United States District Court, W.D. Washington, at Seattle.

SEATTLE AUDUBON SOCIETY, et al., Plaintiffs, v. Doug SUTHERLAND, et al., Defendants. No. C06-1608MJP.

Aug. 1, 2007.

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Jon Peter Ferguson, Attorney General' s Office, David C. Lundsgaard, Elaine L. Spencer, Zachary R. Hiatt, Graham & Dunn, Seattle, WA, Neil Lynn Wise, Patricia Hickey O'Brien, Sheila Deirdra Lynch, Attorney General, Fish & Wildlife, Olympia, WA, for Defendants.

ORDER GRANTING IN PART AND DENYING IN PART PLAINTIFFS' MOTION FOR PRELIMINARY INJUNCTION

MARSHA J. PECHMAN, United States District Judge.

This matter comes before the Court on Plaintiffs Seattle Audubon Society and Kittitas Audubon Society's motion for preliminary injunction. (Dkt. No. 3.) Plaintiffs seek to enjoin State Defendants Doug Sutherland and Vicki Christiansen from authorizing logging of certain suitable spotted owl habitat on private lands. Plaintiffs also seek to enjoin Defendant Weyerhaeuser Company from logging suitable spotted owl habitat within four " owl circles" in Southwest Washington. Plaintiffs allege that Defendants' actions are likely to "harm" northern spotted owls and result in a "take," in violation of the Endangered Species Act (" ESA"), 16 U .S.C. § 1538. Defendants Doug Sutherland, Vicki Christiansen, and Weyerhaeuser Company, and Intervenors Washington Forest Protection Association and American Forest and Paper Association oppose the motion. (Dkt.Nos.85, 99, 111-2.) Plaintiffs have filed a reply. (Dkt. No. 142.) On June 18 through June 21, 2007, the Court held an evidentiary hearing on the matter. Having considered the materials submitted by the parties and the testimony and evidence presented at the June hearing, and pursuant to Federal Rule of Civil Procedure 52(a), the Court FINDS and CONCLUDES as

follows.

Findings of Fact

BACKGROUND

1. This is an action to enjoin logging of spotted owl habitat within a specified radius of any spotted owl administrative site center located outside of Spotted Owl Special Emphasis Areas (" special emphasis areas") in Washington State, including spotted owl habitat located in privately owned second-growth forests.

2. Plaintiffs are the Seattle and Kittitas Audubon Societies.

3. Defendants are Doug Sutherland, Vicki Christiansen, and the Weyerhaeuser Company (" Weyerhaeuser"). Doug Sutherland and Vicki Christiansen (collectively, "State Defendants") are employees of the Washington Department of Natural Resources and are sued in their official capacity as the State officials responsible for administering and enforcing forest practices regulations promulgated under Washington's Forest Practices Act, RCW 76.09. Weyerhaeuser is a Washington corporation that owns and manages forest land in Southwest Washington upon which several spotted owl site centers are located. Two industry associations, the Washington Forest Protection Association and the American Forest and Paper Association (collectively, " Intervenors"), have intervened as defendants to protect the interest of their members who own or manage forest land that may be affected by Plaintiffs' claims. Intervenors were granted leave to intervene on January 16, 2007. (Dkt. No. 49.)

4. Plaintiffs' claims focus on spotted owls and spotted owl habitat remaining in Southwest Washington. " Southwest Washington" is the approximately 1.7 million acres of land bounded by State Highway 12 to the north, Interstate 5 to the east, and the Oregon-Washington border to the south. (Dkt. No. 206, Statement of Undisputed Facts [hereinafter " Undisputed Facts"]¶ 6.)

5. Plaintiffs filed this lawsuit against the State Defendants and Weyerhaeuser on November 7, 2006, alleging violations of Section 9 of the ESA and seeking declaratory and injunctive relief.

6. Several other Washington State agencies and

officials were originally named as defendants in this action. On February 22, 2007, Plaintiffs conceded that the Washington Department of Natural Resources (" Department") and Forest Practices Board (" Board") are immune from suit under the Eleventh Amendment and agreed to dismiss them from this lawsuit. The Court dismissed the Department, the Board, and the individual members of the Board from the suit by Order dated May 1, 2007. (Dkt. No. 133.)

WASHINGTON FOREST PRACTICES RULES

7. In Washington, forest practices, including logging, on non-federal land are governed by the Forest Practices Act, RCW 76.09 *et seq.* The Act requires the Board to adopt rules to accomplish the purposes and policies set forth in RCW 76.09.010, including the establishment of a permit system for various classes of forest practices. The Department implements and enforces those rules. The Forest Practices Appeals Board hears appeals of decisions related to approval or denial of forest practice permits.

8. In 1996, the Board adopted rules applicable to forest practices with the potential to impact spotted owls at WAC 222-16-010, -080, -085, -086, 222-10-040 and 222-10-041. Central to the implementation of the rules are "site centers," defined by rule as the location of spotted owls as recorded by Washington Department of Fish & Wildlife. WAC 222-16-010. Site centers are assigned a status from 1 to 5: Status 1 = reproductive pair; Status 2 = pair, reproductive state not clear; Status 3 = single territorial owl; Status 4 = non-territorial single owl; and Status 5 = historical, i.e., unoccupied site. The Forest Practices rules do not regulate activities near Status 4 or Status 5 sites. *See* WAC 222-16-010.

9. Spotted Owl Special Emphasis Areas (" special emphasis areas") are established under WAC 222-16-010 and 222-16-086, and were created by the Board in 1996. Special emphasis areas are intended to contribute to spotted owl recovery efforts on federal land. The Board chose not establish a special emphasis area in Southwest Washington as well as other locations. (Undisputed Facts ¶ 12.)

10. Inside of special emphasis areas, most forest practices trigger environmental review under the State Environmental Policy Act and require preparation of an environmental impact statement for logging of suitable owl habitat within 0.7 miles of a spotted owl site center or that results in less than 40 percent suitable habitat in a median home range circle. RCW 76.09.050(1); WAC 222-10-041(4); 222-16-080(1)(h)(I).

11. Outside of special emphasis areas, administrative owl circles have no regulatory effect under the State's Forest Practices Rules. Forest practices conducted outside of special emphasis areas are regulated by the Washington Forest Practices Rules only to limit harvesting, road construction, or aerial pesticide application on the 70 acres of highest quality suitable spotted owl habitat immediately surrounding a designated site center during a six-month nesting season. WAC 222-16-080(h)(iii). The owl circles at issue in this case are all outside of special emphasis areas.

12. The Board has classified forest practices depending on the impact the practice has on the environment. Class I and II practices do not require Department approval. RCW 76.09.050(1). Class III and IV practices have greater potential for damaging a public resource and therefore require Department approval. *Id.* Approval is obtained through submission of a "Forest Practices Application." Class III forest practices are exempt from environmental review and must be approved by the Department within thirty days. RCW 76.09.050(1). The forest practices at issue in this litigation are Class III practices.

13. The State's rules constitute a ceiling on the protections that the Department may require for the benefit of spotted owls when approving a Forest Practices Application outside of a special emphasis area. The Department has never interpreted the rules for owl sites outside of special emphasis areas as giving them the flexibility or authority to require environmental review or habitat protection beyond the 70 acre core during the breeding season. (Undisputed Facts ¶ 20.)

NORTHERN SPOTTED OWL

14. The Northern Spotted Owl (*Strix occidentalis caurina*) is an uncommon, medium-sized owl that inhabits forests from southern British Columbia to just north of San Francisco. (Undisputed Facts \P 1.)

15. The Northern Spotted Owl was listed as a threatened species under the Endangered Species Act

(" ESA"), 16 U.S.C. § 1531 *et seq.*, in 1990. (Undisputed Facts \P 2.) When listed, it was generally assumed that northern spotted owls depended on old growth forests for resources to support their essential behavioral functions.

16. In Washington, the distribution of spotted owls is often studied and discussed relative to four physiographic provinces: (1) the Olympic Peninsula, (2) the Western Washington Lowlands, which includes Southwest Washington, (3) the Western Washington Cascades, and (4) the Eastern Washington Cascades. Because these areas differ with respect to weather, physical features, and biotic communities, the abundance, habitat use, and some other aspects of the northern spotted owl's ecology can vary among these areas. (Ward Decl. ¶ 10.)

17. Although spotted owls prefer older forests, spotted owls will use younger forests for roosting, nesting, and foraging, particularly where those younger forests have "legacy" features, including snags and decaying logs. (Ward Decl. ¶ 25; Ex. 89, at 20.) $^{\rm FN1}$

FN1. Numbered exhibits refer to trial exhibits. Lettered exhibits refer to exhibits provided by the parties in conjunction with their motion papers. The Court notes that the parties have provided the Court with an extraordinary number of exhibits. declarations, and deposition transcripts. The Court has, for the most part, relied upon that evidence which was actually referenced by the parties, either in their motion papers, or during the evidentiary hearing, in formulating its findings.

18. Although scientists do not agree on a precise agerange, "old growth" forests in the Pacific Northwest are generally assumed to be at least 160-200 years old; "late-successional" forests are those with trees at least 80 to 100 years old, and up to 199 years old; and "younger forests" are described as those with trees 30-80 years old. (*See* Undisputed Facts ¶ 2; Irwin Decl. ¶ 10, 33; Ex. 74.) By 1990, most old growth had been removed from private and stateowned land, and harvest of remaining old growth on federal land was accelerating. (Undisputed Facts ¶ 2.)

19. WAC 222-16-085 defines three categories of suitable spotted owl habitat-old forest, sub-mature, and young forest marginal. The rules differentiate

these categories of habitat by a number of factors, including forest community, canopy closure, tree density and height, number of snags, and amount of down woody debris. WAC 222-16-085. The rules provide that "old forest habitat" is that which provides all of the characteristics needed by spotted owls for nesting, roosting, foraging, and dispersal; " sub-mature" habitat is that which provides all of the characteristics needed by northern spotted owls for roosting, foraging, and dispersal, but not nesting; and "young forest marginal" habitat provides some of the characteristics needed by northern spotted owls for roosting, foraging and dispersal.

20. Spotted owls are primarily nocturnal hunters of small-to medium-sized mammals. (Undisputed Facts ¶ 21.) In Washington, northern flying squirrels routinely provide more than 50 percent of the spotted owl's dietary biomass. (Ward Decl. ¶ 29; *see also* Ex. 325, Irwin Decl., at 32 n. 6.) Relative to other prey species, the availability of northern flying squirrels is most likely to affect spotted owl habitat use, reproduction, and survival. (Ward Decl. ¶ 29.)

Importance of Owls in Southwest Washington

21. Only a few pairs and single spotted owls remain in Southwest Washington. (Orians Decl. ¶ 32.) Given the limited and fragmented owl habitat remaining in Southwest Washington, Plaintiffs' expert Dr. Gordon Orians predicts that the remaining owls in Southwest Washington are at high risk of extirpation. ^{FN2} (*Id.*) An Environmental Impact Statement prepared in conjunction with the Board's 1996 spotted owl rules acknowledged that the lack of a special emphasis area in Southwest Washington, would " likely result in the further reduction or extirpation of owls from this portion of their range." (Ex. 92, at 2-141.)

FN2. According to Dr. Orians, "extirpation" means the total loss of a population in a particular area. (Tr. June 19, 2007.)

22. Southwest Washington covers approximately 40% of the spotted owl's range in Washington and occupies a critical location between populations of owls on the Olympic Peninsula and the Cascades. (Orians Decl. ¶ 30.) Elimination of suitable habitat and subpopulations of owls in Southwest Washington could isolate the owls living on the Olympic Peninsula, increasing the risk of extinction of that population as well. (Orians Decl. ¶ 36.)

Home Range Size

23. The spotted owl's " home range" is the area required by a pair of spotted owls to obtain the resources to meet their life requisites. Home range size varies by geographic region, forest type, landscape pattern, and type of prey consumed. (Ward Decl. ¶ 17.) The amount of area within a northern spotted owl's home range is greater when suitable habitat becomes fragmented and/or when spotted owls primarily consume northern flying squirrels. (*Id.*) Although home range boundaries are, in actuality, amoeboid in shape, for management purposes, they are represented by circular areas, and are referred to by the distance of the circle's radius.

24. In the Hoh-Clearwater/Coastal Link special emphasis area, located on the Olympic Peninsula, the radius of administrative owl circles is 2.7 miles from the site center. For the rest of the special emphasis areas in Washington, the radius is 1.8 miles. WAC 222-16-010. Because the Board did not establish a special emphasis area in Southwest Washington, the rules do not delineate the size of an owl circle in Southwest Washington. The parties dispute the median home range size of owl circles in Southwest Washington.

25. The Spotted Owl Scientific Advisory Group (" Scientific Advisory Group") was formed to assist the Board by obtaining, interpreting, and synthesizing scientific information related to the conservation and management of northern spotted owls on non-federal lands in Washington. In 1993, based on evaluation of radio-telemetry data, the Scientific Advisory Group recommended that a 2.7-mile radius circle be used to approximate an owl pair's home range in the Olympic Peninsula and Southwest Washington. (Ex. 98, at 24.) In 2005, in a peer-reviewed study, Dr. Eric Forsman reanalyzed the same radio-telemetry data, and based on the results, recommended no changes to the Forest Practices Rules, which provide for a 2.7-mile radius circle in the Olympic Peninsula special emphasis area. (Dkt. No. 151-9, Supp. Harlow Decl., Ex. H, at 375.) In 1994, the U.S. Fish & Wildlife Service (" Fish & Wildlife"), the agency charged with administering and enforcing the ESA, sent a letter to Weyerhaeuser indicating that it uses a 2.7-mile radius circle to approximate the median annual home range of spotted owls on the Olympic Peninsula and in Southwest Washington. (Ex. 35.)

26. Some of the parties' experts testified at the

evidentiary hearing regarding whether home ranges sizes in Southwest Washington are more similar to home range sizes on the Olympic Peninsula, or those on the Northwest Coast Range of Oregon. The Court finds persuasive Dr. Andrew Carey's testimony that based on landscape and prey base considerations, owl home range sizes in Southwest Washington are more similar to those on the Olympic Peninsula than those on the Northwest Coast Range of Oregon. (Tr. June 21, 2007.) Based on the Scientific Advisory Group's report, Dr. Forsman's study, Fish & Wildlife's letter, and Dr. Carey's testimony, the Court finds that a 2.7mile radius circle best approximates owl home range size in Southwest Washington.

Amount of Necessary Suitable Habitat

27. Spotted owls need a certain amount of "suitable habitat" within their home range to provide resources necessary to meet essential life functions. (Ward Decl. ¶ 19, 48.) As the amount of suitable habitat in an owl's home range decreases, so does site occupancy, reproduction, and survival. (Ward Decl. ¶¶ 20, 49, 51.) The parties dispute the threshold amount of habitat needed to support spotted owls.

28. Several scientific studies indicate that removal of suitable spotted owl habitat to below forty (40) percent of the median annual home range area harms spotted owls. Bart and Forsman (1992) found that areas with less than twenty (20) percent suitable habitat had few owls and less reproductive success than areas with more suitable habitat. (Ex. 61.) In 1995, Bart re-analyzed his prior data, and concluded that spotted owl reproduction and survival decrease as suitable habitat decreased from 40% to 20%. (Ex. 60.) In a 2005 study (Forsman et al.), the researchers estimated that the median and mean amounts of suitable habitat within the ranges of spotted owls are similar to or slightly lower than the management target adopted by the Forest Practices Board (i.e., 40% threshold). (Ex. 70.) They recommended that changes to the 40% Board guideline were not warranted. (Id.)

29. The State's rules acknowledge that 40% suitable spotted owl habitat within the median home range circle is "assumed to be necessary to maintain the viability of the owl(s) associated with each northern spotted owl site center, in the absence of more specific data or a mitigation plan." WAC 222-10-041(4).^{FN3} Fish & Wildlife also uses the 40% threshold guideline. In 1990, Fish & Wildlife adopted

guidelines recommending that landowners avoid timber harvest that results in less than 40% suitable spotted owl habitat within a median home range circle. (Ex. 103, at 10.) Although those 1990 guidelines were later rescinded, Fish & Wildlife continues to use the 40% habitat threshold as a general guideline for analyzing incidental take from habitat loss in biological opinions and environmental impact studies. (Ex. 82; Ward Decl. ¶ 21.)

FN3. Defendants argue that the 40% guideline in the State Forest Practice Rules only applies to owl circles within special emphasis areas. But whether an owl circle is within or outside an special emphasis area is an administrative designation. That designation does not affect the habitat needs of the spotted owls living in the area.

30. The parties agree that within their home ranges, spotted owls intensively use and defend a "core area," because it provides a necessary and critical set of resources (e.g., a nesting grove or area with reliable food sources). (Undisputed Facts \P 22.)

31. Within special emphasis areas, the state's rules provide for protection of all suitable habitat within the 0.7-mile radius core area. WAC 222-10-041(4)(a) and 222-16-080(1)(h). Fish & Wildlife uses 1000 acres (a circle with 0.7-mile radius) to represent a core area of activity designated around a site center during the breeding season and recommends maintaining a minimum of 500 acres of suitable habitat within this core area. (Ex. 82, 103.)

32. The states rules also provide protection for the 70 acres of suitable habitat closest to the nest tree. WAC 222-16-080(1)(h)(iii). The 1990 Fish & Wildlife guidelines recommended maintaining the 70 acres of best available suitable owl habitat encompassing the nest site. (Ex. 103, at 10.)

33. Spotted owls may also concentrate their foraging within "hot spots" found in managed stands, which, though they may not present all of the structural characteristics of old growth stands, provide a prey base for owls because of unique microcharacteristics conducive to use by prey species. Hot spots are areas which, because of unique features within managed stands such as large volumes of down wood or an area with multiple large snags, appear to develop an unusually high prey base. The location of hot spots may change over time as prey becomes depleted or as the forest itself changes. (Undisputed Facts ¶ 23.)

34. The Court finds that removal of suitable habitat below forty (40) percent of the median annual home range area risks harming spotted owls by removing resources necessary to their essential behavioral functions. Although the 40% threshold is a guideline, rather than a bright-line rule, it is a guideline that is supported both by peer-reviewed science and by usage by the State and U.S. Fish & Wildlife Service. The Court does not find persuasive Dr. Irwin's testimony that the 40% threshold is arbitrary and speculative. (See Irwin Decl. ¶ 61.) And the Court does not agree with Dr. Irwin's suggestion that habitat protection should focus solely on the " core area" used by spotted owls. The Court finds that protection of the 0.7-mile radius core area is important. But, as explained in the 1993 Scientific Advisory Group's report, protection of the core area alone would be inadequate to avoid harm to spotted owls. (Harlow Decl., Ex. M, at 16.) Other scientists have also concluded that protection of the core area alone is insufficient and that the 40% guideline is biologically defensible. (Exs.62, 65, 70.)

Habitat Loss Harms Spotted Owls

35. Spotted owls are greatly affected by habitat loss. (Ward Decl. ¶ 48.) Loss or degradation of habitat can harm spotted owls by (1) reducing or eliminating food resources that fuel survival, growth or maintenance, and reproduction; (2) reducing or eliminating cover that shelters these owls from harmful weather effects or predation; and (3) causing abandonment of an established territory. (Ward Decl. ¶ 51.) Loss of suitable habitat injures spotted owls by reducing access to their primary food source, northern flying squirrels. (Ward Decl. ¶ 52.) Northern flying squirrels and other prey species are generally not found in very young (i.e., less than 40 years of age) conifer forests. (Id.) Habitat loss and fragmentation also lower spotted owl survival rates by increasing their exposure to wet weather and summer heat and by forcing them to cross open places where there is a higher risk of predation. (Id. ¶ 53.) Moreover, spotted owls that are forced to abandon an established site due to loss of habitat or disturbance face higher risk of predation and starvation. (Id. ¶ 54.) The Court finds that habitat loss, particularly when there is little habitat remaining, risks injuring spotted owls.

36. Since being listed as a "threatened" species,

spotted owl populations have continued to decline. In Washington, the rate of decline has averaged about 7.3 percent per year for the past ten to fifteen years, with populations in some areas of Washington declining by 40 to 50 percent over that period. (Orians Decl. ¶ 20.) Population loss can be attributed to a number of factors, including habitat loss and increased populations of barred owls. (Orians Decl. ¶ 23-24; Ward Decl. ¶ 39, 42-43; Irwin Decl. ¶¶ 50-56.)

HABITAT REMAINING AND SPOTTED OWL PRESENCE ON NON-WEYERHAEUSER PRIVATE LANDS

Suitable Spotted Owl Habitat Remaining

37. The state does not assess the amount of suitable spotted owl habitat remaining in owl circles outside of special emphasis areas. (Dkt. No. 76-3, Arum Decl., Ex. B, at 9-10.) In 2003, the Board commissioned a study, in which researchers reviewed and quantified the change in suitable habitat in areas regulated by the 1996 Board rules. The report produced-the "Pierce report" -concluded that, as of 2004, about 47,000 acres of suitable habitat remained on private lands in owl circles outside of special emphasis areas in areas not covered by a " habitat conservation plan." FN4

FN4. Under section 10 of the Endangered Species Act, an individual may obtain an "incidental take permit" after developing and implementing a "habitat conservation plan." 16 U.S.C. § 1539.

38. The Pierce report also concluded that as of 2004, the amount of suitable spotted owl habitat in owl circles that contained more than 10 percent private land and that are located outside of special emphasis areas averaged 31 percent, and ranged from 37 percent in the North Cascades to 7 percent in Southwest Washington. (Ex. 75, at v-vi.) The researchers estimates were derived statistically and represent averages across the landscape. (*Id.*, at 90.) The researchers did not report on the amount of suitable habitat remaining in any particular owl circle.

39. Audubon has not presented any evidence documenting the amount of suitable habitat remaining in any particular owl circle in Southwest

Washington, or anywhere else in Washington.

Presence of Spotted Owls in Administrative Owl Circles

40. The administrative spotted owl site centers at issue in this case were established by the Washington Department of Fish & Wildlife based on survey data indicating that a resident spotted owl or pair of owls were detected in that location.

41. Once established, site centers are maintained by the Washington Department of Fish & Wildlife unless formally converted by that agency to " historic" (i.e., unoccupied) status through three years of surveys confirmed by the agency as having been conducted pursuant to the U.S. Fish and Wildlife Service (" Fish & Wildlife") protocol.^{FNS} (Undisputed Facts ¶ 13.) In other words, the State treats administrative owl circles as " occupied" unless they are converted to " historic" after at least three years of full protocol surveys.

FN5. In November 2005, the Board adopted rule amendments that prohibit changing the status of site centers to "historic" (Status 5) until at least June 2007.

42. Washington Department of Fish & Wildlife records the location and status of spotted owl site centers in an electronic database. Washington Department of Natural Resources relies on this database in administering the Forest Practices Rules addressing spotted owls. Washington Department of Fish & Wildlife establishes the location of spotted owl site centers based on survey data it receives from researchers, landowners, consultants, and others. As new data is received and interpreted, Washington Department of Fish & Wildlife may move a site center or modify its status. (Undisputed Facts ¶ 17.)

43. Neither federal nor state law requires Washington landowners to survey their lands for spotted owls. There is similarly no legal requirement that survey data, once obtained, be submitted to Washington Department of Fish & Wildlife. As a consequence, there are large areas in Washington for which that department has not received survey data in years. (Undisputed Facts ¶ 18.)

44. Washington Department of Fish & Wildlife also maintains an "observation database," which contains information about spotted owl detections

that have been recorded and voluntarily submitted to the agency. Only positive detections are recorded in the database. (Undisputed Facts \P 19.)

45. Because the Washington Department of Fish & Wildlife data is not necessarily current, it is impossible to determine exactly how many owl site centers are currently occupied. (*See* Ex. 608, Potter Decl. ¶ 4; Ward Decl. ¶¶ 109, 110.) It is possible, and likely, that some of the circles have been abandoned, some remain occupied, and that some new circles should be drawn where owls have established themselves in new places. (*See* Ward Decl. ¶¶ 109-110; Potter Decl. ¶ 4.)

46. Plaintiffs argue that, despite the lack of evidence regarding owl occupancy, the Court should assume that spotted owls currently occupy many, if not all, of the 218 status 1, 2, or 3 site centers with median home range circles that include private lands located wholly or partly outside of special emphasis areas. Analyzing data from the Washington Department of Fish & Wildlife database, Eric Harlow testified that there have been reported spotted owl detections near 44 owl site centers that include private lands outside special emphasis areas within the past five years.^{FN6} (Supp. Harlow Decl. ¶ 2, Table 1.) Thirty-six of those circles have had detections within three years of the filing of Plaintiffs' complaint, i.e. between 2003 and 2006. (*Id.*)

FN6. Mr. Harlow states in his declaration that 45 owls circles have had spotted owl detections in the past five years, but only lists 44 specific circles. (Supp. Harlow Decl. ¶ 2, Table 1.) It is not clear from the evidence presented where those owl circles are located or whether any of them are located in Southwest Washington.

47. Given the unreliability of the State's database, but also considering the methodology used by the State in determining whether an owl circle has become unoccupied, the Court finds, for the purposes of this case, that an owl circle is likely occupied if there has been a spotted owl detection in that circle as recently as 2003. Thus, based on the recent sightings identified in Mr. Harlow's declaration, the Court finds that it is reasonably likely that spotted owls are present in the thirty-six owl circles identified in that declaration.

48. The Court makes no finding whether owls likely

inhabit the remaining administrative owl circles throughout the state. Plaintiffs have not presented any recent survey data supporting their assertion that it is likely that owls inhabit the remaining circles. Because of the unreliability of the State's database, and the lack of current survey data, it is not clear whether owls inhabit the remaining circles.

OWL CIRCLES ON WEYERHAEUSER LANDS IN SOUTHWEST WASHINGTON

49. Weyerhaeuser owns land within a 2.7-mile radius of the following site centers in Southwest Washington: Elk Creek and Ellis Creek-100 percent; Pioneer Creek-85 percent; and Blue Mountain-32 percent. (Undisputed Facts ¶ 24.)

50. In March 1994, Weyerhaeuser committed to develop five-year habitat management plans for seven spotted owl sites in Southwest Washington, including Blue Mountain, Elk Creek, and Ellis Creek. (Undisputed Facts ¶ 27.) Weyerhaeuser agreed to classify suitable habitat in cooperation with Fish & Wildlife and to refrain from harvesting stands classified as suitable habitat within 2.2 miles of these site centers for five years. (Ex. 321.) Between 1994 and 1996, Weyerhaeuser delineated suitable habitat in cooperation with Fish & Wildlife, creating maps that identify suitable habitat on Weverhaeuser-owned land within a 2.2-mile radius of the Blue Mountain, Elk Creek, and Ellis Creek site centers. (Exs.322, 323, 324.) These take avoidance plans were approved by Fish & Wildlife in 1995 and 1996 and remained in effect for a five-year period starting from the March 1994 letter agreement. The plans expired in March 1999 and were not renewed. (Undisputed Facts ¶ 28.)

51. Starting in March 1999, Weyerhaeuser has managed its lands inside owl circles based on an internal " Owl Protection and Management Plan" which protects the best 500 acres of habitat around a site center. (Phillips Decl. ¶ 25.) In some cases, the " best 500 acres" may only be 300 acres. (Ex. 24.) Weyerhaeuser also follows the State's " 2000 Forest & Fish Rules," which require the company to leave riparian buffers as well as forests on upland unstable slopes. *See* WAC 222-30-021, -022. (Phillips Decl. ¶ 25.) These riparian buffers and upland slope areas cover 10-15% of Weyerhaeuser's lands in Southwest Washington. (Phillips Decl. ¶ 25.)

52. In 2006, after this lawsuit was filed, Weyerhaeuser conducted inventories to assess

whether selected harvest units within the four owl circles met the definition of suitable habitat in the State's rules, WAC 222-16-085. But as Plaintiffs' Daniel expert Dr. Rosenberg explained, Weyerhaeuser's recent surveys did not take adequate account of smaller patches of habitat within larger harvest units, thereby diluting the data specific to small areas of habitat. (Rosenberg Reb. Decl. ¶¶ 5-22) And Weverhaeuser's surveyors so rigidly applied the WAC definition of suitable habitat, that they disregarded areas that functionally serve as spotted owl habitat. (Id. ¶¶ 23-27.) Weyerhaeuser's methods led to an underestimation of the amount of suitable habitat within the four owl circles. Based on the evidence and testimony presented before and during the evidentiary hearing, particularly the testimony of Dr. Rosenberg, the Court finds that the habitat mapping conducted for the mid-1990s take-avoidance plans are better estimates of habitat conditions than Weverhaeuser's more recent habitat inventories. (See, e.g., id. ¶ 28.)

53. Virtually all habitat remaining within the median home range circles of the Elk Creek, Ellis Creek, Blue Mountain, and Pioneer Creek sites is composed of younger forests ranging from approximately 50-80 years in age. (Ward Decl. ¶ 65.) The stands of habitat also have some legacy features present, including large downed logs, snags, and large live trees with side cavities or broken tops. (*Id.*)

Evidence Regarding Specific Circles on Weyerhaeuser Property

Elk Creek Circle (Site 851)

54. A pair of spotted owls was detected at the Elk Creek circle in 1992, 1993, 1994, 1995, 1996, 1997, 1998, 2000, 2001, and 2006. A single owl was detected at the Elk Creek site in 1999, 2002, 2003, and 2005. The pair at Elk Creek produced young in 1992, 1994, 1997, 1998 and 2001. (Undisputed Facts \P 29.) The Court finds that the 2.7-mile radius circle surrounding the Elk Creek site center is probably currently occupied by one or more spotted owls.

55. Weyerhaeuser's prior mapping shows that as of about 1996, only 11 percent of the 2.2-mile circle surrounding the Elk Creek site center was comprised of suitable spotted owl habitat. (Ward Decl., at 40, Table 2.)

56. Plaintiffs' GIS (Geographical Information

Systems) analyst, Matt Stevenson, estimates that between 1996 and 2004, Weyerhaeuser harvested 187 acres of suitable habitat within a 2.7-mile radius circle of the Elk Creek center. (Supp. Stevenson Decl., Ex. C.)

Blue Mountain Circle (Site 645)

57. The Blue Mountain administrative circle is centered approximately three-quarters of a mile east of Weyerhaeuser ownership on land owned by the Department. The 2.7-mile Blue Mountain and Pioneer Creek administrative circles overlap. A pair of northern spotted owls was detected at Blue Mountain in 1990 and 1992, and again in 2005 and 2006. The Blue Mountain pair produced young in 1992. Single spotted owls were detected within the Blue Mountain circle in 1991, 1994, and 1995. (Undisputed Facts ¶ 30.) The Court finds that the 2.7-mile radius circle surrounding the Blue Mountain site center is probably currently occupied by one or more spotted owls.

58. In 2006, a Fish & Wildlife assessment indicated that approximately 21 percent of a 2.7-mile radius circle surrounding the Blue Mountain site center was comprised of suitable habitat. (Ward Decl., at 40, Table 2.)

59. Plaintiffs' GIS (Geographical Information Systems) analyst, Matt Stevenson, estimates that between 1996 and 2004, Weyerhaeuser harvested 449 acres of suitable habitat within a 2.7-mile radius circle of the Blue Mountain center. (Supp. Stevenson Decl., Ex. C.)

Pioneer Creek Circle (Site 1234)

60. The Pioneer Creek site center is to the west of the Blue Mountain site center. Single spotted owls were detected within what is now the Pioneer Creek site in 1999 and 2000, although they were attributed to the Blue Mountain site at the time. The Pioneer Creek site was established in 2001 after an adult and juvenile were detected on Weyerhaeuser land at what is now the administrative site center. A pair has been detected in the vicinity of the Pioneer Creek site center every year since 2001. The Pioneer Creek pair produced young in 2001 and 2004. No nest tree has been located at the Pioneer Creek site. (Undisputed Facts ¶ 31.) The Court finds that the 2.7-mile radius circle surrounding the Pioneer Creek site center is probably currently occupied by one or more spotted

owls.

61. A 2006 Fish & Wildlife assessment indicates that there is about 22 percent of suitable habitat within the 2.7-mile radius Pioneer Creek circle. (Ward Decl., at 40, Table 2.)

62. Plaintiffs' GIS (Geographical Information Systems) analyst, Matt Stevenson, estimates that between 1996 and 2004, Weyerhaeuser harvested 449 acres of suitable habitat within a 2.7-mile radius circle of the Pioneer Creek center. (Supp. Stevenson Decl., Ex. C.)

Ellis Creek Circle (Site 758)

63. Weyerhaeuser surveys for the Ellis Creek site center detected a male and a female spotted owl in 1992 and single spotted owls in 1991, 1994, 1995, 1996, and 1997. There was also a spotted owl detection in 2003. (Undisputed Facts \P 32.)

64. Weyerhaeuser argues that the Court should assume that no spotted owl occupies the Ellis Creek site. In a September 8, 2006, letter from Fish & Wildlife to Kevin Godbout, Director of External and Regulatory Affairs at Weyerhaeuser, Fish & Wildlife acknowledged, based on Weyerhaeuser's survey results, " the low likelihood of spotted owls currently occupying ... the Ellis Creek site (# 758)." (Ex. 334.) But Fish & Wildlife went on to state that Weyerhaeuser's " survey efforts may not be totally conclusive relative to spotted owl occupancy" because " they were not conducted consistent with our approved protocol." (Id.) Audubon has presented evidence indicating that Weyerhaeuser only surveyed about a mile from the site center at Ellis Creek and that the company never conducted a "full protocol" survey for Ellis Creek. (Godbout Dep. at 99; Woodworth Dep. at 82.) Because Weyerhaeuser's Ellis Creek surveys did not comply with established survey protocols, they are insufficient to demonstrate lack of spotted owl occupancy. The Court finds that the 2.7-mile radius circle surrounding the Ellis Creek site center is probably currently occupied by one or more spotted owls.

65. Weyerhaeuser's prior mapping shows that as of 1996, only 8 percent of the 2.2-mile circle surrounding the Ellis Creek site center was comprised of suitable spotted owl habitat. (Ex. 323; Ward Decl., at 40, Table 2.)

66. Plaintiffs' GIS (Geographical Information Systems) analyst, Matt Stevenson, estimates that between 1996 and 2004, Weyerhaeuser harvested 77 acres of suitable habitat within a 2.7-mile radius circle of the Ellis Creek center. (Supp. Stevenson Decl., Ex. C.)

Evidence of Current Harvest Plans Within Owl Circles

67. The Court finds that since 2004, the State has approved Forest Practices Applications that involve suitable habitat within 2 .7 miles of both the Blue Mountain and Pioneer Creek site centers. (Ward Decl. ¶ 87 & Table 5.) For example, in September 2005, the Department approved Forest Practices Application # 2912377, which is within the 0.7-mile radius core area of the Pioneer Creek circle, and is within 2.7 miles of both the Pioneer Creek and Blue Mountain site centers. (Ward Decl., at 50, Table 5; Ex. 164.) In May 2005, the Department approved Forest Practices Application # 2911469, which authorizes harvest of about 15 acres of mapped suitable habitat within 0.7 miles of the Ellis Creek site center. (Ward Decl. ¶ 93 .)

68. Weyerhaeuser creates "ten year plans" that map where and when the company intends to harvest timber. Weyerhaeuser's ten-year harvest plans call for logging of suitable habitat within each of the four owl circles. (Exs. 152 (Elk Creek), 155 (Pioneer Creek), 157 (Ellis Creek), 158 (Blue Mountain)).

69. On November 7, 2006, the day Audubon filed suit against the State Defendants and Weyerhaeuser, Weyerhaeuser withdrew five Forest Practices Applications, including Forest Practices Application # 2912377 in the Pioneer Creek/Blue Mountain Circle. (Ex. 338.)

Northern Spotted Owl/Barred Owl Research Agreement and Management Plan

70. After this litigation was commenced, on February 28, 2007, Weyerhaeuser and Fish & Wildlife entered into a Northern Spotted Owl/Barred Owl Research Agreement and Management Plan (" Agreement") for the Elk Creek and Pioneer Creek/Blue Mountain spotted owl sites. The Agreement relates to Weyerhaeuser's forest practices at the Elk Creek and Pioneer Creek/Blue Mountain sites from now through August 31, 2010. (Undisputed Facts ¶ 33.) The Agreement does not cover the Ellis Creek circle. (See

Ex. 340.)

71. Under the Agreement, Weyerhaeuser will fund and conduct radio-telemetry research on northern spotted owls and barred owls in the Elk Creek and Pioneer/Blue Mountain Circles from 2007-08. (Ex. 340, at 4.)

72. The Agreement designates "Research Areas" within the Elk Creek and Pioneer/Blue Mountain owl circles. The Elk Creek Research Area is 4,518 acres; the Pioneer/Blue Research Area is 4,573 acres. (*Id.* at 3.) For reference, a 2.7-mile radius circle encompasses over 14,000 acres. A 1.6-mile radius circle encompasses 5,147 acres. The Research Areas are not circular in shape; they are smaller than the area that would be encompassed by a 1.6-mile radius circle.

73. During the first two years of the Agreement, Weyerhaeuser generally will not conduct timber harvest within the "Research Areas" in each circle. (Ex. 340, at 5.) Exceptions to that no-harvest agreement include experimental harvest, harvest for road construction, salvage harvest, and "other harvests." All "experimental" and "other" harvests within the Research Areas for the first two year must be agreed upon by Weyerhaeuser and Fish & Wildlife. (*Id.*)

74. The Agreement also contemplates the harvest of at least ten Forest Practices Applications outside the Research Areas, but within 2.7 miles of the centers of the three owl circles. (*Id.*, at 4-5 .) The Agreement also contemplates other additional harvests within 2.7 miles of the site center of the Pioneer, Blue Mountain, and Elk Creek circles. These harvests will be conducted " as agreed to by both [Fish & Wildlife] and Weyerhaeuser" and after joint field review and evaluation of the owl telemetry data. (*Id.*)

75. The Court finds that the Agreement between Weyerhaeuser and Fish & Wildlife does not eliminate all risk of injury to spotted owls on Weyerhaeuser property in Southwest Washington. Less than 40% suitable habitat remains in all four of these circles. The Agreement allows harvest of habitat within 2.7 miles of the owl circle site centers and does not cover the Ellis Creek circle.

EVIDENCE OF PAST HARM TO SPOTTED OWLS

76. In 1990 and 1991, two of the Blue Mountain

radio-tagged spotted owls were found dead. (Woodworth Dep. at 139-42.) At least one died from starvation. (Ex. 96.) A third Blue Mountain owl was found dead in the mid-1990s. (Potter Dep. at 24.)

77. Spotted owl reproduction at the Elk Creek, Blue Mountain, and Pioneer Creek sites has been sporadic or non-existent in recent years.

78. The State admits that since 1996, it has approved Forest Practices Applications outside of special emphasis areas that authorized the logging of a spotted owl nest tree and all or part of the seventy acres of the highest quality habitat around the site center. (Dkt. No. 76-3, Arum Decl., Ex. B., at 8-9.)

79. For example, in July 2002, the State approved harvest of 104 acres of suitable spotted owl habitat within the 0.7-mile core area of the First Creek site, including most of the 70 acres of best habitat and the site center itself. (Swedeen Decl. ¶ 53.) At the time that it was logged, the State treated the site as occupied. (Id.) The site had been occupied by a pair of owls for at least three years. (Swedeen Decl. ¶ 51.) The pair fledged young in 1999 and 2000. (Id.) The site was abandoned around the time that the site was logged. The female owl was observed in a new location in 2001, the male's whereabouts after 2000 are unknown. (Dkt. No. 107, Vaughn Decl. ¶ 24.) Great horned owls, a spotted owl predator, were detected in the vicinity of the spotted owl nest in 2001 and 2002. (Vaughn Decl. ¶ 24.)

80. For all of these sites, it is impossible to identify a single, direct cause of death, lack of reproduction, or abandonment of the nest site. The injury could have resulted from intense harvest of suitable spotted owl habitat around or including the nest site, or could have been caused by the presence of barred or great horned owls.

Discussion

SECTION 9 OF THE ENDANGERED SPECIES ACT

1. Plaintiffs bring their claims under section 9 of the ESA. That section makes it unlawful for any person to "take" an endangered or threatened species. 16 U.S.C. § 1538(a)(1)(B). The term "take" means "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture or collect." 16 U.S.C. § 1532(19). "Harm" means "an act which actually kills or injures wildlife

... includ[ing] significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding or sheltering." 50 C.F.R. § 17.3. "Harming a species may be indirect, in that the harm may be caused by habitat modification, but habitat modification does not constitute harm unless it ' actually kills or injures wildlife.' "*Defenders of Wildlife v. Bernal*, 204 F.3d 920, 924-25 (9th Cir.1999); see Babbitt v. Sweet *Home Chapter of Cmtys. for a Great Or.*, 515 U.S. 687, 700 n. 13, 115 S.Ct. 2407, 132 L.Ed.2d 597 (1995) ("[E]very term in the regulation's definition of ' harm' is subservient to the phrase ' an act which actually kills or injures wildlife.' ").

PRELIMINARY INJUNCTION STANDARD

2. The usual standard for granting a preliminary injunction balances a plaintiff's likelihood of success against the relative hardship to the parties. Clear Channel Outdoor, Inc. v. City of Los Angeles, 340 F.3d 810, 813 (9th Cir.2003). Under the traditional test, an injunction is warranted where a plaintiffs shows (1) a strong likelihood of success on the merits, (2) the possibility of irreparable injury to plaintiff if preliminary relief is not granted, (3) a balance of hardships favoring the plaintiff, and (4) advancement of the public interest (in certain cases). Ranchers Cattleman Action Legal Fund United Stockgrowers of Am. v. U.S. Dep't of Ag., 415 F.3d 1078, 1092 (9th Cir.2005). Under an alternative formulation of that test, a party is entitled to a preliminary injunction if it demonstrates: (1) a likelihood of success on the merits and the possibility of irreparable injury; or (2) the existence of serious questions going to the merits and a balance of hardships tipping in its favor. Id. Under the alternative formulation, the two standards are not separate tests, but "two points on a sliding scale in which the required degree of irreparable harm increases as the probability of success decreases." Id.

3. The traditional test for preliminary injunctions is not the test for preliminary injunctions under the ESA. *Nat'l Wildlife Fed'n v. Burlington Northern R.R., Inc.,* 23 F.3d 1508, 1510 (9th Cir.1994). When it enacted the ESA, " Congress removed from the courts their traditional equitable discretion in injunction proceedings of balancing the parties' competing interests." *Id.* at 1511. Congress decided that " the balance of hardships and the public interest tip heavily in favor of endangered species." Id.

4. This change in the preliminary injunction standard does not mean that courts are not required to look at the likelihood of future harm before deciding whether to grant an injunction. Id. "Federal courts are not obligated to grant an injunction for every violation of the law." Id. "When federal statutes are violated, the test for determining if equitable relief is appropriate is whether an injunction is necessary to effectuate the congressional purpose behind the statute." Biodiversity Legal Found. v. Badgley, 309 F.3d 1166, 1177 (9th Cir.2002) (citing TVA v. Hill, 437 U.S. 153, 194, 98 S.Ct. 2279, 57 L.Ed.2d 117 (1978)). A plaintiff seeking a preliminary injunction based on an alleged violation of § 9 of the ESA must " make a showing that a violation of the ESA is at least likely in the future." Burlington Northern, 23 F.3d at 1511. What is required is " a definitive threat of future harm to protected species, not mere speculation." Id. at 1511 n. 8.

5. To prevail on the *merits* of their claim that State Defendants will authorize " take" of spotted owls, Plaintiffs must show that the State is likely to approve Forest Practices Applications that pose a " reasonably certain threat of imminent harm" to spotted owls through habitat modification.^{FN7} See Marbled Murrelet v. Pacific Lumber Co., 83 F.3d 1060, 1066 (9th Cir.1996); Forest Conservation Council v. Rosboro Lumber Co., 50 F.3d 781, 783 (9th Cir.1995). Likewise, to succeed on the merits of their claim against Weyerhaeuser, Plaintiffs must show that Weyerhaeuser is likely to engage in logging activities that pose a " reasonably certain threat of imminent harm" to spotted owls.

FN7. For the purposes of their motion for preliminary injunction, Plaintiffs only allege that Defendants' actions "harm" spotted owls.

6. Combining the Ninth Circuit's preliminary injunction standard with the requisite showing on the merits, to obtain a preliminary injunction, Plaintiffs must show that Defendants' actions create a " reasonable likelihood" of a " reasonably certain threat of imminent harm" to northern spotted owls. Stated differently, Plaintiffs must show that there is a reasonable likelihood of future habitat modification that is reasonably certain to injure spotted owls by impairing their essential behavioral patterns. 7. Plaintiffs suggest that they can obtain a preliminary injunction based on an alleged " impairment of recovery" of the northern spotted owl as a species. Under that theory, " impairment of recovery" can constitute " harm" to an endangered species if a plaintiff shows " significant impairment of the species' breeding or feeding habits and ... that the habitat degradation prevents, or possibly, retards, recovery of the species." *Burlington Northern*, 23 F.3d at 1513 (9th Cir.1994).

8. The Court will not entertain the possibility of a preliminary injunction based on an " impairment of recovery" theory. When interpreting the federal regulatory definition of "harm," the Supreme Court made clear that " actual death or injury of a protected animal is necessary" to prove harm by habitat modification. Sweet Home, 515 U.S. at 691 n. 2. Since passage of the current regulatory definition of " harm," the Ninth Circuit has only discussed the " impairment of recovery" theory in dicta. See, e.g., Burlington Northern, 23 F.3d at 1512-13; Az. Cattle Growers' Ass'n v. U.S. Dep't of Fish & Wildlife, 273 F.3d 1229, 1238 (9th Cir.2001). Plaintiffs have pointed to no Ninth Circuit decision that actually adopts " impairment of recovery" as an alternative theory of ESA " take." Given the Supreme Court's holding in Sweet Home, evidence that recovery of a species is impaired, without a showing of likely death or injury, is insufficient to prove ESA take.

Conclusions of Law

PLAINTIFFS HAVE NOT SHOWN A REASONABLE LIKELIHOOD THAT STATE DEFENDANTS WILL AUTHORIZE " TAKE" OF NORTHERN SPOTTED OWLS

9. Plaintiffs have failed to show that the State's approval of Forest Practice Applications affecting suitable habitat within administrative owl circles outside of special emphasis areas is reasonably likely to result in harm to spotted owls.

10. First, Plaintiffs have only presented evidence of spotted owl presence in 44 owl circles. Although it is reasonably likely, based on recent survey data, that owls occupy 36 of those circles, Plaintiffs have not presented any evidence indicating that spotted owls occupy the remainder of the 218 owl circles on private lands outside of special emphasis areas throughout the state. Without evidence of the presence of a protected species in an area that might

be affected by habitat modification, the Court cannot conclude that a threatened species is likely to be harmed.

11. Second, Plaintiffs have presented no evidence regarding the specific amount of suitable habitat remaining in any of the owl circles, aside from the four on Weyerhaeuser property. Without knowing how much suitable habitat remains in each circle where an owl is likely present, the Court cannot determine whether additional loss of any habitat will harm the resident owl(s).

12. Under Ninth Circuit law, a preliminary injunction cannot issue based on speculation that harm may occur; plaintiffs must show that there is a "definitive threat of future harm to protected species." *Burlington Northern*, 23 F.3d at 1512 n. 8. Based on the lack of specific information regarding owl presence and suitable habitat remaining, the Court cannot determine whether additional habitat loss in owl circles in Southwest Washington is reasonably likely to harm spotted owls. A preliminary injunction against State Defendants is not warranted.

PLAINTIFFS HAVE SHOWN THAT THERE IS A REASONABLE LIKELIHOOD THAT WEYERHAEUSER WILL "TAKE" NORTHERN SPOTTED OWLS

13. With respect to the four owl circles on Weyerhaeuser lands, Plaintiffs have demonstrated a reasonable likelihood of take.

14. Plaintiffs have demonstrated spotted owl presence in all four circles.

15. All four circles have less than 40% suitable habitat remaining.

16. Any additional harvest of suitable spotted owl habitat within 2.7-miles of the center of the Elk Creek, Ellis Creek, Pioneer Creek, and Blue Mountain circles is reasonably likely to harm spotted owls by impairing their essential behavioral functions. Additional harvest in these areas, particularly within the 0.7-mile core area, poses a reasonably certain threat of actual injury to these owls in the form of diminished reproductive success or death from starvation, exposure, or predation.

17. Plaintiffs have demonstrated, through Weyerhaeuser's ten-year plans and Forest Practice

Applications, that Weyerhaeuser intends to harvest suitable spotted owl habitat within the 2.7-mile radius circle around each site center.

18. Although Weyerhaeuser has withdrawn some of its Forest Practices Applications and entered into a research agreement with Fish & Wildlife, Weyerhaeuser has not committed to cease all logging of suitable spotted owl habitat within a 2.7-mile radius circle of the site center of the occupied circles on its property in Southwest Washington. Neither the withdrawal of the five Forest Practices Applications, nor the Agreement with Fish & Wildlife, negate the likelihood of harvest of suitable spotted owl habitat within these circles.

19. Any harm from logging of these circles will be irreparable. The loss of a single listed species is an irreparable harm. *See Loggerhead Turtle v. Volusia County*, 896 F.Supp. 1170, 1180 (M.D.Fla.1995). In addition, the harm resulting from any single owl loss in any of these four circles is magnified by the precarious existence of spotted owls in Southwest Washington.

20. Accordingly, pending a trial on the merits, the Court will preserve the status quo and prevent any irreparable harm to the owls in the Elk Creek, Ellis Creek, Blue Mountain, and Pioneer Creek circles by issuing a preliminary injunction. Weyerhaeuser is hereby enjoined from any further logging of suitable habitat mapped as part of the take-avoidance plans of the mid-1990s within the 2.7-mile radius circles around each of these four site centers. In those portions of these 2.7-mile radius circles that were not mapped for the take-avoidance plans, Weyerhaeuser shall not log any stands over 50 years in age without conducting a comprehensive survey of the harvest unit.

Conclusion

Plaintiffs seek a preliminary injunction against the State and Weyerhaeuser company, and ask that the Court enjoin all logging of suitable spotted owl habitat on private lands in owl circles outside of spotted owl special emphasis areas throughout Washington. The Court GRANTS IN PART and DENIES IN PART Plaintiffs' request, and issues an injunction against Weyerhaeuser, but not against State Defendants. The Court GRANTS Plaintiffs' request that the Court enjoin logging in the four owl circles identified on Weyerhaeuser property in Southwest Washington. Plaintiffs have shown that, without an injunction, it is reasonably likely that take will occur within these four owl circles. Pending a trial on the merits, the Court enjoins Weyerhaeuser from logging any suitable habitat within 2.7 miles of the center of the Elk Creek, Ellis Creek, Blue Mountain, or Pioneer Creek circles.

But the Court DENIES Plaintiffs' request that the Court prohibit State Defendants from authorizing logging of suitable habitat in owl circles on private lands outside of special emphasis areas throughout the state. Plaintiffs have not shown that it is likely that spotted owls inhabit many of these administrative owl circles. And Plaintiffs have not identified the amount of suitable owl habitat remaining within those circles. Given these evidentiary deficiencies, Plaintiffs have not met their burden of showing that additional logging, authorized by State Defendants, is likely to harm spotted owls.