Section 1. Purpose, Scope, and Context

1.1 INTRODUCTION

This *Aquatic Habitat Conservation Plan and Candidate Conservation Agreement with Assurances* (AHCP/CCAA, the Plan) was prepared for the California Timberlands Division of Simpson Resource Company (Simpson) to conserve habitat for and mitigate impacts on six aquatic species (Covered Species):

- *Oncorhynchus tshawytscha* (chinook salmon)
- *Oncorhynchus kisutch* (coho salmon)
- *Oncorhynchus mykiss* (steelhead and resident rainbow trout)
- *Oncorhynchus clarki clarki* (coastal cutthroat trout)
- *Ascaphus truei* (tailed frog)
- *Rhyacotriton variegates* (southern torrent salamander)

The Plan is part of Simpson's applications to the National Marine Fisheries Service (NMFS) and U.S. Fish and Wildlife Service (USFWS) for permits authorizing incidental take of listed species in accordance with the federal Endangered Species Act (ESA) and federal policies regarding conservation of unlisted species. NMFS is being asked to approve a habitat conservation plan (HCP) and incidental take permit (ITP) for listed and unlisted populations of three fish under its jurisdiction: chinook salmon, coho salmon, and steelhead. The ITP would be issued by NMFS pursuant to Section 10(a)(1)(B) of the ESA. USFWS is being asked to approve a CCAA and enhancement of survival permit (ESP) for two unlisted fish and two unlisted amphibians under its jurisdiction: resident rainbow trout, coastal cutthroat trout, tailed frog, and southern torrent salamander. The ESP would be issued by USFWS pursuant to Section 10(a)(1)(A) of the ESA. The ITP and ESP collectively are cited in this Plan as the “Permits.” NMFS and USFWS collectively are cited as “the Services.”

The information, analysis, and conservation program that comprise the Plan are organized as follows:

Sections 1-8 present:

- The purposes of the Plan; the term, area, species, and activities covered by the Plan and Permits; the requirements and approval criteria for the Plan and Permits; and other conservation efforts involving Simpson (Section 1);

- A description of Simpson’s timber operations and other forest management activities (Section 2);

- A description of the Covered Species and their habitats (Section 3);

- A description and assessment of habitat conditions and occurrence of Covered Species in the area where the Plan will be implemented (Section 4);

- An assessment of the potential for timber operations and other activities to directly or indirectly impact Covered Species and potentially result in take of listed species (Section 5);

- A statement of the biological goals and objectives of the Plan; a listing of the specific measures that Simpson will implement under the Plan (i.e., the Operating Conservation Program); and a discussion of the intent, rationale, and analysis underlying the Operating Conservation Program (Section 6);

- An analysis of the effectiveness of the conservation strategy in fulfilling the purposes of the Plan (Section 7); and

- A description of alternatives to the taking of Covered Species that Simpson considered, and a discussion of the reasons why those why those options were not pursued (Section 8).

Seven appendices provide additional information, analysis, and details about components of the Plan:

- Appendix A provides additional information about the biology, habitat requirements, and sensitivity to impacts of each Covered Species.

- Appendix B provides additional detail about the landslide terminology and classifications used in the Plan.

- Appendix C includes summaries of the physical habitat assessments, fish population studies, amphibian surveys, and analyses of habitat conditions conducted by Simpson since 1994.

- Appendix D describes the effectiveness monitoring protocols that will be followed during Plan implementation.

- Appendix E supplements the assessment of timber management impacts on the Covered Species with a review of literature on the subject.

- Appendix F presents sediment studies and modeling efforts, including an assessment of long-term sediment production with and without the AHCP/CCAA.

- Appendix G provides additional detail and analysis regarding a project that will be implemented under the Plan to enhance coho salmon productivity by utilizing habitats upstream of a barrier.

In addition to the above components, an Implementation Agreement (IA) has been prepared to accompany the applications to NMFS and USFWS. The IA defines the roles and responsibilities of the parties regarding the Plan and Permits, ensures implementation of the Operating Conservation Program identified in the Plan, describes procedures for modifications, and provides assurances to Simpson and the agencies. An Environmental Impact Statement (EIS) also has been prepared for the actions of the Services on the Plan and Permits in accordance with the National Environmental Policy Act (NEPA).

1.2 PURPOSE

The primary purposes of this AHCP/CCAA are to:

- Coordinate and facilitate Simpson's compliance with the federal ESA; and
- By providing for the conservation of individual species and their habitats, provide the NMFS and USFWS as appropriate with the bases for authorizing Simpson to take Covered Species pursuant to an ITP and an ESP.

The Plan describes the conservation measures that Simpson will implement to:

- Minimize and mitigate the potential adverse effects of any authorized taking of listed Covered Species in the Plan Area that may occur incidental to Simpson's timber operations in California;
- Ensure that any authorized take and its probable impacts will not appreciably reduce the likelihood of survival and recovery in the wild of any Covered Species; and
- Contribute to efforts to reduce the need to list currently unlisted Covered Species under the ESA in the future by providing early conservation benefits to those species.

The measures in the Plan focus on assessing, conserving, and monitoring the populations and habitats of the Covered Species and are designed to be a comprehensive conservation program for the species in the Plan Area. The measures, supporting analysis, and related authorizations also provide the basis for Simpson to comply with any requirements of the Forest Practice Rules (FPRs) relating to the ESA and the Covered Species. These requirements and other aspects of the multiple uses proposed for the Plan are discussed in more detail in Section 1.4.5.

1.3 SCOPE

The term, area, species, and activities covered by the requested authorizations for incidental take and this Plan are as follows.

1.3.1 Term of the AHCP/ITP and CCAA/ESP

The term of the AHCP/ITP and CCAA/ESP will be 50 years. Provisions for extending or terminating this term are presented in the IA consistent with the requirements of applicable regulations.

1.3.2 Area Where Take Will Be Authorized and the Plan Will Be Implemented

Simpson buys and sells timberlands in the general area covered by the Plan on a regular basis and expects to continue this practice in the normal course of business during the 50-year term of the Plan. To reflect this aspect of Simpson's business practices, the Plan is designed to allow some flexibility in the application of the Plan and Permits to the ownership as it adjusts over time. The Plan uses a number of defined terms to describe the extent to which adjustments may occur to the area in which the Permits may be exercised and the Plan will be implemented. Those terms and their definitions are set forth in this section, and the Plan provides the rationale based upon Simpson's assessment of information compiled about Simpson's ownership and other lands in the general area.

1.3.2.1 Definitions

In this Plan, the following definitions apply:

- "**Plan Area**" means all commercial timberland acreage within eleven Hydrographic Planning Areas (HPAs) on the west slopes of the Klamath Mountains and the Coast Range of California where Simpson owns fee lands and Harvesting Rights (Simpson's ownership), during the period of such ownership within the term of the Permits, subject to the limitations described in Section 1.3.2.3 and in the IA, and up to 100 miles of roads on lands where Simpson owns and exercises Road Access Rights within its approved Timber Harvesting Plan (THP) areas in the Eligible Plan Area during the term of the Plan and Permits. This is the geographic area where incidental take will be authorized, the Covered Activities will occur, and the Operating Conservation Program will be implemented. Except where stated otherwise in the Plan, references to lands, commercial timberlands, and Simpson's ownership in the context of the Plan Area include lands owned in fee and lands subject to harvesting rights.

- "**11 HPAs**" means the area encompassed by the eleven HPAs as identified in Figure 1-1 and Table 1-1 of the Plan and described in Section 1.3.2.4.

- "**Eligible Plan Area**" means all privately owned commercial timberlands within the 11 HPAs that, over the life of the Plan, are either included within the Plan Area or are eligible for inclusion in the Plan Area as provided in the IA. This is the entire commercial timberland acreage analyzed in the Plan and the EIS prepared pursuant to NEPA to support the Plan's provisions allowing for additions and deletions of lands from the Plan Area over the term of the Plan and Permits.

- "**Initial Plan Area**" means Simpson's ownership within the 11 HPAs as of the effective date of the Permits as depicted in Figure 1-1.

- "**Adjustment Area**" means commercial timberland acreage within the 11 HPAs that is not within Simpson's ownership or the Plan Area on any given date during the term of the Plan. This includes lands that are eligible for addition to the Plan Area through acquisition or that may be or have been removed from the Plan Area through sale, subject to the limitations imposed by the Plan and IA.

1.3.2.2 Eligible Plan Area: Initial Plan Area and Adjustment Area

Table 1-1 indicates the estimated acreage of the Eligible Plan Area and its components (the Initial Plan Area and Adjustment Area) as of the effective date of the Permits.

As depicted in Figure 1-1, the Initial Plan Area includes approximately 416,531 acres. This area includes approximately 411,961 acres that were part of Simpson's ownership in the 11 HPAs when this Plan was prepared, plus approximately 4,560 acres of acquisitions that are or will be complete by the effective date of the Permits. The acquisitions include approximately 2,927 acres in the Smith River HPA and approximately 1,643 acres in the Coastal Klamath HPA. As the acquisitions are completed and more detailed information about the lands (e.g., timber stand age classes, roads, estimated sediment budgets) is compiled, the lands will be factored into the models, tables, and figures related to Plan implementation. The acreage of the Initial Plan Area indicated in Table 1-1 and represented in Figure 1-1 will be adjusted to reflect Simpson's actual ownership in the HPAs as of the effective date of the Permits.

Approximately 96,193 acres of the Initial Plan Area are located in Del Norte County; approximately 320,338 acres are in Humboldt County. National Forests and Wilderness Areas flank the Initial Plan Area on the north and east, and Redwood National Park and various State Parks abut on the west. Other adjacent ownerships include industrial timberlands managed by Sierra Pacific Industries, Stimson Lumber Company, Soper-Wheeler Company, Pacific Lumber Company, and other private holdings. The Hoopa Valley Indian Reservation is located east of the Initial Plan Area; lands administered by the Yurok Tribe or Bureau of Indian Affairs occur along the lower Klamath River. Adjacent land uses vary by location but generally follow land ownership patterns. The federal and state lands are managed for multiple uses, including preservation and recreation; various levels of timber harvesting also are allowed in designated areas. On adjacent private lands, commercial timber operations and ranching predominate; other uses include gravel mining and residential development.

As depicted in Figure 1-2, the initial Adjustment Area is estimated to include approximately 267,000 acres of commercial timberlands in the 11 HPAs. This estimate excludes non-forested commercial timberlands, a large tract of land proposed for conservation commitments, and commercial timberlands covered by an approved HCP.

1.3.2.3 Plan Area Adjustments Over Time

During the term of the Plan and Permits, Simpson may elect to add commercial timberlands to the Plan Area within any of the 11 HPAs by submitting to the Services a description of the lands within the Adjustment Area that it intends to add, along with a summary of relevant biological and physical characteristics that they share with existing Plan Area lands in that HPA. As discussed above, Simpson estimates that there are approximately 267,000 acres of other commercial timberlands in the 11 HPAs that could be added to the Plan Area if acquired by Simpson in the future. However, the IA limits expansions of the Plan Area under this process to 15% of the Initial Plan Area (approximately 62,480 acres). This estimate is based on the acreage of the Adjustment Area within the HPAs as of the effective date of the Permits (see Table 1-1). Further, through a notification to the Services, the Plan Area would contract automatically with sales or disposals of commercial timberlands in the 11 HPAs unless the contraction of the Initial Plan Area exceeds 15%.

Table 1-1. Estimated acreage of the Eligible Plan Area and Hydrographic Planning Areas (HPAs) by component, and Initial Plan Area as percentage of HPAs.*

HPA Name (Type[1])	Hydrographic Planning Areas (HPAs)					IPA as % of HPAs
	Eligible Plan Area (EPA)			Non-EPA[5] (acres)	Total HPA (acres)	
	Initial Plan Area (IPA)[2] (acres)	Adjustment Area[3] (acres)	Total EPA[4] (acres)			
Smith River HPA (Hydrographic Area)	44,090	8,036	52,126	129,873	181,999	23%
Coastal Klamath HPA (Hydrographic Area)	88,759	5,277	94,036	14,114	108,150	82%
Blue Creek HPA (Hydrologic Unit)	15,355	35	15,390	64,913	80,303	19%
Interior Klamath HPA (Hydrographic Area)	66,127	43,184	109,311	18,695	128,006	52%
Redwood Creek HPA (Hydrologic Unit)	33,038	59,316	92,354	95,981	188,335	18%
Coastal Lagoons HPA (Hydrographic Area)	39,999	4,505	44,504	9,088	53,592	75%
Little River HPA (Hydrologic Unit)	26,042	1,910	27,952	1,751	29,703	88%
Mad River HPA (Hydrographic Area)	49,497	46,063	95,560	24,126	119,686	41%
North Fork Mad River HPA (Hydrologic Unit)	28,219	3,197	31,416	0	31,416	90%
Humboldt Bay HPA (Hydrographic Area)	17,465	18,755	36,220	102,499	138,719	13%
Eel River HPA (Hydrographic Area)	7,940	76,864	84,804	120,356	205,160	4%
TOTAL	416,531	267,412	683,673	581,396	1,265,069	33%

Notes

* Estimated acreage of Initial Plan Area and Adjustment Area will be adjusted to reflect Simpson's actual ownership in the 11 HPAs as of the effective date of the Permits.

1 HPAs that encompass the entire drainage are referred to as hydrologic units. HPAs that encompass multiple watersheds or a fraction of one watershed are referred to as hydrographic areas.

2 Estimated acreage includes approximately 411,961 acres of Simpson's ownership in the HPAs at the time the Plan was prepared, plus approximately 4,560 acres of acquisitions that are or will be complete by the effective date of the Permits (see Figure 1-1). The total includes 414,818 acres of fee owned land and 3,579 acres of harvesting rights (1,866 acres of perpetual harvesting rights granted by Simpson Timber Company on June 28, 2002 and 1,713 acres of other perpetual harvesting rights).

3 Estimated acreage of the Adjustment Area as of the effective dates of the Permits; includes other commercial timberlands potentially available for addition to the Plan Area as of the effective date of the Permits; estimate excludes non-forested commercial timberlands, a large tract of land proposed for conservation commitments, and commercial timberlands covered by an approved HCP.

4 Estimated acreage based on configuration of Initial Plan Area and Adjustment Area as shown in Figure 1-2.

5 Estimated acreage includes developed and undeveloped privately owned lands, all public lands, Native American lands, and commercial timberlands excluded from the estimated acreage of the initial Adjustment Area (see note 3 above).

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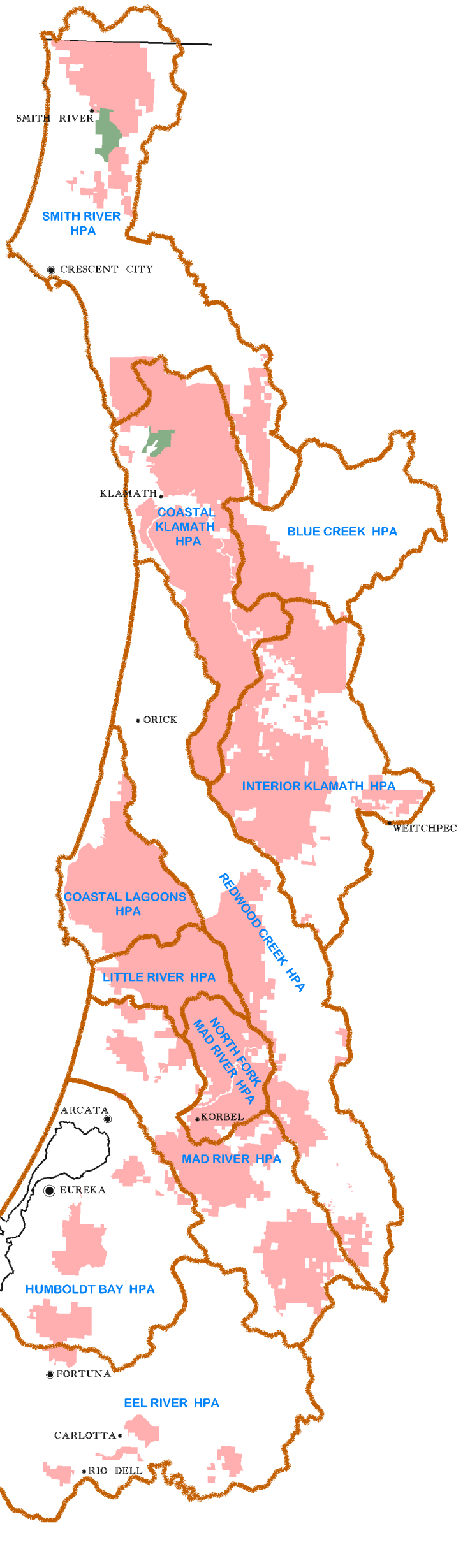

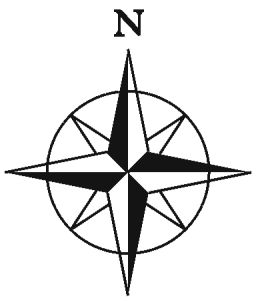

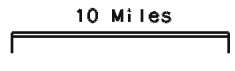

LEGEND

- Ownership in HPAs at Time of Plan Preparation
- Acquisitions to be Completed by Permit Effective Date
- Hydrographic Planning Area Boundary

Map will be adjusted to reflect actual Simpson ownership as of the Permits' effective date.

Figure 1-1. Hydrographic Planning Areas and Initial Plan Area.

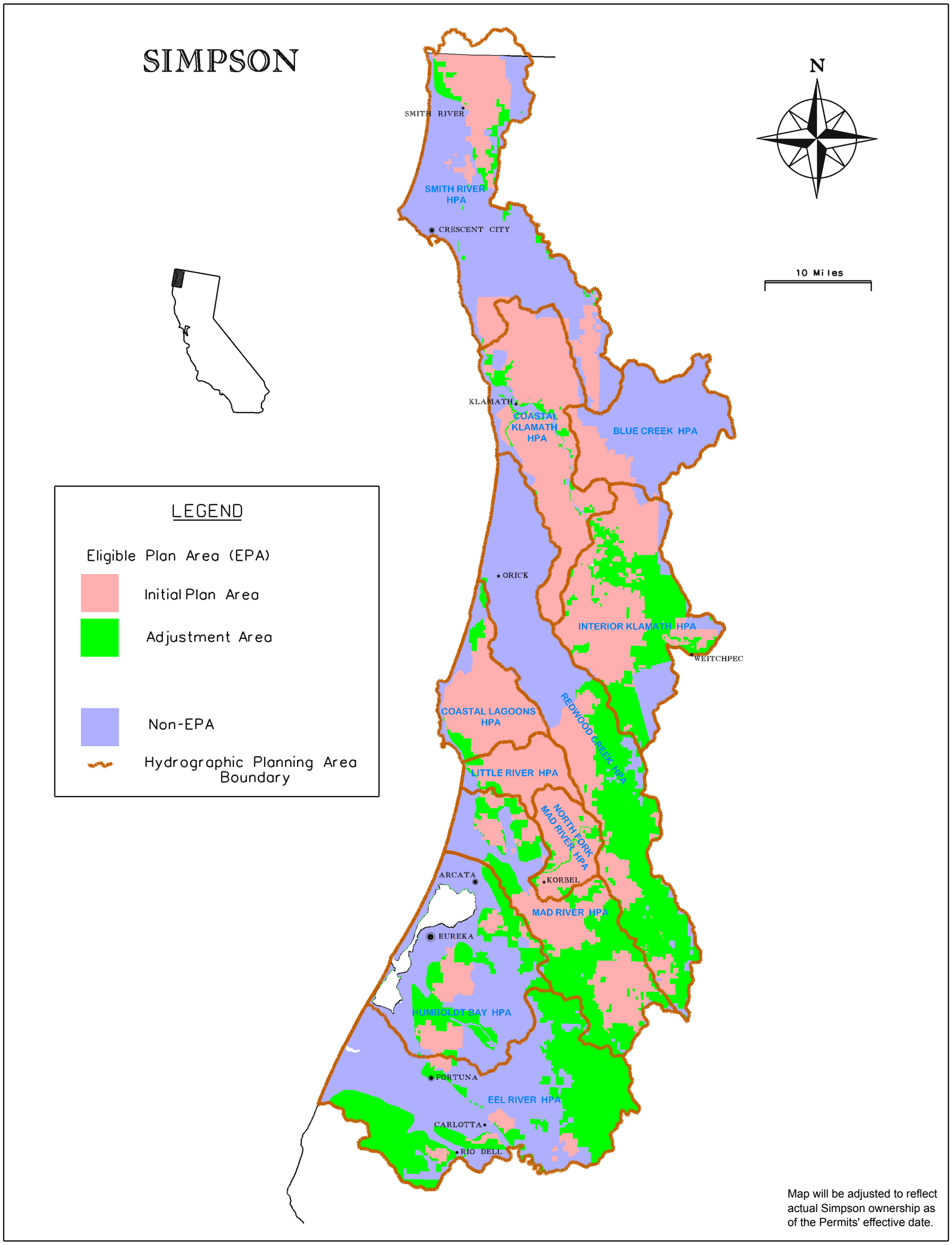

Figure 1-2. Eligible Plan Area. (The Initial Plan and Adjustment Area constitute the Eliglble Plan Area.)

All expansions and contractions of the Plan Area are subject to provisions described in the IA. As discussed in greater detail in Sections 5 and 7 of this Plan, the adjustment mechanisms are based on analysis in the Plan concluding that, in general, habitat and relevant environmental conditions, as well as the potential impacts to the Covered Species, are sufficiently similar across the 11 HPAs to support the application of the conservation strategy on any lands on which Simpson operates within the 11 HPAs during the term of the Plan.

1.3.2.4 Hydrographic Planning Areas

As indicated in Table 1-1 and depicted in Figure 1-1, the HPAs encompass approximately 1,265,000 acres and range in size from approximately 30,000 to 205,000 acres. They were delineated to encompass Plan Area and other lands in the same watersheds and provide an appropriate scale for analyzing habitat conditions and potential effects on Covered Species. The commercial timberlands in the HPAs (including the Initial Plan Area) have common characteristics directly related to habitat conditions for Covered Species. As described in detail in Section 4, these characteristics include:

- Steep and rugged terrain;
- Extensive geologic folds and fault lines;
- Several highly unstable bedrock types;
- Seasonally intense precipitation; and
- More than a century of logging, mining, road building, and grazing.

1.3.2.4.1 Rationale

The 11 HPAs are a subset of nine contiguous coastal drainages that encompass 13.7 million acres in northwestern California and southern Oregon (Table 1-2). Within these coastal drainages, the Initial Plan Area constitutes as little as 0.3% and as much 88% of the total area. These percentages are important because the size of Simpson's ownership relative to the size of the drainages directly affects the potential influence of Simpson's timber operations on the basins. Simpson's ownership in the largest drainages (Klamath, Smith, and Eel Rivers) is concentrated near the coast and very small relative to total basin size, limiting the influence of Simpson's operations on these watersheds. It is possible however, to have a proportionally larger impact on a coastal species. Upstream factors including dams, water diversions, development, and commercial land uses such as agriculture and other (non-Simpson) timber management activities further reduce the relative impact of Simpson's operations on these drainages. Some of the smaller watersheds, in contrast, are largely owned by Simpson, and Simpson's operations may be the main anthropogenic disturbance to these drainages. The 11 HPAs were delineated to address the differences in scale mentioned above and allow Simpson to examine and address habitat conditions and the status of Covered Species on a finer scale.

Table 1-2. Initial Plan Area as proportion of nine major coastal drainages.

Major Coastal Drainages		Initial Plan Area (IPA)	
Drainage	**Total Acres**	**IPA Acres in Drainage**	**IPA as % of Drainage**
Winchuck River	49,860	8,389	17%
Smith River	509,290	35,701	7%
Klamath River	10,029,580	170,242	2%
Redwood Creek	188,335	33,038	18%
Coastal Lagoons	53,592	39,999	75%
Little River	29,703	26,041	88%
Mad River	319,530	77,716	24%
Humboldt Bay	138,719	17,465	13%
Eel River	2,360,340	7,940	0.3%
TOTAL	13,678,949	416,531	3%

1.3.2.4.2 HPA Types

HPAs that encompass an entire drainage are identified in this Plan as "hydrologic units." HPAs that encompass multiple watersheds or a fraction of one watershed are identified as "hydrographic areas." As indicated in Table 1-1, four HPAs are hydrologic units (Blue Creek, Redwood Creek, Little River, and North Fork Mad River); seven HPAs are hydrographic areas (Smith River, Coastal Klamath, Interior Klamath, Coastal Lagoons, Mad River, Humboldt Bay, and Eel River).

1.3.2.4.3 HPA Groups

For purposes of applying slope stability measures identified in the Operating Conservation Program (see Section 6), the 11 HPAs are divided into four HPA Groups (Table 1-3). A brief description of each group is provided below; additional information about the HPA Groups is provided in Section 4.2.

Table 1-3. HPA Groups.

HPA Group	Individual HPAs in Group
Smith River	Smith River
Coastal Klamath	Coastal Klamath Blue Creek
Korbel	Redwood Creek Coastal Lagoons Little River North Fork Mad River Mad River Interior Klamath
Humboldt Bay	Humboldt Bay Eel River

- Smith River HPA Group

The Smith River HPA Group includes approximately 182,000 acres and consists only of the Smith River HPA. Because it does not have the same topographic characteristics as the Coastal Klamath HPA Group and is too far geographically from the Korbel HPA Group, the Smith River HPA was not included in these other HPA Groups. Approximately 44,090 acres of the Initial Plan Area are in the Smith River HPA Group.

- Coastal Klamath HPA Group

The Coastal Klamath HPA Group includes approximately 188,000 acres and consists of the Coastal Klamath and Blue Creek HPAs. Approximately 104,114 acres of the Initial Plan Area are in this group.

- Korbel HPA Group

The Korbel HPA Group includes approximately 551,000 acres and encompasses the Interior Klamath, Redwood Creek, Coastal Lagoons, Little River, Mad River, and North Fork Mad River HPAs. Approximately 242,922 acres of the Initial Plan Area are in this HPA Group.

- Humboldt Bay HPA Group

The Humboldt Bay HPA Group includes approximately 344,000 acres and consists of the Humboldt Bay and Eel River HPAs. This group includes all of the Jacoby Creek, Freshwater Creek, Elk River, Salmon Creek, and Yager Creek drainage basins and portions of the lower reaches of the Eel and Van Duzen Rivers. Approximately 25,405 acres of the Initial Plan Area are in this group.

1.3.3 Covered Species

The Covered Species include populations of four fish species and two amphibian species as identified in Table 1-4. Each is a cold-water adapted taxonomic species whose habitat requirements make it sensitive to the impacts of timber management.

Three of the species are under NMFS's jurisdiction and include six “evolutionarily significant units” (ESUs) of those species. Three of the ESUs currently are listed under the ESA; three are not. This Plan is a HCP for the fish populations in all six ESUs (see Section 1.4.1), and the six ESUs will be named on the ITP. The species and ESUs are identified on Table 1-4 as the “ITP Species.”

The resident form of the rainbow trout, coastal cutthroat trout, southern torrent salamander, and tailed frog are under USFWS jurisdiction; and none of them is currently listed under the ESA. Under these circumstances, USFWS takes the view that the Covered Species under its jurisdiction are most appropriately addressed in a CCAA (rather than an HCP) and that incidental take coverage should be provided through issuance of an ESP rather than an ITP. Accordingly, with respect to these species, the Plan includes the conservation planning elements of a CCAA as described in Section 1.4.1. The species under the jurisdiction of the USFWS are identified in Table 1-4 as the “ESP Species.”

Table 1-4. The Covered Species.

Species Common Name, *Scientific Name*	Listing Status in HPAs	
	Federal	**State**
ITP Species		
Chinook salmon, *Oncorhynchus tshawytscha*		
California Coastal ESU	FT	None
Southern Oregon and Northern California Coastal ESU	None	None
Upper Klamath/Trinity Rivers ESU	None	None
Coho salmon, *Oncorhynchus kisutch*		
Southern Oregon/Northern California Coast ESU	FT	SCT[1]
Steelhead, *Oncorhynchus mykiss*[2]		
Northern California ESU	FT	None
Klamath Mountains Province ESU	None	None
ESP Species		
Resident rainbow trout, *Oncorhynchus mykiss*[3]	None	None
Coastal cutthroat trout, *Oncorhynchus clarki clarki*[4]	None	CSC
Tailed frog, *Ascaphus truei*	FSC	CSC
Southern torrent salamander, *Rhyacotriton variegates*	FSC	CSC

Codes

CSC California Department of Fish and Game Species of Special Concern
ESU Evolutionarily Essential Unit
FT Federal threatened species
FSC Federal species of concern (previously called "Category 2 candidate for federal listing)
SCT State candidate for listing as threatened

Notes

1 The state candidate population includes coho from San Francisco north to the Oregon border. This area includes the San Francisco portion of the federal Central California Coast ESU and the northern California portion of the federal So. Oregon/No. California ESU.

2 Steelhead are the anadromous form of the rainbow trout.

3 The USFWS has indicated that it will have jurisdiction over the resident form of the rainbow trout.

4 During preparation of the AHCP/CCAA, jurisdiction over this species changed from NMFS to USFWS.

The characteristics and general habitat requirements for the Covered Species are described in Section 3 and Appendix A. Current habitat conditions and the status of the Covered Species in the area where the Plan will be implemented are described in Sections 4 and 5 and in Appendix C.

1.3.3.1 ITP Species

The ITP Species include six ESUs of coho salmon, chinook salmon, and steelhead. Three of the ESUs are listed as threatened by NMFS (the Southern Oregon/Northern California Coast ESU of coho salmon, California Coastal ESU of chinook salmon, and Northern California ESU of steelhead). The other three ESUs currently have no federal listing status (Southern Oregon and Northern California Coastal ESU and Upper Klamath/Trinity Rivers ESU of chinook and the Klamath Mountains Province ESU of steelhead).

1.3.3.2 ESP Species

The ESP Species include two fish species (resident rainbow trout and coastal cutthroat trout) and two amphibians (southern torrent salamander and tailed frog). None of the populations of these species within the Plan Area currently are federally listed or proposed for federal listing. Prior to the USFWS taking sole responsibility for the coastal cutthroat trout, NMFS considered listing the species in 1999 but determined that listing was not warranted at that time. USFWS considered listing southern torrent salamander in 2000 but determined that listing was not warranted at that time.

USFWS recently asserted jurisdiction over the resident form of the rainbow trout, which is unlisted. The anadromous form of the rainbow trout (the steelhead) is under NMFS's jurisdiction and covered under the Plan as an ITP Species within the Northern California ESU and Klamath Mountains Province ESU. The anadromous and resident forms are genetically indistinguishable, and the life history and habitat requirements of resident rainbow trout are similar to those of steelhead while in the freshwater phase (with the possible exception of estuary and some mainstem habitats).

1.3.4 Covered Activities

The activities covered by the Plan and Permits (Covered Activities) include many aspects of Simpson's timber operations and other forest management activities that have the potential to adversely affect the Covered Species and/or their habitats in the Plan Area. Covered Activities are specifically described in Section 2 and include those activities needed to carry out all the measures identified in Section 6. This includes surveying watercourses for the presence or absence of fish to make Class I/Class II determinations, which could constitute take. The AHCP/CCAA is designed to meet the approval criteria for a CCAA/ESP and an HCP/ITP that covers the take of Covered Species incidental to the Covered Activities. All Covered Activities will be conducted in accordance with the measures identified in this Plan, the California FPRs, and all other applicable laws and regulations.

1.4 CONTEXT

This Plan has been prepared in the overlapping contexts of:

- ITP and ESP requirements;
- California FPRs and other regulations;
- Simpson's Northern Spotted Owl Habitat Conservation Plan (NSO HCP);
- Other conservation efforts; and
- The multiple uses of the Plan.

1.4.1 ITP and ESP Requirements

The information, analysis, and conservation measures in this Plan, together with the assurances and procedures identified in the accompanying IA, are designed to meet the application requirements and approval criteria for an ITP and an ESP.

1.4.1.1 ITP Requirements

Under Section 10(a)(1)(B) of the ESA, NMFS and USFWS are authorized to approve ITPs. As described in the Code of Federal Regulations (CFR), applications for such permits must be submitted on a specific form and must be accompanied by an HCP that contains the following information:

1. The names of the species that will be taken;

2. The impacts that will likely result from the proposed taking;

3. Steps the applicant will take to monitor, minimize, and mitigate such impacts;

4. The funding available to implement such steps;

5. Procedures that will be used to respond to unforeseen circumstances;

6. The names of the responsible party or parties;

7. Alternatives to the taking and the reasons why they were not pursued; and

8. Other measures that may be required by the approving agency as necessary or appropriate.

Guidance on the contents of HCPs also is provided in the "Endangered Species Habitat Conservation Planning Handbook" (HCP Handbook) prepared by the agencies, particularly as addressed in the Addendum to the HCP Handbook published by the agencies in June 2000. The Handbook Addendum focuses on the expanded use and integration of five components in HCPs: biological goals and objectives, adaptive management as a method for addressing uncertainty, monitoring measures to ensure compliance and gauge the effects of effectiveness of HCPs, permit duration in relation to effects and mitigation, and expanded public participation in the review process.

ITP applications are submitted to USFWS and/or NMFS as appropriate. Upon receiving a completed application, the appropriate Director will decide whether or not to issue a permit. The permit is required to be issued if it is found that:

1. The taking will be incidental to an otherwise lawful activity;

2. The applicant will, to the maximum extent practicable, minimize and mitigate the impacts of such taking;

3. The applicant will ensure that adequate funding for the HCP and procedures to deal with unforeseen circumstances will be provided;

4. The taking will not appreciably reduce the likelihood of the survival and recovery of the species in the wild; and

5. The applicant will ensure that other assurances and measures as required by the Director of the approving agency will be provided and implemented.

Consistent with applicable regulations, unlisted Covered Species must be addressed in the AHCP as if already listed and will be named on the ITP. If approved, the ITP will take effect for listed Covered Species at the time the permit is issued. For unlisted covered species, the ITP will take effect upon the listing of such species (50 CFR 17.22(d)(1), 17.32(d)(1), 222.102, and 222.307). Prior to making the decision whether to issue an ITP, the agency will comply with the consultation requirements of Section 7 of the ESA, the public review provisions of the ESA, and the environmental analysis and public review requirements of NEPA.

1.4.1.2 ESP Requirements

Under Section 10(a)(1)(A) of the ESA, USFWS and NMFS are authorized to approve ESPs. As described in the CFR, applications for such permits must be submitted on a specific form and be accompanied by a CCAA that complies with the requirements of the CCAA policy (64 FR 32726-36). The CCAA regulations and policy are intended to facilitate the conservation of proposed or candidate species, or species likely to become proposed or candidate species in the near future, by giving incentives to non-Federal property owners who commit in a CCAA to implement mutually agreed upon conservation measures. Sections 2 and 10 of the ESA (as well as 4 and 7) allow implementation of the CCAA policy. Section 2 of the ESA states that “the purposes of this Act are to provide a means whereby the ecosystems upon which endangered and threatened species depend may be conserved, to provide a program for the conservation of such endangered species and threatened species, and to take such steps as may be appropriate to achieve the purposes of...treaties and conventions.…” Section 2 goes on to state that “all Federal departments and agencies shall seek to conserve endangered and threatened species and shall utilize their authorities in furtherance of the purposes of this Act.” Section 10 (a)(1) of the ESA provides for the issuance of permits for any act that enhances the propagation or survival of the affected species that would otherwise be prohibited by Section 9. The application of the CCAA policy in the Plan Area will provide benefits to the covered CCAA species through the voluntary conservation measures agreed to and implemented by Simpson.

As stated in the CCAA policy, CCAAs are required to identify or include:

1. The population levels (if available or determinable) of the covered species existing at the time the parties negotiate the CCAA; the existing habitat characteristics that sustain any current, permanent, or seasonal use by the covered species on lands or water owned by the participating non-Federal property owner; and/or the existing characteristics of the property owner's lands or water included in the CCAA that support populations of covered species on land or water not on the participating property owner's property;

2. The conservation measures the participating non-Federal property owner is willing to undertake to conserve the species included in the CCAA;

3. The benefits expected to result from the conservation measures described in 2 above (e.g., increase in population numbers; enhancement, restoration, or preservation of habitat; removal of threat) and the conditions that the participating non-Federal property owner agrees to maintain.

4. Assurances provided by USFWS that no additional conservation measures will be required and no additional land, water, or resource use restrictions will be imposed beyond those described in 2 above should the covered species be listed in the future. Assurances related to take of the covered species will be authorized through a Section 10(a)(1)(A) ESP.

5. A monitoring provision that may include measuring and reporting progress in implementation of the conservation measures described in 2 above and changes in habitat conditions and the species status resulting from these measures; and

6. A notification requirement to provide USFWS with a reasonable opportunity to rescue individuals of the covered species before any authorized incidental take occurs.

Items 1-3 and 5 are similar in nature to the elements of an HCP and, therefore, are included in this document. Items 4 and 6 are addressed in the IA and ESP itself.

The Director of USFWS must publish notice in the Federal Register of each application made for an ESP. Each notice must invite the submission from interested parties, within 30 days after the date of the notice, of written data, views, or arguments with respect to the application. The procedures included in 50 CFR 17.22(e) for objections to permit issuance apply to the published notice. Upon receiving a completed application, the Director of USFWS will decide whether or not to issue a permit. A permit may be issued if it is found that:

1. The taking will be incidental to an otherwise lawful activity and will be in accordance with the terms of the CCAA;

2. The CCAA complies with the CCAA policy issuance criteria of the CCAA policy, including the requirement that the benefits of the conservation measures implemented by a property owner under a CCAA, when combined with those benefits that would be achieved if it is assumed that the conservation measures were also implemented on other necessary properties, would preclude or remove any need to list the covered species. Under the CCAA policy "other necessary properties" are those "properties in addition to the property that is the subject of a Candidate Conservation Agreement with assurances on which conservation measures would have to be implemented in order to preclude or remove any need to list the covered species" (64 FR at 32734);

3. The probable direct and indirect effects of any authorized take will not appreciably reduce the likelihood of survival and recovery in the wild of any species;

4. Implementation of the terms of the CCAA is consistent with applicable Federal, State, and Tribal laws and regulations;

5. Implementation of the terms of the CCAA will not be in conflict with any ongoing conservation programs for species covered by the permit; and

6. The applicant has shown capability for and commitment to implementing all terms of the CCAA.

The agency, in this case USFWS, will issue an ESP at the time of entering into a CCAA. The permit will have a delayed effective date tied to the date of any future listing of a Covered Species (50 CFR 17.22(a), 17.32(d)(1); 64 FR 32735).

1.4.2 California's FPRs and Other Regulations

California's FPRs include a number of standard prescriptions that must be applied in every THP approved by the California Department of Forestry and Fire Protection (CDF). Prescriptions include: protection measures for watercourse zones (minimum buffer sizes, canopy closure requirements, and equipment exclusion); restrictions on construction, use, and maintenance of roads, trails, landings, and watercourse crossings; and snag retention requirements and measures providing for large woody debris (LWD) recruitment.

The FPRs also require a site-specific and area-specific assessment of potential individual and cumulative impacts of timber harvesting on the environment, including aquatic resources. Any significant impacts remaining after application of the standard prescriptions must be addressed through the adoption of other measures to mitigate or avoid such impacts.

The FPRs incorporate a significant requirement of the state water quality protection law, prohibiting the unreasonable degradation of the "quality and beneficial uses of water" by timber operations. Beneficial uses of water include protection of fish, wildlife, and other aquatic resources. All THPs must be judged against this prohibition, and all commercial timber operations must comply with it.

Other regulations that provide a level of resource protection and conservation in the Plan Area include the federal ESA, federal Clean Water Act, and California Fish and Game Code (including the State ESA).

1.4.3 Simpson's NSO HCP

This AHCP/CCAA is the second HCP that covers Simpson operations in the Plan Area. The first is the NSO HCP, which was approved by USFWS in 1992 (the first such plan approved for commercial timberlands in the Pacific Northwest) and covers the Simpson's operations in most of the same area as this AHCP/CCAA.

The AHCP/CCAA builds on conservation provided under the NSO HCP, which provides significant protection to the AHCP/CCAA species through resource management measures such as enhanced watercourse protection zones and wildlife habitat retention areas. In addition, although Simpson sought authorization only for incidental take of spotted owls, the NSO HCP also considers the needs of 39 other terrestrial species thought to be the most sensitive to timber operations in the area. For planning and management purposes, the NSO HCP is the terrestrial species equivalent to the AHCP/CCAA. Simpson considered simply amending the NSO HCP rather than having two separate operating conservation plans on its ownership. However, although the conservation plans have significant overlap, they address different elements of the ecosystem: the aquatic and the terrestrial. They have different terms; the NSO HCP has a 30-year term, whereas the AHCP/CCAA has a 50-year term. There are differences in the plan areas. The AHCP/CCAA Plan Area consists of Simpson's ownership within the 11 HPAs during the term of the Permits. The NSO HCP Plan Area consists of Simpson's California ownership within Humboldt, Mendocino and Del Norte Counties during the term of that permit (as well as lands Simpson owned in Trinity County at the time the NSO HCP was approved). In addition, the need to prepare a CCAA for the ESP Species, and the participation of NMFS in the conservation planning for the aquatic species under its jurisdiction, added complexity to the conservation planning. Finally, Simpson anticipates that the AHCP/CCAA will be used as the basis to satisfy other water quality and aquatic regulatory requirements in the future. For these and other reasons, Simpson chose to leave the NSO HCP/ITP intact and seek separate approvals of the aquatic conservation plan.

Provisions of Simpson's NSO HCP, principally through the retention of wildlife trees that are left within marked tree clumps or designated habitat retention areas, provide residual vertical structure. These retained trees, in conjunction with those left in Riparian Management Zones (RMZs), will result in a significant portion of the area within even-aged harvesting units supporting post-harvest vertical structure to provide various habitat attributes for terrestrial and aquatic wildlife. The following are the approved live tree retention guidelines from the NSO HCP:

1. Live trees retained for wildlife habitat pursuant to these guidelines are to be in addition to those trees left in Watercourse and Lake Protection Zones.

2. Except as noted below, at least one live tree per clearcut acre will be retained. At least two trees per clearcut acre will be retained in tracts where Simpson's biologists have determined that past intensive harvesting activity has resulted in a landscape deficient in residual vertical structure, and in all THPs where hardwood is the principal species harvested.

3. In a cable or helicopter yarding unit the requisite number of trees shall be retained in a habitat retention area (HRA) at least ½ acre in size. For optimal protection of HRAs from windthrow and damage resulting from yarding or site preparation activities, HRAs will usually be retained low on the slope and adjacent to RMZs.

4. If 15% or more of the total area in a harvesting unit (including any ground skidding area) is designated as uneven-aged management (selection or group selection silvicultural system), then an HRA will not normally be required.

5. In ground skidding areas trees will be retained in "tree clumps" of ten or more trees. The requisite number trees per ground skidding clearcut acre will be retained regardless of the percentage of the total harvesting unit area (including any portion that is to be cable or helicopter yarded) that may be specified as uneven-aged management. Protection from windthrow and site preparation burning should be considered when designating the location of tree clumps.

6. Candidate Trees for retention will be selected as follows:

    a. The average diameter at breast height (dbh) of retained trees should be equal to or greater than the average dbh of trees in the THP area.

    b. Large defective or poorly formed trees are preferred for retention (e.g., forked top, broken top, mistletoe broom, etc.). Because these particular habitat structural elements are not common and have high wildlife value, they should be retained wherever feasible.

    c. A mix of conifers and hardwoods should be retained (approximately 50/50 mix where possible). Conifer species preference: Douglas-fir, hemlock, white fir, cedar, spruce, redwood. Hardwood species preference: tanoak, Pacific madrone, California laurel, chinquapin.

1.4.4 Other Conservation Efforts

Other conservation efforts that provide a foundation for this Plan include:

1. The long-term channel monitoring program initiated in 1995,

2. Stream assessments and studies of aquatic species conducted on Simpson property since 1993, (see Section 4 and Appendix C),

3. The Salmon Creek Management Plan, prepared in 1993 in coordination with CDF, CDFG, and the North Coast Regional Water Quality Control Board (RWQCB),

4. The Management Strategies for the Little River Watershed, prepared in 1999 after Simpson acquired the Little River timberlands formally owned by Louisiana-Pacific Corporation,

5. A cooperative effort with the Yurok Tribe fisheries staff and the Coastal Conservancy on a long-term program to restore anadromous fish habitat in 24 tributaries of the lower Klamath River,

6. A cooperative effort with Redwood National Park (RNP) in the upper Redwood Creek watershed to inventory roads and hillslopes and prioritize treatment areas to reduce the risk of future erosion,

7. Habitat restoration and enhancement projects completed in cooperation with restoration groups on 33 streams,

8. Standardized field methods to assess salmonid populations and habitat, developed through the cooperative efforts of the Fish, Farms, and Forests Communities (FFFC) Coalition,

9. Habitat conservation on a landscape scale through resource protection and balanced forest growth and timber harvest (Maximum Sustained Production [MSP]) under a CDF-approved sustained yield strategy for Simpson's timberlands,

10. Simpson's voluntary ownership-wide road maintenance program; and

11. The Redwood Creek TMDL Implementation Plan proposed by the Redwood Creek Landowners Association.

1.4.5 Multiple Uses of the Plan

In addition to satisfying ESA requirements regarding authorization for incidental take, the Operating Conservation Program presented in Section 6.2 of this AHCP/CCAA is designed to address other significant, closely related issues such as water quality and cumulative wildlife impacts. These multiple uses of the Plan are important to note because some of the specific measures and level of mitigation provided under the Operating Conservation Program would not necessarily be required to satisfy federal or state requirements if Simpson were only seeking authorization for take. Individual components of the Operating Conservation Program and, in some instances, the program as a whole, also provide the basis for satisfying non-ESA legal requirements related to aquatic resources and moving forward on voluntary issues. For example, a number of other statutes address water quality protection and govern activities within streams. In many cases, particularly with regard to the potential impacts of timber operations, the principal target of protection and the indicator of the protection's success is the health of the aquatic ecosystem. By targeting fish populations and habitat components representative of that aquatic ecosystem, the AHCP/CCAA provides the framework for assessing and addressing multiple issues regarding the same resource.