

October 26, 2011

Mr. Steven Landino  
Washington State Habitat Director  
National Marine Fisheries Service  
510 Desmond Drive SE, Suite 103  
Lacey, Washington 98503

Mr. Ken Berg  
Western Washington Fish and Wildlife Manager  
U.S. Fish and Wildlife Service  
510 Desmond Drive SE, Suite 102  
Lacey, Washington 98503

**Re: Amended Implementation Agreement and Proposed Modification to Green Diamond Resource Company's Northwest Operations Habitat Conservation Plan**

Dear Sirs:

Green Diamond Resource Company ("GDRCo") is pleased to submit the enclosed Modification to the Northwest Operations Habitat Conservation Plan ("HCP") and corresponding Amendment to Implementation Agreement. The HCP Modification seeks to add approximately 53,000 acres of GDRCo privately-owned lands to the HCP. The Amendment to Implementation Agreement accurately defines the HCP Assessment Area and confirms proper accounting and reporting of changes to HCP acreage caused by acquisition and disposition of land.

The HCP Modification will allow for lands currently managed under the Washington Forest Practices Act ("FPA") to be managed in accordance with the existing GDRCo HCP prescriptions. Accordingly, the National Environmental Policy Act ("NEPA") analysis and Endangered Species Act ("ESA") section 7 consultation should compare effects of "no action" (management under FPA) with the effects of the Modification (management under the HCP). Such comparison and required analyses were previously completed in the 2000 Environmental Impact Statement and ESA section 7 consultation for the existing HCP. Accordingly, no new NEPA analysis or ESA section 7 consultation is required. We now have the benefit of over ten years of HCP implementation experience and results that substantiate benefits to species and their habitats from HCP implementation.

Thank you for your time and cooperation.

Sincerely,



Paul Wing  
General Manager/Vice President  
Enclosure

cc: James Michaels  
LouEllyn Jones  
Marty Acker  
Eric Beach  
Erika Malmén  
Galen Schuler

**AMENDMENT TO IMPLEMENTATION AGREEMENT  
GREEN DIAMOND RESOURCE COMPANY  
NORTHWEST OPERATIONS  
HABITAT CONSERVATION PLAN**

**Dated \_\_\_\_\_, 2011**

**AMENDMENT TO  
IMPLEMENTATION AGREEMENT  
GREEN DIAMOND RESOURCE COMPANY  
NORTHWEST OPERATIONS  
HABITAT CONSERVATION PLAN**

THIS AGREEMENT by and between the United States Fish and Wildlife Service (“FWS”) an agency of the United States Department of the Interior, the National Marine Fisheries Service (“NMFS”) an agency of the United States Department of Commerce, and Green Diamond Resource Company (“Green Diamond”) amends the Implementation Agreement made and entered into as of the 13th day of October, 2000, by and between FWS and NMFS (together, the “Services”) and Green Diamond’s predecessor in interest, the Simpson Timber Company (“Simpson”).

For and in consideration of the mutual covenants and conditions contained herein, the Parties hereto do hereby agree that the Implementation Agreement shall be amended as follows:

**I. RIGHTS AND OBLIGATIONS OF GREEN DIAMOND**

As successor in interest to Simpson, all references to Simpson in the Implementation Agreement shall be read as references to Green Diamond and all rights and obligations of Simpson under the Implementation Agreement are rights and obligations of Green Diamond.

**II. RECITALS**

Section 2.1 of the Implementation Agreement shall be amended to read as follows:

**2.1 Recitals. The parties have entered into this Agreement in consideration of the following facts:**

(a) In 2000, Simpson owned approximately 287,000 acres of commercial forestland distributed across Mason, Grays Harbor, Lewis, Pacific, and Thurston counties in the State of Washington. For most of these forestlands, Simpson elected to develop a habitat conservation plan, approved by the Services on October 13, 2000 (as the same may be amended from time to time, the "HCP"), initially covering approximately 261,575 acres, which property was referred to as the "Initial Plan Area" depicted in Figures 1 and 2 of the HCP, and in Exhibit A to the October 13, 2000 Agreement. The Initial Plan Area was located within a broader "Assessment Area" shown on Figures 1 and 2 of the HCP as a boundary around lands eligible for inclusion in the plan area managed under the HCP.

(b) In 2002, Simpson contributed its timberland assets, including the Initial Plan Area and HCP, to a new company, Simpson Resource Company, which assumed all of the rights and obligations of Simpson under the HCP. In 2004, the name of Simpson Resource Company was changed to Green Diamond Resource Company, which currently implements the HCP. As of the effective date of this Amendment, Green Diamond owns approximately 313,873 acres of timberland in Washington State that are covered by and subject to the HCP (the "Plan Area"). The property identified as the "Plan Area" in Exhibit A to this Amendment, and as modified from time to time in accordance with Section 10 hereof, is also referred to herein as the "Tree Farm."

(c) As shown in Exhibit A to this Agreement, the Tree Farm is located within a larger area of land known as the "Amended Assessment Area," which covers river basins and lithotopo features also found within the Initial Plan Area when the HCP was first approved.

(d) During the course of its ownership and operation of the Tree Farm, Green Diamond has identified a number of fish and wildlife species which visit or permanently reside in the Tree Farm or which may hereafter visit or permanently reside in the Tree Farm. These include marbled murrelets listed as "threatened" species under the federal Endangered Species Act, 16 U.S.C. § 1531, et seq. (as the same may be amended or reauthorized from time to time and together with any successor statute or statutes, the "ESA"). These also include the additional species described in the attached Exhibit B.

(e) Under the ESA, it is unlawful for a landowner to "take" any member of a species listed as "endangered" in the course of carrying out an otherwise lawful land use activity without an "incidental take permit" issued under ESA Section 10(a) after approval by the applicable Services of a habitat conservation plan. Take of certain species listed as "threatened" is also prohibited by regulations promulgated by the Services, unless such take is authorized by an incidental take permit issued in conjunction with approval of a habitat conservation plan. As Simpson's successor in the implementation of the HCP, Green Diamond holds an incidental take permit ("ITP") relating to its proposed activities on the Tree Farm. Notwithstanding anything herein to the contrary, however, Green Diamond reserves its right to deny that its current or future activities on the Tree Farm require an ITP.

(f) Under the Migratory Bird Treaty Act of 1918, as amended (16 U.S.C. §§ 703-712) (“MBTA”), and the Bald and Golden Eagle Protection Act of 1940, as amended (16 U.S.C. §§ 668-668d) (“BGEPA”), a landowner is precluded from “taking” migratory birds and bald eagles, respectively. When the HCP was approved in 2000, Simpson applied for a Special Purpose Permit under 50 CFR § 21.27 for the taking of certain migratory birds. Where applicable, references in this Agreement to the ITP shall be deemed to include a reference to such Special Purpose Permit and Green Diamond shall be the permittee. Green Diamond requests that the FWS exercise its prosecutorial discretion in not prosecuting Green Diamond with respect to any take of bald eagles under the MBTA or the BGEPA, in each case, resulting from activities conducted on the Tree Farm in accordance with the HCP. Notwithstanding anything herein to the contrary, however, Green Diamond reserves its right to deny that its current or future activities on the Tree Farm require a Special Purpose Permit or would constitute an otherwise prohibited “take” under the MBTA or the BGEPA.

### **III. DEFINITIONS**

Section 3.1 of the Implementation Agreement will be amended to add the following definition of “Designated Murrelet Habitat”:

“**Designated Murrelet Habitat**” means the areas of the Tree Farm identified on Exhibit E hereto (as the same may be amended from time to time).

### **IV. OBLIGATIONS OF THE PARTIES**

Section 10 of the Implementation Agreement shall be amended to read as follows:

#### **10.0 LAND TRANSACTIONS**

##### **10.1 Acquisition of Land by Green Diamond.**

(a) In General. Nothing in this Agreement, the HCP or the ITP shall limit Green Diamond’s rights to continue to own or to acquire additional lands in and around the Tree Farm or elsewhere. Unless such lands are added to the Tree Farm in the manner provided below, however, no such additional lands will be covered by the ITP and therefore such additional lands will be subject to the same ESA provisions and related regulations with respect to fish and wildlife species as if owned by another private party. Nothing in this Agreement, the HCP or the ITP shall require Green Diamond to include in the Tree Farm or to add to the HCP or ITP any additional lands it may currently own or hereafter acquire. Any lands that Green Diamond elects to include in the HCP and the ITP in accordance with this Agreement shall thereafter constitute a portion of the Tree Farm and all references to the “Tree Farm” shall be deemed to include a reference to such additional lands.

(b) Inclusion of Certain Additional Property. In its sole discretion Green Diamond may elect to include in the HCP and the ITP any lands that at the time of the proposed inclusion meet the following additional criteria:

(i) are within the outer boundaries of the Assessment Area identified on Exhibit A;

(ii) do not contain any lithotopo features or stream types not analyzed in connection with the original HCP; and

(iii) have been managed by Green Diamond in accordance with the prescriptions in the HCP (other than those prescriptions requiring Green Diamond to provide periodic reports or other information) at all times since the later of the Effective Date of this Amendment or the date Green Diamond first acquired such lands.

Green Diamond's right to elect to include lands under this Section 10.1(b) is further conditioned upon Green Diamond providing to the Services (at the time any such lands are proposed for inclusion):

(iv) Green Diamond's written estimates, based upon the best available information (which will include, where appropriate, in-field verification) of the following baseline characteristics for the lands to be added: a map showing the lands to be added and the location of all roads on such lands; number of acres (total and by lithotopo unit); number of stream miles by the Washington Department of Natural Resource stream type and HCP channel class; number of RCR acres (as defined in the HCP); RCR timber stand age(s) and composition; number of wetland, lake and forested wetland acres; number of road miles; a general description of the condition of the roads; a general description of the unstable slopes; leave tree density (for snag distribution purposes); the location of any known cultural resources; and the distribution of Covered Species across the landscape; and

(v) A written analysis demonstrating that the net effect on the environment and on the Covered Species (and the level of take of Covered Species) on the lands proposed for addition that would result from the management of such lands in accordance with this Agreement and the Incorporated HCP Sections would not be significantly different from the net effect on the environment and the Covered Species (and the level of take of Covered Species) on the lands initially included in the Tree Farm that has resulted and will thereafter result from the management of such lands in accordance with this Agreement and the Incorporated HCP Sections.

Unless the Services object in a writing delivered to Green Diamond within 60 days of receipt of the materials referenced in subclauses (i) and (v) above specifying in detail the reasons why in their judgment the proposed addition of lands has failed to satisfy one or more of the conditions set forth in subclauses (i) through (v) above, it will be conclusively presumed for all purposes that the proposed addition does satisfy such conditions. If the Services do deliver such a written objection, the Services and Green Diamond will confer in good faith and pursue the informal

dispute resolution mechanisms set forth in Section 13.3 of this Agreement in an effort to reach agreement.

Upon satisfaction of the conditions set forth in subclauses (i) through (v) above, the lands proposed for addition will be added to the Tree Farm. The addition of any lands to the Tree Farm effected under this Section 10.1(b) shall be processed in accordance with Section 11.3(a) hereof provided, that in the event of any dispute between Green Diamond and the Services as to the satisfaction of the above-referenced conditions, Green Diamond may request that the proposed addition be processed in accordance with Section 11.3(b).

(c) Further Acquisitions. Green Diamond may request that the HCP and ITP be modified to include lands in the Tree Farm other than those described in Section 10.1(b). Any such request will be processed in accordance with Section 11.3(b) hereof.

## **10.2 Land Dispositions.**

(a) In General. Green Diamond may not sell any lands included in the Tree Farm to, or exchange any portion thereof with, any other party during the term of this Agreement unless:

(i) such sale or exchange does not involve a Core Area or Designated Murrelet Habitat, and after giving effect to such sale or exchange, the net reduction (lands acquired and added to the Tree Farm minus lands removed from the Tree Farm other than transfers to Comparable Transferees as defined in Section 10.2 (b)) in total acreage of all lands sold or exchanged under this Section 10.2(a)(i) would not exceed 47,045 acres; or

(ii) the lands are transferred to a Comparable Transferee as provided in Section 10.2(b) below; or

(iii) the HCP and ITP are modified to delete such lands in accordance with Section 11.3(b) hereof.

Any sale or exchange of land described in Section 10.2(a) (i) or (ii) above shall be processed in accordance with Section 11.3(a) hereof. If Green Diamond sells or exchanges any of the lands comprising a portion of the Tree Farm and such transfer is permitted by the terms hereof, from and after such transfer, such lands shall not be deemed to be a portion of the Tree Farm and all references to "Tree Farm" shall be deemed not to include a reference to such transferred lands. Green Diamond will not be responsible for the performance of the HCP on lands transferred in accordance with the terms of this Agreement. As part of its annual report to the Services, Green Diamond will provide an accounting of the amount and location of land disposed of or transferred to Comparable Transferees.

(b) Transfers to Comparable Transferees. Green Diamond may sell, transfer or exchange lands comprising all or a portion of the Tree Farm to one or more

Comparable Transferees. As used herein, a "Comparable Transferee" shall mean any of the following transferees:

(i) an agency of the federal government if, prior to transfer, the Services have determined that such transfer will not compromise the effectiveness of the HCP based on adequate commitments by that agency regarding management of such land;

(ii) a non-federal entity that has entered into an agreement acceptable to the Services (e.g., an easement held by the Washington Department of Fish and Wildlife with the Services as third-party beneficiaries) to ensure that the lands will be managed in such a manner and for such a duration as to not compromise the effectiveness of the HCP; or

(iii) any person or entity (A) who has elected to be bound by the HCP as it applies to the transferred lands; (B) who demonstrates sufficient financial resources to adequately fund its affirmative obligations under the HCP and who meets the requirements under 50 CFR § 13.21(b) and (C) who has entered into an agreement with the Services covering the transferred lands containing terms and covenants substantially similar to the terms hereof. To the extent permitted by applicable law then in effect, upon request of such a person or entity and satisfaction of any required transfer criteria, the Services will issue an incidental take permit (and where applicable, a Special Purpose Permit) to such a transferee covering the transferred lands subject to such terms and conditions as the Services may require pursuant to §10 of the ESA (See 50 C.F.R. § 13.25(b)).

## V. MISCELLANEOUS PROVISIONS

Section 15.6 of the Implementation Agreement shall be amended to read as follows:

**15.6 Notices.** Any notice permitted or required by this Agreement shall be in writing, delivered personally to the persons listed below, or shall be deemed given five (5) days after deposit in the United States mail, certified and postage prepaid, return receipt requested and addressed as follows, or at such other address as any party may from time to time specify to the other parties in writing. Notices may be delivered by facsimile or other electronic means, provided that they are also delivered personally or by certified mail. Notices shall be transmitted so that they are received within the specified deadlines.

Assistant Regional Director  
United States Fish and Wildlife Service  
911 N.E. 11th Ave.  
Portland, Oregon 97232-4181  
Telephone: 503-231-6159  
Telefax: 503-231-2019

Regional Administrator  
National Marine Fisheries Service

7600 Sand Point Way N.E.  
Seattle, Washington 98115-0070  
Telephone: 206-526-6150  
Telefax: 206-526-6426

With a copy to:

Washington State Director  
Habitat Conservation Division, NMFS  
510 Desmond Dr., Suite 103  
Lacey, Washington 98503

Green Diamond Resource Company  
Attention: General Manager, Northwest Timberlands  
215 North Third  
Shelton, WA 98584-0460  
Telephone: 360-427-4795  
Telefax: 360-427-4709

With a copy to:

Green Diamond Resource Company  
Legal Department, Attention: General Counsel  
1301 Fifth Avenue, Suite 2700  
Seattle, WA 98101-2613

## VI. EFFECT OF AMENDMENTS

Except for the amendments set forth herein and expressly agreed to, all other terms of the Implementation Agreement shall remain unchanged. THIS AMENDMENT SHALL TAKE EFFECT, FOLLOWING ITS EXECUTION BY EACH OF THE PARTIES, ON THE DATE THE AMENDED PERMIT IS ISSUED TO GREEN DIAMOND (the "Effective Date").

GREEN DIAMOND RESOURCE COMPANY

By: \_\_\_\_\_  
William R. Brown, President

Date: \_\_\_\_\_

NATIONAL MARINE FISHERIES SERVICE

By: \_\_\_\_\_

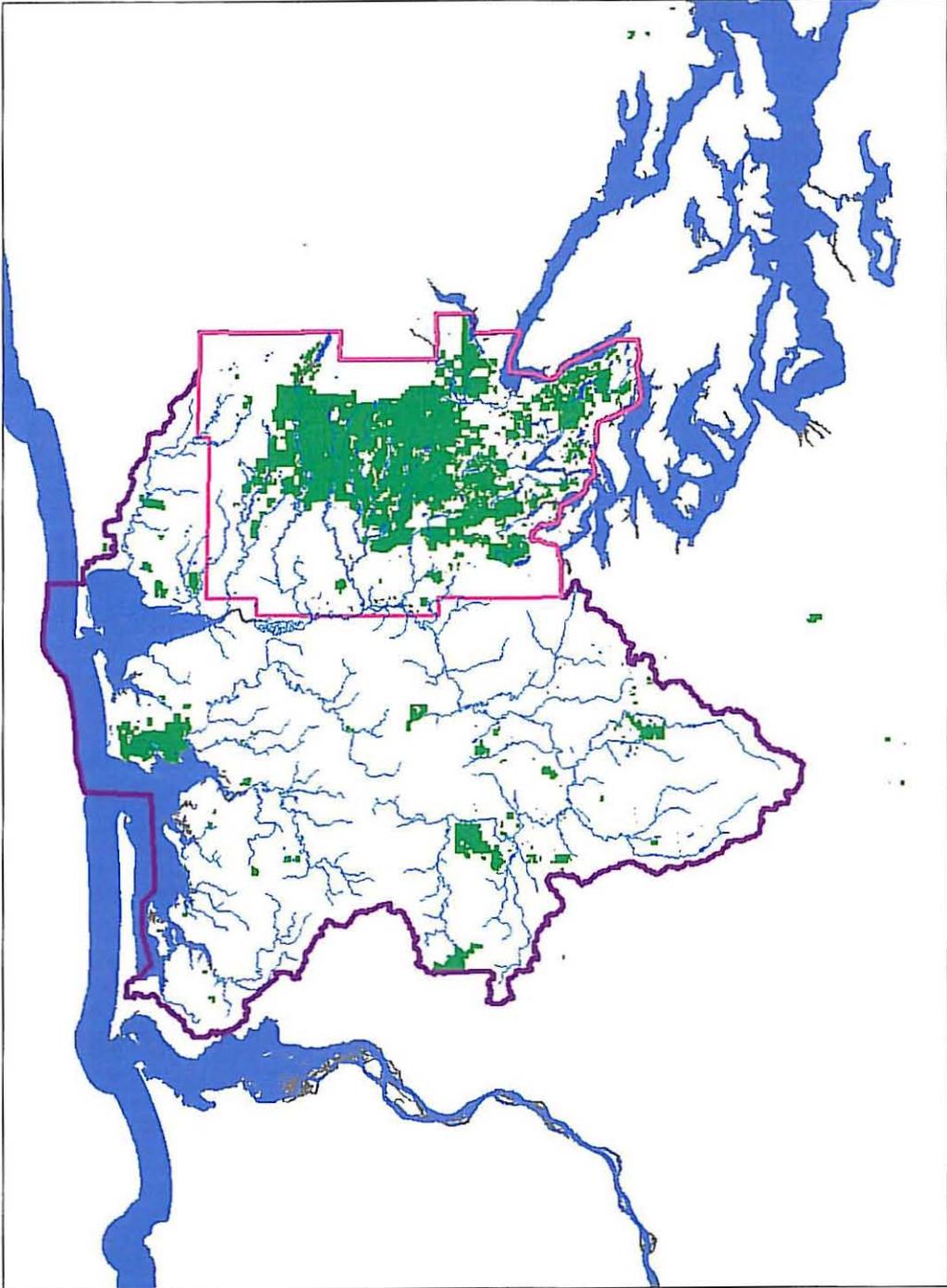
Date: \_\_\_\_\_

U.S. FISH AND WILDLIFE SERVICE

By: \_\_\_\_\_

Date: \_\_\_\_\_

EXHIBIT A



- Major Streams and Rivers
- Original Assessment Area
- Amended Assessment Area
- GDRC Ownership (2011)

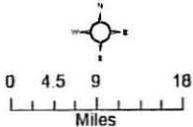
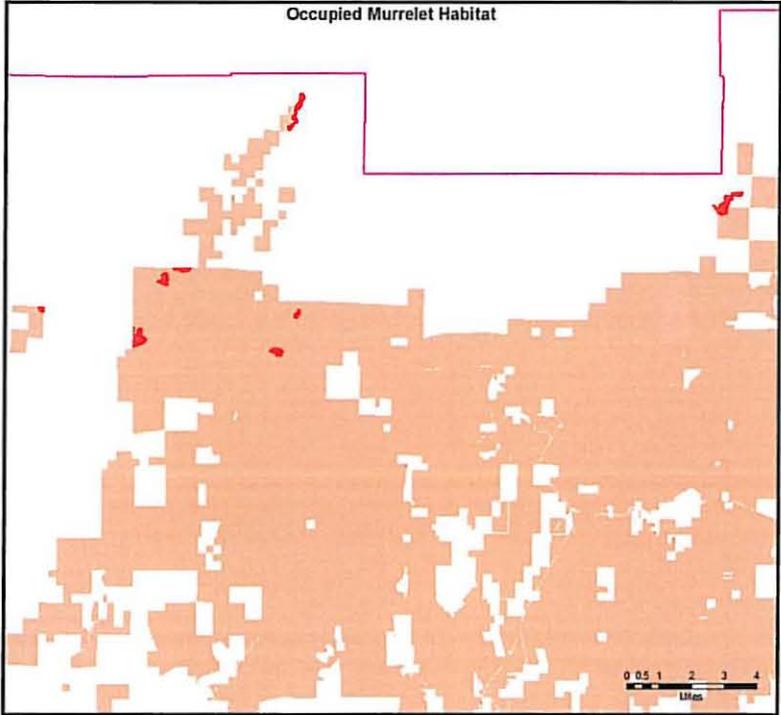


Exhibit A

**EXHIBIT E**

**DESIGNATED MURRELET HABITAT**



- Murrelet Habitat
- Assessment Area
- GDRG Ownership



**Designated and Occupied Marbeled Murrelet Habitat**

**Exhibit E**

**GREEN DIAMOND RESOURCE COMPANY  
PROPOSED MODIFICATION TO  
THE NORTHWEST OPERATIONS HABITAT CONSERVATION PLAN**

**I. INTRODUCTION AND EXECUTIVE SUMMARY**

Green Diamond Resource Company (“GDRCo”) (formerly the Simpson Timber Company), is seeking the U.S. Fish & Wildlife Service (“USFWS”) and NOAA Fisheries (collectively, the “Services”) approval to expand its existing Northwest Operations Habitat Conservation Plan (“HCP”) and associated Incidental Take Permit (“ITP”) to include the majority of GDRCo private land ownership in Washington State. The proposed HCP modification (“Proposal”) primarily entails adding GDRCo privately-owned lands (“Added Lands”)<sup>1</sup> to the HCP, thereby expanding the boundary of the HCP Plan Area.

In accordance with section 11 of the Implementation Agreement (“IA”), this submittal includes a written description of the proposed HCP modification, the purpose and rationale for expanding the HCP, a description of the likely effects of the Proposal on Covered Species, and the habitat types found in the Added Lands.

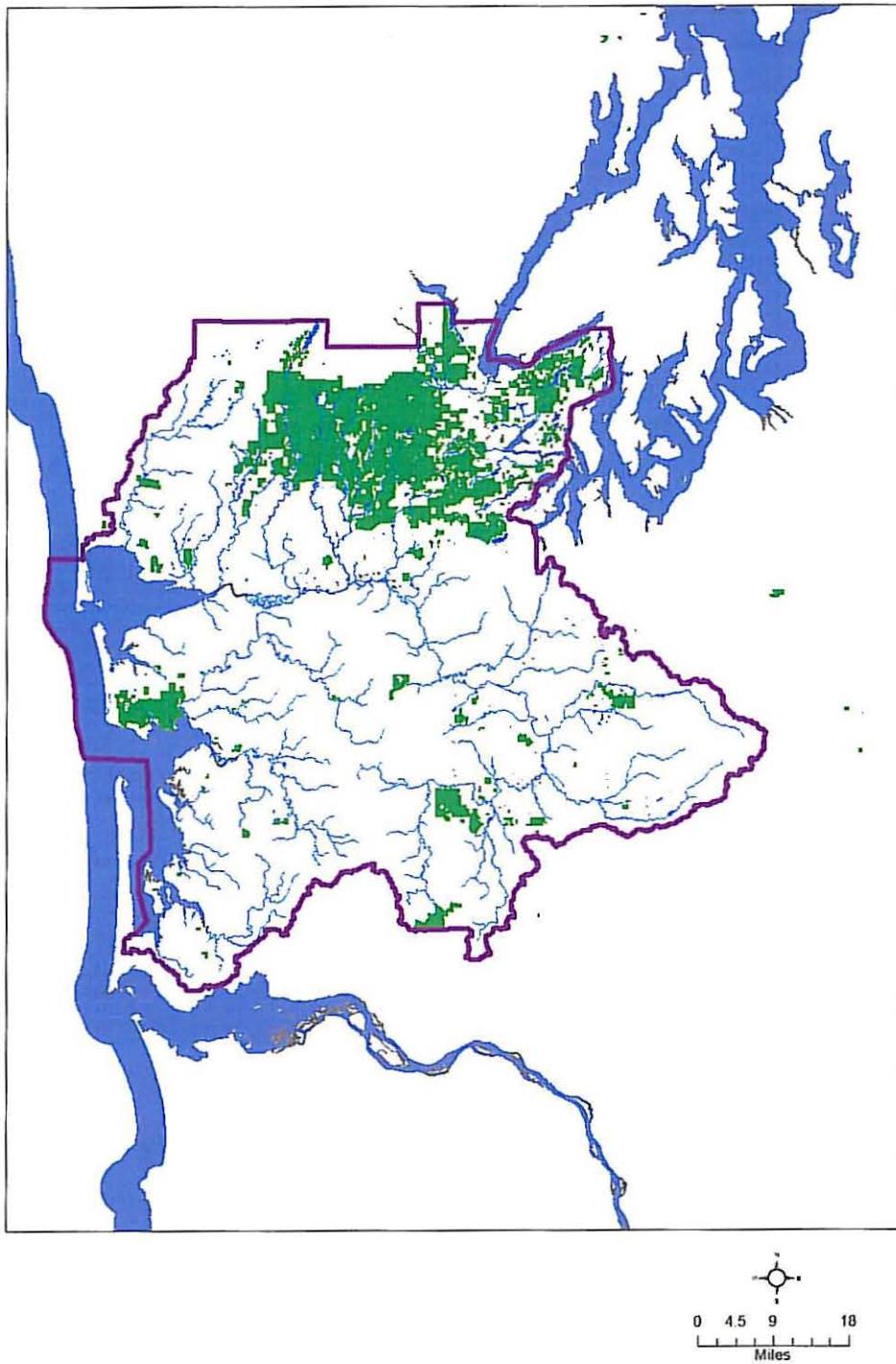
The Proposal includes the following primary components:

- A. Expand the boundary of the HCP Plan Area and extend HCP prescriptions for lands available for coverage under the HCP/ITP. GDRCo private timberlands included in the Plan Area would be managed according to the HCP prescriptions. The Added Lands proposed for addition include approximately 53,000 acres of GDRCo privately-owned timberlands. (Figure 1). The acreage covered by the existing ITP would increase from ~266,000 to ~319,000 (Table 1).
- B. Modify the HCP prescriptions in Sections 5.2.2 (Supplemental Wildlife Tree Conservation Program), 5.2.6 (Hydrologic Maturity) and 5.3.1 (Marbled Murrelet) to reflect habitat types in portions of the Added Lands.

**Table 1** Acreage and Stream Miles of the Plan Area

<b>HCP Management</b>	<b>Current</b>	<b>Proposed</b>	<b>Total</b>	<b>Increase</b>
GDRCo Ownership	266,091	52,870	318,961	22%
Stream Miles on GDRCo	1,721	878	2,591	54%

<sup>1</sup> “Added Lands” are additional lands that may be added to the HCP/ITP within the Assessment Area.



**Figure 1** Assessment Area (purple line) and GDRCo current ownership (green shade) are depicted.

## II. PURPOSE AND RATIONALE FOR THE PROPOSED MODIFICATION

Since the HCP was approved in 2000, GDRCo has purchased additional lands within the Twin Harbors drainage and seeks to include those lands under the HCP and ITP. The impetus for this proposed HCP modification is the positive results on Covered Species and habitats that have been realized through implementation of the HCP over the last 10 years, and GDRCo's desire for consistent and proven management strategies across GDRCo ownership.

## III. HABITAT TYPES INCLUDED IN THE PROPOSAL

The lands included in the Proposal are appropriate for current HCP prescriptions because of a shared biogeography with the current HCP Plan Area. The physical attributes include similar underlying geologies consisting of discrete areas of basalt, continental and alpine glacial outwash, and marine sediments. The common lithologies and topographies allow for incorporation of the Litho-Topo stratification and associated management prescriptions. The Proposal includes lands within the western hemlock and Sitka spruce zones similar to lands currently covered by the HCP and the aquatic and terrestrial species types are consistent as well.

## IV. PROPOSED MODIFICATION

### Marbled Murrelet Prescriptions

HCP Section 5.3.1 contains prescriptions for the Marbled Murrelet ("Murrelet"). GDRCo's Proposal includes HCP prescriptions specific to the Added Lands, as the existing HCP prescriptions are based on a particular series of occupancy surveys specific to the original HCP lands. GDRCo has assessed the stand conditions for the Added Lands and has identified the areas with large trees containing nesting platforms, a multistoried stand, and a moderate to high canopy closure. These areas are specifically identified for management for Murrelets (Figure 2).

For GDRCo lands currently covered by the HCP:

1. There will be no harvest in *Designated Murrelet habitat*.<sup>2</sup> (See Figure 2 as well as IA Exhibit E). These areas will be managed as *occupied Murrelet habitat* for the duration of the ITP.
2. A 300 foot managed buffer will be established to encompass the *Designated Murrelet Habitat*:

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<sup>2</sup> These areas meet most or all of the Pacific Seabird Group protocol for habitat. However, Murrelets exhibiting nesting behavior were not detected within these stands during occupancy surveys conducted in 2008-2009.

- a. Thinning is allowed within the 300 foot buffer with the objective of increasing “wind firmness” as well as providing structure; and
  - b. The prescription retains 75 trees per acre with 12 inches diameter-at-breast-height (“dbh”) or greater, including 5 trees greater than 20 inches in dbh, where they exist.
3. Established Riparian Conservation Reserves (“RCR”) will be managed for developing late seral conditions. These RCRs cover 17% of the Plan Area and are expected to grow into suitable forest conditions to support Murrelets over the course of the HCP/ITP. No buffer areas will be established for Murrelets outside of the RCR given the large extent of the contiguous forest within the riparian areas.
  4. Avoid disturbance to Murrelets by limiting management activity within the 300 foot buffer areas to periods outside of the nesting season (April 1-Sept. 15). These restrictions do not apply to traffic on mainline roads that intersect Murrelet Management Areas.

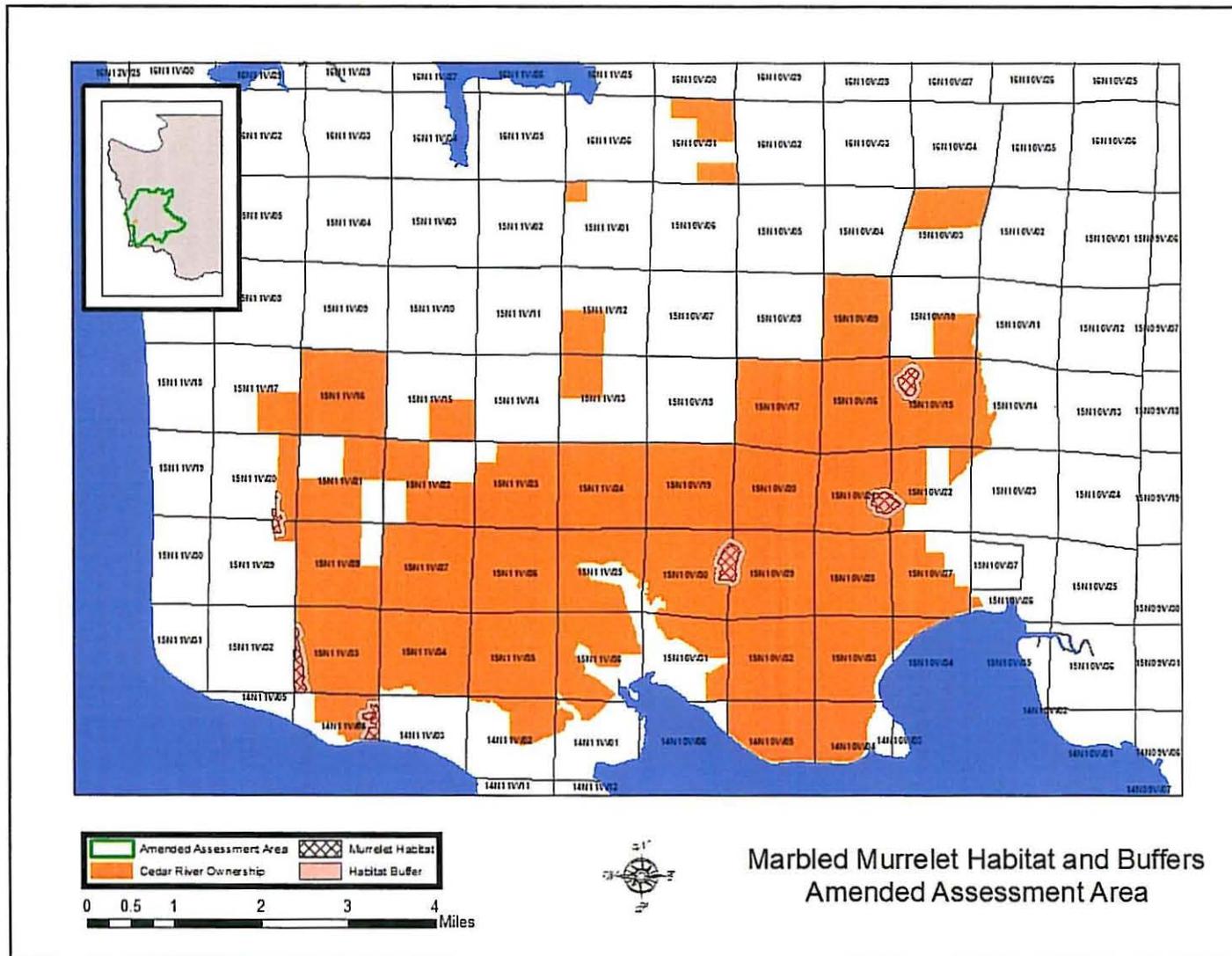
For GDRCo Added Lands:

1. GDRCo will evaluate the forest conditions using a combination of inventory data, field review and remote sensing;
2. Areas that are
  - a.  $\geq 5$  acres in size, and
  - b. characterized by large trees,<sup>3</sup> and
  - c. a multistoried stand, and
  - d. a moderate to high canopy closure, and
  - e. the trees within the area contain platforms; defined as
    - (i) flat surfaces 10 cm wide and 10 m high
    - (ii) in the live crown of a coniferous tree with vertical and horizontal cover and
    - (iii) substrate such as moss and lichen

will be delineated as *Designated Murrelet Habitat*, and a 300 foot managed buffer will be assigned and disturbance distance criteria observed for the duration of the HCP.

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<sup>3</sup> Nest trees in Washington have been greater than 19 in (48 cm) in dbh and greater than 98 ft. (30 m) tall (Hamer and Nelson 1995).



**Figure 2** Designated Murrelet Habitat within the Assessment Area (T 15N, R 11W). Currently there are 6 designated patches totaling 188 acres with ~405 ac of buffer. A 34 acre habitat patch with 41 acres of associated buffer is to be sold to a comparable transferee within the next year.

## Other Covered Species Prescriptions

The specific prescriptions for other non-listed species will be implemented in accordance with the provisions of the HCP. No likely adverse effects are anticipated.

## Supplemental Wildlife Tree Conservation Program

HCP Section 5.2.2 “Supplemental Wildlife Tree Conservation Program” as amended by the Services’ approval letter of January-2007 will be amended as part of this Proposal. Section 5.22 (d) would be changed, deleting the words “*or stumps*”. Accordingly, Section 5.22 (d) would read: *Prohibit the salvage of any residual ‘old growth’ downed wood throughout the entire Plan Area.* No likely adverse effects are anticipated.

## Hydrologic Maturity

Section 5.2.6 “Hydrologic Maturity” prescribes managing forest cover in the sub-basins in the *Rain on Snow* (“ROS”) zones such that sufficient mature forest canopy cover is present to avoid peak flow impacts. The current HCP forest cover thresholds were developed through hydrologic analyses performed during the South Fork Skokomish Watershed Analysis (Simpson 1995) and are specific to the southern Olympic geomorphic province and therefore are not directly equivalent to suitable prescriptions for the Added Lands.

The areas of the Added Lands in the ROS zone are limited to 1395 acres of ownership in the headwaters of the Chehalis Basin (Figure 3). GDRCo will incorporate the Chehalis Headwaters Watershed Analysis Prescriptions (Weyerhaeuser 1994) for the Added Lands, which is anticipated to have a beneficial effect on Covered Species and their habitats. The Hydrologic Maturity prescriptions that apply to the ROS zone are:

(1)  $\leq 40\%$  of the drainage area will have hydrologically immature cover ( $<10\%$  canopy cover<sup>4</sup>)

And

(2)  $\geq 40\%$  of the drainage area will have hydrologically mature cover ( $>70\%$  canopy cover<sup>4</sup>).

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<sup>4</sup> Canopy Cover is defined in the Standard Methodology for Watershed Analysis Version 2.0.

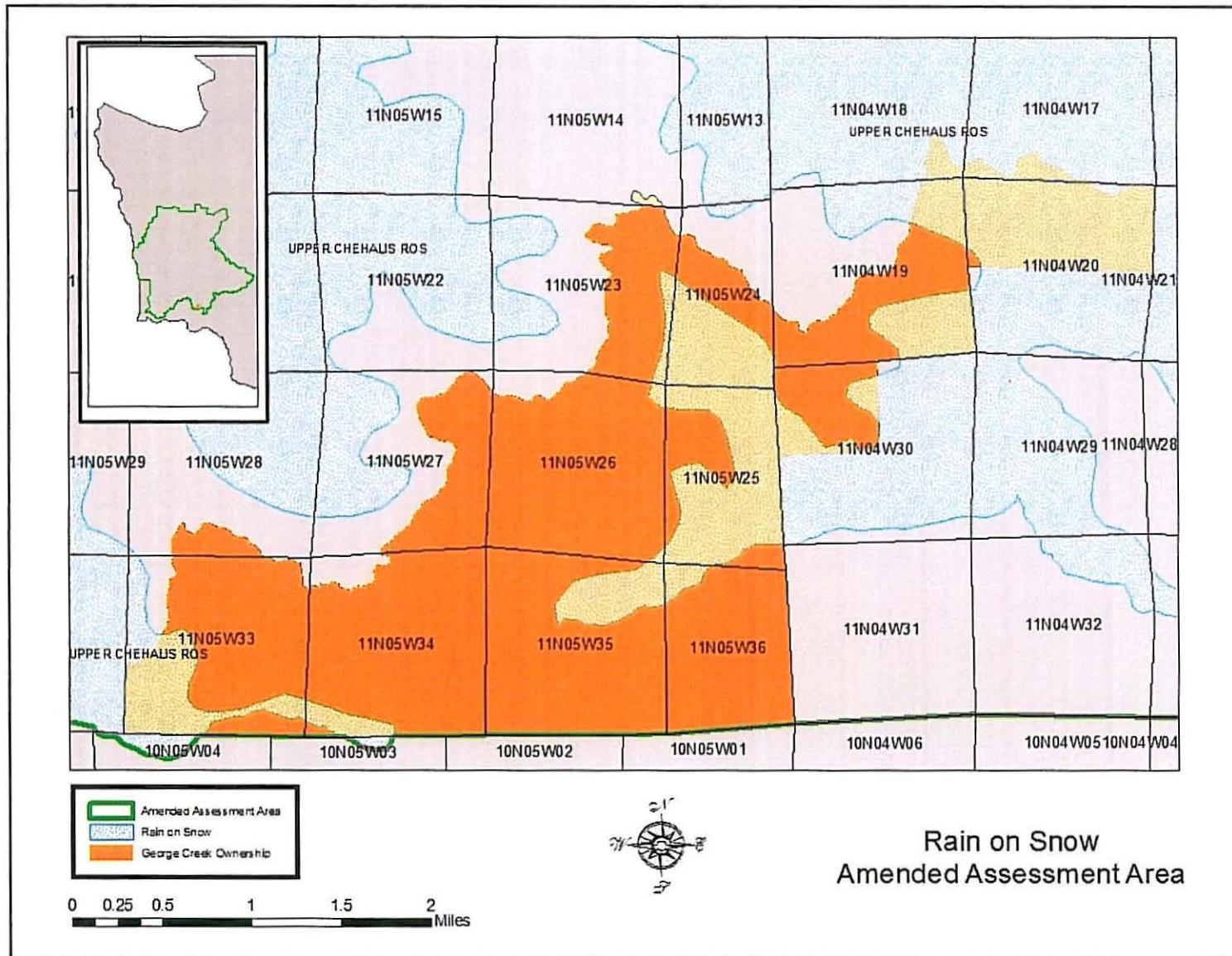


Figure 3 Rain on Snow zone within the Added Lands

## V. DESCRIPTION OF LIKELY EFFECTS ON COVERED SPECIES

The Proposal would allow for lands currently managed under the Washington FPA to be managed in accordance with the GDRCo HCP. Accordingly, the National Environmental Policy Act (“NEPA”) and ESA section 7 consultation should compare effects of “no action” (management under Washington Forest Practices Act (“FP”)) with the effects of the Proposal (management under the HCP). This analysis was previously completed in the 2000 NEPA and ESA review of the HCP.

### Effects on Aquatic Habitat Types

Ecosystem structure and dynamics are influenced by geologic settings, climatic factors and associated physical processes. The Litho-Topo strategy; with the extensive RCR management prescriptions, provides habitat protection above those of the FP currently in place. Accordingly, the likely effects on habitats of extending the HCP prescriptions are expected to be positive.

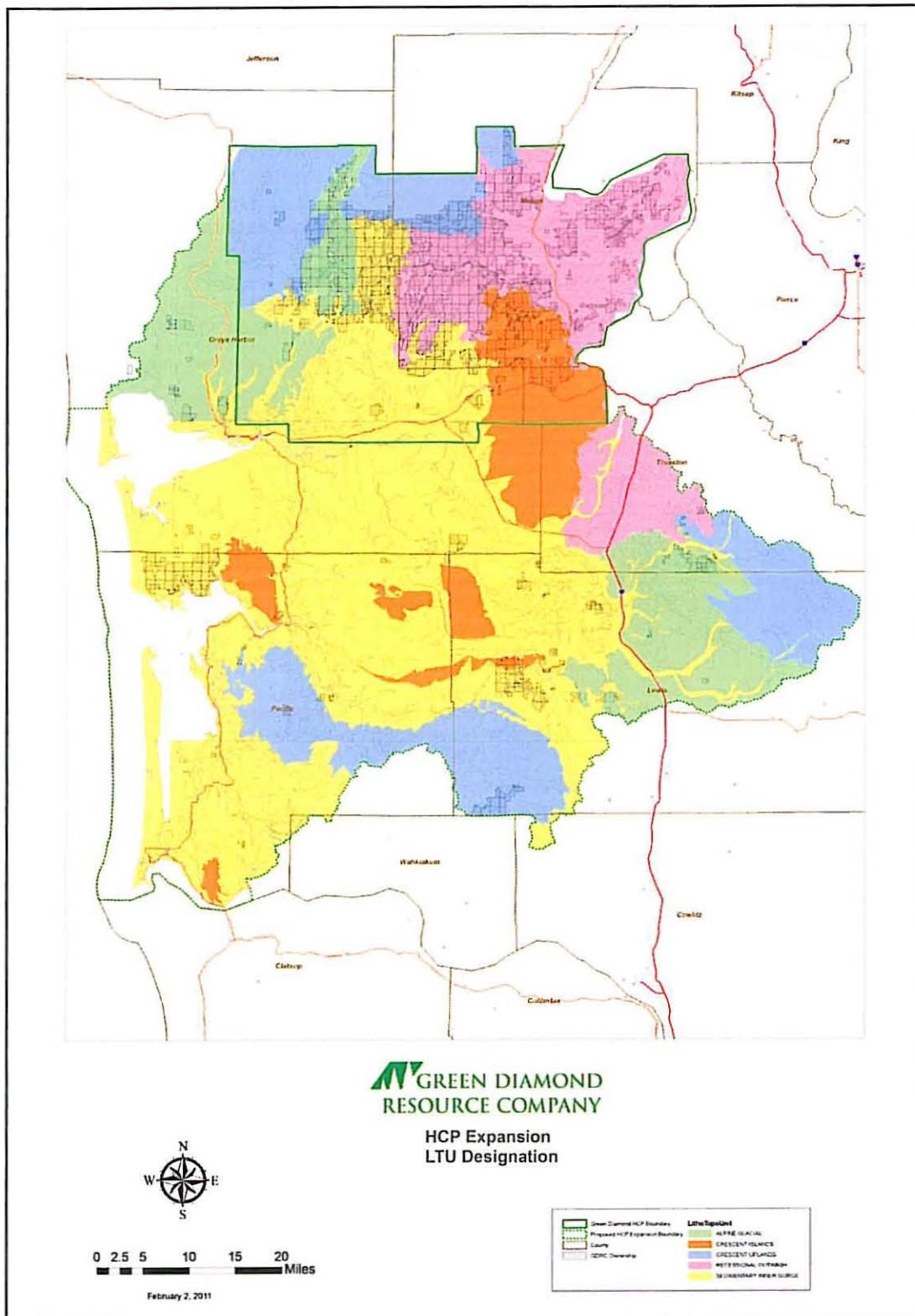
The current HCP aquatic habitats have been captured by stratifying the landscape into five Litho-Topo Units (“LTUs”) which are areas of similar lithology and topography. A second level of stratification consists of classifying stream segments of the channel network within each LTU into “Channel Classes”. LTUs include Alpine Glacial, Crescent Islands, Crescent Uplands, Recessional Outwash Plain, and Sedimentary Inner Gorges. Existing geology and topographic relief determine LTU boundaries dividing the landscape into areas that share similar erosional and channel forming processes. The IA Section 10(b) (ii) indicates that lands identified for inclusion should contain LTU and Channel Classes analyzed during the original HCP. GDRCo has reviewed the physical and biological conditions of the Assessment Area and determined that the same landscape stratification works well in those areas. Extension of LTU and Channel Classes proved to be a straightforward process as the Added Lands have much of the same geology and topography as the existing HCP lands. The proposed extended LTU’s are presented in Figure 4 (page 9).

The prescriptions of the current HCP have been proven appropriate to minimize and mitigate the incidental take of Endangered Species Act (“ESA”) listed, proposed, and candidate aquatic species within the Puget Sound and Washington Coast Ecologically Significant Unit (“ESU”). Similar prescriptions will be implemented for Added Lands.

In terms of ESA listed fish stocks, there are no listed ESU’s within the Added Lands<sup>5</sup> (Table 2).

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<sup>5</sup> See [http://wdfw.wa.gov/conservation/endangered/esa/federally\\_listed\\_esa\\_fish.pdf](http://wdfw.wa.gov/conservation/endangered/esa/federally_listed_esa_fish.pdf).



**Figure 4** Assessment Area Litho Topo Units

**Table 2** ESA Status of Fish stocks in the HCP Assessment Area

<b>Common Name</b>	<b>Assessment Area</b>	<b>ESU, Federal Status</b>
<b>Scientific Name</b>	<b>ESU/DPS</b>	<b>Current HCP Coverage (Y)</b>
Steelhead Trout <i>O. mykiss</i>	Southwest WA	Puget Sound Threatened (Y) Southwest WA Not Warranted (Y)
Coho Salmon <i>O. kisutch</i>	SW Washington	SW Washington, Undetermined (Y) Puget Sound, Species of Concern (Y)
Chum Salmon <i>O. keta</i>	Pacific Coast	Hood Canal Summer Chum Threatened (Y)
Chinook Salmon <i>O. tshawytscha</i>	Washington Coast	Puget Sound, Threatened, (Y)
Bull Trout <i>Salvelinus confluentus</i>	Olympic	Washington Coastal, Threatened (Y) Puget Sound Threatened (Y)

### Effects on Terrestrial Habitat Types

With the 2007 delisting of the Bald Eagle, the Marbled Murrelet is the only HCP covered ESA-listed terrestrial species that may utilize habitat in the Assessment Area. Murrelet may also utilize habitat in the Added Lands. Current HCP management strategies (HCP Section 5.3.1, as modified July 17, 2006) as well as a suite of proposed minor changes to those prescriptions described above will be employed. Murrelet surveys have been conducted on all Murrelet habitats identified across GDRCo ownership (Hamer 2009). Murrelets occupy two stands on GDRCo ownership in the Added Lands; however only one of the occupied stands will be eligible for inclusion in the HCP as Added Lands<sup>6</sup>. No deleterious effects on Murrelet populations are likely to result from adding lands to the HCP. These areas are currently managed under the FPA. HCP prescriptions are considered more protective of Murrelet habitat than the FPA, as suitable stands are protected regardless of occupancy.

The terrestrial habitat management is closely aligned and coordinated with management for aquatic habitat through the use of extensive RCR in concert with prescriptions for multiple species (HCP Section 5.2) as well as specific habitat conservation measures for identified species (HCP Section 5.3). The management prescriptions from the HCP implemented across GDRCo fee ownership for the Added Lands will be consistent with current GDRCo practices. No likely adverse effect is anticipated.

<sup>6</sup> A 230 acre parcel in S 3 T 15N R10 W which has had Murrelet detections in the past and contains suitable habitat has been identified for sale as mitigation. The parcel will not be included within the Added Lands. The other occupied stand, a 75 acre parcel of habitat and buffer, is being sold to a comparable transferee. The sale is expected to close in 2012. The parcel will initially be included in the Added Lands

## **Other Positive Effects and Benefits to the Environment of the HCP**

The HCP, in addition to providing for resource protection, has provided additional benefits and synergies beyond traditional species conservation, which include:

1. A structured internal process for harvest unit layout, road management and harvest operations to effectively implement the HCP. As a result significant efficiencies are gained and reliable processes ensure consistent implementation of the prescriptions.
2. The Scientific Advisory Team (SAT) provides a meaningful forum for stakeholder input and collaboration. Over the past decade, the SAT has evolved from a monitoring advisory group to a *de facto* ID team used to resolve land management issues on the HCP Assessment Area as well as a vetting body for HCP amendment.
3. The riparian adaptive management program has proven to be an effective means of accelerating forest structure development while maintaining or increasing provision of ecosystem services to the aquatic environments as well as returning value from lands that were previously unavailable for management.
4. Clear, consistent permitting and transparent review of Forest Practice Applications by stakeholders. Use of existing Washington State programs such as RMAP to administer HCP requirements resulting in savings for the Services in compliance monitoring.