



Preliminary Decision Memo

RF-38 Test Drilling for Red Flat Nickel Corporation

Rogue River-Siskiyou National Forest Service
Gold Beach Ranger District
Curry County, Oregon

Project website: http://www.fs.fed.us/nepa/nepa_project_exp.php?project=41652

Introduction

We have received a plan of operations from Red Flat Nickel Corporation to drill 35 holes, 3-inches in diameter and a maximum of 50 feet deep. The purpose is to obtain core samples to test for minerals on the proponent's existing claims on Forest Service lands. Drilling would be in previously disturbed areas and a minimum of 200 feet from perennial or intermittent streams or springs. Drill sites cover a cumulative area of less than one acre. No road construction or reconstruction would occur. All activities would take place on the Gold Beach Ranger District of the Rogue River-Siskiyou National Forest.

We prepared this preliminary decision memo (DM) to determine whether extraordinary circumstances exist which would preclude the use of a categorical exclusion to allow implementation of this test drilling. By preparing this decision memo, we are fulfilling agency policy and direction to comply with the National Environmental Policy Act (NEPA).

Proposed Project Location

Map - Figure 1 displays the perimeter of the project area and the vicinity of proposed activities. Drill locations are approximately 500 feet apart on or adjacent to existing classified and unclassified roads. Many unclassified roads are not mapped.

The project area is located approximately eight miles east-southeast of the city of Gold Beach, Curry County, Oregon. The area is known as Red Flat and lies within the Hunter Creek and North Fork Pistol River watersheds. Lands are entirely managed by the Forest Service. Access is via Hunter Creek Road (NFS 3680) to NFS 1703 road. The legal description is: Township 37 South, Range 13 West - Sections 18, 19, 30, 31 and 32 (Willamette Meridian).

All proposed drilling would occur on previously disturbed ground, such as on the side of open roads or within the bed of non-system, low use roads. Drill sites are within the perimeter of the existing minerals claims; an area of approximately 1100 acres.

The Red Flat area was extensively explored for minerals up to about 1978. As a result, there are numerous non-designated secondary (unclassified) roads that were constructed for exploration activities. Many of these remain open and passable by 4x4 vehicles. In addition, there are a number of east-west trending trenches that were excavated in the area.

Figure 1. Map of project area and vicinity.

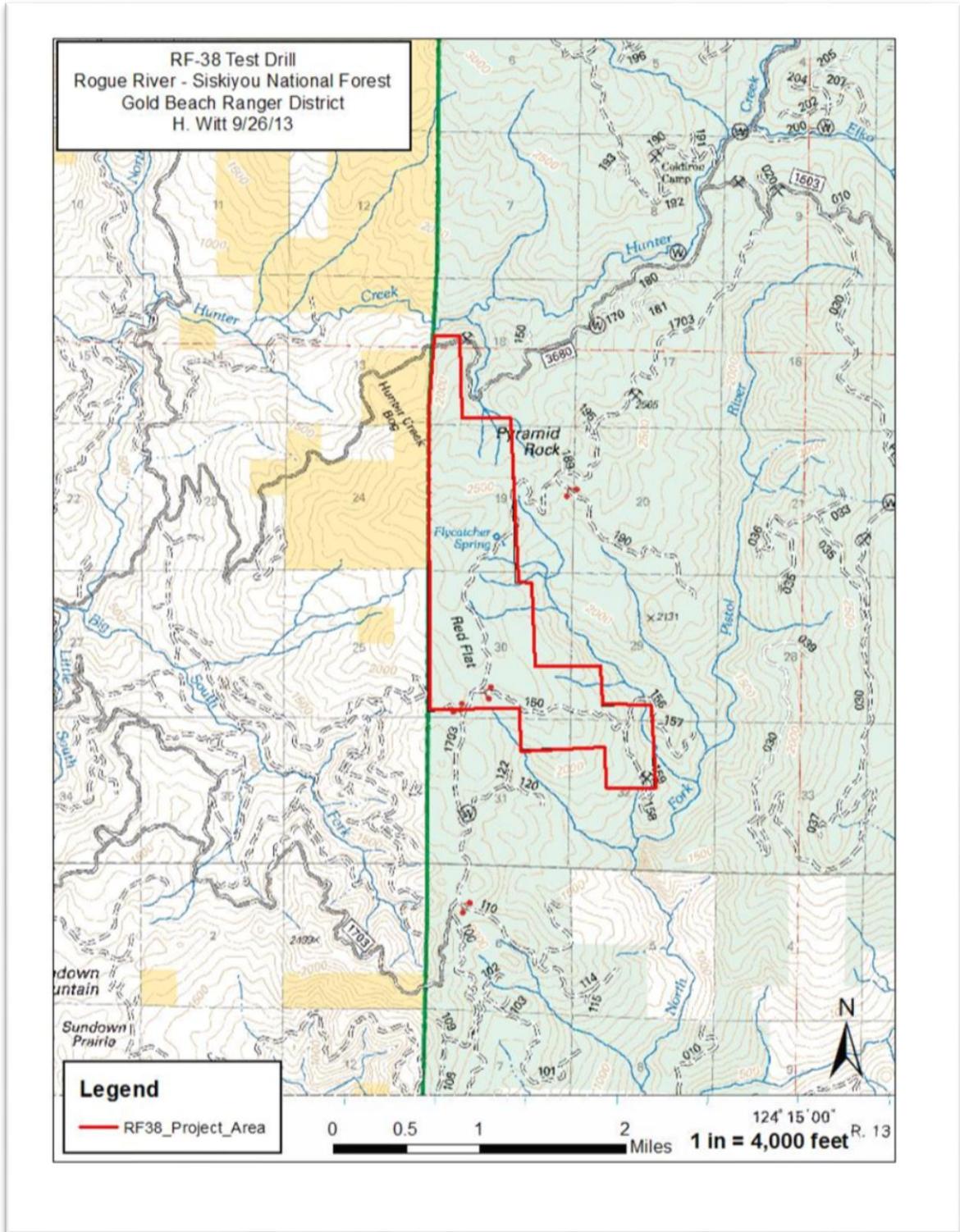
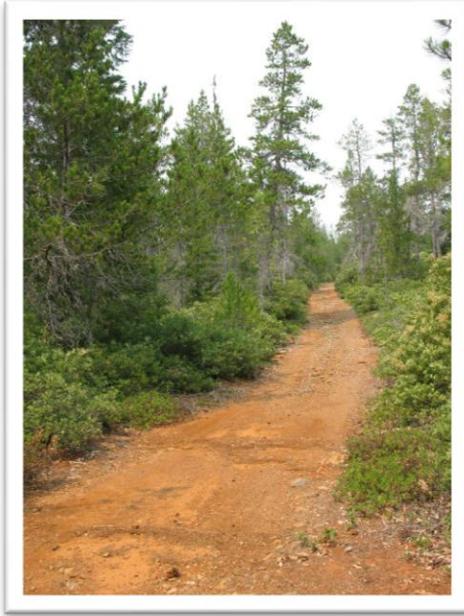


Figure 2. Geology and vegetation.



Geology and vegetation (Figure 2) - The project area is primarily composed of lateritic soils with outcrops of serpentinite and peridotite rocks. Overstory vegetation consists primarily of Port-Orford-cedar, Douglas fir and Jeffrey pine. Understory vegetation is primarily manzanita species, tanoak, huckleberry oak, and myrtlewood (shrub form).

Land use designations – The project area is within lands designated as late seral reserve and matrix in the Northwest Forest Plan (USDA Forest Service and USDI Bureau of Land Management 1994). The Red Flat Botanical Area was designated in the “Siskiyou National Forest Land and Resource Management Plan” (USDA Forest Service 1989b).

Special designations – The Red Flat Botanical Area is within the project area at T37S-R13W-Sections 18 and 19. It is contiguous with the east edge of the

Hunter Creek Bog ACEC (Area of Critical Environmental Concern) on BLM (Bureau of Land Management) lands. Flycatcher Springs is also located in Section 19.

Purpose and Need

There is a need for the Forest Service to respond to the claimant’s plan of operations (dated November 8, 2012) to test drill for minerals on National Forest System lands open to mineral entry. Our goal is to ensure proposed activities would be conducted “so as, where feasible, to minimize adverse environmental impacts on National Forest surface resources” by regulating functions, work, and activities connected with developing locatable minerals on National Forest System land (36 CFR 228.8).

Management Direction

This document only includes actions over which the Forest Service has discretion. The decision is not whether to allow minerals exploration (because current law already authorizes those and other mining activities) but whether additional protection measures are warranted to minimize adverse environmental impacts to Forest Service resources.

Therefore, the Forest Service is conducting this environmental review in response to the proposed plan of operations submitted by the proponents and in fulfillment of specific requirements set forth in subpart A of the Forest Service’s minerals regulation (36 CFR 228). This review satisfies the agency’s ongoing stewardship responsibility for National Forest System lands.

Code of Federal Regulations (36 CFR 228) - The Forest Service is neither advocating nor proposing the claimant’s plan of operations. The claimant initiated this minerals exploration proposal and has a possessory right to conduct mineral exploration and extraction operations on their claims.

However, the regulations at 36 CFR 228 create a dual need for Forest Service action as follows:

1. The agency is legally required to respond to the proponent's request to conduct exploration and related activities in the submitted plan of operations (36 CFR 228.5).
2. The agency is required to ensure that "All operations are conducted so as, where feasible, to minimize adverse environmental impacts on National Forest surface resources..." (36 CFR 228.8).

The Forest Service applies regulations found at 36 CFR 228.4(a). They provide the requirements for authorizing mining operations, conducting environmental analyses to assess the impacts of the operation, applying terms and conditions to minimize impacts to surface resources, and requiring bonding where appropriate for restoration of affected lands. Presuming other applicable state and federal laws are met, mining is authorized under 36 CFR 228.4(a) after the Forest Service completes its analysis, applies its terms and conditions, and collects bonding (if necessary).

Siskiyou LRMP - Authorizing mining activities on National Forest System lands is based on management direction from the *1989 Siskiyou National Forest Land and Resource Management Plan* (Siskiyou LRMP), as amended, to "facilitate mineral exploration and development while protecting surface resources and environmental quality" (p. IV-2)(USDA Forest Service 1989a).

Mining Law, Regulation, and Policy

The General Mining Law of 1872 (17 Stat. 91; 30 U.S.C. § 21 et seq.) grants a statutory right to enter upon public lands to prospect, explore, develop, mine, or process mineral resources, unless the lands in question are withdrawn from entry. While the law has been amended or supplemented by the Multiple Use Mining Act of 1955 (69 Stat. 368; 30 U.S.C. § 612), the Mining and Minerals Policy Act of 1970 (84 Stat. 1876; 30 U.S.C. § 21a), and other statutes, much of the nation's public lands remain "free and open" to United States citizens for mineral exploration (30 U.S.C. § 22).

Under current mining law, citizens of the United States are authorized to file mining claims, conduct mining operations on those claims, and hold conditional property rights (conditioned on compliance with applicable law and regulation) to the locatable minerals extracted from these claims. Under this law and related case law, the United States Department of Agriculture (USDA) Forest Service has no authority to prohibit an otherwise reasonable plan of operations for such mining (i.e., one that can be characterized as the logical next step in the orderly development of a mine). For example, reasonable operations often begin with small-scale sampling, followed by larger scale sampling, then on to small-scale production for bulk testing purposes, and then perhaps launching into a large-scale development. The idea is that each successive phase is justified by the value of the minerals found in the prior smaller phase of operation. The minerals exploration operation being evaluated here is determined to be a reasonable operation in this orderly development process.

Public Involvement and Consultation

The RF-38 Test Drill project was first made available to the public on April 1, 2013, with publication of the SOPA (schedule of proposed actions) for the Rogue River-Siskiyou National Forest (<http://www.fs.fed.us/sopa/forest-level.php?110610>).

We consulted with (or reviewed consultation requirements for) the following agencies during the development of this decision memo:

- *Confederated Tribes of the Siletz* - Consultation with the Siletz Tribe occurred. No responses have been received to date.
- *U. S. Fish and Wildlife Service* - No consultation is needed with USF&WS because no effects would occur that might impact federally-listed species.
- *National Marine Fisheries Service* - No consultation is needed with NMFS because no effects would occur that might impact federally-listed anadromous fish species.

Proposed Action

A detailed description of the proposed action is contained within the plan of operations (dated November 8, 2012) submitted to the Forest Service, and is incorporated herein. The following summarizes that plan.

Key Activities

- Drill 35 3-inch diameter holes to a maximum depth of 50 feet to obtain core samples for testing from previously disturbed areas in, or adjacent to, existing classified and unclassified roads.
- Brush and remove down trees from approximately 1200 feet of existing unclassified road within the road template.
- No new road construction or road reconstruction would occur.
- Reclaim drilling locations to their original condition, as closely as possible.

The Forest Service received a plan of operations from Red Flat Nickel Corp. to drill 35 holes to obtain core samples of minerals on their claims ORMC #161335-161434. These claims are in the area known as Red Flat in the Hunter Creek and Pistol River watersheds. Operations would occur over a 4 to 6 week period (45 days maximum). No road construction or new ground disturbance would occur. Approximately 1200 feet of brushing and down log clearing within the road prism is needed along one existing unclassified road in T37S-R13W-Section 19.

The 35 drill sites would be in previously disturbed areas adjacent to existing secondary roads (unclassified by Forest Service) on bare lateritic soils, free of vegetation. A total of approximately one acre would be occupied over the life of the project with no more than one-tenth acre occupied at any one time. Each drill hole would be 3-inches in diameter and drilled to a maximum depth of 50 feet. Project activities and visual impacts would not generally exceed 2 days per hole.



A low impact, light drilling rig (Figure 3) would be moved to each site by truck and lifted by boom onto a temporary 4-foot by 11-foot raised metal platform. Prior to beginning drilling at the next location, sealing of the hole, spreading of drill cuttings to blend with the natural slope, and removal of all equipment and materials would occur.

Fuel and petroleum products would be used in equipment and vehicles. Appropriate spill

prevention and containment measures would be employed.

Municipal water would be used during drilling operations (up to 1,000 gallons per drill hole; up to 35,000 gallons total). Potable water would be purchased from a municipal source (likely Gold Beach) and transported to the site via truck and either stored in the truck or in a 5,000 gallon water tank. If needed, two drilling additives (Bio-Cut Plus and DD2000) might be mixed with the water to improve sample recovery or maintain drill-hole stability. The proponent indicates that both additives are non-hazardous and biodegradable (MSDS on file; no hazards indicated).

Protection Measures Summarized from the Plan of Operations

In the plan of operations, the proponent states they would implement measures to prevent or minimize impacts to surface resources. The complete list is described in the plan of operations, but is summarized as follows:

1. Comply with the requirements for environmental protection described in 36 CFR 228.8 for: a) air quality; b) water quality; c) solid wastes; d) scenic values; e) fisheries and wildlife habitat; f) roads; and g) reclamation (which includes control of erosion, water runoff, and toxic materials; reshaping and revegetation of disturbed areas; and the rehabilitation of fish and wildlife habitat). (Plan of Operations, section V.)

Water and soil resources

2. Only water of domestic drinking quality would be used and brought from an off-site municipal source.
3. Drill holes would be a minimum of 200 feet from any intermittent or perennial springs or watercourses. In addition, an absorbent barrier would be installed between any equipment and a watercourse. No drill holes would occur within 300 feet of Hunter Creek Bog or within the Flycatcher Springs area.
4. Spill containment materials and trays would be used under equipment. Spill response kits would be readily available.
5. Best management practices (BMPs) would be followed to limit potential erosion. No water is anticipated to return to the surface during the drilling process because of porous soils; however, in the event it does, the water would be directed away from the drilling location and allowed to naturally infiltrate.
6. Drill holes will be plugged and abandoned immediately after completion in accordance with Oregon Administrative Rules (OAR) 690-220-0030 and OAR 632-033-0025.
7. Excess soil would be spread to a maximum depth of one inch and the natural grade restored.

Port-Orford-cedar root disease (*Phytophthora lateralis*)

8. Vehicles would be thoroughly cleaned prior to entering areas gated to prevent the spread of Port-Orford-cedar root disease.

Areas of significance

9. Hunter Creek Bog ACEC and Flycatcher Springs - No drilling or associated activities would occur in the Flycatcher Springs area or within 300 feet of the Hunter Creek Bog ACEC boundary.

Permits

Exploration and mining operations commonly have environmental requirements enforced by state and federal permits. It is the responsibility of the operator to obtain and maintain all necessary permits and to comply with all their regulations. Possible permits include, but are not limited to, an exploration permit from Oregon Department of Geology and Mineral Industries (DOGAMI).

Mitigation Measures

The Forest Service has identified the following additional design and mitigation measures (Table 1) needed to minimize adverse environmental impacts to surface resources. These measures are in addition to those proposed by the proponent and will be incorporated into the final plan of operations and adhered to by the operator(s). These measures would be effective in protecting sensitive species and reducing the risk of spreading Port-Orford-cedar root disease and weeds.

Table 1. Additional design and mitigation measures.

No.	Resource	Description	Applicable Dates
1	Botany	Invasive plants - Make sure all machinery is clean and free of invasive plant seed by spraying under carriages and wheel wells of vehicles with a pressure sprayer before driving on site.	All
2	Botany	Sensitive plants – Protect sensitive plant species and, to the extent possible, avoid botanical areas (such as Red Flat Botanical Area).	All
3	Fish	No additional measures.	None
4	Wildlife	Spotted owl : Within 65 yards of nest sites or habitat, no project activities March 1 through September 30. Currently no suitable nesting habitat or nest sites are known within disturbance distances (65 yards) of proposed activities. If potential habitat or owls are discovered, apply restrictions and notify the Forest Service wildlife biologist.	1 Mar. – 30 Sept.
5	Wildlife	Marbled murrelet – Within 120 yards of suitable habitat or occupied sites, no project activities April 1 through September 15. Currently no nesting habitat or occupied sites are known within disturbance distances (120 yards) of proposed activities. If potential habitat or murrelets are discovered, apply restrictions and notify the Forest Service wildlife biologist.	1 April – 15 Sept.
6	Port-Orford-cedar	<ul style="list-style-type: none"> a. Project scheduling - Schedule test drilling to occur during the dry season (generally June 1 – Sept. 30). If not possible, contact the Forest Service POC specialist. b. Unit scheduling – Conduct drilling work in uninfested areas prior to working in areas infested with <i>Phytophthora lateralis</i>. c. Wash project equipment – Wash project equipment prior to working in uninfested areas and/or after working in infested areas. d. Utilize uninfested water – Use uninfested water source for equipment washing or treat water with Clorox bleach to prevent/reduce the spread of POC root disease (use one gallon Clorox Ultra bleach per 1,000 gallons of water). 	All
7	Port-Orford-cedar	FS Road #1703-150 use from Oct. 1-May 31 requires a waiver: For activities during the wet season (October 1 to May 31), obtain a POC waiver from FS prior to drilling on this road.	1 Oct. – 31 May

Reasons for Categorical Exclusion

No extraordinary circumstances exist which preclude use of a categorical exclusion (CE); therefore, this proposal is excluded from further analysis.

Project activities fall within CE category 32.2(8) from Forest Service Handbook 1909.15 as quoted below:

(8) Short-term (1 year or less) mineral, energy, or geophysical investigations and their incidental support activities that may require cross-country travel by vehicles and equipment, construction of less than 1 mile of low standard road, or use and minor repair of existing roads. 36 CFR 220.6(e)(8).

Relationship to Extraordinary Circumstances¹

The following resource conditions have been considered in determining whether extraordinary circumstances related to the proposed action warrant further analysis and documentation in an environmental assessment (EA) or environmental impact statement (EIS). This section summarizes the results of resource reports and biological evaluations included in the project record.

(1) Federally listed threatened or endangered species or designated critical habitat, species proposed for Federal listing or proposed critical habitat, or Forest Service sensitive species.

Per the Endangered Species Act (ESA) of 1973, as amended, federal activities cannot jeopardize the continued existence of any species listed or proposed for listing, nor result in the adverse modification of that species' critical habitat. Proposed activities would be in compliance with the provisions of that act.

Plants – There is one ESA-listed plant species with potential habitat in the project area: Red Mountain rockcress (*Arabis macdonaldiana*). There would be **no effect** on this species because surveys were conducted and there is no suitable habitat at the proposed drilling sites.

There are three Forest Service sensitive plant species with potential habitat in the project area: Waldo gentian (*Gentiana setigera*), Veva's erigeron (*Erigeron stanselliae*), and Western bog violet (*Viola primulifolia* ssp. *occidentalis*). None of these species were found to be directly in harm's way of proposed test drilling. Should additional sensitive plants be found, they would be protected (Table 1, #2). Because of the small scale of the proposed drilling (0.69 acre), anticipated effects (if any) on plant species would be inconsequential at the population level.

The Red Flat Botanical Area contains three proposed drilling sites. There would be **no effect** on sensitive botanical species because no plants were located during surveys within the area of drilling sites.

¹ Forest Service Handbook 1909.15 Sec. 31.2: *The mere presence of one or more of these resource conditions does not preclude use of a categorical exclusion (CE). It is the existence of a cause-effect relationship between a proposed action and the potential effect on these resource conditions and if such a relationship exists, the degree of the potential effect of a proposed action on these resource conditions that determine whether extraordinary circumstances exist. (36 CFR 220.6(b)).*

The potential to spread non-native invasive plant species would be negligible because vehicles would be washed and cleaned of invasive plant material before driving on site (Table 1, #1).

Fish - The proposed activities will have **no effect** on threatened, endangered or sensitive fish species and is in compliance with the Aquatic Conservation Strategy. There would be no measurable effects on fish species or their habitats because no drilling or other project activities would occur within 200 feet of any intermittent or perennial springs or watercourses. In addition, an absorbent barrier would be installed between any equipment and a watercourse. No drill holes would occur within 300 feet of Hunter Creek Bog or in the Flycatcher Springs area. Best management practices (BMPs) would be followed to limit potential erosion. No water is anticipated to return to the surface during the drilling process because of porous soils; however, in the event it does, the water would be directed away from the drilling location and allowed to naturally infiltrate. Drill holes will be plugged and abandoned immediately after completion.

Wildlife - There would be **no effect** on ESA- listed wildlife species (northern spotted owl and marbled murrelet) or their habitat from the proposed activities as mitigated (Table 1).

Habitat for owls and murrelets would not be measurably affected because no trees would be removed or altered and project activities would occur in previously disturbed areas within the road prism. A portion of the project area is in designated critical habitat for murrelets, but there will be no effects to the primary constituent elements of murrelet habitat (large trees with platforms).

Disturbance to owls and murrelets is not expected to occur because no suitable nesting habitat has been identified within disturbance distances of proposed activities. Beyond these distances, effects from disturbance would not be measurable. If potential habitat or birds are discovered within disturbance distances, activities would cease during the breeding season (Table 1, #4 and #5) or drilling sites would be moved.

Other Forest Service sensitive wildlife species or their habitat would not be measurably impacted because no trees or sensitive habitat types would be removed or altered, drilling would occur in roads and previously disturbed areas, and drilling is of small scale (less than one acre cumulative over 35 drill sites) and short duration (≤ 2 days at each drill site). No aquatic species would be impacted because drilling would not occur within 200 feet of water and spill containment measures would be employed.

Disturbance effects to other species from drilling would be minimal at distances of greater than 100 feet from the drill site. Sound levels for the Viper drill averaged 65.9 dB (decibels) at 100 feet (99.0 dB at 1 foot), as tested by the project proponent. This sound level is comparable to a normal conversation at 3 feet (which is 60-65 dB)².

(2) Flood plains, wetlands, or municipal watersheds.

Floodplains – There would be no effects on floodplains because activities would not occur in or modify floodplains. The purpose of Executive Order 11988 is to avoid adverse impacts associated with the occupancy and modification of floodplains.

² Source: <http://www.gcaudio.com/resources/howtos/loudness.html>. Accessed 10/22/13.

Wetlands – There would be no effects on wetlands because activities would not occur in or adjacent to wetlands. The purpose of Executive Order 11990 is to avoid adverse impacts associated with destruction or modification of wetlands.

Municipal watersheds – There would be no effects on municipal watersheds because no water will be extracted or vegetation removed during project activities. A maximum of 35,000 gallons municipal water would be purchased and transported by a water truck to the project area to be used during drilling operations (up to 1000 gallons per drill hole).

(3) Congressionally designated areas such as wilderness, wilderness study areas, or national recreation areas.

There would be no effects on congressionally designated areas because none are located in or adjacent to the project area.

(4) Inventoried roadless areas or potential wilderness areas.

There would be no effects on roadless or potential wilderness areas because none are located in or adjacent to the project area.

(5) Research natural areas.

There would be no effects on native religious or cultural sites within the project area. The Forest consulted with the Confederated Tribes of the Siletz Indians of Oregon for their concerns regarding the project. No concerns were noted.

(6) American Indians and Alaska Native religious or cultural sites.

There would be no effects on native religious or cultural sites within the project area because sites were not located during surveys and are not known to occur in the project area.

(7) Archaeological sites, or historic properties or areas.

There would be no effects on archaeological sites or historic properties because none were located during surveys, and known properties in the area do not lie in the project's area of potential effect (APE).

Consistency Findings

I find activities proposed in the RF-38 Test Drilling project to be consistent with direction in the 1989 Siskiyou National Forest Land and Resource Management Plan, as amended. This action has been analyzed under other laws, regulations and agreements applicable to the management of National Forest System lands and resources, including: 16 USC 1604(g)(3), 36 CFR 219.14 and 36 CFR 219.27 (b). I find this decision to be consistent with the National Environmental Policy Act of 1969 (NEPA); the Council on Environmental Quality regulations for implementing NEPA, 40 CFR 1500-1508, July 1, 1986; the Multiple-use Sustained Yield Act of 1960; and the National Forest Management Act of 1976. I also find this project to be in compliance with the Endangered Species Act of 1973, as amended, and the Historic Preservation Act.

My Decision and Rationale

My decision does not grant approval to begin project activities. A final plan of operations will be authorized after the proponent agrees to implement and incorporate the additional mitigation measures described in Table 1 into their plan of operations of November 8, 2012.

It is my decision to authorize this action based on my review of the site evaluation and effects analysis completed by resource specialists. Specialists have determined activities will have negligible (or no measurable) adverse effects on botanical, wildlife, fish, cultural, water, and other resources. Effects would be minimal in part due to the effectiveness of the mitigation measures proposed by specialists in Table 1.

I have found that a categorical exclusion is appropriate because, while extraordinary circumstances are present, effects on resources are minimal. My decision is based on the limited context, duration, and intensity of this project as detailed in specialist reports and summarized above ([relationship to extraordinary circumstances](#)). I concur with specialists that implementation will result in little or no adverse environmental effects to the physical, biological, or social components of the environment.

Administrative Review (Appeal) Opportunities

Only those who provide comment or express interest in this proposal during this comment period will be eligible to appeal the decision pursuant to 36 CFR part 215 regulations. Comments will be accepted for 30 calendar days following the publication of the legal notice of availability of this document in the Curry County Reporter, Gold Beach, Oregon.

In light of a recent court ruling ([Sequoia ForestKeeper v. Tidwell](#), 11-cv-00679-LJO-DLB (E.D. Cal.)), the Forest Service is providing public notice, comment, and opportunity for administrative appeal for projects and activities documented with a “Decision Memo” (36 CFR 220.6(e)) until new instructions are issued by the Washington Office, or the Agency issues regulations addressing the Court’s ruling.

Implementation Date

The RF-38 Test Drill Project will not be implemented before 50 calendar days following the publication of a legal notice of my final decision in the Curry County Reporter. If appeals are filed, implementation can occur on or after the 15th business day following the date of the last appeal disposition.

Contact

Additional information regarding this decision may be obtained at the Gold Beach Ranger District, 29279 Ellensburg Avenue, Gold Beach, OR 97444. You may also contact Holly Witt (Environmental Coordinator) at (541) 247-3688 or email hfwitt@fs.fed.us. Documents are also available at: http://www.fs.fed.us/nepa/nepa_project_exp.php?project=41652.

Tina C. Lanier
District Ranger

Date

References

USDA Forest Service. 1989a. Final EIS - Land and Resource Management Plan - Siskiyou National Forest. Portland, OR: USDA Forest Service, Pacific Northwest Region.

USDA Forest Service. 1989b. Land and Resource Management Plan - Siskiyou National Forest. Portland, OR: USDA Forest Service, Pacific Northwest Region.

USDA Forest Service; USDI Bureau of Land Management. 1994. [Northwest Forest Plan] Record of decision for amendments to Forest Service and Bureau of Land Management planning documents within the range of the northern spotted owl [and] standards and guidelines for management of habitat for late-successional and old-growth forest related species within the range of the northern spotted owl. 1 vols. Portland, OR.