensures that the State's actions are consistent with the bedrock principle of Oregon water law that "[a]ll water within the state from all sources of water supply belongs to the public." ORS 537.110. The public interest in the waters are numerous and are discussed in detail above, while the recently proposed water use by the foreign-owned nickel mining company—and the almost certain similar future requests for the waters—will be adverse to the public's interest in these waters. For these reasons, the waters should be withdrawn from appropriation.

D. Withdrawing the groundwater (in addition to the surface water) is necessary to maintain the maximum beneficial uses.

The North Fork Smith River's watershed has a unique hydrogeologic setting with a groundwater regime that exerts a positive and crucial influence on the water quality and quantity of the river and its tributaries. Groundwater helps maintain stream flow and low water temperatures through the input of numerous seeps and springs found along the river and its

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tributaries. Many of these springs form globally rare serpentine *Darlingtonia* wetlands. The wetlands can occur at elevations as high as 3,800 feet.<sup>64</sup>

In Oregon, approximately half of the North Fork Smith River watershed is underlain by the serpentine terrain of the Josephine ophiolite.<sup>65</sup> From an aerial view, the ophiolite appears as a stark island of deep red soils, buckskin boulders and Jeffrey pine surrounded by a sea of lush mixed evergreen forest.<sup>66</sup> (Attachment 1, Figure 2). Throughout the Josephine ophiolite area, there are flattened or broad ridge tops associated with a remnant erosional surface called the Klamath peneplain.<sup>67</sup> The broad ridges have a high surface rock content and are underlain by highly fractured ultramafic bedrock. In the North Fork Smith River watershed, these plateau-like features are mostly located in Wilderness or Inventoried Roadless Areas. They act as groundwater recharge areas for the North Fork Smith River and its tributaries.<sup>68</sup>

The North Fork Smith River's proximity to the ocean and a strong orographic effect results in high annual precipitation in the basin (100 to 150 inches).<sup>69</sup> It occurs mostly as rain in the fall, winter, and early spring.<sup>70</sup> The high annual rainfall and the Josephine ophiolite are the key, foundational elements of the watershed's unique hydrogeologic setting and complex groundwater regime.

The area's relatively low elevation means late spring, summer, and fall stream flows are entirely dependent on water sources other than snow melt. From April through July, stream flows fed by shallow groundwater sources remain high despite the decrease in precipitation.<sup>71</sup> In late

<sup>68</sup> For one such ridge, Cleopatra Ridge, U.S. Geologic Survey geologists have estimated that nickel laterite soils are 60 percent rock and have a high surface rock content, allowing for high infiltration and groundwater recharge. The high surface rock content is confirmed by Forest Service accounts and photographs of the area. See also: U.S. Forest Service, 2007, "Technical Guide for Managing Groundwater Resources," pp. 50-51, available at: http://www.fs.fed.us/geology/FINAL\_Ground%20Water%20Technical%20Guide\_FS-881\_March2007.pdf

<sup>69</sup> U.S. Forest Service, 1995, "North Fork of the Smith River Watershed Analysis."

<sup>70</sup> U.S. Forest Service, 1996, "Ecosystem Analysis of the Smith River at the Basin and Subbasin Scales," p. 141.

<sup>&</sup>lt;sup>64</sup> Frost and Jules, 2007, "Draft Conservation Strategy."

<sup>&</sup>lt;sup>65</sup> U.S. Forest Service, 1995, "North Fork of the Smith River Watershed Analysis."

<sup>&</sup>lt;sup>66</sup> See: <u>http://www.fs.fed.us/wildflowers/beauty/serpentines/geology.shtml</u>

<sup>&</sup>lt;sup>67</sup> See: http://www.fs.fed.us/wildflowers/beauty/serpentines/communities/jeffreypine\_savanna.shtml

<sup>&</sup>lt;sup>71</sup> U.S. Forest Service, 1984, "Draft Environmental Impact Statement Gasquet Mountain Mining Project, Del Norte County, California Nickel Corporation, Six Rivers National Forest."

summer, stream flow is low but remains relatively constant from year to year.<sup>72</sup> These characteristics indicate a stream system fed by and dependent on groundwater.

U.S. Forest Service stream surveys note that along Baldface Creek there are numerous springs fed by groundwater emanating from the highly fractured ultramafic bedrock.<sup>73</sup> The agency's North Fork Smith River Watershed Analysis mentions the influence of groundwater on the chemical makeup of streams flowing through the serpentine terrain and that the seeps and springs help cool water temperatures.<sup>74</sup>

Additional insight into the underlying geology of Josephine ophiolite and its relationship to the area's unique groundwater regime is provided by a mineral report published in 2005 by the Bureau of Land Management for the adjacent Rough and Ready Creek Watershed. It notes the following:

"The peridotite in this area is faulted and locally strongly fractured . . . Many serpentinites along fault zones are permeable, and springs are commonly localized along these structures . . . The thickest laterite development typically occurs over brecciated or highly fractured peridotite."<sup>75</sup>

According to the mineral report the thickest laterite development is on the Josephine ophiolite's relatively flat broad ridges.<sup>76</sup>

While the groundwater regime in the North Fork Smith River watershed has not been thoroughly studied, it's known to be complex. The U.S. Forest Service's 1984 Gasquet Mountain Mine Draft Environmental Impact Statement (DEIS) provides the best description of the area's groundwater system.<sup>77</sup> Gasquet Mountain is located in California in the North Fork Smith River watershed eight miles south of the Oregon border and one mile west of the river, and the nickel

- <sup>74</sup> U.S. Forest Service, 1995, "North Fork of the Smith River Watershed Analysis," and U.S. Forest Service, 1993,
  "Wild and Scenic River Eligibility Study for Baldface Creek," and "Wild and Scenic River Eligibility Findings."
  <sup>75</sup> U.S. Bureau of Land Management, Mineral Report, Nicore Claims Group, January 31, 2005.
- <sup>76</sup> Id.

<sup>&</sup>lt;sup>72</sup> Id.

<sup>&</sup>lt;sup>73</sup> U.S. Forest Service, 1993, "Wild and Scenic River Eligibility Study for Baldface Creek."

<sup>&</sup>lt;sup>77</sup> U.S. Forest Service, 1984, "Draft Environmental Impact Statement Gasquet Mountain Mining Project."

laterite strip mine proposed at the time was to be located at the southern end of the Josephine ophiolite in the North Fork Smith River watershed in California.

Test wells for the proposed Gasquet mine suggest that the area is underlain by three hydrogeologic components: 1) a seasonally perched groundwater zone varying from 3 to 40 feet deep, which is associated with numerous seeps and springs [unconfined]; 2) a confined aquifer with a water table at depths of 50 to 100 feet; and 3) a semi-artesian aquifer of about 160 feet or more with a hydrostatic rise of 30 to 130 feet above the confining layer.<sup>78</sup>

Field data collected for the Gasquet mine project indicate that the unconfined aquifer is far from uniform.<sup>79</sup> The DEIS for the Gasquet mine inferred that the groundwater regime was complex and not well understood.<sup>80</sup> In general, the analysis concludes that, from April through July, the streamflows remain relatively high as water is released from shallow groundwater storage. The study found that late summer stream flows are fed by deep groundwater sources, with flows exhibiting little fluctuation from year to year. According to the study:

"the unconfined aquifer experiences major seasonal fluctuations and is recharged by rainfall infiltration throughout the project area. It discharges at lower elevations into streams and at midslope locations as perennial springs where the flow intersects a partial groundwater barrier or a pervious fracture zone.

The springs form rare plant wetlands, known as serpentine *Darlingtonia* wetlands. The wetlands are found where springs emerge along streams, on riparian terraces and on hillslopes. Some can be found near mountain crests."

The study goes on to explain:

"[d]uring October, November, and December when precipitation replenishes the groundwater supply, streamflows lag behind precipitation. By January, the soil is at maximum moisture capacity and any intense storm results in rapid increase in streamflows. From April through July, the rainfall diminishes but streamflow remains relatively high as water is released from shallow groundwater storage. Late summer stream flows are fed by deep groundwater drainage and exhibit little fluctuation from year to year."<sup>81</sup>

<sup>&</sup>lt;sup>78</sup> Id.

<sup>&</sup>lt;sup>79</sup> *Id*.

<sup>&</sup>lt;sup>80</sup> *Id*.

<sup>&</sup>lt;sup>81</sup> *Id.* at page III-8

The presence of numerous seeps and springs and the rare plant wetlands they support are a dramatic outward expression of groundwater's influence in the unique hydrogeologic setting of the North Fork Smith River watershed.<sup>82</sup> The rare plant wetlands (serpentine *Darlingtonia* fens) support a unique assemblage of water-dependent species.<sup>83</sup> Researchers conclude that:

"Any alteration of the hydrology of a *Darlingtonia* wetland has the potential to drain water away from the wetland and its associated plant community. Several studies and general field observation indicates that the hydrological regime of the wetland environment is probably the most critical component of serpentine wetland communities and their associated rare plant habitat."<sup>84</sup>

Further, in discussing these water-dependent, special-status plants, the interagency Serpentine *Darlingtonia* Fen Conservation Agreement states, their "small population sizes, isolated occurrences, and sensitivity to disturbance (especially affects to hydrological functioning) render them vulnerable to local extinction."<sup>85</sup>

While the groundwater resources of the Smith River watershed in Oregon have yet to be thoroughly documented, information from existing U.S Forest Service analysis and studies clearly indicates that groundwater discharges to perennial seeps and springs, which in turn feed into stream flows. In late summer, the groundwater discharge is crucial to sustaining stream flows in the basin. In addition, the groundwater-fed springs and seeps form rare plant wetlands, which support a unique assemblage of wetland species and species of concern. The springs are essential to maintaining perennial flow and cool temperatures in these wetlands, and alternation of their hydrology would have significant impacts on this rare habitat type.

Furthermore, when Congress designated the North Fork Fork Smith River as a National Wild and Scenic River, it recognized three "Outstandingly Remarkable Values" to be

<sup>&</sup>lt;sup>82</sup> Jenny Brown, Abby Wyers, Allison Aldrous, and Leslie Bach, 2007, "Groundwater and Biodiversity Conservation: A methods guide for integrating groundwater needs of ecosystems and species into conservation plans in the Pacific Northwest," The Nature Conservancy. Available at: http://www.seconservation.ecosystems.org/Conservation.plans.

http://www.conservationgateway.org/ConservationByGeography/NorthAmerica/UnitedStates/oregon/freshwater/groundwater/Pages/Assessment-Methods.aspx

<sup>&</sup>lt;sup>83</sup> Frost and Jules, 2007, "Draft Conservation Strategy."

<sup>&</sup>lt;sup>84</sup> "Serpentine *Darlingtonia* Fen Conservation Agreement," p.6.

<sup>&</sup>lt;sup>85</sup> Serpentine *Darlingtonia* Fen Conservation Agreement, 1.

protected—water quality, fisheries, and scenery; all these values rely on the quantity and quality of water produced as a result of river's unique hydrogeologic setting. In order to preserve the "outstandingly remarkable" water quality, fisheries, scenic values and rare plant wetlands of the Smith River watershed in Oregon, special protective measures for the river's distinctive hydrogeologic system are warranted.

In sum, owing to the unique hydrogeologic setting of the Smith River watershed in Oregon and the many values it sustains, it is necessary to withdraw the groundwater, in addition to the surface water, from further appropriation in order to protect the maximum beneficial uses of the waters.

# II. The maximum beneficial uses of the Smith River waters are under significant and immediate threat.

The principle threat to the Smith River's waters and the maximum beneficial uses of those waters is the proposed water use for surface mining of the area's ancient nickel laterite soils and likely associated impacts related to pollution.<sup>86</sup> Red Flat Nickel Corp., a foreign-owned company, now holds 139 federal mining claims in the Cleopatra claim block (located in 2007).<sup>87</sup> The claims are located across approximately 3,000 acres within the Smith River watershed in Oregon, specifically the watersheds of Baldface Creek and Fall Creek (direct tributaries of the National Wild and Scenic North Fork Smith River in Oregon), and North Fork of Diamond Creek (a tributary of the National Wild and Scenic North Fork Smith River in California).<sup>88</sup> (Attachment 1, Figure 4). The company's stated goal is to construct and operate a nickel surface

<sup>&</sup>lt;sup>86</sup> According to the latest U.S. Environmental Protection Agency's Toxic Resource Inventory, the metal mining industry is responsible for 47 percent of all toxic pollution in the United States. See results of the inventory for the 2013 reporting year of the total disposal or other releases by industry sector at: <u>http://www2.epa.gov/toxics-release-inventory-tri-program/2013-tri-national-analysis-comparing-industry-sectors</u>; see also U.S. Forest Service, 2007, "Technical Guide for Managing Groundwater Resources," pp. 50-51.

<sup>&</sup>lt;sup>87</sup> According to the BLM's LR2000 online data base, the Cleo 1 through 139 lode claims are held by Red Flat Nickel Corp. A public mining claim (MC) customer information report and public mining claim geographic report can be obtained at: <u>http://www.blm.gov/landandresourcesreports/rptapp/menu.cfm?appCd=2</u>

<sup>&</sup>lt;sup>88</sup> Mining claim information is from the BLM LR2000 online data base of federal mining claims: <u>http://www.blm.gov/lr2000/rptsum.htm</u>

mine and processing facility on the Cleopatra claims.<sup>89</sup> The claim area is located within the Inventoried South Kalmiopsis Roadless Area, an extensive National Forest wild area in Oregon.<sup>90</sup> The southern edge of the potential mine area is adjacent to the Smith River National Recreation Area in California. In 2012, the company submitted a plan of operations to conduct test drilling, part of a larger plan to develop a surface nickel mine and processing facility.<sup>91</sup> Neither test drilling nor mining has begun because the U.S. Forest Service has yet to analyze and approve the mining company's mineral exploration drilling proposal.

Red Flat Nickel Corp. has already filed two applications to use Oregon's water in association with its plans to develop a strip mine in the Smith River watershed in Oregon. Additional water use applications are almost certain to follow. First, the company applied for a limited license (LL-1445) on January 1, 2013. That limited license was issued allowing water use from March 31, 2013 through November 1, 2013. However, it expired before the company had obtained the necessary U.S. Forest Service approvals to begin the project and therefore water use never occurred under LL-1445.

Red Flat Nickel Corp. then applied for a second limited license (LL-1533) on June 5, 2014.<sup>92</sup> LL-1533 was a request to use water from an unnamed tributary to Taylor Creek (a tributary to Baldface Creek) for drilling 59 test holes each approximately 50 feet deep, across the 3,000-acre, Cleopatra mining-claim block in the North Fork Smith River watershed.<sup>93</sup> LL-1533 was initially denied on September 30, 2014. The OWRD granted the mining company's petition for reconsideration on January 21, 2015, but the order was never revised or reissued because the

<sup>&</sup>lt;sup>89</sup> Mike Oxley, Agent for Red Flat Nickel Corp. to U.S. Forest Service, Oct. 26, 2012, cover letter to Plan of Operations, Cleopatra Check Drilling Program. Available at:

 <sup>&</sup>lt;sup>90</sup> Inventoried Roadless Areas are National Forest lands with wilderness characteristics and values. They are provided certain protections under the <u>Roadless Area Conservation Rule</u> but they remain open to mining.
 <sup>91</sup> Red Flat Nickel Corp., "Plan of Operations, Cleopatra Check Drilling Program," Prepared by LithoLogic

<sup>&</sup>lt;sup>27</sup> Red Flat Nickel Corp., "Plan of Operations, Cleopatra Check Drilling Program," Prepared by LithoLogic Resources, LLC and Alyssum Ventures Ltd., Submitted to the U.S. Forest Service, Oct. 2012. Available at: <u>http://www.fs.fed.us/nepa/nepa\_project\_exp.php?project=41908</u> <sup>92</sup> See: <u>http://apps.wrd.state.or.us/apps/wr/wrinfo/wr\_details.aspx?snp\_id=179162</u>

 <sup>&</sup>lt;sup>93</sup> Red Flat Nickel Corp., "Plan of Operations, Cleopatra Check Drilling Program."

company withdrew its application two days later.<sup>94</sup> The company still lacks the needed approvals from the U.S. Forest Service to begin the test drilling project for which it sought water use under LL-1533.

Red Flat Nickel Corp. has not yet provided the public with a detailed mining plan so its additional water use plans are not publicly known. However, the previously proposed Gasquet Mountain Mine included construction of a water supply reservoir and so we might expect to see the same type of proposal should Red Flat Nickel Corp. advance plans to mine the Cleopatra Ridge area.

One problem highlighted by the request for LL-1533 is the lack of groundwater information available to the OWRD for evaluating the proposal. The Gasquet Mountain Mine DEIS found that the serpentine terrain of the North Fork Smith River watershed has seasonally perched groundwater zones as shallow as a few feet and groundwater flow patterns that cannot be described with any precision, given the lack of detailed hydrologic information. In a recent legal challenge to a project involving exploratory drilling for mining on the Gifford Pinchot National Forest, the District Court of Oregon explained that without a baseline groundwater study there is no way to determine the impacts of exploratory drilling.<sup>95</sup>

In addition to the damage that would be caused by the mining company's water use, the mining operations facilitated by the water use may well destroy the maximum beneficial uses of the water described above. Mining and related activities are the principle threat to the serpentine wetlands through alterations in hydrology and water chemistry. According to serpentine wetland plant researchers "many species are sensitive to small changes in hydrology and water chemistry."<sup>96</sup> The primary reason for the potential listing of *Hastingsia bracteosa* var. *bracteosa* and *H. bracteosa* var. *atropurpurea* has been the threat of commercial mining in and adjacent to

<sup>&</sup>lt;sup>94</sup> See: <u>http://apps.wrd.state.or.us/apps/wr/wrinfo/wr\_folder\_image.aspx?snp\_id=179162</u>

<sup>&</sup>lt;sup>95</sup> Gifford Pinchot Task Force v. Perez et al., U.S. District Court for the District of Oregon, Case No. 3:13-cv-00810 (July 3, 2014).

<sup>&</sup>lt;sup>96</sup> Frost and Jules, 2007, "Draft Conservation Strategy."

their habitats.<sup>97</sup> The development of a nickel laterite surface mine in the watershed of the North Fork Smith River and its tributaries would have severe and long-lasting adverse consequences for the area's hydrology.

It is notable that in California all National Forest lands within the Smith River watershed are closed to mining pursuant to the Smith River National Recreation Area Act.<sup>98</sup> However in Oregon, only those lands designated as Wilderness (19,181 acres) or Wild and Scenic Rivers (1,757 acres) are closed to operation of the mining laws of the United States.<sup>99</sup> Approximately two-thirds of the North Fork Smith River watershed in Oregon, including Inventoried Roadless Areas, remains open to mining. In a recent development, the Bureau of Land Management issued a *Federal Register* notice temporarily closing the area to new mineral entry for at least two years while Congress considers legislation to permanently close the area to mineral entry.<sup>100</sup> However, even if Congress passes legislation to close the area to mineral entry, it will be subject to "valid existing rights," which means the Red Flat Nickel Corp. mining company could continue to advance its plans to develop a surface strip mine if mineral claims prove to be "valid" under the federal mining law.

The mining company is currently in the mineral exploration phase and has not yet revealed details about the potential mine and processing method it will use.<sup>101</sup> However, the U.S. Forest Service's *Technical Guide to Managing Ground Water Resources* discusses significant potential impacts to ground and surface water resources from most types of mining activities.<sup>102</sup>

Numerous investigations and published reports have documented the release of toxic metals to ground water and surface water resulting from mobilization and transport of metals from mines and mine-related facilities.

<sup>&</sup>lt;sup>97</sup> "Serpentine Darlingtonia Fen Conservation Agreement," p. 6.

<sup>&</sup>lt;sup>98</sup> See: http://www.gpo.gov/fdsys/granule/STATUTE-104/STATUTE-104-Pg3209/content-detail.html

<sup>&</sup>lt;sup>99</sup> See land withdrawal definitions for all federal lands at: <u>http://www.blm.gov/or/landsrealty/lodefinitions.php</u> <sup>100</sup> *Federal Register*, June 29, 2015, Vol. 80, No. 124, pp. 37015-37016.

<sup>&</sup>lt;sup>101</sup> At a public information event hosted by the League of Women Voters in Gold Beach, OR on Nov. 20, 2014, Red Flat Nickel Corp. representative Obie Strickler indicated that acid heap leach was the most likely method the company would use to process the soils. See: <u>https://vimeo.com/114082431</u>

<sup>&</sup>lt;sup>102</sup> U.S. Forest Service, 2007, "Technical Guide for Managing Groundwater Resources," pp. 50-51.

In hardrock mines, adits and shafts, underground workings, open pits, overburden, development rock and waste rock dumps, tailings impoundments, leach pads, mills, and process water ponds are recognized as potential sources of acidity, metals, sulfate, cyanide, and nitrate. If released in environmentally harmful concentrations, these contaminants can significantly reduce the quality and usability of both ground and surface waters. Dissolved metals in ground waters can make it unsuitable for consumption. If contaminated ground water provides baseflow to a stream, the aquatic health of the stream and riparian ecosystems can be impacted. The impacts can be long term and large scale. They differ with the physical and geological setting of the ore body, type of ore extracted, the mining method, the method of ore processing, the effectiveness of water management, and the nature of mine closure.

A variety of complex geochemical and hydrogeological processes control the transport, attenuation, and ultimate distribution of metals and other mine- related contaminants in ground water (Drever 1997). Dissolved contaminants are transported to aquifers through complex overland and subsurface pathways. This complexity, combined with the large scale of many mining activities and the numerous mine-related sources of contaminants, makes water-quality assessments and restoration and remediation of mine sites very difficult.

Precious and heavy metal ore bodies are typically found in fractured-rock hydrogeologic settings. The extraction and processing of ore over the past 100 years has resulted in the release of heavy metals into the aquatic environment in mining districts across North America. During the past 10 years, research has shown that ground water flow can deliver significant metal loads to streams in mountainous areas.<sup>103</sup>

The guide also found that process water, mine water, and runoff and seepage from mine waste piles or impoundments can transport dissolved contaminants to groundwater and that this likelihood depends in part on the hydrogeological setting.<sup>104</sup> It warned that dewatering of shallow aquifers that are connected to surface water bodies can have a significant detrimental effect and that mineral substances like asbestos, nickel, chromium—all of which are known to be present in the area's nickel laterite soils—can pose a threat to groundwater.<sup>105</sup>

More generally, the U.S. Environmental Protection Agency has found metal mining to be the nation's most polluting industry. According to the most recent National Toxic Release Inventory, metal mining was responsible for release of 47% of all toxic pollution in the U.S.<sup>106</sup>

 $<sup>^{103}</sup>$  *Id*.

<sup>&</sup>lt;sup>104</sup> *Id.*, p. 52.

<sup>&</sup>lt;sup>105</sup> *Id.*, pp. 52-53.

<sup>&</sup>lt;sup>106</sup> U.S. EPA, 2013, "Toxics Release Inventory National Analysis: Comparing Industry Sectors," graph 2. Available at: <u>http://www2.epa.gov/toxics-release-inventory-tri-program/2013-tri-national-analysis-comparing-industry-sectors</u>

While the U.S. Forest Service has not yet begun analysis for the mining company's mineral exploration drilling, comments to OWRD on LL-1533 highlighted a number of problems with the proposal. (Attachments 2-5). One major concern is the company's failure to conduct baseline groundwater studies. The primary protection for groundwater and surface water in the Cleopatra Plan of Operation is to simply "not drill within 200 feet of any seasonal or perennial watercourse." This mitigation is inadequate and simplistic given the unique hydrogeological setting, complex groundwater regime, irreplaceable natural values, and water quality at risk.

In sum, the two previous water use requests by a foreign-owned nickel mining corporation have highlighted serious risks looming for the Smith River watershed. These water use requests will almost certainly be followed by additional, and likely larger, requests. Petitioners urge the Commission to act now to conserve the beneficial uses of the waters by withdrawing them from further appropriation.

III. Without a withdrawal from appropriation, the State may lack the basic management tools needed to protect the beneficial uses of the Smith River waters in Oregon and California.

The State of Oregon lacks both instream water rights and water availability data for the North Fork Smith River and its tributaries. In the absence of these, OWRD has limited tools and capabilities to appropriately address new water use applications.

Currently, there are no instream water rights or instream water right applications for the Smith River or any of its tributaries. Withdrawing the system from further appropriation would provide a crucial regulatory mechanism to protect instream values and flows, protecting the public's interest in the resource.

The online Water Availability Reporting System (WARS) maintained by the OWRD calculates the availability of surface waters by sub-watershed. The WARS calculates monthly water availability and can produce maps for most watersheds in Oregon used by OWRD to determine whether water is available for an applied-for use. However, the OWRD's WARS database has no data available for the Smith River watershed in Oregon. Here, the situation is

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unique because the river's waters flow from Oregon into California. Yet in 1998, the California State Water Resources Control Board declared the Smith River system to be fully appropriated year round.<sup>107</sup> This declaration specifically stated that stream systems declared "fully appropriated should encompass all upstream sources which contribute to the identified stream if, and to the extent that, such sources are hydrologically continuous to the identified stream system." Thus a WARS system that incorporated this information *should* show no water available for further appropriation. Lacking such fundamental water availability information in this trans-state setting, withdrawal of the Smith River in Oregon from further appropriation is the most prudent course of action. An additional benefit is that the OWRD and California State Water Resources Control Board would save immense resources and staff time by not needing to research, calculate, negotiate, and develop information for the Smith River for the WARS database. Even if OWRD decided not to develop WARS database information for the area, withdrawal from further appropriation would save OWRD the significant staff time involved in visiting the remotes sites to determine water availability (as occurred for LL-1533).

The extensive interests of California in the Smith River's waters are articulated in the letters to OWRD from the Mayor of Crescent City, Del Norte County, California Department of Fish and Wildlife, and the California North Coast Regional Water Quality Control Board. (Attachments 2-5). A withdrawal of the waters of the Smith River watershed in Oregon, which lies entirely on public land and for which there are no water rights of record, is appropriate to protect these many downstream beneficial uses.

It is also important to note that LL-1533 was subject to review by Oregon Department of Fish and Wildlife and Oregon Department of Environmental Quality pursuant to the Division 33 rules (OAR 690-33). These reviews provided critical information to OWRD in its review of the

<sup>&</sup>lt;sup>107</sup> California State Water Resources Control Board, Order WR 98 08, November 19, 1998. Available at: <u>http://www.waterboards.ca.gov/waterrights/board\_decisions/adopted\_orders/ord ers/1998/wro98 - 08.pdf</u>

proposal. However, if the mining company were to reapply for a limited license spanning less than 120 days (as anticipated), the rules would provide for no Division 33 review (OAR 690-033-0310(1)(b)(A)), yet the adverse impacts on the maximum beneficial uses of the water would remain just as severe.

In sum, the Smith River watershed in Oregon presents a unique set of circumstances where existing management tools are inadequate to reliably conserve the maximum beneficial uses of the water. Withdrawing the waters from appropriation will give OWRD the tool it needs to conserve these uses.

### CONCLUSION

Withdrawing the surface and groundwater of the Smith River watershed in Oregon from any new appropriations (except for the establishment of instream water rights), including exempt uses, is both "necessary to insure compliance with state water policy" and "necessary in the public interest to conserve the water resources of this state for the maximum beneficial use and control thereof." ORS 536.410. We respectfully request that the Commission grant this petition. Petitioners also request, in accordance with ORS 536.410(2), that prior to issuing an order of withdrawal, the Commission advertise and hold a public hearing on the necessity for the withdrawal.

Respectfully submitted this 31<sup>st</sup> day of August, 2015,

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(*Petitioners continued on next page*)

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## **Index of Attachments**

Attachment 1: Figures and Photos of the Area Proposed for Withdrawal.

Attachment 2: California Department of Fish and Wildlife, letter to Tom Paul, Oregon Water Resources Department, re: Limited License Application LL-1533 and Cleopatra Check Drilling Program (July 8, 2014).

Attachment 3: Mayor of Crescent City, Mr. Richard Holley, letter to Oregon Water Resources Department, re: Limited License for Cleopatra Check Drilling Program (LL-1553) (July 8, 2014).

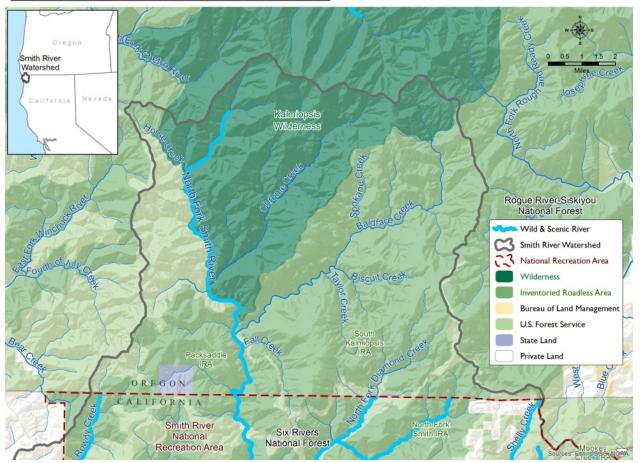
Attachment 4: County of Del Norte County, Board of Supervisors, letter to Oregon Water Resources Department, re: Limited License for Cleopatra Check Drilling Program (LL-1533) (July 8, 2014).

Attachment 5: California North Coast Regional Water Quality Board, letter to Oregon Water Resources Department, re: Comments on the Limited License 1533 Application (Water Right Application for the Proposed Cleopatra Project in the Headwaters of the Smith River) (July 8, 2014).

Attachment 6: Curry County Board of Commissioners, letter to Tina Lanier, Gold Beach Ranger District [Rogue River-Siskiyou National Forest], re: formal opposition to any permit issued to Red Flat Nickel Corporation (December 12, 2013).

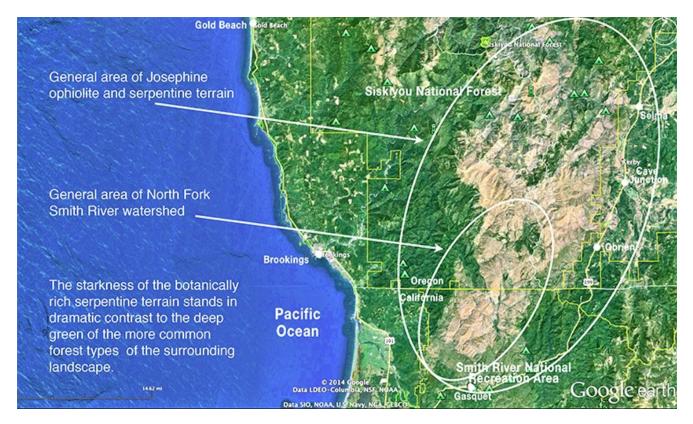
Attachment 7: California Senate Joint Resolution 3 (SJR-3), Smith River Watershed Protection (Adopted in Senate July 2, 2015).

Attachment 8: Press Release of California State Senator Mike McGuire. McGuire's resolution protecting the Smith River passes: SJR 3 urges Congress to permanently safeguard the river from strip mining regarding passage of SJR-3 (July 9, 2015).



# Smith River Watershed, Oregon

Figure 1 - Though the Smith River enters the Pacific Ocean in California, 11.6 % of its watershed, or 59,200 acres, lies in Oregon. Of this area, 98% lies within the North Fork Smith watershed. Map courtesy of Trout Unlimited.



**Figure 2** - Google Earth scene showing the Josephine ophiolite in southwest Oregon and northwest California in the general area of the North Fork Smith River watershed. The Josephine ophiolite is the largest, continuous expanse of exposed ultramafic rock (peridotite, serpentinized peridotite, and serpentinite) in North America, covering more than 150 square miles. Source: Serpentine *Darlingtonia* Fen Conservation Agreement, 2006.

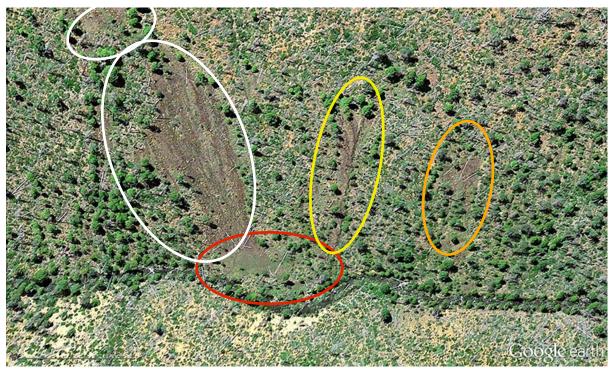
According to the U.S. Forest Service: "The ultramafic bedrock has a dramatic influence on the vegetation. Soils derived from ultramafic rock are high in iron and magnesium, and also have minerals containing toxic metals such as chromium, nickel and cobalt. The sparse vegetation of grass brush, and scattered pines contrasts with the typically dense vegetation on other types of bedrock." Source: U.S. Forest Service, 1993, "Wild and Scenic River Eligibility Assessment for Baldface Creek and its Tributaries."



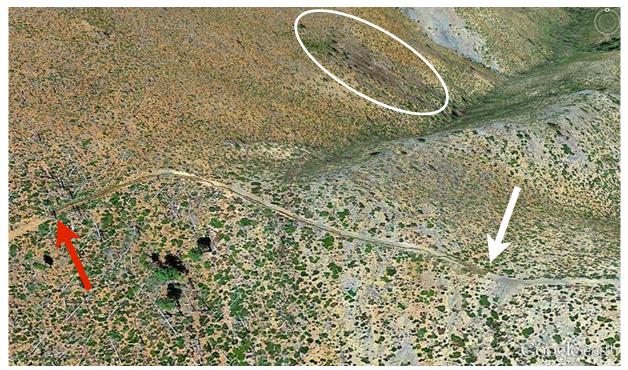
**Figure 3** - U.S. Forest Service poster illustrating the distinctive rare plant communities associated with the Klamath-Siskiyou region's ultramafic soils. Serpentine wetland plants are shown in lower right of the poster. Source: <u>http://www.fs.fed.us/wildflowers/beauty/serpentines/</u>



**Figure 4** - Google Earth scene of the North Fork Smith River watershed in Oregon showing the complex geology and vegetation patterns of the Cleopatra Ridge area. Cleopatra Ridge is one of the ancient remnants of the Klamath peneplain. Cleopatra Ridge lies at the headwaters of Baldface and Fall Creeks, both tributaries to the National Wild and Scenic North Fork Smith River in Oregon.



**Figure 5** - Google Earth scene of the Taylor Creek *Darlingtonia* wetlands shown in Photos 4-7. *Darlingtonia* wetlands—especially ones this large—are dominant enough landscape features to be easily visible on aerial photos. The area of the red oval corresponds with the bench/stream side part of the wetland pictured in Photos 4 & 5. The orange and yellow ovals are likely additional springs/*Darlingtonia* wetlands. The large white oval is a very large hill slope fen, or hanging fen. It extends up slope and out of the photo (smaller white oval). It can be seen in Photos 6 & 7. The area is located on the northeast edge of the Cleopatra Ridge, adjacent to and above Taylor Creek, which is a tributary to Baldface Creek.



**Figure 6** - Google Earth scene of a portion of Cleopatra Ridge and shallow groundwater flow interrupted by McGrew Trail. The water emerges near the red arrow, pools on the surface, and then flows down McGrew Trail for about 700 feet, before dispersing in the area of the white arrow. The white oval is likely a hill slope *Darlingtonia* wetland above Taylor Creek, although smaller than the ones in Figure 5.



**Photo 1** - Even following heavy winter storms, the clarity of the waters of the North Fork Smith River is exceptional as seen here in California (after flowing out of the river's mostly roadless, undeveloped watershed in Oregon) following a big February 2013 rainstorm.



**Photo 2** - Baldface Creek, pictured here, provides exceptionally clear water to the National Wild and Scenic North Fork Smith River. According to the U.S. Forest Service Baldface Creek and all its perennial tributaries are eligible to be added to the National Wild and Scenic River System based on their outstandingly remarkable water quality and fisheries.



**Photo 3** - An area along the North Fork Smith River in California where numerous seeps and springs emerge. The perennial nature of the springs is indicated by the presence of *Darlingtonia californica* (common names: Pitcher plant or Cobra lily), which require a year round supply of cool water to survive. The flow is less than pictured here during the summer. There are similar areas along Baldface Creek in Oregon (see Photo 8).



**Photo 4** - This large *Darlingtonia* wetland near Taylor Creek was documented in 2014. A series of perennial springs has created expansive areas of hill slope, bench, and stream side *Darlingtonia* wetlands (also known as hanging fens) along Taylor Creek. These unique wetlands lie in the northeast corner of Cleopatra Ridge, an area now threatened by a foreign-owned company's proposal to develop a nickel strip mine (see Figure 5).



Photo 5 - Looking downhill at a Darlingtonia wetland on a bench along Taylor Creek (see Figure 5).



**Photo 6** - Looking from a bench above Taylor Creek up slope at an extensive hill slope *Darlingtonia* wetland (see Figure 5).



**Photo 7-** Part of a serpentine *Darlingtonia* wetland above Taylor Creek (see Figure 5). *Darlingtonia* wetlands on steep slopes are known as hanging fens. The presence of *Darlingtonia* indicates an extensive perennial source of cool water.



**Photo 8** - Baldface Creek below Cleopatra Ridge. Springs emerge from fissures in the rock wall above the creek. The presence of *Darlingtonia* indicate the springs are perennial. Photo 3 shows a similar area along the North Fork Smith River.



State of California – Natural Resources Agency DEPARTMENT OF FISH AND WILDLIFE Region 1 – Northern 601 Locust Street Redding, CA 96001 www.wildlife.ca.gov 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,

Conserving California's Wildlife Since 1870

Mr. Tom J. Paul, Acting Director Oregon Water Resources Department July 8, 2014 Page 2

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 <u>http://www2.epa.gov/toxics-release-inventory-tri-program/2012-tri-national-analysisoverview</u> 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.

Mr. Tom J. Paul, Acting Director Oregon Water Resources Department July 8, 2014 Page 3

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

Sincerely,

vitte Milliron

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

#### References

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Mr. Tom J. Paul, Acting Director Oregon Water Resources Department July 8, 2014 Page 4

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July 8, 2014

Oregon Water Resources Department Attn: Tom J. Paul, Acting Director 725 Summer Street NE, Suite A Salem, OR 97301-1271

#### PUBLIC COMMENT: Limited License for Cleopatra Check Drilling Program (LL-1533)

Dear Mr. Paul:

It has come to the attention of the City Council of the City of Crescent City that Red Flat Nickel Corp. has submitted an application to the OWRD for a limited use water license in conjunction with the "Cleopatra Check Drilling Program" located in Southern Oregon within the Rogue River - Siskivou National Forest. Red Flat Nickel Corp. proposes to appropriate water from an unnamed tributary to Taylor Creek, which is a tributary to Baldface Creek, which flows into the North Fork Smith River, a National Wild and Scenic River. The project is also within the watershed of two other tributaries to the North Fork Smith River, Diamond Creek and Fall Creek. The North Fork Smith River is one of three forks that feed into and make up the Smith River, which flows through Del Norte County, California to the coast.

The Smith River is the source for Crescent City's municipal water system, which serves approximately 14,000 residents year-round and tens of thousands of visitors throughout the year. The quality of the water extracted by the City from below the bed of the Smith River as well as the quantity of water in the Smith River are of paramount importance to providing safe, reliable drinking water. The appropriation and use of water for drilling exploration from tributaries to the North Fork Smith River raises significant concerns for the City as to the project's impacts on both the quality and quantity of water in the Smith River.

First, the City is troubled that the OWRD is approving an aspect of the project prior to the completion of an environmental assessment. Without such an environmental assessment, the City is concerned that this project has the potential to negatively impact the water quality of the North Fork Smith River, and therefore, the quality of the City's municipal water supply.

Second, the California State Water Resources Control Board has declared the Smith River to be fully appropriated year round. If new water licenses are issued along the tributaries to the Smith River, the flow of Smith River will be impacted.

Third, in addition to providing drinking water to the City's municipal water users, the Smith River offers a multitude of recreational activities including kayaking, rafting, swimming, and fishing. The Smith River and its tributaries are the spawning grounds and habitat for a worldclass fishery (salmon, steelhead, cutthroat trout). These recreational and fishing opportunities

Oregon Water Resources Department

PUBLIC COMMENT: Limited License for Cleopatra Check Drilling Program (LL-1533)

are not only enjoyed and valued by local residents, they are also an important feature of the region's tourist industry.

Due to the potential for this project and its associated appropriation of water from the tributaries to the North Fork Smith River to negatively impact the City's municipal water source, the City Council of the City of Crescent City opposes the approval of this limited water license (LL-1533).

If you have any questions you can contact Eugene Palazzo, City Manager at 707-464-7483 ext. 232 or by email at epalazzo@crescentcity.org. Please send all future notices and related project documents to the following address:

City of Crescent City Attn: City Manager 377 J Street Crescent City, CA 95531

Sincerely,

Richard Holley, Mayor

cc: Edmund G. Brown, Governor of California John Kitzhaber, Governor of Oregon Dianne Feinstein, U.S. Senator Barbara Boxer, U.S. Senator Ron Wyden, U.S. Senator Jeff Merkley, U.S. Senator Jared Huffman, U.S. Representative Jim Nielsen, California State Senator Wild Rivers Ranger District, U.S. Forest Service

7



County of Del Norte County Board of Supervisors 981 "H" Street, Ste. 200 Crescent City, California 95531

Phone (707) 464-7204

July 8, 2014

Fax (707) 464-1165

Oregon Water Resources Department Attn: Phillip C. Ward, Director 725 Summer Street NE, Suite A Salem, OR 97301-1271

Wild Rivers Ranger District Attn: Robert Shoemaker 2164 N.E. Spaldning Avenue Grants Pass, OR 97526

RE: Limited License for Cleopatra Check Drilling Program (LL-1533)

Dear Director Ward and Ranger Shoemaker:

The Del Norte County Board of Supervisors representing Del Norte County, California directly south of the proposed project site has reviewed the limited information submitted by the Red Flat Nickel Corporation for its application for a Limited Use Water License associated with exploratory drilling in the area. This Board has voted unanimously to oppose the issuance of a permit for a Limited Water Use License for the Cleopatra Check Drilling Program.

After considering the information available in the permit application, it is readily apparent that the project has the potential to cause significant adverse environmental impacts within the immediate watershed and subsequently adversely impact the overall watershed of the Smith River. The Smith River is the indirect source for many water users in Del Norte County with the largest user being the City of Crescent City. It is with this in mind the Del Norte County Board of Supervisors adamantly opposes this application or any application that would result in future strip mining in the Smith River watershed.

The lack of information and inadequate analysis of the potential impacts of the project significantly concerns the Del Norte County Board of Supervisors. In addition, Del Norte County residents have expressed their concerns to both the Board of Supervisors and Crescent City Council at separate public meetings and it is obvious this application is not in the public interest. Del Norte County has not received any comments or letters supporting the actions requested of the OWRD associated with the above application.

Thank you for the opportunity to comment on this application and please feel free to contact Del Norte County if your staff requires any clarification or additional information.

Sincerely

David Finigan, Chair Del Norte County Board of Supervisors

cc: Senator Ron Wyden Senator Jeff Merkley Senator Diane Feinstein Senator Barbara Boxer Congressman Peter DeFazio Congressman Jarred Huffman John Corbett, Chair North Coast Regional Water Quality Control Board





#### North Coast Regional Water Quality Control Board

July 8, 2014

Mr. Tom J. Paul, Acting Director Water Resources Department 725 Summer Street NE, Suite A Salem, OR 97301 <u>Tom.J.Paul@wdr.state.or.us</u>

Dear Mr. Paul,

- Subject: Comments on the Limited License 1533 Application (Water Right Application for the Proposed Cleopatra Project in the Headwaters of the Smith River)
- File: North Fork Smith River Cleopatra Mining Project

The North Coast Regional Water Quality Control Board (Regional Water Board) would like to thank you for this opportunity to comment on the Limited License 1533 (LL-1533) application by the Red Flat Nickel Corporation posted by the Oregon Water Resources Department. The Smith River is a unique and thriving natural resource of pristine highquality water, often referred to as the crown jewel of the North Coast Region of California. Its unspoiled water quality is the water supply for several communities including Gasquet, Hiouchi and Crescent City. It is a state and federally designated Wild and Scenic River with world class recreational opportunities and a habitat stronghold for a declining population of rare, threatened and endangered anadromous fish. The active recreational and fishing industries supported by the Smith River make it a vital part of the Northern California environment, economy, and culture. Staff find that a mining project in this location has a high risk of resulting in discharges of waste with significant adverse impacts to water quality. For this, and the many additional reasons detailed in the attached letter, the staff of the Regional Water Board urges the Oregon Water Resources Department to deny the LL-1533 application. For the protection of this nationally designated recreational area, we further recommend denial of any future proposals to mine the headwaters of the Smith River.

The LL-1533 application filed by the Red Flat Nickel Corporation (St Peter Port Capital Ltd), headquartered in the United Kingdom (Guernsey), should be reviewed in full context of the

JOHN W. CORBETT, CHAIR | MATTHIAS ST. JOHN, EXECUTIVE OFFICER

5550 Skylane Blvd., Suite A, Santa Rosa, CA 95403 | www.waterboards.ca.gov/northcoast

S RECYCLED PAPER

proposal in order to determine the potential damage to the public interest and to downstream water right holders. For this proposed phase of work, the Red Flat Nickel Corporation plans to drill 59 exploratory holes to collect geologic samples for mineral analysis. The Red Flat Nickel Corporation's longer term plans are to mine about 4,000 acres of public land. The LL-1533 application proposes to divert surface water from an unnamed tributary of Taylor Creek in the Siskiyou National Forest in Curry County, Oregon for mineral exploration drilling. However, this unnamed tributary is a headwater stream to the North Fork Smith River. Both the short term drilling and diversion plans and long term plan to mine the headwaters of the Smith River have potential for significant adverse effects on the environment and could impair the existing and nationally protected beneficial uses of the Smith River.

The North Fork Smith River's outstanding values are its scenic quality including the pristine character of the landscape, the river's clear turguoise colored waters, and the excellent water quality which contributes to the overall functioning of the river's ecosystem. The world class anadromous fishery depends on the excellent water quality that supports the many miles of near-pristine spawning and rearing habitat.

The beneficial uses as listed in the *Water Quality Control Plan for the North Coast Region* (Basin Plan) for the Smith River include:

Municipal and Domestic Supply (MUN) Agricultural Supply (AGR) Industrial Service Supply (IND) Industrial Process Supply (PRO) Freshwater Replenishment (FRSH) Navigation (NAV) Water Contact Recreation (REC-1) Non-Contact Water Recreation (REC-2) Commercial and Sport Fishing (COMM) Cold Freshwater Habitat (COLD)

Wildlife Habitat (WILD) Rare, Threatened, or Endangered Species (RARE) Marine Habitat (MAR) Migration of Aquatic Organisms (MIGR) Spawning, Reproduction, and/or Early Development (SPWN) Estuarine Habitat (EST) Aquaculture (AQUA) Native American Culture (CUL) Subsistence Fishing (FISH)

The beneficial uses as part of Oregon's water quality standards include:

Domestic water supply	Livestock watering
Fishing	Aesthetic quality
Industrial water supply	Fish and aquatic life
Boating	Hydropower
Irrigation	Wildlife and hunting
Water contact recreation	Commercial navigation and transportation

The Six Rivers National Forest has determined that the beneficial uses of the North Fork Smith River are:

Migration and spawning of anadromous fish

Municipal and domestic water supplies Water-based recreation Wildlife habitat

Additionally, the North Fork Smith River is designated as both a Federal and California Wild and Scenic River. In 1990, the North Fork Smith River in California was added to the National Wild and Scenic River System by the Smith River National Recreation Area Act.

It is the policy of the State of California that certain rivers which possess extraordinary scenic, recreational, fishery, or wildlife values shall be preserved in their free-flowing state, together with their immediate environments, for the benefit and enjoyment of the people of the state. The Legislature declares that such use of these rivers is the highest and most beneficial use and is a reasonable and beneficial use of water within the meaning of Section 2 of Article X of the California Constitution<sup>1</sup>.

Though identified in the 1970s as suitable for providing the beneficial use of industrial water supply, it is clear that the value of the beneficial uses to the local culture, environment and economy associated with the 1990 designation of the North Fork Smith River as a wild and scenic river far outweigh those of an industrial water supply project. This is particularly true since staff find the proposed project risks pose significant threat to all other downstream uses. Given the ecological and socioeconomic implications, we believe it is in the best interest of the people of Oregon and California to preserve this unique resource and deny any further attempts to permanently alter the headwaters of this designated national treasure.

In addition, approvals by United States Forest Service (USFS), to the extent it exercises decision-making authority over the water right decision, and certainly in its permit or license for the mining activity, must be accompanied by water quality certification pursuant to the Clean Water Act section 401. Because of the interstate nature of the proposed project, Regional Water Board would hope to have a role in in the certification process. Water quality certifications contain conditions to ensure that any project will comply with state water quality standards and any other water quality requirements of state law.

Consideration of the following factors will show that approval of the LL-1533 application is not in the public interest because of the high-risk location and potential cause of injury to existing water right holders and important natural resources.

1) The location of the claim is not well suited for such an industrial operation. According to precipitation data between 1961 and 1990<sup>2</sup>, this area was one of the

<sup>&</sup>lt;sup>1</sup> California PUBLIC RESOURCES CODE §5093.50.

<sup>&</sup>lt;sup>2</sup> <u>http://www.wrcc.dri.edu/precip.html</u>

wettest in the western states averaging well over 100 inches of precipitation annually. The Smith River watershed is well known for its large amounts of runoff and dramatic swings in flows. The precipitation rates combined with a mining operation atop steep topography make the proposed operations a high risk for discharges of waste and associated water quality impacts. Controlling discharges of waste and preventing pollution to the otherwise high-quality waters would be incredibly difficult, if not impossible, given the setting of the proposed project.

- 2) The high-quality water of the Smith River is recognized in the North Coast Basin Plan as point source discharges of waste are prohibited in the Smith River and its tributaries in California.
- 3) The California State Water Resources Control Board (SWRCB), on November 19, 1998, by Order WR 98-08 (see link below), has declared the Smith River system to be fully appropriated year round. http://www.waterboards.ca.gov/waterrights/board\_decisions/adopted\_orders/ord\_ers/1998/wro98-08.pdf

The SWRCB found that a declaration that specifically identified that a stream system is fully appropriated should encompass all upstream sources which contribute to the identified stream if, and to the extent that, such sources are hydraulically continuous to the identified stream system. (WR Order 98-08 at 21.) Under Public Resources Code §5093.55, no diversion shall be constructed unless and until the Secretary (California Resources Agency) determines that the diversion is necessary to supply domestic water to residents and it will not adversely affect the freeflowing condition and natural character of the river. No department of the state may assist or cooperate, whether by loan, grant, license, or otherwise, with any department or agency of the federal, state, or local government, in the planning or construction of a diversion that could have an adverse effect on the free-flowing condition and natural character of the river. (Pub. Resources Code, § 5093.56.) The Oregon WRD should consult with the California Resources Agency and the California Department of Fish and Wildlife (DFW) to determine whether the proposed project would adversely affect the free-flowing condition and natural character of the Smith River.

- 4) The Oregon WRD should consult with the California SWRCB Division of Water Rights to determine whether downstream water right holders would be injured and/or public trust resources would be damaged by diversions under the LL-1533 application if approved.
- 5) Due to the lack of infrastructure in this wild and scenic area, the initial drilling operations will be mobilized by helicopter. Therefore, the remoteness of the proposed place of use and future project location are clearly problematic for timely inspection or enforcement.

6) Using the public waters of Oregon and California to facilitate such an industrial development in a headwater of an important California river by a foreign corporation could impair high quality-waters and be detrimental to the public interest. Such an industrial development could disturb, harm, or destroy the local flora and fauna, pollute the water, degrade the area with helicopter noise, equipment noise, offensive visual blight, and air pollution from dust clouds and exhaust fumes.

For all of these reasons provided please deny the LL-1533 application.

If you have any questions or concerns regarding this letter, feel free to contact Jeremiah J. Puget, Environmental Scientist of my staff, at (707) 576-2835.

Sincerely,

Original signed by David Leland for

Matthias St. John Executive Officer

 $140708\_JJP\_dp\_NFSmithRiver\_WaterRightComment\_Ltr$ 

#### Web link: SWRCB Order WR 98-08

http://www.waterboards.ca.gov/waterrights/board\_decisions/adopted\_orders/19 98/wro98-08.pdf

cc: Oregon Governor John Kitzhaber, 160 State Capitol, 900 Court Street NE, Salem, OR 97301 California Governor Edmund G. Brown Jr., c/o State Capitol, Suite 1173, Sacramento, CA 95814 Senator Jeff Merkley, 495 State Street, Suite 330, Salem, OR 97301 Representative Peter DeFazio, 125 Central Avenue, Suite 350, Coos Bay, OR 97420 Representative Jared Huffman, 999 Fifth Avenue, Suite 290, San Rafael, CA 94901 Felicia Marcus, Chair SWRCB, Felicia.Marcus@waterboards.ca.gov Tom Howard, Executive Director, SWRCB, <u>Tom.Howard@waterboards.ca.gov</u> Tina Lanier, District Ranger, Gold Beach Ranger District, 29279 Ellenburg Avenue, Gold Beach, OR 97444 Robert Shoemaker, Wild Rivers Ranger District, 2164 N.E., Spalding Avenue, Grants Pass, OR 97526 City Manager of Crescent City, Eugene Palazzo, City Hall 377 J Street, Crescent City, CA 95531 Big Rock Community Services District, 2680 US Highway 199, Crescent City, CA 95531 Gasquet Community Services District, 250 Middle Fork Gasquet Road, Gasquet, CA 95543 Jerry Sauter, Oregon Water Resources Department, jerry.k.sauter@wrd.state.or.us Pam Blake, Oregon Water Resources Department, BLAKE.Pam@deg.state.or.us Michael Van Hattem, California Department of Fish and Wildlife Michael.vanHattem@wildlife.ca.gov



### Curry County Board of Commissioners

David Brock Smith, *Chair* Susan Brown, *Vice Chair* David G. Itzen, *Commissioner*  94235 Moore Street/Suite #122 Gold Beach, OR 97444 541-247-3296, 541-247-2718 Fax 800-243-1996 www.co.curry.or.us

December 12, 2013

Tina C. Lanier Gold Beach Ranger District, 29279 Ellensburg Avenue, Gold Beach, OR 97444

Dear Tina C. Lanier:

The Curry County Board of Commissioners (BOC) passed an Amendment to the Curry County Code adding a New Article One, Division Fourteen relating to a Federal Coordination Policy, August 7<sup>th</sup>, 2013. This Policy, under Section 1.14.010, subsection (1) asserts additional coordination as outlined in the FLPMA and NFMA to, "provide early and frequent opportunities for.... local governments to participate in the planning process". The purpose of the Federal Coordination Policy, as outlined in Section 1.14.020, is that Curry County asserts its maximum rights to coordination, as provided by law, with all federal agencies conducting activities in or affecting Curry County. The policies contained in the Federal Coordination Policy are enacted with the express intent of developing meaningful and productive relationships with the federal agencies that coordinate with Curry County.

Section 1.14.030, Subsection (3) outlines the Federal Coordination Policy Mining Policies. The Curry County Board of Commissioners agrees that the proposed project to be conducted by the Red Flat Nickel Corporation will cause serious negative externalities to the project location at the headwaters of the free flowing Hunter Creek and Pistol River watersheds. If allowed to be developed; the BOC also recognizes there will be serious negative impacts to the surrounding area, restriction of access to popular recreational areas, degradation of the rare and unique botanical resources, as well as the health risks to the residents and wildlife. The BOC places higher values on its citizens health and safety, the many recreational uses of the Red Flat area as well as the highly prized Hunter Creek and Pistol River fisheries for wild Chinook and Coho Salmon, Steelhead, Cutthroat and resident trout than on the foreign owned Red Flat Mining Corporation interests. Furthermore, the BOC feels this proposed project is not in line with a number of other Curry County policies outlined within the Federal Coordination Policy.

This letter is the Curry County BOC formal opposition of any permit issued to the Red Flat Nickel Corporation. A copy of Article One, Division Fourteen and Exhibit A, Curry County Federal Coordination Policy is included for your reference. Thank you for your attention in this matter.

Sincerely,

David Brock Smith, Chair

Susan Brown, Vice Chair

David Itzen, Commissioner

cc: Senator Wyden Senator Merkley Congressman DeFazio State Senator Kruse State Representative Krieger BLM District Manager Patricia Burke

#### BILL NUMBER: SJR 3 CHAPTERED BILL TEXT

RESOLUTION CHAPTER 93 FILED WITH SECRETARY OF STATE JULY 6, 2015 ADOPTED IN SENATE JULY 2, 2015 ADOPTED IN ASSEMBLY JUNE 25, 2015 AMENDED IN ASSEMBLY JUNE 25, 2015 AMENDED IN SENATE APRIL 6, 2015 AMENDED IN SENATE MARCH 17, 2015

INTRODUCED BY Senator McGuire (Principal coauthor: Senator Pavley) (Principal coauthor: Assembly Member Wood) (Coauthors: Senators Allen, Hertzberg, and Leno) (Coauthors: Assembly Members Dodd, Levine, Mark Stone, Williams, Alejo, Atkins, Bloom, Bonilla, Burke, Campos, Chau, Chiu, Chu, Cooley, Cooper, Dababneh, Daly, Eggman, Cristina Garcia, Eduardo Garcia, Gatto, Gipson, Gomez, Gonzalez, Gordon, Gray, Holden, Irwin, Jones-Sawyer, Lopez, Low, Maienschein, McCarty, Medina, Mullin, Nazarian, O'Donnell, Perea, Quirk, Rodriguez, Salas, Santiago, Thurmond, Ting, and Weber)

#### JANUARY 21, 2015

Relative to the Smith River watershed.

#### LEGISLATIVE COUNSEL'S DIGEST

SJR 3, McGuire. Smith River watershed protection.

This measure would urge the President of the United States and Congress to permanently safeguard the currently unprotected North Fork of the Smith River watershed in Oregon from any mining activities that would have the potential impacts on water supplies, economies, or the environment in California's portion of the Smith River watershed.

WHEREAS, The Smith River watershed of approximately 610 square miles in California and 115 square miles in Oregon has been considered the prize of the California wild and scenic river system since the time it was included in the California Wild and Scenic Rivers Act in 1972, and then later included in the National Wild and Scenic Rivers System in 1981; and

WHEREAS, The Smith River is the indirect primary source of drinking water for the majority of Del Norte County's 28,000 residents, with the largest user being the City of Crescent City; and

WHEREAS, The Del Norte County Board of Supervisors and the City Council of Crescent City have voted unanimously to oppose the issuance of a limited water use license for the Cleopatra Check Drilling Program based on the potential to cause significant adverse environmental impacts within the overall watershed of the Smith River and subsequent impacts on drinking water for residents and thousands of annual visitors; and

WHEREAS, The California North Coast Regional Water Quality Control Board, the Department of Fish and Wildlife, the Natural Resources Agency, and the Oregon Water Resources Department have also opposed any mining within the Smith River watershed because of the detrimental effects of strip mining; and

WHEREAS, The Smith River is unparalleled for its free-flowing status, large and abundant salmon and steelhead stock, and extraordinary botanical diversity, and is the only major undammed river in California; and

WHEREAS, The Smith River National Recreation Area Act, passed by the 101st United States Congress in 1990 (Public Law 101-612), amended the federal Wild and Scenic Rivers Act of 1968 and permanently protected all federal lands of the Smith River watershed within California by establishing the Smith River National Recreation Area; and

WHEREAS, The Oregon portion of the North Fork of the Smith River was not included in the act and remains vulnerable to mining; and

WHEREAS, Any strip mining activities on the North Fork of the Smith River could have devastating and irreversible impacts to the entire National Wild and Scenic Smith River watershed; and

WHEREAS, In 2012, the Red Flat Nickel Corporation submitted the Cleopatra Check Drilling Program Plan for the watershed of the North Fork of the Smith River to the Rogue River-Siskiyou National Forest, with the goals to develop and operate a devastating 3,980-acre strip mine to extract nickel, cobalt, and chromium; and

WHEREAS, The proposed mining operations will unnecessarily put the people and wildlife that rely on the Smith River at risk; and

WHEREAS, The United States Environmental Protection Agency has confirmed that hard rock mining, which includes strip mining, is the largest source of toxic pollution in the United States; and

WHEREAS, The United States Department of Agriculture's Technical Guide to Managing Ground Water Resources documents numerous published reports concerning the release of toxic metals to groundwater and surface water resulting from mines and mine-related facilities; and

WHEREAS, Mining operations along the tributaries of the Smith River would inevitably impact water quality and quantity with the potential to cause significant injury to fish and other wildlife, including threatened coho salmon; and

WHEREAS, The Smith River's coho salmon are protected under the federal Endangered Species Act and are recognized as a core independent population with a high risk of extinction; and

WHEREAS, The Smith River is one of California's most important, irreplaceable watersheds for the threatened coho salmon; and

WHEREAS, The Chinook salmon, cutthroat trout, and steelhead runs are vitally important to the economies and environment of northern California and Oregon; and

WHEREAS, Millions of federal, state, and private dollars have been spent in the past decades on improving water supply systems and for restoration and protection of salmonid habitat and watershed lands downstream from the proposed mining operations; now, therefore, be it

Resolved by the Senate and the Assembly of the State of California, jointly, That the Legislature urges the President of the United States and Congress to permanently safeguard the currently unprotected North Fork of the Smith River watershed in Oregon from any mining activities that would have potential impacts on water supplies, economies, or the environment in California's portion of the Smith River watershed; and be it further

Resolved, That the Secretary of the Senate transmit copies of this resolution to the author for appropriate distribution.

## **McGuire's resolution protecting the Smith River passes**

#### SJR 3 urges Congress to permanently safeguard the river from strip mining

#### July 9, 2015

*Sacramento, CA* – A Senate Joint Resolution authored by Senator Mike McGuire protecting the Smith River watershed from strip-mining was made official last week after approval on both the Assembly and Senate floors.

North Coast Senator Mike McGuire advocated for Smith River protection by urging his fellow legislators to help him ensure the state's premiere wild and scenic river would be protected from the devastating effects of a proposed strip-mining operation along the North Fork of the Smith River in southern Oregon, just over the California border.

#### "Any future mining activities will unnecessarily put the people and wildlife that rely on the Smith River at risk and would create irreversible impacts to the entire watershed," Senator McGuire said.

The resolution originally passed in the Senate in April, and was up for a full floor vote in the Assembly when, in a show of solidarity for the North Coast, 42 members of the State Assembly added their names as co-authors of the resolution. The resolution went back to the Senate for final approval with the new co-author requests and was finally approved last week.

SJR 3 – the **Smith River Watershed Protection** measure – urges the President of the United States and Congress to permanently safeguard the currently unprotected North Fork of the Smith River watershed in Oregon from any mining activities.

Recently, the Panama-based Red Flat Nickel Corporation submitted a plan to drill up to 59 test mine shafts on 3,980 acres, which could allow for one of the largest nickel, cobalt and chromium mines in the Western United States. Any mining would have irreversible negative impacts to water supplies, the North Coast's economy and the environment in California's portion of the Smith River Watershed.

# "Mining of any kind in the Smith River Watershed is simply unacceptable. I will work tirelessly to protect our river, which is one of the premier salmon fisheries in the lower 48 states and the source of drinking water for tens of thousands of residents in Del Norte County, including Crescent City," said McGuire.

The Smith River is the primary source of drinking water for the majority of Del Norte County's 28,000 residents, and is a crucial waterway for the endangered Coho salmon and other important fish runs. The Smith also offers a multitude of recreational activities that are a primary driver of the Del Norte economy.

Support for the resolution is broad and includes the United States Department of the Interior, California State Parks, the Crescent City Council, Del Norte Board of Supervisors, the Smith River and Elk Valley Rancherias, Trout Unlimited and many more.

