Federal Register

Tuesday,
June 12, 2007

Part III

Department of the Interior

Fish and Wildlife Service

50 CFR Part 17

Endangered and Threatened Wildlife and Plants; Proposed Revised Designation of Critical Habitat for the Northern Spotted Owl (*Strix occidentalis caurina*); Proposed Rule

DEPARTMENT OF THE INTERIOR

Fish and Wildlife Service

50 CFR Part 17

RIN 1018–AU37

Endangered and Threatened Wildlife and Plants; Proposed Revised Designation of Critical Habitat for the Northern Spotted Owl (*Strix occidentalis caurina*)

AGENCY: Fish and Wildlife Service, Interior.

ACTION: Proposed rule.

SUMMARY: We, the U.S. Fish and Wildlife Service (Service), propose to revise the critical habitat designation for the northern spotted owl (*Strix occidentalis caurina*) under the Endangered Species Act of 1973, as amended (Act). In 1992, we designated critical habitat for the northern spotted owl on 6,887,000 acres (ac) (2,787,070 hectares (ha)) of Federal lands in California, Oregon, and Washington. In this document we propose revised critical habitat for the northern spotted owl on a total of approximately 5,337,839 acres (ac) (2,160,194 hectares (ha)) of Federal lands in California, Oregon, and Washington. If adopted, this action would result in a net decrease of approximately 1,549,161 ac (626,915 ha) of designated critical habitat for the northern spotted owl.

DATES: We will accept comments from all interested parties until August 13, 2007. We must receive requests for public hearings, in writing, at the address shown in the **ADDRESSES** section by July 27, 2007.

ADDRESSES: If you wish to comment, you may submit your comments and materials concerning this proposal by any one of several methods:

1. You may mail or hand-deliver written comments and information to Kemper McMaster, Field Supervisor, U.S. Fish and Wildlife Service, Oregon Fish and Wildlife Office, 2600 SE 98th Ave., Suite 100, Portland, OR 97266.

2. You may send comments by electronic mail (e-mail) to *northernspottedowlCH@fws.gov*. Please see the Public Comments Solicited section below for file format and other information about electronic filing.

3. You may fax your comments to our Oregon Fish and Wildlife Office at 503–231–6195.

4. You may go to the Federal eRulemaking Portal: *http://www.regulations.gov*. Follow the instructions provided for submitting comments.

Comments and materials received, as well as supporting documentation used in the preparation of this proposed rule, will be available for public inspection, by appointment, during normal business hours at the Oregon Fish and Wildlife Office, at the address above; the Western Washington Fish and Wildlife Office, 510 Desmond Drive SE., Suite 101, Lacey, WA 98503; and the Yreka Fish and Wildlife Office, 1829 S. Oregon St., Yreka, CA 96097.

FOR FURTHER INFORMATION CONTACT: Kemper McMaster, Field Supervisor, Oregon Fish and Wildlife Office (see **ADDRESSES**) (telephone 503–231–6179); Ken Berg, Field Supervisor, Western Washington Fish and Wildlife Office (see **ADDRESSES**) (telephone 360–753–9440); or Phillip Detrich, Field Supervisor, Yreka Fish and Wildlife Office (see **ADDRESSES**) (telephone 530–842–5763). People who use a telecommunications device for the deaf (TTD) may call the Federal Information Relay Service (FIRS) at 800–877–8339, 24 hours a day, 7 days a week.

SUPPLEMENTARY INFORMATION:

Public Comments Solicited

We intend that any final action resulting from this proposal will be as accurate and as effective as possible. Therefore, comments or suggestions from the public, other concerned governmental agencies, the scientific community, industry, or any other interested party concerning this proposed rule are hereby solicited. Comments particularly are sought concerning:

(1) The reasons why habitat should or should not be designated as critical habitat as provided by section 4 of the Act (16. U.S.C. 1531 *et seq.*), including whether the benefit of designation would outweigh threats to the species caused by designation such that the designation of critical habitat is prudent;

(2) Specific information on the amount and distribution of northern spotted owl habitat, what areas should be included in the revised designation that were occupied at the time of listing that contain the features that are essential for the conservation of the species and why, and what areas that were not occupied at the time of listing are essential to the conservation of the species and why;

(3) Land use designations and current or planned activities in the subject areas and their possible impacts on proposed revised critical habitat;

(4) Any foreseeable economic, national security, or other potential impacts resulting from the proposed revised designation and, in particular, any impacts on small entities; and the benefits of including or excluding areas that exhibit these impacts; and

(5) Whether any areas should or should not be excluded from the revised designation under section 4(b)(2) of the Act and why; and

(6) Whether our approach to designating critical habitat could be improved or modified in any way to provide for greater public participation and understanding, or to assist us in accommodating public concerns and comments.

If you wish to comment, you may submit your comments and materials concerning this proposal by any one of several methods (see **ADDRESSES** section). Please submit e-mail comments to *northernspottedowlCH@fws.gov* in ASCII file format and avoid the use of special characters or any form of encryption. Please also include ''Attn: northern spotted owl critical habitat'' in your e-mail subject header. If you do not receive a confirmation from the system that we have received your message, contact us directly by calling our Oregon Fish and Wildlife Office at 503–231–6179. Please note that the e-mail address *nor0thernspottedowlCH@fws.gov* will be closed out at the termination of the public comment period.

Before including your address, phone number, e-mail address, or other personal identifying information in your comment, you should be aware that your entire comment—including your personal identifying information—may be made publicly available at any time. While you can ask us in your comment to withhold your personal identifying information from public review, we cannot guarantee that we will be able to do so.

Background

Ecological Considerations

Physical Description and Taxonomy

The northern spotted owl is a medium-sized owl and the largest of the three subspecies of spotted owls currently recognized by the American Ornithologists' Union (Gutiérrez *et al.* 1995, p. 2). It is dark brown with a barred tail and white spots on the head and breast, and has dark brown eyes that are surrounded by prominent facial disks. The taxonomic separation of these three subspecies is supported by varied characteristics (reviewed in Courtney *et al.* 2004, pp. 3–3 to 3–31), including genetic (Barrowclough and Gutiérrez 1990, p. 739; Barrowclough *et al.* 1999, p. 922; Haig *et al.* 2004b, p. 1353; Barrowclough *et al.* 2005, p.

1113), morphological (Gutiérrez *et al.* 1995, pp. 2 to 3), behavioral (Van Gelder 2003, p. 30) and biogeographical information (Barrowclough *et al.* 1999, p. 928).

Distribution

The current range of the northern spotted owl extends from southwest British Columbia through the Cascade Mountains, coastal ranges, and intervening forested lands in Washington, Oregon, and California, as far south as Marin County, California (USFWS 1990, pp. 13, 60; June 26, 1990). The subspecies is listed as threatened under the Act throughout its range (55 FR 26114). Within the United States, the northern spotted owl ranges across 12 physiographic provinces, based on recognized landscape subdivisions exhibiting different physical and environmental features (Franklin and Dyrness 1988, pp. 5 to 26; Thomas *et al.* 1990, p. 61; USDA and USDI 1994b, p. A–3). These include the Olympic Peninsula, Western Washington Lowlands, Western Washington Cascades, Eastern Washington Cascades, Oregon Coast Ranges, Western Oregon Cascades, Willamette Valley, Eastern Oregon Cascades, Oregon Klamath, California Klamath, California Coast Ranges, and California Cascades Provinces (based on USDA and USDI 1994b, p. A–3). Very few northern spotted owls are found in the Western Washington Lowlands or Willamette Valley, however, therefore the subspecies is restricted primarily to 10 of the 12 provinces within its range.

Population Status and Trends

Demographic data, from studies initiated as early as 1985, have been analyzed every few years to estimate northern spotted owl population trends (Anderson and Burnham 1992; Burnham *et al.* 1994; Franklin *et al.* 1999; Anthony *et al.* 2006). The most current evaluation of population status and trends is based on data through 2003 (Anthony *et al.* 2006). Based on this analysis, populations on 8 of 12 study areas (Wenatchee, Cle Elum, Rainier, Olympic Peninsula, Oregon Coast Ranges, Warm Springs, H.J. Andrews, and Simpson) were declining (Anthony *et al.* 2006, p. 23). Estimates of realized population change (cumulative population change across all study years) indicated that, in the more rapidly declining populations (Wenatchee, Cle Elum, Rainier, and Warm Springs), the 2003 populations were 50 to 70 percent of the population sizes observed in 1994 or 1995 (Anthony *et al.* 2006, pp. 25 to 26). Populations in the remaining four study areas (Tyee, Klamath, South Oregon Cascades, and Hoopa) appear to have remained stable through 2003 (Anthony *et al.* 2006, p. 25). A meta-analysis combining data from all 12 study areas indicates that rangewide the population declined at a rate of about 3.7 percent per year from 1985 to 2003. Northern spotted owl populations on Federal lands had better demographic rates than elsewhere, but still declined at a mean annual rate of about 2.4 percent (Anthony *et al.* 2006, pp. 33 to 34).

The barred owl (*Strix varia*) has recently emerged as a greater threat to the northern spotted owl than was previously recognized. The range of the barred owl has expanded in recent years and now completely overlaps that of the northern spotted owl (Crozier *et al.* 2006, p. 761). The presence of barred owls has significant negative effects on northern spotted owl reproduction (Olson *et al.* 2004), survival (Anthony *et al.* 2006), and number of territories occupied (Kelly *et al.* 2003, p. 51; Olson *et al.* 2005). The determination of population trends for the northern spotted owl has become complicated by the finding that northern spotted owls are less likely to call when barred owls are also present, therefore they are likely to be undetected by standard survey methods (Olson *et al.* 2005; Crozier *et al.* 2006). It is therefore difficult to determine whether northern spotted owls no longer occupy a site, or whether they may still be present but are not detected. The 2007 Draft Recovery Plan for the Northern Spotted owl concludes that ''barred owls are exacerbating the spotted owl population decline, particularly in Washington, portions of Oregon, and the northern coast of California'' (USFWS 2007, p. 126).

British Columbia has a small population of northern spotted owls. This population has declined at least 49 percent since 1992 (Courtney *et al.* 2004, p. 8–14), and by as much as 90 percent since European settlement (Chutter *et al.* 2004, p. 6) to a current breeding population estimated at about 23 birds (Sierra Legal Defence [sic] Fund and Western Canada Wilderness Committee 2005, p. 16) on 15 sites (Chutter *et al.* 2004, p. 26).

Life History and Ecology

Northern spotted owls are highly territorial (Courtney *et al.* 2004, p. 2–7), though overlap between the outer portions of the home ranges of adjacent pairs is common (Forsman *et al.* 1984, pp. 5, 17, 22 to 24; Solis and Gutiérrez 1990, p. 742; Forsman *et al.* 2005, p. 374). Pairs are non-migratory and remain on their home range throughout the year, though they often increase the area used for foraging during fall and winter (Forsman *et al.* 1984, p. 21; Sisco 1990, p. 9), likely in response to potential depletion of prey in the core of their home range (Carey *et al.* 1992, p. 245; Carey 1995a, p. 649; but see Rosenberg *et al.* 1994, pp. 1512 to 1515). The northern spotted owl shows strong year-round fidelity to its breeding site, even when not nesting (Solis 1983, pp. 23 to 28; Forsman *et al.* 1984, pp. 52 to 53) or after natural disturbance alters habitat characteristics within the home range (Bond *et al.* 2002, pp. 1024 to 1026). A discussion of northern spotted owl home range size and use is included in the Primary Constituent Elements section of this proposed rule.

Reproductive success of northern spotted owls has been characterized as a multi-stage process (Carey and Peeler 1995, p. 236) in which natal dispersal and survival to reproductive age are the most vulnerable stages. Nomadic adults and juveniles dispersing from their natal area serve as sources of replacements for resident northern spotted owls that die or leave their home range (Thomas *et al.* 1990, p. 295). Habitat supporting movements of northern spotted owls between large blocks limits the potentially adverse genetic effects of inbreeding and provides demographic support to declining populations (Thomas *et al.* 1990, pp. 271 to 272). A discussion of northern spotted owl dispersal is included in the Primary Constituent Elements section of this proposed rule.

Prey

Northern spotted owls forage primarily on arboreal and semi-arboreal mammals (summarized in Courtney *et al.* 2004, pp. 4–31 to 4–32). The primary prey species utilized depends on geographic area, but may include northern flying squirrels (*Glaucomys sabrinus*), two species of woodrats (*Neotoma* spp.), two species of red-backed voles (*Clethrionomys* spp.), red tree voles (*Arborimus longicaudus*), two species of deer mice (*Peromyscus* spp.), and two species of lagomorphs (rabbits and hares) (Courtney *et al.* 2004, p. 4–5). Northern spotted owls are also known to prey on insects, other terrestrial mammals, birds, and juveniles of larger mammals (*e.g.*, mountain beaver (*Aplodontia rufa*), although the use of these prey species is more seasonal (mainly spring, summer, and early fall) (Forsman *et al.* 2001, p. 146; Forsman *et al.* 2004, p. 223).

There is a clear geographic pattern to the northern spotted owl diet that varies with distribution and abundance of prey and habitat type (Thomas *et al.* 1990, p.

201; Forsman *et al.* 2001, p. 146; Courtney *et al.* 2004, p. 4–7). Northern flying squirrels are the dominant prey species in the northern Western Hemlock/Douglas-fir forests. Dusky-footed woodrats (*Neotoma fuscipes*) are more important in the southern drier, mixed-conifer/mixed-evergreen forests. Both prey species are co-dominant through the southwest interior of Oregon (Courtney *et al.* 2004, pp. 4–7 to 4–8).

Northern flying squirrels are nocturnal arboreal rodents and the primary prey of northern spotted owls in the northern provinces. Forests that support northern flying squirrels provide den sites, usually cavities in large snags, but northern flying squirrels may also use cavities in live trees, hollow branches of fallen trees, crevices in large stumps, stick nests of other species, and lichen and twig nests they construct (Carey 1995b, p. 658). Fungi (mychorrhizal and epigeous types) are prominent in their diet, however seeds, fruits, nuts, vegetation matter, insects, and lichens may also represent a significant proportion of their diet (summarized in Courtney *et al.* 2004, App. 3–12). Northern flying squirrel densities tend to be higher in older forest stands with ericaceous shrubs (*e.g.*, rhododendron) and an abundance of large snags (Carey 1995b, p. 654), likely because these older forests produce a higher forage biomass. Flying squirrel density tends to increase with stand age (Carey 1995b, pp. 653 to 654; Carey 2000, p. 252), although managed and second-growth stands sometimes also show high densities of squirrels, especially when canopy cover is high (*e.g.*, Rosenberg and Anthony 1992, p. 163; Lehmkuhl *et al.* 2006, pp. 589 to 591). The main factors that may limit northern flying squirrel densities are the availability of den structures and food, especially hypogeous fungi (Gomez *et al.* 2005, pp. 1677 to 1678).

For northern spotted owls in northern California, southwestern Oregon, and the Willamette Valley, dusky-footed woodrats constitute the primary prey (Carey *et al.* 1999, p. 65). Habitats that support dusky-footed woodrats usually include early seral mixed-conifer/mixed evergreen forests close to water (Carey *et al.* 1999, p. 77). Dusky-footed woodrats reach high densities in both old forests with openings and closed-canopy young forests (Sakai and Noon 1993, pp. 376 to 378; Carey *et al.* 1999, p. 73), and use hardwood stands in mixed evergreen forests (Carey *et al.* 1999, p. 73). Dense woodrat populations in shrubby areas are likely a source of colonists to surrounding forested areas (Sakai and Noon 1997, p. 347), therefore forested areas with nearby open, shrubby vegetation generally support high numbers of dusky-footed woodrats. The main factors that may limit dusky-footed woodrats are access to stable, brushy environments that provide food, cover from predation, materials for nest construction, dispersal ability, and appropriate climatic conditions (Carey *et al.* 1999, p. 78).

Home Range, Forest Condition, Survival, and Reproduction

Territorial northern spotted owls remain resident on their home range throughout the year, therefore, these home ranges must provide all of the habitat components needed for the survival and successful reproduction of a pair of owls. The home range is composed of a core area, the area of most intensive use and nesting, and the remainder of the home range which is utilized for additional foraging and roosting. In nearly all studies of northern spotted owl nesting habitat, the amount of mature and old-growth forest was greater within northern spotted owl sites than at random sites at the home range and core area scale (Courtney *et al.* 2004, pp. 5–6, 5–13), and forests were less fragmented (Hunter *et al.* 1995, p. 688). The amount of quality habitat at the core area scale shows the strongest relationships with home range occupancy (Meyer *et al.* 1998, p. 34; Zabel *et al.* 2003, p. 1036), survival (Franklin *et al.* 2000, p. 567; Dugger *et al.* 2005, p. 873), and reproductive success (Ripple *et al.* 1997, pp. 155 to 156; Dugger *et al.* 2005, p. 871). A more complete description of the home range is presented in the Primary Constituent Elements section of this proposed rule.

The size, configuration, and characteristics of vegetation patches within core areas affect northern spotted owl survival and reproduction, a concept referred to as habitat fitness potential (Franklin *et al.* 2000, p. 542). Among studies that have estimated habitat fitness potential, the effects of forest fragmentation and heterogeneity vary geographically. In the California Klamath Province, locations for nesting and roosting tend to be centered in larger patches of old forest, but edges between forest types may provide increased prey abundance and availability (Franklin *et al.* 2000, p. 579). In the central Oregon Coast Range, northern spotted owls appear to benefit from a mixture of older forests with younger forest and non-forested areas in their home range (Olson *et al.* 2004, pp. 1049 to 1050), a pattern similar to that found in the California Klamath Province. In contrast, studies conducted in the Oregon Cascades found that habitat characteristics were not good predictors of northern spotted owl survival or reproduction (Anthony *et al.* 2002, p. 49). Courtney *et al.* (2004, p. 5–23) suggest that although in general large patches of older forest appear to be necessary to maintain stable populations of northern spotted owls, core areas composed predominantly of old forest may not be optimal for northern spotted owls in the California Klamath Province and Oregon Coast Ranges Province.

Habitat Use

Habitat for northern spotted owls has traditionally been described as consisting of four functional types: nesting, roosting, foraging, and dispersal habitats. Recent studies continue to support the practical value of discussing northern spotted owl habitat usage by classifying it into these functional habitat types (Lint 2005; Buchanan 2004; Forsman *et al.* 2005; Zabel *et al.* 2003; Irwin *et al.* 2000) and data from studies are available to describe areas used for these types of activities, so we retain it here to structure our discussion of the essential features of suitable habitat for the northern spotted owl. Detailed characterizations of each of these functional habitat types and their relative distribution are described in the Primary Constituent Elements section of this proposed rule.

Summary of Conservation Strategies for the Northern Spotted Owl

Prior and subsequent to the listing of the northern spotted owl (FR 55 26175), many committees, task forces, and work groups were formed to find biologically and socially acceptable solutions to the dilemma of halting its decline (Meslow 1993, entire document), commencing in 1982 with the development of a regional guide for management of the northern spotted owl (Courtney *et al.* 2004, p. 9–3). Today, northern spotted owl conservation on Federal lands within the range of the northern spotted owl in Washington, Oregon, and California is largely accomplished through the Forest Service's Land and Resource Management Plans (LRMP) and Bureau of Land Management's (BLM) Resource Management Plans (RMP), as amended by the Record of Decision for Amendments to Forest Service and BLM Planning Documents within the Range of the Northern Spotted Owl (USDA and USDI 1994a, p. 31; USDA and USDI 1994b). The LRMPs/RMPs were considered to be, in part, the Federal contribution to recovery for the northern spotted owl (USDA and USDI 1994a, Appendix G). The work of the

Interagency Scientific Committee to Address Conservation of the Northern Spotted Owl (ISC) in 1990 and its resulting core strategies has served as the foundation for subsequent conservation planning, including the 1992 Final Draft Recovery Plan for the Northern Spotted Owl (Courtney *et al.* 2004, p. 9–3), the original designation of critical habitat for the northern spotted owl (57 FR 1796; January 15, 1992), and the 2007 Draft Recovery Plan for the Northern Spotted Owl (USFWS 2007).

Interagency Scientific Committee (ISC)—1990

The Interagency Scientific Committee (ISC), was chartered in 1989 by four Federal agencies, the U.S. Department of Agriculture's Forest Service (FS) and U.S. Department of the Interior's Bureau of Land Management (BLM), Fish and Wildlife Service, and National Park Service, to develop a scientific conservation strategy for the northern spotted owl (Thomas *et al.* 1990). In 1992, the Forest Service formally adopted the ISC Conservation Strategy for the Northern Spotted Owl as a basis for its planned management. However, for a variety of reasons, the plan was never implemented (Courtney *et al.* 2004, p. 9–4).

The ISC's Conservation Strategy was built on a foundation of five conservation biology principles. In general, the ISC favors the protection of large blocks of habitat capable of supporting multiple pairs of northern spotted owls spaced closely enough to facilitate dispersal between the blocks. The results of applying these principles were of key importance to the development of this revised critical habitat proposal, and are summarized below:

(1) Large Block Size. The ISC strategy emphasizes the importance of managing large and well-distributed blocks of northern spotted owl habitat, called Habitat Conservation Areas (HCAs), which are sufficiently connected to maintain a stable and well-distributed population throughout the northern spotted owl's range. The target population for HCAs was derived from empirical data and modeling results supporting the conclusion that clusters of 20 pairs of northern spotted owls should be stable over the long term, given the rates of dispersal among them by juveniles (Thomas *et al.* 1990, pp. 24, App. O). At the time of selection, some HCAs contained sufficient habitat and resident northern spotted owls to meet or exceed the 20-pair target, while others were deficient in both habitat and pairs. The ISC anticipated that northern spotted owl habitat, and therefore the target number of pairs, would be recruited over time (Thomas *et al.* 1990, p. 23). Large block size was determined based on the target number of northern spotted owl pairs and the median provincial home range size of pairs. Based on habitat use studies, the median home range used was larger in the north (14,271 ac (5,775 ha)) and smaller in the south (2,955 ac (1,196 ha)) (Thomas *et al.* 1990, App. I). Overall, the large habitat blocks are considered sufficiently large so that they can remain stable over the long run, with low to moderate dispersal from adjacent blocks (Thomas *et al.* 1990, p. 24).

In areas where the actual habitat conditions, future capability of lands to develop into northern spotted owl habitat, and northern spotted owl densities did not allow for the large block approach, smaller habitat blocks were identified in strategic locations (Thomas *et al.* 1990, p. 28). The ISC recognized that the northern spotted owl populations in these smaller blocks were relatively less stable, but would still contribute to the metapopulation structure across the subspecies' range (Thomas *et al.* 1990, pp. 27 to 30, 308). The term metapopulation refers to a set of local populations linked by dispersing individuals. The ISC adopted a metapopulation approach to management as an attempt to provide the northern spotted owl with habitat distributed across the landscape in a fashion most similar to the historical configuration, given existing patterns of fragmentation. This approach was considered the best hedge against future extinction (Thomas *et al.* 1990, p. 23).

(2) Distance Between Habitat Blocks. The success of a northern spotted owl conservation strategy based on metapopulation structure depends, in part, on dispersal between habitat blocks. Therefore, the ISC developed habitat blocks separated by distances well within the known dispersal range of juveniles (Thomas *et al.* 1990, p. 307). For the northern spotted owl, the ISC indicates that the distance between large habitat blocks should be within the known median dispersal distances of at least two-thirds of all juveniles. This translated into a maximum allowable distance of 12 mi (19.3 km) between the nearest points of contact of neighboring large habitat blocks (Thomas *et al.* 1990, p. 307, Table P1).

Populations in small habitat blocks are inherently less stable and more prone to local extinctions than those in large blocks and are therefore more reliant on immigration from neighboring blocks to remain extant (Thomas *et al.* 1990, pp. 262, 266, 308). To provide an additional measure of population security for the small habitat blocks, the ISC set a shorter distance of 7 mi (11.2 km) to the adjacent blocks. This was less than the median dispersal distance estimate from banded northern spotted owls, and is within the dispersal range of more than 75 percent of all radio-marked juveniles (Thomas *et al.* 1990, p. 308). This shorter distance was intended to improve the likelihood of successful dispersal from adjacent blocks, thereby reducing the potential for local extinctions within small habitat blocks (Thomas *et al.* 1990, p. 308).

(3) Rangewide Distribution. A primary reason for designating habitat blocks throughout the northern spotted owl's range was to ensure that stochastic events such as large fires or windstorms that may occur in a portion of the range would not negatively impact the entire population (Thomas *et al.* 1990, p. 294). The ISC's rangewide distribution of large habitat blocks offered some resiliency to maintain the subspecies and habitat variation across provinces and offered some protection against stressors such as stochastic events (*e.g.*, large fires). This conservation principle provides a hedge against extinction of the northern spotted owl due to either small or large catastrophic events. In addition, large, well-distributed blocks of unfragmented habitat may assist the northern spotted owl in responding to the barred owl, which has recently expanded its range and now overlaps with the range of the northern spotted owl (Herter and Hicks 2000, p. 284).

(4) Contiguous Habitat. The ISC Strategy states that the less fragmented the habitat within blocks is, the better habitat will function for northern spotted owls. Habitat fragmentation may cause habitat deterioration from edge effects, increased risk of predation, and potential displacement by barred owls (Thomas *et al.* 1990, p. 22 to 23). At the time, information such as that provided by the more recent studies in the California Klamath and Oregon Coast Range provinces regarding the potential benefits of heterogeneity and forest edge in these areas (Franklin *et al.* 2000, Olson *et al.* 2004) was not known.

(5) Dispersal Habitat. Stability of the northern spotted owl population under the ISC Conservation Strategy is dependent on the movement of individuals among habitat blocks for population support (Thomas *et al.* 1990, p. 26). To facilitate the movement of northern spotted owls between blocks, the ISC requires intervening forest lands to be managed in a manner that will support dispersing northern spotted owls (Thomas *et al.* 1990, p. 326 to 327).

Designation of Critical Habitat—1992

The original designation of critical habitat for the northern spotted owl was finalized in 1992 (57 FR 1796; January 15, 1992). Critical habitat was identified based on the conservation principles set forth in the ISC Conservation Strategy for the Northern Spotted Owl (Thomas *et al.* 1990), including the development and maintenance of large contiguous blocks of habitat to support multiple reproducing pairs of owls; minimizing fragmentation and edge effect to improve habitat quality; minimizing distance between blocks to facilitate dispersal; and maintaining rangewide distribution of habitat to facilitate recovery (57 FR 1803–1804; January 15, 1992). The emphasis on large, continuous blocks of habitat relied on the ISC's identification of HCAs as a starting point (Thomas *et al.* 1990; p. 315). Category 1 HCAs were those with the potential to support 20 or more pairs, and category 2 HCAs were those with the potential to support fewer than 20 pairs. Although the ISC had also identified category 3 HCAs, areas capable of supporting only a single pair of owls, the critical habitat concentrated on areas of sufficient size to support at least two pairs. The final critical habitat designation included 6,887,000 ac (2,787,070 ha) of Federal lands within the range of the northern spotted owl. Of those acres, approximately 5,700,000 ac (2,317,073 ha) were within the HCA system proposed by the ISC, and an additional 1,887,000 ac (767,073 ha) were designated as a measure to further enhance the HCAs already identified (57 FR 1804–1805; January 15, 1992).

Northern Spotted Owl Final Draft Recovery Plan—1992

The Department of the Interior began development of a recovery plan for the northern spotted owl in 1990. After reviewing a number of conservation strategies, the 1992 Recovery Team settled on the ISC reserve design (*i.e.*, size and spacing of habitat blocks) as a basis for the 1992 Final Draft Northern Spotted Owl Recovery Plan (USDI 1992, p. 357). HCAs were renamed Designated Conservation Areas (DCAs), but the category designations remained the same (*i.e.*, a category 1 DCA was designed to support at least 20 pairs of northern spotted owls, and a category 2 DCA supports from 2 to 19 pairs). The 1992 Recovery Team's objective in remapping the HCAs was to provide a level of habitat protection in the DCAs that was at least equal to that provided by HCAs, while increasing the biological and economic efficiency of the network. The fundamental sizing and spacing criteria from Thomas *et al.* (1990) were applied during mapping of the DCAs. The overall structural elements developed by the ISC remained, although the draft recovery plan was never finalized.

Forest Ecosystem Management Assessment Team—1993

The Forest Ecosystem Management Assessment Team (FEMAT) (USDA *et al.* 1993) was created to provide a review of scientific issues and options for a regional plan to manage Federal forests. The primary concepts of the FEMAT Option 9 were adopted through the Record of Decision for Amendments to Forest Service and BLM Planning Documents within the Range of the Northern Spotted Owl, signed in 1994, and amended the Forest Service LRMPs and BLM RMPs within the range of the northern spotted owl relative to the management of habitat for late-successional and old-growth forest species (USDA and USDI 1994b). The principal components that contribute to conserving the northern spotted owl include the concepts of large reserve blocks of habitat (managed for forests resembling northern spotted owl habitat), connectivity, and silviculture treatments to accelerate habitat development, all of which were founded on the ISC concepts (Courtney *et al.* 2004, 9–7).

The LRMPs/RMPs include a network of reserve allocations called Late-Successional Reserves (LSRs) designed, in part, to support clusters of reproducing northern spotted owl pairs across the range of the subspecies. It should be noted that LSRs are managed to meet the need of multiple species that depend on late-successional forests, and are not exclusive to management for northern spotted owls. Therefore although many LSRs benefit northern spotted owls, not all LSRs necessarily represent optimal habitat for northern spotted owls since they are intended to provide for other species as well.

Silvicultural treatment of young forest (less than 80 years of age) is allowed within LSRs for the purpose of accelerating the development of late-successional habitat. This provision was included because the LSRs initially included a significant amount of area that had been logged and were in young, plantation-style forests. Because the development of large contiguous, unfragmented, blocks of late-successional forest was a key element of the ISC's strategy, activities designed to accelerate restoration of simplified young stands were viewed as appropriate.

The LRMPs/RMPs allow for silvicultural treatments of older forests in LSRs on sites characterized by frequent, light to moderate intensity fire, such as pine and mixed-conifer dominated forests on the eastern slopes of the Cascade Range and in the Siskiyou-Klamath region. This provision was included because of the potential for uncharacteristically intense wildfire on sites where higher than normal amounts of fuel have accumulated. Such fires pose a high risk of temporary or even long-term loss of old-growth conditions, including northern spotted owl habitat, and treatments may help reduce this risk.

2006/2007 Recovery Planning Process for the Northern Spotted Owl

In April 2006, the Service convened an interdisciplinary Northern Spotted Owl Recovery Team to incorporate the most recent scientific information into a current recovery plan for the species. The Recovery Team sought input from northern spotted owl experts on the main threats to the rangewide northern spotted owl population: competition from barred owls, loss of habitat amount and distribution from past activities and disturbances, and ongoing habitat loss to timber harvest. The Draft Recovery Plan for the Northern Spotted Owl (USFWS 2007) provides two options to address the threats posed by habitat loss and modification. Both options are based on the same underlying science, much of which is from the ISC (Thomas *et al.* 1990). Option 1 maps the specific conservation area boundaries where most of the recovery actions and criteria will be targeted. These conservation areas are called Managed Owl Conservation Areas, or MOCAs, and are mapped in the 2007 Draft Recovery Plan (USFWS 2007). Option 2 of the 2007 Draft Recovery Plan provides a rule set that defines the size and distance of the conservation areas needed for recovery, while recognizing that the habitat demands of the northern spotted owl vary across its range. The rule set is designed to help guide the Federal land management agencies when undertaking conservation actions for the northern spotted owl.

The network of habitat blocks stemming from both options is based on the conservation biology strategies of the ISC (Thomas *et al.* 1990, p. 23) and provides the basis for this proposed revised critical habitat designation. The 2007 Draft Recovery Plan suggests that the recovery of the northern spotted owl can be achieved by managing for appropriate habitat on Federal lands within the range of the northern spotted owl in the United States, drawing on

voluntary recovery measures on intervening non-Federal lands. Conservation contributions by private, State, and other landowners in areas between or adjacent to habitat blocks are expected to increase the likelihood of northern spotted owl recovery. Consistent with the 1992 designation, we have identified only Federal lands as proposed revised critical habitat for the northern spotted owl.

Previous Federal Actions

A description of previous Federal actions up to the time of listing on June 26, 1990, can be found in the final rule listing the northern spotted owl (55 FR 26114). On January 15, 1992, we published the final rule designating critical habitat for the northern spotted owl (57 FR 1796). In December 1992, we completed the Final Draft Recovery Plan for the Northern Spotted Owl in Washington, Oregon, and California (USDI 1992).

On April 21, 2003, we published a notice of review initiating a 5-year review of the northern spotted owl (68 FR 19569). We then published a second information request for the 5-year review on July 25, 2003 (68 FR 44093). We contracted a comprehensive status review of the northern spotted owl to provide the best available scientific information for the 5-year review. The status review report was completed in September 2004 and continues to serve as the most current comprehensive summary of scientific information on the northern spotted owl (Courtney *et al.* 2004). We completed the 5-year review on November 15, 2004, concluding that the northern spotted owl should remain listed as a threatened species under the Act.

On January 13, 2003, we entered into a settlement agreement with the American Forest Resource Council, Western Council of Industrial Workers, Swanson Group Inc., and Rough & Ready Lumber Company to conduct a rulemaking to consider potential revisions to critical habitat for the northern spotted owl that includes a revised consideration of economic impacts and any other relevant aspects of designation. The dates for completion of this review have been extended and currently call for the Service to submit a proposed revised critical habitat designation to the **Federal Register** by June 1, 2007, and to submit a final revised critical habitat designation to the **Federal Register** by June 1, 2008.

Critical Habitat

Critical habitat is defined in section 3 of the Act as: (i) The specific areas within the geographical area occupied by a species, at the time it is listed in accordance with the Act, on which are found those physical or biological features (I) essential to the conservation of the species and (II) that may require special management considerations or protection; and (ii) specific areas outside the geographical area occupied by a species at the time it is listed, upon a determination that such areas are essential for the conservation of the species. Conservation, as defined under section 3 of the Act, means to use all methods and procedures necessary to bring any endangered species or threatened species to the point at which the measures provided pursuant to the Act are no longer necessary. Such methods and procedures include, but are not limited to, all activities associated with scientific resources management such as research, census, law enforcement, habitat acquisition and maintenance, propagation, live trapping, and transplantation, and, in the extraordinary case where population pressures within a given ecosystem cannot be otherwise relieved, may include regulated taking.

Critical habitat receives protection under section 7 of the Act through the prohibition against destruction or adverse modification of critical habitat with regard to actions carried out, funded, or authorized by a Federal agency. Section 7 requires consultation on Federal actions that are likely to result in effects to critical habitat. The designation of critical habitat does not affect land ownership or establish a refuge, wilderness, reserve, preserve, or other conservation area. Such designation does not allow government or public access to private lands. Section 7 is a purely protective measure and does not require implementation of restoration, recovery, or enhancement measures.

To be included in a critical habitat designation, the habitat within the area occupied by the species must first have features that are essential to the conservation of the species. Critical habitat designations identify, to the extent known using the best scientific data available, habitat areas that provide essential life cycle needs of the species (*i.e.*, areas on which are found the primary constituent elements, as defined at 50 CFR 424.12(b)).

Habitat occupied at the time of listing may be included in critical habitat only if its essential features may require special management or protection. An area currently occupied by the species but not known to be occupied at the time of listing will likely, but not always, be essential to the conservation of the species and, therefore, typically included in the critical habitat designation. When the best available scientific data do not demonstrate that the conservation needs of the species require additional areas, we will not designate critical habitat in areas outside the geographical area occupied by the species at the time of listing.

The Service's Policy on Information Standards Under the Endangered Species Act, published in the **Federal Register** on July 1, 1994 (59 FR 34271), and section 515 of the Treasury and General Government Appropriations Act for Fiscal Year 2001 (Pub. L. 106–554; H.R. 5658) and the associated Information Quality Guidelines issued by the Service, provide criteria, establish procedures, and provide guidance to ensure that decisions made by the Service represent the best scientific data available. They require Service biologists, to the extent consistent with the Act and with the use of the best scientific data available, to use primary and original sources of information as the basis for recommendations to designate critical habitat. When determining which areas are eligible for consideration as critical habitat, a primary source of information is generally the listing package for the species. Additional information sources include the recovery plan for the species, articles in peer-reviewed journals, conservation plans developed by States and counties, scientific status surveys and studies, biological assessments, or other unpublished materials and expert opinion or personal knowledge. All information is used in accordance with the provisions of section 515 of the Treasury and General Government Appropriations Act for Fiscal Year 2001 (Pub. L. 106–554; H.R. 5658) and the associated Information Quality Guidelines issued by the Service.

Section 4 of the Act requires that we designate critical habitat on the basis of the best scientific data available. Habitat is often dynamic, and species may move from one area to another over time. Furthermore, we recognize that designation of critical habitat may not include all of the habitat areas that may eventually be determined to be necessary for the recovery of the species. For these reasons, critical habitat designations do not signal that habitat outside the designation is unimportant or may not be required for recovery.

Areas that support populations, but are outside the critical habitat designation, will continue to be subject to conservation actions implemented under section 7(a)(1) of the Act and to the regulatory protections afforded by

the section 7(a)(2) jeopardy standard, as determined on the basis of the best available information at the time of the action. Federally funded or permitted projects affecting listed species outside their designated critical habitat areas may still result in jeopardy findings in some cases. Similarly, critical habitat designations made on the basis of the best available information at the time of designation will not control the direction and substance of future recovery plans, habitat conservation plans, or other species conservation planning efforts if new information available to these planning efforts calls for a different outcome.

Methods

As required by section 4(b)(2) of the Act, we use the best scientific data available in determining areas that contain the features that are essential to the conservation of the northern spotted owl. For this critical habitat revision, we relied upon a variety of information sources to identify those areas, as well as to assess the habitat requirements of the species, including the 2007 Draft Recovery Plan for the Northern Spotted Owl (USFWS 2007), the 2004 Status Review for the Northern Spotted Owl (Courtney *et al.* 2004), the Northern Spotted Owl 5-year Review (USFWS 2004), the Final Supplemental Environmental Impact Statement and Record of Decision for Amendments to Forest Service and BLM Planning Documents within the Range of the Northern Spotted Owl (USDA and USDI 1994 a, b), the 1992 final critical habitat designation (57 FR 1796; January 15, 1992), Interagency Scientific Committee Conservation Strategy for the Northern Spotted Owl (Thomas *et al.* 1990), and GIS data layers, including those for northern spotted owl habitat, Federal land use allocations, land ownership, and northern spotted owl occupancy data. This proposed rule only addresses revisions to the current designation. For discussion of the methods used for the existing designation, please refer to that final designation (57 FR 1796; January 15, 1992).

Primary Constituent Elements

In accordance with section 3(5)(A)(i) of the Act and regulations at 50 CFR 424.12, in determining which areas to propose as critical habitat, we consider physical and biological features (primary constituent elements, or PCEs) that are essential to the conservation of the species, and within the area occupied by the species at the time of listing, that may require special management considerations and protection. These include, but are not limited to, space for individual and population growth and for normal behavior; food, water, air, light, minerals, or other nutritional or physiological requirements; cover or shelter; sites for breeding, reproduction, and rearing (or development) of offspring; and habitats that are protected from disturbance or are representative of the historic geographical and ecological distributions of a species.

The specific primary constituent elements required for the northern spotted owl are derived from the biological needs of the species as described in the Background section of this proposal and the following information.

Space for Population Growth and for Normal Behavior

Northern spotted owls remain on their home range throughout the year therefore this area must provide all the habitat components and prey needed to provide for the survival and successful reproduction of a territorial pair. The home range of a northern spotted owl is relatively large and varies in size among and within provinces, generally increasing to the north (Courtney *et al.* 2004, p. 5–24; 55 FR 25117) where home range size ranges from 2,955 ac (1,196 ha) in the Oregon Cascades (Thomas *et al.* 1990, p. 194) to 14,271 ac (5,775 ha) on the Olympic Peninsula (USDI 1992, p. 23; USFWS 1994 in litt., p. 1). Northern spotted owl home ranges are generally larger where northern flying squirrels are the predominant prey and smaller where woodrats are the predominant prey (Zabel *et al.* 1995, p. 436). Home range size also increases with increasing forest fragmentation (Carey *et al.* 1992, p. 235; Franklin and Guti?rrez 2002, p. 212; Glenn *et al.* 2004, p. 45) and decreasing proportions of nesting habitat on the landscape (Carey *et al.* 1992, p. 235; Forsman *et al.* 2005, p. 374), suggesting that northern spotted owls increase the size of their home ranges to encompass adequate amounts of suitable forest types (Forsman *et al.* 2005, p. 374).

Northern spotted owl home ranges contain two distinct use areas: the core area, which is the area that is used most intensively and usually includes the nesting area (Bingham and Noon 1997, pp. 134 to 135), and the remainder of the home range which is used for foraging and roosting. The size of core areas varies considerably across the subspecies? geographic range following a pattern similar to that of home range size (Bingham and Noon 1997, p. 133), varying from over 4,057 ac (1,642 ha) in the northernmost (flying squirrel prey) provinces (Forsman *et al.* 2005, pp. 370, 375) to less than 500 ac (202 ha) in the southernmost (dusky-footed woodrat prey) provinces (Pious 1995, pp. 9 to 10, Table 2; Zabel *et al.* 2003, pp. 1036 to 1038).

Core areas contain greater proportions of mature/old forest than random or non-use areas (Courtney *et al.* 2004, p. 5–13), and the quality of habitat at the core area scale shows the strongest relationships with occupancy (Meyer *et al.* 1998, p. 34; Zabel *et al.* 2003, pp. 1027, 1036), survival (Franklin *et al.* 2000, p. 567; Dugger *et al.* 2005, p. 873), and reproductive success (Ripple *et al.* 1997, pp. 155 to 156; Dugger *et al.* 2005, p. 871). In some areas, edges between forest types within northern spotted owl home ranges may provide increased prey abundance and availability (Franklin *et al.* 2000, p. 579). For successful reproduction, core areas need to contain one or more forest stands that have both the structural attributes and the location relative to other features in the home range that allow them to fulfill nesting, roosting, and foraging functions (Carey and Peeler 1995, pp. 233 to 236; Rosenberg and McKelvey 1999, pp. 1035 to 1037).

The primary function of the remainder of the home range outside the core area is to provide subsidiary roosting and foraging opportunities for the resident pair that are essential to the year-round survival of the resident pair if they partially deplete the prey populations in the core area.

Sites for Breeding, Reproduction, and Rearing of Offspring (Nesting)

Nesting habitat provides structural features for nesting, protection from adverse weather conditions, and cover to reduce predation risks for adults and young. Nesting stands typically include a moderate to high canopy closure (60 to 80 percent); a multi-layered, multi-species canopy with large (greater than 30 inches (in) (76 centimeters (cm)) diameter at breast height (dbh)) overstory trees; a high incidence of large trees with various deformities (e.g., large cavities, broken tops, mistletoe infections, and other evidence of decadence); large snags; large accumulations of fallen trees and other woody debris on the ground; and sufficient open space below the canopy for northern spotted owls to fly (Thomas *et al.* 1990, p. 164; 57 FR 1798).

Recent studies found that northern spotted owl nest stands tend to have greater tree basal area, number of canopy layers, density of broken-top trees, number or basal area of decadent snags, and volume of decadent logs (Courtney *et al.* 2004, pp. 5–16 to 5–19, 5–23). In some forest types, northern

spotted owls nest in younger forest stands that contain structural characteristics of older forests. Nesting northern spotted owls consistently occupy stands having high canopy cover that may provide thermoregulatory benefits (Weathers *et al.* 2001, p. 686), allowing northern spotted owls a wider range of choices for locating thermally-neutral roosts near the nest site. High canopy closure may also conceal northern spotted owls, reducing potential predation.

To support northern spotted owl reproduction, a home range requires appropriate amounts of nesting, roosting, and foraging habitat arrayed so that nesting pairs can use it efficiently and safely. In the northern parts of the range where nesting, roosting, and foraging habitat have similar attributes, nesting is generally associated with increasing old forest in the core area (Swindle *et al.* 1999, p. 1216). In some portions of the range in the south, northern spotted owl survival is positively associated with the area of old forest habitat in the core, but reproductive output is positively associated with amount of edge between older forest and other habitat types in the home range (Franklin *et al.* 2000, pp. 573, 579). This pattern suggests that where dusky-footed woodrats are the primary prey species, core areas that have nesting habitat stands interspersed with varied types of foraging habitat may be optimal for northern spotted owl survival and reproduction. The appropriate amount and spatial distribution of nesting habitat is essential for successful reproduction of northern spotted owls.

Cover or Shelter (Roosting)

The primary functions of roosting habitat are to facilitate thermoregulation in summer or winter, shelter northern spotted owls from precipitation, and provide cover to reduce predation risk while resting or foraging. Studies of roosting locations found that northern spotted owls tended to use stands with greater vertical canopy layering (Mills *et al.* 1993, pp. 318 to 319), canopy closure (King 1993, p. 45), snag diameter (Mills *et al.* 1993, pp. 318 to 319), diameter of large trees (Herter *et al.* 2002, pp. 437, 441), and amounts of large woody debris (Chow 2001, p. 24; reviewed in Courtney *et al.* 2004, pp. 5–14 to 4–16, 5–23). The characteristics of roosting habitat differ from those of nesting habitat only in that roosting habitat need not contain the specific structural features used for nesting (Thomas *et al.* 1990, p. 62).

Food or Other Nutritional or Physiological Requirements (Foraging)

The primary function of foraging habitat is to provide a food supply for survival and reproduction. Foraging activity is positively associated with tree height diversity (North *et al.* 1999, p. 524), canopy closure (Irwin *et al.* 2000, p. 180; Courtney *et al.* 2004, p. 5–15), snag volume, density of snags greater than 20 in (50 cm) dbh (North *et al.* 1999, p. 524; Irwin *et al.* 2000, pp. 179 to 180; Courtney *et al.* 2004, p. 5–15), density of trees greater than or equal to 31 in (80 cm) dbh (North *et al.* 1999, p. 524), volume of woody debris (Irwin *et al.* 2000, pp. 179 to 80), and young forests with some structural characteristics of old forests (Carey *et al.* 1992, pp. 245 to 247; Irwin *et al.* 2000, pp. 178 to 179). Northern spotted owls select old forests for foraging in greater proportion than its availability at the landscape scale (Carey *et al.* 1992, pp. 236 to 237; Carey and Peeler 1995, p. 235; Forsman *et al.* 2005, pp. 372 to 373), but will forage in younger stands with high prey densities and access to prey (Carey *et al.* 1992, p. 247; Rosenberg and Anthony 1992, p. 165; Thome *et al.* 1999, pp. 56 to 57).

Because northern spotted owls show a clear geographic pattern in diet, and different prey species prefer different habitat types, prey distribution contributes to differences in northern spotted owl foraging habitat selection across the range. In the northern portion of their range, northern spotted owls forage heavily in older forests or forests with similar structure that support northern flying squirrels (Rosenberg and Anthony 1992, p. 165; Carey *et al.* 1992, p. 233). In the southern portion of their range, where woodrats are a major component of their diet, northern spotted owls are more likely to use a variety of stands, including younger stands, brushy openings in older stands, and edges between forest types in response to higher prey density in some of these areas (Solis 1983, pp. 89 to 90; Sakai and Noon 1993, pp. 376 to 378; Carey *et al.* 1999, p. 73; Sakai and Noon 1997, p. 347; Franklin *et al.* 2000, p. 579). An adequate amount and distribution of foraging habitat within the home range is essential to the survival and reproduction of northern spotted owls.

Habitats That Are Representative of the Historical Geographical and Ecological Distributions of the Northern Spotted Owl

The northern spotted owl inhabits most of the major types of coniferous forests across its geographic range, including Sitka spruce, western hemlock, mixed conifer and mixed evergreen, grand fir, Pacific silver fir, Douglas-fir, redwood/Douglas-fir (in coastal California and southwestern Oregon), white fir, Shasta red fir, and the moist end of the ponderosa pine zone (Forsman *et al.* 1984; Franklin and Dyrness 1988; Thomas *et al.* 1990). Vegetative composition of northern spotted owl habitat changes from north to south and from west to east within the subspecies' range. The lower elevation limit of subalpine vegetation types defines the uppermost elevation used by northern spotted owls. This elevation varies with latitude from about 3,000 feet (ft) (914 meters (m)) above sea level near the northern edge of the range to about 6,000 ft (1,828 m) above sea level at the southern edge (Lint 2005, p. 32).

Historically, forest types occupied by the northern spotted owl were fairly continuous, particularly in the wetter parts of its range in coastal northern California and most of western Oregon and Washington. Suitable forest types in the drier parts of the range (interior northern California, interior southern Oregon, and east of the Cascade crest in Oregon and Washington) occur in a mosaic pattern interspersed with infrequently used vegetation types such as open forests, shrubby areas, and grasslands. In the Klamath Mountains Provinces in Oregon and California, and to a lesser extent in the Coast and Cascade Provinces of California, large areas of serpentine soils exist that are typically not capable of supporting northern spotted owl habitat (Lint 2005, pp. 31 to 33).

Conditions Supporting Non-Resident Owls

Landscapes with northern spotted owl habitat likely contain non-resident (non-breeding) northern spotted owls, sometimes referred to as ''floaters'' (Forsman *et al.* 2002, pp. 15, 26). These habitats contribute to stable or increasing populations of northern spotted owls by maintaining sufficient individuals to quickly fill territorial vacancies when residents die or leave their territories. Where large blocks of habitat with multiple breeding pairs occur, the opportunities for this integration are enhanced due to the within-block production of potential replacement birds (Thomas *et al.* 1990, p. 295, 307).

Intervening habitats are important in supporting the successful dispersal of northern spotted owls that is essential to maintaining the genetic and demographic connection among populations both within and across

provinces. Habitats that support movements between larger blocks providing nesting, roosting, and foraging habitats for northern spotted owls act to limit the adverse genetic effects of inbreeding and provide demographic support to declining populations (Thomas *et al.* 1990, pp. 271 to 272). Dispersing juvenile northern spotted owls experience high mortality rates (more than 70 percent in some studies (Miller 1989, pp. 32 to 41; Franklin *et al.* 1999, pp. 25, 28; 55 FR 26115)) from starvation, predation, and accidents (Miller 1989, pp. 41 to 44; Forsman *et al.* 2002, pp. 18 to 19). Juvenile dispersal is thus a highly vulnerable life stage for northern spotted owls, and enhancing the survivorship of juveniles during this period could play an important role in maintaining stable populations of northern spotted owls.

Juvenile dispersal occurs in steps (Forsman *et al.* 2002, pp. 13 to 14) between which dispersing juveniles settle into temporary home ranges for up to several months (Forsman *et al.* 2002, p. 13). During the transience (movement) phase, dispersers used mature and old-growth forest slightly more than its availability; during the colonization phase, mature and old-growth forest was used at nearly twice its availability (Miller *et al.* 1997, p. 144). Closed pole-sapling-sawtimber habitat was used roughly in proportion to availability in both phases and may represent the minimum condition for movement. Open sapling and clearcuts were used less than expected based on availability during colonization (Miller *et al.* 1997, p. 145).

Successful juvenile dispersal may depend on locating unoccupied suitable habitat in close proximity to other occupied sites (LaHaye *et al.* 2001, pp. 697 to 698). Natal dispersal distances, measured from natal areas to eventual home range, tend to be larger for females (about 15 mi (24 km)) than males (about 8.5 mi (13.7 km)) (Courtney *et al.* 2004, p. 8–5). Approximately 68 percent of radio-marked juveniles of both sexes dispersed greater than 12 mi (19 km) from their natal areas, which was also the average dispersal distance. Approximately 80 percent dispersed greater than 7 mi (11 km) from their natal areas (Thomas *et al.* 1990, pp. 305 to 306). Northern spotted owls regularly disperse through highly fragmented forested landscapes that are typical of the mountain ranges in western Washington and Oregon (Forsman *et al.* 2002, p. 22), and have dispersed from the Coastal Mountains to the Cascades Mountains in the broad forested regions between the Willamette, Umpqua, and Rogue Valleys of Oregon (Forsman *et al.* 2002, p. 22). Corridors of forest through fragmented landscapes serve primarily to support relatively rapid movement through such areas, rather than colonization.

Primary Constituent Elements for the Northern Spotted Owl

Under our regulations, we are required to identify the known physical and biological features (PCEs) essential to the conservation of the northern spotted owl. All areas proposed as revised critical habitat for the northern spotted owl are within the geographic area occupied by the species and contain sufficient PCEs to support at least one life history function. Much of the recent research on northern spotted owl biology supports the PCEs described in the previous critical habitat designation; based on our current knowledge, the PCEs described here are more detailed and specific, where possible. Based on our current knowledge of the life history, biology, and ecology of the species and the requirements of the habitat to sustain the essential life history functions of the species, we have determined that the northern spotted owl's PCEs are:

(1) Forest types known to support the northern spotted owl across its geographic range. These forest types include Sitka spruce, western hemlock, mixed conifer and mixed evergreen, grand fir, Pacific silver fir, Douglas-fir, white fir, Shasta red fir, redwood/Douglas-fir (in coastal California and southwestern Oregon), and the moist end of the ponderosa pine coniferous forests zones at elevations up to 3,000 ft (914 m) near the northern edge of the range and up to about 6,000 ft (1,828 m) at the southern edge.

This PCE provides the biotic communities that are known to support the northern spotted owl across its geographic range. The northern spotted owl and some of its primary prey species do not reproduce successfully outside these biotic communities.

(2) Forest types as described in PCE 1 of sufficient area, quality, and configuration, or that have the ability to develop these characteristics, to meet the home range needs of territorial pairs of northern spotted owls throughout the year. A home range must provide all of the habitat components and prey needed to provide for the survival and successful reproduction of a resident breeding pair of northern spotted owls. As detailed earlier, home range and core area sizes vary widely both within and among physiographic provinces across the range of the northern spotted owl (Courtney *et al.* 2004, p. 5–24). Core areas, which usually include the nesting habitat, may range from over 4,057 ac (1,642 ha) in the north (Forsman *et al.* 2005, pp. 369 to 370) to fewer than 500 ac (202 ha) in the south (Pious 1995, pp. 9 to 10, Table 2; Meyer *et al.* 1998, p. 34; Zabel *et al.* 2003, pp. 1036 to 1038; Glenn *et al.* 2004, p. 41). Home range sizes range from 2,955 ac (1,196 ha) in the Oregon Cascades (Thomas *et al.* 1990, p. 194) to 14,271 ac (5,775 ha) on the Olympic Peninsula (USDI 1992, p. 23; USFWS 1994, in litt., p. 1). Many factors may influence the size of the home range utilized by northern spotted owls, including the degree of habitat fragmentation, proportion of available nesting habitat, and primary prey species. The three habitat components required within the home range of a northern spotted owl include:

(a) Nesting Habitat. Habitat that includes a moderate to high canopy closure (60 to 80 percent); a multi-layered, multi-species canopy with large (generally greater than 30 in (76 cm) dbh) overstory trees; a high incidence of large trees with various deformities (*e.g.*, large cavities, broken tops, mistletoe infections, and other platforms); large snags; large accumulations of fallen trees and other woody debris on the ground; and sufficient open space below the canopy for northern spotted owls to fly. Patches of nesting habitat, in combination with roosting habitat (PCE 2-(b)) need to be sufficiently large and contiguous to maintain northern spotted owl core areas and home ranges, and be in a spatial arrangement with foraging habitat (PCE 2-(c)) that allows efficient provisioning of young at the nest.

(b) Roosting Habitat. Roosting habitat differs from nesting habitat in that it need not contain those specific structural features used for nesting (cavities, broken tops, and mistletoe platforms). As such, it generally includes moderate to high canopy closure; a multi-layered, multi-species canopy; large accumulations of fallen trees and other woody debris on the ground; and sufficient open space below the canopy for northern spotted owls to fly.

(c) Foraging Habitat. Foraging habitat provides a food supply for survival and reproduction of northern spotted owls and includes a wider array of forest types than nesting and roosting habitat, particularly more open and fragmented forests. While some foraging habitat has attributes that closely resemble those of nesting and roosting habitat, especially in the northern portions of the subspecies' range, some younger stands without all these attributes are used for foraging, especially in the southern portion of the range. Some younger stands may have high prey abundance

and some structural attributes similar to those of older forests, such as moderate tree density, subcanopy perches at multiple levels, multi-layered vegetation, or residual older trees. To be fully functional for northern spotted owls, foraging habitat generally contains some roosting habitat attributes.

This PCE includes all three habitat types (nesting, roosting, and foraging) and provides the forest structural characteristics needed for successful nesting, reproduction, and survival of northern spotted owls on their home ranges. These are primarily characteristics of old and mature forests, or younger forests with some structural and microclimatic characteristics of mature forests. These forests provide the specific structures required for nesting; shelter from adverse weather conditions; cover that reduces predation risk while nesting, after young fledge, and while roosting; and microclimatic conditions that enhance thermoregulation. This PCE also provides the forest structure necessary to provide accessible prey for the survival and reproduction of northern spotted owls on their home ranges. This habitat supports the abundance, diversity, and availability of prey necessary for feeding both adults and young.

(3) Dispersal habitat. The successful dispersal of northern spotted owls between habitat blocks is required to maintain stable populations and provide for adequate gene flow across the range of the species. The dispersal of juveniles requires habitat supporting both the transience and colonization phases. Habitat supporting the transience phase of dispersal includes, at a minimum, stands with adequate tree size and canopy closure to provide protection from avian predators and at least minimal foraging opportunities. This may include younger and less diverse forest stands than foraging habitat, such as even-aged, pole-sized stands. These stands still require the interspersion of some roosting structures and foraging habitat to allow for temporary resting and feeding during the movement phase. Settling of juveniles may be temporary (a few months) or extended (colonization). Small openings in forest habitat do not appear to hinder the dispersal of northern spotted owls (they are known to disperse through highly fragmented forests), but large, non-forested valleys, such as the Willamette Valley apparently serve as barriers to both natal and breeding dispersal (Forsman *et al.* 2002, p. 22). Habitat supporting colonization is generally equivalent to roosting and foraging habitat and is described in PCEs 2-(b) and 2-(c), although it may be in smaller amounts than that needed to support nesting pairs (PCE 2-(a)). Dispersal habitats will typically occur in the intervening areas between larger blocks of forest that provide nesting, foraging, and roosting habitats for resident northern spotted owls, and are essential in providing for successful movement of both juveniles and adults between these blocks.

This PCE describes the features of habitats that allow for the successful dispersal of northern spotted owls between habitat blocks to maintain genetic variability and promote stable or increasing populations across the subspecies' range, including habitat supporting safe movement, foraging, and roosting. As dispersing northern spotted owls, particularly juveniles, experience high levels of mortality, the provision of adequate habitat to provide for successful dispersal is essential to the conservation of the species.

This proposed revised designation is designed for the conservation of PCEs necessary to support the life history functions that are the basis for the proposal. Because not all life history functions require all the PCEs, not all proposed revised critical habitat will contain all the PCEs.

Units are proposed for designation based on sufficient PCEs being present to support one or more of the species' life history functions. Some units contain all PCEs and support multiple life processes, while some units contain only a portion of the PCEs necessary to support the species' particular use of that habitat.

Criteria Used To Identify Critical Habitat

As required by section 4(b)(1)(A) of the Act, we used the best scientific data available in determining areas that contain the features that are essential to the conservation of the northern spotted owl. This proposed revision to critical habitat relies upon on the biology and information discussed in the final rule designating the current critical habitat for northern spotted owl (57 FR 1796; January 15, 1992), the Record of Decision for Amendments to Forest Service and BLM Planning Documents within the Range of the Northern Spotted Owl (USDA and USDI 1994b), and the 2007 Draft Recovery Plan for the Northern Spotted Owl (USFWS 2007). These planning efforts were based on creating and managing large blocks of northern spotted owl habitat to support local populations spaced in a manner that allows for the successful movement of dispersing individuals between these blocks. We do not propose to designate areas outside the geographical area presently occupied by the species since the species currently occurs throughout its historical range, albeit in very low numbers in some areas.

We used the following criteria to select specific areas as revised critical habitat:

(1) Focus on Federal Lands. The foundation of the current recovery strategy, as set forth in the 2007 Draft Recovery Plan for the Northern Spotted Owl (USFWS 2007), is a network of owl conservation areas (i.e., habitat blocks) located on Federal lands. Therefore, we considered only Federal lands to be essential to the conservation of the northern spotted owl for the purposes of designating critical habitat. Wilderness Areas, National Parks and many other lands under various Federal land use allocations contribute to the conservation of the northern spotted owl, but the majority of management for northern spotted owls on Federal lands in Washington, Oregon, and California is largely accomplished through the Forest Service's LRMPs and the BLM's RMPs, as amended by the Record of Decision for Amendments to Forest Service and BLM Planning Documents within the Range of the Northern Spotted Owl (USDA and USDI 1994a, b).

We are not proposing to modify the decision made in our 1992 designation that Wilderness Areas and National Parks do not meet the statutory definition of critical habitat under section 3(5)(A) of the Act, therefore these areas are not proposed as critical habitat here. Due to data and time constraints, some of the mapped critical habitat units in California include newly designated Wilderness Areas (PL 109–362, October 17, 2006). However, all critical habitat units in California will be adjusted to be consistent with our approach to Wilderness Areas in Oregon and Washington and will be removed from the final critical habitat designation.

In some areas of limited Federal ownership, private and State lands may help to expedite the recovery of the northern spotted owl by providing demographic support and connectivity to facilitate dispersal among habitat blocks. These voluntary habitat contributions are expected to increase the likelihood that northern spotted owl recovery will be achieved, shorten the time needed to achieve recovery, and reduce management risks associated with the recovery strategy and recovery actions. Consistent with the 1992 designation, we did not include non-Federal lands in the proposed revised designation of critical habitat.

(2) Lands Supporting the Primary Constituent Elements. We selected only lands that contain one or more of the PCEs described above, using Federal agency maps of nesting, roosting, or foraging habitat for northern spotted owls. Dispersal habitats were identified as necessary to meet the requisite spacing between habitat blocks to allow for the successful dispersal of northern spotted owls, as identified in the 2007 Draft Recovery Plan.

(3) Occupied Habitat. Consistent with the 1992 designation, we included only lands within the geographical area occupied by the species in the revised designation since the most recent assessments do not indicate that any presently unoccupied habitat is essential to the conservation of the species (Courtney *et al.* 2004, USFWS 2007).

(4) Large and Small Habitat Blocks. We relied on the 2007 Draft Recovery Plan recommendations regarding contiguity, habitat quality, spacing, and distribution within the range of the northern spotted owl to select large contiguous blocks of quality habitat, where possible, for critical habitat units (USFWS 2007). The 2007 Draft Recovery Plan recommends that habitat blocks need to be large enough to support clusters of at least 20 pairs of northern spotted owls, where possible. The size of such blocks was derived from empirical data and modeling results concluding that clusters of northern spotted owls approximating 20 pairs should be stable over the long term, given the rate of juvenile dispersal between clusters (Thomas *et al.* 1990, p. 24 and Appendix O). The size of such large blocks will vary based on the provincial home range size (see PCE 2). In some areas, existing conditions precluded designation of relatively large habitat blocks, and some smaller blocks are proposed for designation to provide habitat for fewer than 20 northern spotted owl pairs. These blocks were delineated to accommodate juvenile dispersal distance and to provide options for resident northern spotted owls. In some cases they may provide ''stepping stones'' where northern spotted owls dispersing from one large block may settle, produce young, and those young may then disperse to another large block, thereby facilitating genetic transfer between more distant large habitat blocks. The smaller blocks are intended to assist the populations in these areas by reducing the potential for local extinction and supporting the adjacent larger blocks thereby providing an interacting network of northern spotted owl populations (Thomas *et al.* 1990, pp. 285, 320).

(5) Dispersal Distance Between Blocks. As described in the 2007 Draft Recovery Plan, the success of the conservation strategy for the northern spotted owl depends on the relatively frequent dispersal of individuals between large habitat blocks; therefore the blocks must be separated by distances within the known dispersal distance of juveniles (Thomas *et al.* 1990, p. 307). Based on the observed dispersal distances of juveniles, the maximum allowable distance between the nearest points of contact of neighboring large habitat blocks is 12 mi (19 km) (Thomas *et al.* 1990, p. 307, Table P1). To provide an additional measure of successful dispersal security for the smaller blocks, a shorter distance of 7 mi (11 km) (Thomas *et al.* 1990, p. 308) was used. Current available scientific information continues to support the principles applied by the ISC (Courtney *et al.* 2004).

(6) Habitats Representative of the Historical Geographical and Ecological Distribution of the Northern Spotted Owl. Habitats that are representative of the historic geographical and ecological distributions of the northern spotted owl are more likely to sustain the species over time. The northern spotted owl has historically occupied a wide range of forested habitat types across the various physiographic provinces within its range. Therefore, this revision proposes to define critical habitat units distributed at appropriate dispersal distances throughout the range of the northern spotted owl in order to conserve and maintain the variation represented by these provincial populations rangewide.

We worked closely with the BLM and Forest Service to identify blocks of habitat within their management jurisdiction that would meet all of the criteria specified above. As a result of this coordination, we are proposing that the Managed Owl Conservation Areas as defined in Option 1 of the 2007 Draft Recovery Plan for the Northern Spotted Owl (USFWS 2007, p. 140) constitute the critical habitat units on Forest Service lands. On BLM lands in Oregon, we are proposing the location of critical habitat units consistent with Option 2 of the 2007 Draft Recovery Plan for the Northern Spotted Owl which employs a habitat selection rule-set to define areas needed for long-term conservation (USFWS 2007, p. 158). These mapping strategies are based on the Interagency Scientific Committee's report ''A Conservation Strategy for the Northern Spotted Owl'' (Thomas *et al.* 1990). The 2004 Scientific Evaluation of the Status of the Northern Spotted Owl (Courtney *et al.* 2004) confirmed the continuing scientific validity of this conservation strategy. BLM lands in the range of the northern spotted owl in California were mapped based on Managed Owl Conservation Areas identified in the 2007 Draft Recovery Plan, similar to that applied on Forest Service lands throughout the range of the northern spotted owl.

When determining proposed revised critical habitat boundaries, we made every effort to avoid including developed areas such as buildings, paved areas, and other structures that lack PCEs for the northern spotted owl. The scale of the maps prepared under the parameters for publication within the Code of Federal Regulations may not reflect the exclusion of such developed areas. Any such structures and the land under them left inside revised critical habitat boundaries shown on the maps of this proposed rule have been excluded by text in the proposed rule and are not proposed for designation as critical habitat. Therefore, Federal actions limited to these areas would not trigger section 7 consultation, unless they affect the species or primary constituent elements in adjacent critical habitat.

We are proposing to designate revised critical habitat within the geographical area occupied by the northern spotted owl, and in areas that contain sufficient primary constituent elements to support life history functions essential for the conservation of the species.

Critical habitat units are proposed for revised designation based on sufficient PCEs being present to support northern spotted owl life processes. Some units contain all PCEs and support multiple life processes. Some units contain only a portion of the PCEs necessary to support the northern spotted owl's particular use of that habitat.

Special Management Considerations or Protections

When designating critical habitat, we assess whether the areas determined to be occupied at the time of listing and contain the primary constituent elements may require special management considerations or protections. The primary threats to the northern spotted owl include competition with barred owls and the loss, degradation, and fragmentation of habitat.

The 2007 Draft Recovery Plan for the Northern Spotted Owl (Plan) identifies competition from the barred owl as one of the most significant threats currently facing the northern spotted owl (USFWS 2007). The Plan expresses the need for urgency in addressing the barred owl threat, and actions associated with

addressing the barred owl threat were the only actions to be given recovery priority number 1, meaning the action ''must be taken to prevent extinction or prevent the species from declining irreversibly in the foreseeable future.''

For at least the past 50 years the barred owl has been expanding its range from eastern North America across Canada, and into the northern Rockies and Pacific States where it has invaded the range of the northern spotted owl (Courtney *et al.* 2004, p. 7–3). Being larger and more aggressive, barred owls may compete for habitat, nest sites, and prey (Courtney *et al.* 2004, p. 7–3), may hybridize with northern spotted owls, and may occasionally prey on northern spotted owls (Leskiw and Gutiérrez 1998, p. 226). Given the experimental nature of direct removal as a technique for barred owl control and the absence of any known habitat-based approach that has successfully favored northern spotted owls, special management considerations for barred owls will need to be developed. Since barred owls can apparently utilize all habitats known to be used by northern spotted owls, even if those areas are managed for the structural features preferred by northern spotted owls, if they are colonized by barred owls the value of those areas to northern spotted owls will be reduced or even eliminated.

The loss, degradation, and fragmentation of habitat for the northern spotted owl occur primarily as a result of timber harvest or natural disturbances such as fire and wind storms (55 FR 26177; June 26, 1990). Northern spotted owls disproportionately use older forests that are typically characterized by large-diameter trees, multiple canopy layers, high levels of standing and down woody material, and generally complex structure. All of these habitat components can be lost as a consequence of timber harvest, fire, or other stochastic events.

Timber harvest has contributed significantly to habitat loss, degradation, and fragmentation for the northern spotted owl, and was the basis for the original listing of the species (55 FR 26114; June 26, 1990). As a result of the listing, and the implementation of the LRMPs/RMPs as amended by the Record of Decision for Amendments to Forest Service and BLM Planning Documents within the Range of the Northern Spotted Owl (USDA and USDI 1994b), the threat posed by timber harvest on Federal lands has been greatly reduced since 1994. While reduced as a threat, timber harvest clearly has the potential to remove, degrade, or fragment northern spotted owl habitat.

Timber management within critical habitat units should maintain or enhance the individual habitat components important to nesting, roosting, foraging, and dispersal, as well as provide adequate amounts and juxtapositions of nesting, roosting, foraging, and dispersal habitat. In general, timber management in critical habitat units should seek to maintain or enhance the characteristics of older forest, and provide large blocks of older forest and associated interior forest conditions. In southern portions of the range, harvest plans should carefully consider the mix of prey production habitat, interior old forest, and the edges between them (Courtney *et al.* 2004, p. 5–23). Any timber management intended to maintain or enhance northern spotted owl habitat must take into account regional variation in habitat use and associations across the range.

Habitat losses due to increased wildfire intensity and size may be due to excessive fuel buildup resulting from many decades of fire suppression. Northern spotted owl habitat is particularly vulnerable in some drier eastside forests such as those in the Eastern Washington Cascades and the Eastern and Southern Oregon Cascades, as well as other provinces such as the Klamath Mountains. In these provinces, recent fire losses have been higher than the range of historical variability (Courtney *et al.* 2004, p. 6–32). Fuels reduction treatments, such as clearing vegetation, thinning, or prescribed fire, can themselves result in the loss, degradation, and fragmentation of northern spotted owl habitat. Thus, special management is necessary relative to fire management. Fire suppression will likely occur within critical habitat units, and fuel treatments should balance the short-term impacts of fire hazard reduction projects with the long-term risk of catastrophic loss of northern spotted owl habitat (Courtney *et al.* 2004, p. 6–28).

Other stochastic events can contribute to loss, degradation, and fragmentation of northern spotted owl habitat. Some areas within the range of the northern spotted owl have already been negatively impacted by these factors, including the east Cascades provinces (wildfire), eastern Washington Cascades (insects), southern Oregon (wildfire), and eastern Oregon Cascades (insects, disease, wildfire) (Courtney *et al.* 2004, p. 6–25). Forest managers have no control over weather events, but some factors, such as blowdown or windthrows, can be minimized in some areas by management that maintains large, contiguous blocks of older forest.

The loss of large areas of habitat may lead to reduced dispersal capability or, in the worst case, barriers to dispersal, which in turn can result in small, isolated subpopulations. Recent studies show no indication of reduced genetic variation in Washington, Oregon, or California (Barrowclough *et al.* 1999, pp. 927 to 928; Courtney *et al.* 2004, p. 11–9; Haig *et al.* 2004a, p. 683), although Henke *et al.* (2005 pp. i, 14) found ''especially low'' genetic diversity in northern spotted owls. Any isolation problems that northern spotted owls are experiencing today may not be evident in the genetic record for some time. Areas of concern for isolation include the northern spotted owl's range in Canada, the Olympic Peninsula in Washington, and Marin County in California (Courtney *et al.* 2004, p. 8–24). Because dispersal is an essential function for northern spotted owls, fragmentation between local populations can have negative effects. We considered the distances between critical habitat units and northern spotted owl dispersal ecology during proposed revised critical habitat unit selection. Special management is required to assure that the recommended maximum dispersal distances between blocks of habitat for northern spotted owls are not exceeded.

Summary of Changes From Previously Designated Critical Habitat

In 1992, we designated 6,887,000 ac (2,787,070 ha) of Federal lands as critical habitat for the northern spotted owl (57 FR 1796; January 15, 1992). In this revision, we are proposing that a total of 5,337,839 ac (2,160,194 ha) be designated as critical habitat for the northern spotted owl. We have proposed the revised designation of critical habitat for the northern spotted owl to be consistent with the most current assessment of the conservation needs of the species, as described in the 2007 Draft Recovery Plan for the Northern Spotted Owl (USFWS 2007). Although the recovery plan for the northern spotted owl has not yet been finalized, it nonetheless represents the most current conservation guidance for the species, therefore we looked to the recommendations of the 2007 draft recovery plan to inform this proposed revised designation of critical habitat. Of the proposed designation, 4,468,200 ac (1,808,256 ha) are the same as in the 1992 designation. Of the current proposed designation, 869,639 ac (351,938 ha) are lands that were not formerly designated, and 2,399,490 ac (971,060 ha) of lands that were included

in the former designation are not proposed here, for reasons detailed below.

The new delineation of areas determined to be essential for the conservation of the northern spotted owl was based, in part, on an improved understanding of the limits of habitat usage by northern spotted owls combined with refinements in mapping technology. Using rangewide elevation isopleths (based on a linear regression representing the elevation of 99 percent of the known owl-pair activity centers and latitude) and geologic maps of serpentine soil distribution (forests on such soils do not attain the requisite tree size and canopy closure), Davis and Lint (2005, pp. 30–32) identified ''habitat-capable'' areas on Federal lands within the range of the northern spotted owls. These are lands that currently provide nesting, roosting, and foraging habitat for northern spotted owls, or that have the biological capacity to do so under appropriate management, and that therefore have the ability to provide the PCEs for the northern spotted owls. The modeling of habitat-capable lands also took into account spotted owl presence location data, based on surveys and demographic monitoring (Davis and Lint 2005, p. 26). The improved modeling and mapping of lands that are habitat-capable with regard to northern spotted owls allowed for the refined definition of owl conservation areas, as presented in the 2007 Draft Recovery Plan, which in turn served as the basis for this critical habitat proposal.

Option 1 of the 2007 Draft Recovery Plan for the Northern Spotted Owl (USFWS 2007) identifies specific owl conservation areas based on a modification of the DCAs identified in the 1992 Final Draft Recovery Plan for the Northern Spotted Owl (USDI 1992), which were based on the habitat conservation areas (HCAs) first defined by the ISC (Thomas *et al.* 1990). The DCAs were chosen as the starting point for the delineation of the managed conservation areas (MOCAs) in the 2007 Draft Recovery Plan because they represent the best scientific delineation of areas needed specifically for the conservation of the northern spotted owl. Option 2 of the 2007 Draft Recovery Plan presents a habitat rule-set for defining alternative conservation areas designed to provide a network of habitat blocks to support clusters of reproducing northern spotted owls and allow for dispersal between blocks and provinces, and is also based on the conservation strategy set forth by the ISC (Thomas *et al.* 1990).

The strategy of the 2007 Draft Recovery Plan attempts to maximize the efficiency of the network of habitat blocks by making use of existing land use allocations that benefit the conservation of the northern spotted owl (for example, LSRs that are managed for late-successional forest species or other Federal lands that are administratively withdrawn from regularly scheduled timber harvest). Because the land use management plans of the Forest Service and BLM are designed and implemented, in part, to provide for the conservation of the northern spotted owl on Federal lands (USDA and USDI 1994b), the 2007 Draft Recovery Plan looks specifically to lands within the Federal management plan reserves for the habitat-capable acres needed to support the recovery objectives. This strategy accounts for many of the changes in the proposed critical habitat, since the location of conservation areas for northern spotted owls may have shifted to take advantage of various land use allocations, and some land use allocations, such as LSRs, did not come about until after the development of the DCAs and the original critical habitat designation for the northern spotted owl, under the Record of Decision for Amendments to Forest Service and BLM Planning Documents within the Range of the Northern Spotted Owl (USDA and USDI 1994b). (As noted earlier, LSRs were not designated solely to meet the needs of the northern spotted owl, but may include areas designated for other late-successional forest species. Therefore not all LSRs are necessarily identified as conservation areas for northern spotted owls). The placement of conservation areas in the 2007 Draft Recovery Plan are also designed to take advantage of contiguous areas of designated Wilderness or National Park lands, which provide large areas of additional habitat under management consistent with the objectives of the recovery plan.

Maps showing the difference between the 1992 designation and the 2007 proposed revised designation of critical habitat are provided by physiographic province (Maps 1 through 11), and a table is provided that details the acreage differences by province (Table 1). A map of the Willamette Valley province is not included, since no critical habitat is currently designated within that province and revised critical habitat is similarly not proposed within that province. On all Forest Service lands and on BLM lands in California, the proposed revised critical habitat is consistent with the MOCAs identified under Option 1 in the 2007 Draft Recovery Plan (USFWS 2007, pp. 140–155). The almost 200 DCAs were examined and MOCAs were delineated using the following principles:

(1) The original DCA was retained with no boundary change under one of the following conditions—(a) The original DCA boundary fell completely within a LRMP reserve and no revision of the DCA adjustment of the boundary was needed; or (b) The original DCA boundary did not fall completely within a LRMP reserve, but there was no need to change the boundary to move all or a portion of the DCA into the reserve.

(2) The original DCA was retained with a boundary change under one of the following conditions—(a) The DCA boundary fell completely within a LRMP reserve and a boundary adjustment was made to match all or a portion of the original DCA boundary with the boundary of the reserve; (b) The DCA boundary fell completely within a LRMP reserve and a boundary adjustment was made to include better habitat conditions within the new MOCA boundary; (c) All or a portion of the DCA was outside a LRMP reserve and the DCA was moved to match the reserve as much as possible, resulting in fewer acres of non-reserve land in the DCA; (d) All or a portion of the DCA was outside a LRMP reserve and the DCA was moved to match the reserve as much as possible, resulting in no change to the acres of non-reserve land in the DCA; or (e) Non-Federal lands within the DCA boundary were removed or redesignated as a conservation support area (CSA). Conservation support areas are lands between or adjacent to MOCAs where habitat contributions by private, State, and Federal lands are expected to increase the likelihood of northern spotted owl recovery.

(3) The original DCA was dropped under one of the following conditions—(a) The original DCA was not needed to satisfy the maximum spacing of 12 miles (closest edge to closest edge) between category 1 DCAs and 7 miles between category 2 DCAs (Thomas *et al.* 1990); (b) The original DCA was not needed to provide for a cluster of reproducing owls; or (c) The DCA was redesignated as a CSA. In most cases, the redesignation of DCAs to CSAs was intended to acknowledge the demonstrated contributions to northern spotted owl recovery made by State or private management on intervening lands.

In Oregon, the location of critical habitat units on BLM lands is based on the habitat rule-set presented under Option 2 of the Draft Recovery Plan (USFWS 2007, pp. 65–66). The rule set is intended to create a network of habitat blocks to support clusters of reproducing northern spotted owls, and

are tied directly to the recovery criteria identified in the 2007 Draft Recovery Plan. For the physiographic provinces in Oregon, the rule set provided for the following:

(1) Large habitat blocks, designed to support 20 pairs of spotted owls, no farther apart than 12 miles from their nearest large-block neighbor at their nearest points.

(2) Small habitat blocks, designed to support 1–19 pairs, no farther than 7 miles from their nearest neighbor at their nearest points. Smaller habitat blocks are closer to other habitat blocks to increase the likelihood that dispersing spotted owls find the smaller blocks.

(3) A large habitat block was established whenever possible, when the geographic vicinity for adding a habitat block to the network was met using the spacing criteria above. If adding a large habitat block was not possible, a small habitat block was established with as large a carrying capacity as the available habitat-capable acres and spacing requirements allow.

(4) Block-spacing as described above was the primary factor in determining the geographic vicinity for location of a given block in the network. Once in the vicinity of where a block was located, the specific locations of individual habitat blocks followed these prioritized rules:

a. Include habitat-capable acres that occur within Congressionally Reserved Areas or Administratively Withdrawn Areas (e.g., designated Wilderness Areas, National Parks, Natural Areas), if present; and

b. The habitat blocks are compact (i.e., have the smallest perimeter) and contiguous as the pattern of habitat-capable acres in the vicinity allows, given Rule 3(a); and

c. Include as many as possible acres of currently suitable habitat in Federal lands and as many known locations of spotted owls as possible, given Rule 3(a).

(5) At least 60% of the large and small habitat blocks are within the distance limits of at least three other habitat blocks, and at least one of the other three blocks is a large habitat block. This is to assure distribution of the habitat block network across the range of the spotted owl. The ability to create large habitat blocks in these excepted areas is restricted given the limited amount of available Federal lands.

(6) Where there are two adjoining provinces, establish two habitat blocks, which meet the prescribed distance limits from each other, and at least one of the two habitat blocks is a large block. Strive for multiple connections between adjacent provinces. This is to provide for spotted owl movement between provinces, facilitating demographic interaction and genetic interchange among provinces.

One example of a change resulting from the recommendations of the 2007 Draft Recovery Plan is that we are not proposing any critical habitat within the Western Washington Lowlands physiographic province. The 2007 Draft Recovery Plan for the Northern Spotted Owl no longer considers the management of forest habitat on Fort Lewis in Washington as a necessary component of northern spotted owl recovery, since no northern spotted owls are known to occur there. Thus the 60,506 ac (24,486 ha) of critical habitat designated on Fort Lewis in 1992 are not included in this revision. Since Fort Lewis is the only critical habitat currently designated within the Western Washington Lowlands, this change results in no critical habitat within that province under this proposal.

In sum, although the overarching biological objectives of achieving the recovery of the northern spotted owl remain the same, the 2007 Draft Recovery Plan proposes an alternative configuration of habitat blocks intended to be a more efficient strategy for attaining those objectives, which is reflected in the revised critical habitat designation proposed here. The number, size, and configuration of critical habitat units has thus changed, based on the recommendations of the 2007 Draft Recovery Plan for the Northern Spotted Owl with regard to the placement of conservation areas (USFWS 2007), in combination with the application of the rule set defining habitat block size and distance (Thomas *et al.* 1990) and the refined modeling of habitat-capable lands (Davis and Lint 2005). The reduction in number of critical habitat units is a reflection, in part, of our decision to aggregate multiple blocks into single units (Table 3). The current designation includes 190 critical habitat units; the proposed revision includes 29 critical habitat units. As an example of how blocks were consolidated, in the current proposal the Olympic Peninsula Unit (Unit 1) includes 10 of the units under the current designation (Units 43 through 52). As provided in the unit descriptions, each of the critical habitat units may include several large and small habitat blocks.

Finally, in this proposed rule we provide a more detailed and specific characterization of the PCEs for the northern spotted owl. Although described in more detail in the preamble, the actual rulemaking section of the 1992 designation described the PCEs only as ''forested areas that are used or potentially used by northern spotted owl for nesting, roosting, foraging, or dispersing'' (57 FR 1838; January 15, 1992). Research since the 1992 designation of critical habitat has largely confirmed our understanding of the PCEs as presented in the discussion section of that final rule (Courtney *et al.* 2004), but this revision seeks to incorporate the specific description of those PCEs, as described earlier in the Primary Constituent Elements section of this document, into the Proposed Regulation Promulgation Section of the rule. For example, the proposed rule describing the PCEs now includes a list of the specific forest types used by northern spotted owls, as well as a description of the particular habitat components (tree size, canopy closure, nest platforms, etc.) used by northern spotted owls for nesting, roosting, foraging, and dispersal.

BILLING CODE 4310–55–P

- Map 1 -
Eastern Washington Cascades Province

Distribution of Critical Habitat for the Northern Spotted Owl (*Strix occidentalis caurina*) comparing the 1992 and 2007 designations

Map Key

NSO Critical Habitat

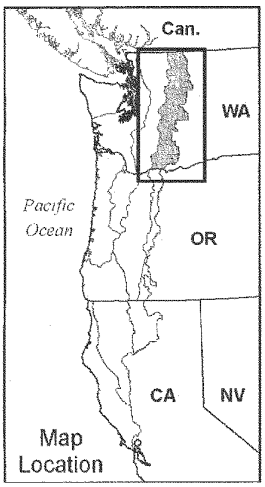
- 1992 designation only
- 2007 designation only
- Both 1992 and 2007

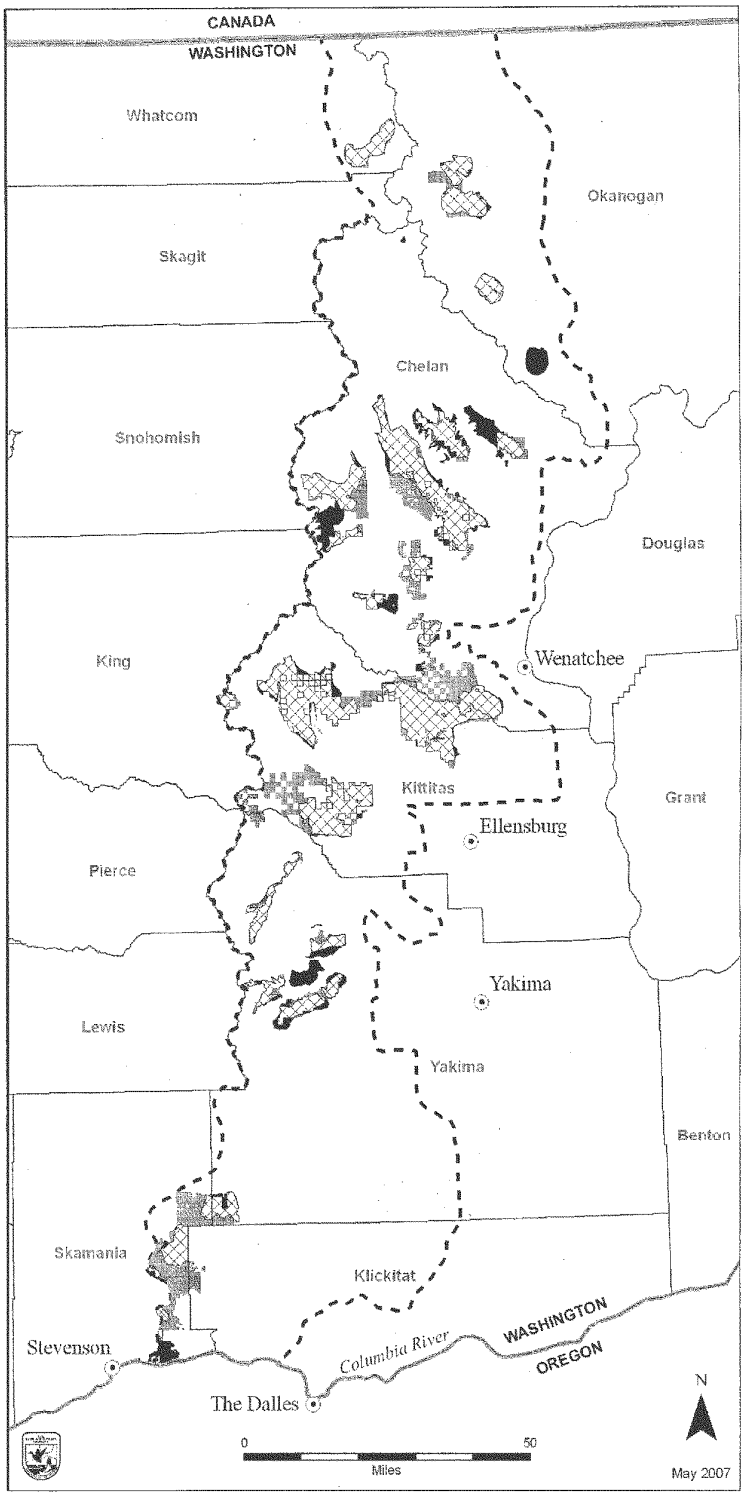
NWFP Boundaries

- Physiographic Province

Political boundaries

- County
- State
- International
- City or town





- Map 2 -
Olympic Peninsula Province

Distribution of Critical Habitat for the Northern Spotted Owl (*Strix occidentalis caurina*) comparing the 1992 and 2007 designations

Map Key

NSO Critical Habitat

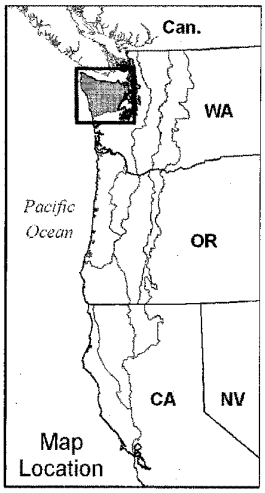
- 1992 designation only
- 2007 designation only
- Both 1992 and 2007

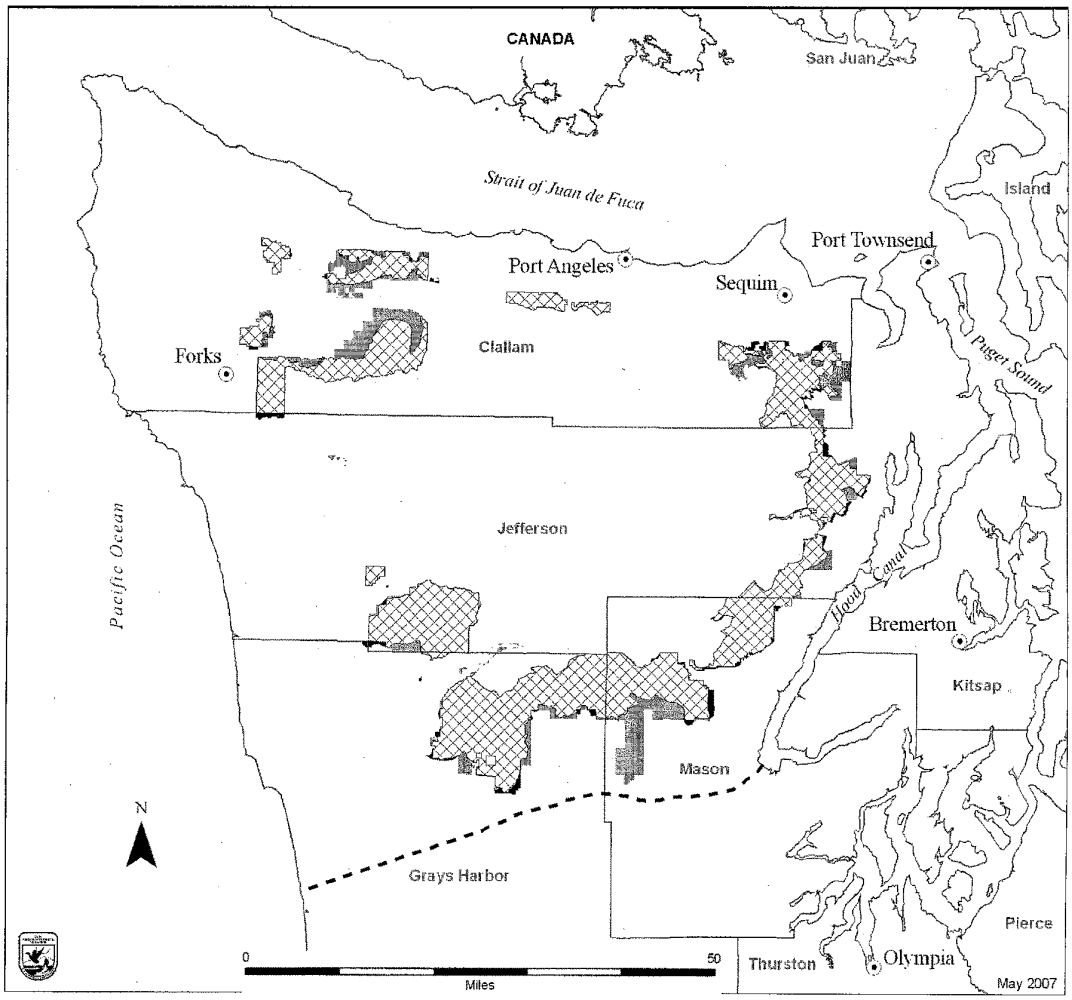
NWFP Boundaries

- Physiographic Province

Political boundaries

- County
- State
- City or town





- Map 3 -
Western Washington Cascades Province

Distribution of Critical Habitat for the Northern Spotted Owl (*Strix occidentalis caurina*) comparing the 1992 and 2007 designations

Map Key

NSO Critical Habitat

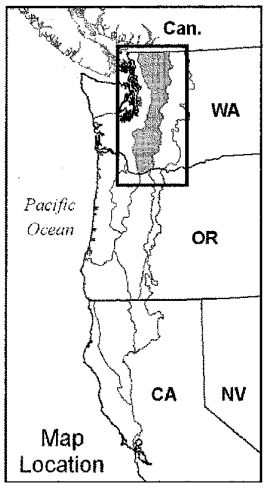
- 1992 designation only
- 2007 designation only
- Both 1992 and 2007

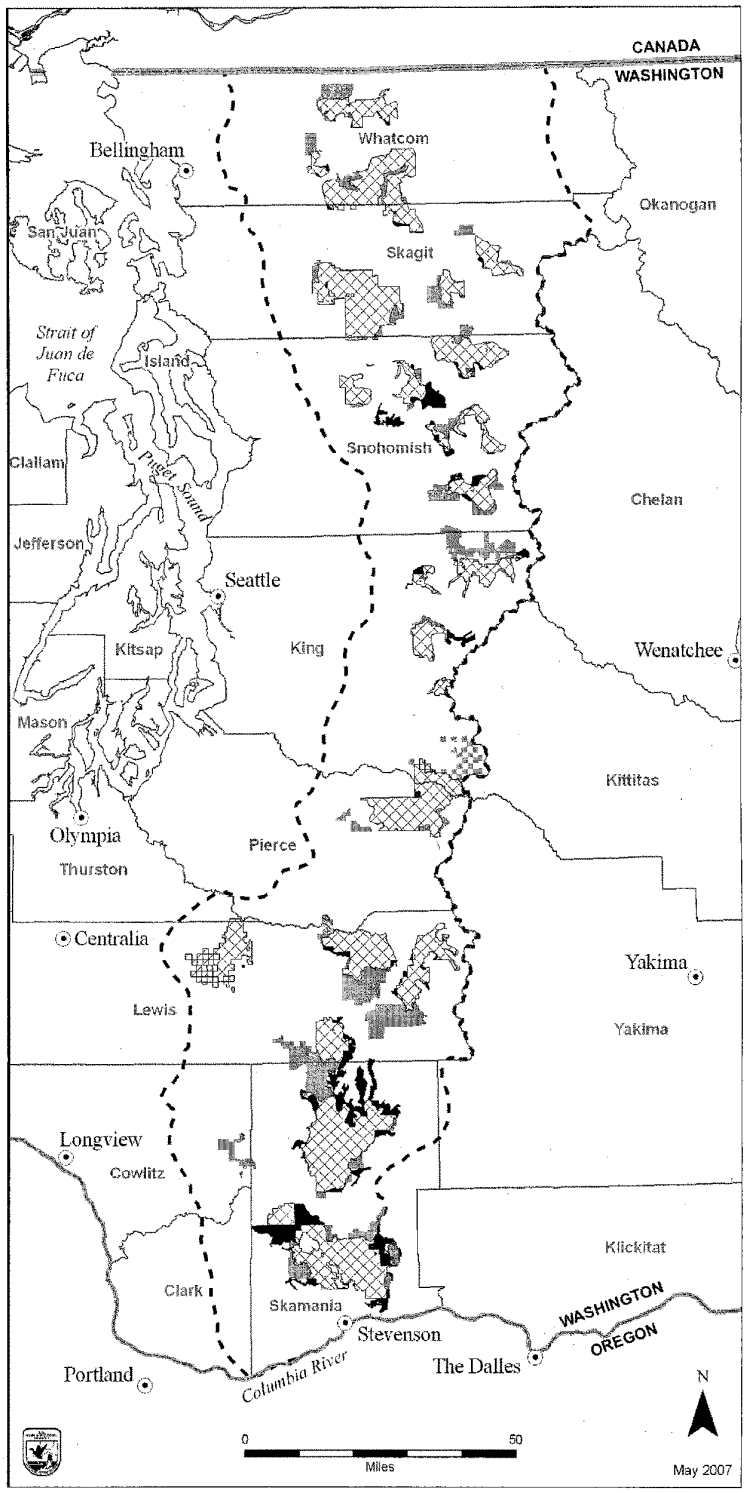
NWFP Boundaries

- Physiographic Province

Political boundaries

- County
- State
- International
- City or town





- Map 4 -
Western Washington Lowlands Province

Distribution of Critical Habitat for the Northern Spotted Owl (*Strix occidentalis caurina*) comparing the 1992 and 2007 designations

Map Key

NSO Critical Habitat

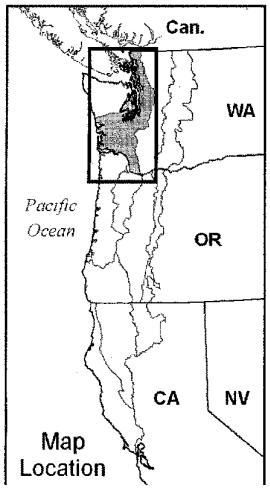
- 1992 designation only
- 2007 designation only
- Both 1992 and 2007

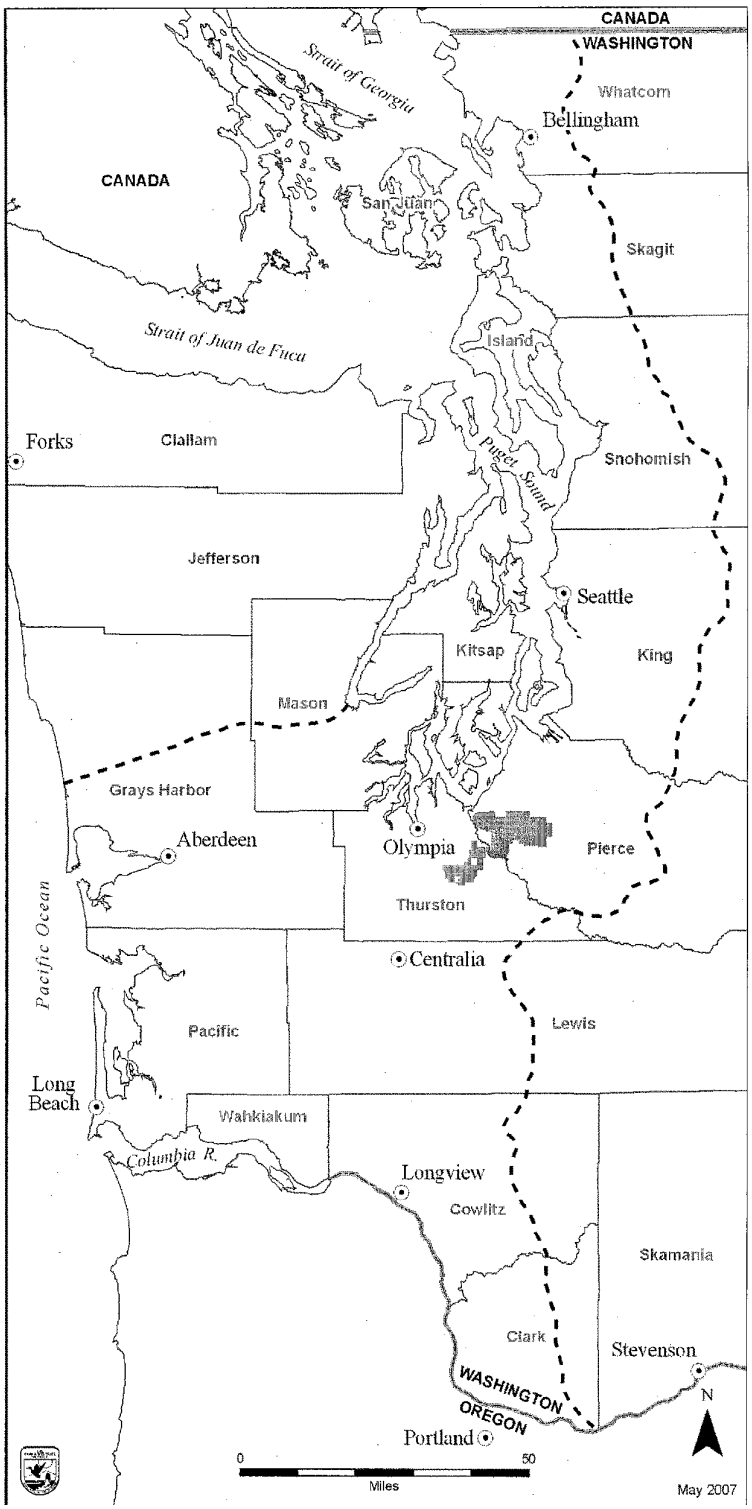
NWFP Boundaries

- Physiographic Province

Political boundaries

- County
- State
- International
- City or town





- Map 5 -
Eastern Oregon Cascades Province

Distribution of Critical Habitat for the Northern Spotted Owl (*Strix occidentalis caurina*) comparing the 1992 and 2007 designations

Map Key

NSO Critical Habitat

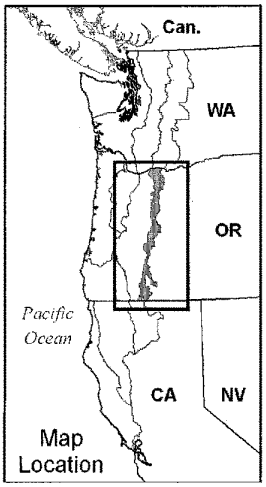
- 1992 designation only
- 2007 designation only
- Both 1992 and 2007

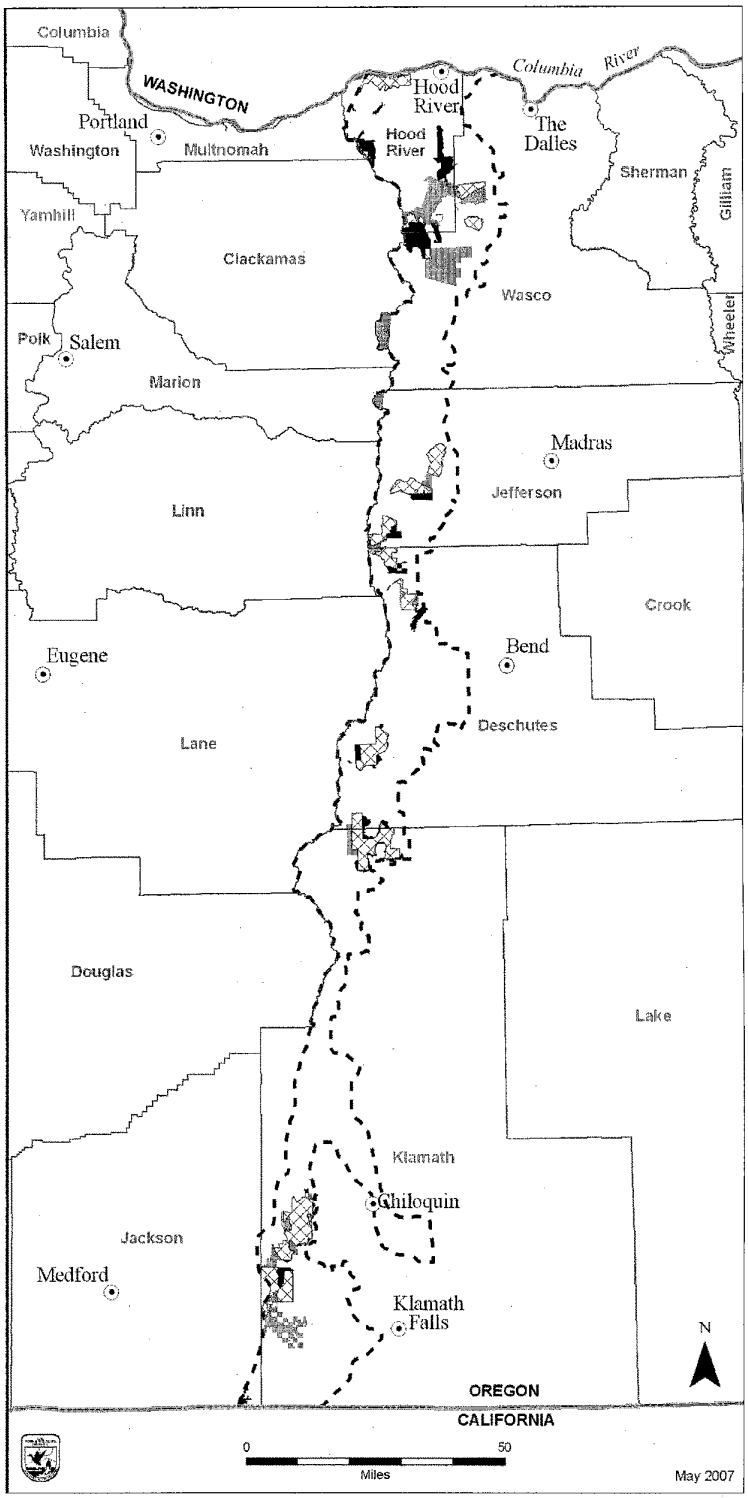
NWFP Boundaries

- Physiographic Province

Political boundaries

- County
- State
- City or town





- Map 6 -
Western Oregon Cascades Province

Distribution of Critical Habitat for the Northern Spotted Owl (*Strix occidentalis caurina*) comparing the 1992 and 2007 designations

Map Key

NSO Critical Habitat

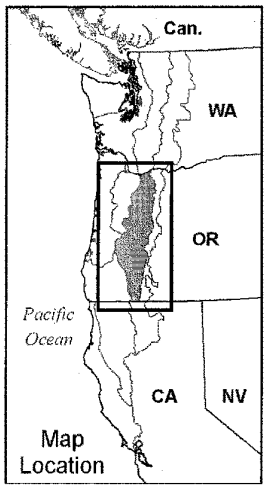
- 1992 designation only
- 2007 designation only
- Both 1992 and 2007

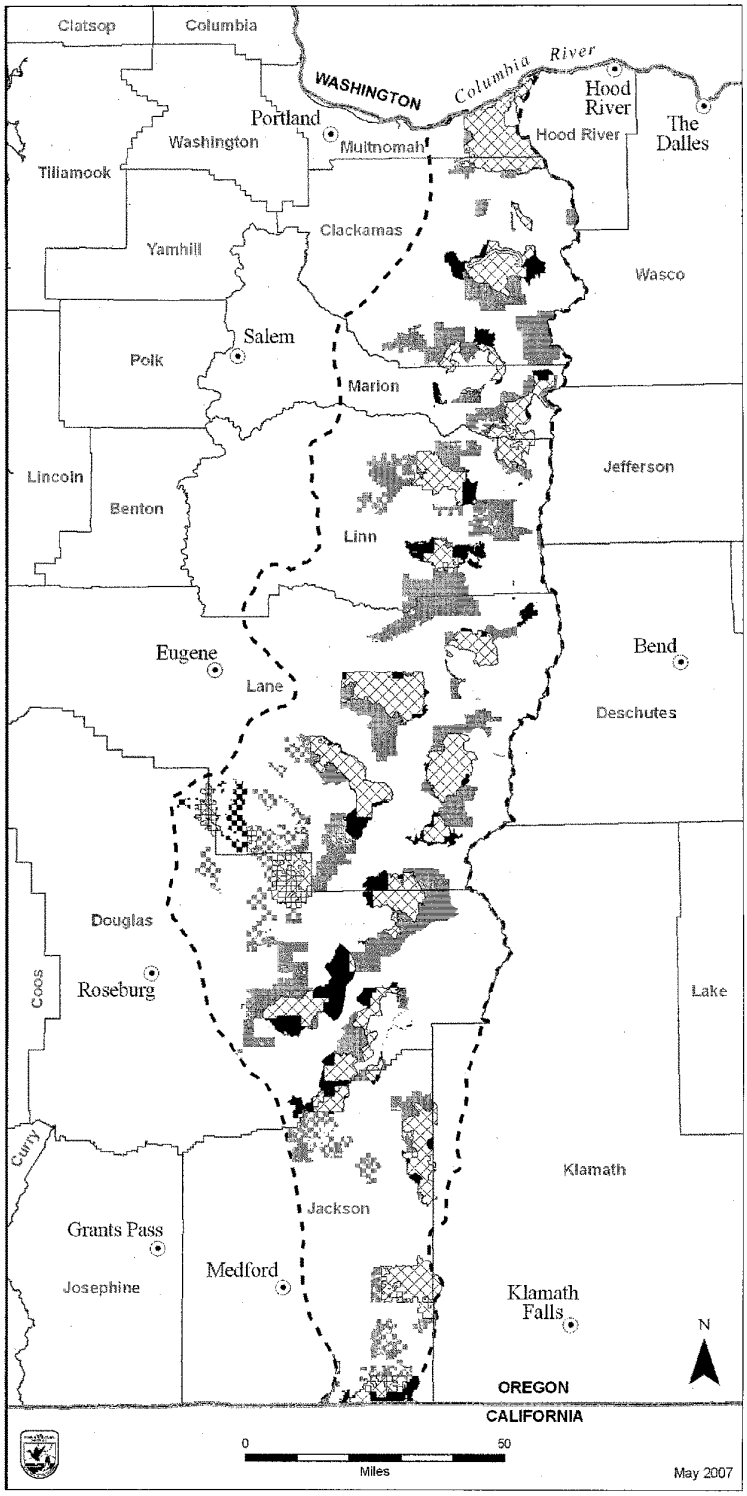
NWFP Boundaries

- Physiographic Province

Political boundaries

- County
- State
- City or town





- Map 7 -
Oregon Coast Ranges Province

Distribution of Critical Habitat for the Northern Spotted Owl (*Strix occidentalis caurina*) comparing the 1992 and 2007 designations

Map Key

NSO Critical Habitat

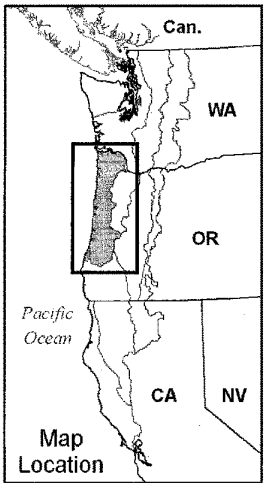
- 1992 designation only
- 2007 designation only
- Both 1992 and 2007

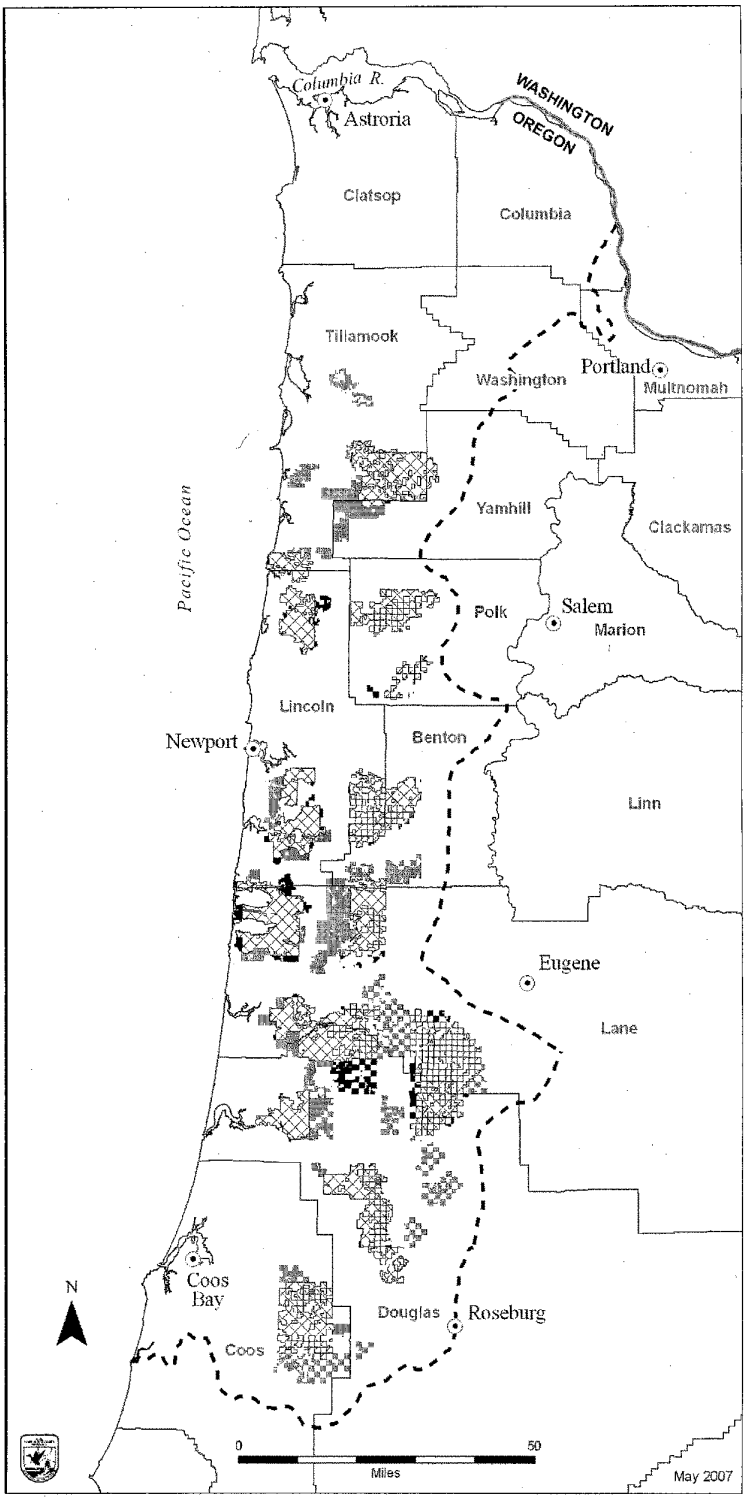
NWFP Boundaries

- Physiographic Province

Political boundaries

- County
- State
- City or town





- Map 8 -
Oregon Klamath Province

Distribution of Critical Habitat for the Northern Spotted Owl (*Strix occidentalis caurina*) comparing the 1992 and 2007 designations

Map Key

NSO Critical Habitat

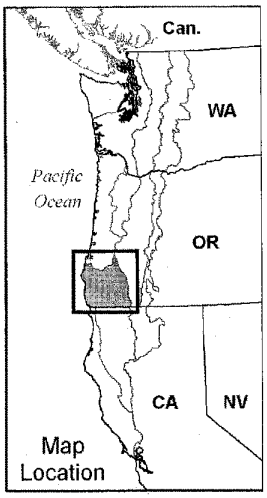
- 1992 designation only
- 2007 designation only
- Both 1992 and 2007

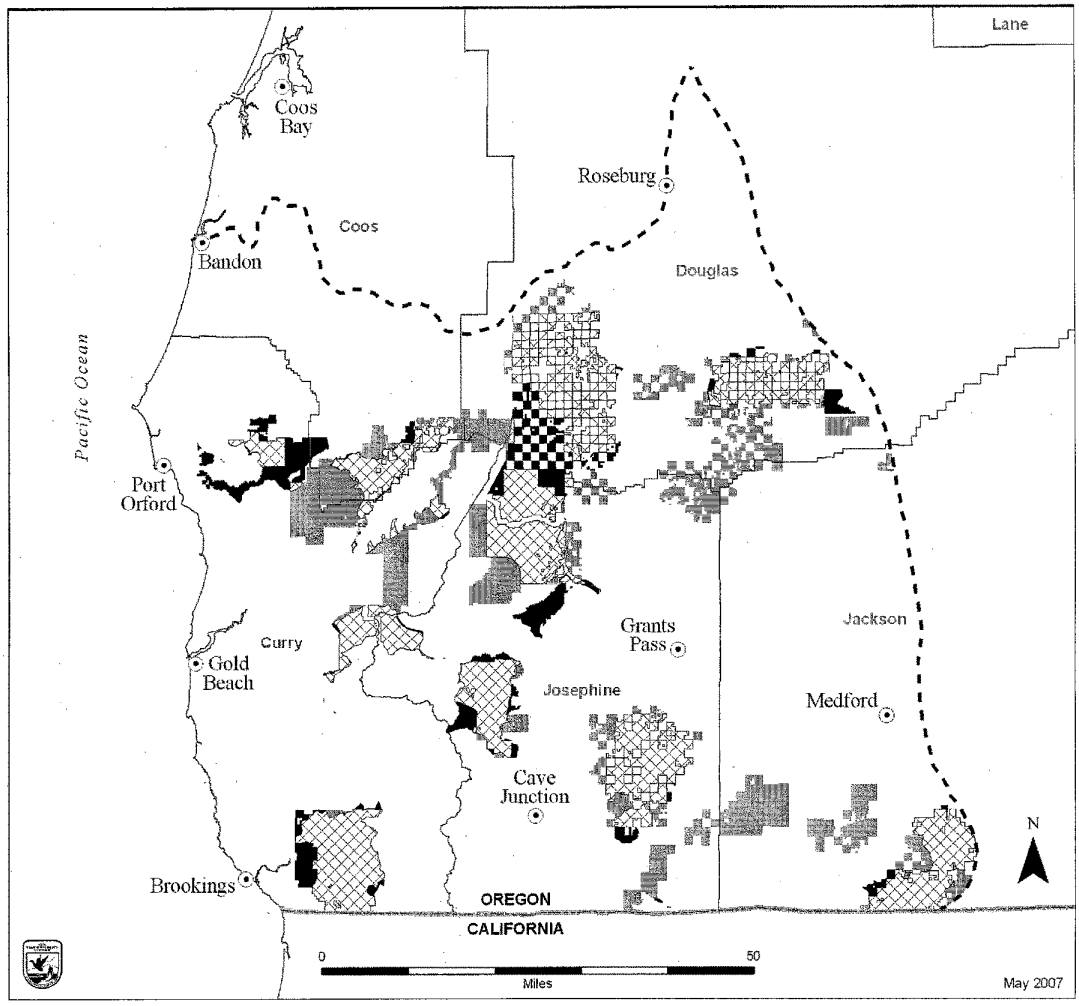
NWFP Boundaries

- Physiographic Province

Political boundaries

- County
- State
- City or town





- Map 9 -
California Cascades Province

Distribution of Critical Habitat for the Northern Spotted Owl (*Strix occidentalis caurina*) comparing the 1992 and 2007 designations

Map Key

NSO Critical Habitat

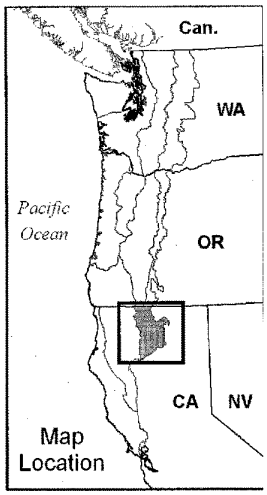
- 1992 designation only
- 2007 designation only
- Both 1992 and 2007

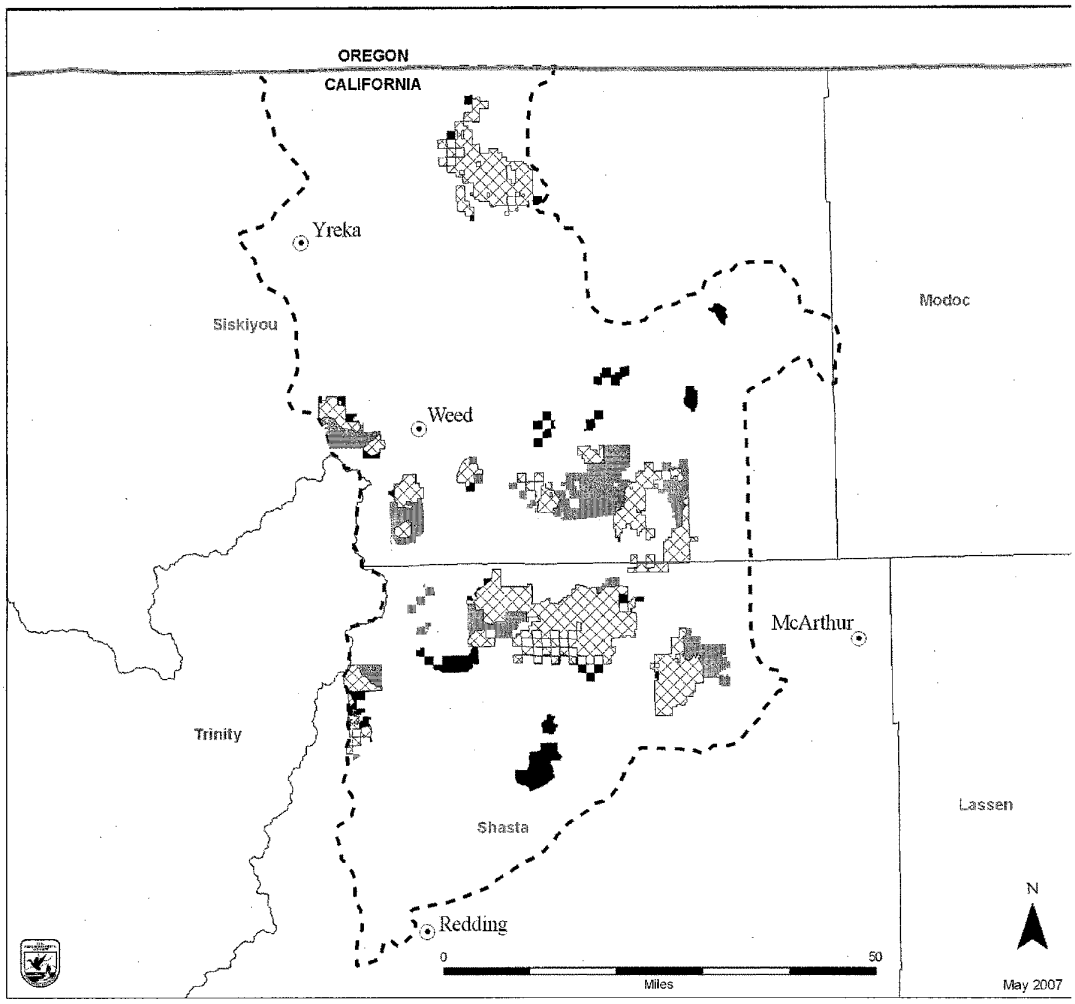
NWFP Boundaries

- Physiographic Province

Political boundaries

- County
- State
- City or town





- Map 10 -
California Coast Ranges Province

Distribution of Critical Habitat for the Northern Spotted Owl (*Strix occidentalis caurina*) comparing the 1992 and 2007 designations

Map Key

NSO Critical Habitat

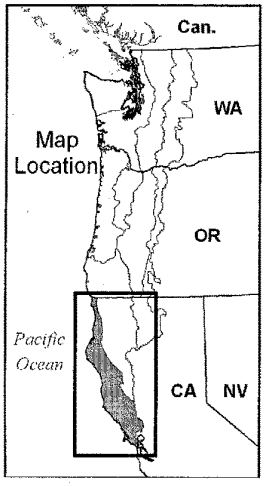
- 1992 designation only
- 2007 designation only
- Both 1992 and 2007

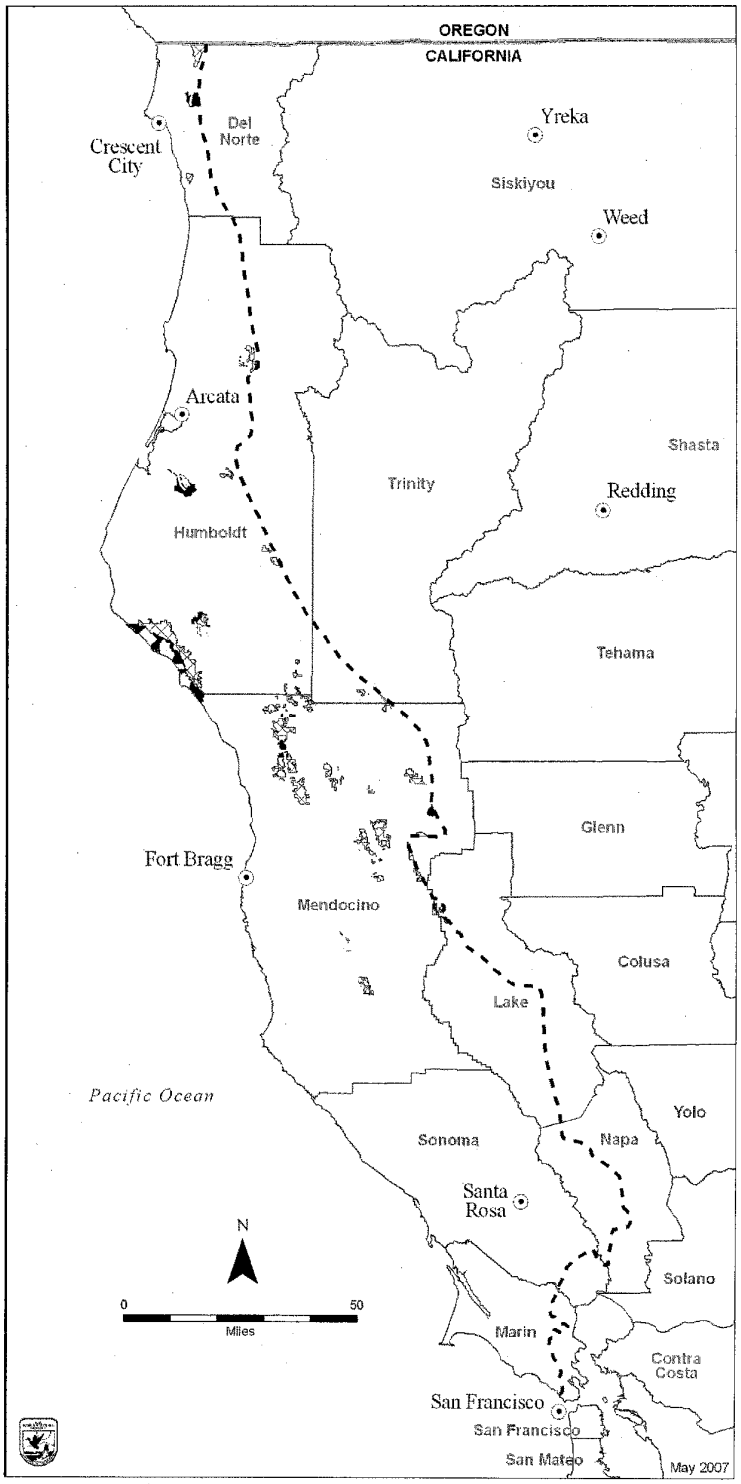
NWFP Boundaries

- Physiographic Province

Political boundaries

- County
- State
- City or town





- Map 11 -
California Klamath Province

Distribution of Critical Habitat for the Northern Spotted Owl (*Strix occidentalis caurina*) comparing the 1992 and 2007 designations

Map Key

NSO Critical Habitat

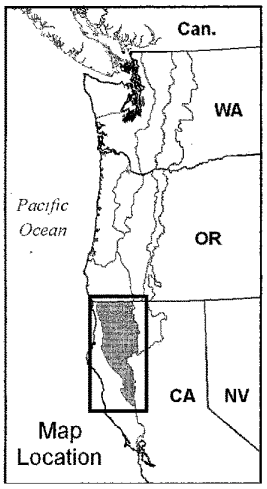
- 1992 designation only
- 2007 designation only
- Both 1992 and 2007

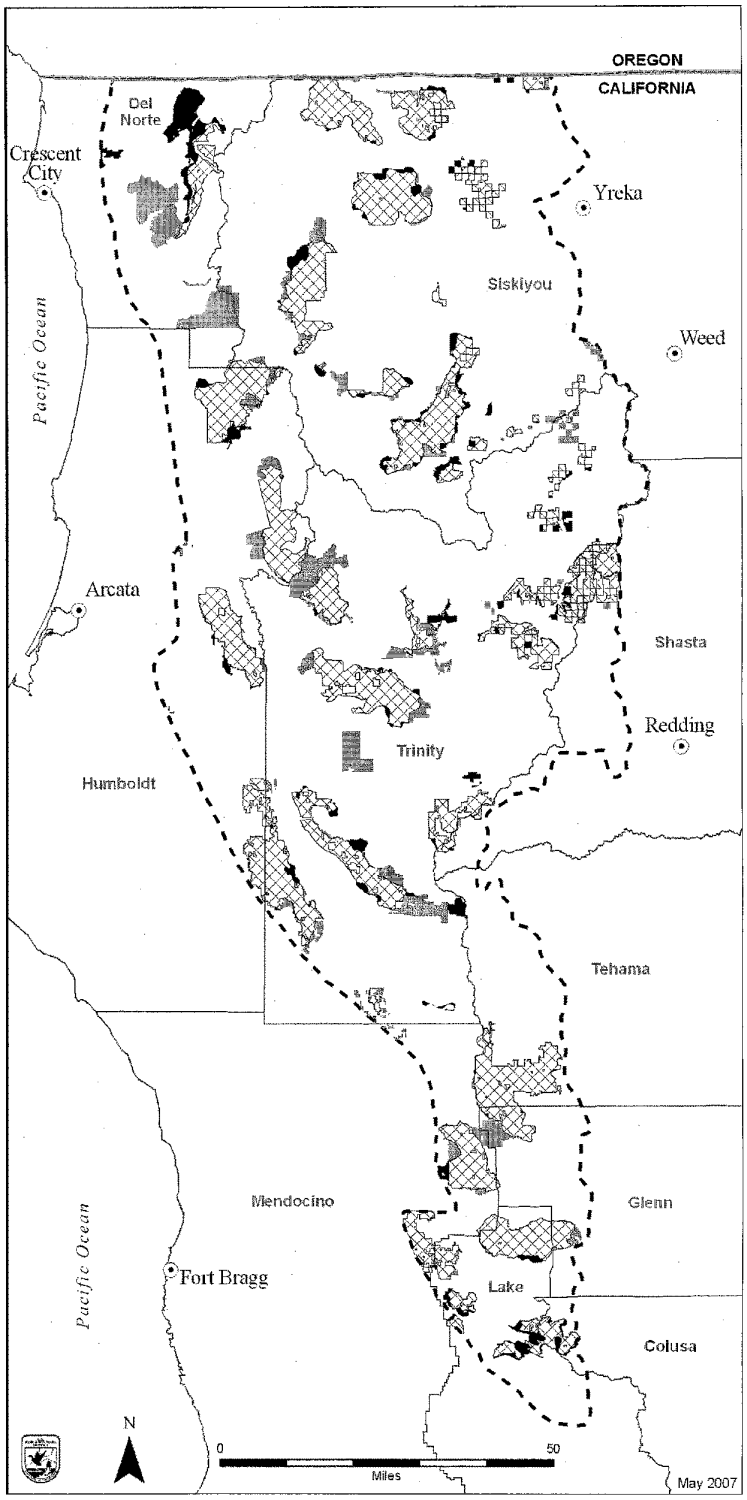
NWFP Boundaries

- Physiographic Province

Political boundaries

- County
- State
- City or town





BILLING CODE 4310–55–C

Areas of overlap (1992 and 2007) and differences between the current (1992) designation of critical habitat for the northern spotted owl and the proposed revised designation (2007) by physiographic province and State. Those areas designated in 1992 that are not included in the proposed revision are labeled as ''1992 only,'' and those areas in the proposed revision that are not currently designated are labeled as ''2007 only.'' All acreages are approximate. Note that the acreage totals for the 1992 designation do not precisely match those originally published (57 FR 1809; January 15, 1992). This discrepancy is due to the

increased accuracy of data coverages and mapping capabilities since 1992, some changes in acreage of congressionally reserved lands since 1992, and the fact that the acreages reported in 1992 were rounded to the nearest 1,000 acres.

TABLE 1.

State	Physiographic province	Critical habitat designation	Acres	Hectares
Washington	Eastern Washington Cascades	1992 and 2007	468,624	189,650
		1992 only	210,992	85,387
		2007 only	111,857	45,268
		1992 total	679,616	275,037
		2007 total	580,481	234,917
	Olympic Peninsula	1992 and 2007	319,810	129,425
		1992 only	65,007	26,308
		2007 only	11,933	4,829
		1992 total	384,817	155,733
		2007 total	331,742	134,254
	Western Washington Cascades	1992 and 2007	796,984	322,535
		1992 only	260,875	105,575
		2007 only	120,972	48,957
		1992 total	1,057,859	428,110
		2007 total	917,956	371,492
	Western Washington Lowlands	1992 and 2007	0	0
		1992 only	60,503	24,485
		2007 only	0	0
		1992 total	60,503	24,485
		2007 total	0	0
	Washington Total	1992	2,182,796	883,365
		2007	1,830,179	740,663
Oregon	Eastern Oregon Cascades	1992 and 2007	159,887	64,706
		1992 only	117,346	47,489
		2007 only	66,288	26,826
		1992 total	277,233	112,195
		2007 total	226,176	91,532
	Western Oregon Cascades	1992 and 2007	733,006	296,644
		1992 only	864,942	350,037
		2007 only	217,590	88,057
		1992 total	1,597,949	646,681
		2007 total	950,596	384,701
	Oregon Coast Ranges	1992 and 2007	538,477	217,919
		1992 only	248,126	100,415
		2007 only	50,478	20,428
		1992 total	786,604	318,334
		2007 total	588,956	238,347
	Oregon Klamath	1992 and 2007	350,098	141,683
		1992 only	278,295	112,624
		2007 only	94,253	38,144
		1992 total	628,392	254,307
		2007 total	444,350	179,826
	Oregon Total	1992	3,290,178	1,331,517
		2007	2,210,078	894,406
California	California Cascades	1992 and 2007	190,986	77,291
		1992 only	87,649	35,471
		2007 only	44,484	18,003
		1992 total	278,635	112,762
		2007 total	235,470	95,293
	California Coast Ranges	1992 and 2007	95,883	38,803
		1992 only	4,026	1,629
		2007 only	35,983	14,562
		1992 total	99,909	40,433
		2007 total	131,866	53,365
	California Klamath	1992 and 2007	814,444	329,601
		1992 only	201,727	81,638
		2007 only	115,802	46,864
		1992 total	1,016,172	411,239
		2007 total	930,246	376,465
	California Total	1992	1,394,716	564,434
		2007	1,297,582	525,124

TABLE 1.—Continued

State	Physiographic province	Critical habitat designation	Acres	Hectares
Total		1992 and 2007	4,468,200	1,808,256
		1992 only	2,399,490	971,060
		2007 only	869,639	351,938
		1992 total	6,867,690	2,779,316
		2007 total	5,337,839	2,160,194

Proposed Revised Critical Habitat Designation

The proposed revised critical habitat areas described below constitute our best assessment currently of areas within the geographic area occupied by the species that contain the primary constituent elements and may require special management. Table 2 below provides the approximate area (ac/ha) determined to meet the definition of critical habitat for the northern spotted owl by State.

TABLE 2.—AREAS DETERMINED TO MEET THE DEFINITION OF CRITICAL HABITAT FOR THE NORTHERN SPOTTED OWL

State	Proposed revised critical habitat	
	Acres	Hectares
Washington	1,830,179	740,650
Oregon	2,210,078	894,390
California	1,297,582	525,115
Total	5,337,839	2,160,155

The approximate area encompassed within each revised critical habitat unit is shown in Table 3.

TABLE 3.—REVISED CRITICAL HABITAT UNITS PROPOSED FOR THE NORTHERN SPOTTED OWL

Critical habitat unit by state	Forest service	BLM
Washington:		
Unit 1—Olympic Peninsula	331,742 ac (134,251 ha)	0.
Unit 2—Northwest Washington Cascades	410,872 ac (166,274 ha)	0.
Unit 3—Okanogan	115,638 ac (46,797 ha)	0.
Unit 4—Entiat	304,817 ac (123,355 ha)	0.
Unit 5—Southwest Washington Cascades	523,710 ac (211,938 ha)	0.
Unit 6—Southeast Washington Cascades	143,400 ac (58,031 ha)	0.
Oregon:		
Unit 7—Northern Oregon Coast Ranges	187,562 ac (75,904 ha)	133,858 ac (54,170 ha).
Unit 8—Southern Oregon Coast Ranges	67,751 ac (27,418 ha)	136,525 ac (55,250 ha).
Unit 9—Western Oregon Cascades North	334,738 ac (135,464 ha)	0.
Unit 10—Hood River	42,683 ac (17,273 ha)	0.
Unit 11—Eastern Oregon Cascades	106,665 ac (43,166 ha)	0.
Unit 12—Western Oregon Cascades South	448,324 ac (181,430 ha)	79 ac (32 ha).
Unit 13—Willamette/North Umpqua	0	119,638 ac (48,416 ha).
Unit 14—Rogue-Umpqua	13,147 ac (5,320 ha)	152,357 ac (61,657 ha).
Oregon and California:		
Unit 15—Oregon Klamath Mountains	194,745 ac (78,810 ha)	466 ac (188 ha).
Unit 16—Klamath Intra-Province	57,977 ac (23,462 ha)	38,595 ac (15,619 ha).
Unit 17—Southern Cascades	191,612 ac (77,543 ha)	34,818 ac (14,090 ha).
Unit 25—Scott and Salmon Mountains	242,450 ac (98,116 ha)	0.
California:		
Unit 18—Coastal Redwoods	6,937 ac (2,807 ha)	0.
Unit 19—Coastal Humboldt	0	49,308 ac (19,954 ha).
Unit 20—King Range	0	40,308 ac (16,312 ha).
Unit 21—South Fork Mountain Divide	141,054 ac (57,082 ha)	4,126 ac (1,670 ha).
Unit 22—Eel-Russian River	0	21,940 ac (8,879 ha).
Unit 23—Mendocino Coast Ranges	215,105 ac (87,050 ha)	0.
Unit 24—Western Klamath/Siskiyou Mountains	236,460 ac (95,692 ha)	3,670 ac (1,485 ha).
Unit 26—Trinity Divide	13,870 ac (5,613 ha)	0.
Unit 27—Shasta-Trinity Lakes	85,730 ac (34,694 ha)	1,090 ac (441 ha).
Unit 28—Eastern Klamath Mountains	110,756 ac (44,821 ha)	0.
Unit 29—Shasta/McCloud	73,316 ac (29,670 ha)	0.

We present brief descriptions of the proposed revised critical habitat units below. All units are within the geographic area occupied (see Criteria Used to Identify Critical Habitat for methods) and all contain one or more of the features essential to the conservation of the northern spotted owl, as described in the PCEs. As provided under section 4(b)(2) of the Act, these units will be considered for exclusion from critical habitat when this rule is finalized. Exclusions are considered based on the relative costs and benefits of designating critical habitat, including

information contained in the forthcoming economic analysis.

Unit 1. Olympic Peninsula

The Olympic Peninsula Unit consists of 331,742 ac (134,251 ha) in Clallam, Jefferson, Mason, and Grays Harbor Counties, Washington, and is comprised of lands managed by the Olympic National Forest. This unit includes one area that, with the associated Wilderness and Olympic National Park, meets the size requirement of a large habitat block, and two areas that, with the associated Wilderness and Olympic National Park, meet the size requirement of small habitat blocks.

Unit 2. Northwest Washington Cascades

The Northwest Washington Cascades Unit consists of 410,872 ac (166,274 ha) in Whatcom, Skagit, Snohomish, King, and Kittitas Counties, Washington, and is comprised of lands managed by the Mt. Baker-Snoqualmie and Wenatchee National Forests. This unit includes 2 areas that, with associated Wilderness and the North Cascades National Park, meet the size requirement of large habitat blocks, and 13 areas that, with associated Wilderness and the North Cascades National Park, meet the size requirement of small habitat blocks.

Unit 3. Okanogan

The Okanogan Unit consists of 115,638 ac (46,797 ha) in Whatcom, Okanogan, and Chelan Counties, Washington, and is comprised of lands managed by the Okanogan and Wenatchee National Forests. This unit includes seven areas that, with associated Wilderness and the North Cascades National Park, meet the size requirement of small habitat blocks.

Unit 4. Entiat

The Entiat Unit consists of 304,817 ac (123,355 ha) in Chelan and Kittitas Counties, Washington, and is comprised of lands managed by the Wenatchee and Mt. Baker-Snoqualmie National Forests. This unit includes three areas that, with associated Wilderness, meet the size requirement of large habitat blocks and four areas that, with associated Wilderness, meet the size requirement of small habitat blocks.

Unit 5. Southwest Washington Cascades

The Southwest Washington Cascades Unit consists of 523,710 ac (211,938 ha) in King, Pierce, Thurston, Lewis, Skamania, Cowlitz, Kittitas, and Yakima Counties, Washington, and is comprised of lands managed by the Mt. Baker-Snoqualmie, Gifford Pinchot, and Wenatchee National Forests. This unit includes four areas that, with associated Wilderness and Mount Rainier National Park, meet the size requirement of large habitat blocks and two areas that, with associated Wilderness and the Mount Rainier National Park, meet the size requirement of small habitat blocks.

Unit 6. Southeast Washington Cascades

The Southeast Washington Cascades Unit consists of 143,400 ac (58,031 ha) in Kittitas, Yakima, and Skamania Counties, Washington, and is comprised of lands managed by the Wenatchee and Gifford Pinchot National Forests. This unit includes six areas that, with associated Wilderness, meet the size requirement of small habitat blocks.

Unit 7. Northern Oregon Coast Ranges

The Northern Oregon Coast Ranges Unit consists of 321,420 ac (130,074 ha) in Tillamook, Yamhill, Polk, Lincoln, Benton, and Lane Counties, Oregon, and is comprised of lands managed by the Siuslaw National Forest (187,562 ac (75,904 ha)) and Salem and Eugene BLM Districts (133,858 ac (54,170 ha)). This unit includes one area that, with associated Wilderness, meets the size requirement of a large habitat block and seven areas that, with associated Wilderness, meet the size requirement of small habitat blocks.

Unit 8. Southern Oregon Coast Ranges

The Southern Oregon Coast Ranges Unit consists of 204,276 ac (82,668 ha) in Lane, Coos, and Douglas Counties, Oregon, and is comprised of lands managed by the Siuslaw National Forest (67,751 ac (27,418 ha)) and Eugene, Roseburg and Coos Bay BLM Districts (136,525 ac (55,250 ha)). This unit includes one area that meets the size requirement of a large habitat block and three areas that, with associated Wilderness, meet the size requirement of small habitat blocks.

Unit 9. Western Oregon Cascades North

The Western Oregon Cascades North Unit consists of 334,738 ac (135,464 ha) in Linn, Marion, Clackamas, Hood River, and Multnomah Counties, Oregon, and is comprised of lands managed by the Mt. Hood and Willamette National Forests. This unit includes five areas that, with associated Wilderness, meet the size requirement of large habitat blocks and one area that meets the size requirement of a small habitat block.

Unit 10. Hood River

The Hood River Unit is comprised of 42,863 ac (17,273 ha) in Hood River and Wasco Counties, Oregon, and is comprised of lands managed by the Mt. Hood National Forest. This unit includes one area that, with its associated Wilderness, meets the size requirement of a large habitat block.

Unit 11. Eastern Oregon Cascades

The Eastern Oregon Cascades Unit is comprised of 106,665 ac (43,166 ha) in Jefferson, Deschutes, and Klamath Counties, Oregon, and is comprised of lands managed by the Deschutes National Forest. This unit includes seven areas that, with associated Wilderness and Crater Lake National Park, meet the size requirement of small habitat blocks.

Unit 12. Western Oregon Cascades South

The Western Oregon Cascades South Unit consists of 448,403 ac (181,463 ha) in Jackson, Douglas, Lane, and Linn Counties, Oregon, and is comprised of lands managed by the Willamette, Umpqua, and Rogue River National Forests (448,324 ac (181,406 ha)) and Eugene BLM Districts (79 ac (32 ha)). This unit includes eight areas that, with associated Wilderness, meet the size requirement of large habitat blocks.

Unit 13. Willamette/North Umpqua

The Willamette/North Umpqua Unit is comprised of 119,637 ac (48,415 ha) of lands in Lane and Douglas Counties, Oregon, and is comprised of lands managed by the Eugene and Roseburg BLM Districts. This unit includes three areas that meet the size requirement of small habitat blocks. These areas provide for habitat connectivity and northern spotted owl movement via the inter-provincial connection from the western Cascades to the Oregon Coast Ranges.

Unit 14. Rogue/Umpqua

The Rogue/Umpqua Unit consists of 165,504 ac (66,977 ha) in Douglas and Josephine Counties, Oregon, and is comprised of lands managed by the Umpqua National Forest (13,147 ac (5,320 ha)) and Roseburg and BLM Medford Districts (152,357 ac (61,657 ha)). This unit includes one area that meets the size requirement of a large habitat block, and one area that meets the size requirement of a small habitat block. These areas provide for habitat connectivity and northern spotted owl movement via the inter-provincial connection from the western Cascades to the Oregon Coast Ranges across the Rogue-Umpqua divide.

Unit 15. Oregon Klamath Mountains

The Oregon Klamath Mountains Unit is a total of 195,211 ac (79,215 ha), including 189,424 ac (76,657 ha) in Coos, Curry, and Josephine Counties,

Oregon, and 5,787 ac (2,342 ha) in the northernmost portion of Del Norte County, California. It is comprised of lands managed by the Siskiyou and Six Rivers National Forests (194,745 ac (78,810 ha)) and Coos Bay BLM District (466 ac (188 ha)). This unit includes three areas that, with associated Wilderness, meet the size requirement of large habitat blocks, and one area that, with its associated Wilderness, meets the size requirement of a small habitat block. The northern spotted owl population in the Klamath Province is the major population link between the Oregon Coast Ranges and western Oregon Cascades Provinces. It also provides the primary connection between northern spotted owl populations in Oregon and California.

Unit 16. Klamath Intra-Province

The Klamath Intra-Province Unit is a total of 96,572 ac (39,081 ha), including 90,437 ac (36,598 ha) in Josephine and Jackson Counties, Oregon, and 6,135 ac (2,483 ha) in the northern portion of Siskiyou County, California. It is comprised of lands managed by the Rogue-Siskiyou and Klamath National Forests (57,977 ac (23,462 ha)) and Medford BLM District (38,595 ac (15,619 ha)). This unit includes one area that meets the size requirement of a large habitat block and one area that meets the size requirement of a small habitat block. These areas provide essential habitat connections through an area of limited habitat in the Klamath Province.

Unit 17. Southern Cascades

The Southern Cascades Unit is a total of 226,430 ac (91,634 ha), including 186,732 ac (75,568 ha) in Jackson and Klamath Counties, Oregon, and 39,698 ac (16,065 ha) in the northern portion of Siskiyou County, California. It is comprised of lands managed by Rogue-Siskiyou, Winema, and Klamath National Forests (191,612 ac (77,543 ha)) and Medford and Lakeview BLM Districts (34,818 ac (14,090 ha)). This unit includes two areas that, with associated Wilderness, meet the size requirement of large habitat blocks and three areas that, with associated Wilderness, meet the size requirement of small habitat blocks.

Unit 18. Coastal Redwoods

The Coastal Redwoods Unit consists of 6,937 ac (2,807 ha) in Del Norte County, California, and is comprised of lands managed by Six Rivers National Forest. This unit includes one area that, with associated portions of Redwood National Park, meets the size requirement of a small habitat block.

Unit 19. Coastal Humboldt

The Coastal Humboldt Unit consists of 49,308 ac (19,954 ha) in Humboldt and Mendocino Counties, California, and is comprised of lands managed by the BLM Arcata Field Office. This unit includes four areas that, with associated Congressionally-Reserved Areas, meet the size requirement of small habitat blocks.

Unit 20. King Range

The King Range Unit consists of 40,308 ac (16,312 ha) in Humboldt and Mendocino Counties, California, and is comprised of lands managed by the BLM Arcata Field Office. This unit includes one area that meets the size requirement of a small habitat block.

Unit 21. South Fork Mountain Divide

The South Fork Mountain Divide Unit consists of 141,180 ac (58,752 ha) in Humboldt and Trinity Counties, California, and is comprised of lands managed by the Six Rivers and Shasta-Trinity National Forests (141,054 ac (57,082 ha)) and BLM Arcata Field Office (4,126 ac (1,670 ha)). This unit includes three areas that meet the size requirement of large habitat blocks, and one area that meets the size requirement of a small habitat block.

Unit 22. Eel-Russian River

The Eel-Russian River Unit consists of 21,940 ac (8,879 ha) in Mendocino and Trinity Counties, California, and is comprised of lands managed by the BLM Ukiah and Arcata Field Offices. This unit includes 16 areas that meet the size requirement of small habitat blocks for northern spotted owls.

Unit 23. Mendocino Coast Ranges

The Mendocino Coast Ranges Unit consists of 215,105 ac (87,050 ha) in Mendocino, Lake, Colusa, Glenn, Tehama, and Trinity Counties, California, and is comprised of lands managed by the Mendocino National Forest. This unit includes two areas that, with associated Wilderness, meet the size requirement of large habitat blocks and five areas that meet the size requirement of small habitat blocks.

Unit 24. Western Klamath-Siskiyou Mountains

The Western Klamath-Siskiyou Mountains Unit consists of 240,130 ac (87,178 ha) in Del Norte, Humboldt, Trinity, Shasta, and Siskiyou Counties, California, and is comprised of lands managed by the Six Rivers and Shasta-Trinity National Forests (236,460 ac (95,692 ha)) and BLM Redding Field Office (3,670 ac (1,485 ha)). This unit includes five areas that, with associated Wilderness, meet the size requirement of large habitat blocks, and one area that meets the size requirement of a small habitat block.

Unit 25. Scott and Salmon Mountains

The Scott and Salmon Mountains Unit is a total of 242,450 ac (98,116 ha), including 242,292 ac (98,052 ha) in Siskiyou County, California, and 158 ac (64 ha) in Josephine County, Oregon, and is comprised of lands managed by the Klamath National Forest. This unit includes four areas that, with associated Wilderness, meet the size requirement of large habitat blocks and two areas that, with associated Wilderness, meet the size requirement of small habitat blocks.

Unit 26. Trinity Divide

The Trinity Divide Unit consists of 13,870 ac (5,613 ha) in Siskiyou County, California, and is comprised of lands managed by the Klamath National Forest. This unit includes four areas that, with associated Wilderness, meet the size requirement of small habitat blocks with one to two pairs of northern spotted owls each, forming a ''stepping-stone'' string of small areas providing connectivity to the eastern Klamath Mountains.

Unit 27. Shasta-Trinity Lakes

The Shasta/Trinity Lakes Unit consists of 86,819 ac (35,134 ha) in Shasta and Trinity Counties, California, and is comprised of lands managed by the Shasta-Trinity National Forest (85,730 ac (34,694 ha)) and BLM Redding Field Office (1,090 ac (441 ha)). This unit includes six areas that, with associated Wilderness, meet the size requirement of small habitat blocks.

Unit 28. Eastern Klamath Mountains

The Eastern Klamath Mountains Unit consists of 110,756 ac (44,821 ha) in Shasta and Siskiyou Counties, California, and is comprised of lands managed by the Shasta-Trinity and Klamath National Forests. This unit includes five areas that meet the size requirement of small habitat blocks.

Unit 29. Shasta/McCloud

The Shasta/McCloud Unit consists of 73,316 ac (29,670 ha) in Siskiyou and Shasta Counties, California, and is comprised of lands managed by the Klamath and Shasta-Trinity National Forests. This unit includes 13 areas that meet the size requirement of small habitat blocks.

Effects of Critical Habitat Designation

Section 7 Consultation

Section 7 of the Act requires Federal agencies, including the Service, to ensure that actions they fund, authorize, or carry out are not likely to destroy or adversely modify critical habitat. In our regulations at 50 CFR 402.02, we define destruction or adverse modification as ''a direct or indirect alteration that appreciably diminishes the value of critical habitat for both the survival and recovery of a listed species. Such alterations include, but are not limited to, alterations adversely modifying any of those physical or biological features that were the basis for determining the habitat to be critical.'' However, recent decisions by the 5th and 9th Circuit Courts of Appeals have invalidated this definition (see *Gifford Pinchot Task Force* v. *U.S. Fish and Wildlife Service*, 378 F. 3d 1059 (9th Cir 2004) and *Sierra Club* v. *U.S. Fish and Wildlife Service et al.*, 245 F.3d 434, 442F (5th Cir 2001)). Pursuant to current national policy and the statutory provisions of the Act, destruction or adverse modification is determined on the basis of whether, with implementation of the proposed Federal action, the affected critical habitat would remain functional (or retain the current ability for the primary constituent elements to be functionally re-established in situations where the critical habitat was temporarily destroyed or degraded) to serve the intended conservation role for the species.

Section 7(a) of the Act requires Federal agencies, including the Service, to evaluate their actions with respect to any species that is proposed or listed as endangered or threatened and with respect to its critical habitat, if any is proposed or designated. Regulations implementing this interagency cooperation provision of the Act are codified at 50 CFR part 402.

Section 7(a)(4) of the Act requires Federal agencies to confer with us on any action that is likely to jeopardize the continued existence of a species proposed to be listed or result in destruction or adverse modification of proposed critical habitat. This is a procedural requirement only. However, once a species becomes listed, or proposed critical habitat is designated as final, the full prohibitions of section 7(a)(2) apply to any Federal action. The primary utility of the conference procedures is to maximize the opportunity for a Federal agency to adequately consider species proposed for listing and proposed critical habitat and avoid potential delays in implementing their proposed action as a result of the section 7(a)(2) compliance process, if those species are listed or the critical habitat designated.

Under conference procedures, the Service may provide advisory conservation recommendations to assist the agency in eliminating conflicts that may be caused by the proposed action. The Service may conduct either informal or formal conferences. Informal conferences are typically used if the proposed action is not likely to have any adverse effects to the species proposed to be listed or proposed critical habitat. Formal conferences are typically used when the Federal agency or the Service believes the proposed action is likely to cause adverse effects to species proposed to be listed or critical habitat, inclusive of those that may cause jeopardy or adverse modification.

The results of an informal conference are typically transmitted in a conference report, while the results of a formal conference are typically transmitted in a conference opinion. Conference opinions on proposed critical habitat are typically prepared according to 50 CFR 402.14 as if the proposed critical habitat were designated. We may adopt the conference opinion as the biological opinion when the critical habitat is designated if no substantial new information or changes in the action alter the content of the opinion (see 50 CFR 402.10(d)). As noted above, any conservation recommendations in a conference report or opinion are strictly advisory.

If a species is listed or critical habitat is designated, section 7(a)(2) of the Act requires Federal agencies to ensure that activities they authorize, fund, or carry out are not likely to jeopardize the continued existence of such a species or to destroy or adversely modify its critical habitat. If a Federal action may affect a listed species or its critical habitat, the responsible Federal agency (action agency) must enter into consultation with us. If, after informal consultation, the action agency determines that the action is not likely to adversely affect the species or critical habitat, it may request concurrence from the Service and complete the section 7(a)(2) process without formal consultation. If the action is likely to adversely affect the species or critical habitat, the agency shall request formal consultation and the Service will issue a biological opinion.

When we issue a biological opinion concluding that a project is likely to result in jeopardy to a listed species or the destruction or adverse modification of critical habitat, we also provide reasonable and prudent alternatives to the project, if any are identifiable, to avoid that outcome. ''Reasonable and prudent alternatives'' are defined at 50 CFR 402.02 as alternative actions identified during consultation that can be implemented in a manner consistent with the intended purpose of the action, that are consistent with the scope of the Federal agency's legal authority and jurisdiction, that are economically and technologically feasible, and that the Director believes would avoid jeopardy to the listed species or destruction or adverse modification of critical habitat. Reasonable and prudent alternatives can vary from slight project modifications to extensive redesign or relocation of the project. Costs associated with implementing a reasonable and prudent alternative are similarly variable.

Regulations at 50 CFR 402.16 require Federal agencies to reinitiate consultation on previously reviewed actions in instances when a new species is listed or critical habitat is subsequently designated that may be affected and the Federal agency has retained discretionary involvement or control over the action or such discretionary involvement or control is authorized by law. Consequently, some Federal agencies may request reinitiation of consultation or initiation of conference with us on actions for which formal consultation has been completed, if those actions may affect subsequently listed species or designated critical habitat or adversely modify or destroy proposed critical habitat.

Federal activities that may affect the northern spotted owl or its designated critical habitat require section 7 consultation under the Act. Activities on State, Tribal, local or private lands requiring a Federal permit (such as a permit from the U.S. Army Corps of Engineers under section 404 of the Clean Water Act or a permit under section 10(a)(1)(B) of the Act from the Service) or involving some other Federal action (such as funding from the Federal Highway Administration, Federal Aviation Administration, or the Federal Emergency Management Agency) are also be subject to the section 7 consultation process. Federal actions not affecting listed species or critical habitat, and actions on State, Tribal, local, or private lands that are not federally funded, authorized, or permitted, do not require section 7 consultation. In addition, currently designated northern spotted owl critical habitat (see 50 CFR 17.95(b)) remain in place, and therefore be subject to section 7, until our final determination on this proposal is made.

Application of the Jeopardy and Adverse Modification Standards for Actions Involving Effects to the Northern Spotted Owl and Its Critical Habitat

Jeopardy Standard

The Service has applied an analytical framework for northern spotted owl jeopardy analyses that relies heavily on a northern spotted owl conservation strategy developed in the Standards and Guidelines of the Record of Decision for Amendments to Forest Service and BLM Planning Documents within the Range of the Northern Spotted Owl (USDA and USDI 1994b) and adopted by the Forest Service and BLM in their land management plans (LRMPs/RMPs); this habitat-based strategy also applies to National Park Service lands. The section 7(a)(2) analysis focuses on how the proposed Federal action comports with the habitat-based, rangewide conservation plan for the northern spotted owl.

Adverse Modification Standard

The analytical framework described in the Director's December 9, 2004, memorandum is used to complete section 7(a)(2) analyses for Federal actions affecting northern spotted owl critical habitat. The key factor related to the adverse modification determination is whether, with implementation of the proposed Federal action, the affected critical habitat would remain functional (or retain the current ability for the primary constituent elements to be functionally re-established in situations where the critical habitat was temporarily destroyed or degraded) to serve its intended conservation role for the species. Generally, the conservation role of northern spotted owl critical habitat units is to support viable populations at the physiographic province level. The parameters for the habitat that is understood to fulfill this role are set forth in the recovery criteria in the 2007 Draft Recovery Plan for the Northern Spotted Owl (USFWS 2007).

Section 4(b)(8) of the Act requires us to briefly evaluate and describe in any proposed or final regulation that designates critical habitat those activities involving a Federal action that may destroy or adversely modify such habitat, or that may be affected by such designation. Activities that may destroy or adversely modify critical habitat may also jeopardize the continued existence of the species.

Activities that may destroy or adversely modify critical habitat are those that alter the PCEs to an extent that the intended conservation function of critical habitat for the northern spotted owl is appreciably reduced. Activities that, when carried out, funded, or authorized by a Federal agency, may affect critical habitat and therefore should result in informal or formal consultation for the northern spotted owl include, but are not limited to:

(1) Actions that would remove or modify potential nest structures, such as large (generally greater than 30 in (76 cm) dbh) broken-topped trees, snags, platforms, or mistletoe infestations. Such activities could remove nesting opportunities, potentially preventing or suppressing reproduction. Activities that could remove or modify these features are listed below.

(2) Actions that would remove or modify forest conditions supporting nesting, foraging, and roosting, such as large trees, canopy closure, multi-layered and multi-species canopies, the presence of flight room under the canopy, and in some areas, the presence of hardwoods in stands. Such activities could increase the risk of predation of adults or young, increase thermal stress, decrease foraging success, or decrease survival resulting from extreme weather. Activities that could remove or modify these features are listed below.

(3) Actions that would fragment northern spotted owl nesting, roosting, foraging, or dispersal habitat within critical habitat blocks, so that connectivity within or between blocks, units, or provinces is reduced or eliminated. Concentrated removal or modification of forested areas within individual blocks could increase the distance northern spotted owls must travel to reach suitable forest conditions in another critical habitat block, which can result in an increased risk of predation, increased stress, and reduction in foraging opportunities. Activities that could remove or modify these features are listed below.

(4) Actions that would eliminate the potential for an area to support the forest types that develop into nesting, roosting, foraging and dispersal habitat. Ground disturbances that disrupt the ability for the landscape to grow forested communities to their full potential could decrease nesting and foraging opportunities, while increasing the distance between blocks of intact habitat, which could result in an increased risk of predation and increased stress. Activities that could remove the potential for these forest types to exist are listed below.

The types of activities that may affect northern spotted owl critical habitat as described above include, but are not limited to: Timber harvest; salvage of dead trees from healthy forest stands and post-wildfire burn areas; snag creation or removal; hazard tree removal; fuels reduction treatments; wildland fire management and fire suppression activities, such as back-burning and felling trees; personal use and commercial firewood collection; land disturbance activities associated with construction and maintenance of power transmission line corridors, highways, hydroelectric facilities, mines, or oil, gas, geothermal or telecommunications leases; sand, gravel, or rock extraction; and construction of ski areas and associated resort facilities or other large-scale recreational developments.

Some silvicultural activities designed to improve the habitat for northern spotted owls over the long term may have short-term negative impacts.

We consider all of the units proposed as revised critical habitat to contain features essential to the conservation of the northern spotted owl. All units are within the geographic range of the species and are likely to be used by the northern spotted owl. Federal agencies already consult with us on activities in areas currently occupied by the northern spotted owl to ensure that their actions do not jeopardize the continued existence of the northern spotted owl.

Application of Section 3(5)(A) and Exclusions Under Section 4(b)(2) of the Act

Section 3(5)(A) of the Act defines critical habitat as the specific areas within the geographic area occupied by the species on which are found physical and biological features (i) essential to the conservation of the species, and (ii) which may require special management considerations or protection. Therefore, areas within the geographic area occupied by the species that do not contain the features essential to the conservation of the species are not, by definition, critical habitat. Similarly, areas within the geographic area occupied by the species that require no special management or protection also are not, by definition, critical habitat. Many areas that did not meet the definition previously and were not included in critical habitat are also not included in this designation for the same reason.

Section 4(b)(2) of the Act states that critical habitat shall be designated, and revised, on the basis of the best available scientific data after taking into consideration the economic impact, national security impact, and any other relevant impact of specifying any particular area as critical habitat. The Secretary may exclude an area from critical habitat if he determines that the

benefits of such exclusion outweigh the benefits of specifying such area as part of the critical habitat, unless he determines, based on the best scientific data available, that the failure to designate such area as critical habitat will result in the extinction of the species.

Under section 4(b)(2) of the Act, in considering whether to exclude a particular area from the designation, we must identify the benefits of including the area in the designation, identify the benefits of excluding the area from the designation, and determine whether the benefits of exclusion outweigh the benefits of inclusion. If an exclusion is contemplated, we must determine whether excluding the area would result in the extinction of the species. In addition, the Service is conducting an economic analysis of the impacts of the proposed revised critical habitat designation and related factors, which will be available for public review and comment. We are not proposing any specific exclusions under 4(b)(2) at this time; however, based on public comment on the document, the proposed revised designation itself, and the information in the final economic analysis, areas may be excluded in the final rule. This is provided for in section 4(b)(2) of the Act, and in our implementing regulations at 50 CFR 424.19.

General Principles of Section 7 Consultations Used in the 4(b)(2) Balancing Process

The most direct, and potentially largest, regulatory benefit of critical habitat is that federally authorized, funded, or carried out activities require consultation under section 7 of the Act to ensure that they are not likely to destroy or adversely modify critical habitat. There are two limitations to this regulatory effect. First, it only applies where there is a Federal nexus—if there is no Federal nexus, designation itself does not restrict actions that destroy or adversely modify critical habitat. Second, it only limits destruction or adverse modification. By its nature, the prohibition on adverse modification is designed to ensure that areas containing the physical and biological features essential to the conservation of the species, or unoccupied areas essential to the conservation of the species, are not eroded. Critical habitat designation alone, however, does not require specific steps toward recovery.

Once consultation under section 7 of the Act is triggered, the process may conclude informally if the action agency determines that the proposed Federal action is not likely to adversely affect the listed species or its critical habitat. However, if the action agency determines through informal consultation that adverse impacts are likely to occur, then formal consultation would be initiated. Formal consultation concludes with a biological opinion issued by the Service on whether the proposed Federal action is likely to jeopardize the continued existence of a listed species or result in destruction or adverse modification of critical habitat, with separate analyses being made under both the jeopardy and the adverse modification standards. For critical habitat, a biological opinion that concludes in a determination of no destruction or adverse modification may contain discretionary conservation recommendations to minimize adverse effects to primary constituent elements, but it would not contain any mandatory reasonable and prudent measures or terms and conditions. Mandatory measures, and terms and conditions to implement them, are only specified when the proposed action would result in the incidental take of a listed animal species. Reasonable and prudent alternatives to the proposed Federal action would only be suggested when the biological opinion results in a jeopardy or adverse modification conclusion.

A benefit of including lands in critical habitat is that the designation of critical habitat serves to educate landowners, State and local governments, and the public regarding the potential conservation value of an area. This helps focus and promote conservation efforts by other parties by clearly delineating areas of high conservation value for the northern spotted owl. In general the educational benefit of a critical habitat designation always exists, although in some cases it may be redundant with other educational effects.

The Service is conducting an economic analysis of the impacts of the proposed revised critical habitat designation and related factors, which will be available for public review and comment. Based on public comment on that document, the proposed revised designation itself, and the information in the final economic analysis, additional areas beyond those identified in this assessment may be excluded from critical habitat by the Secretary under the provisions of section 4(b)(2) of the Act. This is provided for in the Act, and in our implementing regulations at 50 CFR 424.19.

Exclusions Under Section 4(b)(2) of the Act

We are not proposing to exclude any specific areas under section 4(b)(2) of the Act in this proposed revision to northern spotted owl critical habitat at this time. However, we will consider excluding any, or all, areas in the final designation after taking into account public comments and the economic analysis.

Economic Analysis

An analysis of the economic impacts of proposing revised critical habitat for the northern spotted owl is being prepared. We will announce the availability of the draft economic analysis as soon as it is completed, at which time we will seek public review and comment. At that time, copies of the draft economic analysis will be available for downloading from the Internet at *http://www.fws.gov/oregonfwo,* or by contacting the Oregon Fish and Wildlife Office directly (see **ADDRESSES** section).

Peer Review

In accordance with our joint policy published in the **Federal Register** on July 1, 1994 (59 FR 34270), and based on our implementation of the Office of Management and Budget's Final Information Quality Bulletin for Peer Review, dated December 16, 2004, we will seek the expert opinions of at least five appropriate and independent peer reviewers regarding the science in this proposed rule. The purpose of such review is to ensure that our revised critical habitat designation is based on scientifically sound data, assumptions, and analyses. We will send copies of this proposed rule to these peer reviewers immediately following publication in the **Federal Register**. We will invite these peer reviewers to comment during the public comment period on the specific assumptions and conclusions regarding the proposed revised designation of critical habitat.

We will consider all comments and information received during the comment period on this proposed rule during preparation of a final rulemaking. Accordingly, the final decision may differ from this proposal.

Public Hearings

The Act provides for one or more public hearings on this proposal, if requested. Requests for public hearings must be made in writing at least 15 days prior to the close of the public comment period (see **DATES**). We will schedule public hearings on this proposal, if any are requested, and announce the dates, times, and places of those hearings in

the **Federal Register** and local newspapers at least 15 days prior to the first hearing.

Clarity of the Rule

Executive Order 12866 (Regulatory Planning and Review) requires each agency to write regulations and notices that are easy to understand. We invite your comments on how to make this proposed rule easier to understand, including answers to questions such as the following: (1) Are the requirements in the proposed rule clearly stated? (2) Does the proposed rule contain technical jargon that interferes with the clarity? (3) Does the format of the proposed rule (grouping and order of the sections, use of headings, paragraphing, and so forth) aid or reduce its clarity? (4) Is the description of the notice in the **SUPPLEMENTARY INFORMATION** section of the preamble helpful in understanding the proposed rule? (5) What else could we do to make this proposed rule easier to understand?

Send a copy of any comments on how we could make this proposed rule easier to understand to: Office of Regulatory Affairs, Department of the Interior, Room 7229, 1849 C Street, NW., Washington, DC 20240. You may e-mail your comments to this address: *Exsec@ios.doi.gov.*

Required Determinations

Regulatory Planning and Review

In accordance with Executive Order 12866, this document is a significant rule in that it may raise novel legal and policy issues, but it is not anticipated to have an annual effect on the economy of $100 million or more, or to affect the economy in a material way. Due to the tight timeline for publication in the **Federal Register**, the Office of Management and Budget (OMB) has not formally reviewed this rule. We are preparing a draft economic analysis of this proposed action, which will be available for public comment, to determine the economic consequences of revising our critical habitat designation for the northern spotted owl. This economic analysis also will be used to determine compliance with Executive Order 12866, Regulatory Flexibility Act, Small Business Regulatory Enforcement Fairness Act, and Executive Order 12630.

Further, Executive Order 12866 directs Federal agencies promulgating regulations to evaluate regulatory alternatives (Office of Management and Budget, Circular A–4, September 17, 2003). Pursuant to Circular A–4, once it has been determined that the Federal regulatory action is appropriate, the agency will need to consider alternative regulatory approaches. Since the determination of critical habitat is a statutory requirement under the Act, we must then evaluate alternative regulatory approaches, where feasible, when promulgating a designation of critical habitat.

In developing our designations of critical habitat, we consider economic impacts, impacts to national security, and other relevant impacts under section 4(b)(2) of the Act. Based on the discretion allowable under this provision, we may exclude any particular area from the designation of critical habitat providing that the benefits of such exclusion outweigh the benefits of specifying the area as critical habitat and that such exclusion would not result in the extinction of the species. As such, we believe that the evaluation of the inclusion or exclusion of particular areas, or combination thereof, in a designation constitutes our regulatory alternative analysis.

Within these areas, the types of Federal actions or authorized activities that we have identified as potential concerns are listed above in the section on section 7 consultation. The availability of the draft economic analysis will be announced in the **Federal Register** and in local newspapers so that it is available for public review and comments. The draft economic analysis can be obtained from the internet Web site at: *http://www.fws.gov/oregonfwo* or by contacting the Oregon Fish and Wildlife Office directly (see **ADDRESSES** section).

Regulatory Flexibility Act (5 U.S.C. 601 et seq.)

Under the Regulatory Flexibility Act (5 U.S.C. 601 *et seq.*, as amended by the Small Business Regulatory Enforcement Fairness Act (SBREFA) of 1996), whenever an agency is required to publish a notice of rulemaking for any proposed or final rule, it must prepare and make available for public comment a regulatory flexibility analysis that describes the effects of the rule on small entities (i.e., small businesses, small organizations, and small government jurisdictions). However, no regulatory flexibility analysis is required if the head of the agency certifies the rule will not have a significant economic impact on a substantial number of small entities. The SBREFA amended the Regulatory Flexibility Act (RFA) to require Federal agencies to provide a statement of the factual basis for certifying that the rule will not have a significant economic impact on a substantial number of small entities.

At this time, the Service lacks the available economic information necessary to provide an adequate factual basis for the required RFA finding. Therefore, the RFA finding is deferred until completion of the draft economic analysis prepared under section 4(b)(2) of the Act and Executive Order 12866. The draft economic analysis will provide the required factual basis for the RFA finding. Upon completion of the draft economic analysis, the Service will publish a notice of availability of the draft economic analysis of the proposed revised designation and reopen the public comment period for the proposed revised designation. The Service will include with the notice of availability, as appropriate, an initial regulatory flexibility analysis or a certification that the rule will not have a significant economic impact on a substantial number of small entities accompanied by the factual basis for that determination. The Service has concluded that deferring the RFA finding until completion of the draft economic analysis is necessary to meet the purposes and requirements of the RFA. Deferring the RFA finding in this manner will ensure that the Service makes a sufficiently informed determination based on adequate economic information and provides the necessary opportunity for public comment.

Executive Order 13211

On May 18, 2001, the President issued an Executive Order on regulations that significantly affect energy supply, distribution, and use. Executive Order 13211 requires agencies to prepare Statements of Energy Effects when undertaking certain actions. While this proposed rule to designate revised critical habitat for the northern spotted owl is a significant regulatory action under Executive Order 12866, it is not expected to significantly affect energy supplies, distribution, or use. Therefore, this action is not a significant energy action, and no Statement of Energy Effects is required.

Unfunded Mandates Reform Act (2 U.S.C. 1501 et seq.)

In accordance with the Unfunded Mandates Reform Act (2 U.S.C. 1501 *et seq.*), the Service makes the following findings:

(a) This rule would not produce a Federal mandate. In general, a Federal mandate is a provision in legislation, statute or regulation that would impose an enforceable duty upon State, local, Tribal governments, or the private sector and includes both ''Federal intergovernmental mandates'' and

''Federal private sector mandates.'' These terms are defined in 2 U.S.C. 658(5)–(7). ''Federal intergovernmental mandate'' includes a regulation that ''would impose an enforceable duty upon State, local, or Tribal governments'' with two exceptions. It excludes ''a condition of Federal assistance.'' It also excludes ''a duty arising from participation in a voluntary Federal program,'' unless the regulation ''relates to a then-existing Federal program under which $500,000,000 or more is provided annually to State, local, and Tribal governments under entitlement authority,'' if the provision would ''increase the stringency of conditions of assistance'' or ''place caps upon, or otherwise decrease, the Federal Government's responsibility to provide funding,'' and the State, local, or Tribal governments ''lack authority'' to adjust accordingly. At the time of enactment, these entitlement programs were: Medicaid; AFDC work programs; Child Nutrition; Food Stamps; Social Services Block Grants; Vocational Rehabilitation State Grants; Foster Care, Adoption Assistance, and Independent Living; Family Support Welfare Services; and Child Support Enforcement. ''Federal private sector mandate'' includes a regulation that ''would impose an enforceable duty upon the private sector, except (i) a condition of Federal assistance or (ii) a duty arising from participation in a voluntary Federal program.''

The designation of critical habitat does not impose a legally binding duty on non-Federal government entities or private parties. Under the Act, the only regulatory effect is that Federal agencies must ensure that their actions do not destroy or adversely modify critical habitat under section 7. While non-Federal entities that receive Federal funding, assistance, or permits, or that otherwise require approval or authorization from a Federal agency for an action, may be indirectly impacted by the designation of critical habitat, the legally binding duty to avoid destruction or adverse modification of critical habitat rests squarely on the Federal agency. Furthermore, to the extent that non-Federal entities are indirectly impacted because they receive Federal assistance or participate in a voluntary Federal aid program, the Unfunded Mandates Reform Act would not apply; nor would critical habitat shift the costs of the large entitlement programs listed above on to State governments.

(b) We do not believe that this rule would significantly or uniquely affect small governments, because only Federal lands are involved in the proposed designation. As such, a Small Government Agency Plan is not required. However, as we conduct our economic analysis, we will further evaluate this issue and revise this assessment if appropriate.

Takings

In accordance with Executive Order 12630 (''Government Actions and Interference with Constitutionally Protected Private Property Rights''), we have analyzed the potential takings implication of designating revised critical habitat for the northern spotted owl in a takings implication assessment. The takings implications assessment concludes that this revised designation of critical habitat for the northern spotted owl does not pose significant takings implications. However, we will further evaluate this issue as we conduct our economic analysis and review and revise this assessment as warranted.

Federalism

In accordance with Executive Order 13132 (Federalism), the rule does not have significant Federalism effects. A Federalism assessment is not required. In keeping with DOI and Department of Commerce policy, we requested information from, and coordinated development of, this proposed revised critical habitat designation with appropriate State resource agencies in Washington, Oregon, and California. The revised designation of critical habitat in areas currently occupied by the northern spotted owl imposes no additional restrictions to those currently in place and, therefore, has little incremental impact on State and local governments and their activities. The designation may have some benefit to these governments in that the areas that contain the features essential to the conservation of the species are more clearly defined, and the primary constituent elements of the habitat necessary to the conservation of the species are clearly identified. While making this definition and identification does not alter where and what federally sponsored activities may occur, it may assist these local governments in long-range planning (rather than waiting for case-by-case section 7 consultations to occur).

Civil Justice Reform

In accordance with Executive Order 12988 (Civil Justice Reform), the Office of the Solicitor has determined that the rule does not unduly burden the judicial system and meets the requirements of sections 3(a) and 3(b)(2) of the Order. We have proposed revised critical habitat in accordance with the provisions of the Endangered Species Act of 1973, as amended (16 U.S.C. 1531 *et seq.*). This proposed rule uses standard property descriptions and identifies the primary constituent elements within the designated areas to assist the public in understanding the habitat needs of the northern spotted owl.

Paperwork Reduction Act of 1995 (44 U.S.C. 3501 et seq.)

This rule does not contain any new collections of information that require approval by OMB under the Paperwork Reduction Act. This rule will not impose recordkeeping or reporting requirements on State or local governments, individuals, businesses, or organizations. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number.

National Environmental Policy Act

It is our position that, outside the Tenth Circuit, we do not need to prepare environmental analyses as defined by the National Environmental Policy Act (42 U.S.C. 4321 et seq.) in connection with designating critical habitat under the Endangered Species Act of 1973, as amended. We published a notice outlining our reasons for this determination in the **Federal Register** on October 25, 1983 (48 FR 49244). This assertion was upheld in the courts of the Ninth Circuit (*Douglas County* v. *Babbitt*, 48 F.3d 1495 (9th Cir. Ore. 1995), cert. denied 116 S. Ct. 698 (1996)).

Government-to-Government Relationship With Tribes

In accordance with the President's memorandum of April 29, 1994, ''Government-to-Government Relations with Native American Tribal Governments'' (59 FR 22951), Executive Order 13175, and the Department of Interior's manual at 512 DM 2, we readily acknowledge our responsibility to communicate meaningfully with recognized Federal Tribes on a government-to-government basis. No Tribal lands are proposed as revised critical habitat.

References Cited

A complete list of all references cited in this rulemaking is available upon request from the Field Supervisor, Oregon Fish and Wildlife Office (see **ADDRESSES** section).

Author(s)

The primary authors of this package are the staff of the U.S. Fish and Wildlife Service.

List of Subjects in 50 CFR Part 17

Endangered and threatened species, Exports, Imports, Reporting and recordkeeping requirements, Transportation.

Proposed Regulation Promulgation

Accordingly, we propose to amend part 17, subchapter B of chapter I, title 50 of the Code of Federal Regulations, as set forth below:

PART 17—[AMENDED]

1. The authority citation for part 17 continues to read as follows:

Authority: 16 U.S.C. 1361–1407; 16 U.S.C. 1531–1544; 16 U.S.C. 4201–4245; Pub. L. 99–625, 100 Stat. 3500; unless otherwise noted.

2. In § 17.95(b), revise the entry for ''Northern Spotted Owl (*Strix occidentalis caurina*)'' to read as follows:

17.95 Critical habitat—fish and wildlife.

* * * * *

(b) *Birds.*

* * * * *

Northern Spotted Owl (*Strix occidentalis caurina*)

(1) Critical habitat units are depicted for the States of Washington, Oregon, and California on the maps below.

(2) The primary constituent elements of critical habitat for the northern spotted owl are:

(i) Forest types known to support the northern spotted owl across its geographic range. These forest types include Sitka spruce, western hemlock, mixed conifer and mixed evergreen, grand fir, Pacific silver fir, Douglas-fir, white fir, Shasta red fir, redwood/Douglas-fir (in coastal California and southwestern Oregon), and the moist end of the ponderosa pine coniferous forests zones at elevations up to 3,000 ft (914 m) near the northern edge of the range and up to about 6,000 ft (1,828 m) at the southern edge.

(ii) Forest types described in paragraph (2)(i) of this entry that are of sufficient area, quality, and configuration, or that have the ability to develop these characteristics, to meet the home range needs of territorial pairs of northern spotted owls throughout the year. A home range must provide all of the habitat components and prey needed to provide for the survival and successful reproduction of a resident breeding pair of northern spotted owls. The three habitat components required within the home range of a northern spotted owl include:

(A) Nesting habitat. Habitat that includes a moderate to high canopy closure (60 to 80 percent); a multi-layered, multi-species canopy with large (generally greater than 30 inches (in) (76 centimeters (cm) diameter at breast height (dbh)) overstory trees; a high incidence of large trees with various deformities (e.g., large cavities, broken tops, mistletoe infections, and other platforms); large snags; large accumulations of fallen trees and other woody debris on the ground; and sufficient open space below the canopy for northern spotted owls to fly. Patches of nesting habitat, in combination with roosting habitat (see paragraph (2)(ii)(B) of this entry) need to be sufficiently large and contiguous to maintain northern spotted owl core areas and home ranges, and be in a spatial arrangement with foraging habitat (see paragraph (2)(ii)(C) of this entry) that allows efficient provisioning of young at the nest.

(B) Roosting habitat. Roosting habitat differs from nesting habitat in that it need not contain those specific structural features used for nesting (cavities, broken tops, and mistletoe platforms). As such, it generally includes moderate to high canopy closure; a multi-layered, multi-species canopy; large accumulations of fallen trees and other woody debris on the ground; and sufficient open space below the canopy for northern spotted owls to fly.

(C) Foraging habitat. Foraging habitat provides a food supply for survival and reproduction of northern spotted owls and includes a wider array of forest types than nesting and roosting habitat, particularly more open and fragmented forests. While some foraging habitat has attributes that closely resemble those of nesting and roosting habitat, especially in the northern portions of the subspecies' range, some younger stands without all these attributes are used for foraging, especially in the southern portion of the range. Some younger stands may have high prey abundance and some structural attributes similar to those of older forests, such as moderate tree density, subcanopy perches at multiple levels, multi-layered vegetation, or residual older trees. To be fully functional for northern spotted owls, foraging habitat generally contains some roosting habitat attributes.

(iii) Dispersal habitat. The dispersal of juveniles requires habitat supporting both the transience and colonization phases. Habitat supporting the transience phase of dispersal includes, at a minimum, stands with adequate tree size and canopy closure to provide protection from avian predators and at least minimal foraging opportunities. This may include younger and less diverse forest stands than foraging habitat (see paragraph (2)(ii)(C) of this entry), such as even-aged, pole-sized stands. These stands still require the interspersion of some roosting structures and foraging habitat to allow for temporary resting and feeding during the movement phase. Habitat supporting colonization is generally equivalent to roosting and foraging habitat and is described in paragraphs (2)(ii)(B) and (2)(ii)(C) of this entry, although it may be in smaller amounts than that needed to support nesting pairs (see paragraph (2)(ii)(A) of this entry). Dispersal habitats will typically occur in the intervening areas between larger blocks of forest that provide nesting, foraging, and roosting habitats for resident northern spotted owls.

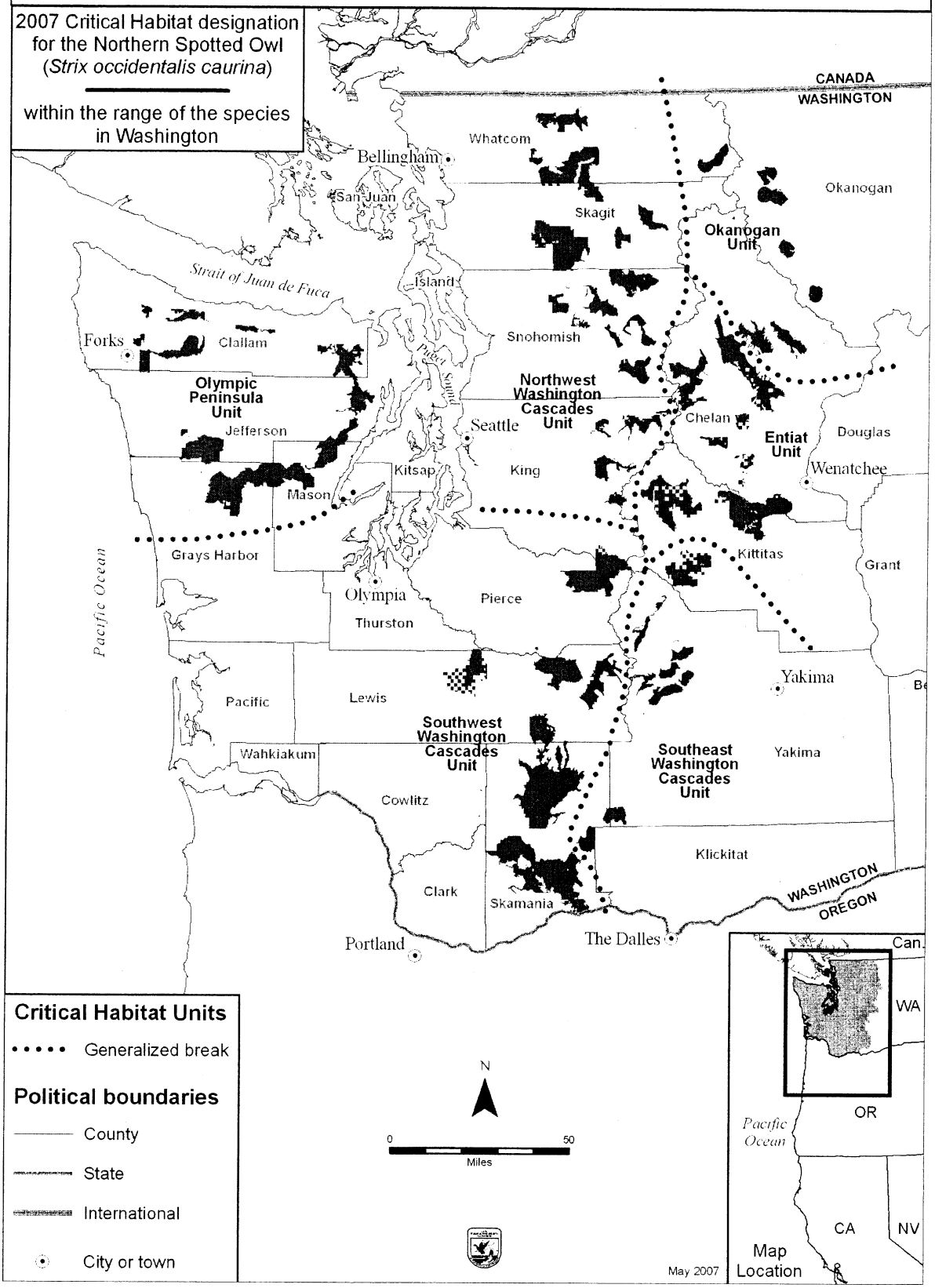
(3) Critical habitat does not include manmade structures (e.g., buildings, aqueducts, airports, and roads, including the land on which they are located) existing on the effective date of this rule and not containing one or more of the primary constituent elements.

(4) Critical habitat map units. The designated critical habitat units for the northern spotted owl are depicted on the maps below.

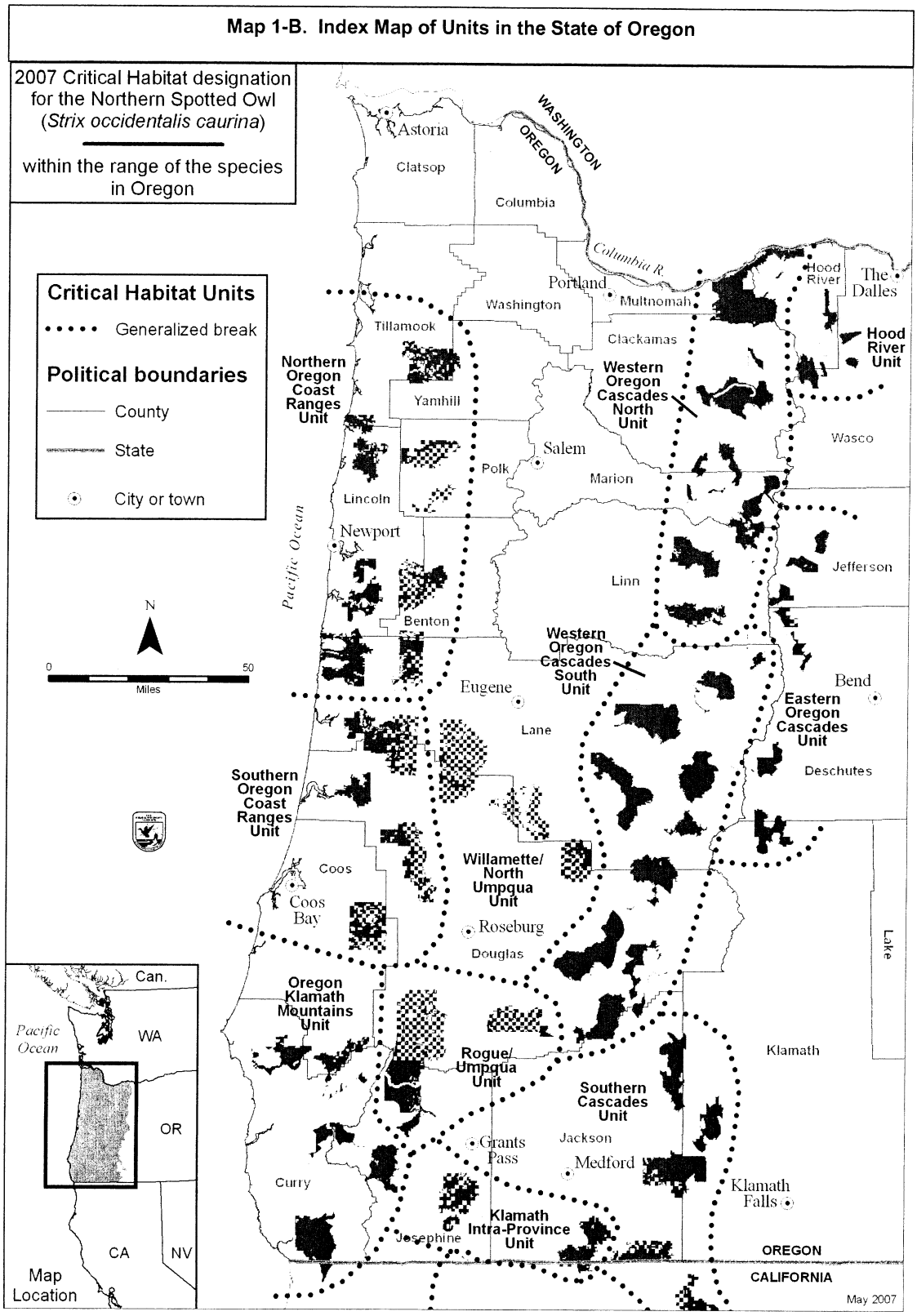
(5) Note: Index map of critical habitat units for the northern spotted owl in the State of Washington (Map 1–A) follows:

BILLING CODE 4310–55–P

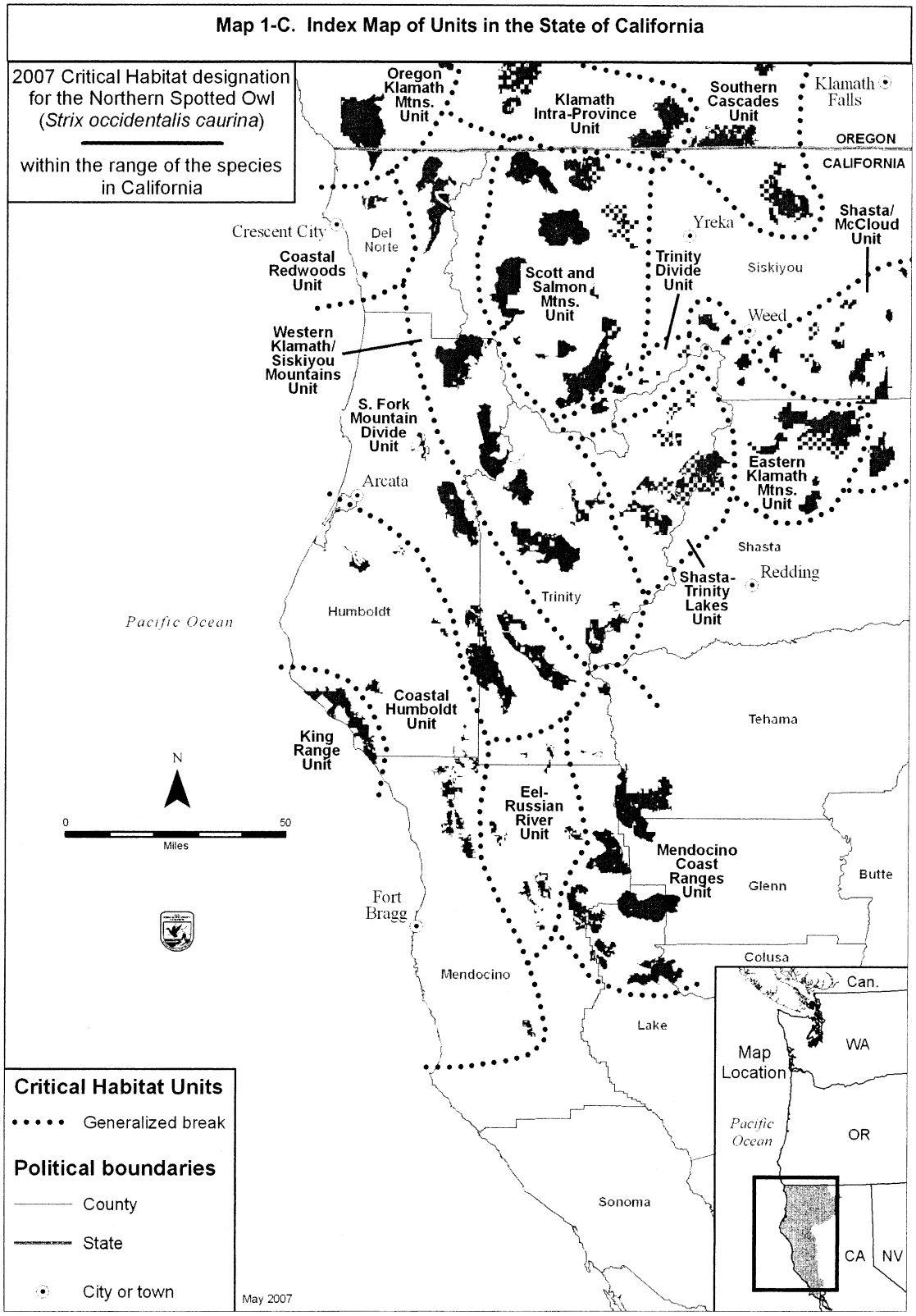
Map 1-A. Index Map of Units in the State of Washington



(6) Note: Index map of critical habitat units for the northern spotted owl in the State of Oregon (Map 1–B) follows:



(7) Note: Index map of critical habitat units for the northern spotted owl in the State of California (Map 1–C) follows:

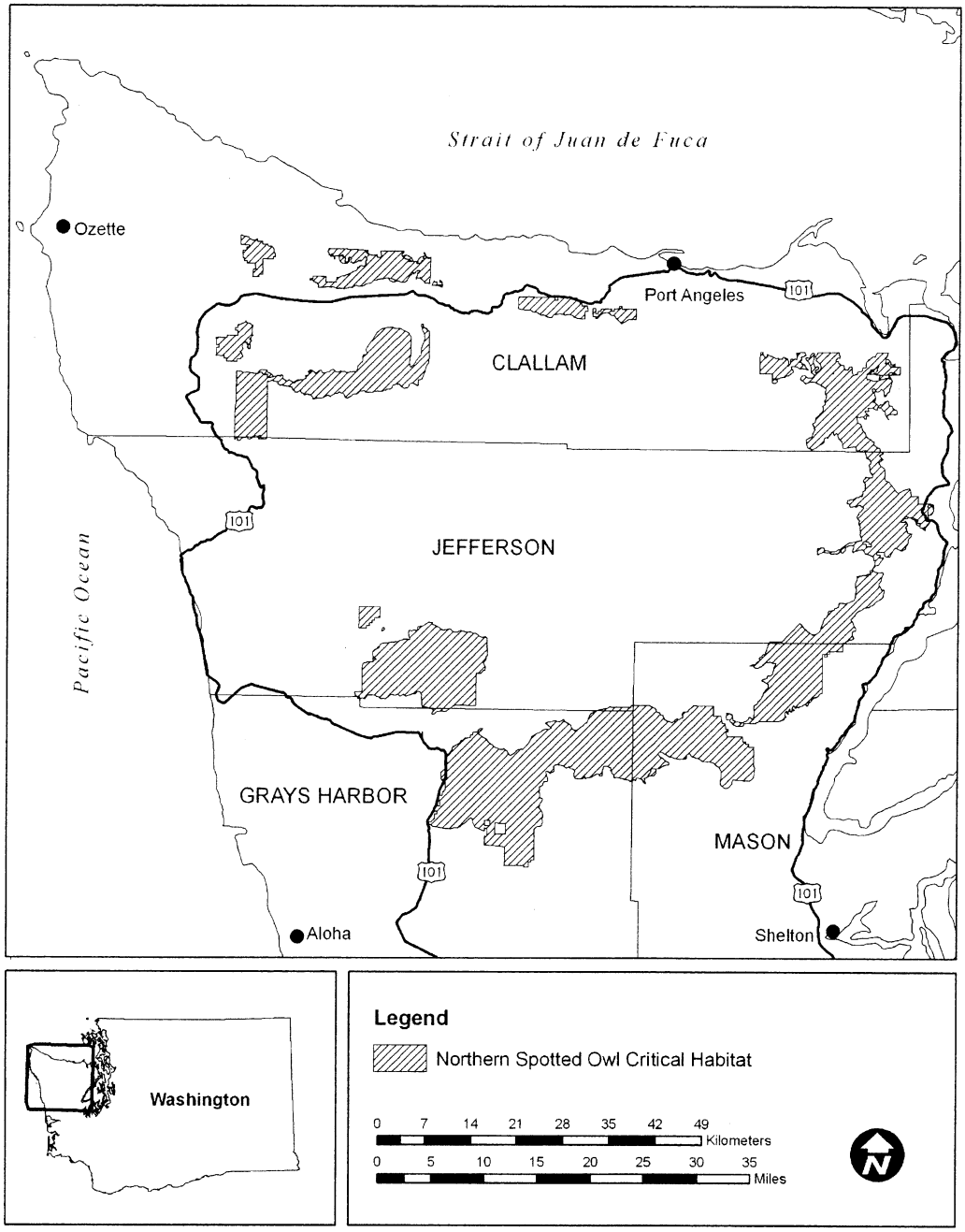


(8) Olympic Peninsula Unit (Unit 1). Clallam, Grays Harbor, Jefferson, and Mason Counties, Washington. From USGS 1:24,000 scale quadrangles Anderson Creek, Brinnon, Bunch Lake, Burnt Hill, Colonel Bob, Deadmans Hill, Eldon, Ellis Mountain, Elwha, Finley Creek, Hunger Mountain, Indian Pass, Kloochman Rock, Lake Pleasant, Lake Quinault East, Lake Quinault West, Lake Sutherland, Larsen Creek, Lightning Peak, Maiden Peak, Matheny Ridge, Mount Deception, Mount Hoquiam, Mount Jupiter, Mount Muller, Mount Olson, Mount Skokomish, Mount Tebo, Mount Townsend, Mount Walker, Mount Washington, Mount Zion, Pysht, Reade Hill, Salmon River East, Slide Peak, Snider Peak, Stequaleho Creek, Stevens Creek, The Brothers, Twin Rivers, Tyler Peak, Uncas, West of Pysht, Winfield Creek, and Wynoochee Lake.

(i) The Olympic Peninsula Unit consists of 331,741 ac (134,251 ha) in Clallam, Jefferson, Mason, and Grays Harbor Counties, Washington, and is comprised of lands managed by the Olympic National Forest.

(ii) Note: Map of Olympic Peninsula Unit (Map 2) follows:

Map 2. Olympic Peninsula Unit, Washington

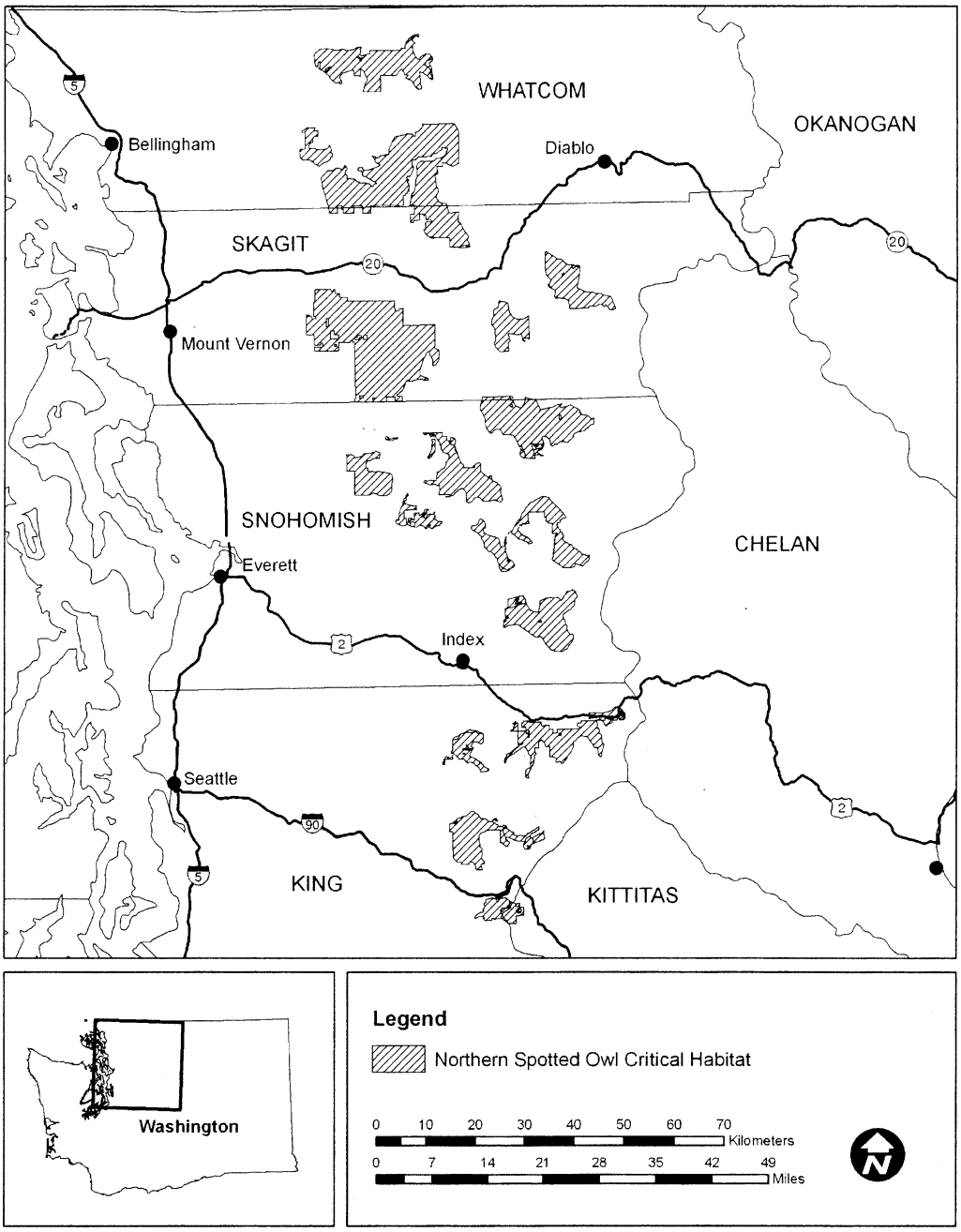


(9) Northwest Washington Cascades Unit (Unit 2). King, Kittitas, Skagit, Snohomish, and Whatcom Counties, Washington. From USGS 1:24,000 scale quadrangles Bacon Peak, Baker Pass, Bandera, Baring, Bearpaw Mountain, Bedal, Benchmark Mountain, Big Devil Peak, Big Snow Mountain, Blanca Lake, Cascade Pass, Chikamin Peak, Darrington, Day Lake, Downey Mountain, Eldorado Peak, Evergreen Mountain, Findley Lake, Finney Peak, Fortson, Gee Point, Glacier, Glacier Peak West, Groat Mountain, Grotto, Helena Ridge, Huckleberry Mountain, Illabot Peaks, Lake Philippa, Lake Shannon, Lime Mountain, Lost Lake, Mallardy Ridge, Meadow Mountain, Monte Cristo, Mount Baker, Mount Higgins, Mount Larrabee, Mount Phelps, Mount Sefrit, Mount Shuksan, Prairie Mountain, Pugh Mountain, Rockport, Sauk Mountain, Scenic, Shuksan Arm, Silverton, Skykomish, Sloan Peak, Snoqualmie Lake, Snoqualmie Pass, Snowking Mountain, Sonny Boy Lakes, Stevens Pass, Twin Sisters Mountain, Verlot, Welker Peak, White Chuck Mountain, and Whitehorse Mountain.

(i) The Northwest Washington Cascades Unit consists of 410,872 ac (166,274 ha) in Whatcom, Skagit, Snohomish, King, and Kittitas Counties, Washington, and is comprised of lands managed by the Mt. Baker-Snoqualmie and Wenatchee National Forests.

(ii) Note: Map of Northwest Cascades Unit (Map 3) follows:

Map 3. Northwest Washington Cascades Unit, Washington

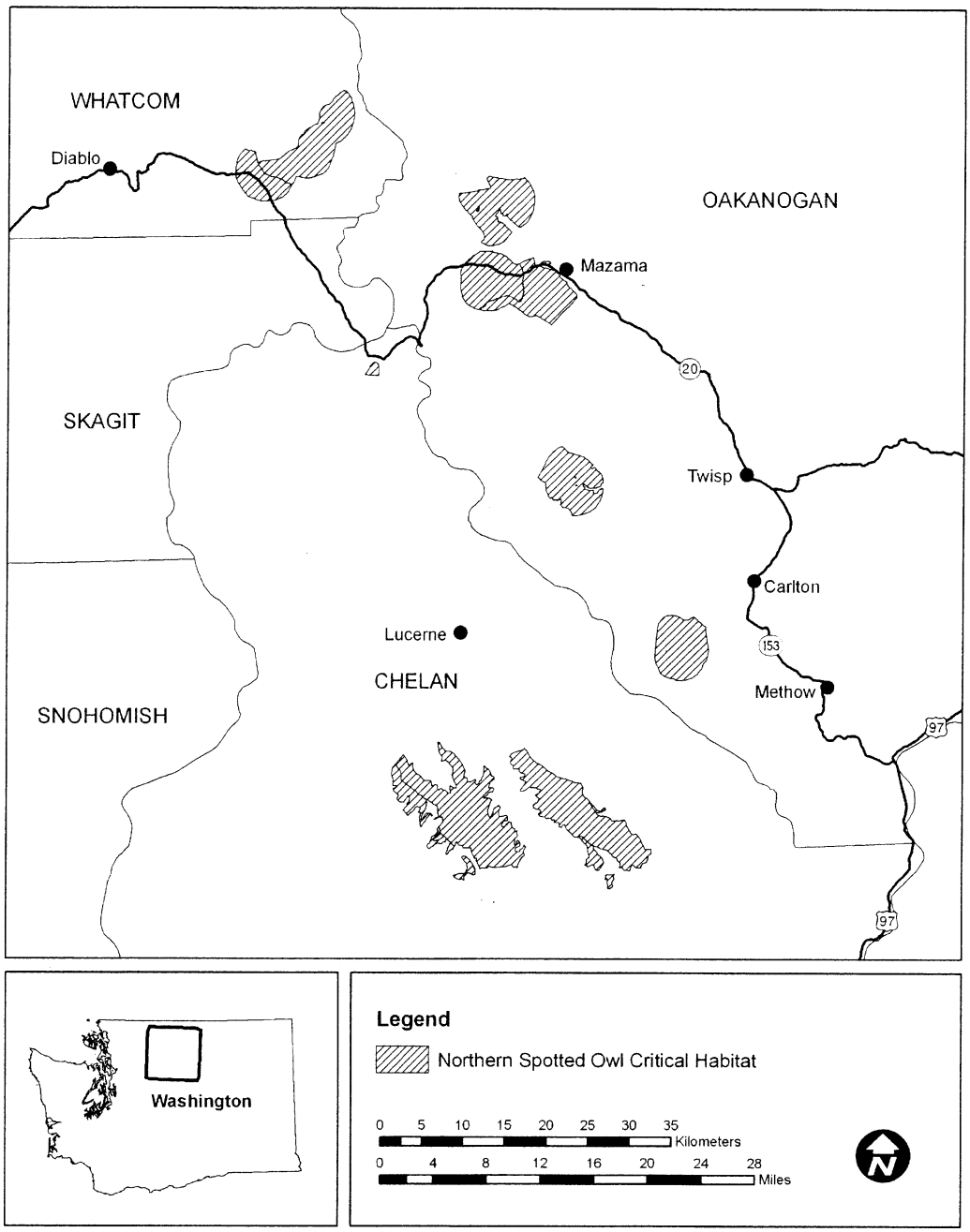


(10) Okanogan Unit (Unit 3). Whatcom, Okanogan, and Chelan Counties, Washington. From USGS 1:24,000 scale quadrangles Azunite Peak, Big Goat Mountain, Brief, Chikamin Creek, Crater Mountain, Hoodoo Peak, Hungry Mountain, Martin Peak, Mazama, McAlester Mountain, McCleod Mountain, Midnight Mountain, Oval Peak, Pasayten Peak, Pyramid Mountain, Robinson Mountain, Saska Peak, Shull Mountain, Silver Falls, Silver Star Mountain, Slate Peak, South Navarre Peak, Stormy Mountain, and Thompson Ridge.

(i) The Okanogan Unit consists of 115,638 ac (46,797 ha) in Whatcom, Okanogan, and Chelan Counties, Washington, and is comprised of lands managed by the Okanogan and Wenatchee National Forests.

(ii) Note: Map of Okanogan Unit (Map 4) follows:

Map 4. Okanogan Unit, Washington

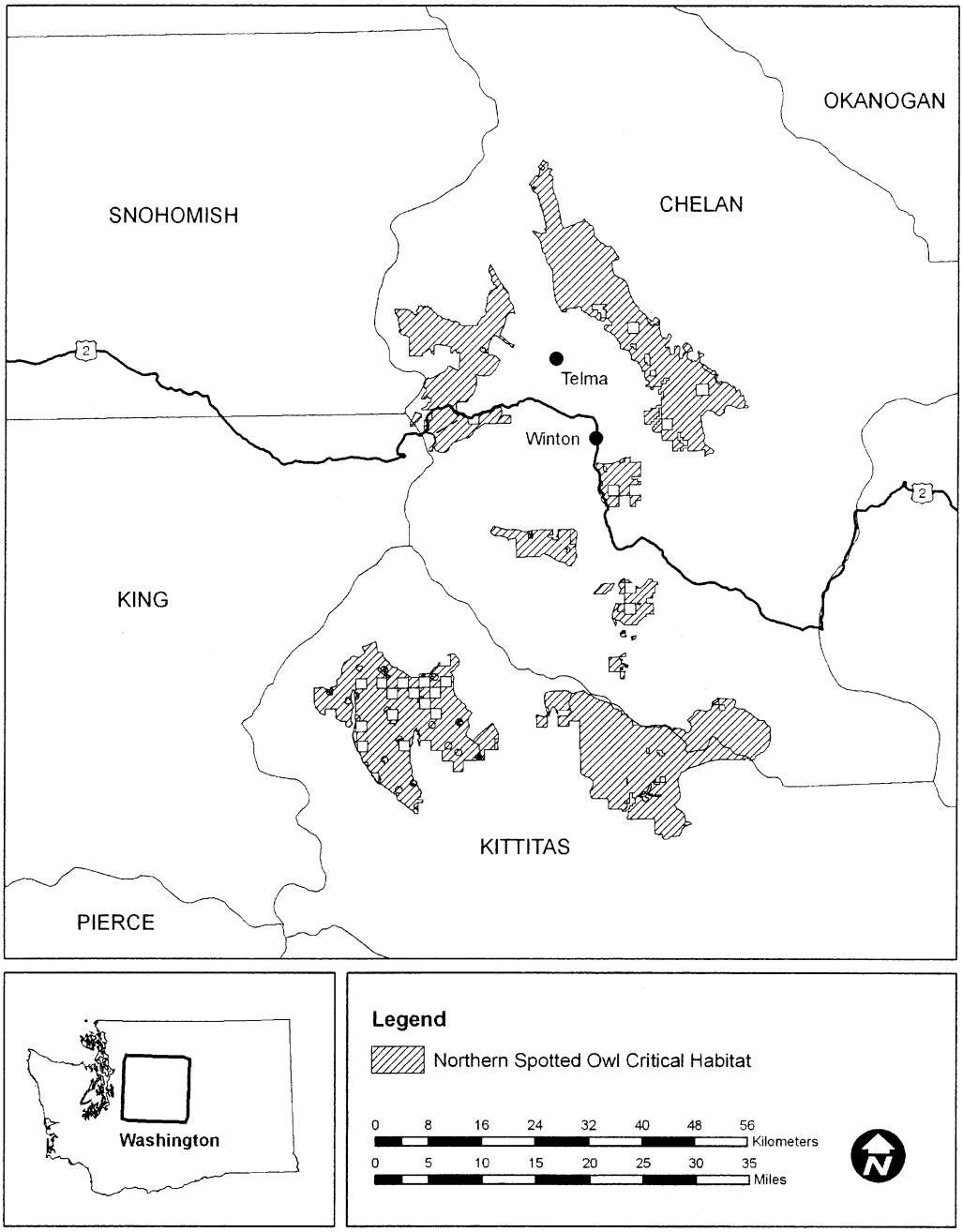


(11) Entiat Unit (Unit 4). Chelan and Kittitas Counties, Washington. From USGS 1:24,000 scale quadrangles Benchmark Mountain, Blewett, Cashmere Mountain, Chikamin Creek, Chikamin Peak, Chiwaukum Mountains, Cle Elum Lake, Davis Peak, Easton, Enchantment Lakes, Jack Ridge, Kachess Lake, Labyrinth Mountain, Leavenworth, Liberty, Mission Peak, Monitor, Mount David, Mount Howard, Peshastin, Plain, Poe Mountain, Polallie Ridge, Red Top Mountain, Reecer Canyon, Ronald, Saska Peak, Schaefer Lake, Silver Falls, Stampede Pass, Stevens Pass, Sugarloaf Peak, Swauk Pass, Swauk Prairie, Teanaway, Teanaway Butte, Tiptop, Trinity, Tyee Mountain, Van Creek, and Winton.

(i) The Entiat Unit consists of 304,817 ac (123,355 ha) in Chelan and Kittitas Counties, Washington, and is comprised of lands managed by the Wenatchee and Mt. Baker-Snoqualmie National Forests.

(ii) Note: Map of Entiat Unit (Map 5) follows:

Map 5. Entiat Unit, Washington

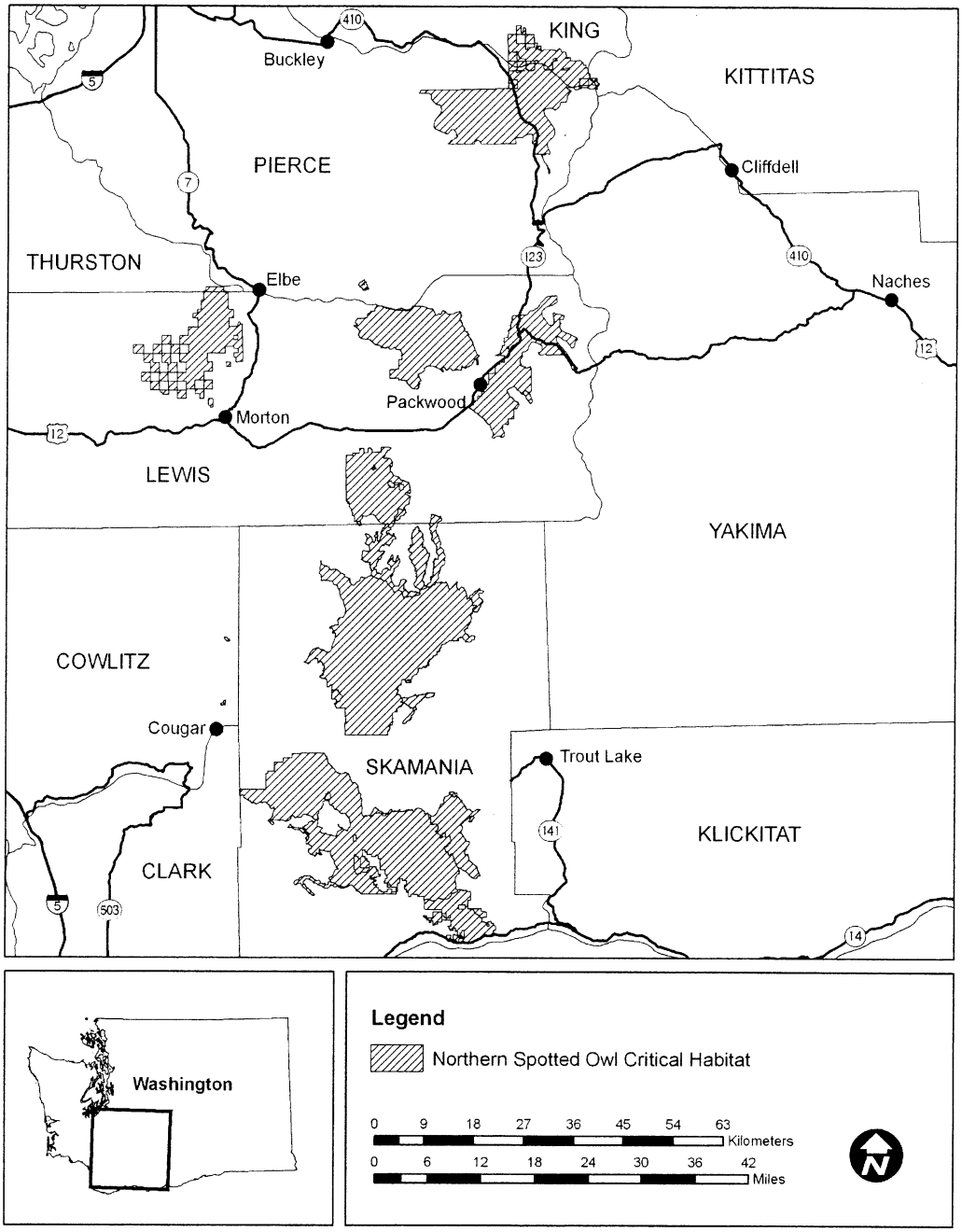


(12) Southwest Washington Cascades Unit (Unit 5). Clark, Cowlitz, King, Kittitas, Lewis, Pierce, Skamania, and Thurston Counties, Washington. From USGS 1:24,000 scale quadrangles Bare Mountain, Bearhead Mountain, Big Huckleberry Mountain, Burnt Peak, Carson, Cedar Flats, Clear West Peak, Cougar, East Canyon Ridge, Eatonville, French Butte, Gifford Peak, Goat Mountain, Greenhorn Buttes, Lester, Little Huckleberry Mountain, Lone Butte, Lookout Mountain, McCoy Peak, Mineral, Morton, Mossyrock, Mount Defiance, Mount Mitchell, Mount Wow, Nagrom, Newautum Lake, Noble Knob, Norse Peak, Ohanapecosh Hot Springs, Packwood, Packwood Lake, Purcell Mountain, Quartz Creek Butte, Randle, Sawtooth Ridge, Siouxon Peak, Smith Creek Butte, Spencer Butte, Spirit Lake East, Stabler, Steamboat Mountain, Sun Top, Sunrise, Tatoosh Lakes, Termination Point, The Rockies, Tower Rock, Wahpenayo Peak, White Pass, White River Park, and Willard.

(i) The Southwest Washington Cascades Unit consists of 523,710 ac (211,938 ha) in King, Pierce, Thurston, Lewis, Skamania, Cowlitz, Kittitas, and Yakima Counties, Washington, and is comprised of lands managed by the Mt. Baker-Snoqualmie, Gifford Pinchot, and Wenatchee National Forests.

(ii) Note: Map of Southwest Washington Cascades Unit (Map 6) follows:

Map 6. Southwest Washington Cascades Unit, Washington

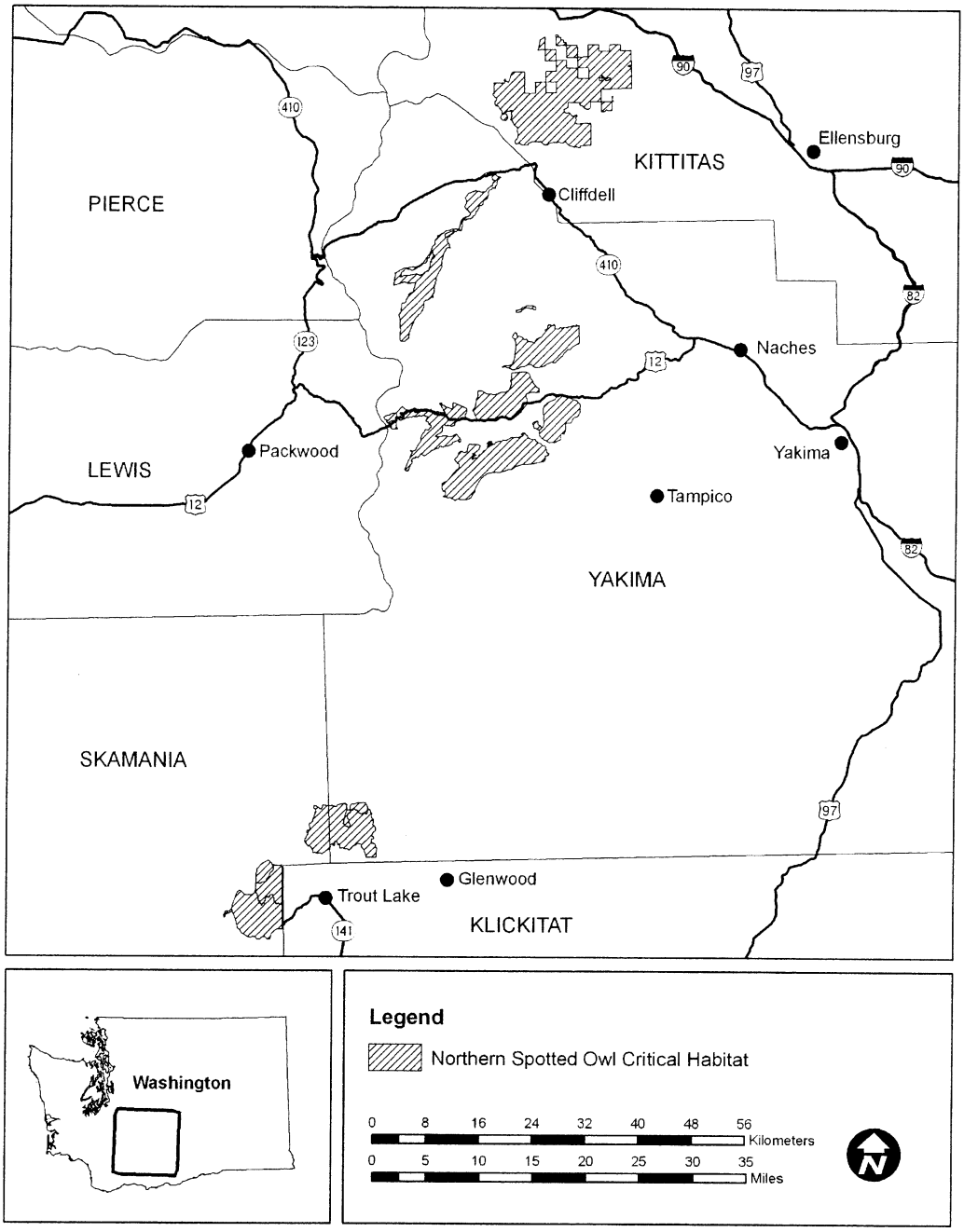


(13) Southeast Washington Cascades Unit (Unit 6). Kittitas, Yakima, and Skamania Counties, Washington. From USGS 1:24,000 scale quadrangles Bumping Lake, Cle Elum, Cougar Lake, Darland Mountain, Foundation Ridge, Frost Mountain, Goose Prairie, Guler Mountain, King Mountain, Little Huckleberry Mountain, Meeks Table, Mount Adams East, Mount Clifty, Old Scab Mountain, Pinegrass Ridge, Quartz Mountain, Rimrock Lake, Ronald, Sleeping Beauty, Spiral Butte, Tieton Basin, Timberwolf Mountain, Trout Lake, and White Pass.

(i) The Southeast Washington Cascades Unit consists of 143,400 ac (58,031 ha) in Kittitas, Yakima, and Skamania Counties, Washington, and is comprised of lands managed by the Wenatchee and Gifford Pinchot National Forests.

(ii) Note: Map of Southeast Washington Cascades Unit (Map 7) follows:

Map 7. Southeast Washington Cascades Unit, Washington

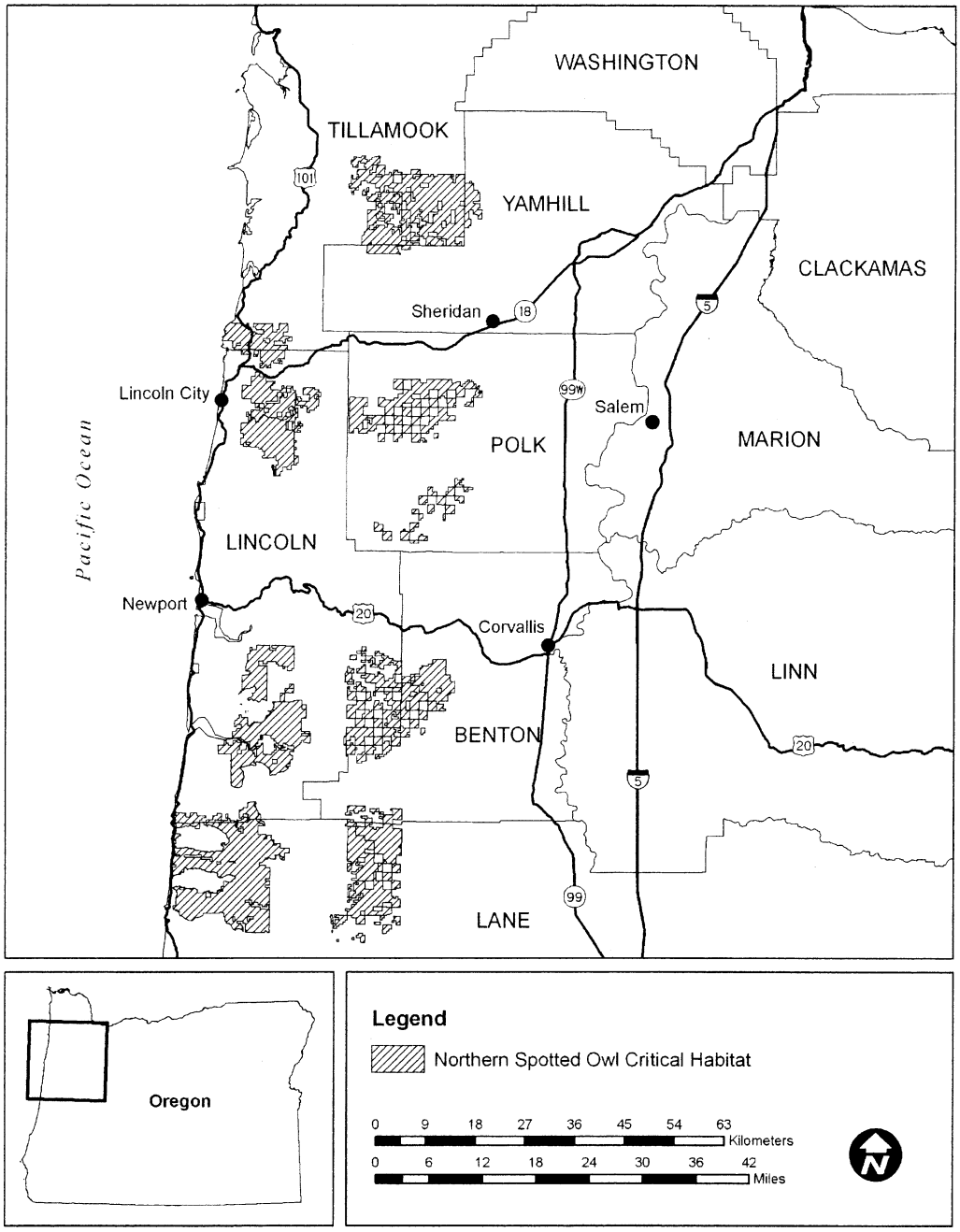


(14) Northern Oregon Coast Ranges Unit (Unit 7). Benton, Lane, Lincoln, Polk, Tillamook, and Yamhill Counties, Oregon. From USGS 1:24,000 scale quadrangles Alsea, Blaine, Cannibal Mountain, Cummins Peak, Devils Lake, Digger Mountain, Dolph, Dovre Peak, Elk City, Eurchre Mountain, Falls City, Fanno Ridge, Five Rivers, Flat Mountain, Grand Ronde, Grass Mountain, Greenleaf, Harlan, Heceta Head, Hellion Rapids, Herman Creek, Laurel Mountain, Mapleton, Marys Peak, Mercer Lake, Mowrey Landing, Neskowin, Neskowin OE W, Niagara Creek, Nortons, Prairie Peak, Sheridan, Socialist Valley, Springer Mountain, Stony Mountain, Stott Mountain, Summit, Tidewater, Tiernan, Toledo South, Trask Mountain, Triangle Lake, Valsetz, Waldport, Walton, Warnicke Creek, Windy Peak, Wren, and Yachats.

(i) The Northern Oregon Coast Ranges Unit consists of 321,420 ac (130,074 ha) in Tillamook, Yamhill, Polk, Lincoln, Benton, and Lane Counties, Oregon, and is comprised of lands managed by the Siuslaw National Forest (187,562 ac (75,904 ha)) and Salem and Eugene Bureau of Land Management (BLM) Districts (133,858 ac (54,170 ha)).

(ii) Note: Map of Northern Oregon Coast Ranges Unit (Map 8) follows:

Map 8. Northern Oregon Coast Ranges Unit, Oregon

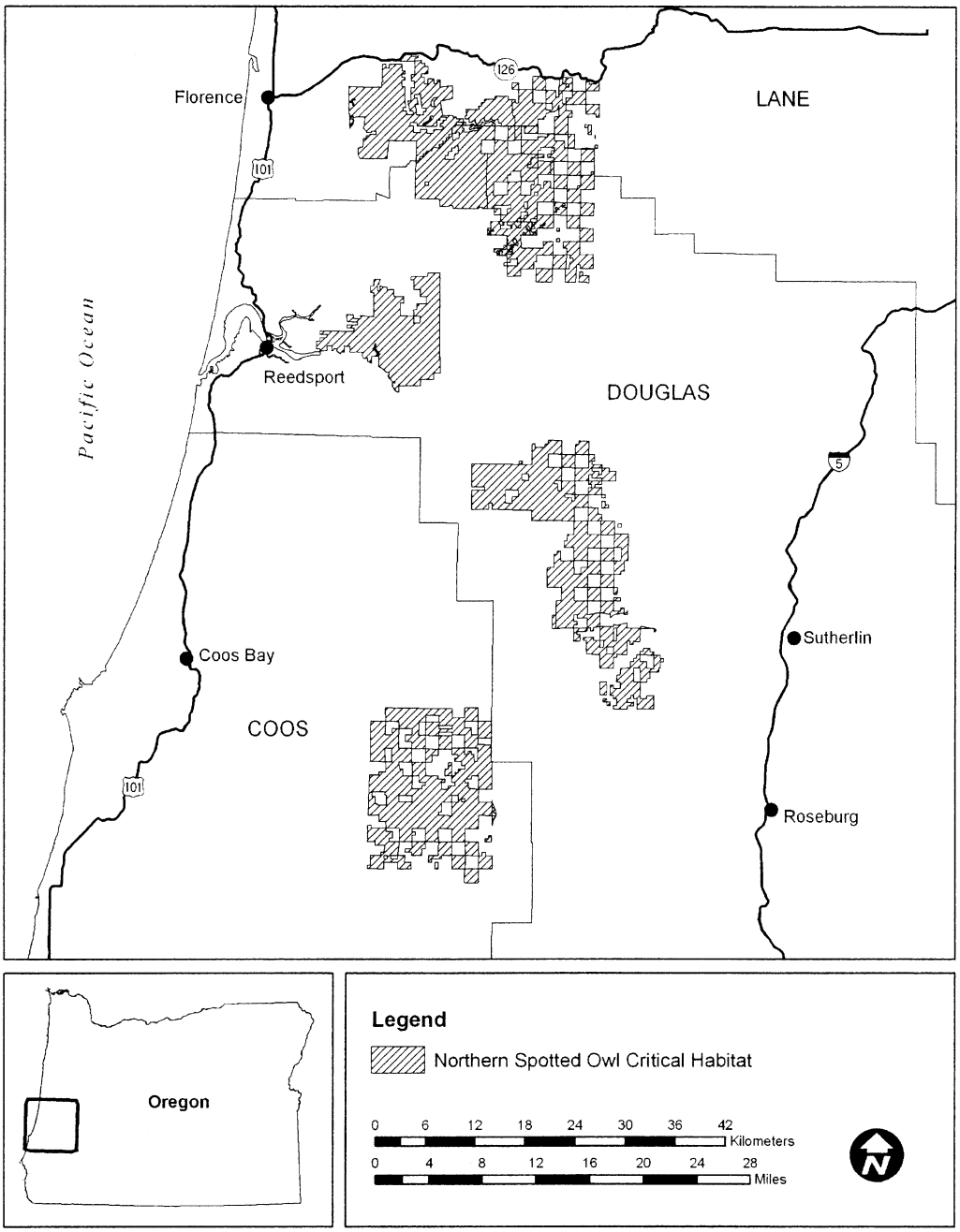


(15) Southern Oregon Coast Ranges Unit (Unit 8). Coos, Douglas, and Lane Counties, Oregon. From USGS 1:24,000 scale quadrangles Baldy Mountain, Callahan, Clay Creek, Coos Mountain, Deer Head Point, Dora, Goodwin Peak, Gunter, Kellogg, Kelly Butte, Loon Lake, Mapleton, North Fork, Old Blue, Reedsport, Roman Nose Mountain, Scottsburg, Sitkum, Smith River Falls, Tiernan, Tioga, Twin Sisters, and Tyee.

(i) The Southern Oregon Coast Ranges Unit consists of 204,276 ac (82,668 ha) in Lane, Coos, and Douglas Counties, Oregon, and is comprised of lands managed by the Siuslaw National Forest (67,751 ac (27,418 ha)) and Eugene, Roseburg, and Coos Bay BLM Districts (136,525 ac (55,250 ha)).

(ii) Note: Map of Southern Oregon Coast Ranges Unit (Map 9) follows:

Map 9. Southern Oregon Coast Ranges Unit, Oregon

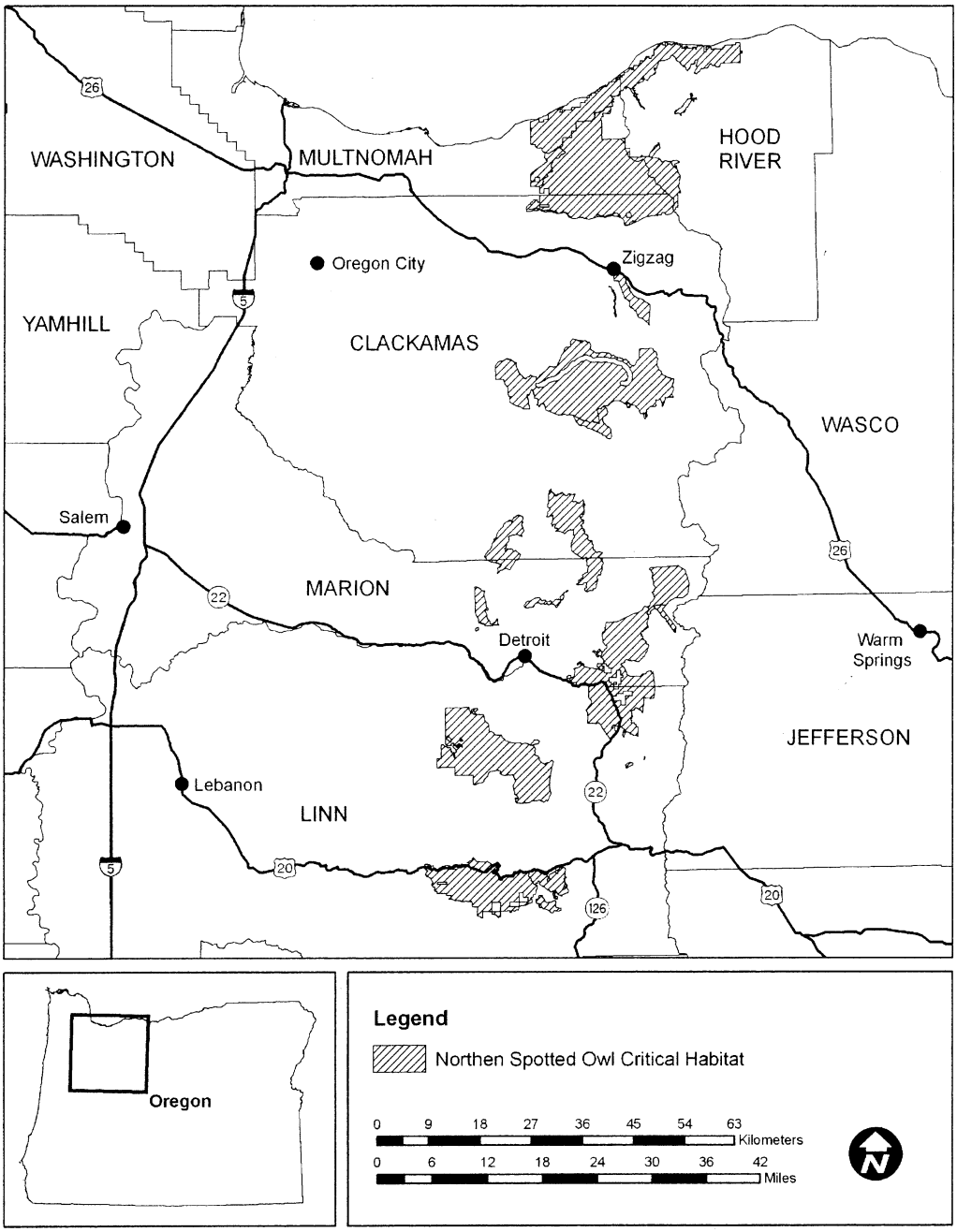


(16) Western Oregon Cascades North Unit (Unit 9). Clackamas, Hood River, Linn, Marion, and Multnomah Counties, Oregon. From USGS 1:24,000 scale quadrangles Bagby Hot Spring, Battle Ax, Bedford Point, Bonneville Dam, Breitenbush Hot Springs, Brightwood, Bull of the Woods, Bull Run, Bull Run Lake, Carpenter Mountain, Carson, Chimney Peak, Coffin Mountain, Dee, Detroit, Echo Mountain, Elkhorn, Fish Creek Mountain, Government Camp, Harter Mountain, Hickman Butte, High Rock, Idanha, Lawhead Creek, Marion Forks, Mother Lode Mountain, Mount Bruno, Mount Defiance, Mount Jefferson, Mount Lowe, Mount Mitchell, Multnomah Falls, Olallie Butte, Quartzville, Rhododendron, Tamolitch Falls, Tanner Butte, Three Lynx, Tidbits Mountain, Timothy Lake, Upper Soda, Wahtum Lake, and Wolf Peak.

(i) The Western Oregon Cascades North Unit consists of 334,738 ac (135,464 ha) in Linn, Marion, Clackamas, Hood River, and Multnomah Counties, Oregon, and is comprised of lands managed by the Mt. Hood and Willamette National Forests.

(ii) Note: Map of Western Oregon Cascades North Unit (Map 10) follows:

Map 10. Western Oregon Cascades North Unit, Oregon

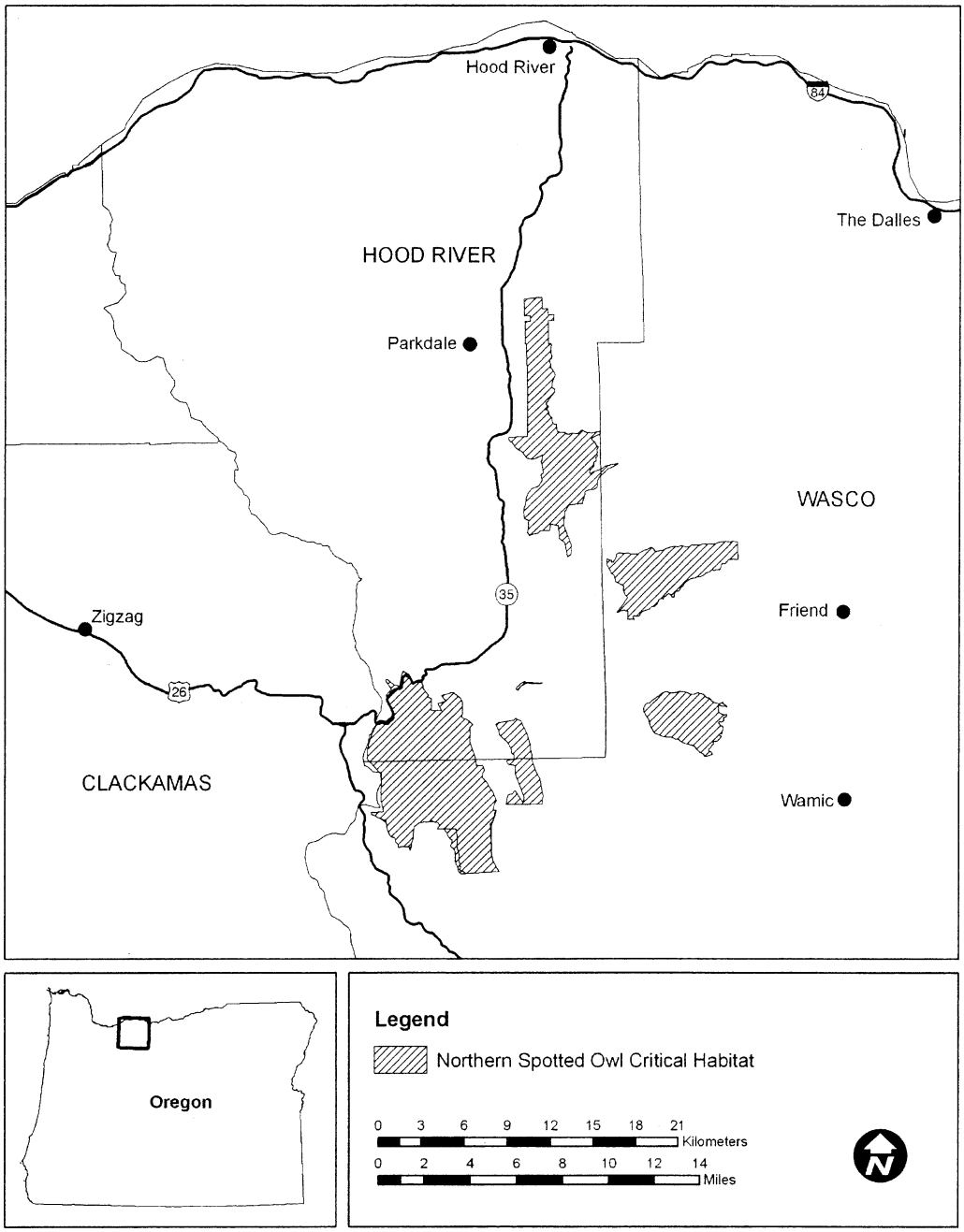


(17) Hood River Unit (Unit 10). Clackamas, Hood River, and Wasco Counties, Oregon. From USGS 1:24,000 scale quadrangles Badger Lake, Dog River, Fivemile Butte, Flag Point, Friend, Mount Hood South, Parkdale, Post Point, Wapinitia Pass, and Wolf Run.

(i) The Hood River Unit consists of 42,863 ac (17,273 ha) in Hood River and Wasco Counties, Oregon, and is comprised of lands managed by the Mt. Hood National Forest.

(ii) Note: Map of Hood River Unit (Map 11) follows:

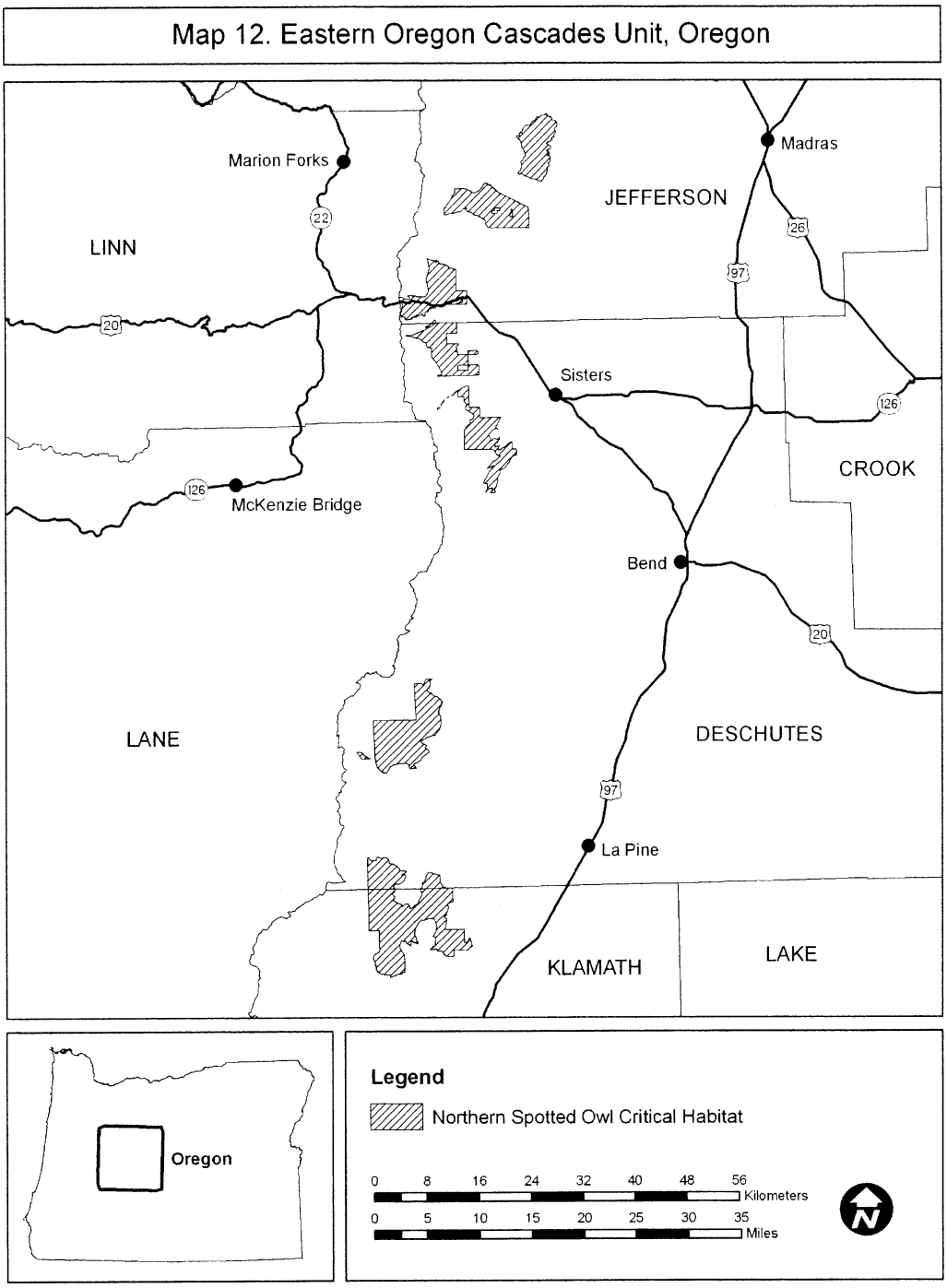
Map 11. Hood River Unit, Oregon



(18) Eastern Oregon Cascades Unit (Unit 11). Deschutes, Jefferson, and Klamath Counties, Oregon. From USGS 1:24,000 scale quadrangles Black Butte, Black Crater, Candle Creek, Crane Prairie Reservoir, Crescent Lake, Cryder Butte, Davis Mountain, Elk Lake, Hamner Butte, Irish Mountain, Marion Lake, Mount Washington, Odell Butte, Odell Lake, Prairie Farm Spring, Shitike Butte, The Twins, Three Creek Butte, Three Fingered Jack, and Trout Creek Butte.

(i) The Eastern Oregon Cascades Unit consists of 106,665 ac (43,166 ha) in Jefferson, Deschutes, and Klamath Counties, Oregon, and is comprised of lands managed by the Deschutes National Forest.

(ii) Note: Map of Eastern Oregon Cascades Unit (Map 12) follows:

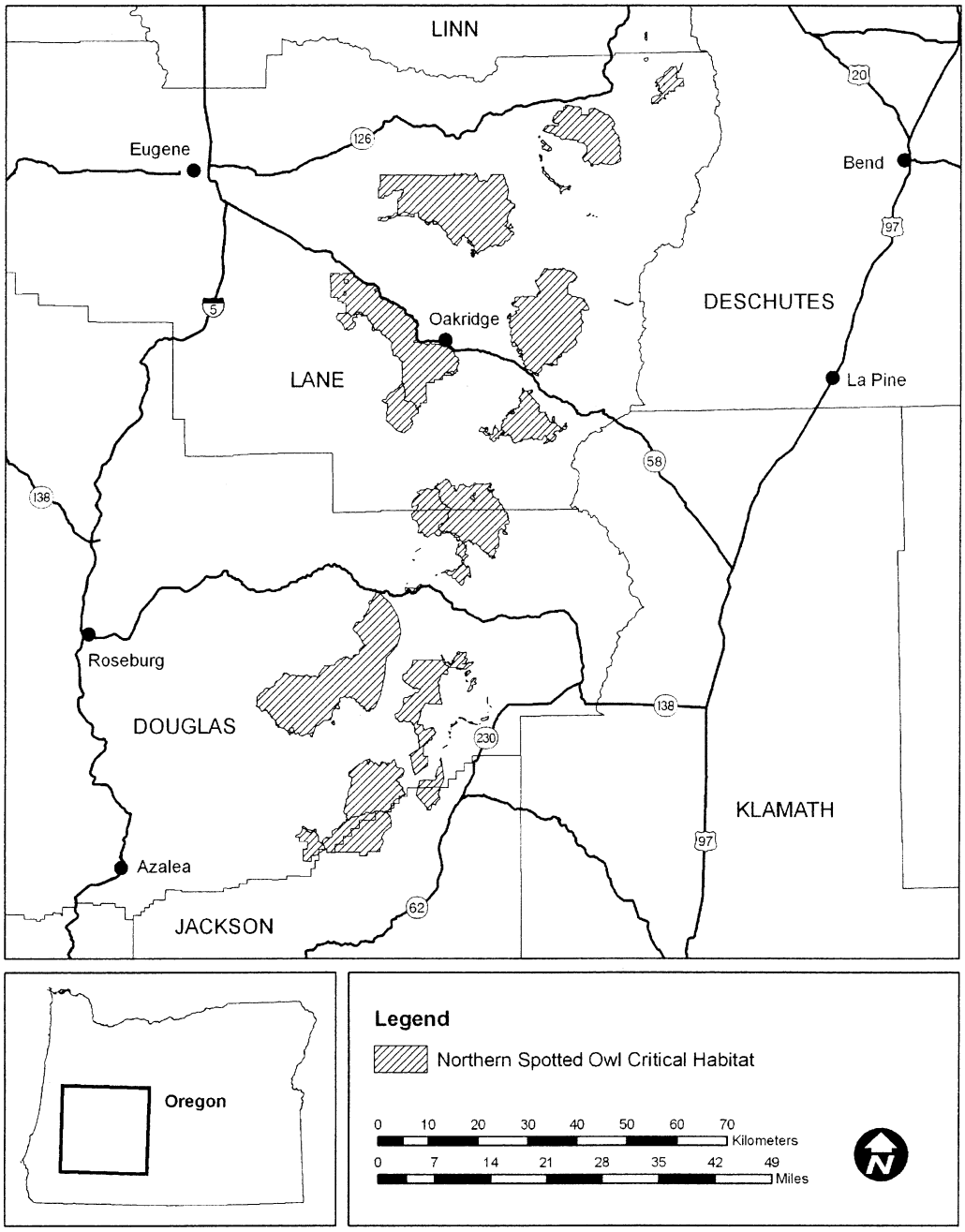


(19) Western Oregon Cascades South Unit (Unit 12). Douglas, Jackson, Lane, and Linn Counties, Oregon. From USGS 1:24,000 scale quadrangles Abbott Butte, Acker Rock, Bearbones Mountain, Belknap Springs, Blair Lake, Buckeye Lake, Butler Butte, Chucksney Mountain, Clear Lake, Cougar Reservoir, Deadman Mountain, Diamond Peak, Dumont Creek, Fall Creek Lake, Fish Creek Desert, Fish Mountain, French Mountain, Goat Point, Groundhog Mountain, Hamaker Butte, Harvey Mountain, Holland Point, Huckleberry Mountain, Illahee Rock, Irish Mountain, Linton Lake, McCredie Springs, McKenzie Bridge, Mount David Douglas, Mount June, Nimrod, North Sister, Oakridge, Potter Mountain, Quartz Mountain, Ragsdale Butte, Red Butte, Reynolds Ridge, Rigdon Point, Saddleblanket Mountain, Sardine Butte, Sinker Mountain, Staley Ridge, Steamboat, Sugarpine Creek, Taft Mountain, Toketee Falls, Twin Lakes Mountain, Union Creek, Waldo Mountain, Warner Mountain, Westfir West, and Whetstone Point.

(i) The Western Oregon Cascades South Unit consists of 448,403 ac (181,463 ha) in Jackson, Douglas, Lane, and Linn Counties, Oregon, and is comprised of lands managed by the Willamette, Umpqua, and Rogue River National Forests (448,324 ac (181,406 ha)) and Eugene BLM Districts (79 ac (32 ha)).

(ii) Note: Map of Western Oregon Cascades South Unit (Map 13) follows:

Map 13. Western Oregon Cascades South Unit, Oregon

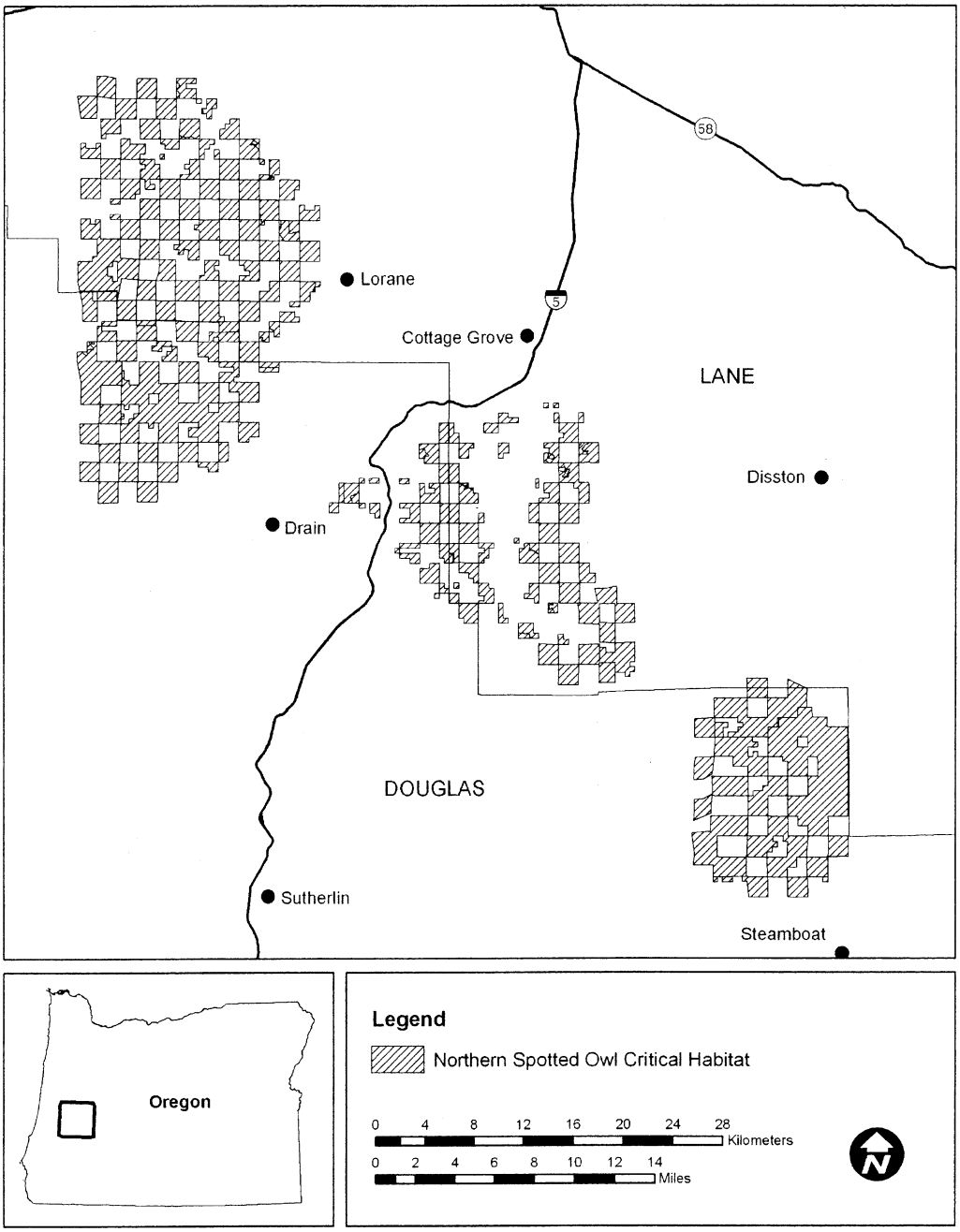


(20) Willamette/North Umpqua Unit (Unit 13). Douglas and Lane Counties, Oregon. From USGS 1:24,000 scale quadrangles Beaver Creek, Blue Mountain, Burnt Mountain, Chilcoot Mountain, Clay Creek, Cottage Grove, Cottage Grove Lake, Crow, Curtin, Drain, Elkton, Fairview Peak, Gunter, Harness Mountain, Harrington Creek, High Point, Letz Creek, Putnam Valley, Scaredman Creek, Scotts Valley, and Silica Mountain.

(i) The Willamette/North Umpqua Unit consists of 119,637 ac (48,415 ha) of lands in Lane and Douglas Counties, Oregon, and is comprised of lands managed by the Eugene and Roseburg BLM Districts.

(ii) Note: Map of Willamette/North Umpqua Unit (Map 14) follows:

Map 14. Willamette/North Umpqua Unit, Oregon

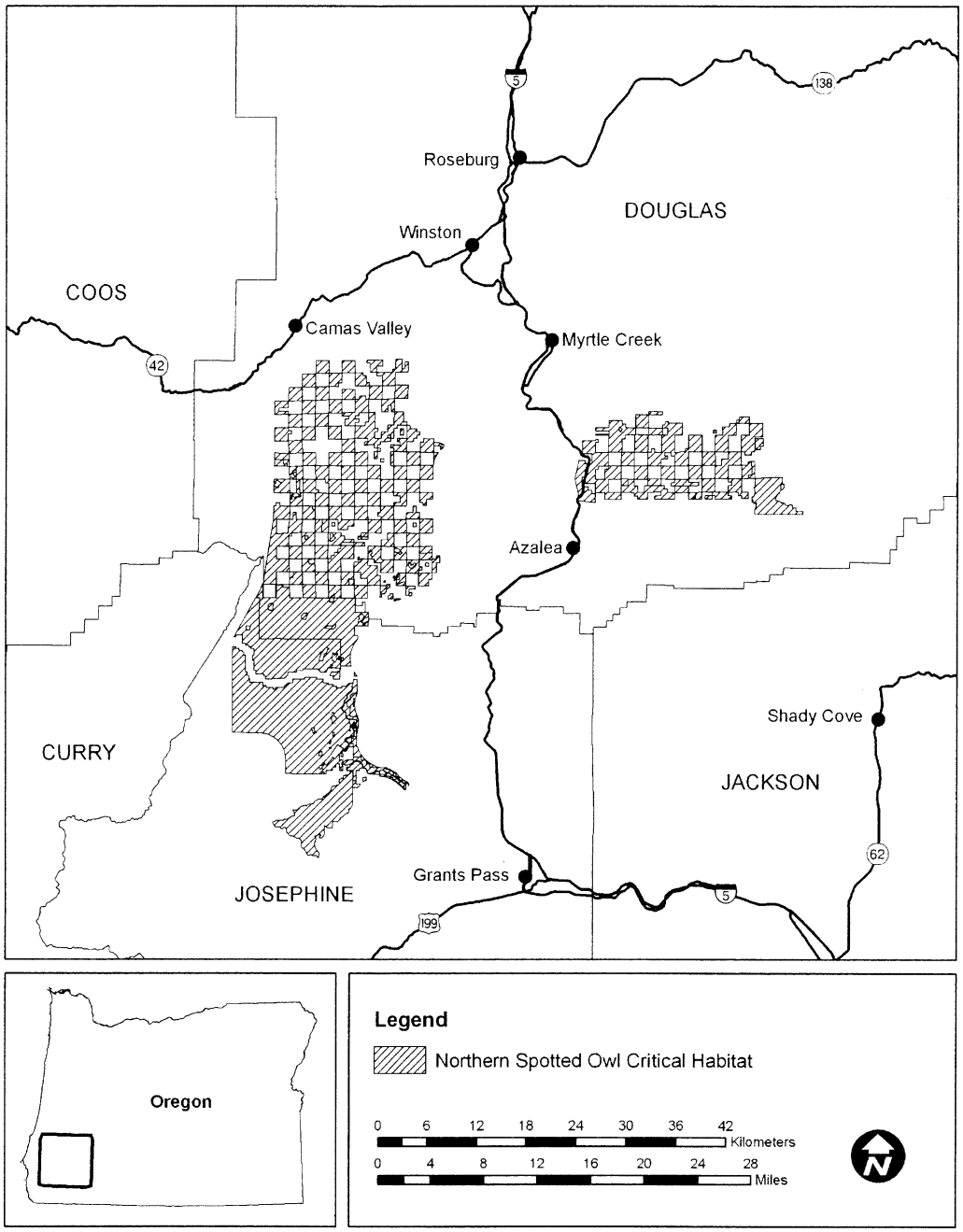


(21) Rogue/Umpqua Unit (Unit 14). Douglas and Josephine Counties, Oregon. From USGS 1:24,000 scale quadrangles Bunker Creek, Canyonville, Cedar Springs Mountain, Chipmunk Ridge, Chrome Ridge, Days Creek, Dutchman Butte, Galice, Glendale, Hobson Horn, Kelsey Peak, Live Oak Mountain, McCullough Creek, Merlin, Milo, Mount Peavine, Mount Reuben, Nickel Mountain, Onion Mountain, Quines Creek, Rabbit Mountain, Richter Mountain, Starvout Creek, and Tiller.

(i) The Rogue/Umpqua Unit consists of 165,504 ac (66,977 ha) in Douglas and Josephine Counties, Oregon, and is comprised of lands managed by the Umpqua National Forest (13,147 ac (5,320 ha)) and Roseburg and BLM Medford Districts (152,357 ac (61,657 ha)).

(ii) Note: Map of Rogue/Umpqua Unit (Map 15) follows:

Map 15. Rogue/Umpqua Unit, Oregon

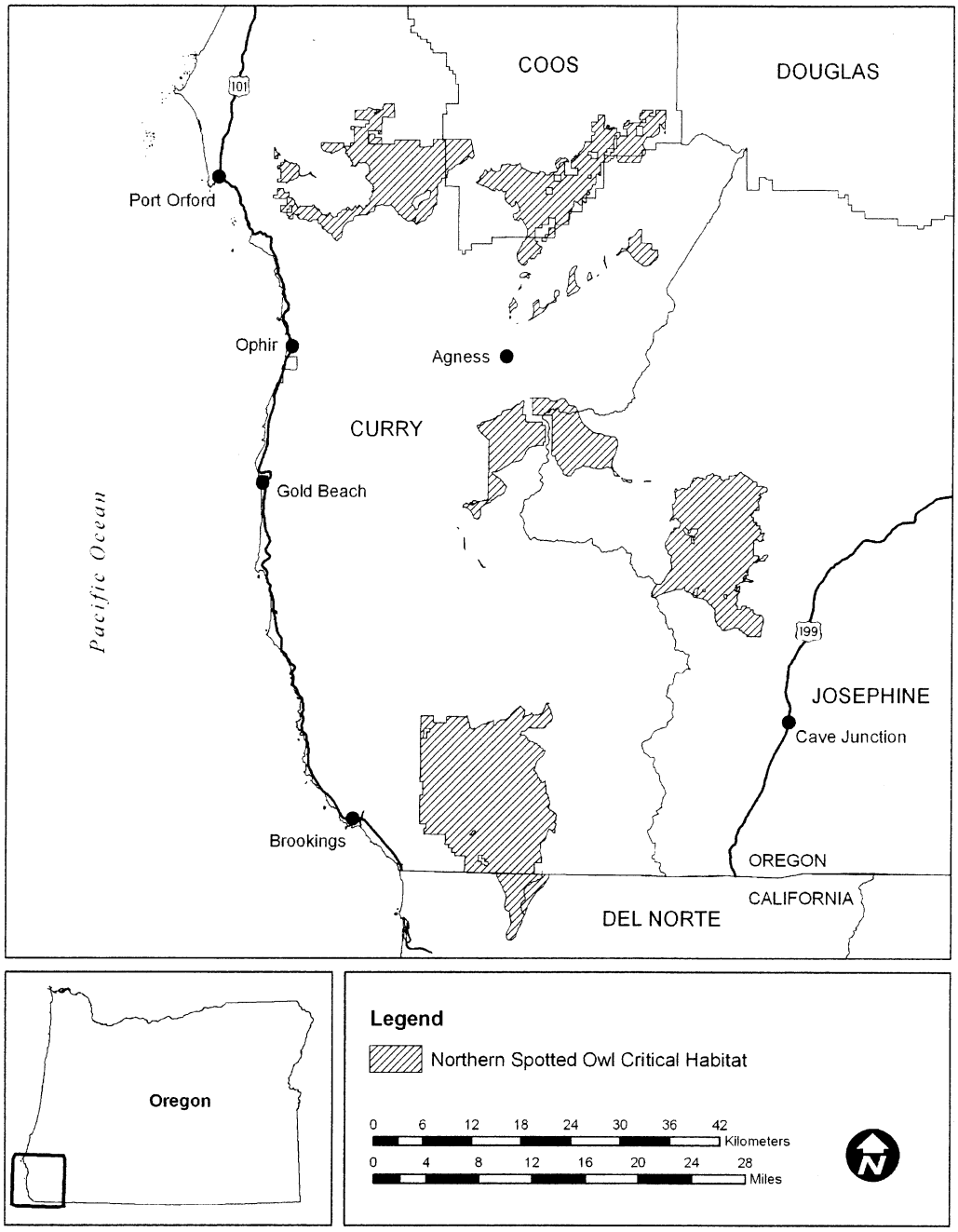


(22) Oregon Klamath Mountains Unit (Unit 15). Coos, Curry, and Josephine Counties, Oregon. Del Norte County, California. From USGS 1:24,000 scale quadrangles Agness, Barklow Mountain, Big Craggies, Biscuit Hill, Bosley Butte, Brandy Peak, Chetco Peak, China Flat, Chrome Ridge, Collier Butte, Eden Valley, Eight Dollar Mountain, Father Mountain, Fourth of July Creek, High Divide, High Plateau Mountain, Horse Sign Butte, Illahe, Kelsey Peak, Marial, Mount Bolivar, Mount Butler, Mount Emily, Ophir Mountain, Pearsoll Peak, Port Orford, Quail Prairie Mountain, Silver Peak, Sixes, and York Butte.

(i) The Oregon Klamath Mountains Unit is a total of 195,211 ac (79,215 ha), including 189,424 ac (76,657 ha) in Coos, Curry, and Josephine Counties, Oregon, and 5,787 ac (2,342 ha) in the northernmost portion of Del Norte County, California. It is comprised of lands managed by the Siskiyou and Six Rivers National Forests (194,745 ac (78,810 ha)) and Coos Bay BLM District (466 ac (188 ha)).

(ii) Note: Map of Oregon Klamath Mountains Unit (Map 16) follows:

Map 16. Oregon Klamath Mountains Unit, Oregon and California

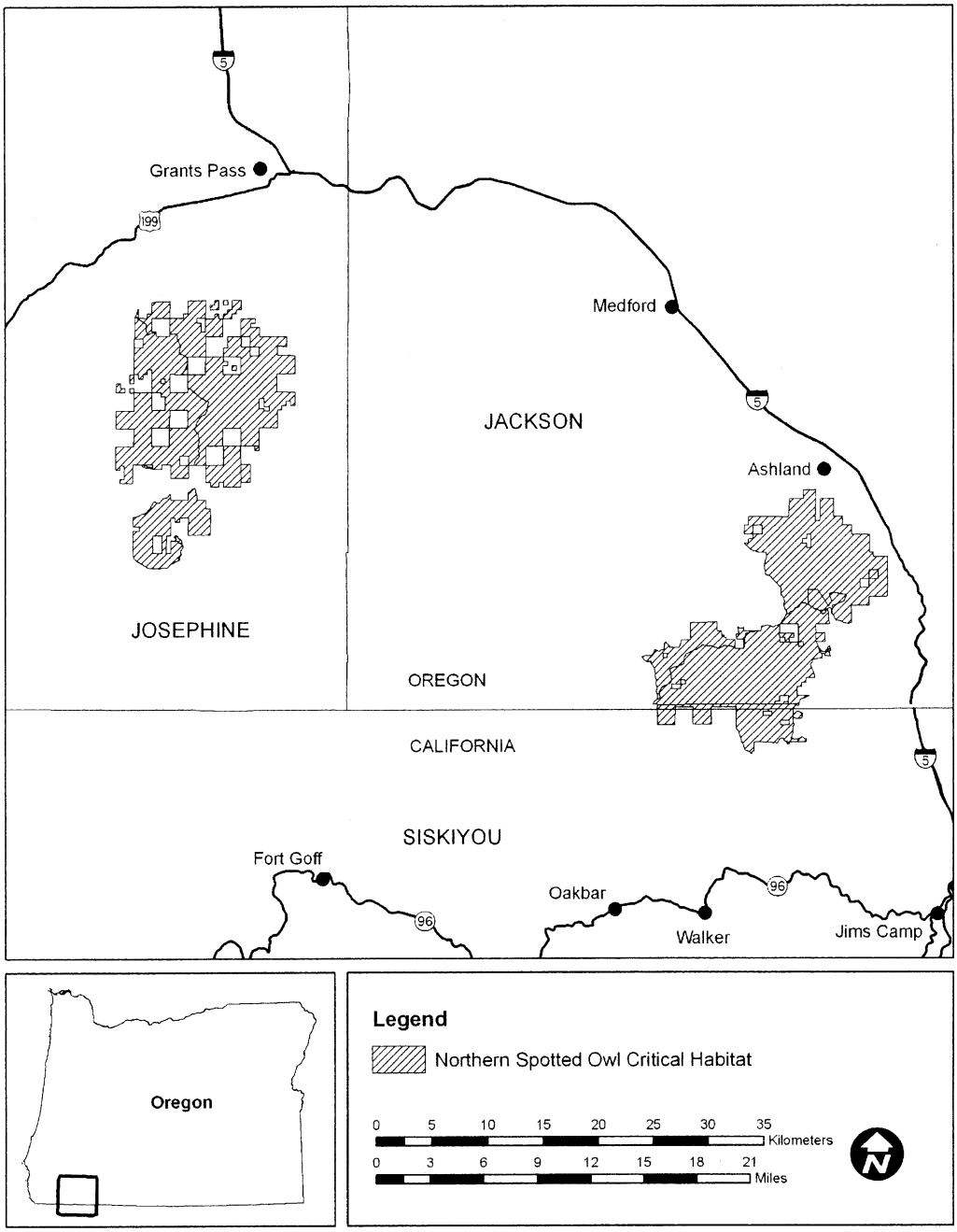


(23) Klamath Intra-Province Unit (Unit 16). Jackson and Josephine Counties, Oregon. Siskiyou County, California. From USGS 1:24,000 scale quadrangles Ashland, Buckhorn Bally, Condrey Mountain, Cottonwood Peak, Dutchman Peak, Kerby Peak, Mount Ashland, Murphy, Murphy Mountain, Oregon Caves, Siskiyou Peak, Talent, and Williams.

(i) The Klamath Intra-Province Unit is a total of 96,572 ac (39,081 ha), including 90,437 ac (36,598 ha) in Josephine and Jackson Counties, Oregon, and 6,135 ac (2,483 ha) in the northern portion of Siskiyou County, California. It is comprised of lands managed by the Rogue-Siskiyou and Klamath National Forests (57,977 ac (23,462 ha)) and Medford BLM District (38,595 ac (15,619 ha)).

(ii) Note: Map of Klamath Intra-Province Unit (Map 17) follows:

Map 17. Klamath Intra-Province Unit, Oregon and California

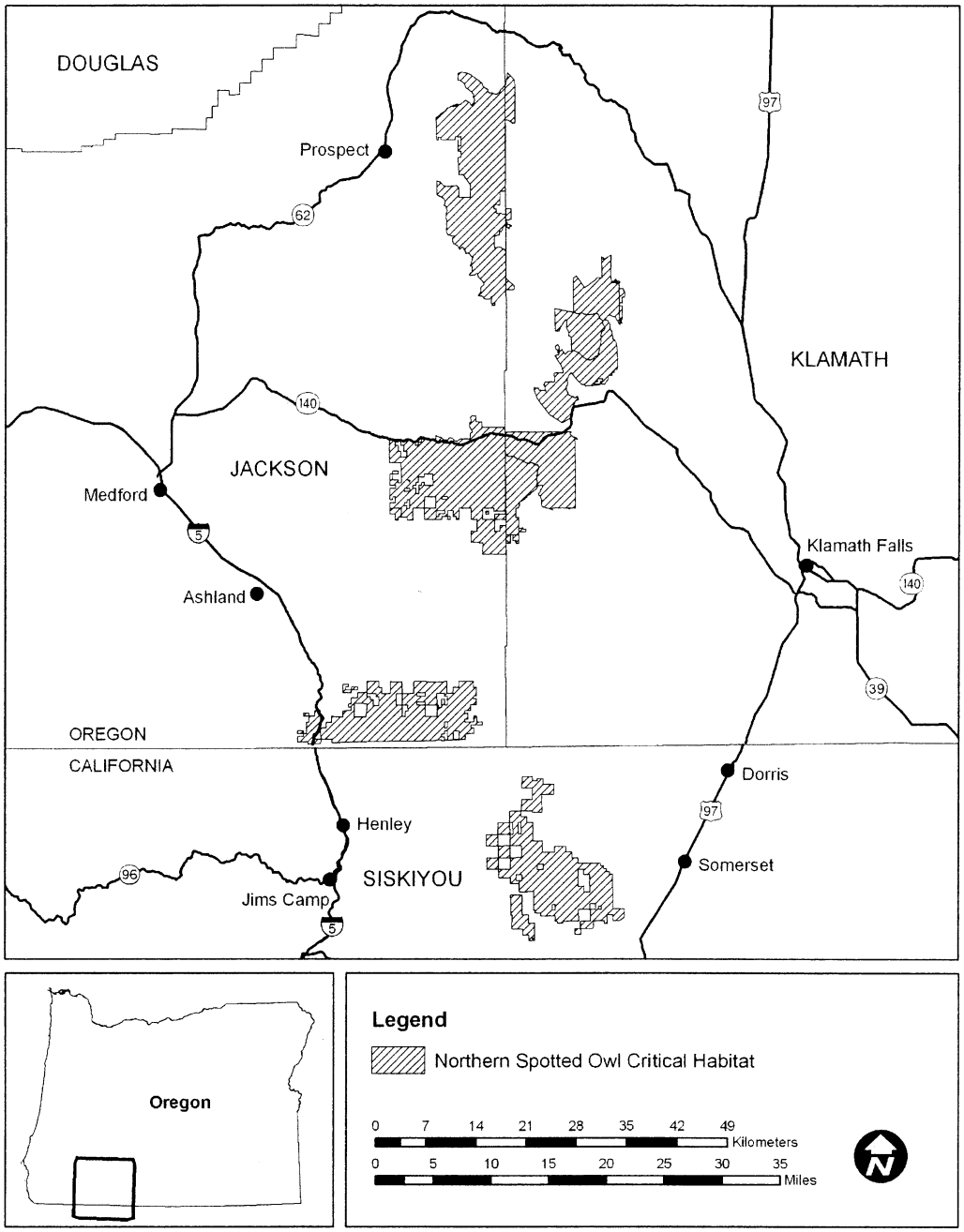


(24) Southern Cascades Unit (Unit 17). Jackson and Klamath Counties, Oregon. Siskiyou County, California. From USGS 1:24,000 scale quadrangles Brown Mountain, Copco, Crystal Spring, Dewey Gulch, Imnaha Creek, Lake of the Woods North, Lake of the Woods South, Little Chinquapin Mountain, MacDoel, Mount Ashland, Mount McLoughlin, Panther Rock, Parker Mountain, Pelican Bay, Pelican Butte, Prospect North, Prospect South, Red Blanket Mountain, Robinson Butte, Rustler Peak, Secret Spring Mountain, Siskiyou Pass, Soda Mountain, and Willow Lake.

(i) The Southern Cascades Unit is a total of 226,430 ac (91,634 ha), including 186,732 ac (75,568 ha) in Jackson and Klamath Counties, Oregon, and 39,698 ac (16,065 ha) in the northern portion of Siskiyou County, California. It is comprised of lands managed by Rogue-Siskiyou, Winema, and Klamath National Forests (191,612 ac (77,543 ha)) and Medford and Lakeview BLM Districts (34,818 ac (14,090 ha)).

(ii) Note: Map of Southern Cascades Unit (Map 18) follows:

Map 18. Southern Cascades Unit, Oregon and California

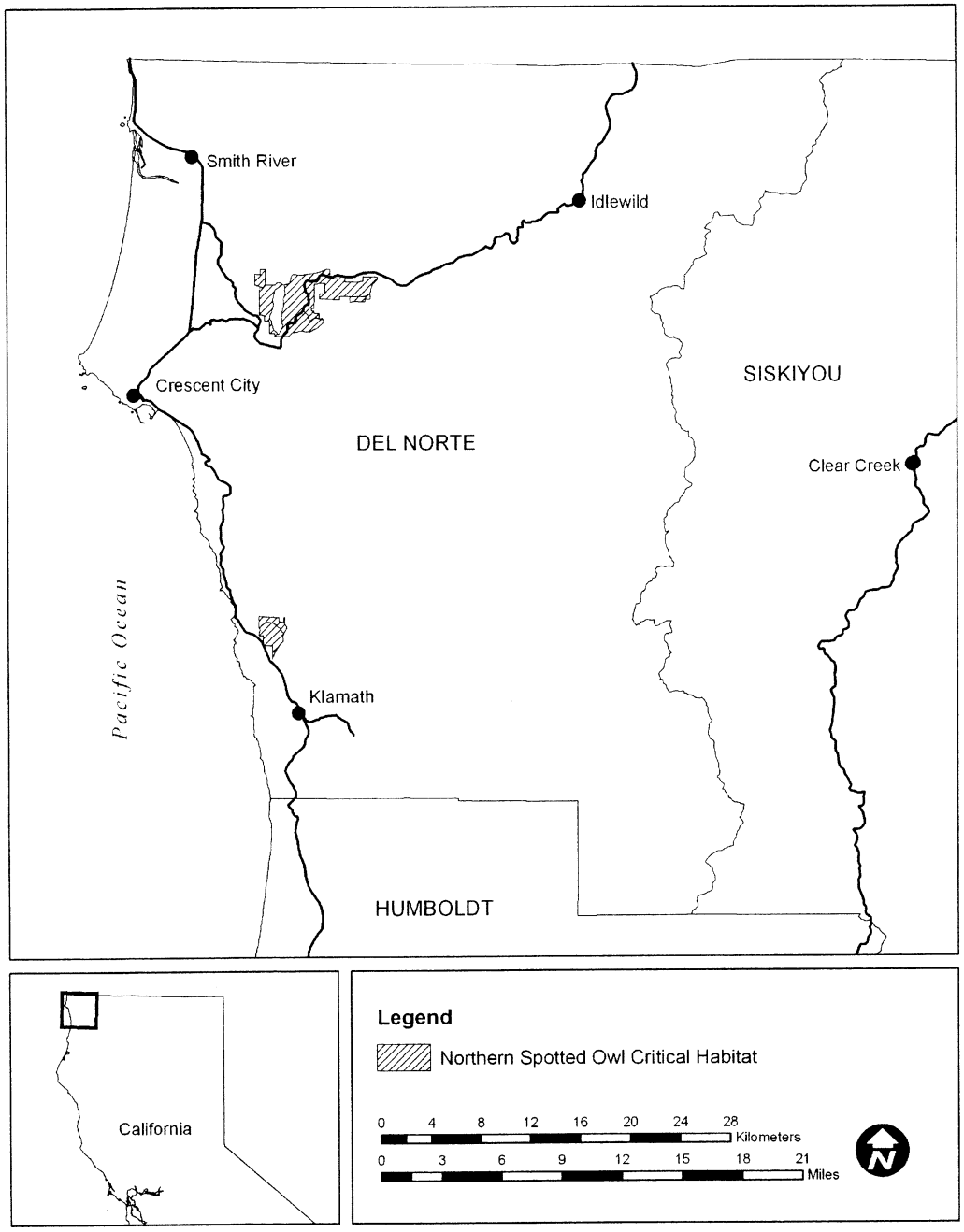


(25) Coastal Redwoods Unit (Unit 18). Del Norte County, California. From USGS 1:24,000 scale quadrangles Gasquet, Hiouchi, and Requa.

(i) The Coastal Redwoods Unit consists of 6,937 ac (2,807 ha) in Del Norte County, California, and is comprised of lands managed by Six Rivers National Forest.

(ii) Note: Map of Coastal Redwoods Unit (Map 19) follows:

Map 19. Coastal Redwoods Unit, California

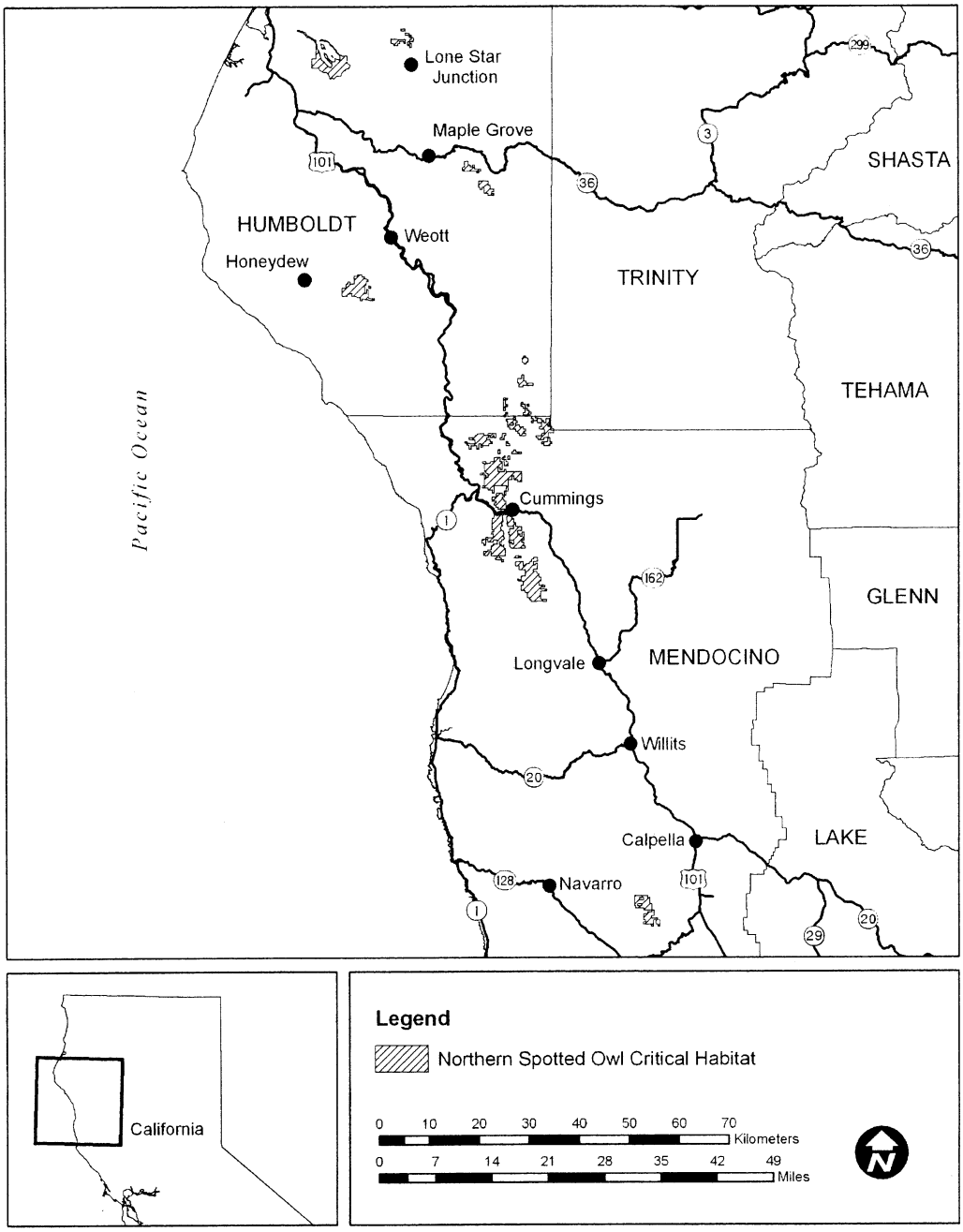


(26) Coastal Humboldt Unit (Unit 19). Humboldt, Mendocino, and Trinity Counties, California. From USGS 1:24,000 scale quadrangles Bell Springs, Boonville, Bridgeville, Bull Creek, Cahto Peak, Ettersburg, Fields Landing, Harris, Honeydew, Hydesville, Iaqua Buttes, Jewett Rock, Larabee Valley, Leggett, Lincoln Ridge, Mad River Buttes, McWhinney Creek, Noble Butte, Orrs Springs, Tan Oak Park, and Weott.

(i) The Coastal Humboldt Unit consists of 49,308 ac (19,954 ha) in Humboldt and Mendocino Counties, California, and is comprised of lands managed by the BLM Arcata Field Office.

(ii) Note: Map of Coastal Humboldt Unit (Map 20) follows:

Map 20. Coastal Humboldt Unit, California

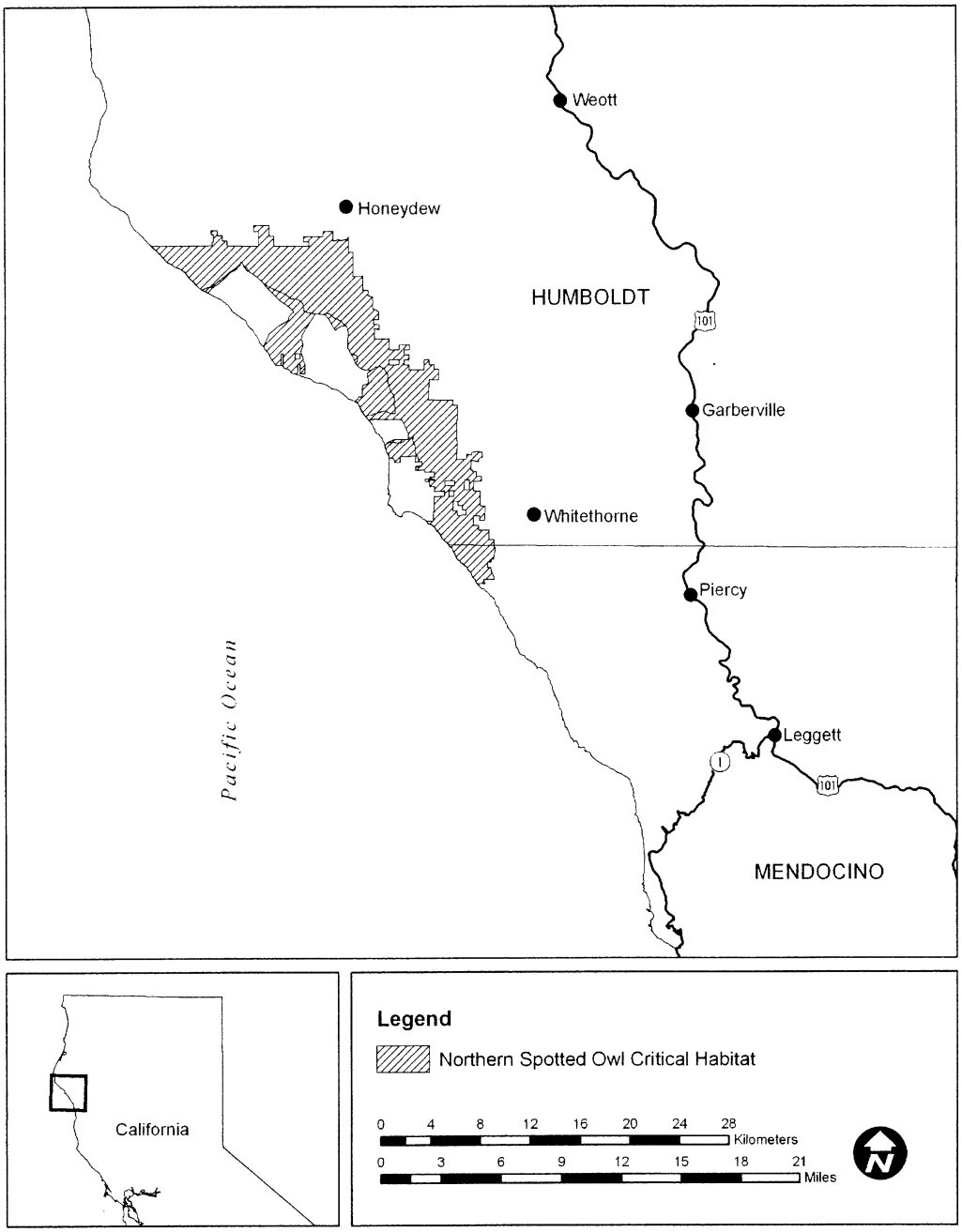


(27) King Range Unit (Unit 20). Humboldt and Mendocino Counties, California. From USGS 1:24,000 scale quadrangles Bear Harbor, Bear Harbor OE W, Briceland, Cooskie Creek, Honeydew, Shelter Cove, Shubrick Peak, and Shubrick Peak OE S.

(i) The King Range Unit consists of 40,308 ac (16,312 ha) in Humboldt and Mendocino Counties, California, and is comprised of lands managed by the BLM Arcata Field Office.

(ii) Note: Map of King Range Unit (Map 21) follows:

Map 21. King Range Unit, California

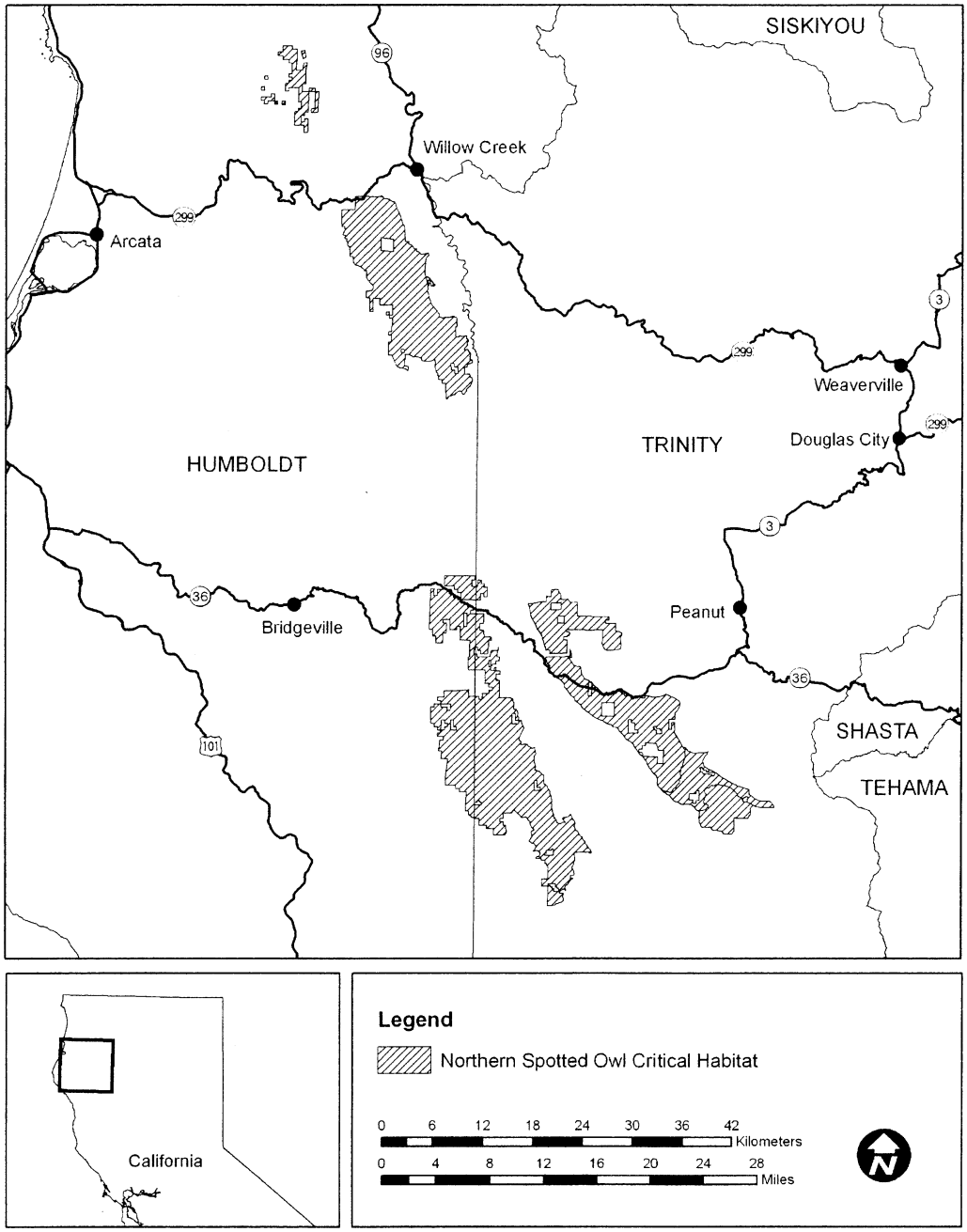


(28) South Fork Mountain Divide Unit (Unit 21). Humboldt and Trinity Counties, California. From USGS 1:24,000 scale quadrangles Alderpoint, Black Lassic, Blake Mountain, Board Camp Mountain, Dinsmore, Forest Glen, Grouse Mountain, Hennessy Peak, Hupa Mountain, Lord-Ellis Summit, Naufus Creek, Pony Buck Peak, Ruth Lake, Sims Mountain, Smoky Creek, Sportshaven, Swim Ridge, Willow Creek, and Zenia.

(i) The South Fork Mountain Divide Unit consists of 141,180 ac (58,752 ha) in Humboldt and Trinity Counties, California, and is comprised of lands managed by the Six Rivers and Shasta-Trinity National Forests (141,054 ac (57,082 ha)) and BLM Arcata Field Office (4,126 ac (1,670 ha)).

(ii) Note: Map of South Fork Mountain Divide Unit (Map 22) follows:

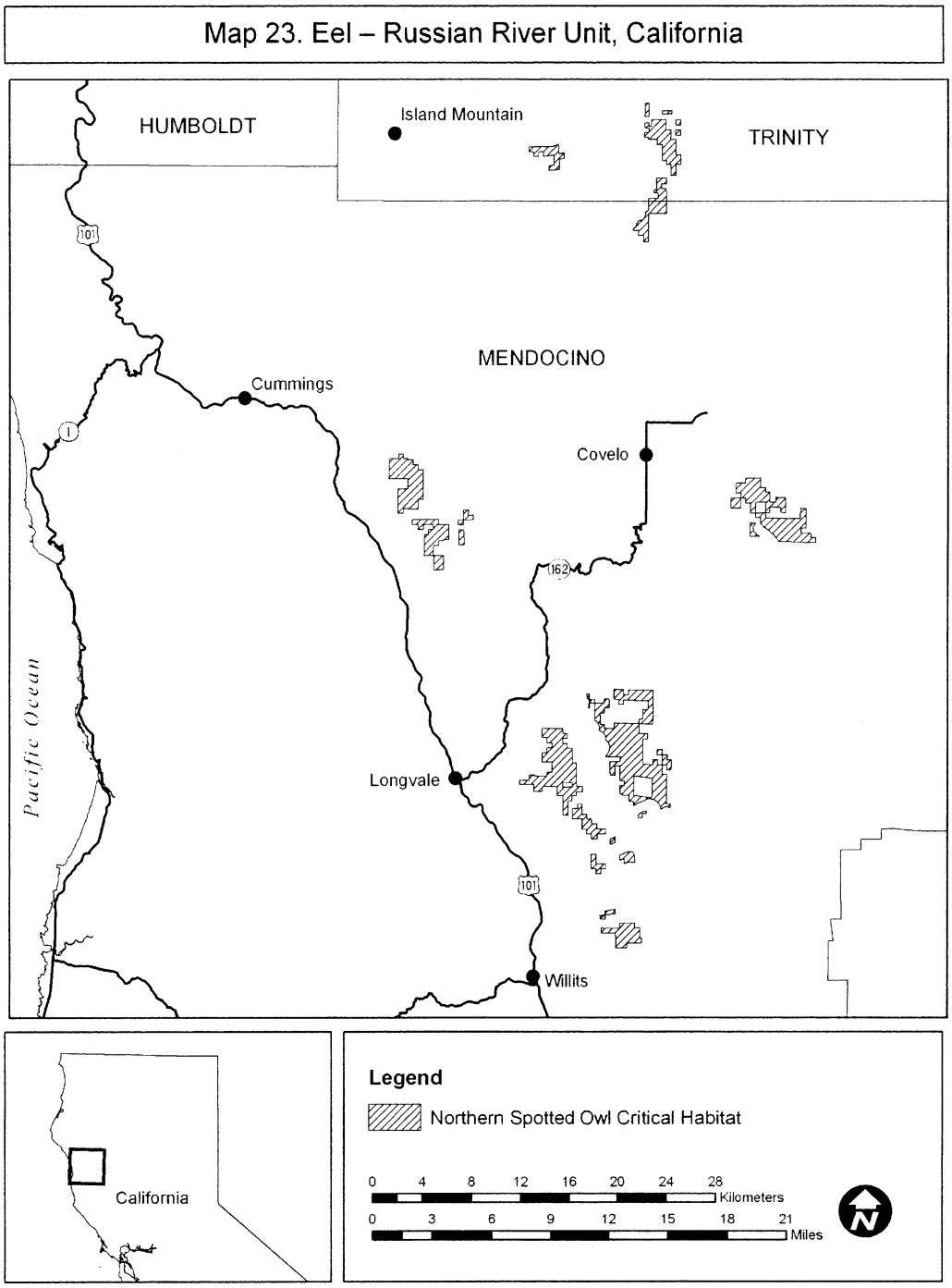
Map 22. South Fork Mountain Divide Unit, California



(29) Eel-Russian River Unit (Unit 22). Mendocino and Trinity Counties, California. From USGS 1:24,000 scale quadrangles Bluenose Ridge, Brushy Mountain, Covelo East, Foster Mountain, Four Corners Rock, Iron Peak, Jamison Ridge, Laytonville, Long Ridge, Mina, Newhouse Ridge, Thatcher Ridge, Willis Ridge, and Willits.

(i) The Eel-Russian River Unit consists of 21,940 ac (8,879 ha) in Mendocino and Trinity Counties, California, and is comprised of lands managed by the BLM Ukiah and Arcata Field Offices.

(ii) Note: Map of Eel-Russian River Unit (Map 23) follows:

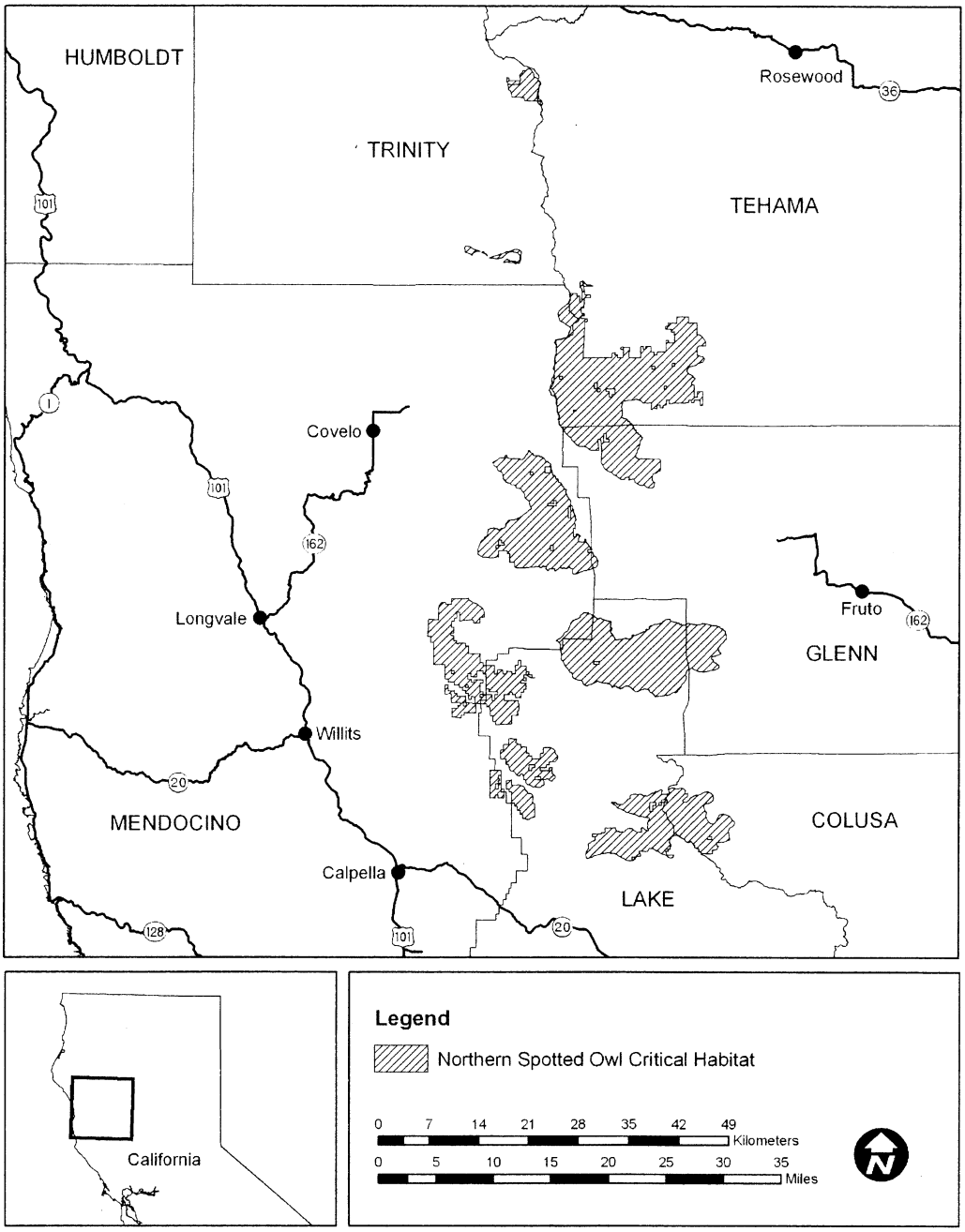


(30) Mendocino Coast Ranges Unit (Unit 23). Colusa, Glenn, Lake, Mendocino, Tehama, and Trinity Counties, California. From USGS 1:24,000 scale quadrangles Ball Mountain, Bartlett Mountain, Black Rock Mountain, Brushy Mountain, Buck Rock, Crockett Peak, Elk Mountain, Felkner Hill, Foster Mountain, Fouts Springs, Hall Ridge, Hull Mountain, Kneecap Ridge, Lake Pillsbury, Log Spring, Mendocino Pass, Newhouse Ridge, North Yolla Bolly Mountains, Plaskett Meadows, Plaskett Ridge, Potato Hill, Potter Valley, Riley Ridge, Saint John Mountain, Sanhedrin Mountain, Thatcher Ridge, Van Arsdale Reservoir, and Wrights Ridge.

(i) The Mendocino Coast Ranges Unit consists of 215,105 ac (87,050 ha) in Mendocino, Lake, Colusa, Glenn, Tehama, and Trinity Counties, California, and is comprised of lands managed by the Mendocino National Forest.

(ii) Note: Map of Mendocino Coast Ranges Unit (Map 24) follows:

Map 24. Mendocino Coast Ranges Unit, California

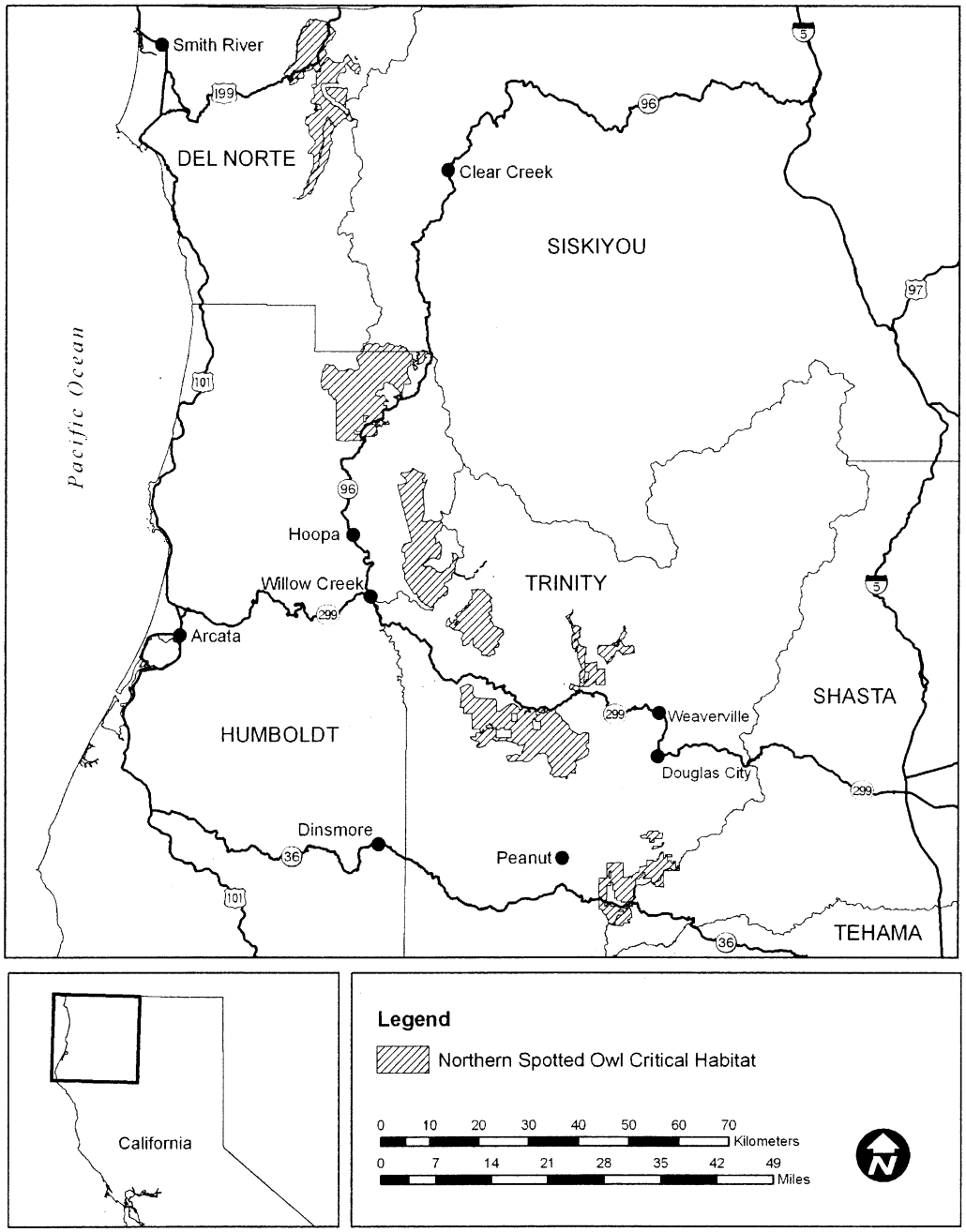


(31) Western Klamath-Siskiyou Mountains Unit (Unit 24). Del Norte, Humboldt, Shasta, Siskiyou, and Trinity Counties, California. From USGS 1:24,000 scale quadrangles Bark Shanty Gulch, Big Bar, Broken Rib Mountain, Chanchelulla Peak, Dedrick, Dees Peak, Del Loma, Denny, Devils Punchbowl, Fish Lake, Hayfork, Hayfork Bally, Helena, Hopkins Butte, Hossimbim Mountain, Hurdygurdy Butte, Hyampom Mountain, Ironside Mountain, Jim Jam Ridge, Johnsons, Junction City, Lonesome Ridge, Mount Hilton, Orleans, Orleans Mountain, Pony Buck Peak, Prescott Mountain, Rush Creek Lakes, Salmon Mountain, Salyer, Shelly Creek Ridge, Ship Mountain, Somes Bar, Thurston Peaks, Tish Tang Point, Trinity Mountain, Weitchpec, and Wildwood.

(i) The Western Klamath-Siskiyou Mountains Unit consists of 240,130 ac (87,178 ha) in Del Norte, Humboldt, Trinity, Shasta, and Siskiyou Counties, California, and is comprised of lands managed by the Six Rivers and Shasta-Trinity National Forests (236,460 ac (95,692 ha)) and BLM Redding Field Office (3,670 ac (1,485 ha)).

(ii) Note: Map of Western Klamath-Siskiyou Mountains Unit (Map 25) follows:

Map 25. Western Klamath/Siskiyou Mountains Unit, California

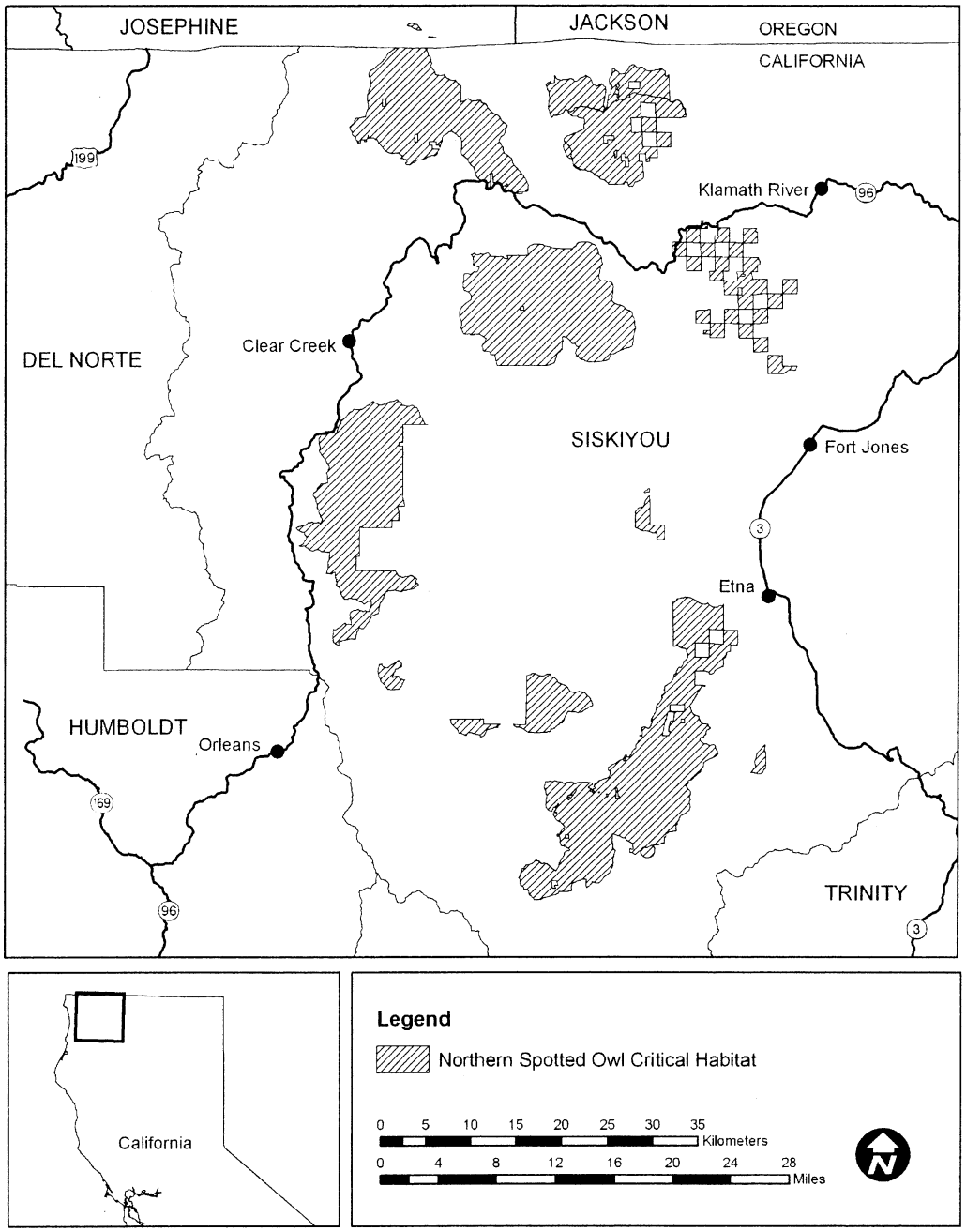


(32) Scott and Salmon Mountains Unit (Unit 25). Siskiyou County, California. Josephine County, Oregon. From USGS 1:24,000 scale quadrangles Boulder Peak, Cecilville, Clear Creek, Deadman Peak, Deadman Point, Dillon Mountain, Dutch Creek, Eaton Peak, English Peak, Etna, Figurehead Mountain, Forks of Salmon, Grasshopper Ridge, Grayback Mountain, Grider Valley, Hamburg, Horse Creek, Huckleberry Mountain, Indian Creek Baldy, Kangaroo Mountain, McKinley Mountain, Medicine Mountain, Orleans Mountain, Russell Peak, Sawyers Bar, Scott Bar, Seiad Valley, Slater Butte, Somes Bar, Tanners Peak, Ukonom Lake, Ukonom Mountain, and Yellow Dog Point.

(i) The Scott and Salmon Mountains Unit is a total of 242,450 ac (98,116 ha), including 242,292 ac (98,052 ha) in Siskiyou County, California, and 158 ac (64 ha) in Josephine County, Oregon, and is comprised of lands managed by the Klamath National Forest.

(ii) Note: Map of Scott and Salmon Mountains Unit (Map 26) follows:

Map 26. Scott and Salmon Mountains Unit, California and Oregon

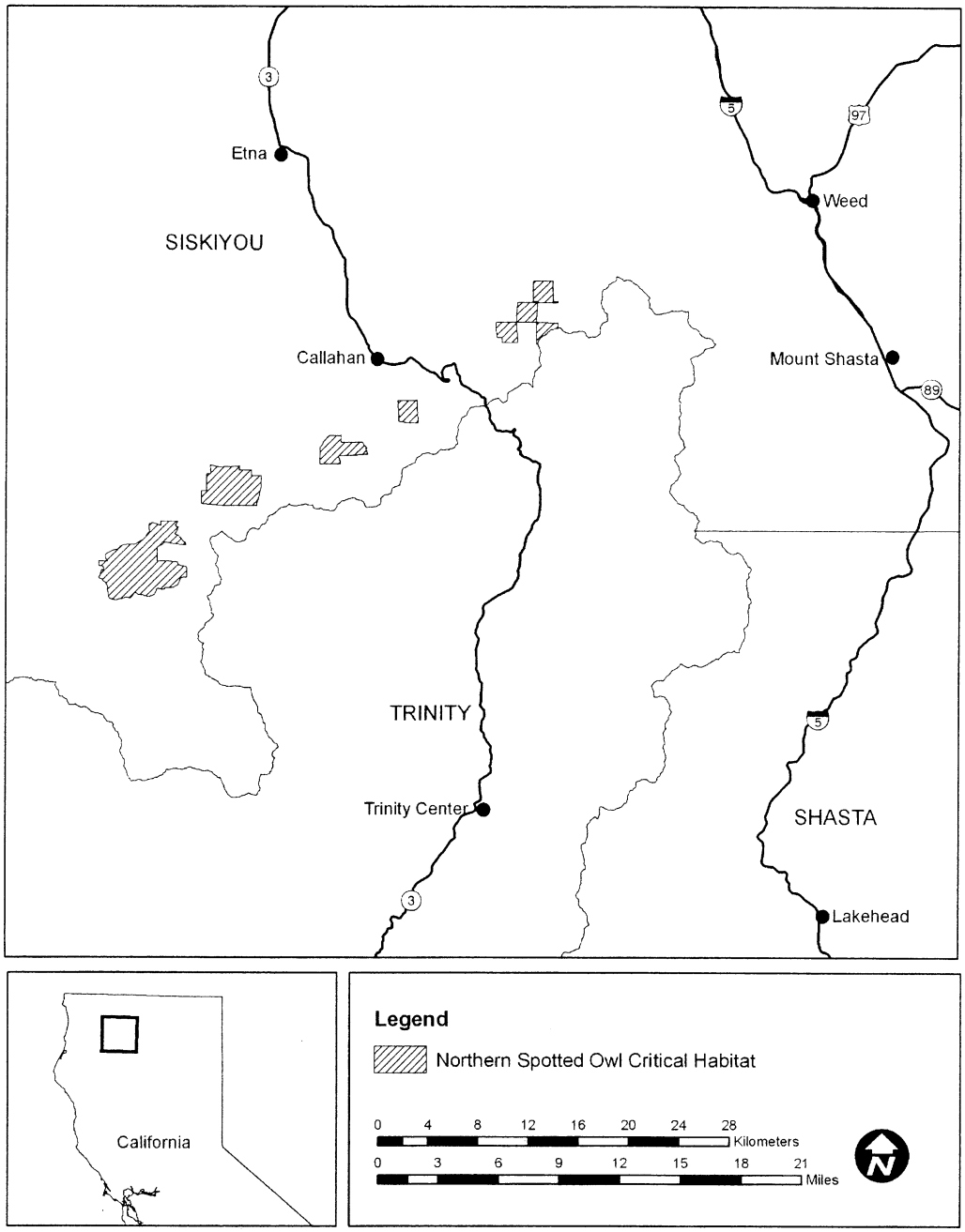


(33) Trinity Divide Unit (Unit 26). Siskiyou County, California. From USGS 1:24,000 scale quadrangles Billys Peak, Callahan, Deadman Peak, Grasshopper Ridge, and Scott Mountain.

(i) The Trinity Divide Unit consists of 13,870 ac (5,613 ha) in Siskiyou County, California, and is comprised of lands managed by the Klamath National Forest.

(ii) Note: Map of Trinity Divide Unit (Map 27) follows:

Map 27. Trinity Divide Unit, California

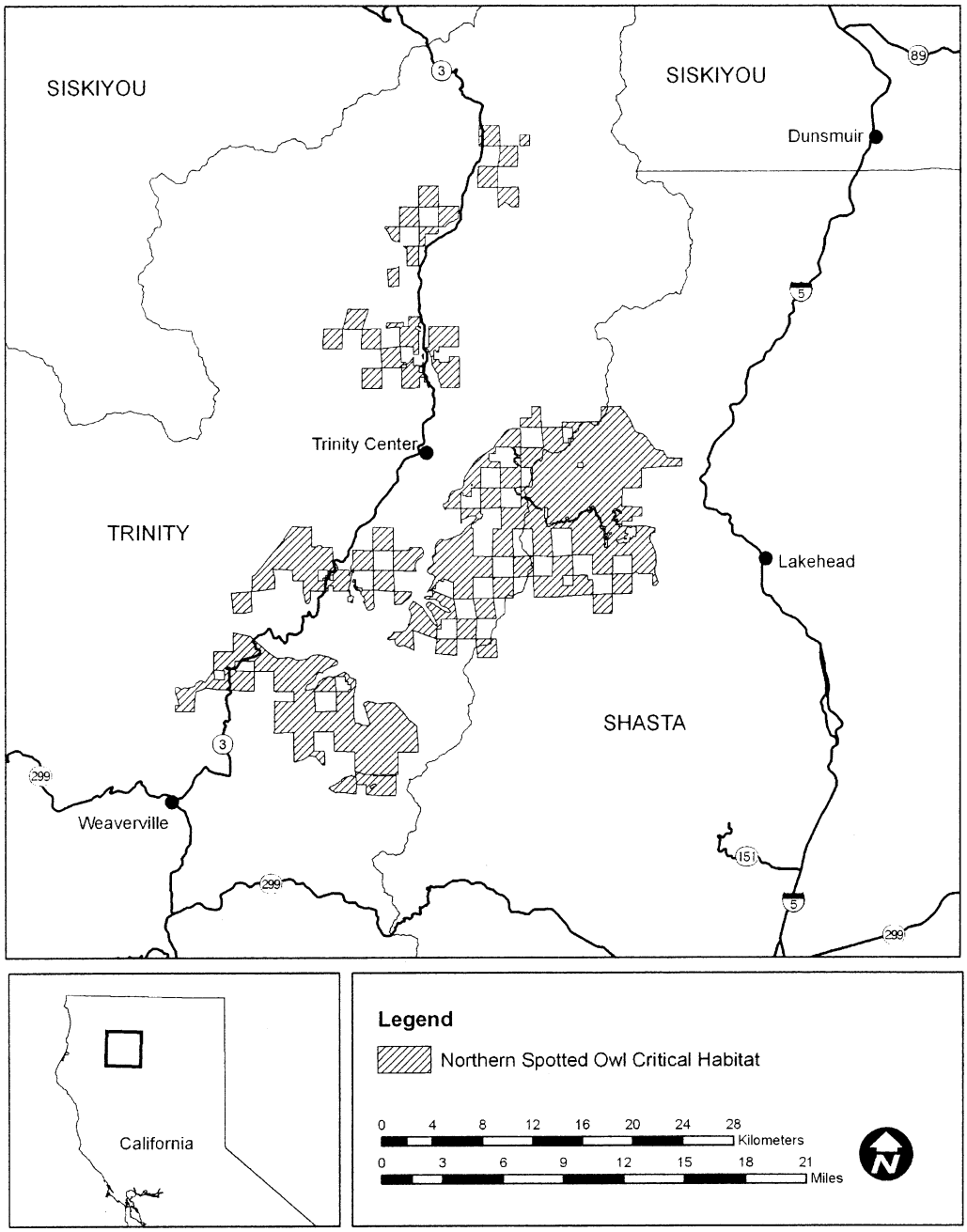


(34) Shasta-Trinity Lakes Unit (Unit 27). Shasta and Trinity Counties, California. From USGS 1:24,000 scale quadrangles Carrville, Covington Mill, Damnation Peak, French Gulch, Lamoine, Lewiston, Mumbo Basin, Papoose Creek, Rush Creek Lakes, Schell Mountain, Siligo Peak, Tangle Blue Lake, Trinity Center, Trinity Dam, Whisky Bill Peak, and Ycatapom Peak.

(i) The Shasta-Trinity Lakes Unit consists of 86,819 ac (35,134 ha) in Shasta and Trinity Counties, California, and is comprised of lands managed by the Shasta-Trinity National Forest (85,730 ac (34,694 ha)) and BLM Redding Field Office (1,090 ac (441 ha)).

(ii) Note: Map of Shasta-Trinity Lakes Unit (Map 28) follows:

Map 28. Shasta – Trinity Lakes Unit, California

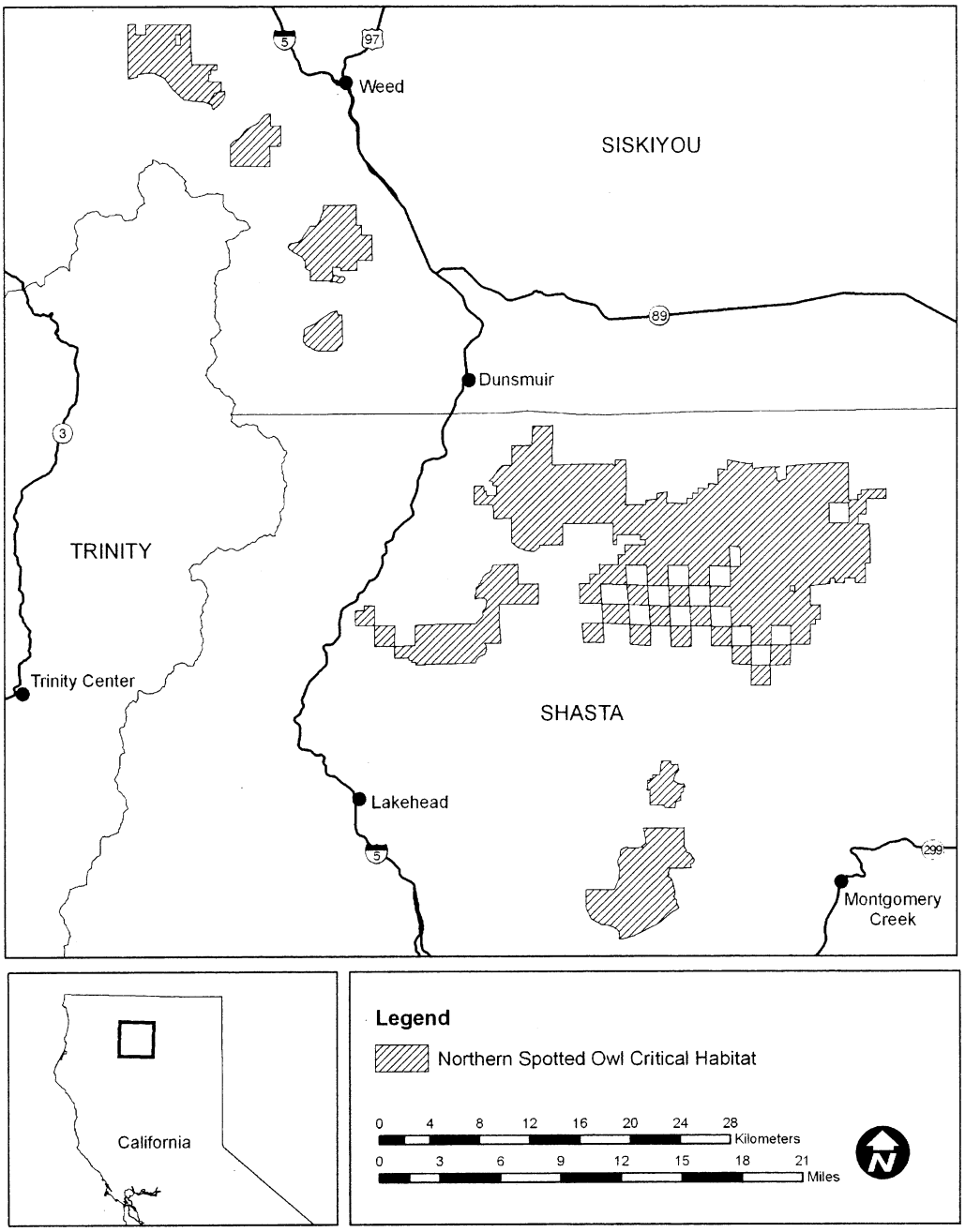


(35) Eastern Klamath Mountains Unit (Unit 28). Shasta and Siskiyou Counties, California. From USGS 1:24,000 scale quadrangles Big Bend, Chicken Hawk Hill, China Mountain, City of Mount Shasta, Dead Horse Summit, Devils Rock, Dunsmuir, Girard Ridge, Goose Gap, Grizzly Peak, Lake McCloud, Minnesota Mountain, Mount Eddy, Roaring Creek, Seven Lakes Basin, Shoeinhorse Mountain, Skunk Ridge, Tombstone Mountain, Weed, and Yellowjacket Mountain.

(i) The Eastern Klamath Mountains Unit consists of 110,756 ac (44,821 ha) in Shasta and Siskiyou Counties, California, and is comprised of lands managed by the Shasta-Trinity and Klamath National Forests.

(ii) Note: Map of Eastern Klamath Mountains Unit (Map 29) follows:

Map 29. Eastern Klamath Mountains Unit, California

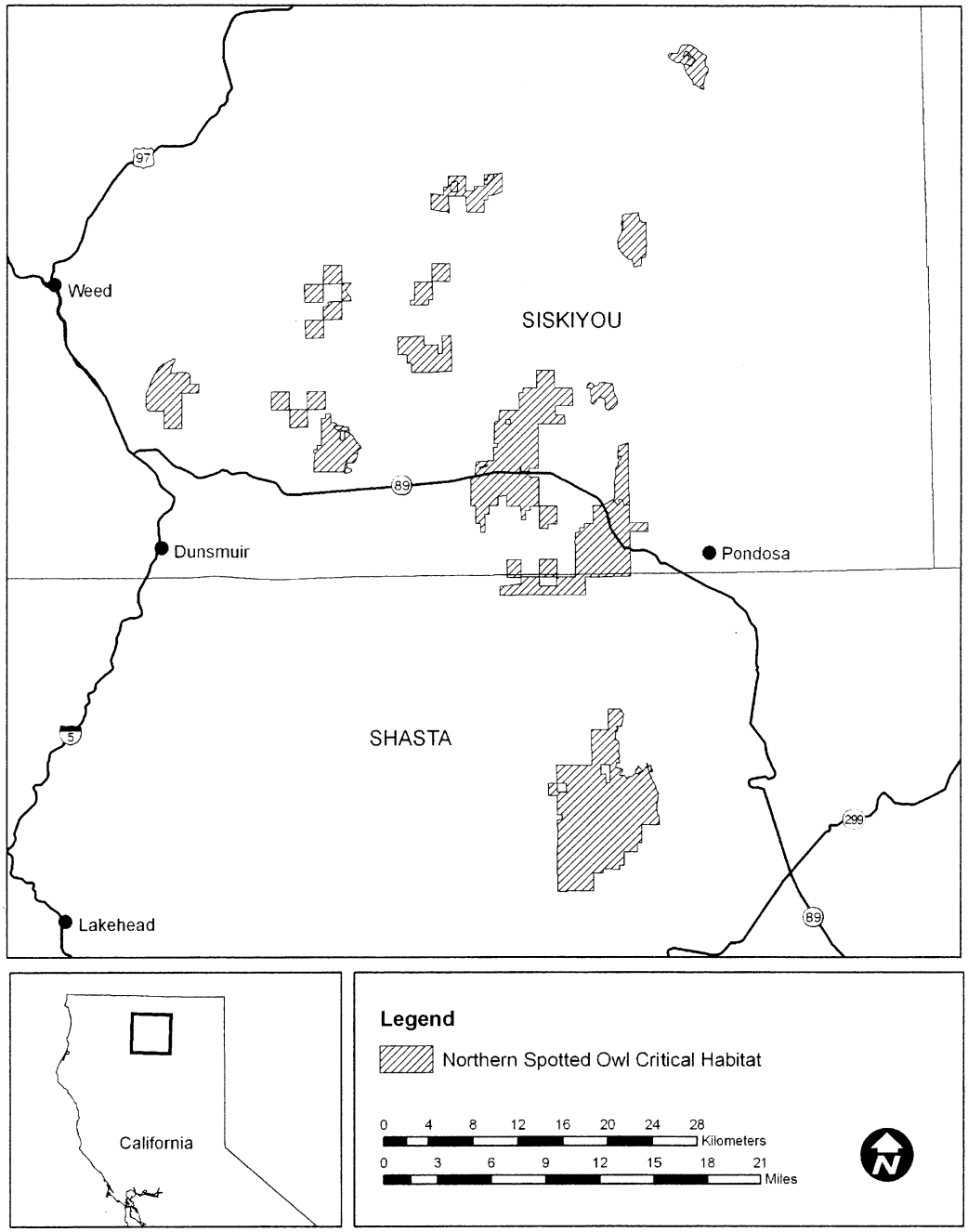


(36) Shasta/McCloud Unit (Unit 29). Shasta and Siskiyou Counties, California. From USGS 1:24,000 scale quadrangles Ash Creek Butte, Bartle, Burney, Burney Falls, Chalk Mountain, City of Mount Shasta, Dead Horse Summit, Elk Spring, Grizzly Peak, Horse Peak, Kinyon, Little Glass Mountain, McCloud, Mount Shasta, Rainbow Mountain, Skunk Ridge, and Tennant.

(i) The Shasta/McCloud Unit consists of 73,316 ac (29,670 ha) in Siskiyou and Shasta Counties, California, and is comprised of lands managed by the Klamath and Shasta-Trinity National Forests.

(ii) Note: Map of Shasta/McCloud Unit (Map 30) follows:

Map 30. Shasta/McCloud Unit, California



* * * * *

Dated: May 31, 2007.

David M. Verhey,

Acting Assistant Secretary for Fish and Wildlife and Parks.

[FR Doc. 07–2805 Filed 6–11–07; 8:45 am]

BILLING CODE 4310–55–C