



# **HABITAT CONSERVATION PLAN**

## **IMPLEMENTATION MEMORANDUM # 1**

- (1) Spotted Owl Nest Patches
- (2) USFWS Owl Circle  
Recommendations
- (3) Management of NRF/  
Dispersal Habitat

January 12, 1998



WASHINGTON STATE DEPARTMENT OF  
**Natural Resources**

Jennifer M. Belcher - Commissioner of Public Lands



WASHINGTON STATE DEPARTMENT OF  
**Natural Resources**

JENNIFER M. BELCHER  
Commissioner of Public Lands

**MEMORANDUM**

January 20, 1998

**TO:** DNR Executive Management  
DNR Region Managers  
DNR Division Managers

**FROM:** Charles Baum, Department Supervisor

**SUBJECT:** HCP Implementation Memorandum Number 1

This, the first HCP IMPLEMENTATION MEMORANDUM, provides guidance in three areas: (1) spotted owl nest patches, (2) U.S. Fish and Wildlife Service (USFWS) recommendations regarding existing spotted owl circles, and (3) management activities within spotted owl circles and designated spotted owl nesting, roosting, foraging (NRF) and dispersal habitat management areas. Please provide this memorandum to appropriate staff involved in HCP implementation. Michael Perez-Gibson and Chuck Turley will provide additional detail and answer any questions you may have on these issues at our next business group meeting. Please contact Chuck (902-1148) with any questions you have before that time.

**A. SPOTTED OWL NEST PATCHES**

One of the HCP commitments made by DNR was to designate 66, 500-acre nest patches within spotted owl NRF-management areas in the western Cascades. These 66 sites have now been selected by DNR staff (working in conjunction with USFWS biologists), reviewed and approved by DNR Executive Management, and documented with the USFWS (see Attachment 1 - December 15, 1997, letter from C. Turley to J. Engbring and accompanying maps). These nest patches are intended to provide habitat nuclei for spotted owl nesting until DNR develops, through research, the ability to manage entire NRF landscapes to support spotted owl nesting. Once DNR demonstrates this ability to USFWS, the need to maintain the nest patches will end.

Until that time, management activities are prohibited within the boundaries of the nest patches.

Page 1 of 5

Likewise, nest patches should not be considered for inclusion in any transaction that would remove the area from DNR management unless (1) the party obtaining management responsibility for the area agrees to continue to manage the area consistent with its nest patch designation, or (2) the nest patch has by necessity (as described in the attached letter) been located in Young Forest Marginal habitat or forested non-habitat and an area of equal habitat quality and potential is available for replacement within the appropriate area.

## **B. U.S. FISH AND WILDLIFE SERVICE OWL CIRCLE RECOMMENDATIONS**

Another of the HCP commitments made by DNR was to consider USFWS recommendations when harvesting spotted owl habitat outside of designated NRF-management areas during the first decade of the HCP. These recommendations are intended to potentially extend, in the short-term, the viability and productivity of certain key owl sites. The USFWS has now transmitted its recommendations to DNR (see Attachment 2 - December 11 letter from J. Engbring to J. Belcher and accompanying USFWS staff report and map). DNR Executive Management has reviewed the recommendations and information provided by region staff about the sites contained within those recommendations, and determined that DNR will respond to the recommendations in the following manner:

1. Information provided by region staff indicates no intent of harvesting within 20 of the circles prior to January, 2007. Regions should comply with this stated intent. These circles are:
  - Central Region - Seven Creek/Elk Creek
  - Olympic Region - Lower Stequaleho, Willoughby Ridge, Kunamakst Creek, Kalaloch, Solecks River, Kloochman, Queets Campground, Owl Creek, Shale Creek, Upper Stequaleho, Upper Clearwater River, Minter Creek, Tacoma Creek East Fork
  - Southeast Region - Phelps Creek, Wieberg Creek, Goat Peak, Dairy Creek/Klickitat River, Mill Creek/Rattlesnake, Snyder Swale
2. Information provided by region staff indicates that harvest will occur only in non-habitat within 2 of the circles prior to January, 2007. Regions should comply with this stated intent. These circles are:
  - Southeast Region - Cave Creek/Trout Lake Valley, Ladiges Spring/Klickitat
3. As indicated in the attached USFWS letter (Attachment 2), DNR agreed to consider USFWS recommendations for harvest outside of designated NRF management areas. However, recommendations are included for 23 circles that are actually within designated NRF areas and, in some cases, within designated nest patches. DNR believes, and USFWS has agreed, that these sites are likely adequately protected by their location and the additional timing restrictions provided all existing sites by the HCP (harvest activities precluded within the breeding season within the best 70 acres at a site outside of

designated NRF management areas and within 0.7 miles of a site within designated NRF management areas). These circles are:

- Northwest Region - Pressentin Creek Lower, Boardman Creek, Williamson Creek
- Southeast Region - Smith Butte, Bear Creek/Trout Lake Creek, Dairy Creek North Fork
- Southwest Region - Forest Creek, Steep Creek, Ole Creek, Carson Ridge, Huffman Peak/North Siouxon Creek, Budweiser Creek, Spring Creek, North Fork Rock Creek, Siouxon Creek Lower, Rock Creek/Columbia, Yale Lake North, Mount Mitchell, Red Bluffs, North Siouxon Creek, Yale Lake, North Siouxon Creek Lower, Lewis River/Swift Dam

When the 45 sites names above are excluded, there are 21 remaining sites on the USFWS recommendation list.

4. Regions **may not move forward** with harvest activities within habitat in those 11 remaining circles that are USFWS Category 1 (2 sites) or USFWS Category 2 (9 sites). Those circles are:
  - Lower Bear Creek (Olympic Region) - USFWS Category 1
  - Mill Creek/White Salmon (Southeast Region) - USFWS Category 1
  - Blue Mountain (Central Region) - USFWS Category 2
  - Anderson Ridge (Olympic Region) - USFWS Category 2
  - Lake Creek/Soleduck (Olympic Region) - USFWS Category 2
  - Reade Hill (Olympic Region) - USFWS Category 2
  - Whiskey Creek (Olympic Region) - USFWS Category 2
  - Salt Creek (Olympic Region) - USFWS Category 2
  - White Salmon River (Southeast Region) - USFWS Category 2
  - Moss Creek Campground (Southeast and Southwest Regions) - USFWS Category 2
  - Dry Creek/White Salmon River (Southeast Region) - USFWS Category 2
  
5. Regions **may move forward** with harvest activities in the 10 remaining circles that are on the USFWS recommendation list as Category 3 (2 sites) or USFWS category 4 (8 sites). Those circles are:
  - Mineral Creek (Central Region and South Puget Sound Region) - USFWS Category 3
  - French Creek/Chumstick Creek (Southeast Region) - USFWS Category 3
  - Willoughby West (Olympic Region) - USFWS Category 4
  - Buck Knoll (Olympic Region) - USFWS Category 4
  - Johnson Creek/Sequim Bay (Olympic Region) - USFWS Category 4
  - Rattlesnake Creek/Mill Creek (Southeast Region) - USFWS Category 4
  - Beeks Canyon (Southeast Region) - USFWS Category 4
  - Rock Creek/Lake Merwin (Southwest Region) - USFWS Category 4
  - Dog Creek/Lewis River (Southwest Region) - USFWS Category 4
  - Elochoman River (Southwest Region) - USFWS Category 4

**C. MANAGEMENT ACTIVITIES WITHIN EXISTING SPOTTED OWL CIRCLES AND/OR DESIGNATED SPOTTED OWL NESTING, ROOSTING, FORAGING (NRF) AND DISPERSAL HABITAT MANAGEMENT AREAS**

Management Activities Within Designated NRF/Dispersal Habitat Management Areas

1. Harvest-related management activities may proceed if they were on a region's action plan as of January 30, 1997 (signing date of the HCP). A list of such planned activities should be prepared by each region and provided to the FRD HCP Implementation Manager prior to March 1, 1998.
2. For all other management activities, including harvest-related activities not on a region's action plan as of January 30, 1997:
  - A. if the affected WAU or quarter-township is at or above its 50% habitat goal, management activities may be conducted that are:
    - i. in the non-habitat portion of the designated area, following review and approval by the region's State Lands Assistant (SLA), or
    - ii. within the existing habitat portion of the designated area if the activity will not lower the habitat below the 50% goal. All such planned activities must be reviewed by the region's SLA, including discussion with the RPAMD Scientific Support Section and the FRD HCP Implementation Section.
  - B. if the affected WAU or quarter-township is below its 50% habitat goal, management activities may be conducted that will not extend the time at which the area is projected to reach its goal absent the management activity in question. All such activities must be reviewed by the region's SLA, including discussion with the RPAMD Scientific Support Section and the FRD HCP Implementation Section.
  - C. When required for access purposes, road construction may occur through designated habitat management areas whether the WAU or quarter-township is above or below its habitat goal. However, for areas below habitat goal, such activity requires review and approval by the region's SLA, including discussion with the RPAMD Scientific Support Section and the FRD HCP Implementation Section.

## Review and Approval of Management Activities Planned Within NRF/Dispersal Habitat Management Areas

All management activities within designated NRF/dispersal habitat management areas require review and approval by the SLA and, in some cases as described above, appropriate division staff. Following this review, recommendations will be presented to, and final approval sought from, the appropriate Region and Division Managers. The intent of this process is to ensure that any management activity proposed within these important areas receives a critical evaluation of its potential short-term and long-term influence on the overall goals of the HCP.

Approval should focus on those activities with the potential for accelerating the attainment of an area's habitat goals. Some management activities may reduce the time needed to achieve habitat goals. For example, a commercial thinning might be designed to provide snags and downed woody debris, in addition to providing for increased growth of the remaining trees, all leading to habitat that is much more beneficial to species, and in a time frame that would be more rapid when compared to achieving desired stand conditions based on natural processes. Potential benefits should be documented during the design and review phase of these proposed activities.

### Management Activities Within Existing Owl Circles

1. Management activities planned within Status 4 owl circles may proceed if consistent with all other commitments of the HCP.
2. Harvest-related management activities planned within Status 1, 2, or 3 owl circles must be consistent with direction provided in this memorandum regarding **U.S. Fish and Wildlife Service Owl Circle Recommendations**.
3. **FRD will approve and monitor all proposed harvest-related activities within known spotted owl circles. To facilitate this process, Region Managers will submit a summary of all such proposed activities to the Forest Resource Division Manager by January 1 for the following fiscal year (example: by Jan. 1, 1999 for FY2000). Summaries should include activity name, location, total acreage, acres of suitable habitat impacted, and harvest type. Because of the date at which this memo is being distributed, summaries of FY1999 activities will be due by March 1, 1998.**

c: John Engbring, U.S. Fish and Wildlife Service  
Chuck Turley, DNR HCP Implementation Manager

Attachment 1



WASHINGTON STATE DEPARTMENT OF  
**Natural Resources**

JENNIFER M. BELCHER  
Commissioner of Public Lands

December 15, 1997

Mr. John Engbring  
U.S. Department of the Interior, U.S. Fish and Wildlife Service  
510 Desmond Drive SE, Suite 102  
Lacey, WA 98503-1273

Dear John:

I am pleased to inform you that DNR has fulfilled one of its most important HCP implementation commitments: the designation of 66, 500-acre spotted owl nest patches. The enclosed maps show the general locations of these patches; the enclosed computer tape contains a precise record of patch locations and boundaries.

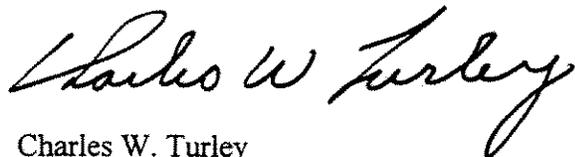
Nest patches were selected by DNR wildlife biologist Paula Swedeen, working with DNR's Northwest, South Puget Sound, and Southwest region offices, as well as USFWS wildlife biologist Carolyn Scafidi. The selection process involved screening potentially suitable habitat with DNR foresters, field inspections to verify habitat conditions, and review of candidate patches with region management. Patches identified via this process have been reviewed and approved by DNR management and the Commissioner of Public Lands.

The HCP stipulates that each patch should consist of a 300-acre core of "the highest quality nesting habitat available" and a 200-acre buffer of "sub-mature or higher quality habitat," and that the entire 500-acre patch be "entirely within a circle of 0.7 mile radius." Only 33 (50%) of the nest patches could be situated in (Old Forest) habitat known to support spotted owl nesting in western Washington (Table 1). This reflects a paucity of Old Forest habitat on DNR lands in the western Cascades. Per guidance in the HCP, the remaining 33 patches were placed in "the highest quality nesting habitat available." However, 19 patches (29%) had to be placed in Young Forest Marginal habitat or forested non-habitat (Table 1). Again, this reflects the scarcity of older forest habitat on DNR lands in the western Cascades. Nine (14%) of the nest patches could not be configured within a 0.7-mile radius circle; these patches were configured within circles up to 1.2 miles in radius. These departures in configuration occurred in response to long, narrow stands of Old Forest habitat surrounded by young, regenerating forest. Although half of the patches were placed in habitat not known to support spotted owl nesting, and nine patches exceed the configuration specified in the HCP, patches selected represent a consensus recommendation by DNR and USFWS biologists. In other words, there is mutual agreement that patches were placed in the best possible locations.

Mr. John Engbring  
Page 2  
December 15, 1997

DNR is assembling detailed information describing each of the 66 nest patches. Please contact Paula Swedeen at 360-902-1392 if you would like to have copies of this information. If you have questions about the format of the enclosed computer tape, please contact Kristin Jamison at 360-902-1640. Please contact me at 360-902-1148 if you have general questions about the nest patch selection and designation process.

Sincerely,



Charles W. Turley  
HCP Implementation Manager

CWT:ly

Enclosures

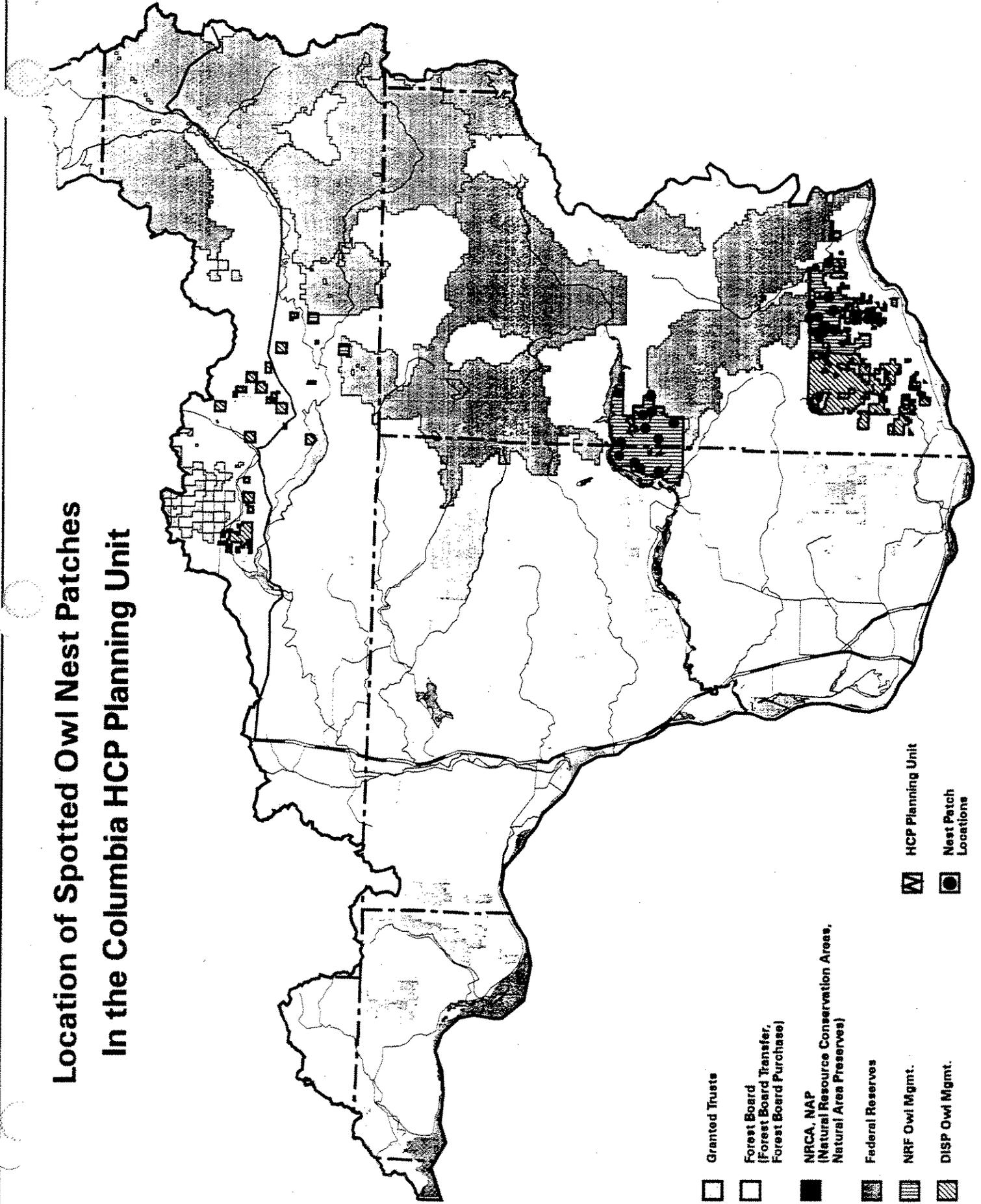
c: Jennifer M. Belcher, Commissioner of Public Lands  
Charles Baum, Department Supervisor  
John Daly, Deputy Supervisor for Operations  
Paul Silver, Deputy Supervisor for Resource Management  
Bonnie Bunning, Manager, South Puget Sound Region  
Rick Cooper, Manager, Southwest Region  
Joy Keniston-Longrie, Manager, Resource Planning and Asset Management Division  
Michael Perez-Gibson, Manager, Forest Resources Division  
Bill Wallace, Manager, Northwest Region  
Lenny Young, Assistant Manager, Resource Planning and Asset Management Division  
Paula Swedeen, Natural Resource Scientist, Resource Planning and Asset Management Division

Table 1. Location and Condition of Spotted Owl Nest Patches.

Planning Unit	Habitat Condition in the 300-acre Core			Total
	Old Forest	Sub-mature	YFM or Forested Non-habitat	
North Puget	22	3	17	42
South Puget	1	0	1	2
Columbia	10	12	0	22
Total	33	15	18	66

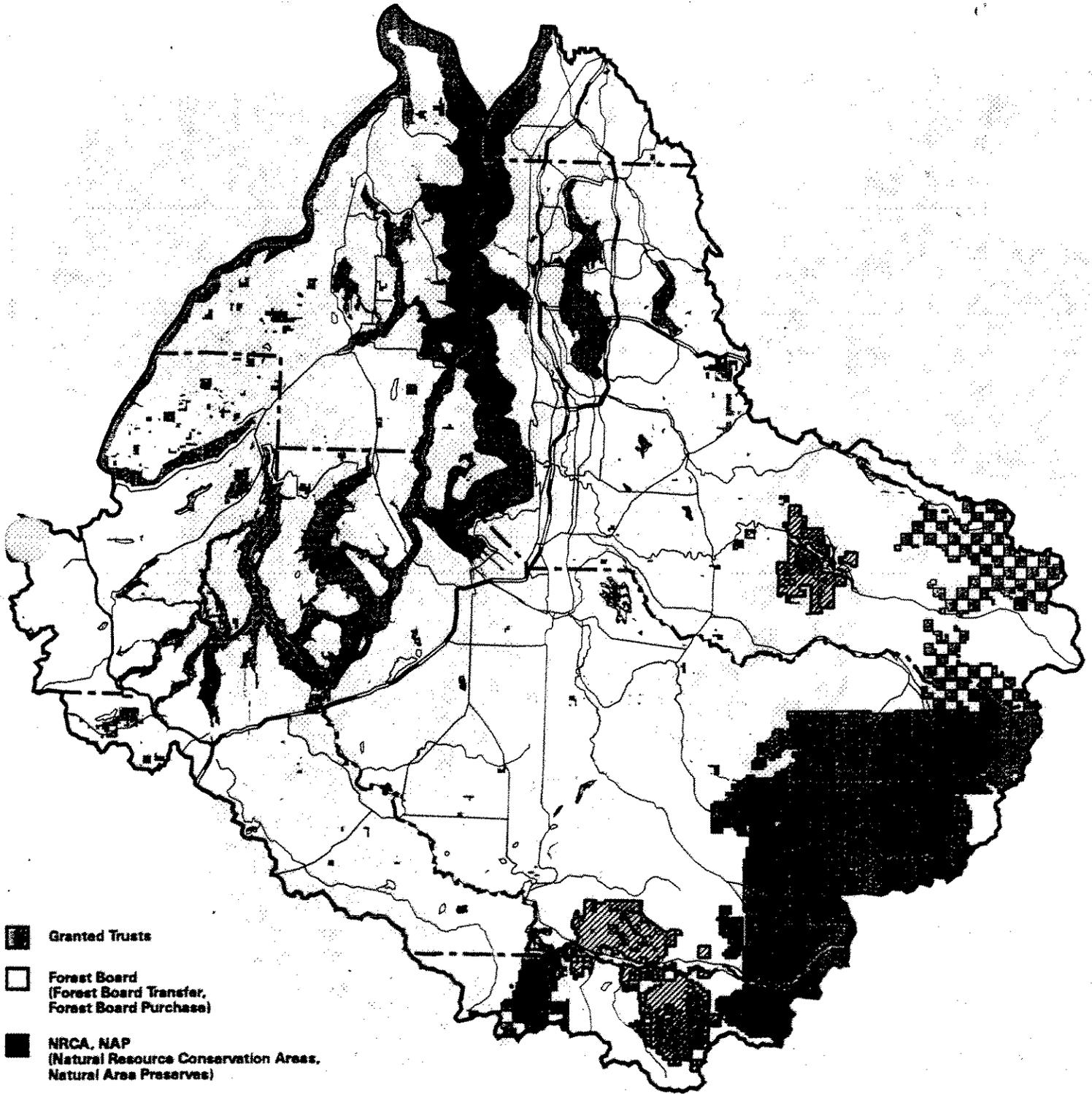
# Location of Spotted Owl Nest Patches In the Columbia HCP Planning Unit

-  Granted Trusts
-  Forest Board  
(Forest Board Transfer,  
Forest Board Purchase)
-  NRCA, NAP  
(Natural Resource Conservation Areas,  
Natural Area Preserves)
-  Federal Reserves
-  NRF Owl Mgmt.
-  DISP Owl Mgmt.
-  HCP Planning Unit
-  Nest Patch  
Locations



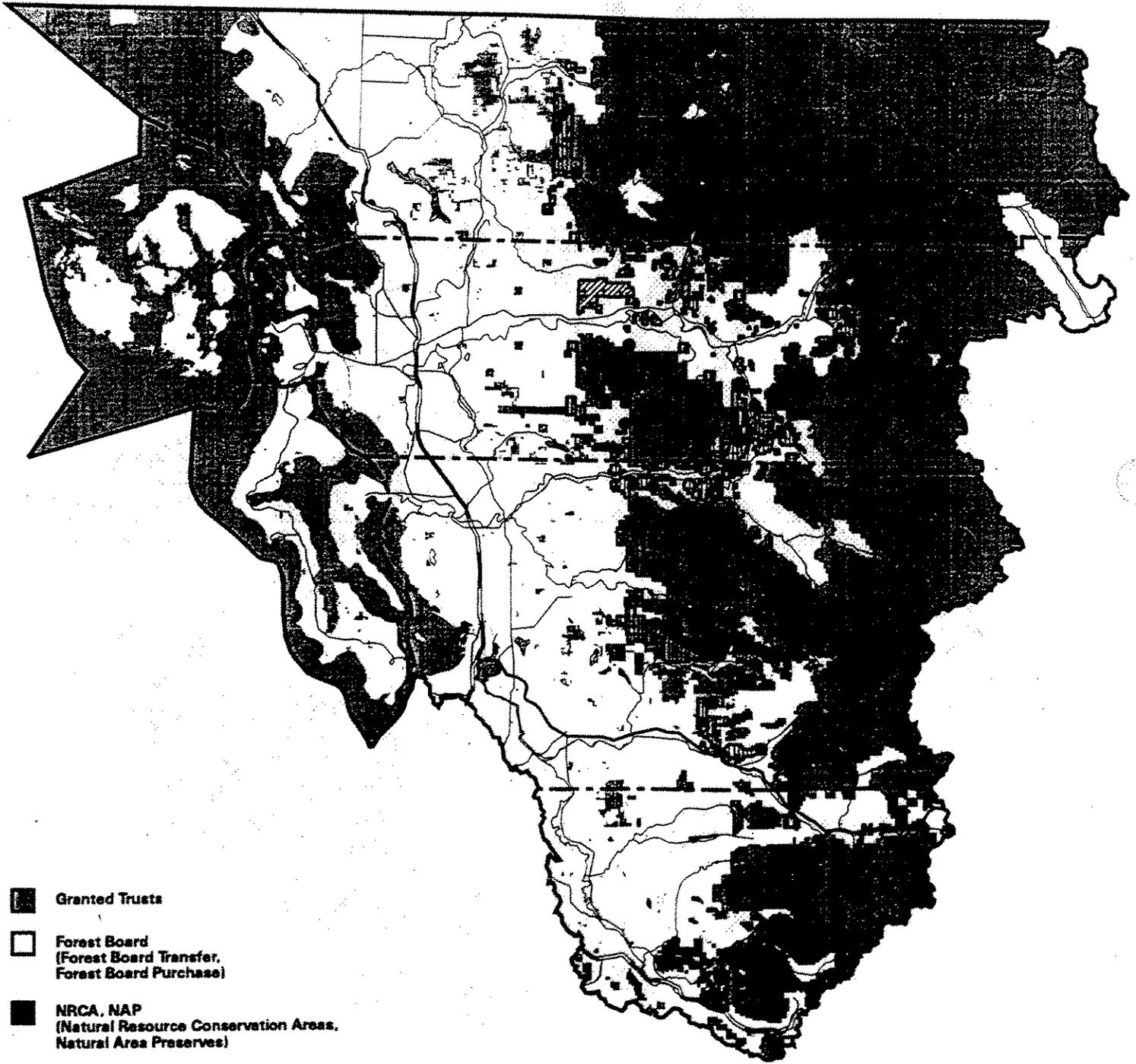
# Location of Spotted Owl Nest Patches

## In the South Puget Sound HCP Planning Unit



-  Granted Trusts
-  Forest Board  
(Forest Board Transfer,  
Forest Board Purchase)
-  NRCA, NAP  
(Natural Resource Conservation Areas,  
Natural Area Preserves)
-  Federal Reserves
-  NRF Owl Mgmt.
-  DISP Owl Mgmt.
-  HCP Planning Unit
-  Nest Patch  
Locations

# Location of Spotted Owl Nest Patches In the North Puget Sound HCP Planning Unit



-  Granted Trusts
-  Forest Board  
(Forest Board Transfer,  
Forest Board Purchase)
-  NRCA, NAP  
(Natural Resource Conservation Areas,  
Natural Area Preserves)
-  Federal Reserves
-  NRF Owl Mgmt.
-  DISP Owl Mgmt.
-  HCP Planning Unit
-  Nest Patch  
Locations

# Attachment 2



## United States Department of the Interior

FISH AND WILDLIFE SERVICE  
North Pacific Coast Ecoregion  
Western Washington Office  
510 Desmond Drive SE, Suite 102  
Lacey, Washington 98501  
Phone: (360) 753-9440 Fax: (360) 753-9008

16 1997

December 11, 1997

12-17-97  
To: Chuck Turley

The Honorable Jennifer Belcher  
Commissioner of Public Lands  
Washington Department of Natural Resources  
1111 Washington Street SE  
Olympia, Washington 98504-7000

Dear Commissioner Belcher:

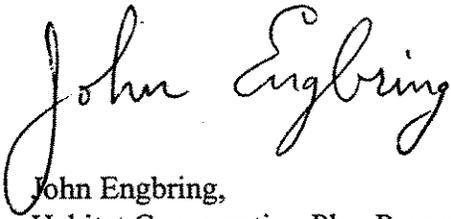
In developing the northern spotted owl strategy for the recently signed Department of Natural Resources (DNR) Habitat Conservation Plan, one of our agreements was that DNR would consider U.S. Fish and Wildlife Service (Service) recommendations in scheduling harvest of timber that may affect spotted owls. Specifically, the DNR agreed during the first decade to consider Service recommendations when harvesting spotted owl habitat outside of designated Nesting, Roosting, Foraging (NRF) Areas. The purpose of this exercise is to potentially extend, in the short term, the productivity and viability of key owl sites.

Enclosed is the report which contains our recommendations. The report categorizes all owl sites that may be affected by DNR harvest activities into five major groups, in order of priority, based on the value of each site to the spotted owl population in general. Our primary recommendation is to minimize or defer harvest in the owl sites in groups 1 through 4 for as long as possible (66 sites total in groups 1 through 4).

The report was prepared by biologists from the Service, the Washington Department of Fish and Wildlife, and the DNR. They did a credible and expansive job. I personally thank you for allowing Paula Swedeen from your staff to participate in developing the report. The information is on an arcview database, and we offer to transfer this database to you for your continued update and use. We are also available to provide training on the development and use of the database. Please contact me if you choose to do so.

Again, please consider our recommendations as DNR schedules harvests over the next 10 years. We believe that shifting harvest from the key owl sites affected by your management to other less-sensitive areas will significantly contribute to the conservation of spotted owls.

Sincerely,



John Engbring,  
Habitat Conservation Plan Program Manager

JE/jkp

Enclosure (2 of same) QK0

c: Bern Shanks, Washington Department of Fish and Wildlife

WASHINGTON DEPARTMENT OF NATURAL RESOURCES  
HABITAT CONSERVATION PLAN  
OWL SITE PRIORITIZATION SCHEDULE  
December 11, 1997

Interagency Technical Group:  
Carolyn Scafidi (FWS), Paula Swedeen (WDNR),  
Timothy Quinn (WDFW), and Joe Buchanan (WDFW)

with GIS support from:  
Tim Young (FWS) and Tom Williams (WDFW)

## INTRODUCTION

We prepared a northern spotted owl (owl) site prioritization schedule to assist DNR in the implementation of their Habitat Conservation Plan (HCP). This schedule is presented as a recommendation, with final implementation to be decided by DNR. Development of the schedule is referenced on page IV. 9 of the final HCP: "When harvesting outside of designated NRF areas, DNR will consider recommendations of the USFWS for scheduling potential take of spotted owl site centers during the first decade. This will be done in order to retain sites that may have a valuable short-term contribution to the population." No specific constraints were placed on the technical group as the site prioritization process began. Consequently, we set out to prioritize all 234 spotted owl sites (sites) that were at risk of take due to DNR-management activities. While a ten-year schedule was originally described in the HCP, any protection provided beyond this time would benefit the species. This, again, is at the discretion of DNR.

## METHODS

The intent of the schedule is to manage the rate of incidental take during the first ten years of HCP implementation. We attempted to schedule take in such a way as to retain the most significant sites (e.g., most productive as measured by direct and indirect means) for the longest time. We developed a process for prioritizing owl sites by their potential to contribute to the maintenance of the species throughout its range in Washington, with an emphasis on sites located near federal reserves and spotted owl special emphasis areas (SOSEAs)(WFPB 1997). Only status 1, 2 and 3 sites identified between 1989 and 1996 and potentially affected by DNR-managed lands were specifically included in the prioritization schedule. Sites with DNR-managed habitat that occurred wholly within Watershed Administrative Units (WAUs) with no harvestable surplus of habitat were not considered to be at risk of take and thus were not included in the list. However, we recommend that the prioritization scheme described below be applied to any new "at-risk" owl sites in the future. New "at-risk" sites would result when WAUs within NRF Management Areas (NRF Areas) develop a harvestable surplus of owl habitat or when new sites are found.

Sites in Southwest Washington were ranked according to the criteria described below, which were applied to all sites covered by our analysis. However, we recognize the long-standing concern of maintaining spotted owl distribution in Southwest Washington (see summary in WFPB 1996). We believe that habitat conditions in Southwest Washington should be silviculturally managed to maintain or enhance the conditions required to ensure owl occupancy, regardless of a site's final ranking on the list. Although there are no SOSEAs in Southwest Washington, and thus no regulatory mechanisms to facilitate owl conservation there, we encourage creative and cooperative solutions to meet this goal (USDI 1995).

We developed three ranking criteria to assist us in prioritizing owl sites: location of the site relative to areas identified for owl conservation; amount of habitat on DNR-managed lands within the site's provincial radius; and site productivity. These criteria are described below.

### Site Location and Status

We considered only those owl sites which contained DNR-managed lands, identified as owl habitat, within their provincial circles. Owl circles overlapping areas identified for owl conservation were believed to have a greater likelihood of contributing to owl viability in the next ten years. Sites within DNR NRF Areas that had no harvestable surplus of owl habitat were not considered to be at risk of incidental take in the next ten years and thus were not included in the list. All other sites were considered to be "at-risk" and were ranked by status (FWS-endorsed survey protocol, 1992) and location in the following manner:

- Category 1: Status 1 site circles that overlap harvestable NRF Areas
- Category 2: Status 1 site circles that overlap SOSEAs and are outside NRF Areas
- Category 3: Status 1 site circles that are outside both SOSEAs and NRF Areas
- Category 4: Status 2 & 3 site circles that overlap SOSEAs and Dispersal or No-Role Areas, and are outside of NRF Areas.
- Category 5: Status 2 & 3 site circles that overlap harvestable NRF Areas, regardless of their location with respect to SOSEAs.
- Category 6: Status 2 & 3 site circles that are outside both SOSEAs and NRF Areas (by definition, these are sites that are in Dispersal or No-Role Areas).

Status 1 sites were generally prioritized above status 2 & 3 sites, particularly when those sites overlapped harvestable NRF Areas and their continued reproductive contributions to the population were potentially at risk. Status 2 & 3 sites overlapping SOSEAs were prioritized for protection over status 2 & 3 sites in harvestable NRF areas. These harvestable NRF Areas are expected to contain a minimum of 50 percent owl habitat, while sites overlapping SOSEAs are likely to be at greater risk due to potential harvest on adjacent, non-DNR ownerships.

### Habitat quantity

Sites were also ranked according to the amount of DNR-managed habitat within their provincial

circles. All else being equal, sites with more DNR-managed habitat were considered more likely to persist and to benefit from a take deferral process than those that would be minimally influenced by DNR activities, yet subject to habitat loss on other ownerships. Sites that were more likely to persist, regardless of habitat removal activities on adjacent ownerships, were generally considered a higher priority. Sites were ranked according to the following habitat criteria:

- A. Sites with  $\geq 40$  percent of the provincial radius circle and/or  $\geq 500$  acres of a 0.7-mile radius "core area" in DNR-managed suitable habitat;
- B. Sites with  $\geq 25$  percent of their provincial radius circle and/or  $\geq 400$  and  $< 500$  acres of a 0.7-mile radius "core area" in DNR-managed suitable habitat; and
- C. Sites with  $\geq 250$  and  $< 400$  acres of DNR-managed suitable habitat within a 0.7-mile radius "core area."

### Site productivity

Site productivity was ranked as high (H), moderate/low (M), zero (0) or X. The productivity data available to us did not distinguish between a year with zero offspring and one for which there was no survey information (i.e., they were both recorded as zeros). For this application, we assumed that surveys were sufficient to document reproduction and consequently assigned any status 1 site without confirmed reproduction a ranking of zero (0). We recognize that this assumption likely resulted in a number of sites being assigned an incorrect reproduction score. To determine productivity, we divided the total number of offspring at a site by the number of years that offspring were detected at that site since 1989. This biased productivity high because all years with no productivity were excluded from the calculation. Sites with a level of productivity in the top 50th percentile were ranked high; those in the lower 50th percentile were ranked moderate/low. All status 2 & 3 sites were ranked using an indicator variable (X) because, by definition, they are not reproductive sites.

### Data Sources

Spotted owl habitat data. These data were developed by the Mid Continent Ecological Science Center of the Biological Resources Division of the United States Geological Survey from the following sources as represented in the COMB100 dataset as of June 25, 1997:

1. Habitat as defined in data sets acquired from the Supervisors' Offices for each of the National Forests in the range of the owl in Washington State as of the first quarter of 1997.
2. Habitat as defined in the OWLMOSAIC, version 2 dataset developed by Washington Department of Natural Resources as of the second quarter of 1995, updated with timber harvest information developed by the Washington Department of Natural Resources covering the time period 1988 through 1993.

3. Late seral conifer distribution as developed by Washington Department of Natural Resources from 1988 Landsat data and updated with Washington Department of Natural Resources' timber harvest information covering the time period 1988 through 1993.

Spotted Owl Special Emphasis Areas (SOSEAs). These data were provided by the Washington Department of Natural Resources, current as of August, 1996 and received by the Service in July 1997.

Habitat Conservation Plan Boundaries and Management Areas. These data were provided by the Washington Department of Natural Resources, and received by the Service in June 1997.

Spotted Owl Site Centers. These data were provided by the Washington Department of Fish and Wildlife, and received by the Service in August 1997.

## THE SITE PRIORITIZATION STRATEGY

The three criteria described above were combined into classes and then into a final prioritization strategy. The classes and strategy reflect our combined best professional judgement regarding the relative value of particular sites in light of their potential for short-term contributions to the species. The final strategy, indicated below, represents a consensus decision on the part of the working group. Table 1 illustrates the strategy with abbreviated definitions, for easier interpretation.

1AH > 1AM > 1BH > 1BM > 2AH > 2AM > 1A0 > 1CH > 1CM > 1B0 > 2BH > 2BM > 2A0 > 2CH > 2B0 > 2CM > 3AH > 3AM > 1C0 > 2C0 > 3BH > 3BM > 4AX > 4BX > 3A0 > 3B0 > 3CH > 3CM > 4CX > 3C0 > 5AX > 5BX > 5CX > 6AX > 6BX > 6CX > all others.

Sites were then placed into these classes using a GIS application. Prioritized sites, assigned to their classes, were then divided into five groups for the purpose of guiding harvest management, from highest priority (Group 1) to lowest priority (Group 5). Out of 234 "at-risk" sites, 66 met the requirements for placement in classes 1AH through 6CX and were placed in Groups 1 through 4 (Tables 2 and 3). Prioritized sites are presented by Region because DNR's timber harvest planning is conducted on a regional basis. The remaining 168 sites did not meet the ranking criteria, primarily due to small amounts of DNR-managed habitat, and were placed in Group 5 (Appendix A).

We recommend that the prioritization scheme be re-applied to "at-risk" sites as habitat typing is completed in each Region. In the Southwest Region, for example, DNR has completed field-typing of habitat according to the habitat definitions in the HCP. The results indicate that 12 out of 21 prioritized sites are no longer at risk of take due to their location within non-harvestable NRF Areas. Tables 2 through 5 do not reflect this, however, because our habitat data are based on earlier definitions.

### Site Management Recommendations

Harvest activities that degrade or remove habitat within an owl site should occur within Group 5 sites prior to Group 1 through Group 4 sites. Our strongest recommendation is to defer take of the 66 Group 1 through Group 4 sites for as long as possible. If impacts to valuable sites must occur, we recommend that management be scheduled in lower priority sites prior to initiation of harvest in higher priority sites. Harvest activities should focus on the fewest number of sites (either within or among priority groupings) rather than harvest occurring within a large number of sites. In addition, harvest should occur as far from the site center and as far from reserve lands as possible. Similarly, lower impact harvest (e.g. commercial thins and partial cuts) would be preferable to final entry harvests (e.g. clearcuts) both within an owl site as well as among sites of different priority status. We recognize that site specific knowledge may justify an alternate approach.

Table 1. The final scheme for prioritizing owl sites at risk of take due to DNR land management activities. Priority is listed from highest to lowest. The "Class" designation (first column) represents a combination of the three ranking criteria presented in the remaining columns: site location/status (second column); amount of DNR-managed habitat in the estimated home range radius (third column); and level of productivity (fourth column).

Class	Site Location/Status	DNR-Managed Habitat Quantity	Productivity
1AH	Status 1 Site overlaps harvestable NRF Area	≥40% in prov. radius and/or ≥500 acres in 0.7-mile radius	High
1AM	Status 1 Site overlaps harvestable NRF Area	≥40% in prov. radius and/or ≥500 acres in 0.7-mile radius	Moderate
1BH	Status 1 Site overlaps harvestable NRF Area	≥25% in prov. radius and/or ≥400 & <500 acres in 0.7-mile radius.	High
1BM	Status 1 Site overlaps harvestable NRF Area	≥25% in prov. radius and/or ≥400 & <500 acres in 0.7-mile radius.	Moderate
2AH	Status 1 site overlaps SOSEA & is outside NRF Area	≥40% in prov. radius and/or ≥500 acres in 0.7-mile radius	High
2AM	Status 1 site overlaps SOSEA & is outside NRF Area	≥40% in prov. radius and/or ≥500 acres in 0.7-mile radius	Moderate
1AO	Status 1 Site overlaps harvestable NRF Area	≥40% in prov. radius and/or ≥500 acres in 0.7-mile radius	Zero
1CH	Status 1 Site overlaps harvestable NRF Area	≥250 & <400 acres in 0.7-mile radius	High
1CM	Status 1 Site overlaps harvestable NRF Area	≥250 & <400 acres in 0.7-mile radius	Moderate
1BO	Status 1 Site overlaps harvestable NRF Area	≥25% in prov. radius and/or ≥400 & <500 acres in 0.7-mile radius.	Zero
2BH	Status 1 site overlaps SOSEA & is outside NRF Area	≥25% in prov. radius and/or ≥400 & <500 acres in 0.7-mile radius.	High
2BM	Status 1 site overlaps SOSEA & is outside NRF Area	≥25% in prov. radius and/or ≥400 & <500 acres in 0.7-mile radius	Moderate
2AO	Status 1 site overlaps SOSEA & is outside NRF Area	≥40% in prov. radius and/or ≥500 acres in 0.7-mile radius	Zero

2CH	Status 1 site overlaps SOSEA & is outside NRF Area	≥250 & <400 acres in 0.7-mile radius	High
2BO	Status 1 site overlaps SOSEA & is outside NRF Area	≥25% in prov. radius and/or ≥400 & <500 acres in 0.7-mile radius	Zero
2CM	Status 1 site overlaps SOSEA & is outside NRF Area	≥250 & <400 acres in 0.7-mile radius	Moderate
3AH	Status 1 site outside both SOSEA & NRF Areas	≥40% in prov. radius and/or ≥500 acres in 0.7-mile radius	High
3AM	Status 1 site outside both SOSEA & NRF Areas	≥40% in prov. radius and/or ≥500 acres in 0.7-mile radius	Moderate
1CO	Status 1 Site overlaps harvestable NRF Area	≥250 & <400 acres in 0.7-mile radius	Zero
2CO	Status 1 site overlaps SOSEA & is outside NRF Area	≥250 & <400 acres in 0.7-mile radius	Zero
3BH	Status 1 site outside both SOSEA & NRF Areas	≥25% in prov. radius and/or ≥400 & <500 acres in 0.7-mile radius.	High
3BM	Status 1 site outside both SOSEA & NRF Areas	≥25% in prov. radius and/or ≥400 & <500 acres in 0.7-mile radius.	Moderate
4AX	Status 2&3 sites overlap SOSEA & Dispersal or No-role Areas, & are outside NRF Areas.	≥40% in prov. radius and/or ≥500 acres in 0.7-mile radius	Not Applicable
4BX	Status 2&3 sites overlap SOSEA & Dispersal or No-role Areas, & are outside NRF Areas.	≥25% in prov. radius and/or ≥400 & <500 acres in 0.7-mile radius.	Not Applicable
3AO	Status 1 site outside both SOSEA & NRF Areas	≥40% in prov. radius and/or ≥500 acres in 0.7-mile radius	Zero
3BO	Status 1 site outside both SOSEA & NRF Areas	≥25% in prov. radius and/or ≥400 & <500 acres in 0.7-mile radius.	Zero
3CH	Status 1 site outside both SOSEA & NRF Areas	≥250 & <400 acres in 0.7-mile radius	High
3CM	Status 1 site outside both SOSEA & NRF Areas	≥250 & <400 acres in 0.7-mile radius	Moderate

4CX	Status 2&3 sites overlap SOSEA & Dispersal & No-role Areas, & are outside NRF Areas.	$\geq 250$ & $< 400$ acres in 0.7-mile radius	Not Applicable
3CO	Status 1 site outside both SOSEA & NRF Areas	$\geq 250$ & $< 400$ acres in 0.7-mile radius	Zero
5AX	Status 2&3 sites overlap harvestable NRF Areas	$\geq 40\%$ in prov. radius and/or $\geq 500$ acres in 0.7-mile radius	Not Applicable
5BX	Status 2&3 sites overlap harvestable NRF Areas	$\geq 25\%$ in prov. radius and/or $\geq 400$ & $< 500$ acres in 0.7-mile radius.	Not Applicable
5CX	Status 2&3 sites overlap harvestable NRF Areas	$\geq 250$ & $< 400$ acres in 0.7-mile radius	Not Applicable
6AX	Status 2&3 sites outside both SOSEAs and NRF Areas	$\geq 40\%$ in prov. radius and/or $\geq 500$ acres in 0.7-mile radius	Not Applicable
6BX	Status 2&3 sites outside both SOSEAs and NRF Areas	$\geq 25\%$ in prov. radius and/or $\geq 400$ & $< 500$ acres in 0.7-mile radius.	Not Applicable
6CX	Status 2&3 sites outside both SOSEAs and NRF Areas	$\geq 250$ & $< 400$ acres in 0.7-mile radius	Not Applicable

Table 2. State-wide ranking of at-risk owl sites. Sites were placed into five "Groups" (first column) for the purpose of prioritizing harvest management (see narrative). "State Rank" (second column) lists the statewide rank of the priority classes for which there were applicable sites. For example, there were no sites meeting the ranking criteria for class 1AH; consequently, the highest ranking sites in the state are in priority class 1AM. "Priority Class" (third column) is described in the narrative and in Table 1. "Site #," "Site Name," and "Legal" (fourth, fifth, and sixth columns, respectively) are based on WDFW information, received by the Service in August of 1997.

GROUP	STATE RANK	PRIORITY CLASS	SITE #	SITE NAME	LEGAL
1	1	1AM	648	FOREST CREEK	T03N R07E S08
1	1	1AM	667	STEEP CREEK	T03N R07E S18
1	1	1AM	740	OLE CREEK	T07N R05E S31
1	2	1BM	647	CARSON RIDGE	T03N R75E S13
1	2	1BM	792	HUFFMAN PK - N SIOUXON CR	T06N R05E S22
1	3	2AH	42	LOWER STEQUALEHO	T25N R10W S18
1	3	2AH	632	SMITH BUTTE	T06N R11E S03
1	3	2AH	828	BEAR CR - TROUT LAKE CR	T06N R10E S17
1	3	2AH	991	MILL CREEK - WHITE SALMON	T04N R10E S29
1	4	2AM	30	WILLOUGHBY RIDGE	T27N R11W S22
1	4	2AM	115	LOWER BEAR CREEK	T28N R13W S26
1	4	2AM	234	KUNAMAKST CREEK	T26N R11W S23
1	4	2AM	236	KALALOCH	T25N R13W S13
1	4	2AM	774	DAIRY CREEK NORTH FORK	T07N R12E S10
1	4	2AM	864	SOLLECKS RIVER	T25N R10W S11
2	5	1A0	302	BUDWEISER CREEK	T03N R07E S16
2	5	1A0	665	SPRING CREEK	T03N R07E S10
2	5	1A0	666	NORTH FORK ROCK CREEK	T03N R07E S06
2	5	1A0	759	SIOUXON CREEK LOWER	T06N R04E S27
2	5	1A0	945	ROCK CREEK - COLUMBIA	T03N R07E S07
2	5	1A0	1009	YALE LAKE NORTH	T07N R04E S35
2	5	1A0	1196	MOUNT MITCHELL	T06N R05E S10
2	6	1B0	765	RED BLUFFS	T03N R07E S33
2	6	1B0	839	PRESSENTIN CREEK LOWER	T35N R07E S36
2	7	2BH	653	NORTH SIOUXON CREEK	T06N R05E S14
2	7	2BH	875	WHITE SALMON RIVER	T05N R10E S11

2	7	2BH	1003	MOSS CREEK CAMPGROUND	T04N R09E S35
2	8	2BM	82	KLOOCHMAN	T25N R10W S03
2	8	2BM	734	DRY CR - WHITE SALMON R	T05N R10E S23
2	9	2A0	66	QUEETS CAMPGROUND	T25N R11W S36
2	9	2A0	669	OWL CREEK	T26N R10W S07
2	9	2A0	874	PHELPS CREEK	T05N R10E S28
2	10	2B0	19	ANDERSON RIDGE	T28N R13W S31
2	10	2CH	21	LAKE CREEK - SOLEDUCK	T29N R13W S08
2	10	2B0	78	SHALE CREEK	T25N R12W S36
2	10	2B0	95	UPPER STEQUALEHO	T25N R10W S21
2	10	2B0	262	UPPER CLEARWATER RIVER	T26N R10W S25
2	10	2CH	400	READE HILL	T28N R12W S31
2	10	2CH	1116	WIEBERG CREEK	T05N R10E S35
2	11	2CM	852	CAVE CR - TROUT LK VALLEY	T06N R10E S34
2	11	2CM	1011	GOAT PEAK	T20N R13E S36
2	13	3AM	645	BLUE MOUNTAIN	T16N R06W S35
2	12	3AH	836	WHISKEY CREEK	T30N R08W S06
2	13	3AM	741	SALT CREEK	T30N R08W S16
3	14	2C0	237	MINTER CREEK	T27N R13W S29
3	14	2C0	436	FRENCH CR - CHUMSTICK CR	T26N R18E S36
3	14	2C0	704	TACOMA CREEK EAST FORK	T25N R11W S35
3	14	2C0	1001	DAIRY CREEK - KCLICKITAT R	T07N R12E S14
3	15	4AX	652	YALE LAKE	T06N R04E S11
3	15	4AX	876	N SIOUXON CREEK LOWER	T06N R05E S17
3	16	4BX	1159	LEWIS RIVER - SWIFT DAM	T07N R05E S28
3	17	3B0	673	BOARDMAN CREEK	T29N R09E S04
3	18	3CH	307	MINERAL CREEK	T14N R06E S30
3	18	3CH	735	MILL CREEK - RATTLESNAKE	T04N R12E S20
3	19	3CM	1074	SNYDER SWALE	T04N R13E S07
4	20	4CX	1	WILLOUGHBY WEST	T27N R12W S21
4	20	4CX	1048	RATTLESNAKE CR - MILL CR	T05N R11E S36
4	21	3C0	650	WILLIAMSON CREEK	T29N R10E S06
4	21	3C0	779	BUCK KNOLL	T29N R05W S02
4	21	3C0	1085	LADIGES SPRING - KCLICKITAT	T06N R13E S36
4	22	6AX	799	ROCK CR - LAKE MERWIN	T06N R03E S08
4	22	6AX	849	DOG CREEK - LEWIS R	T07N R04E S29

4	22	6AX	880	ELOCHOMAN RIVER	T09N R05W S15
4	23	6BX	992	BEEKS CANYON	T05N R13E S23
4	23	6BX	1042	SEVEN CREEK - ELK CREEK	T13N R05W S18
4	24	6CX	962	JOHNSON CREEK - SEQUIM BAY	T29N R03W S07
5	168 SITES NOT MEETING THE RANKING CRITERIA (see Appendix A)				

Table 3. At-risk owl sites ranked by DNR Region. Sites were placed into five "Groups" (first column) for the purpose of prioritizing harvest management (see text). "Region Rank" (second column) lists the regional rank of the priority classes for which there were applicable sites. For example, in the Olympic Region, the highest ranking site is in Priority Class 2AH. "Site #," "Site Name," and "Legal" (third, fourth, and fifth columns, respectively) are based on WDFW information, received by the Service in August of 1997. "Priority Class" (sixth column) is described in the narrative and in Table 1. "State Rank" (last column) lists the statewide rank of the priority classes for which there were applicable sites.

OLYMPIC REGION						
GROUP	REGION RANK	SITE #	SITE NAME	LEGAL	PRIORITY CLASS	STATE RANK
1	1	42	LOWER STEQUALEHO	T25N R10W S18	2AH	3
1	2	30	WILLOUGHBY RIDGE	T27N R11W S22	2AM	4
1	2	115	LOWER BEAR CREEK	T28N R13W S26	2AM	4
1	2	234	KUNAMAKST CREEK	T26N R11W S23	2AM	4
1	2	236	KALALOCH	T25N R13W S13	2AM	4
1	2	864	SOLLECKS RIVER	T25N R10W S11	2AM	4
2	3	82	KLOOCHMAN	T25N R10W S03	2BM	8
2	4	66	QUEETS CAMPGROUND	T25N R11W S36	2A0	9
2	4	669	OWL CREEK	T26N R10W S07	2A0	9
2	5	19	ANDERSON RIDGE	T28N R13W S31	2B0	10
2	5	21	LAKE CREEK - SOLEDUCK	T29N R13W S08	2CH	10
2	5	78	SHALE CREEK	T25N R12W S36	2B0	10
2	5	95	UPPER STEQUALEHO	T25N R10W S21	2B0	10
2	5	262	UPPER CLEARWATER RIVER	T26N R10W S25	2B0	10
2	5	400	READE HILL	T28N R12W S31	2CH	10
2	6	836	WHISKEY CREEK	T30N R08W S06	3AH	12
2	7	741	SALT CREEK	T30N R08W S16	3AM	13
3	8	237	MINTER CREEK	T27N R13W S29	2C0	14
3	8	704	TACOMA CREEK EAST FORK	T25N R11W S35	2C0	14
4	9	1	WILLOUGHBY WEST	T27N R12W S21	4CX	20
4	10	779	BUCK KNOLL	T29N R05W S02	3C0	21
4	11	962	JOHNSON CREEK - SEQUIM BAY	T29N R03W S07	6CX	24

**NORTHEAST REGION: no records**

<b>NORTHWEST REGION</b>						
GROUP	REGION RANK	SITE #	SITE NAME	LEGAL	PRIORITY CLASS	STATE RANK
2	1	839	PRESSENTIN CREEK LOWER	T35N R07E S36	1B0	6
3	2	673	BOARDMAN CREEK	T29N R09E S04	3B0	17
4	3	650	WILLIAMSON CREEK	T29N R10E S06	3C0	21

<b>SOUTH PUGET SOUND REGION</b>						
GROUP	REGION RANK	SITE #	SITE NAME	LEGAL	PRIORITY CLASS	STATE RANK
3	1	307	MINERAL CREEK	T14N R06E S30	3CH	18

<b>SOUTHWEST REGION</b>						
GROUP	REGION RANK	SITE #	SITE NAME	LEGAL	PRIORITY CLASS	STATE RANK
1	1	648	FOREST CREEK	T03N R07E S08	1AM	1
1	1	667	STEEP CREEK	T03N R07E S18	1AM	1
1	1	740	OLE CREEK	T07N R05E S31	1AM	1
1	2	647	CARSON RIDGE	T03N R75E S13	1BM	2
1	2	792	HUFFMAN PK - N SIOUXON CR	T06N R05E S22	1BM	2
2	3	302	BUDWEISER CREEK	T03N R07E S16	1A0	5
2	3	665	SPRING CREEK	T03N R07E S10	1A0	5
2	3	666	NORTH FORK ROCK CREEK	T03N R07E S06	1A0	5
2	3	759	SIOUXON CREEK LOWER	T06N R04E S27	1A0	5
2	3	945	ROCK CREEK - COLUMBIA	T03N R07E S07	1A0	5
2	3	1009	YALE LAKE NORTH	T07N R04E S35	1A0	5
2	3	1196	MOUNT MITCHELL	T06N R05E S10	1A0	5
2	4	765	RED BLUFFS	T03N R07E S33	1B0	6
2	5	653	NORTH SIOUXON CREEK	T06N R05E S14	2BH	7

2	5	1003	MOSS CREEK CAMPGROUND	T04N R09E S35	2BH	7
3	6	652	YALE LAKE	T06N R04E S11	4AX	15
3	6	876	N SIOUXON CREEK LOWER	T06N R05E S17	4AX	15
3	7	1159	LEWIS RIVER - SWIFT DAM	T07N R05E S28	4BX	16
4	8	799	ROCK CR - LAKE MERWIN	T06N R03E S08	6AX	22
4	8	849	DOG CREEK - LEWIS R	T07N R04E S29	6AX	22
4	8	880	ELOCHOMAN RIVER	T09N R05W S15	6AX	22

### CENTRAL REGION

GROUP	REGION RANK	SITE #	SITE NAME	LEGAL	PRIORITY CLASS	STATE RANK
2	1	645	BLUE MOUNTAIN	T16N R06W S35	3AM	13
3	2	307	MINERAL CREEK	T14N R06E S30	3CH	18
4	3	1042	SEVEN CREEK - ELK CREEK	T13N R05W S18	6BX	23

### SOUTHEAST REGION

GROUP	REGION RANK	SITE #	SITE NAME	LEGAL	PRIORITY CLASS	STATE RANK
1	1	632	SMITH BUTTE	T06N R11E S03	2AH	3
1	1	828	BEAR CR - TROUT LAKE CR	T06N R10E S17	2AH	3
1	1	991	MILL CREEK - WHITE SALMON	T04N R10E S29	2AH	3
1	2	774	DAIRY CREEK NORTH FORK	T07N R12E S10	2AM	4
2	3	875	WHITE SALMON RIVER	T05N R10E S11	2BH	7
2	3	1003	MOSS CREEK CAMPGROUND	T04N R09E S35	2BH	7
2	4	734	DRY CR - WHITE SALMON R	T05N R10E S23	2BM	8
2	5	874	PHELPS CREEK	T05N R10E S28	2A0	9
2	6	1116	WIEBERG CREEK	T05N R10E S35	2CH	10

2	7	852	CAVE CR - TROUT LK VALLEY	T06N R10E S34	2CM	11
2	7	1011	GOAT PEAK	T20N R13E S36	2CM	11
3	8	436	FRENCH CR - CHUMSTICK CR	T26N R18E S36	2C0	14
3	8	1001	DAIRY CREEK - KLUCKITAT R	T07N R12E S14	2C0	14
3	9	735	MILL CREEK - RATTLESNAKE	T04N R12E S20	3CH	18
3	10	1074	SNYDER SWALE	T04N R13E S07	3CM	19
4	11	1048	RATTLESNAKE CR - MILL CR	T05N R11E S36	4CX	20
4	12	1085	LADIGES SPRING - KLUCKITAT	T06N R13E S36	3C0	21
4	13	992	BEEKS CANYON	T05N R13E S23	6BH	23

## LITERATURE CITED

U.S. Department of Interior. 1995. Endangered and threatened wildlife and plants; proposed special rule for the conservation of the northern spotted owl on nonfederal lands, proposed special rule. Fish and Wildlife Service. Federal Register Vol. 60:9484-9527. February 17, 1995.

Washington State Forest Practices Board. 1996. Final environmental impact statement on forest practices rule proposals for northern spotted owl, marbled murrelet, and western gray squirrel. Forest Practices Division, WDNR. Olympia, WA.

Washington State Forest Practices Board. 1997. Permanent rules for the northern spotted owl (1996) and marbled murrelet (1997). August 11, 1997. 38 pp.

APPENDIX A. Group 5 Sites: the 168 "at risk" owl sites that did not meet the ranking criteria.

<b>OLYMPIC REGION</b>			
<b>SITE #</b>	<b>SITE NAME</b>	<b>LEGAL</b>	<b>PRIORITY CLASS</b>
2	ALLENS BAY	T30N R15W S29	2D0
3	BEAR CREEK UPPER	T28N R12W S29	2DM
5	MAIDEN CREEK - MORSE	T29N R05W S28	3DM
11	CAMP CREEK	T29N R10W S05	3D0
12	OZETTE LAKE - SOUTH END	T29N R15W S09	4D0
15	HOH RIVER MILE 35	T27N R10W S24	2DH
18	DOGHAIR	T28N R03W S03	3DM
23	ELK CREEK	T28N R12W S17	2DH
27	GOODMAN CREEK - PACIFIC	T27N R14W S22	4DX
29	EAST FORK SIEBERT CREEK	T29N R05W S23	3D0
31	HARLOW CREEK	T25N R09W S04	2D0
43	MCDONALD MTN	T30N R07W S34	3DH
51	MORSE CREEK	T29N R05W S07	3DM
54	MT BALDY	T30N R08W S35	3DM
61	OWL MOUNTAIN	T26N R10W S12	2D0
71	NEILTON RIDGE	T22N R10W S13	3D0
80	W FK HUMPTULIPS LOWER	T22N R09W S13	3DH
87	SPRUCE CREEK - BOGACHIEL	T27N R11W S01	2D0
88	ENNIS CREEK UPPER	T29N R06W S10	3DM
89	THIRD BEACH TRAIL	T28N R15W S36	2DH
99	FAIRHOLM	T30N R09W S19	3DM
100	WEST TWIN CREEK	T27N R10W S20	2DH
104	DEVIL CLUB CREEK	T27N R12W S11	4DX
113	TUMWATA CREEK	T27N R11W S12	2D0
125	ELLEN CREEK	T28N R15W S09	2D0
127	MOSQUITO CREEK	T27N R14W S35	2D0
132	MADISON CREEK	T29N R07W S03	3D0
140	BARNES CREEK UPPER	T29N R08W S03	3DM
141	LAKE CREEK - MORSE CREEK	T29N R06W S11	3D0
146	SOUTH BRANCH LITTLE RIVER	T30N R06W S32	6DX
148	MORGANROTH CREEK	T28N R12W S33	2D0

151	SHUWAH CREEK	T29N R12W S18	2DH
152	COLD CREEK	T30N R12W S17	2DM
154	NORTH FORK SALMON	T24N R10W S19	2D0
158	SNOW CREEK	T28N R02W S08	3D0
169	COAL CREEK	T25N R10W S27	2D0
170	CARACO CREEK	T29N R04W S23	3DM
171	BIG QUILCENE RIVER	T27N R02W S33	3DM
182	TACOMA CREEK	T24N R11W S19	2D0
209	BOUNDARY	T21N R09W S01	3DM
265	SCHMITH KNOB	T29N R03W S29	3DH
298	PYRAMID MOUNTAIN	T30N R09W S28	3D0
299	FALLS CREEK-LK SUTHERLAND	T30N R08W S28	3DM
305	FLATBOTTOM CREEK	T22N R08W S32	3DM
401	SNIDER CREEK	T30N R11W S28	2D0
408	TOWNSEND CREEK	T27N R02W S20	3D0
410	JIMMYCOMELATELY CREEK	T29N R03W S24	3DM
438	LOWER DUCKABUSH RIVER	T25N R03W S11	3DH
646	BOUNDARY CREEK	T30N R09W S18	3DM
705	SOLEDUCK VALLEY	T30N R11W S31	4DX
706	MCDONALD CREEK	T29N R04W S16	6DX
708	MATHENY RIDGE WEST	T24N R15W S12	2D0
725	JOHNSON CREEK - PACIFIC	T29N R15W S32	2DM
726	SALMON CREEK	T29N R02W S31	3DM
731	QUEETS RIVER LOWER	T24N R12W S25	2DH
738	EAST FORK DICKEY RIVER	T29N R14W S22	6DX
742	LAKE ALDWELL	T30N R07W S22	3DM
755	EAST TWIN RIVER	T30N R10W S13	3DM
761	SCOTT CREEK	T27N R14W S07	4DX
768	JIMMYCOMELATELY CREEK-W.	T29N R03W S26	3DM
781	MT WALKER	T27N R02W S34	6DX
789	CLALLAM RIVER	T31N R12W S05	3DM
821	CEDAR CREEK - HOWE CREEK	T28N R02W S28	6DX
947	KLOSHE CREEK	T28N R11W S32	2DH
958	SOUTH FORK HOH LOWER	T27N R10W S36	4DX
960	COAL CREEK LOWER	T29N R15W S35	4DX
1063	HARLOW CREEK UPPER	T26N R09W S28	4DX

1065	MT BALDY WEST	T30N R08W S27	3D0
1083	ENNIS CREEK	T29N R06W S03	6DX
1124	JEFFERSON COVE	T26N R14W S12	2D0
1135	MAIDEN PEAK	T29N R05W S33	6DX
1160	NEWBURY CREEK	T21N R09W S06	3D0

**NORTHEAST REGION**

SITE #	SITE NAME	LEGAL	PRIORITY CLASS
627	WOLF CREEK - METHOW R	T35N R20E S35	6DX

**NORTHWEST REGION**

SITE #	SITE NAME	LEGAL	PRIORITY CLASS
138	WILSON CREEK - PILCHUCK	T29N R08E S14	6DX
495	MT HIGGINS	T33N R08E S25	2D0
525	IRENE CREEK UPPER	T35N R12E S30	2D0
528	MONOGRAM CREEK	T35N R12E S08	2DM
541	WANLICK CREEK	T37N R08E S31	2DH
543	WHITE CREEK	T34N R10E S26	1DH
561	CARROLL CREEK	T26N R12E S35	3DH
570	HARLAN CREEK	T26N R12E S08	6DX
671	SOUTH FORK NOOKSACK UPPER	T36N R07E S02	2DH
751	WHITE CREEK LOWER	T34N R10E S29	1DH
770	MILL CREEK - SKAGIT RIVER	T35N R07E S34	1D0
783	MALLARDY CREEK	T30N R09E S34	3D0
855	WALLACE CREEK	T38N R07E S29	3D0
878	SISTER CREEK-M FK NOOKSACK	T38N R06E S25	3D0
965	MILL CREEK UPPER	T34N R07E S03	1DM
967	PRESSANTIN CREEK EAST	T34N R08E S07	1D0
972	GREEN MOUNTAIN	T31N R08E S32	3D0
978	BOARDMAN LAKE	T30N R09E S31	6DX
983	JUG CREEK	T33N R11E S07	4DX
1017	QUARTZ CREEK - SKAGIT	T34N R08E S05	1D0
1043	WARM CREEK - NOOKSACK	T38N R07E S19	3DM

1084	STILLAGUAMISH M BR N FK	T34N R09E S34	4DX
1108	IRON CREEK - ILLABOT	T34N R10E S14	4DX
1185	BOULDER RIVER LOWER	T32N R08E S29	1DM

<b>SOUTH PUGET SOUND REGION</b>			
<b>SITE #</b>	<b>SITE NAME</b>	<b>LEGAL</b>	<b>PRIORITY CLASS</b>
4	BIG CREEK	T24N R04W S33	6DX
10	CABIN CREEK	T25N R04W S36	3DH
98	WASHINGTON CREEK	T24N R04W S23	3DH
276	WATSON CREEK	T24N R03W S05	3DH
552	PRATT RIVER	T23N R10E S18	3D0
557	TALAPUS LAKE	T22N R10E S10	2D0
686	CALLIGAN LAKE UPPER	T24N R09E S10	3D0
709	LEBAR CREEK	T23N R05W S34	3DH
710	DRY CREEK	T23N R05W S20	3DM
736	ALICE CREEK	T22N R09E S12	2DH
756	MT TAHOMA CANYON	T15N R06E S24	3D0
979	MINERAL CREEK LOWER	T15N R05E S36	3DM

<b>SOUTHWEST REGION</b>			
<b>SITE #</b>	<b>SITE NAME</b>	<b>LEGAL</b>	<b>PRIORITY CLASS</b>
180	MARTHA CREEK	T04N R07E S33	1DM
252	PEPPER CREEK	T07N R07E S20	3DM
289	MOSS CREEK	T04N R09E S28	2DM
303	KNOWLTON CREEK	T06N R02E S09	6DX
824	LITTLE WIND RIVER UPPER	T03N R09E S06	2D0
881	DRIFT CR LOWER - LEWIS R	T07N R06E S31	2D0
970	BERRY CREEK	T04N R09E S10	2DH
984	COLD CREEK - LEWIS R	T03N R04E S16	6DX

<b>CENTRAL REGION</b>			
-----------------------	--	--	--

SITE #	SITE NAME	LEGAL	PRIORITY CLASS
229	QUARTZ CREEK LOWER	T11N R06E S21	1D0
257	BEAVER CREEK	T11N R02E S16	6DX
453	NASELLE RIVER	T11N R08W S01	6DX
649	NEMAH RIVER	T11N R10W S01	3D0
693	BEAR CANYON	T13N R03E S08	4DX
758	ELLIS CREEK	T12N R07W S20	6DX
787	MOSS CREEK - NORTH RIVER	T15N R06W S22	6DX
877	UPPER MILL CREEK - WILLAPA	T13N R06W S21	3D0
948	COPPER CANYON	T11N R06E S18	1D0
980	ELLSWORTH CREEK	T10N R10W S03	6DX
1000	ROCK CREEK - CHEHALIS	T16N R05W S05	3DH
1008	SHIELDS CREEK - CHEHALIS	T13N R05W S22	6DX
1164	SURREY CREEK	T12N R07E S01	3D0

#### SOUTHEAST REGION

SITE #	SITE NAME	LEGAL	PRIORITY CLASS
272	CABIN CREEK - YAKIMA	T20N R13E S19	2DM
284	MONTE CRISTO	T05N R10E S20	2DM
320	INDIAN CREEK	T21N R16E S14	2DH
336	JUNGLE CREEK SOUTH	T21N R15E S01	2DM
348	JUMPOFF MEADOWS	T13N R14E S02	3DH
391	BIG CREEK LOWER	T20N R14E S30	2DM
393	GREEK CREEK	T19N R13E S02	2D0
399	YELLOW HILL	T21N R15E S17	2DH
459	MILL CR - LITTLE KCLICK	T06N R15E S27	3DH
465	COUGAR CREEK - KCLICKITAT	T08N R12E S31	2D0
662	MANASTASH LOWER	T18N R15E S35	2DM
690	GILMER CREEK	T05N R11E S22	2DH
724	POISON CANYON	T23N R18E S23	3DH
729	RYE CREEK	T21N R15E S13	2DH
730	LARSON CREEK - PESHASTIN	T23N R18E S09	2DH
733	HIGH CREEK - NANEUM CR	T20N R19E S28	3DH
744	ORSO CREEK	T20N R16E S17	2D0

53	GILMER CREEK SOUTH	T05N R11E S34	2D0
773	DOMERIE CREEK	T21N R13E S36	4DX
86	TEANAWAY RIDGE LOWER	T20N R17E S16	3D0
815	DRY CREEK S - NILE	T16N R14E S36	6DX
816	PEARSON CREEK	T21N R19E S29	3DH
817	SHIRK CREEK	T21N R16E S20	2DH
856	TEANAWAY MIDDLE FORK	T21N R15E S10	2DM
956	CAMAS PRAIRIE	T05N R11E S11	6DX
970	BERRY CREEK	T04N R09E S10	2DH
987	COLOCKUM CREEK SOUTH FORK	T20N R21E S05	6DX
1004	RATTLESNAKE CR - HUSUM	T04N R11E S15	4DX
1010	EASTON RIDGE	T20N R14E S08	2D0
1012	NORTH RIDGE	T19N R13E S02	2D0
1091	HORNET RIDGE - MAD RIVER	T27N R19E S31	3DM
1106	WELLENBROCK SPRING	T06N R13E S29	6DX
1107	HORNET RIDGE	T26N R19E S05	3DH
1125	RAILROAD CANYON	T25N R18E S02	4DX
1126	SUGARLOAF PEAK	T26N R18E S11	2D0
1148	KACHESS RIDGE	T21N R13E S27	4DX
1149	FEATHERBED CREEK	T06N R15E S08	3D0
1150	KAISER BUTTE	T06N R14E S13	3D0
1187	POT PEAK	T28N R20E S11	3D0

