

Green Diamond Resource Company

Proposed Amendments to the Habitat Conservation Plan for the Northern Spotted Owl on the California Timberlands of Green Diamond Resource Company

August 24, 2006

I. Introduction and Background

On September 17, 1992, the United States Fish & Wildlife Service ("FWS") issued an incidental take permit ("ITP") to Simpson Timber Company and its subsidiaries based on an approved Habitat Conservation Plan for the Northern Spotted Owl on the California Timberlands of Simpson Timber Company (the "NSO HCP"). The NSO HCP is now the responsibility of Green Diamond Resource Company, which owns the California Timberlands managed under the NSO HCP. Green Diamond Resource Company was previously known as Simpson Resource Company, a former subsidiary of Simpson Timber Company.

The NSO HCP and ITP were issued for a period of 30 years with a comprehensive review scheduled after the first 10 years of the plan. The purpose of the comprehensive review was to evaluate the efficacy of the northern spotted owl conservation measures in the plan. In addition, the comprehensive review was to address the need and timing of any subsequent comprehensive review and the permit-holder's need for additional authorization of owl displacement.

In 2002, the FWS extended the time for comprehensive review because the actual owl displacements under the plan were less than anticipated during the first ten years of plan implementation and the scientific quality of the comprehensive review would be enhanced by providing additional time for Green Diamond's research in cooperation with the FWS.

In 2005, Green Diamond completed the initial research on the efficacy of the NSO HCP conservation measures, and it submitted a phase one comprehensive review report to FWS on January 13, 2006 (the "Comprehensive Review"). The Comprehensive Review is attached hereto as Appendix A. As a result of the Comprehensive Review, Green Diamond is proposing amendments to the NSO HCP and ITP issued pursuant to Section 10(a)(1)(B) of the ESA. This document describes the proposed amendments and the justification for each proposed amendment.

II. Proposed Amendments and Justification

Green Diamond proposes to amend four areas of the NSO HCP, ITP, and Implementation Agreement ("IA"); the special management area, the research program, the periodic review, and the incidental take authorization.

Under the proposed amendments, Green Diamond would: (1) reestablish a special management area of 20,310 acres; (2) initiate new research on the habitat overlap and interaction between the barred owl and northern spotted owl; (3) submit an updated comprehensive review by plan-year twenty (2012) on the efficacy of the conservation measures and the status of habitat overlap and interaction between the northern spotted owl and barred owl; and (4) be authorized to displace up to eight northern spotted owl pairs in addition to the currently permitted displacement of 50 owl pairs as authorized by an approved ITP issued on September 17, 1992.

With the exception of the reestablished special management area and the proposed initiation of research and reporting on the interaction between the northern spotted owl and barred owl, Green Diamond does not propose an amendment to the conservation measures in the NSO HCP. The amount of habitat 46+ years old continues to increase over the remainder of the ITP term. Conservation and mitigation measures continue to include habitat management, nest site protection, research, set-asides (timber harvest eliminated from 13,242.5 acres), and training programs.

Green Diamond does not propose an amendment to the ITP area, but the authorization of eight additional northern spotted owl pair displacements proposed by Green Diamond would be restricted to that portion of the permit area that is within the permit area of the Aquatic Habitat Conservation Plan / Candidate Conservation Agreement with Assurances proposed by Green Diamond and pending for approval by the FWS and National Marine Fisheries Service. Green Diamond does not propose to amend the ITP term.

A. Reestablish Special Management Area

At the inception of the NSO HCP, Green Diamond's predecessor, Simpson Timber Company, was required to establish a 36,500-acre "Special Management Area" or "SMA" for the first ten years of the ITP term. No take was permitted within the SMA and certain monitoring and resource protection measures were required in the SMA. The SMA obligation expired in 2002.

In 2002, Green Diamond became the owner of property within the SMA. After 2002, Green Diamond sold a substantial portion of the property included in the original SMA. Approximately 20,310 acres of the original SMA remain in Green Diamond ownership.

Green Diamond proposes to reestablish the SMA and its restrictions and monitoring obligations for 20,310 acres of forest land that remain in Green Diamond ownership. The legal description of the reestablished SMA is provided in the proposed First Amendment to the Implementation Agreement attached hereto as Appendix B. The limitations on use of the SMA and the monitoring requirements would continue to be the same SMA limitations and requirements included in the original NSO HCP when it was approved. The reestablished SMA obligations would continue until the twentieth anniversary of the NSO HCP.

B. Initiation of Research on Northern Spotted Owl and Barred Owl Habitat Overlap and Interaction

Green Diamond proposes an amendment to the NSO HCP program to initiate research on the habitat overlap and interaction between the northern spotted owl and barred owl. This research is recommended by Green Diamond and requested by FWS to evaluate the potential effect of barred owl presence on northern spotted owls in the plan area.

The range of the barred owl has expanded across the northern part of the North American continent and now appears to almost completely overlap that of the northern spotted owl. Due to their larger size and apparently more aggressive behavior, barred owls have been recognized as a potential threat to northern spotted owl populations (Gutiérrez et al. 2004). The FWS (2004) has found that barred owls may pose a significant threat to northern spotted owls because of competition for nest sites, territory, and prey items, and because of potential predation of barred owls on spotted owls. However, further research regarding this topic is required before definitive conclusions can be drawn about the nature of interactions between these two owl species, including those interactions on managed landscapes such as Green Diamond's ownership. Because of the potential threat posed by barred owls, additional research on habitat overlap and interaction between the barred owl and spotted owl on Green Diamond lands should lead to a better understanding of how barred owls may affect future management for NSO on commercial timberlands.

Because little scientific data exists for barred owls on Green Diamond lands, the research program will likely involve surveys for and radio marking (telemetry) of barred owls. Telemetry will provide opportunities to collect data on habitat selection, home range, diet, and competitive interactions between barred owls and spotted owls on Green Diamond lands. The USFWS (2006) has convened a team to develop a recovery plan for the northern spotted owl, which will identify goals, criteria and management actions necessary for the survival and recovery of the northern spotted owl. This plan is expected to address barred owls in the context of northern spotted owl recovery. A final peer-reviewed recovery plan is scheduled for completion in November 2007. Green Diamond's research and

management program on the barred owl will be consistent with recommendations identified in the final northern spotted owl recovery plan.

C. Comprehensive Review Update Plan-Year Twenty (2012)

The NSO HCP, as initially approved, requires a Comprehensive Review in plan-year ten. Among the requirements for the Comprehensive Review is a determination whether subsequent comprehensive reviews are needed and, if so, the timing for review.

Green Diamond proposes an updated Comprehensive Review by plan-year twenty (2012). The updated Comprehensive Review will address: (1) a comparison of actual and estimated levels of displacement; (2) a comparison of actual and estimated distribution of spotted owl habitat; (3) a reevaluation of the biological basis for the conservation strategy based on the data collected through the research program and other sources; (4) a detailed analysis of the efficacy and continued need for the set-asides; (5) an estimate of spotted owl displacement for the remainder of the permit period; and (6) an analysis of the habitat overlap of and interactions between barred owls and spotted owls. The 2012 Comprehensive Review will provide sufficient time for Green Diamond to complete the initial research on northern spotted owl and barred owl interaction and report the results to FWS.

D. Authorization for Eight Additional Owl Pair Displacements

Green Diamond proposes that the FWS authorize displacement of up to eight northern spotted owl pairs in addition to the currently permitted displacement of 50 northern spotted owl pairs. The eight additional owl pair displacements are needed to provide Green Diamond with operational flexibility while the FWS and Green Diamond further consider and evaluate the findings of the Comprehensive Review and Green Diamond implements research on the habitat overlap and interaction between the northern spotted owl and barred owl.

1. The proposal is consistent with the annual rate of Northern Spotted Owl pair displacement over the first 15 years of the NSO HCP.

The NSO HCP, as initially approved, anticipated and authorized the displacement and take of 50 northern spotted owl pair through habitat modification resulting from timber harvest over the first ten years of the plan. In fact, Green Diamond has managed the plan area so that only 44 northern spotted owl sites were displaced and taken through plan year thirteen. The number of displacements per year has been variable, but on average, 3.4 northern spotted owl sites per year were displaced and taken since 1992. Authorization for eight additional site displacements in combination with the six remaining from the originally permitted 50

takes would allow the company to continue its sustained yield harvest activities until the year 2012 when the proposed updated Comprehensive Review would occur.

2. The impact of the proposed Northern Spotted Owl take is not significant.

Green Diamond proposes authorization for northern spotted owl take that is incidental to lawful timber harvest operations. The primary form of incidental take for which Green Diamond seeks the proposed amendment is displacement of northern spotted owl due to modification of northern spotted owl habitat, particularly areas with nest sites and primary activity centers (northern spotted owl sites). No direct killing or injuring of northern spotted owl is anticipated, and Green Diamond will take all reasonable precautions to avoid such impacts; instances of unintentional or inadvertent harm, however, would continue to be covered by the ITP, as amended. Some foraging, roosting, and nesting habitat would be removed annually, but no net loss of habitat in the age-classes and with the characteristics of areas currently used by owls is expected because harvested habitat would be replaced through maturing of younger timber stands (Green Diamond, Comprehensive Review, 2006).

Accordingly, for purposes of the NSO HCP and ITP, as amended, it is assumed that a take will occur when owl sites are harvested, displacing owls that occupied those sites during the nesting and fledging season (direct displacement). Green Diamond has also assumed that displacement, and therefore take, will occur where owl sites themselves are not harvested, but harvesting within stands near those sites reduces habitat to below threshold levels (indirect displacement).

Take in the legal sense results from the impact of habitat loss on the essential behaviors (foraging, resting, pair formation and maintenance, breeding and etc.) of individual northern spotted owls. However, the impact of the take on the population is best considered in terms of available habitat for the maintenance of northern spotted owl territories or sites. Northern spotted owls directly and indirectly displaced by timber harvest have been documented to move to adjacent sites with suitable habitat and continue normal owl behaviors including successful nesting. (Green Diamond, Comprehensive Review, 2006). Therefore, eight additional takes would cause eight owl sites to become unsuitable for occupation by northern spotted owl for an undetermined time.

Conservation commitments and regulatory obligations governing Green Diamond timber harvests tend to accelerate regrowth of suitable northern spotted owl habitat (e.g. habitat retention within harvest units and large robust riparian reserves) in most areas within Green Diamond ownership causing northern spotted owl sites to become suitable for re-occupation within 20-30 years following a displacement. In addition, as noted above, take will only result in a localized loss of owl sites. Across the ownership, harvested habitat will be replaced through maturing of younger timber stands with no net loss of habitat in

the age-classes currently used for nesting or roosting by northern spotted owls.

The impact of the take of eight owl sites can also be related to the regional owl population. Based on recent genetics studies (Haig et al. 2001 and Haig et al. 2004) and documented movements of spotted owls within and outside the Green Diamond spotted owl study area (Green Diamond, Comprehensive Review, 2006), the northern spotted owl within the study area are a functional part of the northern spotted owl population within coastal California extending north throughout the Klamath Province and into southern Oregon as far north as approximately Roseburg. When the northern spotted owl was listed in 1990, it was estimated there were somewhere between 2,000 pairs (USDI 1990a, 1990b) and 3,000-4,000 pairs (Thomas et al. 1990) throughout the entire range of the species. There have been no attempts to estimate the total population of northern spotted owl since the listing, but California Department of Fish and Game maintains a database of known owl sites within California. As of July 2003, there were 2,895 northern spotted owl sites estimated from over 50,000 survey detections in coastal and northern California. This estimate should only be viewed as an approximation of the total population of northern spotted owl sites occupied by owls in any given year, because it is not known what proportion of the sites are occupied in any given year. In addition, it is unknown what proportion of the suitable habitat has been surveyed in California. Finally, we do not have an estimate for the proportion of the regional northern spotted owl population that occurs in southern Oregon from approximately Roseburg south to the Oregon border. However, based on relative areas alone, there may be an additional 30-40 percent of the regional northern spotted owl population that occurs in Oregon. If we make a broad assumption that the number of unoccupied owl sites in the California database equals the unknown sites in areas not surveyed, we estimate the regional population to be approximately 2,900 occupied owl sites. Using a conservative estimate of 25 percent in southern Oregon (725 sites), the total regional population consists of approximately 3,625 occupied northern spotted owl sites. Take of eight northern spotted owl sites within Green Diamond ownership would represent an impact on 0.0022 percent of the total population. This level of take should have no immediate or long term impacts on the regional northern spotted owl population.

III. Conclusion

Green Diamond requests that the FWS approve these proposed amendments to the NSO HCP and IA and any corresponding amendments to the ITP. This request is supported by the Green Diamond Resource Company, Northern Spotted Owl Habitat Conservation Plan, the Phase One Comprehensive Review, included as Appendix A, and the proposed First Amendment to the Implementation Agreement for the Green Diamond Resource Company, Northern Spotted Owl Habitat Conservation Plan, included as Appendix B.

Appendix A

Green Diamond Resource Company

Northern Spotted Owl Habitat Conservation Plan

Comprehensive Review

Appendix B

Green Diamond Resource Company

Northern Spotted Owl Habitat Conservation Plan

Proposed First Amendment to the Implementation Agreement