
Appendix D. Port-Orford-Cedar Risk Assessment and Root Disease Control Strategy

Big Flat Vegetation and Fuel Management Project Smith River National Recreation Area Six Rivers National Forest June 2008

PROJECT DESCRIPTION

The Six Rivers National Forest proposes to manage vegetation and hazardous fuels on approximately 1,824 acres of conifer/hardwood stands and a meadow through commercial timber harvesting, timber stand improvement, and fuel reduction treatments. The project would take place on National Forest System lands administered by the Smith River National Recreation Area (NRA) in Del Norte County, California. The proposed project area is located in the vicinity of the Big Flat community and drains into the South Fork Smith River, Jones Creek, and Hurdygurdy Creek. The planning area occurs in portions of the following townships: Township 15 North, Range 2 East; and Township 15 North, Range 3 East; Humboldt Meridian. The planning area is subdivided into three subdivisions: Grande, Jones, and South.

All treatment units were evaluated for the presence of Port-Orford-cedar (POC) in or adjacent to the unit. Mitigation measures were applied where possible. In cases where it was not possible to mitigate the impacts to POC, the units were dropped.

MANAGEMENT DIRECTION FOR PORT-ORFORD-CEDAR

Management direction for POC is from the Six Rivers National Forest Land and Resource Management Plan, Forest Management Direction (Chapter IV, page 129), Standards and Guidelines (S&Gs) 20-6 to 20-10. In summary the S&Gs address:

- 1) Management of POC as a long-term component of plant associations where present.
- 2) Integration of POC root disease (*Phytophthora lateralis*) control strategies for reducing the risk into environmental analyses and project planning.
- 3) Practices applied on a site or drainage specific basis to prevent or, if the disease is present, reduce the spread and severity of POC root disease.
- 4) Public information and education concerning POC root disease and reducing the spread.

MANAGEMENT OBJECTIVES

- 1) Prevent the import of disease into uninfected areas (off site spores picked up and carried into uninfected project area).
- 2) Prevent the export of disease from infected areas (on site spores moved to off-site uninfected area).
- 3) Minimize the rate of spread in areas where the disease already occurs.

To reduce the risk of introducing Port-Orford-cedar root disease into the project area, the following would be implemented:

1. Limit road reconstruction and decommissioning to the dry season only.
2. Limit operating season of the timber sale to the drier months. No operations may occur between October 15th and May 15th without written approval by the Forest Service.
3. No surface maintenance on gravel roads would occur when road conditions are wet (such as during or immediately after rainfall).
4. Wash mud and dirt from earth moving, yarding, loading, and other support equipment prior to beginning work on the project site and following completion of work.
5. Equipment must be washed before entering the project area or leaving the area at a place approved by the Forest Service.
6. Constrain timber haul and purchaser vehicle access so that vehicles do not travel from an infected to un-infected area.
7. Avoid using water for dust abatement that may be potentially infected with root disease. If a potentially infected water source must be used, treat with Clorox brand chlorine bleach before application (1 gallon of Clorox per 1000 gallons of water). Use chlorinated water to wash all vehicles and heavy equipment.

RISK ASSESSMENT MATRIX

PROXIMITY OF POC TO ROADS (HAZARD)

<u>LOW</u>	<u>MODERATE</u>	<u>HIGH</u>
>500 ft below	>100-500 ft below	<100 ft below
>50 ft above	>50 ft above	<50 ft above

NARRATIVE ASSESSMENT OF RISK

The project area contains POC, with the majority of located within riparian zones. Portions of Horse, Hurdygurdy, and Jones Creeks, and South Fork Smith River within the project area contain infested stands of POC (see map). Due to the proximity of POC to roads in the project area, the risk to further import, export, or spread the POC root disease is medium to high without POC root disease control prescriptions. The risk for this area can be reduced to low by implementation of the prescriptions of the control strategy.

The roads to be used during the sale have native surface, or native surface with small areas of rock. Such roads would increase the risk without using control prescriptions.

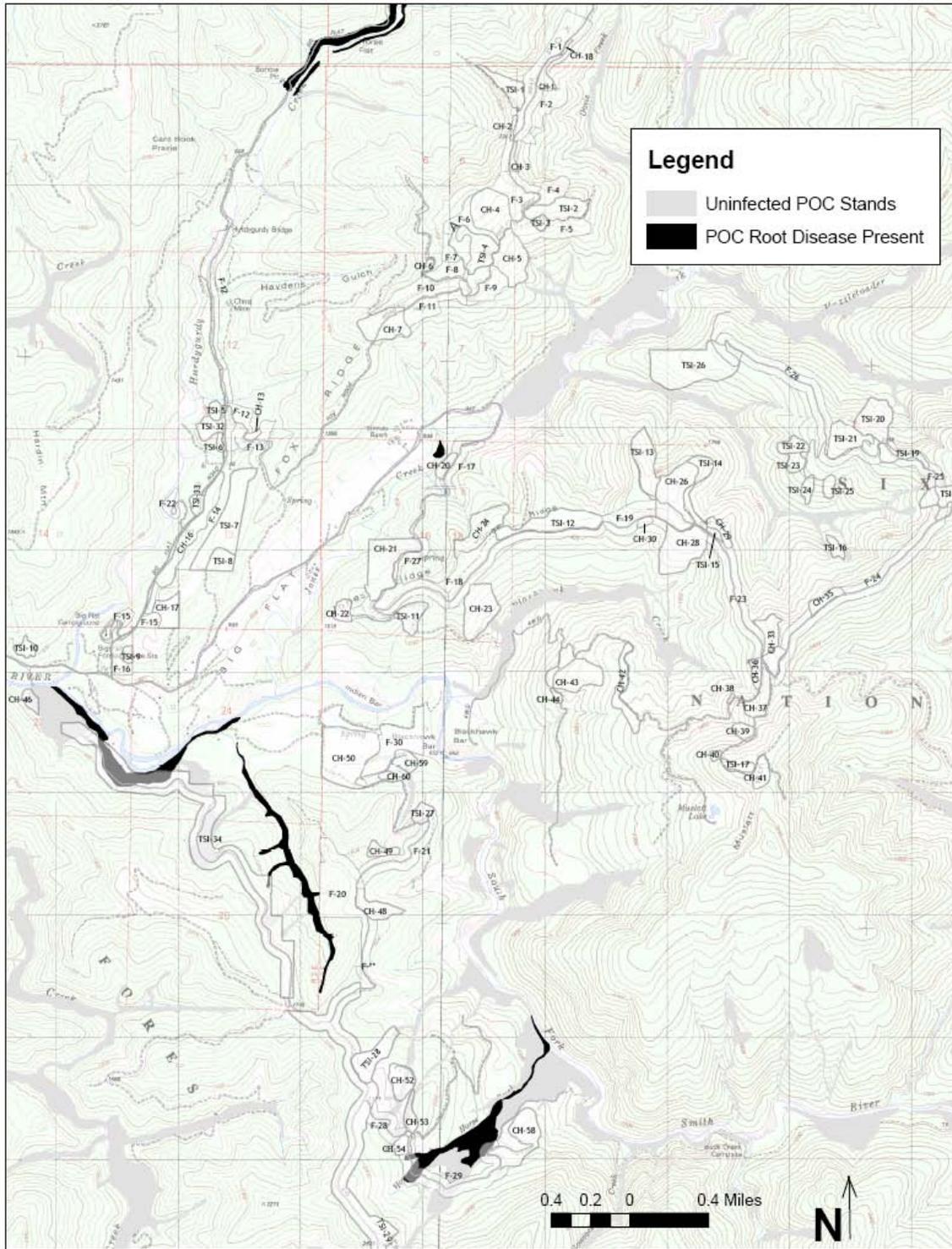


Figure 1. Current Known Locations of Port-Orford-Cedar Plant Associations

DISEASE CONTROL PRESCRIPTIONS

The Big Flat Vegetation and Fuel Management Project would utilize Del Norte County Roads 405 and 427. Road 405 is gravel and Road 427 is paved, and when used in the dry season would not add risk of POC root disease spread during the duration of the project. There is no control over the County roads at this time. Del Norte County is responsible for maintenance and condition.

National Forest System roads that would be used during the project by subdivision include:

- Grande: 15N57, 16N02, 16N03, 16N24 (and 24A).
- Jones: 15N36 (and 36N), 16N02 (and 02T).
- South: 15N01, 15N38, 15N39 (and 39B), 15N63.

A variety of control prescriptions would be utilized on this project. Education of the public may be enhanced by the distribution of POC information pamphlets and flyers at the pre-work meeting with contractors. Emphasis on the POC root disease and its impact on activities to all employees may be beneficial. The following are control prescriptions to be used:

Roads and Equipment

1. Temporary road locations will avoid POC.
2. Limit road and landing construction to dry season only.
3. Wash (high pressure or steam clean) all equipment prior to entering project area.
4. Operate in non-infested areas first, if possible. If moving from infested to non-infested area, all vehicles and equipment shall be high pressure or steam cleaned before entering non-infested area. (C6.342 – Cleaning of equipment; C6.343 – Post operation cleaning of equipment).
5. All temporary roads will be closed after use (outsloped, ripped, and waterbarred).
6. All water used for dust abatement will be obtained from an uninfested water source (as determined by the Forest Service).
7. Limit timber hauling to dry season only. The dry season occurs from approximately June 1 to October 15, depending on weather conditions. Operations may be shut down during this season if wet weather occurs.
8. Limit road maintenance activities to dry season only.

Timber Harvest

1. Limit timber sale activities requiring vehicle or equipment access to dry season only. The dry season occurs from approximately June 1 to October 15, depending on weather conditions. Operations may be shut down during this season if wet weather occurs.
2. Limit activity in riparian reserves to dry seasons.
3. Wash all equipment and vehicles before entering the project area (high pressure/steam clean).

4. Wash all equipment and vehicles prior to leaving infested sites and moving to non-infested sites.
5. Work in non-infested sites first, if possible, to reduce risk.

COST EFFECTIVENESS ESTIMATE

The effectiveness of the mitigations should be high if enforced. If the timber sale activities are restricted to the dry season, risk is **LOW** for spread. The overall cost of implementation is low due to the continued monitoring of activities for adherence to contract specifications. Forest Service costs are related to information pamphlets, flyers, and inserts explaining the POC and the root disease.

POTENTIAL IMPACT ANALYSIS

- A. Following mitigation, is *Phytophthora lateralis* likely to infect a major amount of the analysis area? (Ref. CEQ Reg. 1508.27) If no, then no secondary or cumulative effect expected. If YES, continue. **NO**
- B. Will the potential secondary and cumulative effects cause meaningful levels of mortality?
NO

Definitions:

Major amounts of analysis area: great or large in relative importance to POC existence in the near proximity and over its range. Effects are notable or conspicuous in effect or scope (e.g. visually detracting); or posing a serious risk to the ecosystem, adjacent POC, or the total population.

Meaningful levels of mortality: a mortality rate of 25% or more of existing POC over the next 20-year period.

POTENTIAL IMPACT NARRATIVE

The use of Del Norte County Roads 405 and 427 and National Forest System roads (listed above) for access to all work sites may increase the risk of spreading *Phytophthora lateralis*, but only slightly. The risk level would be **LOW** to infect any significant amount of POC along any of the access routes utilized. Current locations of the infections would remain static with individuals and small groups around centers continuing to be affected. The distances between locations of POC reduce the opportunity for spread along all routes.

Access to the project area via County Road 427 would pass through infected areas. The Forest Service would have control over entry and the washing of vehicles and equipment of the operator. If the control strategy prescriptions are followed, the overall risk to the POC in the project area is **LOW**. The access to the area by the public is not limited at this time and does contribute a risk factor equal to or greater than the project. Many private vehicles utilize the road without a thought to washing or concern for the POC.

MONITORING

The current Forest Service policy is to monitor locations of infections and to constantly update any new locations. Spread from infection centers are noted and new centers are recorded and updated for use in risk assessments conducted on future projects.