

**LANDOWNER OPTION PLAN
For the Northern Spotted Owl
WAC 222-16-100**

Proponent:
Murphy at Loch Kachess LLC
Brian E. Murphy, principal
3121 Broadway East
Seattle, WA 98102

Location:
T21N, R13E, Section 27, lot 1, 2 and 5
Kittitas County, Washington

Introduction

The northern spotted owl (*Strix occidentalis caurina*) was listed by the U.S. federal government as a threatened species in 1990. It is currently considered an endangered species by the State of Washington. The Washington Forest Practices Board, under the Washington State Department of Natural Resources (DNR), is charged to establish by rule which forest practices in the state have the potential for a substantial impact on the environment and therefore require further environmental review under the State Environmental Policy Act (SEPA). Forest practices that require such review are classified as Class IV-Special. Harvest of timber within areas of spotted owl habitat, specifically within 1.8 miles of an activity center of a status 1-3 spotted owl pair in landscapes that contribute to the well-being of the species, is likely to lead to a designation of the harvest as a Class IV- Special.

In 1996, the Forest Practices Board published *Permanent Rules for the Northern Spotted Owl* (DNR 1996). Under the rules and regulations adopted in this announcement was WAC (Washington Administrative Code) 222-16-100 "Planning Options for the Northern Spotted Owl: (1) Landowner Option Plans for the Northern Spotted Owl." Known as an LOP, this option is a voluntary planning mechanism available to landowners currently impacted by rules designed to minimize impacts to spotted owls. Forest practices consistent with the approved plan are exempt from further SEPA (State Environmental Policy Act) regulations in regard to northern spotted owl issues.

An LOP is defined as follows (DNR 1996):

Landowner option plans are intended to provide landowners with a mechanism, entered into voluntarily, to contribute to the protection of northern spotted owls by considering the needs of overall population maintenance or dispersal habitat across a defined geographic area. Forest practices applications that are in an area covered by an LOP, and that are consistent with the LOP, will not be classified as Class IV-Special on the basis of critical wildlife habitat (state) or

critical habitat (federal) for the northern spotted owl. This does not preclude classification as Class IV-Special because of the presence of other factors listed in WAC 222-16-050(1).

The landowner option plan is an alternative to traditional owl site-center management and is available to both large and small landowners to provide more flexibility to meet management goals than is provided under the standard owl regulations. As stated in the forest practices rules, the plan should be developed by the landowner and approved by the DNR in consultation with the Washington Department of Fish and Wildlife (WDFW). This LOP is meant to result in such an arrangement between Murphy at Loch Kachess LLC, the DNR, and WDFW.

In 2008 the USFWS agreed to move the Spotted Owl NFR Deferral Area in the Plum Creek HCP (located on the proponent's land) to another location (out of this section) since there was no evidence of Spotted Owl activity for nearly ten years at the site and in order to be able to sell the parcel as unencumbered by Plum Creek's HCP. This change was deemed to be either neutral or beneficial to the Northern Spotted Owl (see supplemental information section for additional information).

This proposal is on the outer portion of the 1.8 mile circle for the Silver Creek Spotted Owl circle (#332) and is within 0.7 miles of the activity center of the Kachess Ridge Spotted Owl site (#1148). Both circles have been habitat typed via aerial photography in the last three years with some follow up ground truthing of the typed habitat data.

Both circles are below habitat thresholds. The Silver Creek owl has been mapped at 30% habitat and the Kachess Ridge owl has been mapped at 27% habitat. However, nearly 1600 acres of the Kachess Ridge Spotted Owl circle lie within Lake Kachess. The proposal area contains some habitat as described below. As of this date, both Spotted Owl sites are regulated by the Forest Practices Rules and Regulations.

Narrative

Murphy at Loch Kachess LLC, a State of Washington Limited Liability Company, is the ownership entity of the parcels. Brian and Kathryn Murphy, the only principals of the corporation, purchased the land in 2008 and 2009. The Murphy's goal for the LOP is to ensure regulatory certainty for current and future owners of the 176.3 acres under the ownership of Murphy at Loch Kachess LLC.

The goal of the LOP is to identify current Spotted Owl Habitat and ensure that the Spotted Owl Habitat is enhanced during the term of this agreement. During the term of this agreement, the applicants anticipate increasing the Spotted Owl Habitat to more than 100 acres and will minimize the harvest of Spotted Owl habitat.

Of the 176.37 acres, approximately 70 acres have been identified as Spotted Owl habitat by WDFW biologists. The habitat assessment occurred during site visits on September 3 and October 23, 2008, and June 1, 2009. Lots 2 and 5 contain about 67 acres of Spotted Owl habitat

and lot 1 contains 4 acres of Spotted Owl habitat and is described below. All the lands within this LOP are private, non-federal lands. All the habitat protection area outside the development area will contribute to meeting SOSEA goals. This will be done by maintaining most of the current habitat that is above the Forest Service road and by allowing for the recruitment of spotted owl habitat from forest that is currently non-habitat to each of the two spotted owl circles that are currently under habitat thresholds. Some of the non-habitat acreage that is protected under this agreement will grow and become habitat over the next 15 to 25 years. Some of the non-habitat area above the road is steep, rocky talus slopes that will never become habitat.

The area of the parcels that contains Spotted Owl habitat is limited to the following:

Gov. Lot 1: The area 200 to 250 feet north of the stream (southern boundary line) and below Forest Service Road 4818 (mapped Lot 1 Hab), additionally the area 100 to 150 feet north of the stream and above the road. The entire Spotted Owl habitat lies adjacent to the southern property line boundary. The Spotted Owl habitat area totals approximately 6 acres of the 41.25 acre parcel, or roughly 14.5% of the parcel's acreage.

Gov. Lot 2 and 5: Per map generated by Gary Bell and Joe Buchanan of WDFW dated 7/30/2009, habitat totals 72.8 of 136 acres. This map is attached. The actual spotted owl acreage is less since the map includes acreage not under the applicant's ownership and includes some acreage in Lot1.

Topographical Description

The property is on south and southwest facing aspect slopes adjacent to Kachess Lake. The terrain slope near the lake is generally less than 20% and transitions to an area with slopes up to 70% or more at and near the eastern property line which includes an area of rock outcrops. The elevation ranges from 2200' at the lake's edge to 3800' on the eastern property line. There are unstable features on the upper slopes as well as on the type F stream gorge inner slopes that are from 10 to 15 feet high. Most slopes below the Forest Service road are timbered with mature forest and both mature and smaller second growth forest are present above the road. No timber harvest will occur on any of the unstable features.

Goals and Objectives of the Landowner Option Plan

The goals for the LOP are, (1) allow the greatest flexibility for the landowners to accomplish their current and future plans, and (2) to contribute to the conservation of Northern Spotted Owls by considering the needs of overall population maintenance or dispersal habitat. The second goal will be accomplished by protecting additional non-habitat acreage outside of the harvest area therefore allowing that non-habitat acreage to become spotted owl habitat during the term of this agreement. The LOP will allow for timber harvest in Spotted Owl habitat including; 7 acres of Spotted Owl habitat in the Development Area (T-1), 3.44 acres of Spotted Owl Habitat (T-2)

2.14 acres of Spotted Owl habitat in harvest unit T-3, and thinning of 2.67 acres of Spotted Owl habitat (T-4) as long as it (T-4) is maintained as Spotted Owl habitat.

The applicant seeks relief from timber harvest restrictions on no more than 13.88 acres of Spotted Owl habitat and will protect an additional 31.54+ acres of non habitat (M-1, M-2, M-3, and M-5) that is likely to become suitable Spotted Owl habitat in the next 15 to 25 years. The applicant seeks to harvest on a total of 64.97 acres (this includes no more than 13.88 acres of current Spotted Owl habitat described above); 47.74 acres of non habitat (units) to be harvested in 2011 to 2013 and 17.23 acres of non habitat (units) to be harvested in the 2025 to 2035 period.

Long Term Plans for Parcels (Government lots) 1, 2, and 5

The long term plans for the entire 176.37 acres include the following and is mapped on the attached "Management Units" map:

- 1) Mapped T-1, approximately 7 acres of Spotted Owl habitat, (5.82 acres), would be devoted to 3 building sites. This area (Development Area) is west of FS4818 and south of the F-type stream. The stream has been classified by WDFW as less than 15 feet Full Bank Width. No harvest within the 110 foot RMZ south of the stream will be allowed, with the exception of hazard trees. Building structures will be prohibited within 120 feet of the stream. Driveways are not permitted within 110 feet of the stream. 5.82 acres are mapped in planning area T-1, the applicant recognizes some hazard trees may need to be removed, therefore allowing an additional 1.18 acres is reserved for this purpose. Area T-1 will be converted from commercial forestland use to residential use. At the sole discretion of the current owner, the current owner may elect to move one building site from T-1 to T-3; T-3 would then be converted from commercial forestland use to residential use.
- 2) Mapped H-1, T-2 and T-3, 31.82 acres, may be harvested starting in 2011. This unit of 31.82 acres includes 24.78 acres of non Spotted Owl habitat (H-1) and 5.58 acres of current Spotted Owl habitat (T-2 and T-3). The proponent selected T-2 for harvest, realizing the risk of damaging this habitat by harvesting the surrounding non habitat in H-1. There is a 110 foot RMZ reserved for non harvest along the stream.
- 3) Mapped T-4, 2.67 acres, harvest is limited to thinning while maintaining T-4 as Spotted Owl habitat, as agreed to during the site visit with DNR and WDFW representatives on May 13, 2011. Thinning must be conducted in such a way that maintains at least one of the following three owl habitat types: Sub mature, old forest, or young forest marginal. These are described in the forest practices rules WAC 222, and should be simply described by making reference to the WAC. For the purposes of this agreement, T-4 is neither mitigation nor Take acreage.
- 4) Mapped H-2, this unit is approximately 10.38 acres, can be harvested in starting in 2011 or during the term of this agreement. This unit is 8.51 acres of non Spotted Owl habitat and 1.3 acres of Spotted Owl habitat from the area mapped Lot1 Hab.

- 5) Mapped H-3, this unit is approximately 17.23 acres, will be harvested between 2025 and 2035. This unit is non Spotted Owl habitat. Timber harvest is prohibited in the 110 foot RMZ along the stream. Timber harvest access will be allowed via an existing logging road that crosses the stream at an elevation of approximately 2540 feet. Crossing of the stream will be subject to current Forest Practice rules and Hydraulic Project Approval requirements at the time of harvest.
- 6) For the term of this agreement, the total current Spotted Owl habitat take during the term of this agreement will be limited to 13.88 acres; this Spotted Owl take area is mapped T-1, T-2, T-3 and 1.3 acres of Lot1 Hab.
- 7) For the term of this agreement, the total current non Spotted Owl habitat reserved for protection or mitigation (no timber harvest allowed) is 31.54 acres; this planning area is mapped:
 - i) M-1 (a,b,c,d,e,f), 14.5 acres,
 - ii) M-2 and M-2 RW, 12.07 acres
 - iii) M-3, 1.53 acres
 - iv) M-5, 3.44 acres

Much of the non-habitat acreage (M-1(a, b, c, d, e, and f), M- 2, and M- 3 and M-5) will grow and become habitat should become suitable habitat during the term of this agreement.

- 8) Additional mitigation includes harvest opportunities within the stream RMZ but is not considered in the mitigation acreage calculations. The owners have voluntarily elected not to harvest as much as 3 to 4 acres within the RMZ; even though harvest would be allowed under normal Forest Practice rules.

Addition mitigation includes M-4 and M-6, totaling 7.86 acres. M-4 and M-6 may be thinned as long as these units meet Forest Practice and RMZ rules. M-4 and M-6 are not considered in the mitigation acreage calculations, even though any harvest is likely to be minimal and the result of the harvest would not adversely impact any Spotted Owl Habitat.
- 9) All acreage with the “M” designation (excepting M-4 and M-6) is mitigation acreage; totaling 31.54 acres. All acreage with the “T” designation is Spotted Owl Take acreage; totaling 13.88 acres.
- 10) A temporary 1500 foot access logging road to a landing in harvest area H-1 will be built. This logging road will be approximately 600 feet long and 60 feet wide through M-2 (mapped M-2 RW). The location of the M-2 RW road through M-2 may vary depending on terrain but will be limited to the 600’ X 60’ footprint. 1 acre is allocated for this road. Access to the road from FS 4818 will utilize an existing skid road that connects to FS 4818, located at UTM 10T, 0636385, 5238169. Note that the M2 RW bears north off the forest service road farther south than where the existing spur jumps up the hill. The map was drawn this way to allow for the most horizontal length possible to help with hitting the landings on an acceptable grade. At the conclusion of the harvest of unit H-1, the road will be blocked to access and abandoned.

Mitigation of Adverse Impacts

There are an estimated 70 plus acres of Spotted Owl habitat on the proponent's land, all of which is within the .7 mile radius of the site center. On the map, this acreage is indicated with an (SO) symbol or all green shaded areas.

All 7 acres of the proposed Development Area are Spotted Owl habitat. This agreement allows for timber harvest in the Development Area (T-1) as described above. The land between T-1 and Lake Kachess is not owned by the proponent.

An additional 57.97 acres (unit H-1, T-2, H-2, H-3, and T-3) are scheduled for timber harvest over the term of this agreement; 50.09 acres are currently non Spotted Owl habitat and 7.88 acres are current Spotted Owl habitat.

No more than 13.88 acres of current Spotted Owl habitat will be harvested during the term of this agreement. Approximately 31.54 acres of non Spotted Owl habitat are reserved to become Spotted Owl habitat; these 31.54 acres represent the mitigation acreage in the agreement.

The 31.54 acres of mitigation acreage are mapped as M-1(a, b, c, d, e, and f), M- 2, M- 3, and M- 5. The proponent selected this acreage attempting to keep the current Spotted Owl habitat contiguous with future additional Spotted Owl habitat.

- A. M-1a (10.26 acres) is comprised of approximately 75% Douglas fir, 25% grand fir. The trees are an even aged stand naturally regenerated from fire, which has had very little disturbance subsequent to the fire. It is topographically more protected than the stands facing the lake of similar age, so that there has been less opportunity for windfall. As such the stand in M-1a remains in the stem exclusion stage of development, but is anticipated to enter the understory re-initiation stage of development soon, as the stand is differentiating (i.e. dominant/co-dominant trees are expressing dominance over intermediate/suppressed trees). In other words, the stand should be opening up as intermediate and suppressed trees die, allowing light into the understory for the development of understory trees (second canopy layer) which will develop over time.
- B. M-1b, c, d, e, and f (4.24 acres) are adjacent to identified current Spotted Owl habitat and have the potential to function as dispersal habitat. Some of it may meet the definition of Spotted Owl habitat in the coming several decades.
- C. M-2 and M-2 RW (12.07 acres). An estimated 30 years ago, approximately half of the trees in this acreage were selectively logged out of the stand. Defective large and moderately sized trees were left on site as seed source for regeneration. Defects include seams on the bole, crook/fork/sweep, and dwarf mistletoe. There are now a minimum of two age classes of trees growing in this area. Over the long term, the multiple age classes, presence of defect, and species composition (Doug-fir, grand fir, western hemlock) put this stand on a trajectory for becoming valuable wildlife habitat in the future. M-2 RW provides a logging road access to harvest area H-1 and will be abandoned after harvest.

- D. M-3 (1.53 acres) was clear cut approximately 20 years ago as part of a larger harvest on neighboring property. Although 1.53 acres represents a relatively small area, the potential to function as dispersal habitat exists in the long term.
- E. M-4 (3.36 acres) contains two or three small areas of Spotted Owl habitat interspersed with forest that lack structural complexity – mainly due to the presence of small pockets of diseased trees (e.g. root rot). Patches in this area lack structural complexity, are not currently suitable Spotted Owl habitat, and may become suitable Spotted Owl habitat sometime in the future. Regardless, this area will continue to function as dispersal and foraging habitat and may complement the adjacent Lot1 Hab area reserved as habitat. Limited harvest will not adversely affect the potential Spotted Owl habitat. Some thinning of this area will be allowed during the term of this agreement. However, given the proximity to the lake only trees adjacent to FS4818 road could be harvested. Even though M-4 will remain largely protected, is not considered as mitigation acreage in the mitigation acreage calculations.
- F. M-5 (3.44 acres) is close to becoming Spotted Owl Habitat and is similar to M-1a. The proponent selected M-5 as suitable additional mitigation for the harvesting of area T-2 and for the selective thinning of areas T-4, M-4 and M-6. This agreement was made during the site visit with the proponent and DNR and WDFW representatives on May 13, 2011.
- G. M-6 (4.5 acres) is considered Spotted Owl habitat. Some thinning of M-6 will be allowed during the term of this agreement. However, given the proximity to the lake only trees adjacent to FS4818 road could be harvested. Limited harvest will not adversely affect the Spotted Owl habitat. Even though M-6 is largely protected, is not considered as mitigation acreage in the mitigation acreage calculations.
- H. Some areas in the RMZ along the stream above FS 4818 road are not current Spotted Owl habitat. However the proponent has reserved the entire RMZ of 110 feet to further protect and enhance existing Spotted Owl habitat on both sides of the stream. This area may compensate for the disturbance created by the logging access road M-2 RW.

For the purpose of this agreement, the following describes the 176 acres;

- A. Up to 65 acres are scheduled for timber harvest, including up to 13.88 acres of current Spotted Owl habitat
- B. More than 60 acres of current Spotted Owl habitat will be maintained,
- C. 31.54 acres of potential future Spotted Owl are protected as mitigation,
- D. Less than 17 acres are identified as non-habitat area that will never become habitat (steep, rocky talus slopes).

As described above, DNR and WDFW have agreed and confirmed that appropriate mitigation for a project of this type is to identify and set aside a minimum of two (2) acres of non habitat for the Spotted Owl for every one (1) acre of habitat that is available to harvest under the proposal. The

2:1 mitigation principle is followed under this plan: 13.88 acres may be cut (likely less) and more than 31.54 acres of non-habitat will be protected under this proposal. In addition, some 60 acres will also remain as Spotted Owl habitat. The proposed mitigation under this proposal is significantly greater than the required 2 acres of non habitat protected to every 1 acre of habitat harvested, easily exceeding the minimum 2:1 mitigation ratio.

Term of the Landowner Option Plan

This LOP shall apply (as set forth above) for the length of the agreement set forth below. Once the LOP is fully executed the landowner may terminate this LOP with {30} days notice to DNR and WDFW in the event that a subsequent protocol survey concludes that the Northern Spotted Owl site location that is the subject of this agreement has moved or has been abandoned such that the land that is the subject of this agreement is no longer within 0.7 miles of the activity center, or if the Northern Spotted Owl is removed from Threatened or Endangered Species list.

In the event that this LOP is terminated as provided above, any timber harvest or other forest practices activities would revert to standard FP rules and regulations.

In the event of a catastrophic loss of habitat due to fire, insects, disease, or other events outside of the landowner's control, fault, or negligence, the parties may modify this agreement. Catastrophic loss would not include any activity required to reduce the spread of wildfires such as fire breaks on either habitat or mitigation acreage. For the purposes of this agreement a "catastrophic loss of habitat" is a loss in which the habitat is made completely unsuitable for habitation by the Northern Spotted Owl.

In the event that results of a protocol survey indicate that the Northern Spotted Owl site location subject to this Agreement has moved such that the landowner is no longer within 0.7 miles of the activity center or has been abandoned and a formal decision is made to recognize the site as abandoned.

The Department of Natural Resources, Department of Fish and Wildlife and the landowner may mutually agree at any time to terminate this agreement.

Modification

In the event that landowner elects to harvest timber beyond that which is allowed in this agreement, DNR and WDFW and the landowner shall agree to the proposed modification prior to approval of a Forest Practices Application for this purpose.

Duration of the LOP

The duration of the LOP shall be 50 years.

Agreement to Run with the Land

The terms and conditions of this agreement shall run with the land for the duration of this agreement, and shall be binding upon all subsequent owners of all property subject to this agreement. Terms of this LOP will be registered on the deeds for the properties involved.

Monitoring and Reporting

Once the proposed activities (including but not limited to: clearing of forest and construction of driveways, cabins and associated structures such as out-buildings or pump houses) are completed no additional significant timber harvest activities are planned in the 7 acre development area T-1 that would require further monitoring or reporting.

Access to the site to monitor habitat growth in the mitigation area is granted under this agreement to DNR and WDFW.

Questions regarding this LOP should be addressed to the proponent.

Supplemental Information

There is a substantial amount of NRF or demographic support habitat in Sections 13, 14, 15, 16, 22, 23, and 24 to the north and northeast, and Sections 25, 26, 35 and 36 to the east and south east, all of which is now owned by the U.S. Forest Service and is therefore managed under the Northwest Forest Plan.

The US Fish and Wildlife Service stated in 2008, "The US Fish & Wildlife Service considers Plum Creek's surveying to provide a good indication of whether a site is occupied and noted that 59 acres of the 136 acres proposed for removal [from the HCP] is currently in a NRF deferral area (dispersal habitat) supporting a site that has been vacant for 10 years (referring to the Kachess Ridge Spotted Owl #1148). We believe that the reallocation of the deferral area will be either neutral or beneficial for northern spotted owls. The new deferral area would help support two recently occupied sites. We therefore approve of your reallocation of the NRF deferral. We believe that the removal of 136 acres will have minimal effects on covered species. The parcels are adjacent to other ownerships with recreational development either present or anticipated, and are on the margin of the HCP area."

The US Forest Service has recently indicated plans to harvest timber units on neighboring parcels thought to be protected under the Northwest Forest Plan. The actual harvest unit's locations and acreage is unknown. The proponent believes some harvest will occur as early as 2011.

Seasonal Disturbance Avoidance for Spotted Owls

Road construction, operation of heavy equipment and blasting on the proponent's property as described above, for the purposes of the described activities, may take place throughout the year and are not subject to disturbance avoidance requirements during owl nesting seasons as described in WAC 222-24-030 (10) (b) and WAC 222-30-070 (9) (b).

The individuals whose signatures appear below confirm that they have read and understand this entire document and further confirm that they are fully authorized to execute this Landowner Option Plan as representatives of the identified entities.

Dated this 27th day of July, 2011

Department of Natural Resources
State of Washington

Southeast Asst. Rgn Mgr - RP&S

By Koshare V. Eagle
Authorized representative

Murphy at Loch Kachess, LLC

BRIAN E. Murphy

By: Brian E. Murphy
Authorized representative

